



Parts Catalog

Document Number: UG-015JDCUPKCAYA

Revision: 1

Revision Date: September 2012

Replacement Parts for

John Deere®, Cummins® (Mid - Range), Perkins®, Caterpillar® & Yanmar®

Diesel Engines

FLORIDA WAREHOUSE

*10900 NW 30th Street
Miami, Florida 33172*

CALIFORNIA WAREHOUSE

*12150 Bloomfield Ave Unit Q
Santa Fe Springs, California 90670*

Tel: (305) 592-7027 / Fax: (305) 592-0244

Toll Free Number: (800) 414-2095

E-mail: sales@maxiforce.com

Visit our Web site: www.maxiforce.com

Equal Opportunity / Affirmative Action Employer

© COPYRIGHT 2012, MAXIFORCE, INC.

John Deere® is the registered trademark of Deere & Co., Cummins® is the registered trademark of Cummins Inc., Perkins® is the registered trademark of Perkins Engines Ltd., Caterpillar® and Cat® are the registered trademark of Caterpillar Inc., Yanmar® is the registered trademark of Yanmar Diesel Engine Co., Manufacturer's names, numbers, symbols and descriptions are used solely for reference purposes, not implying that any part listed is the product of these manufacturers. Maxiforce is in no way affiliated to any of these manufacturers.

Abbreviations used throughout this catalog:

A	Turbo Aftercooled	(m)	Marked
A/C	Air Conditioned	MF	Massey Ferguson
AG	Agricultural	N/A	Not Available
BLK	Engine Block	O/H	Overhaul
CDC	Consolidated Diesel	OK	Overhaul Kit
CPL	Control Part List	O/S	Oversize
C/H	Cylinder Head	P.T.	PowerTech
C/R	Connecting Rod	Q	Quantity
C/S	Crankshaft	SBS	Short Block Serial Number.
D	Diesel, Naturally Aspirated	STD	Standard
ESN	Engine Serial No	T	Turbocharged
I/E	Intake/Exhaust	TS	Tractor Serial Number.
I/F	In Frame	U/S	Undersize
IK	In Frame Kit		

**(1) Please refer to RED Numbered Cells in each page.
They are the source of important information.**

Serial Number References:

> 154,165

Denotes: from 1 up to 154,165

215,000 - 335,845

Denotes: in between the two serial numbers

335,846 >

Denotes: from 335,846 up

Introduction to Perkins® Section

Engine models covered by this User's Guide

BORE DIAMETER mm / In	NUMBER OF CYLINDERS	ENGINE MODEL
79.375 / 3.1250	4	4.108
84.000 / 3.3000	4	104-22
84.000 / 3.3000	3	403C
84.000 / 3.3000	4	404C
91.491 / 3.6020	3	3.152
91.491 / 3.6020	4	4.203
98.476 / 3.8770	4	4.236
98.476 / 3.8770	6	6.354
100.000 / 3.9370	4	1004.40
100.000 / 3.9370	6	1006.60
100.000 / 3.9370	6	1106-E60TA
101.054 / 3.9785	4	4.248
103.000 / 4.055	4	1004.42
105.000 / 4.133	3	1103
105.000 / 4.133	4	1104
114.313 / 4.5005	4	4.318

Maxiforce Engine Kit Composition for Perkins® Applications

POK: Engine Overhaul Kits Include: Cylinder kits, main and con rod bearing sets, thrust washer sets, front and rear seals, top and bottom gasket sets, conrod bushings, bolts and nuts, cam bushing and valve train kit.

PBK: Basic Engine Kits Include: All components in the **overhaul kit** with the exception of the valve train kit.

PVTK: Valve Train Kits Include: All valves, springs, guides, keepers and stem seals.

Crankshaft Kits Include: The crankshaft, main and con rod bearings and thrust washer sets.

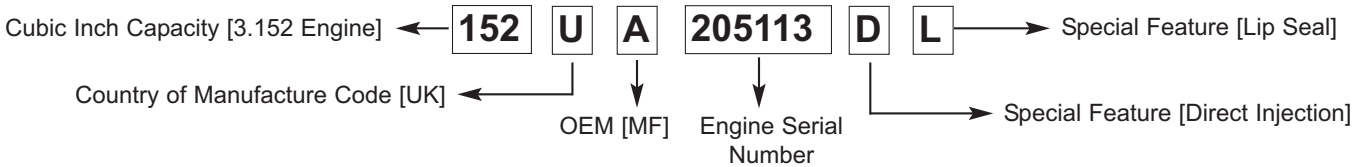
NB: Should engine kits be required without engine bearings and thrust washers, please specify by adding the **NB** suffix on kit part number. i.e: POK ... **NB**.

Engine Identification Guide

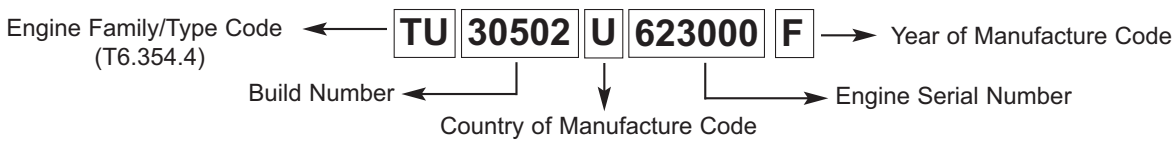
In many cases it is necessary to identify the Perkins Engine Number in order to ascertain the correct engine kit for an application. All Perkins® Engines should contain one of the two following formats for engine numbering (dependent on the year of manufacture):

Pre 1978 Engine Numbers:

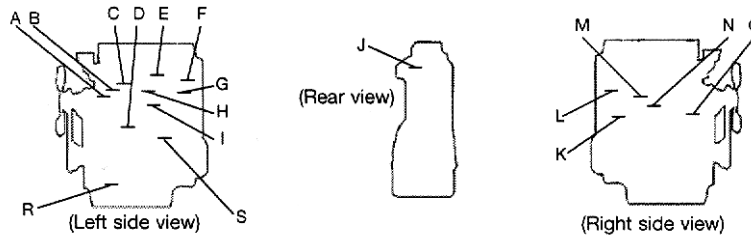
This system, which consists of a maximum of 13 digits, was used from 1966 to late 1978. Another numbering method was used prior to 1966, which utilized a 7-digit number with no reference to engine series.



Current (post 1978) Engine Numbers:



Where to find your Engine Number



Engine Type	Position	Engine Type	Position	Engine Type	Position	Engine Type	Position
3.152	M	4.203	J or N	4.236	C or L	6.354	D
4.108	A	4.212/4.248	C	4.318	F	1000 / 1100 (A/B/C) Series	H or J

Engine Family / Type Code

AA	1004.40	AP	1004.40	DD	1103C-33T	JD	4.203	LJ	T4.236	TC	6.354	YB	1006.60T
AB	1004.40T	AQ	1004.40T	DE	1103C-33TA	JE	D4.203	NC	4.318	TE	T6.354	YC	1006.60T
AC	1004.40T	AR	1004.42	DF	1103B-33	JF	G4.203	RE	1104C-44	TG	6.354.1	YD	1006E-6TW
AD	1004.40TW	AS	1004.42	DG	1103B-33T	JG	4.203.2	RF	1104C-E44	TH	T6.354.1	YE	1006.60
AE	1004.40	AT	1004.40TA	DJ	1103A-33	KR	104.22	RG	1104C-44T	TJ	6.354.2	YF	1006.60S
AG	1004.40	CD	3.152	DK	1103A-33T	LA	4.212	RH	1104C-E44T	TK	C6.354.2	YG	1006.60
AH	1004.40	CE	D3.152	ED	4.108	LD	4.236	RJ	1104C-44TA	TT	TC6.354.1	YH	1006.60T
AJ	1004.40	CF	G3.152	HL	403C-15	LE	G4.236	RK	1104C-E44TA	TU	T6.354.4	YJ	1006.60TA
AK	1004.40T	CM	3.152.4	HM	403C-17	LF	4.248	RR	1104A-44	TW	6.354.4	YK	1006.60TW
AL	1004.40TA	CN	T3.152.4	HP	404C-22	LG	4.248.2	RS	1104A-44T	VK	1106C-E60TA		
AM	1004.40T	DC	1103C-33	HR	404C-22T	LH	C4.236	RT	1104A-44TA	YA	1006.60		

A	Air Cooled	C	Compensated	D	Direct Injection	E	Electronic	G	Gasoline	T	Turbocharged	W	Water Cooled
---	------------	---	-------------	---	------------------	---	------------	---	----------	---	--------------	---	--------------

Year of Manufacture Code

E	1978	J	1982	N	1986	U	1990	Y	1994	D	1998	H	2001	M	2005
F	1979	K	1983	P	1987	V	1991	A	1995	E	1/1/99 - 3/31/99	J	2002	N	2006
G	1980	L	1984	S	1988	W	1992	B	1996	F	4/1/99 - 12/31/99	K	2003	P	2007
H	1981	M	1985	T	1989	X	1993	C	1997	G	2000	L	2004	R/S	2008

Engine Application Chart

This chart refers to engine models and equipment using these engines. It has been divided into four sections: *Engine models, material handling and industrial applications, agricultural and marine*, in that order. The chart will offer the reader the desired model and will indicate the page number where engine components are shown in detail.

MODEL	COMMENTS	PAGE	MODEL	COMMENTS	PAGE
3.152	AG. & INDUSTRIAL ESN > 1935853	P01	4.248	AGRICULTURAL ESN > UA123423L	P37
3.152	AG. & INDUSTRIAL ESN 1935854 >	P02	4.248	AGRICULTURAL ESN UA123424L >	P38
D3.152	AG. & INDUSTRIAL ESN > UA391044D	P03	4.248	INDUSTRIAL	P39
D3.152	AG. & INDUSTRIAL ESN UA391045DL >	P04	4.248.2	FORKLIFTS	P40
D3.152	INDUSTRIAL	P05	4.318	AGRICULTURAL	P41
D3.152	AG. & INDUSTRIAL ESN > UA391044DS	P06	6.354	AGRICULTURAL & INDUSTRIAL	P42
D3.152	AG. & INDUSTRIAL ESN UA391045DSL >	P07	6.354	AGRICULTURAL	P43
D3.152	AGRICULTURAL	P08	T6.354	AGRICULTURAL	P44
G3.152	AG. & INDUSTRIAL GASOLINE ENGINE	P09	T/TC6.354.1	AGRICULTURAL	P45
3.152.4	INDUSTRIAL	P10	6.354.1	AGRICULTURAL	P46
T3.152.4	AGRICULTURAL	P11	6.354.2	AGRICULTURAL	P47
4.108	INDUSTRIAL	P12	6.354.4	AGRICULTURAL & INDUSTRIAL	P48
4.108	MARINE	P13	6.354.4	AGRICULTURAL & INDUSTRIAL	P49
4.203	AG. & INDUSTRIAL ESN > 2820092	P14	6.354.4	AGRICULTURAL	P50
4.203	AG. & INDUSTRIAL ESN 2820093 >	P15	6.354.4	MARINE	P51
4.203	FORKLIFTS	P16	T6.354.4	AGRICULTURAL	P52
4.203	INDUSTRIAL	P17	T6.354.4	AGRICULTURAL	P53
D4.203	AG. & INDUSTRIAL ESN > 2939035	P18	T6.354.4	MARINE	P54
D4.203	AG. & INDUSTRIAL ESN 2939036 - 29C1084	P19	104-22	KR BUILDS	P55
D4.203	AG. & INDUSTRIAL ESN 29C1085 >	P20	403C-15	HL BUILDS	P56
D4.203	INDUSTRIAL ESN > U589378L	P21	403C-17	HM BUILDS	P57
D4.203	INDUSTRIAL ESN U589379L >	P22	404C-22	HP BUILDS	P58
4.203.2	FORKLIFTS	P23	404C-22T	HR BUILDS	P59
G4.203	INDUSTRIAL GASOLINE ENGINE	P24	1004.40	AA BUILDS	P60
4.212	AG & INDUSTRIAL ESN UA187117L >	P25	1004.40	AA BUILDS	P61
4.236	AG. & INDUSTRIAL ESN > U106654N	P26	1004.40T	AB/AH BUILDS ESN > U608300W (1992)	P62
4.236	AG. & INDUSTRIAL ESN U106655N >	P27	1004.40T	AB/AH BUILDS ESN U608301W (1992) >	P63
4.236	INDUSTRIAL ESN > U106654N	P28	1004.40T	YE, and some YD BUILDS	P64
4.236	INDUSTRIAL ESN U106655N >	P29	1004.40/40T	AJ, AK, AM, AP, AQ BUILDS	P65
G4.236	FORKLIFTS ESN > U106654N	P30	1004.42	AR, AS BUILDS	P66
G4.236	FORKLIFTS ESN U106655N >	P31	1006.60	AG. & INDUSTRIAL YA BUILDS	P67
C4.236	JCB ESN > U106654N	P32	1006.60T	ESN > 557976X YB, YD BUILDS	P68
C4.236	JCB ESN U106655N >	P33	1006.60T	ESN U557977X > YB, YD BUILDS	P69
T4.236	AG. ESN U106655N > / JCB ESN U027774M	P34	1006.60T	YE, and some YD BUILDS	P70
T4.236	INDUSTRIAL ESN > U106654N	P35	1006.60T	(YG) (YH) (YJ) (YK) BUILDS	P71
T4.236	INDUSTRIAL ESN U106655N >	P36	1103	1103C-33 (DC) 1103B-33 (DF) 1103A-33 (DJ)	P72

Engine Application Chart

<i>MODEL</i>	<i>COMMENTS</i>	<i>PAGE</i>
1103C-33	(DC) BUILDS	P73
1103T	(DD) (DE) (DG) BUILDS	P74
1103T	1103C-33T (DD)	P75
1103A	1103A-33 (DK)	P76
1104C/E	INDUSTRIAL 1104C-44, 1104C-E44	P77
1104C/E	1104C-44, 1104C-E44	P78
1104C/E	AGRICULTURAL 1104C-44, 1104C-E44	P79
1104C/E	INDUSTRIAL 1104C-44, 1104C-E44	P80
1104C/E	(RG) (RH) (RJ) (RK) (RS) BUILDS	P81
1104C/E	1104C-44TA (RG), 1104C-E44TA (RJ)	P82
1104C/E	1104A-44T (RS)	P83
1104C/E	1104A-44T (RS)	P84
1104C/E	AGRICULTURAL 1104C-44T, 1104C-E44T	P85
1104C/E	INDUSTRIAL 1104C-44T, 1104C-E44T	P86
1106T	1106-E60TA VK BUILDS	P87

Material Handling and Industrial Application Equipment Chart

<i>EQUIPMENT MODEL</i>	<i>ENGINE</i>	<i>ENGINE SERIAL NUMBER</i>	<i>BUILD NUMBER</i>	<i>PAGE</i>
<i>ALLIS CHALMERS</i>				
40-50 Forklift	4.203	ESN U76357L >	JD22458	P17
ACP40/50D	4.203		JD22533	P17
JCP 40-50 Forklift	4.203.2		JG80031	P23
D175 Tractor	4.248		LF21274	P39
700 Forklift	4.203	ESN U74103CL >	JD22028	P17
715B Loader	4.236	ESN > U106654N	LD22682	P28
715B Loader	4.236	ESN U106655N >	LD22682	P29
840 Loader	4.248		LF21617	P39
<i>BOBCAT</i>				
Telehandler	1104C/E		RG37985	P81/P86
<i>CATERPILLAR</i>				
6-8000 lb Forklift	4.236	ESN U106655N >	LD22242	P29
RT	G4.236	ESN > U106654N	LE70110	P30
RT	G4.236	ESN U106655N >	LE70110	P31
T50-150D	4.248.2		LG70109	P40
T80D	4.248.2		LG70149	P40
T500-1500	G4.236	ESN > U106654N	LE70148	P30
T500-1500	G4.236	ESN U106655N >	LE70148	P31
V/T40C Forklift	4.203.2		JG70092	P23
V40-60C Forklift	4.203.2		JG70020	P23
V60C	4.248.2		LG70069/LG70091	P40
V80D	G4.236	ESN > U106654N	LE70089	P30
V80D	G4.236	ESN U106655N >	LE70089	P31
V80D	4.248.2		LG70067/LG70090	P40
V100-140	G4.236	ESN > U106654N	LE70094	P30
V100-140	G4.236	ESN U106655N >	LE70094	P31
<i>CLARK EQUIPMENT</i>				
CTD20-50	4.248.2		LG70097/LG70106	P40
CY-30-40-55	4.203		JD21493	P16
CY40-60	4.203		JD22117	P16
45C Shovel	6.354.4		TW70016	P49
C60-70-80	4.203		JD21383	P16
CY60-70-80B	4.236	ESN > U106654N	LD21386	P28
CY60-70-80B	4.236	ESN U106655N >	LD21386	P29
C500 (H) 60-70-80D	4.203.2		JG70099	P23
C500 (H) 60-80	4.248.2		LG70159	P40
C500Y-100-150	4.248.2		LG70104	P40
C500-160-300D	6.354.4		TW70142	P48
C500-CY-160-300	6.354		TC22266	P42
C500Y-40-560	4.203.2		JG70100	P23
C500Y-40-560	4.203.2		JG70143	P23
C500-Y60	G4.236	ESN > U106654N	LE80173/LE22376	P30
C500-Y60	G4.236	ESN U106655N >	LE80173/LE22376	P31
16000-30000	6.354.4		TW70007	P48
Tow Tractor	4.236	ESN > U106654N	LD21324	P28
Tow Tractor	4.236	ESN U106655N >	LD21324	P29
<i>EATON CORP</i>				
Forklift	G4.203		JF22668	P24
Forklift	G4.236	ESN > U106654N	LE80177	P30
Forklift	G4.236	ESN U106655N >	LE80177	P31

Perkins® is the registered trademark of Perkins Engines Ltd. Manufacturer's names, numbers, symbols and descriptions are used solely for reference purposes, not implying that any part listed is the product of these manufacturers. Maxiforce is in no way affiliated to any of these manufacturers.

Material Handling and Industrial Application Equipment Chart

<i>EQUIPMENT MODEL</i>	<i>ENGINE</i>	<i>ENGINE SERIAL NUMBER</i>	<i>BUILD NUMBER</i>	<i>PAGE</i>
GEHL MFG				
4600 Skid Loader	4.108		ED70048	P12
Skid Steer Loader	1104C/E		RE37911	P80
HYSTER				
C300 Compactor	4.236	ESN > U106654N	LD70119	P28
C300 Compactor	4.236	ESN U106655N >	LD70119	P29
Forklift	1104C/E		RE38037	P80
H40F	4.203		JD20074	P16
H40H	4.203		JD21708	P16
H60-110E	4.248.2		LG70127	P40
H60-80C	4.203.2		JG70040	P23
H60-80E	4.203.2		JG70113	P23
H60-80E	4.248.2		LG70063	P40
H70-155XL	1004.40		AA70218	P60
H110-150	4.236	ESN > U106654N	LD70121	P28
H110-150	4.236	ESN U106655N >	LD70121	P29
H150-250	6.354		TC20102	P42
H150-275-300-350H	6.354.4		TW70005	P48
H165-280 Forklift	1006.60		YA70217	P67
S60-100	4.236	ESN > U106654N	LD70115	P28
S60-100	4.236	ESN U106655N >	LD70115	P29
S60B-H60C	4.203		JD20680	P16
S80-S155XL	1004.40		AA70216	P60
INGERSOLL RAND COMPRESSORS				
DRP 85S 85CFM	D3.152	ESN U79698DL >	CE22236	P05
Model 85	D3.152		CE21575	P05
JCB				
3CX Backhoe	4.236	ESN > U106654N	LD50096	P26
3CX Backhoe	4.236	ESN U106655N >	LD50096	P27
3CX Backhoe	C4.236	ESN > U106654N	LH50133	P32
3CX Backhoe	C4.236	ESN U106655N >	LH50133	P33
3CX Backhoe	1004.40		AA50508	P60
3CX Backhoe	1004.40T	ESN > U608300W (1992)	AB50609/AB50279	P62
3CX Backhoe	1004.40T	ESN U608301W > (1992)	AB50609/AB50279	P63
4CX Backhoe	T4.236	ESN U027774M >	LJ50117	P34
200 Loader	C4.236	ESN > U106654N	LH50205/LH50226	P32
200 Loader	C4.236	ESN U106655N >	LH50205/LH50226	P33
410 Loader	4.236	ESN > U106654N	LD50105	P26
410 Loader	4.236	ESN U106655N >	LD50105	P27
410M Forklift	T4.236	ESN U027774M >	LJ50201	P34
415 Loader	T4.236	ESN U027774M >	LJ50224	P34
415 Loader	1004.40T	ESN > U608300W (1992)	AB50253	P62
415 Loader	1004.40T	ESN U608301W > (1992)	AB50253	P63
418 Wheel Loader	T6.354.4		TU50037	P53
435 Front Loader	1006.60T	ESN > 557976X	YB50292	P68
435 Front Loader	1006.60T	ESN 557977X >	YB50292	P69
520 Handler	4.236	ESN > U106654N	LD50103	P26
520 Handler	4.236	ESN U106655N >	LD50103	P27
520S Loadall	T4.236	ESN U027774M >	LJ50183	P34
Backhoe Loader	1004.40		AA50608	P60
Backhoe Loader	1104C/E		RE38238	P77
Backhoe	1004.40/40T		AK50628	P65
Industrial	1006.60		YA50339	P67
Industrial	1104C/E		RE38082	P78

Material Handling and Industrial Application Equipment Chart

EQUIPMENT MODEL	ENGINE	ENGINE SERIAL NUMBER	BUILD NUMBER	PAGE
JCB (Continued)				
JCB Telehandler	1104C/E		RJ51136	P82
Shovel Loader	1004.40/40T		AM50610	P65
Sleeveless Engine	1004.42		AR50690	P66
Telehandler	1104C/E		RE51141	P79
Telehandler	1104C/E		RG38084	P82
Wheel Loader	1006.60		YA50214	P67
LINCOLN ELECTRIC				
500 Amp Welder	4.236	ESN > U106654N	LD50148	P28
500 Amp Welder	4.236	ESN U106655N >	LD50148	P29
Welder	D3.152		CE95231	P05
MELROE				
E146 Loader	4.108		ED70075	P12
MASSEY FERGUSON INDUSTRIAL				
20	D3.152	ESN > UA391044D		P03
20	D3.152	ESN UA391045DL >		P04
20	G3.152			P09
20C	D3.152	ESN > UA391044DS		P06
20C	D3.152	ESN UA391045DSL >		P07
30	D4.203	ESN 29C1085 >		P20
30B	D3.152	ESN > UA391044DS		P06
30B	D3.152	ESN UA391045DSL >		P07
35 Utility	3.152	ESN > 1935853		P01
35 Utility	3.152	ESN 1935854 >		P02
40	D3.152	ESN > UA391044D		P03
40	D3.152	ESN UA391045DL >		P04
40	G3.152			P09
40B	D4.203	ESN 29C1085 >		P20
50	D4.203	ESN 29C1085 >		P20
50C	4.236	ESN > U106654N	LD22824	P26
50C	4.236	ESN U106655N >	LD22824	P27
50H	4.248	ESN UA123424L >		P38
200 Crawler	D3.152	ESN > UA391044D		P03
203	3.152	ESN > 1935853		P01
203	3.152	ESN 1935854 >		P02
203	D3.152	ESN > UA391044D		P03
205	3.152	ESN > 1935853		P01
205	3.152	ESN 1935854 >		P02
205	D3.152	ESN > UA391044D		P03
302	D4.203	ESN 2939036 - 29C1084		P19
302	D4.203	ESN 29C1085 >		P20
304	D4.203	ESN 2939036 - 29C1084		P19
356	D4.203	ESN 2939036 - 29C1084		P19
356	D4.203	ESN 29C1085 >		P20
356 Tractor Shovel	4.203	ESN > 2820092		P14
356 Tractor Shovel	4.203	ESN 2820093 >		P15
365 Tractor Shovel	D4.203	ESN > 2939035		P18
2135	D3.152	ESN > UA391044D		P03
2200 Forklift & Treever	D3.152	ESN > UA391044D		P03
2244 Crawler	D3.152	ESN > UA391044D		P03
2500 Forklift	D3.152	ESN > UA391044D		P03
2500 Forklift	G3.152			P09

Material Handling and Industrial Application Equipment Chart

<i>EQUIPMENT MODEL</i>	<i>ENGINE</i>	<i>ENGINE SERIAL NUMBER</i>	<i>BUILD NUMBER</i>	<i>PAGE</i>
MASSEY FERGUSON INDUSTRIAL (Continued)				
3165 Tractor Shovel	D4.203	ESN 2939036 - 29C1084		P19
3165 Tractor Shovel	D4.203	ESN 29C1085 >		P20
6000 Forklift	4.236	ESN > U106654N	LD22055	P26
MICHIGAN				
45B Shovel	6.354		TC22460	P42
OWATTONA MFG				
445 Skid Loader	4.108		ED70035	P12
PERKINS USA				
General Industrial	D4.203	ESN > U589378L	JE33174	P21
General Industrial	D4.203	ESN U589379L >	JE33174	P22
General Industrial	T4.236	ESN > U106654N	LJ70128	P35
General Industrial	T4.236	ESN U106655N >	LJ70128	P36
General Industrial	6.354.4		TW33425	P48
General Genset	3.152.4		CM50184	P10
Genset	T4.236	ESN > U106654N	LJ70130/LJ70151	P35
Genset	T4.236	ESN U106655N >	LJ70130/LJ70151	P36
Genset	1004.40		AA37530	P61
Genset	1103A		DK51280	P76
Genset	1104C/E		RE51215	P77
Power Units	1006.60T	ESN > 557976X	YB30127/YB30650	P68
Power Units	1006.60T	ESN 557977X >	YB30127	P69
RG WILSON				
Generator Set	3.152.4		CM33513	P10
SULLAIR CORP				
185-250 Compressor	4.236	ESN > U106654N	LD70147	P28
185-250 Compressor	4.236	ESN U106655N >	LD70147	P29
Compressor	D4.203	ESN > U589378L	JE70033	P21
Compressor	D4.203	ESN U589379L >	JE70033	P22
Genset	T4.236	ESN > U106654N	LJ70155	P35
Genset	T4.236	ESN U106655N >	LJ70155	P36
TOWMOTOR				
V100/120/140	4.236	ESN > U106654N	LD22043/4	P28
V100/120/140	4.236	ESN U106655N >	LD22043/4	P29
VERMEER MFG				
M434-4 Trencher	4.108		ED70044	P12

Agricultural Application Equipment Chart

<i>EQUIPMENT MODEL</i>	<i>ENGINE</i>	<i>ENGINE SERIAL NUMBER</i>	<i>BUILD NUMBER</i>	<i>PAGE</i>
JACOBSEN MFG CO				
H-15 F10 Turf Tractor	G4.236	ESN > U106654N	LE70054	P30
H-15 F10 Turf Tractor	G4.236	ESN U106655N >	LE70054	P31
LANDINI TRACTORS				
4500	D3.152	ESN UA391045DL >		P04
4830	D3.152	ESN UA391045DL >		P04
5500	D3.152	ESN UA391045DSL >		P07
5530	D3.152	ESN UA391045DSL >		P07
5530F	D3.152	ESN UA391045DSL >		P07
5830	D3.152	ESN UA391045DSL >		P07
5840	D3.152	ESN UA391045DSL >		P07
6500/6550	4.236	ESN > U106654N	LD22573	P26

Agricultural Application Equipment Chart

EQUIPMENT MODEL	ENGINE	ENGINE SERIAL NUMBER	BUILD NUMBER	PAGE
LANDINI TRACTORS (Continued)				
6500/6550	4.236	ESN U106655N >	LD22573	P27
6830/7830	4.236	ESN > U106654N		P26
6830/7830	4.236	ESN U106655N >		P27
7500/7550	4.236	ESN > U106654N	LD22574	P26
7500/7550	4.236	ESN U106655N >	LD22574	P27
R8500	4.248	ESN UA123424L >	LF22575	P38
MASSEY FERGUSON AGRICULTURAL				
35	3.152	ESN > 1935853		P01
35	3.152	ESN 1935854 >		P02
50	3.152	ESN > 1935853		P01
50	3.152	ESN 1935854 >		P02
65	4.203	ESN > 2820092		P14
65	4.203	ESN 2820093 >		P15
65	D4.203	ESN > 2939035		P18
65	D4.203	ESN 2939036 - 29C1084		P19
65	D4.203	ESN 29C1085 >		P20
RX95	T6.354.4		TU31010	P53
135	D3.152	ESN > UA391044D		P03
135	D3.152	ESN UA391045DL >		P04
135	G3.152			P09
150	D3.152	ESN > UA391044D		P03
150	G3.152			P09
165	D4.203	ESN 2939036 - 29C1084		P19
165	D4.203	ESN 29C1085 >		P20
175	4.236	ESN > U106654N	LD20022	P26
175	4.236	ESN U106655N >	LD20022	P27
194	4.248	ESN UA123424L >	LF22762	P38
230	D3.152	ESN > UA391044D		P03
230	D3.152	ESN UA391045DL >		P04
235	D3.152	ESN > UA391044D		P03
235	D3.152	ESN UA391045DL >		P04
235	D3.152	ESN > UA391044DS	CE22309	P06
235	D3.152	ESN UA391045DSL >	CE22309/10/11	P07
245	D3.152	ESN > UA391044DS		P06
245	D3.152	ESN UA391045DSL >		P07
250	D3.152	ESN UA391045DSL >	CE31089	P07
250	D3.152		CE22488	P08
253	T3.152.4		CN31219	P11
255	D4.203	ESN 2939036 - 29C1084		P19
255	D4.203	ESN 29C1085 >		P20
255	4.236	ESN > U106654N	LD22694/5	P26
255	4.236	ESN U106655N >	LD22694/5	P27
264	T3.152.4		CN31214	P11
275	4.236	ESN > U106654N	LD22051/2	P26
275	4.236	ESN U106655N >	LD22051/2	P27
275 Tractor	4.248	ESN > UA123423L		P37
275	4.248	ESN UA123424L >	LF22312/3	P38
285	4.248	ESN UA123424L >	LF22471	P38
285	4.318		NC22089	P41
290	4.248	ESN UA123424L >	LF22790	P38
300 Combine	D4.203	ESN 2939036 - 29C1084		P19

Agricultural Application Equipment Chart

<i>EQUIPMENT MODEL</i>	<i>ENGINE</i>	<i>ENGINE SERIAL NUMBER</i>	<i>BUILD NUMBER</i>	<i>PAGE</i>
MASSEY FERGUSON AGRICULTURAL (Continued)				
300 Combine	D4.203	ESN 29C1085 >		P20
355	T3.152.4		CN31187	P11
362	4.236	ESN U106655N >	LD31234	P27
396	1006.60		YA31257	P67
399	1006.60		YA31240	P67
410	1103		DC38027	P72
420	1103T		DD38078	P74
430	1103T		DD38311	P74
431	1103		DC38077	P72
461	1103T		DD38078	P74
471	1104C/E		RE37827	P79
481	1104C/E		RE37830	P79
491	1104C/E		RE37828	P85
492	1104C/E		RE37829	P85
540 Combine	4.318		NC22699	P41
TX550 Combine	6.354.4		TW31015	P48
560	T6.354.4		TU31074/TU31126	P52
590	4.248	ESN UA123424L >	LF22486	P38
660	T6.354.4		TU31076	P52
698	T4.236	ESN U106655N >	LJ31131	P34
699	6.354.4		TW31125	P50
750	T/TC6.354.1			P45
TX750	T6.354.4		TU31006	P52
760	T/TC6.354.1	ESN UA48970L >	TH21794	P45
850	T6.354.4		TU31006	P52
1014	6.354.4		TW31087	P48
1085	4.318		NC21725	P41
1100	6.354	ESN > 354UA10361		P42
1100	6.354	ESN 354UA10362 >		P43
1105	T/TC6.354.1		TT21724	P45
1130	T6.354	ESN > 354UA3355T		P44
1130	T/TC6.354.1	ESN 354UA3356T >		P45
1135	T/TC6.354.1		TH22431	P45
2675	6.354.4		TW31008	P50
2680	T6.354.4		TU31045	P53
2685	T6.354.4		TU31046	P53
3065	T4.236	ESN U106655N >	LJ31217	P34
3090	6.354.4		TW31159	P50
3370	T4.236	ESN U106655N >	LJ31153	P34
3530	T6.354.4		TU31143	P53
3625	1006.60T	ESN > 557976X	YB31245	P68
3625	1006.60T	ESN 557977X >	YB31245	P69
3425C	1104C/E		RE38157	P79
3425S	1103T		DD37992	P74
3425F	1103T		DD37992	P74
3425GE	1103T		DD37992	P74
3425GEV	1103T		DD37992	P74
3435GE	1104C/E		RE37990	P79
3435GEV	1104C/E		RE37990	P79
3435S	1104C/E		RE37990	P79
3435F	1104C/E		RE37990	P79

Agricultural Application Equipment Chart

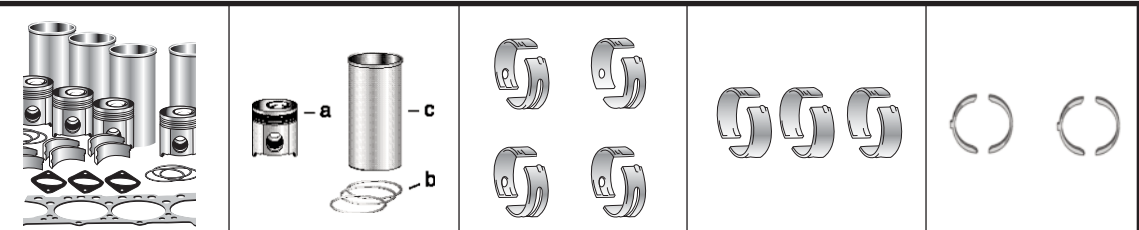
<i>EQUIPMENT MODEL</i>	<i>ENGINE</i>	<i>ENGINE SERIAL NUMBER</i>	<i>BUILD NUMBER</i>	<i>PAGE</i>
MASSEY FERGUSON AGRICULTURAL (Continued)				
3435V	1104C/E		RE37990	P79
3455F	1104C/E		RG37989	P85
3455GE	1104C/E		RG37989	P85
3455GEV	1104C/E		RG37989	P85
3455SF	1104C/E		RG37991	P85
3455SGE	1104C/E		RG37991	P85
3455SGEV	1104C/E		RG37991	P85
5425	1104C/E		RE37873	P79
5425	1104C/E		RE37917	P79
5425	1104C/E		RE37831	P79
5425	1104C/E		RE37919	P79
5435T	1104C/E		RG38401	P85
5435T	1104C/E		RG38402	P85
5445	1104C/E		RG37832	P85
5445	1104C/E		RG37915	P85
5445	1104C/E		RG38120	P85
5445	1104C/E		RG38121	P85
5460	1104C/E		RG37833	P85
5460	1104C/E		RG51400	P85
5465	1106T		VK31483	P87
5465	1106T		VK31486	P87
5465	1106T		VK31505	P87
6180	1006.60T		YH31310	P71
6360	1106T		VK31483	P87
6370	1106T		VK31484	P87
6380	1106T		VK31485	P87
6445	1104C/E		RG37832	P85
6445	1104C/E		RG37915	P85
6445	1104C/E		RG38120	P85
6445	1104C/E		RG38121	P85
6465	1106T		VK31483	P87
6465	1106T		VK31486	P87
6465	1106T		VK31505	P87
6475	1106T		VK31484	P87
6475	1106T		VK31487	P87
6475	1106T		VK31503	P87
6475	1106T		VK31506	P87
6480	1106T		VK31485	P87
6480	1106T		VK31507	P87
7465	1106T		VK31486	P87
7465	1106T		VK31505	P87
7475	1106T		VK31487	P87
7475	1106T		VK31503	P87
7475	1106T		VK31506	P87
7480	1106T		VK31507	P87
Tractor	1004.40/40T		AK31299	P65
Tractor	1104C/E		RE38396	P78
Tractor	1104C/E		RE38396	P82

Agricultural Application Equipment Chart


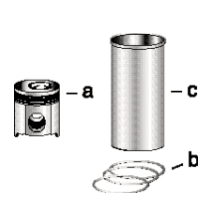
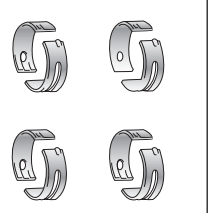
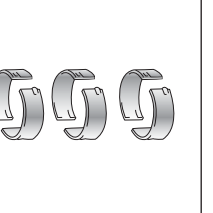

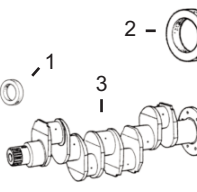
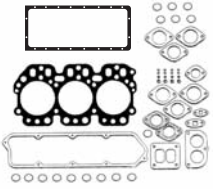
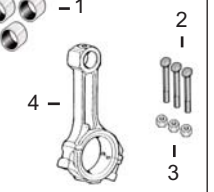
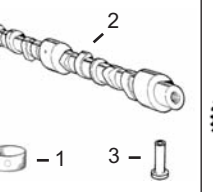
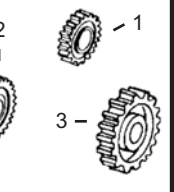
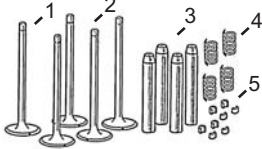
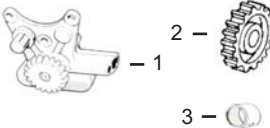

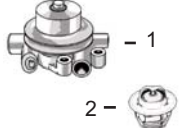
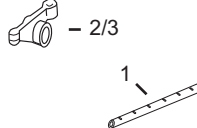

<i>EQUIPMENT MODEL</i>	<i>ENGINE</i>	<i>ENGINE SERIAL NUMBER</i>	<i>BUILD NUMBER</i>	<i>PAGE</i>
<i>McCORMICK</i>				
MTX110	1006.60T		YH50918	P71
MTX125	1006.60T		YH50919	P71
MTX140	1006.60T		YH50920	P71
MTX155	1006.60T		YH50921	P71
MTX170	1006.60T		YJ51192	P71
Wheeled Tractors	1106T		VK37779 to VK37787	P87
<i>NEW IDEA</i>				
Combine	T/TC6.354.1		TH22481	P45
<i>NEW HOLLAND</i>				
Stack Cruiser	6.354.4		TW70031	P49
<i>SPERRY NEW HOLLAND</i>				
L555 Skid Loader	4.108		ED70077	P12
L779 Skid Steer Loader	4.203.2		JG70043/JG70156	P23
<i>WHITE FARM</i>				
2-105	T/TC6.354.1		TH22282	P45
2-105	T/TC6.354.4		TU70018	P53
2-85 Tractor	6.354.1		TG22453	P46
2-85 Tractor	6.354.4		TW70008	P50
7600 Combine	6.354.2		TJ22189	P47
8600 Combine	6.354.4		TW70114	P48
8600 Combine	6.354.4		TW70003	P49
8800 Combine	T6.354.4		TU70001	P52

Marine Application Equipment Chart

<i>EQUIPMENT MODEL</i>	<i>ENGINE</i>	<i>ENGINE SERIAL NUMBER</i>	<i>BUILD NUMBER</i>	<i>PAGE</i>
<i>MARINE</i>				
Commercial/Pleasure Craft	4.108		ED70058	P13
Commercial/Pleasure Craft	6.354.4		TW70087	P51
Perkins USA	4.108		ED22195	P13
Pleasure Craft	4.108		ED33210	P13
Pleasure Craft	4.108		ED50033	P13
Pleasure Craft	6.354.4		TW33196/7	P51
Pleasure Craft	T6.354.4		TU33203	P54
Pleasure Craft	T6.354.4		TU70025	P54
Pleasure Craft	T6.354.4		TU70027	P54
<i>PERKINS SABRE</i>				
44GM Electropak	1004.40		AA30415	P61
44GM Electropak	1004.40		AA30416	P61
4.4TGM	1104C/E		RG30881	P86
44TW2GM	1104C/E		RJ30890	P81

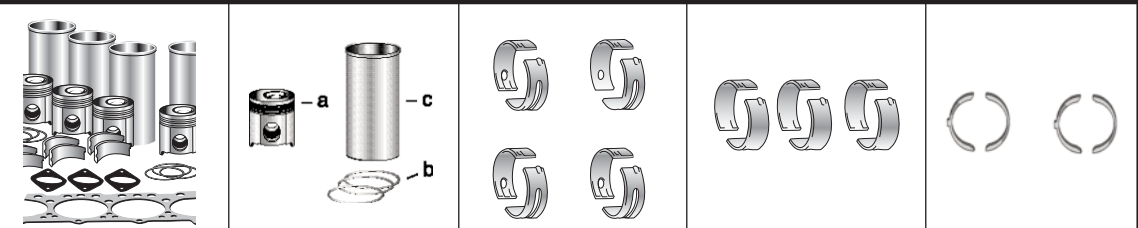
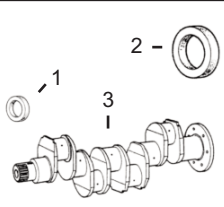
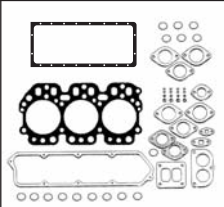
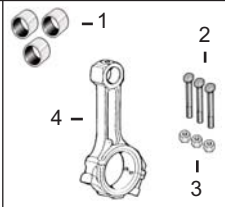
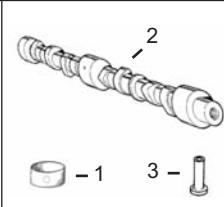
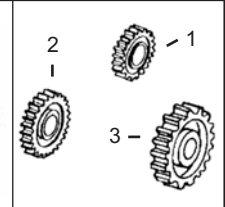
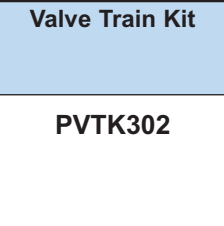
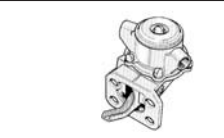
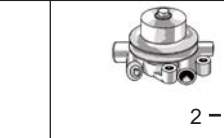
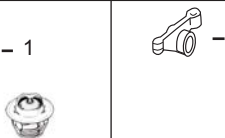
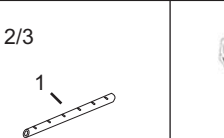

Engine & Equipment Application					
<p>3.152</p> <p>INDIRECT INJECTION</p> <p>3 Cyl, Rope Seal</p> <p>Bore: 3.6020 in 91.491 mm</p> <p>To ESN 1935853</p> <p>APPLICATIONS:</p> <p>MF AGRICULTURAL 35 50</p> <p>MF INDUSTRIAL 35 Utility 203 205</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PCK152</p> <p>Consists of:</p> <p>a) P81512 (1) b) P41158057 c) P31358308 (2)</p> <p>3 Per Engine</p>	<p>P68084 Std.</p> <p>P68084A .010 P68084B .020 P68084C .030</p> <p>Set of 4 Pairs</p>	<p>P85036 Std.</p> <p>P85036A .010 P85036B .020 P85036C .030</p> <p>Set of 3 Pairs</p>	<p>P31137211/21</p> <p>Set of 2 Pairs</p>
	<p>1) POK301</p>				
	<p>2) PBK301</p>				
<p>1) Front Seal 2) Rear Seal 3) Crankshaft Kit</p>	<p>1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod</p>	<p>1) Bushing, Cam 2) Camshaft 3) Tappet</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p>	
<p>1) P2415344 2) P36883106 x2 3) PZZ90116</p>	<p>1) PU5LT0012 2) PU5LB0012 3) P36812136</p>	<p>1) P31134151 x3 2) P0095250 x6 3) P33221327 x6 4) PZZ90011</p>	<p>1) Not Used 2) P31415261 3) P0860012</p>	<p>1) P0410132 2) P0410241 3) P31164362</p>	
<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve (Intake & Exhaust)</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve</p>	
<p>PVTK301</p>	<p>1) P31431261 x3 2) P0910002 x3</p>	<p>3) P33261723 x6</p>	<p>a) Not Used b) P0780006 x6</p>	<p>5) P0230001 x12</p>	
<p>1) Oil Pump 2) Oil Pump Drive Gear 3) Bushing, Drive Gear</p>	<p>Lift Pump</p>	<p>1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves) 2) Glowplug</p>	
<p>1) P41314078 2) P41115025 3) P0050265</p>	<p>P2641408</p>	<p>1a) PU5MW0023 b) P41312784 2) P2485666</p>	<p>1) PZZ90047 2) P3737A101 3) P3737A091</p>	<p>1) PZZ80048 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)</p>	

(1) Flat Head Piston.
(2) Cast sleeve replaces OEM Chrome Liner with Flange thickness 0.040".

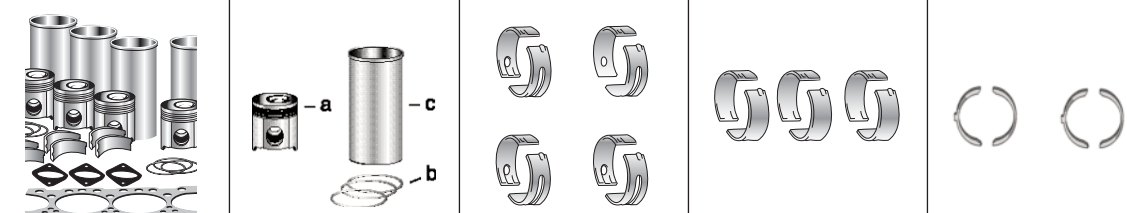
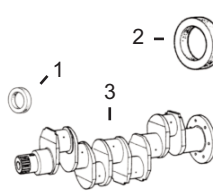
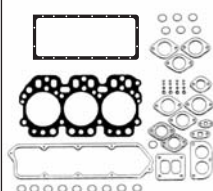
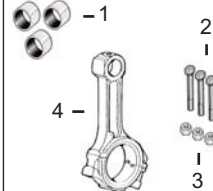
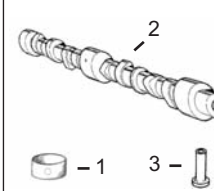
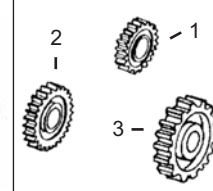
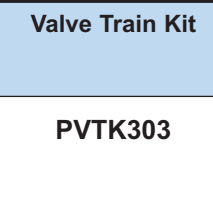
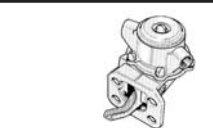
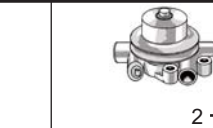
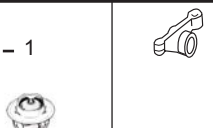
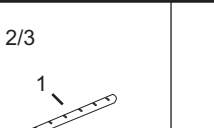

Engine & Equipment Application					
<p>3.152</p> <p>INDIRECT INJECTION</p> <p>3 Cyl, Rope Seal</p> <p>Bore: 3.6020 in 91.491 mm</p> <p>From ESN 1935854</p> <p>APPLICATIONS:</p> <p>MF AGRICULTURAL 35 50</p> <p>MF INDUSTRIAL 35 Utility 203 205</p>					
	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PU5MK0033 Consists of:	P68084 Std.	P85036 Std.	P31137211/21
	1) POK302	a) P81512 (1) b) P41158057 c) P31358345 (2)	P68084A .010 P68084B .020 P68084C .030	P85036A .010 P85036B .020 P85036C .030	
2) PBK302	3 Per Engine	Set of 4 Pairs	Set of 3 Pairs	Set of 2 Pairs	
<p>1) Front Seal 2) Rear Seal</p> <p>3) Crankshaft Kit</p>					
	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear	
	3) Head Gasket	4) Con Rod	2) Camshaft 3) Tappet		
	1) P2415344 2) P36883106 x2 3) PZZ90116	1) PU5LT0012 2) PU5LB0012 3) P36812136	1) P31134151 x3 2) P0095250 x6 3) P33221327 x6 4) PZZ90011	1) Not Used 2) P31415261 3) P0860012	1) P0410132 2) P0410241 3) P31164362
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve
	PVTK301	1) P31431261 x3 2) P0910002 x3	3) P33261723 x6	a) Not Used b) P0780006 x6	5) P0230001 x12
					
1) Oil Pump 2) Oil Pump Drive Gear 3) Bushing, Drive Gear	Lift Pump	1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head (With Valves) 2) Glowplug	
1) P41314078 2) P41115025 3) P0050265	P2641408	1a) PU5MW0023 b) P41312784 2) P2485666	1) PZZ90047 2) P3737A101 3) P3737A091	1) PZZ80048 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)	

(1) Flat Head Piston.

(2) Semi Finished Liner, P31358323, and Finished Liner in .010", P31358384, are available.

Engine & Equipment Application					
<p>D3.152</p> <p>DIRECT INJECTION</p> <p>3 Cyl, Rope Seal</p> <p>Bore: 3.6020 in 91.491 mm</p> <p>ESN ending with D & to UA391044D</p> <p>APPLICATIONS:</p> <p>MF AGRICULTURAL 135 150 230 235</p> <p>MF INDUSTRIAL 20 40 200 Crawler 203 205 2135 2200 Forklift & Treever 2244 Crawler 2500 Forklift</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PU5MK0034</p> <p>Consists of:</p> <p>a) P68332 b) P41158057 c) P31358345 (3)</p> <p>3 Per Engine</p>	<p>P68084 Std.</p>	<p>P85036 Std.</p>	<p>P31137211/21</p>
	<p>1) POK303</p>		<p>P68084A .010 P68084B .020 P68084C .030</p>	<p>P85036A .010 P85036B .020 P85036C .030</p>	
	<p>2) PBK303</p>		<p>Set of 4 Pairs</p>	<p>Set of 3 Pairs</p>	<p>Set of 2 Pairs</p>
					
<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod</p>	<p>1) Bushing, Cam 2) Camshaft 3) Tappet</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p>	
<p>3) Crankshaft Kit</p>	<p>3) Head Gasket</p>	<p>1) P31134151 x3 2) P0095250 x6 3) P33221327 x6 4) PZZ90010</p>	<p>1) P31134128 x1 2) P31415261 3) P0860012</p>	<p>1) P0410132 2) P0410241 3) P31164362</p>	
	<p>Valve Train Kit</p> <p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve (Intake & Exhaust)</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve</p>	
<p>PVTK302</p>	<p>1) P31431281 x3 2) P31431591 x3</p>	<p>3) P33261723 x6</p>	<p>a) Not Used b) P0780006 x6</p>	<p>5) P0230001 x12</p>	
					
<p>1) Oil Pump 2) Oil Pump Drive Gear 3) Bushing, Drive Gear</p>	<p>Lift Pump</p>	<p>1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves) 2) Glowplug</p>	
<p>1) P41314078 2) P41115025 3) P0050265</p>	<p>P2641408 (1) P2641A063 (2)</p>	<p>1a) PU5MW0023 b) P41312874 2) P2485666</p>	<p>1) PZZ90047 2) P3737A101 3) P3737A091</p>	<p>1) PZZ80082 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)</p>	

(1) To Engine No: UA38571D.
(2) From Engine No: UA38572D.
(3) Semi Finished Liner, **P31358323**, and Finished Liner in .010", **P31358384**, are available.

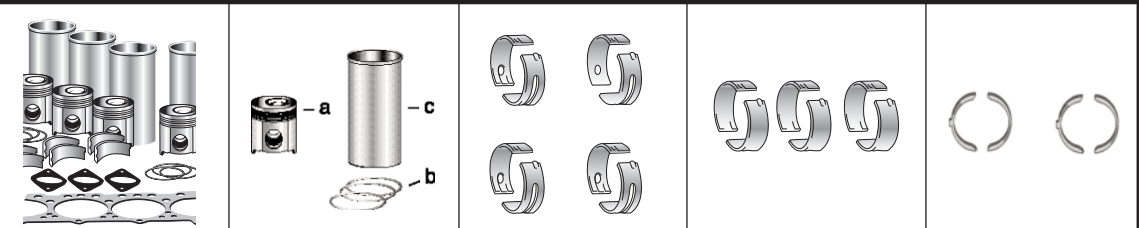
Engine & Equipment Application					
D3.152 DIRECT INJECTION 3 Cyl, Lip Seal Bore: 3.6020 in 91.491 mm ESN Ending with DL from UA391045DL	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PU5MK0034 Consists of: a) P68332 b) P41158057 c) P31358345 (3) 3 Per Engine	P68084 Std. (4) P68084A .010 P68084B .020 P68084C .030 Set of 4 Pairs	P85036 Std. P85036A .010 P85036B .020 P85036C .030 Set of 3 Pairs	P31137211/21 Set of 2 Pairs
	1) POK304	3 Per Engine	Set of 4 Pairs	Set of 3 Pairs	Set of 2 Pairs
	2) PBK304				
APPLICATIONS: LANDINI TRACTORS 4500 4830 MF AGRICULTURAL 135 230 235 MF INDUSTRIAL 20 40					
1) Front Seal 2) Rear Seal 3) Crankshaft Kit 1) P2415344 2) P2418F475 3) PZZ90078	1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket 1) PU5LT0038 2) PU5LB0011 3) P3681E006	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod 1) P31134151 x3 2) P0095250 x6 3) P33221327 x6 4) PZZ90010	1) Bushing, Cam 2) Camshaft 3) Tappet 1) P31134128 x1 2) P31415261 3) P0860012	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear 1) P0410132 2) P0410241 3) P31164362	
	Valve Train Kit PVTK303	1) Valve, Intake 2) Valve, Exhaust 1) P31431681 x3 2) P31431011 x3	3) Guide, Valve (Intake & Exhaust) 3) P33261723 x6	4) Spring, Valve a) Inner b) Outer a) Not Used b) P0780006 x6	5) Lock, Valve 5) P0230001 x12
					
1) Oil Pump 2) Oil Pump Drive Gear 3) Bushing, Drive Gear 1) P41314078 2) P41115025 3) P0050265	Lift Pump P2641A063 (1) P2641808 (2)	1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat 1a) PU5MW0023 b) P41312874 2) P2485666	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH 1) PZZ90047 2) P3737A101 3) P3737A091	1) Cylinder Head (With Valves) 2) Glowplug 1) PZZ80082 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)	

(1) To Engine No: U635848G (2 Hole).


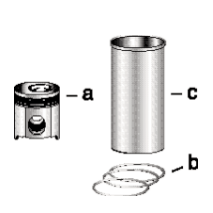
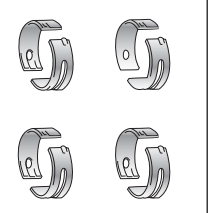
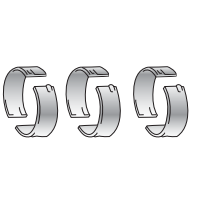

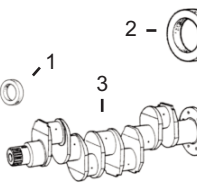
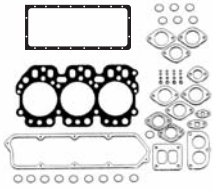
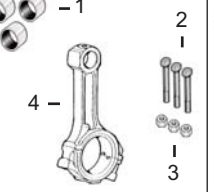
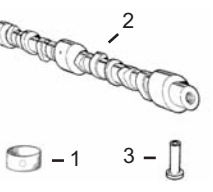
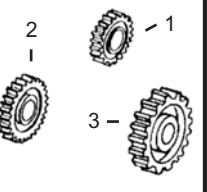
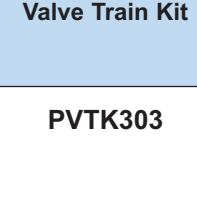


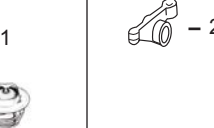
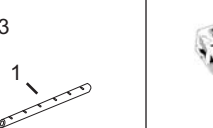

(2) From Engine No: U635849G (4 Hole).

(3) Semi Finished Liner, **P31358323**, and Finished Liner in .010", **P31358384**, are available.

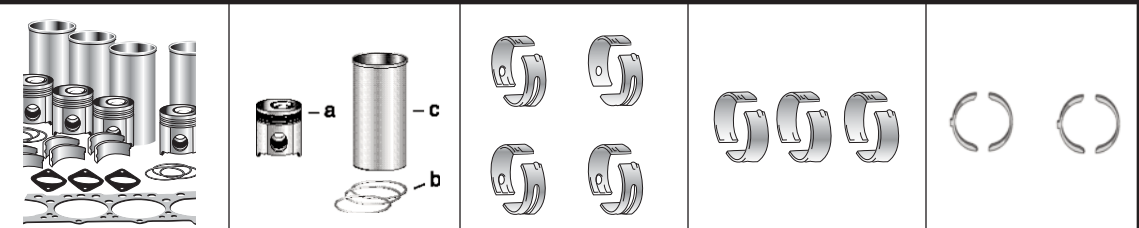
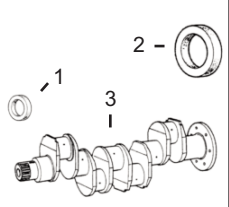
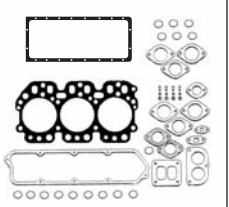
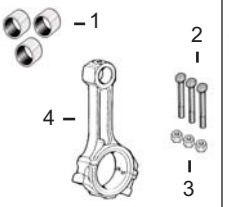
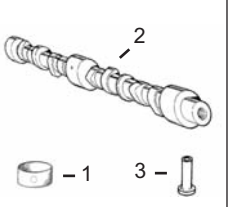
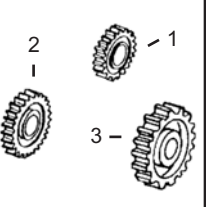
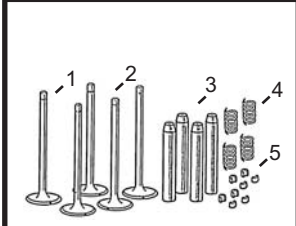
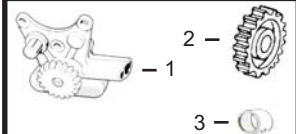
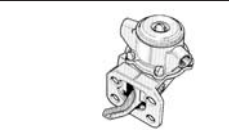
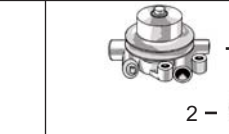
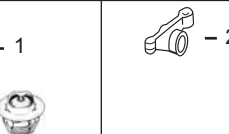
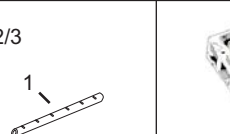
(4) Use Main Bearing Set, **PU5MB0014**, from ESN U983574C. For engine kit with these bearings, order POK/PBK304NB and nominate the bearings.

Engine & Equipment Application					
<p>D3.152</p> <p>DIRECT INJECTION</p> <p>3 Cyl, Lip Seal</p> <p>Bore: 3.6020 in 91.491 mm</p> <p>APPLICATIONS:</p> <p>INGERSOLL RAND COMPRESSORS Model 85 (CE21575) DRP 85S 85CFM (CE22236) (2)</p> <p>LINCOLN ELECTRIC Welder (CE95231)</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PU5MK0034 Consists of:</p>	<p>P68084 Std. (3)</p>	<p>P85036 Std.</p>	<p>P31137211/21</p>
	<p>1) POK309</p>	<p>a) P68332</p>	<p>P68084A .010</p>	<p>P85036A .010</p>	
	<p>2) PBK309</p>	<p>b) P41158057</p> <p>c) P31358345 (1)</p> <p>3 Per Engine</p>	<p>P68084B .020</p> <p>P68084C .030</p> <p>Set of 4 Pairs</p>	<p>P85036B .020</p> <p>P85036C .030</p> <p>Set of 3 Pairs</p>	<p>Set of 2 Pairs</p>
<p>3) Crankshaft Kit</p>	<p>1) Top Gasket Set 2) Bottom Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod</p>	<p>1) Bushing, Cam 2) Camshaft 3) Tappet</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p>	
<p>1) P2415344 2) P2418F475 3) PZZ90078 (7)</p>	<p>1) PU5LT0038 2) PU5LB0010 3) P3681E006</p>	<p>1) P31134151 x3 2) P0095250 x6 3) P33221327 x6 4) PZZ90010 (4)</p>	<p>1) P31134128 x1 2) P31415261 3) P0860012</p>	<p>1) P0410132 (7) 2) P0410241 3) P31164362</p>	
<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve (Intake & Exhaust)</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve</p>	
<p>PVTK303</p>	<p>1) P31431681 x3 2) P31431011 x3</p>	<p>3) P33261723 x6</p>	<p>a) Not Used b) P0780006 x6</p>	<p>5) P0230001 x12</p>	
<p>1) Oil Pump 2) Oil Pump Drive Gear 3) Bushing, Drive Gear</p>	<p>Lift Pump</p>	<p>1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves) 2) Glowplug</p>	
<p>1) P41314078 2) P41115025 3) P0050265</p>	<p>P2641408 (5) P2641808 (6)</p>	<p>1a) PU5MW0023 b) P41312874 2) P2485666</p>	<p>1) PZZ90047 2) P3737A101 3) P3737A091</p>	<p>1) PZZ80082 2) P2666103 (Screw Fitting)</p>	


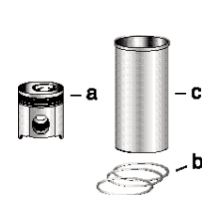
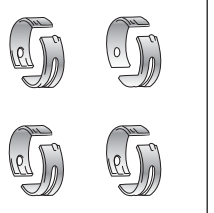
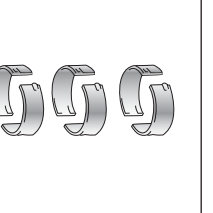

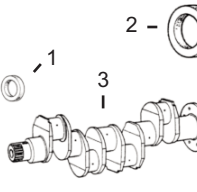
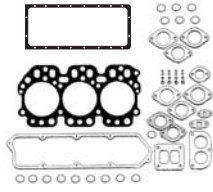
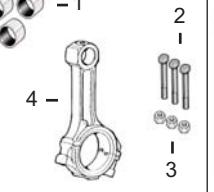
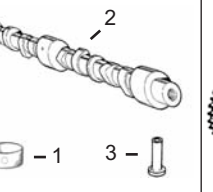
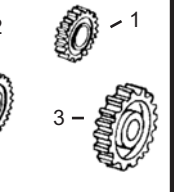
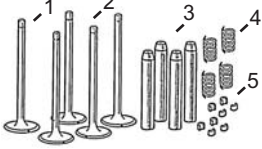
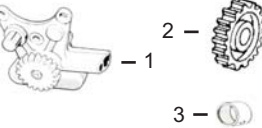


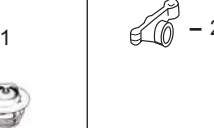
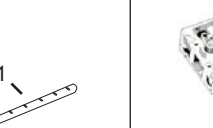
(1) Semi Finished Liner, P31358323, and Finished Liner in .010", P31358384, are available. (4) Build CE95231 Uses PZZ90011.
 (2) From ESN U79698DL. (5) To Engine No: U635848G (2 Hole).
 (3) Use Main Bearing Set, PU5MB0014, from ESN U983574C. For engine kit with these bearings, order POK/PBK309NB and nominate the bearings. (6) From Engine No: U635849G (4 Hole).
 (7) Not used on Build No: CE95231.

Engine & Equipment Application						
D3.152 DIRECT INJECTION 3 Cyl, Rope Seal Bore: 3.6020 in 91.491 mm To ESN UA391044DS	1) Engine O/H Kit 2) Basic Engine Kit 1) POK305 2) PBK305	Piston-Liner Kit PU5MK0117 Consists of: a) P89214 b) P41158065 c) P31358345 (3) 3 Per Engine	Main Bearing Set P68084 Std. P68084A .010 P68084B .020 P68084C .030 Set of 4 Pairs	Con Rod Bearing Set P85036 Std. P85036A .010 P85036B .020 P85036C .030 Set of 3 Pairs	Thrust Washer Set P31137211/21 Set of 2 Pairs	
	APPLICATIONS: MF AGRICULTURAL 235 (CE22309) 245	 1) Front Seal 2) Rear Seal 3) Crankshaft Kit	 1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket	 1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod	 1) Bushing, Cam 2) Camshaft 3) Tappet	 1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear
	MF INDUSTRIAL 20C 30B	1) P2415344 2) P36883106 x2 3) PZZ90116	1) PU5LT0038 2) PU5LB0012 3) P3681E006	1) P31134151 x3 2) P0095250 x6 3) P33221327 x6 4) PZZ90010	1) P31134128 x1 2) P31415261 3) P0860012	1) P0410132 2) P0410241 3) P31164362
	 Valve Train Kit PVTK303	1) Valve, Intake 2) Valve, Exhaust 3) Guide, Valve (Intake & Exhaust) 4) Spring, Valve a) Inner b) Outer 5) Lock, Valve	1) P31431681 x3 2) P31431011 x3 3) P33261723 x6	a) Not Used b) P0780006 x6	5) P0230001 x12	
 1) Oil Pump 2) Oil Pump Drive Gear 3) Bushing, Drive Gear	 Lift Pump	 1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat	 1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	 1) Cylinder Head (With Valves) 2) Glowplug		
1) P41314078 2) P41115025 3) P0050265	P2641A063 (1) P2641808 (2)	1a) PU5MW0023 b) P41312874 2) P2485666	1) PZZ90047 2) P3737A101 3) P3737A091	1) PZZ80082 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)		

(1) To Engine No: U635848G (2 Hole).
 (2) From Engine No: U635849G (4 Hole).
 (3) Semi Finished Liner, **P31358323**, and Finished Liner in .010", **P31358384**, are available.

Engine & Equipment Application					
<p>D3.152</p> <p>DIRECT INJECTION</p> <p>3 Cyl, Lip Seal</p> <p>Bore: 3.6020 in 91.491 mm</p> <p>From ESN UA391045DSL</p> <p>APPLICATIONS:</p> <p>LANDINI TRACTORS 5500 5530 5530F 5830 5840</p> <p>MF AGRICULTURAL 235 (CE22309/10/11) 245 250 (CE31089)</p> <p>MF INDUSTRIAL 20C 30B</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PU5MK0117 Consists of:</p>	<p>P68084 Std. (4)</p>	<p>P85036 Std.</p>	<p>P31137211/21</p>
	<p>1) POK306</p>	<p>a) P89214</p>	<p>P68084A .010</p>	<p>P85036A .010</p>	
	<p>2) PBK306</p>	<p>b) P41158065 c) P31358345 (3)</p> <p>3 Per Engine</p>	<p>P68084B .020 P68084C .030</p> <p>Set of 4 Pairs</p>	<p>P85036B .020 P85036C .030</p> <p>Set of 3 Pairs</p>	<p>Set of 2 Pairs</p>
					
<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p>	<p>1) Bushing, Cam</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p>	
<p>3) Crankshaft Kit</p>	<p>3) Head Gasket</p>	<p>4) Con Rod</p>	<p>2) Camshaft 3) Tappet</p>		
<p>1) P2415344 2) P2418F475 3) PZZ90078</p>	<p>1) PU5LT0038 2) PU5LB0011 3) P3681E006</p>	<p>1) P31134151 x3 2) P0095250 x6 3) P33221327 x6 4) PZZ90010</p>	<p>1) P31134128 x1 2) P31415261 3) P0860012</p>	<p>1) P0410132 2) P0410241 3) P31164362</p>	
<p>MF INDUSTRIAL 20C 30B</p>					
	<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve (Intake & Exhaust)</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve</p>
<p>PVTK303</p>	<p>1) P31431681 x3 2) P31431011 x3</p>	<p>3) P33261723 x6</p>	<p>a) Not Used b) P0780006 x6</p>	<p>5) P0230001 x12</p>	
					
<p>1) Oil Pump 2) Oil Pump Drive Gear 3) Bushing, Drive Gear</p>	<p>Lift Pump</p>	<p>1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves) 2) Glowplug</p>	
<p>1) P41314078 2) P41115025 3) P0050265</p>	<p>P2641A063 (1) P2641808 (2)</p>	<p>1a) PU5MW0023 b) P41312874 2) P2485666</p>	<p>1) PZZ90047 2) P3737A101 3) P3737A091</p>	<p>1) PZZ80082 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)</p>	

(1) To Engine No: U635848G (2 Hole).
 (2) From Engine No: U635849G (4 Hole).
 (3) Semi Finished Liner, **P31358323**, and Finished Liner in .010", **P31358384**, are available.
 (4) Use Main Bearing Set, **PU5MB0014**, from ESN U983574C. For engine kit with these bearings, order POK/PBK306NB and nominate the bearings.

Engine & Equipment Application					
D3.152 DIRECT INJECTION 3 Cyl, Lip Seal Bore: 3.6020 in 91.491 mm	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PU5MK0034 Consists of: a) P68332 b) P41158057 c) P31358345 (5)	P68084 Std. (6) P68084A .010 P68084B .020 P68084C .030	P85036 Std. P85036A .010 P85036B .020 P85036C .030	P31137211/21
	1) POK307/45 (1) POK307/35 (2)	3 Per Engine	Set of 4 Pairs	Set of 3 Pairs	Set of 2 Pairs
	2) PBK307				
APPLICATIONS: MF AGRICULTURAL 250 (CE22488)					
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear
	3) Crankshaft Kit	3) Head Gasket	4) Con Rod	2) Camshaft 3) Tappet	
	1) P2415344 2) P2418F475 3) PZZ90078	1) PU5LT0038 2) PU5LB0011 3) P3681E006	1) P31134151 x3 2) P0095250 x6 3) P33221327 x6 4) PZZ90010	1) P31134128 x1 2) P31415261 3) P0860012	1) P0410132 2) P0410241 3) P31164362
	Valve Train Kit a) 45° Angle b) 35° Angle	1) Valve, Intake 2) Valve, Exhaust a) 45° Angle b) 35° Angle	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve
	a) PVTK302 b) PVTK303	1a) P31431281 x3 b) P31431681 x3 2a) P31431591 x3 b) P31431011 x3	3) P33261723 x6	a) Not Used b) P0780006 x6	5) P0230001 x12
					
1) Oil Pump 2) Oil Pump Drive Gear 3) Bushing, Drive Gear	Lift Pump	1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head (With Valves) 2) Glowplug	
1) P41314078 2) P41115025 3) P0050265	P2641A063 (3) P2641808 (4)	1a) PU5MW0023 b) P41312874 2) P2485666	1) PZZ90047 2) P3737A101 3) P3737A091	1) PZZ80082 2) P2666108 (Bayonet Fitting)	

(1) Use with Cylinder Head **PZZ80082**.


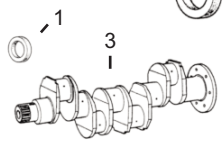
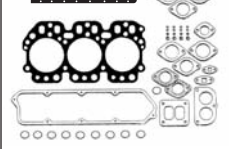
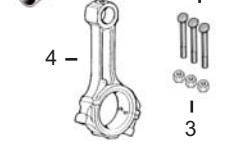
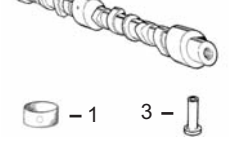
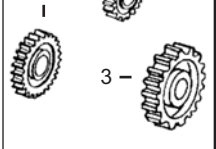
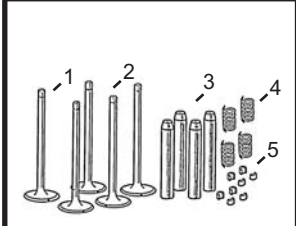

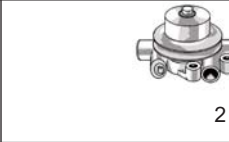
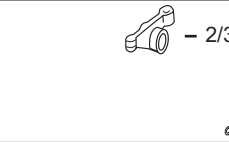
(2) Use with Cylinder Head 68128.

(3) To Engine No: U635848G (2 Hole).

(4) From Engine No: U635849G (4 Hole).

(5) Semi Finished Liner, **P31358323**, and Finished Liner in .010", **P31358384**, are available.

(6) Use Main Bearing Set, **PU5MB0014**, from ESN U983574C. For engine kit with these bearings, order POK/PBK307NB and nominate the bearings. Only available in Std and 0.10 sizes.

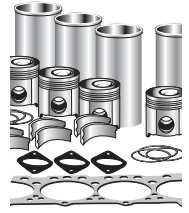
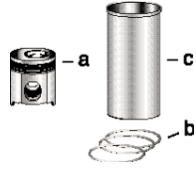
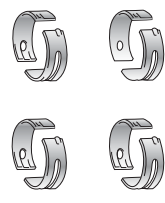


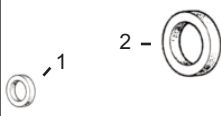
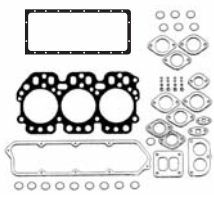
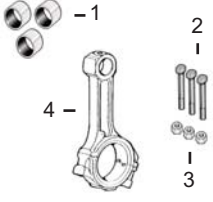
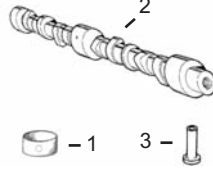
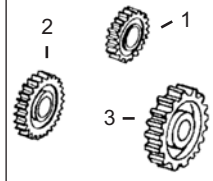
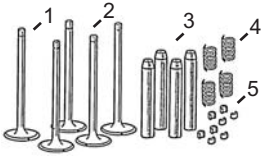
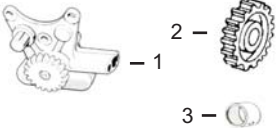

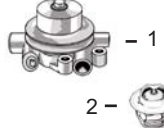
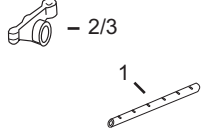

Engine & Equipment Application					
<p>G3.152</p> <p>GASOLINE ENGINE</p> <p>3 Cyl, Rope Seal</p> <p>Bore: 3.6020 in 91.491 mm</p> <p>APPLICATIONS:</p> <p>MF AGRICULTURAL 135 150</p> <p>MF INDUSTRIAL 20 40 2500 Forklift</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PCK154 Consists of:</p>	<p>P68084 Std.</p>	<p>P85036 Std.</p>	<p>P31137211/21</p>
	<p>1) POK308</p>	<p>a) P86723</p>	<p>P68084A .010</p>	<p>P85036A .010</p>	
	<p>2) PBK308</p>	<p>b) P41158012</p>	<p>P68084B .020</p>	<p>P85036B .020</p>	
		<p>c) P31358345 (1)</p>	<p>P68084C .030</p>	<p>P85036C .030</p>	
	<p>3 Per Engine</p>	<p>Set of 4 Pairs</p>	<p>Set of 3 Pairs</p>	<p>Set of 2 Pairs</p>	
					
<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p>	<p>1) Bushing, Cam</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p>	
<p>3) Crankshaft Kit</p>	<p>3) Head Gasket</p>	<p>4) Con Rod</p>	<p>2) Camshaft 3) Tappet</p>		
<p>1) P2415344 2) P36883106 x2 3) PZZ90116</p>	<p>1) PU5LT0037 2) PU5LB0012 3) P3681E006</p>	<p>1) P31134151 x3 2) P0095250 x6 3) P33221327 x6 4) PZZ90011</p>	<p>1) Not Used 2) P31415261 3) P0860012</p>	<p>1) P0410132 2) P0410241 3) P31164362</p>	
	<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve (Intake & Exhaust)</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve</p>
<p>PVTK304</p>	<p>1) P31431741 x3 2) P31431731 x3</p>	<p>3) P3313E011 x6</p>	<p>a) Not Used b) P0780006 x6</p>	<p>5) P0230001 x12</p>	
					
<p>1) Oil Pump 2) Oil Pump Drive Gear 3) Bushing, Drive Gear</p>		<p>1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat</p>		<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	
<p>1) P41314078 2) P41115025 3) P0050265</p>		<p>1a) PU5MW0023 b) P41312784 2) P2485666</p>		<p>1) PZZ90047 2) P3737A101 3) P3737A091</p>	

(1) Semi Finished Liner, P31358323, and Finished Liner in .010", P31358384, are available.


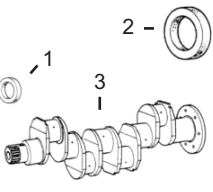
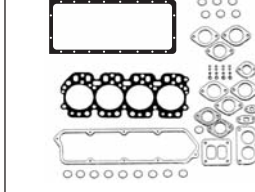
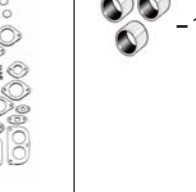
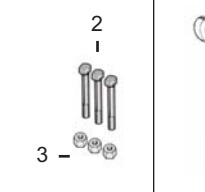
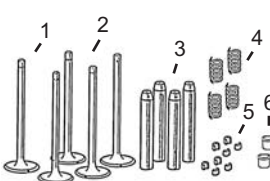
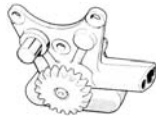

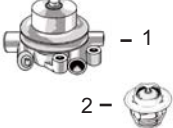
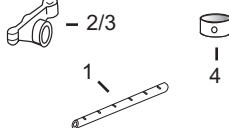
Engine & Equipment Application	Application				
3.152.4 3 Cyl, Lip Seal Bore: 3.6020 in 91.491 mm					
	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PCK1524 Consists of: a) PU5LP0017 b) P41158144 c) P31358345 (1)	P68084 Std. (2) P68084A .010 P68084B .020 P68084C .030	P85036 Std. P85036A .010 P85036B .020 P85036C .030	P31137211/21
	1) POK310	3 Per Engine	Set of 4 Pairs	Set of 3 Pairs	Set of 2 Pairs
2) PBK310					
APPLICATIONS:					
PERKINS General Genset (CM50184)					
RG WILSON General Set (CM33513)					
1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear	
1) P2415344 2) P2418F475	1) PU5LT0038 2) PU5LB0010 3) P3681E006	1) P31134151 x3 2) P0095250 x6 3) P33221327 x6 4) PZZ90010	1) P31134128 2) P31415264 3) P0860012	1) P0410132 2) P0410241 3) P31164362	
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve
	PVTK305	1) P31431981 x3 2) P31431011 x3	a) P33261727 x3 b) P33261723 x3	a) P0780007 x6 b) P0780006 x6	5) P0230001 x12
1) Oil Pump 2) Oil Pump Drive Gear 3) Bushing, Drive Gear	Lift Pump	1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	
1) P41314078 2) P41115025 3) P0050265	P2641808	1a) PU5MW0023 b) P41312874 2) P2485666	1) PZZ90047 2) P3737A101 3) P3737A091	1) N/A 2) P2666108 (Bayonet Fitting)	

(1) Semi Finished Liner, **P31358323**, and Finished Liner in .010", **P31358384**, are available.

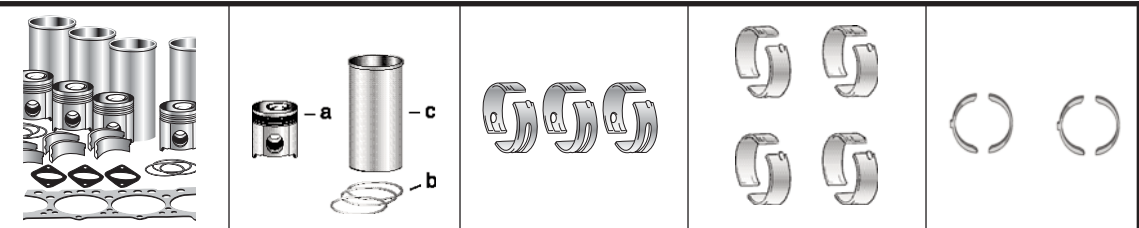
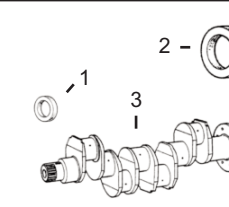
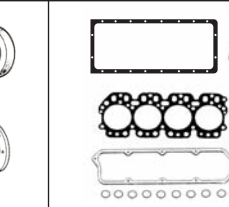
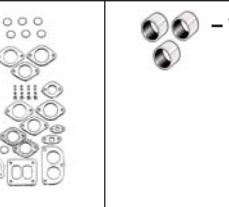
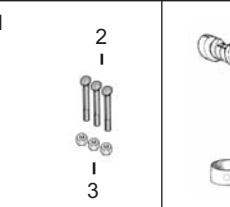
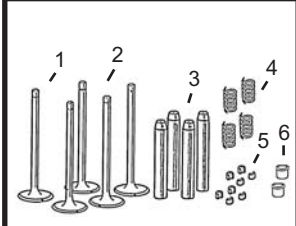
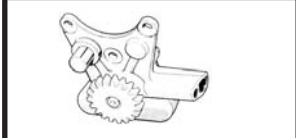
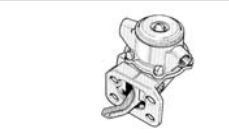
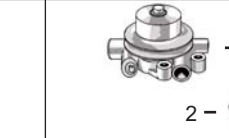
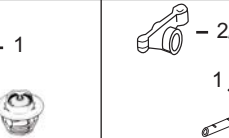
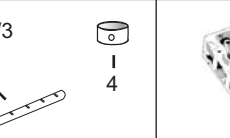
(2) Use Main Bearing Set, **PU5MB0014**, from ESN U983574C. For engine kit with these bearings, order POK/PBK310NB and nominate the bearings.

Engine & Equipment Application						
T3.152.4 3 Cyl, Lip Seal Bore: 3.6020 in 91.491 mm APPLICATIONS: MF AGRICULTURAL 253 (CN31219) 264 (CN31214) 355 (CN31187)						
		1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
		2) Basic Engine Kit	PCK1524 Consists of: a) PU5LP0017 b) P41158144 c) P31358345 (1)	P68084 Std. (2) P68084A .010 P68084B .020 P68084C .030	P85036 Std. P85036A .010 P85036B .020 P85036C .030	P31137211/21
		1) POK311	3 Per Engine	Set of 4 Pairs	Set of 3 Pairs	Set of 2 Pairs
APPLICATIONS:						
		1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear
		1) P2415344 2) P2418F475	1) PU5LT0080 2) PU5LB0011 3) P3681E006	1) P31134151 x3 2) P0095250 x6 3) P33221327 x6 4) PZZ90010	1) P31134128 2) P31415261 3) P0860012	1) N/A 2) P0410241 3) P31164362
		Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve
		PVTK306	1) P31431741 x3 2) P31431731 x3	a) P33261727 x3 b) P33261723 x3	a) P0780007 x6 b) P0780006 x6	5) P0230001 x12
						
1) Oil Pump 2) Oil Pump Drive Gear 3) Bushing, Drive Gear		Lift Pump	1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	
1) P41314078 2) P41115025 3) P0050265		P2641808	1a) PU5MW0023 b) P41312874 2) P2485666	1) PZZ90047 2) P3737A101 3) P3737A091	1) N/A 2) P2666108 (Bayonet Fitting)	


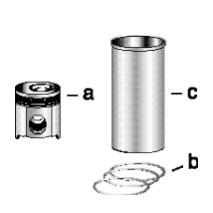
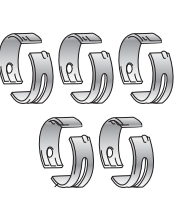

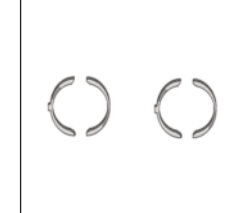
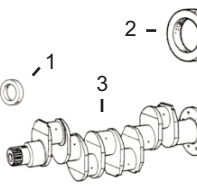
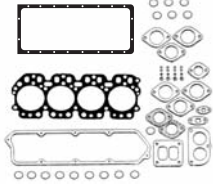
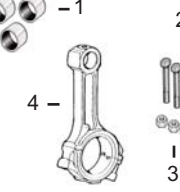
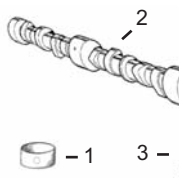
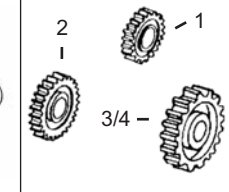
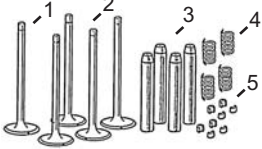
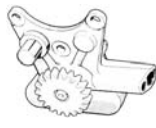

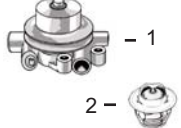
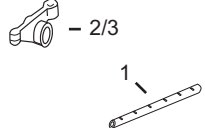

(1) Semi Finished Liner, **P31358323**, and Finished Liner in .010", **P31358384**, are available.
 (2) Use Main Bearing Set, **PU5MB0014**, from ESN U983574C. For engine kit with these bearings, order POK/PBK311NB and nominate the bearings.

Engine & Equipment Application					
<p>4.108</p> <p>INDUSTRIAL</p> <p>4 Cyl, Rope Seal</p> <p>Bore: 3.1250 in 79.375 mm</p> <p>APPLICATIONS:</p> <p>GEHL MFG 4600 Skid Loader (ED70048)</p> <p>MELROE E146 Loader (ED70075)</p> <p>OWATTONA MFG 445 Skid Loader (ED70035)</p> <p>SPERRY NEW HOLLAND L555 Skid Loader (ED70077)</p> <p>VERMEER MFG M434-4 Trencher (ED70044)</p>	<p>1) Engine O/H Kit</p> <p>2) Basic Engine Kit</p> <p>1) POK410</p> <p>2) PBK410</p>	<p>Piston-Liner Kit</p> <p>PU5MK0118</p> <p>Consists of:</p> <p>a) P69491</p> <p>b) P41158008 (1)</p> <p>c) P31358117</p> <p>4 Per Engine</p>	<p>Main Bearing Set</p> <p>P84992 Std.</p> <p>P84992A .010</p> <p>P84992B .020</p> <p>P84992C .030</p> <p>Set of 3 Pairs</p>	<p>Con Rod Bearing Set</p> <p>P85037 Std.</p> <p>P85037A .010</p> <p>P85037B .020</p> <p>P85037C .030</p> <p>Set of 4 Pairs</p>	<p>Thrust Washer Set</p> <p>P0921120/118</p> <p>Set of 3 Pieces</p>
	 <p>1) Front Seal</p> <p>2) Rear Seal</p> <p>3) Crankshaft Kit</p> <p>1) P2415338</p> <p>2) P36883107 x2</p> <p>3) PZZ90160</p>	 <p>1) Top Gasket Set</p> <p>2) Bottom Gasket</p> <p>3) Head Gasket</p> <p>1) P92425</p> <p>2) PU5LB0013</p> <p>3) P36812134</p>	 <p>1) Bush, Con Rod</p> <p>2) Bolt, Con Rod</p> <p>3) Nut, Con Rod</p> <p>1) P31134145 x4</p> <p>2) N/A</p> <p>3) Not Used</p>	 <p>1) Bushing, Cam</p> <p>2) Camshaft</p> <p>3) Tappet</p> <p>1) Not Used</p> <p>2) N/A</p> <p>3) P31434152</p>	
	<p>Valve Train Kit</p> <p>PVTK400</p>	<p>1) Valve, Intake</p> <p>2) Valve, Exhaust</p> <p>1) P0910060 x4</p> <p>2) P0910061 x4</p>	<p>3) Guide, Valve</p> <p>a) Intake</p> <p>b) Exhaust</p> <p>a) P3313E001 x4</p> <p>b) P33261723 x4</p>	<p>4) Spring, Valve</p> <p>a) Inner</p> <p>b) Outer</p> <p>a) P0780143 x8</p> <p>b) P0780144 x8</p>	<p>5) Lock, Valve</p> <p>6) Seal, Valve</p> <p>5) P0230001 x16</p> <p>6) P33817403 x8</p>
 <p>Oil Pump</p> <p>P41314089 (2)</p>	 <p>Lift Pump</p> <p>P2641A058</p>	 <p>1) Water Pump</p> <p>2) Thermostat</p> <p>1) PU5MW0054 (2)</p> <p>2) P2485666</p>	 <p>1) Rocker Shaft</p> <p>2) Rocker Arm LH</p> <p>3) Rocker Arm RH</p> <p>4) Rocker Shaft Bush</p> <p>1) N/A</p> <p>2) N/A</p> <p>3) N/A</p> <p>4) P0050132</p>		

(1) Set of 4 Rings.
(2) Check Against Build Number.

Engine & Equipment Application					
<p>4.108</p> <p>MARINE</p> <p>4 Cyl, Rope Seal</p> <p>Bore: 3.1250 in 79.375 mm</p> <p>APPLICATIONS:</p> <p>MARINE Perkins USA (ED22195) Pleasure Craft (ED33210) Pleasure Craft (ED50033) Commercial/Pleasure Craft (ED70058)</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PU5MK0061 Consists of:</p>	<p>P84992 Std.</p>	<p>P85037 Std.</p>	<p>P0921120/118</p>
	<p>1) POK411</p>	<p>a) P68383</p>	<p>P84992A .010</p>	<p>P85037A .010</p>	
	<p>2) PBK411</p>	<p>b) P41158087 (1) c) P31358117</p>	<p>P84992B .020 P84992C .030</p>	<p>P85037B .020 P85037C .030</p>	
		<p>4 Per Engine</p>	<p>Set of 3 Pairs</p>	<p>Set of 4 Pairs</p>	<p>Set of 3 Pieces</p>
					
<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p>	<p>1) Bushing, Cam</p>	<p>2) Camshaft 3) Tappet</p>	
<p>3) Crankshaft Kit</p>	<p>3) Head Gasket</p>				
<p>1) P2415338 2) P36883107 x2 3) PZZ90160</p>	<p>1) P85786 2) PU5LB0013 3) P36812134</p>	<p>1) P31134145 x4 2) N/A 3) Not Used</p>		<p>1) Not Used 2) N/A 3) P31434152</p>	
	<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve 6) Seal, Valve</p>
<p>PVTK400</p>	<p>1) P0910060 x4 2) P0910061 x4</p>	<p>a) P3313E001 x4 b) P33261723 x4</p>	<p>a) P0780143 x8 b) P0780144 x8</p>	<p>5) P0230001 x16 6) P33817403 x8</p>	
					
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH 4) Rocker Shaft Bush</p>	<p>1) Cylinder Head (Bare) 2) Glowplug</p>	
<p>P41314089 (2)</p>	<p>P2641A058</p>	<p>1) PU5MW0054 (2) 2) P2485608</p>	<p>1) N/A 2) N/A 3) N/A 4) P0050132</p>	<p>1) PZZ80143 2) P2666108 (Bayonet Fitting)</p>	

(1) Set of 5 Rings.
(2) Check Against Build Number.


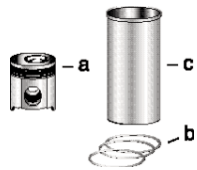

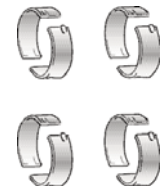

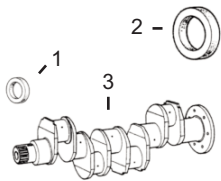
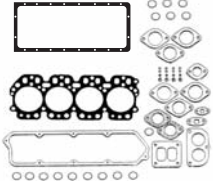
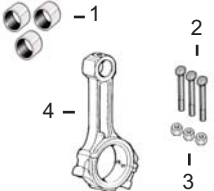
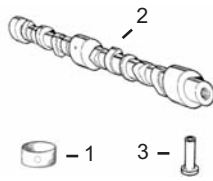
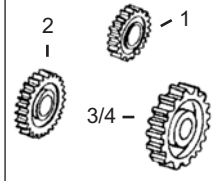
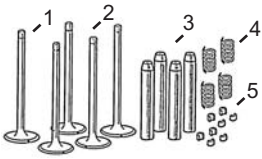
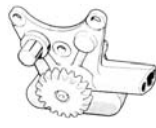

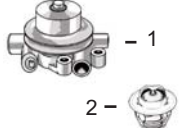
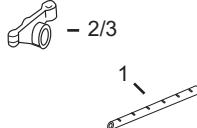

Engine & Equipment Application					
4.203 INDIRECT INJECTION 4 Cyl, Rope Seal Bore: 3.6020 in 91.491 mm To ESN 2820092	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PCK152 Consists of: a) P81512 (1) b) P41158057 c) P31358308 (2) 4 Per Engine	P68082 Std. P68082A .010 P68082B .020 P68082C .030 Set of 5 Pairs	P85035 Std. P85035A .010 P85035B .020 P85035C .030 Set of 4 Pairs	P31137211/21 Set of 2 Pairs
	1) POK430				
	2) PBK430				
APPLICATIONS: MF AGRICULTURAL 65 MF INDUSTRIAL 356 Tractor Shovel					
	1) Front Seal 2) Rear Seal 3) Crankshaft Kit	1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear, Lower 4) Idler Gear, Upper
	1) P2415344 2) P36883106 x2 3) PZZ90121	1) P69036 2) PU5LB0500 3) P36812125	1) P31134151 x4 2) P0095250 x8 3) P33221327 x8 4) PZZ90011	1) P31134119 x1 2) P31415214 3) P0860012	1) P0410228 2) P0410231 3) P41115004 4) P41115005
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve
	PVTK404	1) P31431261 x4 2) P0910002 x4	3) P33261723 x8	a) P0780007 x8 b) P0780006 x8	5) P0230001 x16
					
Oil Pump	Lift Pump	1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head (With Valves) 2) Glowplug	
P41314164	P2641A065	1a) PU5MW0061 b) P41312892 2) P2485666	1) PZZ90139 2) P3737A101 3) P3737A091	1) PZZ80089 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)	

(1) Flat Head Piston.

(2) Cast sleeve replaces OEM Chrome Liner with Flange thickness 0.040".

Engine & Equipment Application					
<p>4.203</p> <p>INDIRECT INJECTION</p> <p>4 Cyl, Rope Seal</p> <p>Bore: 3.6020 in 91.491 mm</p> <p>From ESN 2820093</p> <p>APPLICATIONS:</p> <p>MF AGRICULTURAL 65</p> <p>MF INDUSTRIAL 356 Tractor Shovel</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PU5MK0033</p> <p>Consists of:</p> <p>a) P81512 (1) b) P41158057 c) P31358345 (2)</p> <p>4 Per Engine</p>	<p>P68082 Std.</p> <p>P68082A .010 P68082B .020 P68082C .030</p> <p>Set of 5 Pairs</p>	<p>P85035 Std.</p> <p>P85035A .010 P85035B .020 P85035C .030</p> <p>Set of 4 Pairs</p>	<p>P31137211/21</p> <p>Set of 2 Pairs</p>
	<p>1) POK431</p>				
	<p>2) PBK431</p>				
	<p>1) Top Gasket Set 2) Bottom Gasket</p> <p>3) Head Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod</p>	<p>1) Bushing, Cam 2) Camshaft 3) Tappet</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear, Lower 4) Idler Gear, Upper</p>	
<p>1) Front Seal 2) Rear Seal</p>	<p>1) P69036 2) PU5LB0500 3) P36812125</p>	<p>1) P31134151 x4 2) P0095250 x8 3) P33221327 x8 4) PZZ90011</p>	<p>1) P31134119 x1 2) P31415214 3) P0860012</p>	<p>1) P0410228 2) P0410231 3) P41115004 4) P41115005</p>	
<p>3) Crankshaft Kit</p>	<p>1) P2415344 2) P36883106 x2 3) PZZ90121</p>	<p>1) P31134151 x4 2) P0095250 x8 3) P33221327 x8 4) PZZ90011</p>	<p>1) P31134119 x1 2) P31415214 3) P0860012</p>	<p>1) P0410228 2) P0410231 3) P41115004 4) P41115005</p>	
	<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve (Intake & Exhaust)</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve</p>
<p>PVTK404</p>	<p>1) P31431261 x4 2) P0910002 x4</p>	<p>3) P33261723 x8</p>	<p>a) P0780007 x8 b) P0780006 x8</p>	<p>5) P0230001 x16</p>	
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves) 2) Glowplug</p>	
<p>P41314164</p>	<p>P2641A065</p>	<p>1a) PU5MW0061 b) P41312892 2) P2485666</p>	<p>1) PZZ90139 2) P3737A101 3) P3737A091</p>	<p>1) PZZ80089 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)</p>	

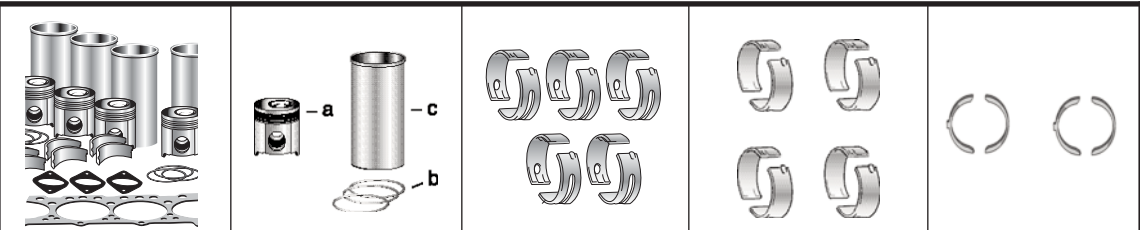
(1) Flat Head Piston.
(2) Semi Finished Liner, P31358323, and Finished Liner in .010", P31358384, are available.

Engine & Equipment Application					
4.203 INDIRECT INJECTION 4 Cyl, Rope & Lip Seal (Both Rear Seal Types Included in Kit) Bore: 3.6020 in 91.491 mm	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PCK152 Consists of: a) P81512 (1) b) P41158057 c) P31358308 (2) 4 Per Engine	P68082 Std. P68082A .010 P68082B .020 P68082C .030 Set of 5 Pairs	P85035 Std. P85035A .010 P85035B .020 P85035C .030 Set of 4 Pairs	P31137211/21 Set of 2 Pairs
	1) POK438				
	2) PBK438				
APPLICATIONS:					
CLARK EQUIPMENT C60-70-80 (JD21383) CY30-40-55 (JD21493) CY40-60 (JD22117)	1) Front Seal 2) Rear Seal 3) Crankshaft Kit	1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear, Lower 4) Idler Gear, Upper
HYSTER H40F (JD20074) H40H (JD21708) S60B-H60C (JD20680)	1) P2415344 2) P36883106 x2 P2418F475 3) PZZ90095 (3)	1) P69036 2) PU5LB0015 3) P36812125	1) P31134151 x4 2) P0095250 x8 3) P33221327 x8 4) PZZ90011	1) P31134119 x1 2) P31415214 3) P0860012	1) P0410228 2) P0410231 3) P41115004 4) P41115005
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve
	PVTK404	1) P31431261 x4 2) P0910002 x4	3) P33261723 x8	a) P0780007 x8 b) P0780006 x8	5) P0230001 x16
					
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head (With Valves) 2) Glowplug	
P41314164	P2641336	1) PU5MW0088 2) P2485666	1) PZZ90139 2) P3737A101 3) P3737A091	1) PZZ80089 2) P2666108 (Bayonet Fitting)	

(1) Flat Head Piston.

(2) Cast sleeve replaces OEM Chrome Liner with Flange thickness 0.040".

(3) Lip Seal Crankshaft from ESN U74103CL.

Engine & Equipment Application					
<p>4.203</p> <p>INDIRECT INJECTION</p> <p>4 Cyl, Lip Seal</p> <p>Bore: 3.6020 in 91.491 mm</p> <p>APPLICATIONS:</p> <p>ALLIS CHALMERS 40-50 Forklift (JD22458) (5) 700 Forklift (JD22028) (4) ACP40/50D (JD22533)</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PU5MK0033</p> <p>Consists of:</p>	<p>P68082 Std.</p>	<p>P85035 Std.</p>	<p>P31137211/21</p>
	<p>1) POK439</p>	<p>a) P81512 (3)</p>	<p>P68082A .010</p>	<p>P85035A .010</p>	
	<p>2) PBK439</p>	<p>b) P41158057</p>	<p>P68082B .020</p>	<p>P85035B .020</p>	
	<p>2) PBK439</p>	<p>c) P31358345 (6)</p>	<p>P68082C .030</p>	<p>P85035C .030</p>	
	<p>4 Per Engine</p>	<p>Set of 5 Pairs</p>	<p>Set of 4 Pairs</p>	<p>Set of 2 Pairs</p>	
<p>1) Front Seal</p> <p>2) Rear Seal</p> <p>3) Crankshaft Kit</p>	<p>1) Top Gasket Set</p> <p>2) Bottom Gasket</p> <p>3) Head Gasket</p>	<p>1) Bush, Con Rod</p> <p>2) Bolt, Con Rod</p> <p>3) Nut, Con Rod</p> <p>4) Con Rod</p>	<p>1) Bushing, Cam</p> <p>2) Camshaft</p> <p>3) Tappet</p>	<p>1) Crankshaft Gear</p> <p>2) Camshaft Gear</p> <p>3) Idler Gear, Lower</p> <p>4) Idler Gear, Upper</p>	
<p>1) P2415344</p> <p>2) P2418F475</p> <p>3) PZZ90095</p>	<p>1) P69036</p> <p>2) PU5LB0015</p> <p>3) P36812125</p>	<p>1) P31134151 x4</p> <p>2) P0095250 x8</p> <p>3) P33221327 x8</p> <p>4) PZZ90011</p>	<p>1) P31134119 x1</p> <p>2) P31415214</p> <p>3) P0860012</p>	<p>1) P0410228</p> <p>2) P0410231</p> <p>3) P41115004</p> <p>4) P41115005</p>	
<p>Valve Train Kit</p> <p>PVTK404</p>	<p>1) Valve, Intake</p> <p>2) Valve, Exhaust</p>	<p>3) Guide, Valve (Intake & Exhaust)</p>	<p>4) Spring, Valve</p> <p>a) Inner</p> <p>b) Outer</p>	<p>5) Lock, Valve</p>	
<p>1) P31431261 x4</p> <p>2) P0910002 x4</p>	<p>3) P33261723 x8</p>	<p>a) P0780007 x8</p> <p>b) P0780006 x8</p>	<p>5) P0230001 x16</p>		
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump</p> <p>2) Thermostat</p>	<p>1) Rocker Shaft</p> <p>2) Rocker Arm LH</p> <p>3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves)</p> <p>2) Glowplug</p>	
<p>P41314164</p>	<p>P2641A065 (1)</p> <p>P2641336 (2)</p>	<p>1) PU5MW0088</p> <p>2) P2485666</p>	<p>1) PZZ90139</p> <p>2) P3737A101</p> <p>3) P3737A091</p>	<p>1) PZZ80089</p> <p>2) P2666103 (Screw Fitting)</p> <p>P2666108 (Bayonet Fitting)</p>	

(1) Use on Build No: JD22028.

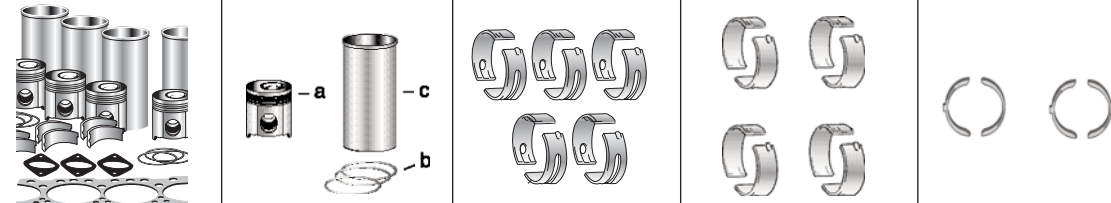
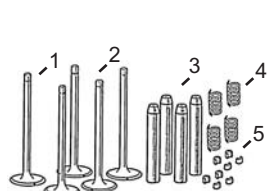
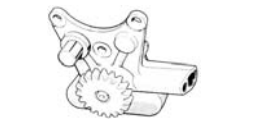
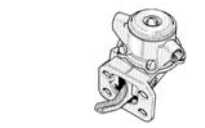
(2) Use on Build No: JD22458/JD22533.

(3) Flat Head Piston.

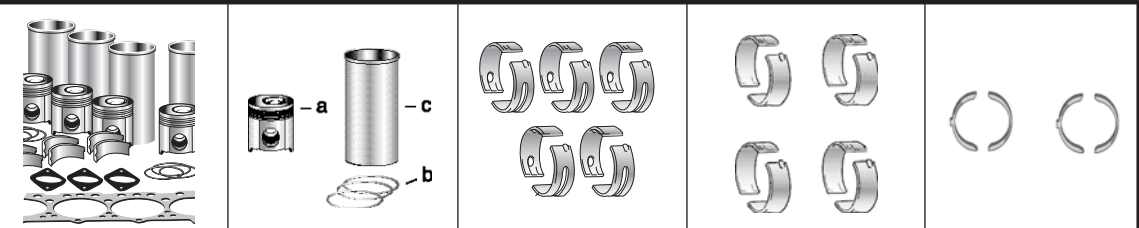
(4) From ESN U74103CL

(5) From ESN U76357L


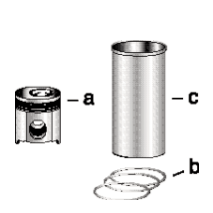


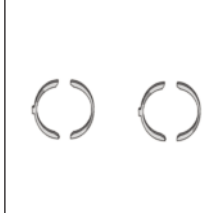
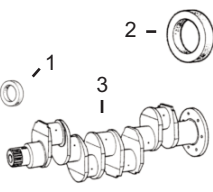
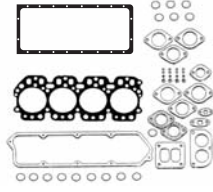
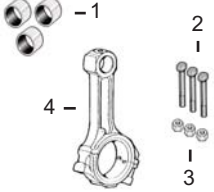
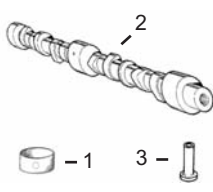
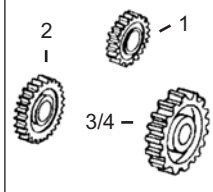
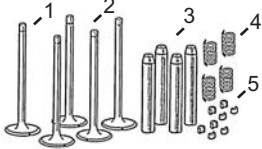


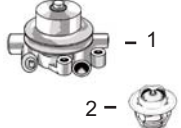
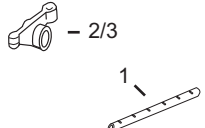

(6) Semi Finished Liner, P31358323, and Finished Liner in .010", P31358384, are available.

Engine & Equipment Application					
<p>D4.203</p> <p>DIRECT INJECTION</p> <p>4 Cyl, Rope Seal</p> <p>Bore: 3.6020 in 91.491 mm</p> <p>To ESN 2939035</p>	<p>1) Engine O/H Kit</p> <p>2) Basic Engine Kit</p> <p>1) POK432</p> <p>2) PBK432</p>	<p>Piston-Liner Kit</p> <p>PCK153</p> <p>Consists of:</p> <p>a) P68332</p> <p>b) P41158057</p> <p>c) P31358308 (1)</p> <p>4 Per Engine</p>	<p>Main Bearing Set</p> <p>P68082 Std.</p> <p>P68082A .010</p> <p>P68082B .020</p> <p>P68082C .030</p> <p>Set of 5 Pairs</p>	<p>Con Rod Bearing Set</p> <p>P85035 Std.</p> <p>P85035A .010</p> <p>P85035B .020</p> <p>P85035C .030</p> <p>Set of 4 Pairs</p>	<p>Thrust Washer Set</p> <p>P31137211/21</p> <p>Set of 2 Pairs</p>
<p>APPLICATIONS:</p> <p>MF AGRICULTURAL 65</p> <p>MF INDUSTRIAL 365 Tractor Shovel</p>	<p>1) Front Seal</p> <p>2) Rear Seal</p> <p>3) Crankshaft Kit</p> <p>1) P2415344</p> <p>2) P36883106 X2</p> <p>3) PZZ90121</p>	<p>1) Top Gasket Set</p> <p>2) Bottom Gasket</p> <p>3) Head Gasket</p> <p>1) PU5LT0069</p> <p>2) P82908</p> <p>3) P36812138</p>	<p>1) Bush, Con Rod</p> <p>2) Bolt, Con Rod</p> <p>3) Nut, Con Rod</p> <p>4) Con Rod</p> <p>1) P31134151 x4</p> <p>2) P0095250 x8</p> <p>3) P33221327 x8</p> <p>4) PZZ90010</p>	<p>1) Bushing, Cam</p> <p>2) Camshaft</p> <p>3) Tappet</p> <p>1) P31134119 x1</p> <p>2) P31415214</p> <p>3) P0860012</p>	<p>1) Crankshaft Gear</p> <p>2) Camshaft Gear</p> <p>3) Idler Gear, Lower</p> <p>4) Idler Gear, Upper</p> <p>1) P0410228</p> <p>2) P0410231</p> <p>3) P41115004</p> <p>4) P41115005</p>
	<p>Valve Train Kit</p> <p>PVTK405</p>	<p>1) Valve, Intake</p> <p>2) Valve, Exhaust</p> <p>1) P31431281 x4</p> <p>2) P31431591 x4</p>	<p>3) Guide, Valve (Intake & Exhaust)</p> <p>3) P33261723 x8</p>	<p>4) Spring, Valve</p> <p>a) Inner</p> <p>b) Outer</p> <p>a) P0780007 x8</p> <p>b) P0780006 x8</p>	<p>5) Lock, Valve</p> <p>5) P0230001 x16</p>
 <p>Oil Pump</p>	 <p>Lift Pump</p>	<p>1) Water Pump</p> <p>a) Without Pulley</p> <p>b) With Pulley</p> <p>2) Thermostat</p> <p>1a) PU5MW0061</p> <p>b) P41312892</p> <p>2) P2485666</p>	<p>1) Rocker Shaft</p> <p>2) Rocker Arm LH</p> <p>3) Rocker Arm RH</p> <p>1) PZZ90139</p> <p>2) P3737A101</p> <p>3) P3737A091</p>	<p>1) Cylinder Head</p> <p>2) Glowplug</p> <p>1) PZZ80078</p> <p>2) P2666103 (Screw Fitting)</p> <p>P2666108 (Bayonet Fitting)</p>	
<p>P41314164</p>	<p>P2641A065</p>				

(1) Cast sleeve replaces OEM Chrome Liner with Flange thickness 0.040".

Engine & Equipment Application					
<p>D4.203</p> <p>DIRECT INJECTION</p> <p>4 Cyl, Rope Seal</p> <p>Bore: 3.6020 in 91.491 mm</p> <p>ESN 2939036-29C1084</p> <p>APPLICATIONS:</p> <p>MF AGRICULTURAL 65 165 255 300 Combine</p> <p>MF INDUSTRIAL 302 304 356 3165 Tractor Shovel</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PU5MK0034</p> <p>Consists of:</p>	<p>P68082 Std.</p>	<p>P85035 Std.</p>	<p>P31137211/21</p>
	<p>1) POK433</p>	<p>a) P68332</p>	<p>P68082A .010</p>	<p>P85035A .010</p>	
	<p>2) PBK433</p>	<p>b) P41158057</p> <p>c) P31358345 (1)</p> <p>4 Per Engine</p>	<p>P68082B .020</p> <p>P68082C .030</p> <p>Set of 5 Pairs</p>	<p>P85035B .020</p> <p>P85035C .030</p> <p>Set of 4 Pairs</p>	<p>Set of 2 Pairs</p>
<p>1) Front Seal</p> <p>2) Rear Seal</p> <p>3) Crankshaft Kit</p>	<p>1) Top Gasket Set</p> <p>2) Bottom Gasket</p> <p>3) Head Gasket</p>	<p>1) Bush, Con Rod</p> <p>2) Bolt, Con Rod</p> <p>3) Nut, Con Rod</p> <p>4) Con Rod</p>	<p>1) Bushing, Cam</p> <p>2) Camshaft</p> <p>3) Tappet</p>	<p>1) Crankshaft Gear</p> <p>2) Camshaft Gear</p> <p>3) Idler Gear, Lower</p> <p>4) Idler Gear, Upper</p>	
<p>1) P2415344</p> <p>2) P36883106 x2</p> <p>3) PZZ90121</p>	<p>1) PU5LT0069</p> <p>2) P82908</p> <p>3) P36812138</p>	<p>1) P31134151 x4</p> <p>2) P0095250 x8</p> <p>3) P33221327 x8</p> <p>4) PZZ90010</p>	<p>1) P31134119 x1</p> <p>2) P31415214</p> <p>3) P0860012</p>	<p>1) P0410228</p> <p>2) P0410231</p> <p>3) P41115004</p> <p>4) P41115005</p>	
<p>Valve Train Kit</p> <p>PVTK405</p>	<p>1) Valve, Intake</p> <p>2) Valve, Exhaust</p> <p>1) P31431281 x4</p> <p>2) P31431591 x4</p>	<p>3) Guide, Valve (Intake & Exhaust)</p> <p>3) P33261723 x6</p>	<p>4) Spring, Valve</p> <p>a) Inner</p> <p>b) Outer</p> <p>a) P0780007 x6</p> <p>b) P0780006 x6</p>	<p>5) Lock, Valve</p> <p>5) P0230001 x16</p>	
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump</p> <p>a) Without Pulley</p> <p>b) With Pulley</p> <p>2) Thermostat</p>	<p>1) Rocker Shaft</p> <p>2) Rocker Arm LH</p> <p>3) Rocker Arm RH</p>	<p>1) Cylinder Head</p> <p>2) Glowplug</p>	
<p>P41314164</p>	<p>P2641A065</p>	<p>1a) PU5MW0061</p> <p>b) P41312892</p> <p>2) P2485666</p>	<p>1) PZZ90139</p> <p>2) P3737A101</p> <p>3) P3737A091</p>	<p>1) PZZ80078</p> <p>2) P2666103 (Screw Fitting)</p> <p>P2666108 (Bayonet Fitting)</p>	

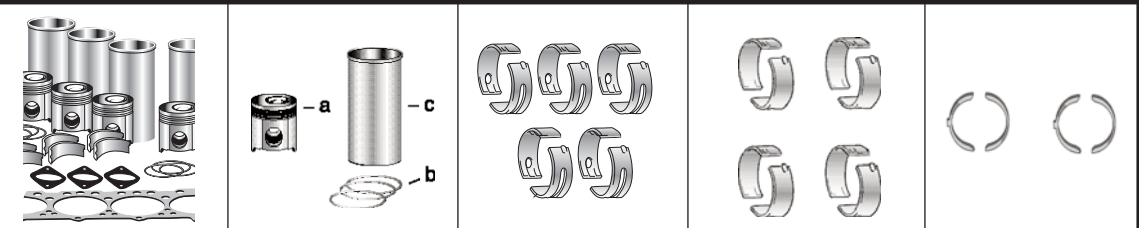
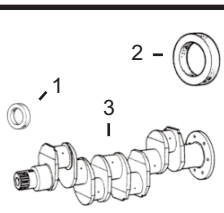
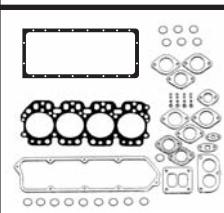
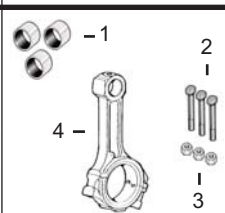
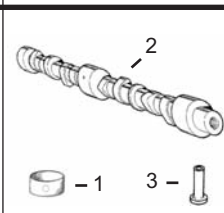
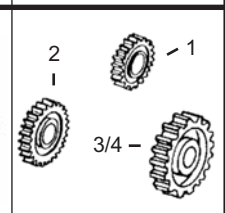
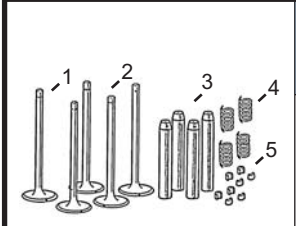
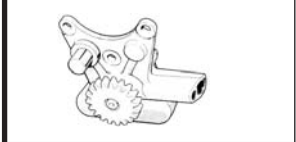
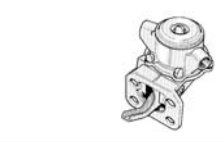
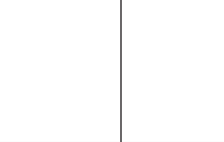
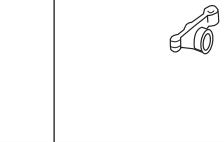
(1) Semi Finished Liner, P31358323, and Finished Liner in .010", P31358384, are available.

Engine & Equipment Application					
D4.203 DIRECT INJECTION 4 Cyl, Rope & Lip Seal (Both Rear Seal Types Included in Kit) Bore: 3.6020 in 91.491 mm From ESN 29C1085	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PU5MK0034 Consists of: a) P68332 b) P41158057 c) P31358345 (3)	P68082 Std. P68082A .010 P68082B .020 P68082C .030	P85035 Std. P85035A .010 P85035B .020 P85035C .030	P31137211/21
	1) POK434 2) PBK434	4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs
APPLICATIONS: MF AGRICULTURAL 65 165 255 300 Combine MF INDUSTRIAL 30 40B 50 302 356 3165 Tractor Shovel					
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear, Lower 4) Idler Gear, Upper
	3) Crankshaft Kit	3) Head Gasket	4) Con Rod	2) Camshaft 3) Tappet	
	1) P2415344 2) P36883106 x2 P2418F475 3) PZZ90121 (1) PZZ90111 (2)	1) PU5LT0069 2) P68036 3) P36812138	1) P31134151 x4 2) P0095250 x8 3) P33221327 x8 4) PZZ90010	1) P31134119 x1 2) P31415214 3) P0860012	1) P0410228 2) P0410231 3) P41115004 4) P41115005
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve
	PVTK405	1) P31431281 x4 2) P31431591 x4	3) P33261723 x8	a) P0780007 x8 b) P0780006 x8	5) P0230001 x16
					
Oil Pump	Lift Pump	1) Water Pump a) Without Pulley b) With Pulley 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	
P41314164	P2641A065	1a) PU5MW0061 b) P41312892 2) P2485666	1) PZZ90139 2) P3737A101 3) P3737A091	1) PZZ80078 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)	

(1) Rope Seal.

(2) Lip Seal.


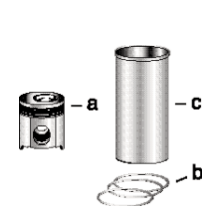



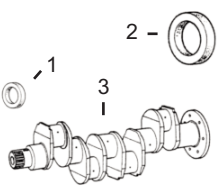
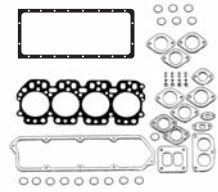
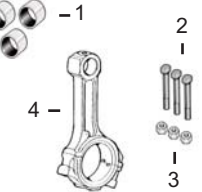
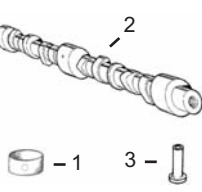
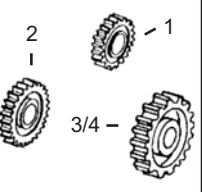
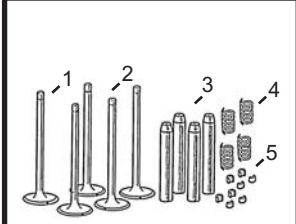
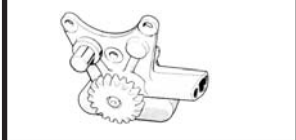
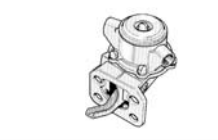
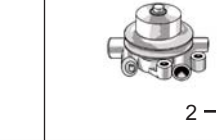
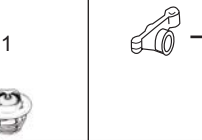
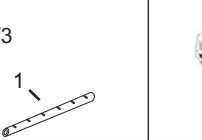
(3) Semi Finished Liner, **P31358323**, and Finished Liner in .010", **P31358384**, are available.

Engine & Equipment Application					
<p>D4.203</p> <p>DIRECT INJECTION</p> <p>4 Cyl, Lip Seal</p> <p>Bore: 3.6020 in 91.491 mm</p> <p>To ESN U589378L</p> <p>APPLICATIONS:</p> <p>PERKINS USA General Industrial (JE33174)</p> <p>SULLAIR CORP Compressor (JE70033)</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PU5MK0034 Consists of:</p>	<p>P68082 Std.</p>	<p>P85035 Std.</p>	<p>P31137211/21</p>
	<p>1) POK436</p>	<p>a) P68332</p>	<p>P68082A .010</p>	<p>P85035A .010</p>	
	<p>2) PBK436</p>	<p>b) P41158057 c) P31358345 (1)</p>	<p>P68082B .020 P68082C .030</p>	<p>P85035B .020 P85035C .030</p>	
<p>4 Per Engine</p>	<p>Set of 5 Pairs</p>	<p>Set of 4 Pairs</p>	<p>Set of 2 Pairs</p>		
					
<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p>	<p>1) Bushing, Cam 2) Camshaft 3) Tappet</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear, Lower 4) Idler Gear, Upper</p>	
<p>3) Crankshaft Kit</p>	<p>3) Head Gasket</p>	<p>4) Con Rod</p>			
<p>1) P2415344 2) P2418F475 3) PZZ90095</p>	<p>1) PU5LT0084 2) PU5LB0015 3) P36812138</p>	<p>1) P31134151 x4 2) P0095250 x8 3) P33221327 x8 4) PZZ90010</p>	<p>1) P31134119 x1 2) P31415214 3) P0860012</p>	<p>1) P0410228 2) P0410231 3) P41115004 4) P41115005</p>	
	<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve</p>
<p>PVTK420</p>	<p>1) P31431681 x4 2) P31431991 x4</p>	<p>a) P33261727 x4 b) P33261723 x4</p>	<p>a) P0780007 x8 b) P0780006 x8</p>	<p>5) P0230001 x16</p>	
					
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>		
<p>P41314164</p>	<p>P2641A054</p>	<p>1) PU5MW0088 2) P2485666</p>	<p>1) PZZ90139 2) P3737A101 3) P3737A091</p>		

(1) Semi Finished Liner, P31358323, and Finished Liner in .010", P31358384, are available.

Engine & Equipment Application					
<p>D4.203</p> <p>DIRECT INJECTION</p> <p>4 Cyl, Lip Seal</p> <p>Bore: 3.6020 in 91.491 mm</p> <p>From ESN U589379L</p>					
<p>APPLICATIONS:</p> <p>PERKINS USA General Industrial (JE33174)</p> <p>SULLAIR CORP Compressor (JE70033)</p>	<p>1) Engine O/H Kit</p> <p>2) Basic Engine Kit</p> <p>1) POK437</p> <p>2) PBK437</p>	<p>Piston-Liner Kit</p> <p>PU5MK0117</p> <p>Consists of:</p> <p>a) P89214</p> <p>b) P41158065</p> <p>c) P31358345 (1)</p> <p>4 Per Engine</p>	<p>Main Bearing Set</p> <p>P68082 Std.</p> <p>P68082A .010</p> <p>P68082B .020</p> <p>P68082C .030</p> <p>Set of 5 Pairs</p>	<p>Con Rod Bearing Set</p> <p>P85035 Std.</p> <p>P85035A .010</p> <p>P85035B .020</p> <p>P85035C .030</p> <p>Set of 4 Pairs</p>	<p>Thrust Washer Set</p> <p>P31137211/21</p> <p>Set of 2 Pairs</p>
<p>APPLICATIIONS:</p> <p>PERKINS USA General Industrial (JE33174)</p> <p>SULLAIR CORP Compressor (JE70033)</p>	<p>1) Front Seal</p> <p>2) Rear Seal</p> <p>3) Crankshaft Kit</p> <p>1) P2415344</p> <p>2) P2418F475</p> <p>3) PZZ90095</p>	<p>1) Top Gasket Set</p> <p>2) Bottom Gasket</p> <p>3) Head Gasket</p> <p>1) PU5LT0084</p> <p>2) PU5LB0015</p> <p>3) P36812138</p>	<p>1) Bush, Con Rod</p> <p>2) Bolt, Con Rod</p> <p>3) Nut, Con Rod</p> <p>4) Con Rod</p> <p>1) P31134151 x4</p> <p>2) P0095250 x8</p> <p>3) P33221327 x8</p> <p>4) PZZ90010</p>	<p>1) Bushing, Cam</p> <p>2) Camshaft</p> <p>3) Tappet</p> <p>1) P31134119 x1</p> <p>2) P31415214</p> <p>3) P0860012</p>	<p>1) Crankshaft Gear</p> <p>2) Camshaft Gear</p> <p>3) Idler Gear, Lower</p> <p>4) Idler Gear, Upper</p> <p>1) P0410228</p> <p>2) P0410231</p> <p>3) P41115004</p> <p>4) P41115005</p>
<p>Valve Train Kit</p> <p>PVTK420</p>	<p>1) Valve, Intake</p> <p>2) Valve, Exhaust</p> <p>1) P31431681 x4</p> <p>2) P31431991 x4</p>	<p>3) Guide, Valve</p> <p>a) Intake</p> <p>b) Exhaust</p> <p>a) P33261727 x4</p> <p>b) P33261723 x4</p>	<p>4) Spring, Valve</p> <p>a) Inner</p> <p>b) Outer</p> <p>a) P0780007 x8</p> <p>b) P0780006 x8</p>	<p>5) Lock, Valve</p> <p>5) P0230001 x16</p>	
<p>Oil Pump</p> <p>P41314164</p>	<p>Lift Pump</p> <p>P2641A054</p>	<p>1) Water Pump</p> <p>2) Thermostat</p> <p>1) PU5MW0088</p> <p>2) P2485666</p>		<p>1) Rocker Shaft</p> <p>2) Rocker Arm LH</p> <p>3) Rocker Arm RH</p> <p>1) PZZ90139</p> <p>2) P3737A101</p> <p>3) P3737A091</p>	


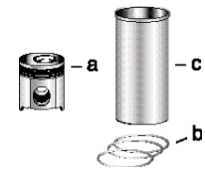
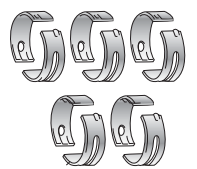
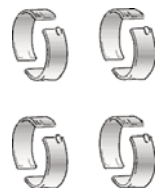

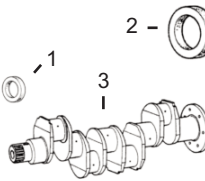
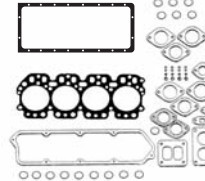
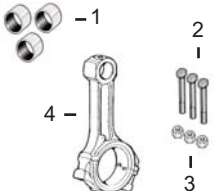
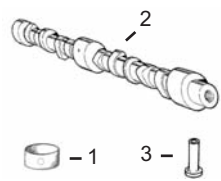
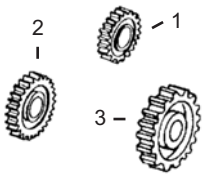
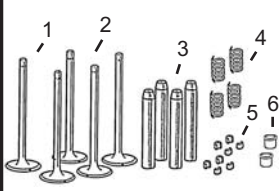


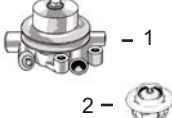
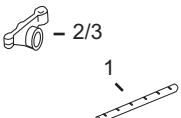

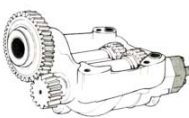
(1) Semi Finished Liner, P31358323, and Finished Liner in .010", P31358384, are available.

Engine & Equipment Application	    				
<p>4.203.2</p> <p>4 Cyl, Lip Seal</p> <p>Bore: 3.6020 in 91.491 mm</p> <p>APPLICATIONS:</p> <p>ALLIS CHALMERS JCP 40-50 Forklift (JG80031)</p> <p>CATERPILLAR V40-60C Forklift (JG70020) V/T40C Forklift (JG70092)</p> <p>CLARK EQUIPMENT C500 (H) 60-70-80D (JG70099) C500Y-40-560 (JG70100) C500Y-40-560 (JG70143)</p> <p>HYSTER H60-80C (JG70040) H60-80E (JG70113)</p> <p>SPERRY NEW HOLLAND L779 Skid Steer Loader (JG70043/JG70156)</p>	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	<p>PU5MK0122</p> <p>Consists of:</p> <p>a) P68801</p> <p>b) P41158007</p> <p>c) P31358345 (1)</p> <p>4 Per Engine</p>	P68082 Std.	P85035 Std.	P31137211/21
	1) POK435		P68082A .010	P85035A .010	
	2) PBK435		P68082B .020	P85035B .020	
2) PBK435	P68082C .030	P85035C .030	Set of 2 Pairs		
					
1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam	1) Crankshaft Gear 2) Camshaft Gear	
3) Crankshaft Kit	3) Head Gasket	4) Con Rod	2) Camshaft 3) Tappet	3) Idler Gear, Lower 4) Idler Gear, Upper	
1) P2415344 2) P2418F475 3) PZZ90095	1) PU5LT0084 2) PU5LB0015 3) P36812138	1) P31134151 x4 2) P0095250 x8 3) P33221327 x8 4) PZZ90010	1) P31134119 x1 2) P31415214 3) P0860012	1) P0410228 2) P0410231 3) P41115004 4) P41115005	
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve
	PVTK418	1) P31431981 x4 2) P31431991 x4	a) P33261727 x4 b) P33261723 x4	a) P0780007 x8 b) P0780006 x8	5) P0230001 x16
					
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	
P41314164	P2641A054	1) PU5MW0088 2) P2485666	1) PZZ90139 2) P3737A101 3) P3737A091	1) N/A 2) P2666108 (Bayonet Fitting)	

(1) Semi Finished Liner, P31358323, and Finished Liner in .010", P31358384, are available.

Engine & Equipment Application					
G4.203 4 Cyl Lip Seal Bore: 3.6020 in 91.491 mm APPLICATIONS: EATON CORP Forklift (JF22668)					
	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PCK154 Consists of:	P68082 Std.	P85035 Std.	P31137211/21
	1) POK442	a) P86723	P68082A .010	P85035A .010	
	2) PBK442	b) P41158012 c) P31358345 (1)	P68082B .020 P68082C .030	P85035B .020 P85035C .030	
	4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs	
1) Front Seal 2) Rear Seal 3) Crankshaft Kit	1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear, Lower 4) Idler Gear, Upper	
1) P2415344 2) P2418F475 3) PZZ90095	1) PU5LT0084 2) PU5LB0015 3) P36812138	1) P31134151 x4 2) P0095250 x8 3) P33221327 x8	1) P31134119 x1 2) P31415214 3) P0860012	1) P0410228 2) N/A 3) P41115004 4) P41115005	
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve a) Inner b) Outer 5) Lock, Valve 6) Seal, Valve	
	PVTK421	1) P31431741 x4 2) P31431731 x4	3) P3313E011 x8	a) P0780007 x8 b) P0780006 x8 5) P0230001 x16 6) N/A	
Oil Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH			
P41314164	1) N/A 2) P2485666	1) PZZ90139 2) P3737A101 3) P3737A091			

(1) Semi Finished Liner, P31358323, and Finished Liner in .010", P31358384, are available.

Engine & Equipment Application					
<p>4.212</p> <p>4 Cyl, Rope & Lip Seal</p> <p>(Both Rear Seal Types Included in Kit)</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>To ESN UA187117L</p>					
	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PU5MK0066</p> <p>Consists of:</p>	<p>P81558 Std.</p>	<p>P85042 Std.</p>	<p>P31137551/61</p>
	<p>1) POK440</p>	<p>a) P86721</p>	<p>P81558A .010</p>	<p>P85042A .010</p>	
	<p>2) PBK440</p>	<p>b) P41158044</p> <p>c) P31358394 (5)</p> <p>4 Per Engine</p>	<p>P81558B .020</p> <p>P81558C .030</p> <p>Set of 5 Pairs</p>	<p>P85042B .020</p> <p>P85042C .030</p> <p>Set of 4 Pairs</p>	
<p>APPLICATIONS:</p> <p>LANDINI TRACTORS TL120C (LA21912)</p> <p>MF AGRICULTURAL 165 (JG70020)</p> <p>MF INDUSTRIAL 50 (LA21243) 50B</p>					
	<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p>	<p>1) Bushing, Cam</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p>
	<p>3) Crankshaft Kit</p>	<p>3) Head Gasket 4) Oil Pan Set</p>	<p>4) Con Rod</p>	<p>2) Camshaft 3) Tappet 4) Pushrod</p>	
	<p>1) P2418F436 2) P36883108 x2 P2418F475 3) N/A</p>	<p>1) PU5LT0015 2) PU5LB0045 3) P36812349 4) PU5MK0600</p>	<p>1) P31134123 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90009</p>	<p>1) P31134132 x1 2) P31415321 (1) P31415374 (2) 3) P31434163 4) P31434307</p>	<p>1) P31171681 2) P31171353 (1) 3) P41115023</p>
	<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve 6) Seal, Valve</p>
	<p>PVTK406</p>	<p>1) P31431641 x4 2) P31431881 x4</p>	<p>a) P3343F002 x4 b) P3343J002 x4</p>	<p>a) P31744131 x8 b) P31745121 x8</p>	<p>5) P33173108 x16 6) P33817117 x8</p>
					
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves) 2) Glowplug</p>	<p>Balancer Unit</p>
<p>P41314182 (3)</p>	<p>P2641728</p>	<p>1) P4131A013 2) P2485659</p>	<p>1) PZZ90032 2) P41151483 3) P41151484</p>	<p>1) PZZ80175 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)</p>	<p>P41733082 (4)</p>

(1) To ESN U106654N.

(2) From ESN U106655N.

(3) Used on Build No: LA21194/LA21243.

(4) Used on Build No: LA21912.

(5) Parallel, Semi Finished Liner, **P31358324**, Flanged, Semi Finished Liner, **P31358393**, and Finished Liner in .010"Oversize, **P31358398**, are also available.

Engine & Equipment Application					
4.236 4 Cyl, Rope & Lip Seal Bore: 3.8770 in 98.476 mm To ESN U106654N APPLICATIONS: JCB 3CX Backhoe (LD50096) 410 Loader (LD50105) 520 Handler (LD50103) LANDINI TRACTORS 6500/6550 (LD22573) 6830/7830 7500/7550 (LD22574) MF AGRICULTURAL 175 (LD20022) 255 (LD22694/5) 275 (LD22051/2) MF INDUSTRIAL 50C (LD22824) 6000 Forklift (LD22055)	1) Engine O/H Kit 2) Basic Engine Kit 1) POK446 2) PBK446	Piston-Liner Kit PU5MK0123 Consists of: a) P68301 b) P41158041 c) P31358394 (3) 4 Per Engine	Main Bearing Set P81558 Std. P81558A .010 P81558B .020 P81558C .030 Set of 5 Pairs	Con Rod Bearing Set P85042 Std. P85042A .010 P85042B .020 P85042C .030 Set of 4 Pairs	Thrust Washer Set P31137551/61 Set of 2 Pairs
	1) Front Seal 2) Rear Seal 3) Crankshaft Kit 1) P2418F436 2) P2418F475 P36883108 x2 3) PZZ90093 (4) PZZ90081 (5)	1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk 4) Head Gasket 5) Oil Pan Set 6) Timing Cover Gsk	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet 4) Pushrod	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear
	Valve Train Kit PVTK406	1) Valve, Intake 2) Valve, Exhaust 1) P31431641 x4 2) P31431881 x4	3) Guide, Valve a) Intake b) Exhaust a) P3343F002 x4 b) P3343J002 x4	4) Spring, Valve a) Inner b) Outer a) P31744131 x8 b) P31745121 x8	5) Lock, Valve 6) Seal, Valve 5) P33173108 x16 6) P33817117 x8
	Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head (With Valves) 2) Glowplug
P41314182 (1)	P2641338 (6) P2641728 (7)	1) P4131A013 2) P2485659 P2485666 (Use on JCB)	1) PZZ90032 2) P41151483 3) P41151484	1) PZZ80175 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)	P41733082 (2)

(1) For Non Agricultural Uses.

(2) For Agricultural Uses.


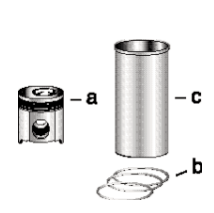



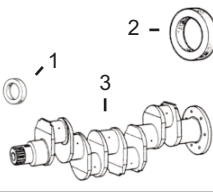
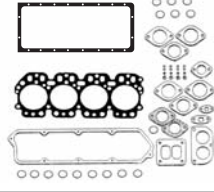
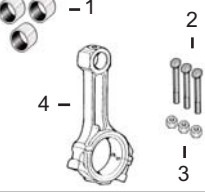
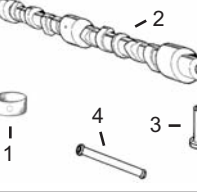
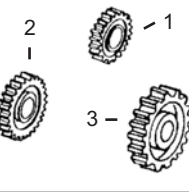
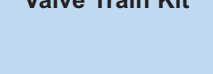
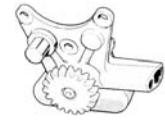

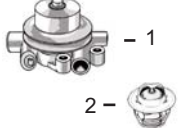
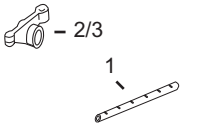

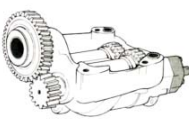
(3) Parallel, Semi Finished Liner, **P31358324**, Flanged, Semi Finished Liner, **P31358393**, and Finished Liner in .010"Oversize, **P31358398**, are also available.

(4) Rope seal crank used To ESN 136318L.

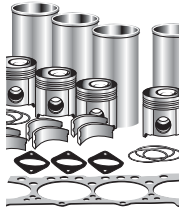
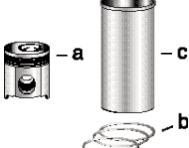
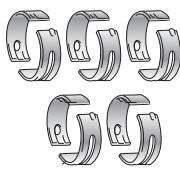


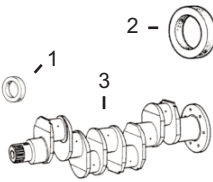
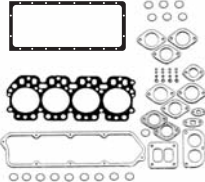
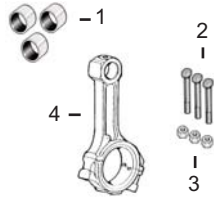
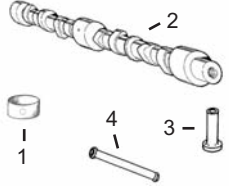
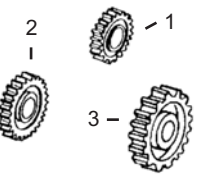
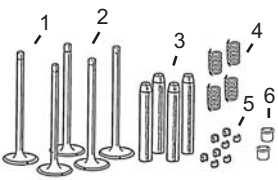
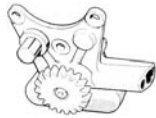

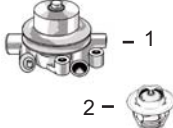
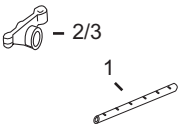

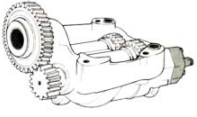
(5) Lip seal crank used From ESN 136319L.

(6) To Engine No: 236UA57134.

(7) From Engine No: 236UA57135.

Engine & Equipment Application					
<p>4.236</p> <p>4 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>From ESN U106655N</p> <p>APPLICATIONS:</p> <p>JCB 3CX Backhoe (LD50096) 410 Loader (LD50105) 520 Handler (LD50103)</p> <p>LANDINI TRACTORS 6500/6550 (LD22573) 6830/7830 7500/7550 (LD22574)</p> <p>MF AGRICULTURAL 175 (LD20022) 255 (LD22694/5) 275 (LD22051/2) 362 (LD31234)</p> <p>MF INDUSTRIAL 50C (LD22824)</p>					
	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PCK301 Consists of:</p>	<p>P81558 Std.</p>	<p>P85042 Std.</p>	<p>P31137551/61</p>
	<p>1) POK449</p>	<p>a) P68301</p>	<p>P81558A .010</p>	<p>P85042A .010</p>	
	<p>2) PBK449</p>	<p>b) P41158041</p>	<p>P81558B .020</p>	<p>P85042B .020</p>	
		<p>c) P3135X032 (3)</p> <p>4 Per Engine</p>	<p>P81558C .030</p> <p>Set of 5 Pairs</p>	<p>P85042C .030</p> <p>Set of 4 Pairs</p>	<p>Set of 2 Pairs</p>
					
	<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p>	<p>1) Bushing, Cam 2) Camshaft 3) Tappet 4) Pushrod</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p>
	<p>3) Crankshaft Kit</p>	<p>4) Head Gasket 5) Oil Pan Set 6) Timing Cover Gsk</p>	<p>4) Con Rod</p>		
	<p>1) P2418F436 2) P2418F475 3) PZZ90081</p>	<p>1) PU5LT0065 2) PU5LB0045 3) P3681A027 4) P3681E036 5) PU5MK0600 6) P3681P045</p>	<p>1) P31134123 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90009</p>	<p>1) P31134132 x1 2) P31415374 3) P31434163 4) P31434307</p>	<p>1) P31171681 2) P31171353 3) P41115023</p>
		<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve 6) Seal, Valve</p>
		<p>PVTK406</p> <p>1) P31431641 x4 2) P31431881 x4</p>	<p>a) P3343F002 x4 b) P3343J002 x4</p>	<p>a) P31744131 x8 b) P31745121 x8</p>	<p>5) P33173108 x16 6) P33817117 x8</p>
 <p>Oil Pump</p>	 <p>Lift Pump</p>	 <p>1) Water Pump 2) Thermostat</p>	 <p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	 <p>1) Cylinder Head (With Valves) 2) Glowplug</p>	 <p>Balancer Unit</p>
<p>P41314182 (1)</p>	<p>P2641728</p>	<p>1) P4131A013 2) P2485659 P2485666 (Use on JCB)</p>	<p>1) PZZ90032 2) P41151483 3) P41151484</p>	<p>1) PZZ80175 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)</p>	<p>P41733082 (2)</p>

(1) For Non Agricultural Uses.
(2) For Agricultural Uses.
(3) Flanged, Semi Finished Liner available, P3135X031.

Engine & Equipment Application					
4.236 4 Cyl, Rope & Lip Seal (Both Rear Seal Types Included in Kit) Bore: 3.8770 in 98.476 mm To ESN U106654N APPLICATIONS: ALLIS CHALMERS 715B Loader (LD22682) CLARK EQUIPMENT CY60-70-80B (LD21386) Tow Tractor (LD21324) HYSTER C300 Compactor (LD70119) H110-150 (LD70121) S60-100 (LD70115) LINCOLN ELECTRIC 500 Amp Welder (LD50148) SULLAIR CORP 185-250 Compressor (LD70147) TOWMOTOR V100/120/140 (LD22043/4)	1) Engine O/H Kit 2) Basic Engine Kit 1) POK450 2) PBK450	Piston-Liner Kit PU5MK0123 Consists of: a) P68301 b) P41158041 c) P31358394 (6) 4 Per Engine	Main Bearing Set P81558 Std. P81558A .010 P81558B .020 P81558C .030 Set of 5 Pairs	Con Rod Bearing Set P85042 Std. P85042A .010 P85042B .020 P85042C .030 Set of 4 Pairs	Thrust Washer Set P31137551/61 Set of 2 Pairs
	 1) Front Seal 2) Rear Seal	 1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk	 1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	 1) Bushing, Cam 2) Camshaft 3) Tappet 4) Pushrod	 1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear
	3) Crankshaft Kit 1) P2418F436 2) P2418F475 P36883108 x2 3) PZZ90093 (2) PZZ90081 (3) PZZ90082 (3) (5)	4) Head Gasket 5) Oil Pan Set 6) Timing Cover Gsk 1) PU5LT0015 2) PU5LB0046 3) P3681A027 4) P36812349 5) PU5MK0600 6) P3681P045	4) Con Rod 1) P31134123 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90009	2) Camshaft 3) Tappet 4) Pushrod 1) P31134132 x1 2) P31415292 P31415321 (5) 3) P31434163 4) P31434307	1) P31171681 2) P31171353 (1) 3) P41115023 (1)
	 Valve Train Kit PVTK413	1) Valve, Intake 2) Valve, Exhaust 1) P31431315 x4 2) P3142A052 x4	3) Guide, Valve a) Intake b) Exhaust a) P3343F002 x4 b) P3343J002 x4	4) Spring, Valve a) Inner b) Outer a) P31744131 x8 b) P31745121 x8	5) Lock, Valve 6) Seal, Valve 5) P33173108 x16 6) P33817117 x8
 Oil Pump	 Lift Pump	 1) Water Pump 2) Thermostat	 1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	 1) Cylinder Head (With Valves) 2) Glowplug	 Balancer Unit
P41314182	P2641728	1) P4131A013 2) P2485666 (7)	1) PZZ90032 2) P41151483 3) P41151484	1) PZZ80175 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)	P41733082 (4)

(1) Check with Build List.

(2) Rope Seal Crank Used To ESN U136318L.

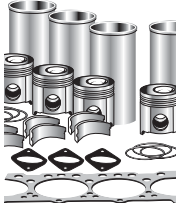
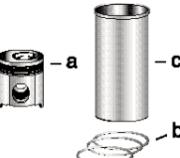
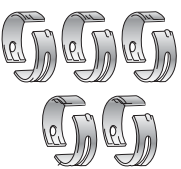


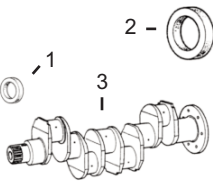
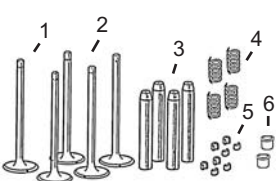
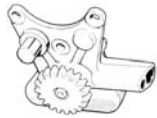

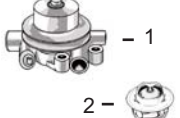
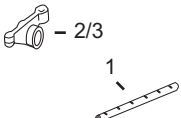

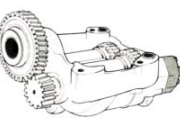
(3) Lip Seal Crank Used From ESN U136319L.

(4) Use on Build No: LD21386.

(5) Used on Build No: LD22682.

(6) Parallel, Semi Finished Liner **P31358324**, Flanged, Semi Finished Liner **P31358393**, and Finished Liner in .010" Oversize **P31358398**, are also available.

(7) Use P2485609 on Build LD21386.

Engine & Equipment Application					
<p>4.236 4 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>From ESN U106655N</p> <p>APPLICATIONS:</p> <p>ALLIS CHALMERS 715B Loader (LD22682)</p> <p>CATERPILLAR 6-8000lb Forklift (LD22242)</p> <p>CLARK EQUIPMENT CY60-70-80B (LD21386) Tow Tractor (LD21324)</p> <p>HYSTER C300 Compactor (LD70119) H110-150 (LD70121) S60-100 (LD70115)</p> <p>LINCOLN ELECTRIC 500 Amp Welder (LD50148)</p> <p>SULLAIR CORP 185-250 Compressor (LD70147)</p> <p>TOWMOTOR V100/120/140 (LD22043/4)</p>	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	<p>PCK301 Consists of:</p> <p>a) P68301 b) P41158041 c) P3135X032 (3)</p> <p>4 Per Engine</p>	<p>P81558 Std.</p> <p>P81558A .010 P81558B .020 P81558C .030</p> <p>Set of 5 Pairs</p>	<p>P85042 Std.</p> <p>P85042A .010 P85042B .020 P85042C .030</p> <p>Set of 4 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>
	1) POK448				
	2) PBK448				
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet 4) Pushrod	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear
	3) Crankshaft Kit	4) Head Gasket 5) Oil Pan Set 6) Timing Cover Gsk	4) Con Rod		
	<p>1) P2418F436 2) P2418F475 3) PZZ90081 PZZ90082 (1)</p>	<p>1) PU5LT0065 2) PU5LB0046 3) P3681A027 4) P3681E036 5) PU5MK0600 6) P3681P045</p>	<p>1) P31134123 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90009</p>	<p>1) P31134132 x1 2) P31415381 P31415374 (1) 3) P31434163 4) P31434307</p>	<p>1) P31171681 2) P31171353 P31171931 (2) 3) P41115023 (1)</p>
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK413	<p>1) P31431315 x4 2) P3142A052 x4</p>	<p>a) P3343F002 x4 b) P3343J002 x4</p>	<p>a) P31744131 x8 b) P31745121 x8</p>	<p>5) P33173108 x16 6) P33817117 x8</p>
					
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head (With Valves) 2) Glowplug	Balancer Unit
<p>P41314182</p>	<p>P2641728</p>	<p>1) P4131A013 2) P2485666 P2485609 (4)</p>	<p>1) PZZ90032 2) P41151483 3) P41151484</p>	<p>1) PZZ80175 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)</p>	<p>P41733082 (2)</p>

(1) Used on Build No: LD22682.
(2) Used on Build No: LD21386.
(3) Flanged, Semi Finished Liner available, P3135X031.
(4) Use on Build LD21386.

Engine & Equipment Application								
G4.236 GASOLINE ENGINE 4 Cyl, Lip Seal Bore: 3.8770 in 98.476 mm To ESN U106654N	1) Engine O/H Kit 2) Basic Engine Kit 1) POK457 2) PBK457	Piston-Liner Kit PCK394 Consists of: a) PU5LP0047 b) P41158142 c) P31358394 (5) 4 Per Engine	Main Bearing Set P81558 Std. P81558A .010 P81558B .020 P81558C .030 Set of 5 Pairs	Con Rod Bearing Set P85042 Std. P85042A .010 P85042B .020 P85042C .030 Set of 4 Pairs	Thrust Washer Set P31137551/61 Set of 2 Pairs			
	APPLICATIONS: CATERPILLAR RT (LE70110) T500-1500 (LE70148) V80D (LE70089) V100-140 (LE70094)	1) Front Seal 2) Rear Seal 3) Crankshaft Kit	1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk 4) Head Gasket 5) Oil Pan Set 6) Timing Cover Gsk	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet 4) Pushrod	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear		
	CLARK EQUIPMENT C500-Y60 (LE80173/LE22376)	EATON CORP Forklift (LE80177)	JACOBSEN MFG CO H-15 & F10 Turf Tractor (LE70054)	1) P2418F436 2) P2418F475 3) PZZ90082	1) PU5LT0176 2) PU5LB0046 3) P3681A027 4) P3681E036 5) PU5MK0600 6) P3681P045 (3)	1) P31134144 x4 2) P32762144 x8 3) P33221328 x8	1) P31134132 x1 2) P31415292 3) P31434163 4) P31434307	1) P31171681 (1) 2) P31171353 P31171931 (4) 3) P31171951
		Valve Train Kit PVTK412	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve		
		1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	Balancer Unit			
P41314182	P2641728	1) P4131A013 PU5MW0105 2) P2485666 (6)	1) PZZ90032 2) P41151483 3) P41151484	1) N/A 2) N/A	P41733082 (2)			

(1) Do not Use on Build No: LE70089,LE22376, and LE80173.

(2) Use on Build No: LE22376,LE80173.

(3) Order with Kit for Build No: LE70089,LE70094.

(4) Use on Build Nos: LE70089/LE80173/LE22376.

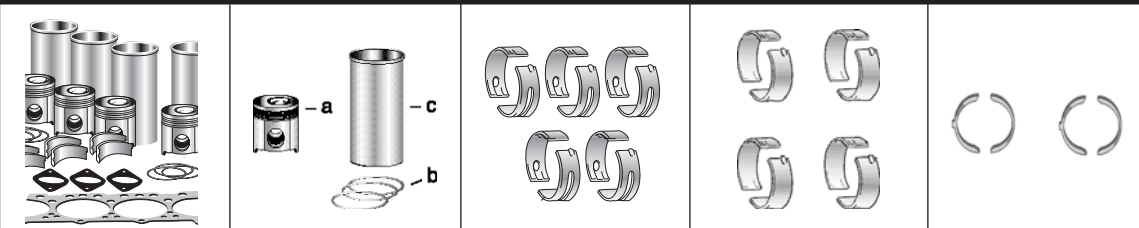
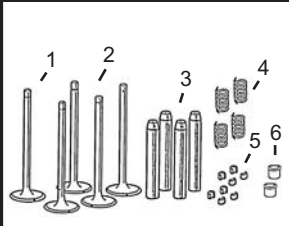
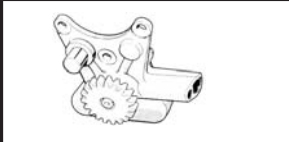
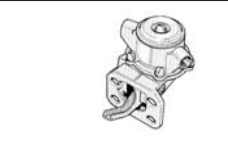
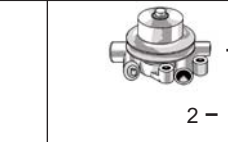
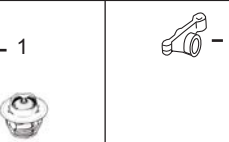

(5) Parallel, Semi Finished Liner, **P31358324**, Flanged, Semi Finished Liner, **P31358393**, and Finished Liner in .010"Oversize, **P31358398**, are also available.

(6) Use P2485613 on Build LE70148 and P2485609 on Build LE80173.

Engine & Equipment Application					
<p>G4.236</p> <p>GASOLINE ENGINE</p> <p>4 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>From ESN U106655N</p> <p>APPLICATIONS:</p> <p>CATERPILLAR RT (LE70110) T500-1500 (LE70148) V80D (LE70089) V100-140 (LE70094)</p> <p>CLARK EQUIPMENT C500-Y60 (LE80173/LE22376)</p> <p>EATON CORP Forklift (LE80177)</p> <p>JACOBSEN MFG CO H-15 & F10 Turf Tractor (LE70054)</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PCK236G Consists of:</p>	<p>P81558 Std.</p>	<p>P85042 Std.</p>	<p>P31137551/61</p>
	<p>1) POK447</p>	<p>a) PU5LP0047</p>	<p>P81558A .010</p>	<p>P85042A .010</p>	
<p>2) PBK447</p>	<p>b) P41158142</p>	<p>P81558B .020</p>	<p>P85042B .020</p>		
	<p>c) P3135X032 (4)</p>	<p>P81558C .030</p>	<p>P85042C .030</p>		
<p>4 Per Engine</p>	<p>Set of 5 Pairs</p>	<p>Set of 4 Pairs</p>	<p>Set of 2 Pairs</p>		
<p>1) Front Seal</p> <p>2) Rear Seal</p> <p>3) Crankshaft Kit</p> <p>4) Head Gasket</p> <p>5) Oil Pan Set</p> <p>6) Timing Cover Gsk</p> <p>1) P2418F436</p> <p>2) P2418F475</p> <p>3) PZZ90082</p>					
	<p>1) Top Gasket Set</p> <p>2) Bottom Gasket</p> <p>3) Valve Cover Gsk</p>	<p>1) Bush, Con Rod</p> <p>2) Bolt, Con Rod</p> <p>3) Nut, Con Rod</p>	<p>1) Bushing, Cam</p> <p>2) Camshaft</p> <p>3) Tappet</p> <p>4) Pushrod</p>	<p>1) Crankshaft Gear</p> <p>2) Camshaft Gear</p> <p>3) Idler Gear</p>	
	<p>1) P2418F436</p> <p>2) P2418F475</p> <p>3) PZZ90082</p>	<p>1) PU5LT0176</p> <p>2) PU5LB0046</p> <p>3) P3681A027</p> <p>4) P3681E036</p> <p>5) PU5MK0600</p> <p>6) P3681P045 (3)</p>	<p>1) P31134144 x4</p> <p>2) P32762144 x8</p> <p>3) P33221328 x8</p>	<p>1) P31134132 x1</p> <p>2) P31415381</p> <p>3) P31434163</p> <p>4) P31434307</p>	<p>1) P31171681 (1)</p> <p>2) P31171353</p> <p>3) P31171931 (5)</p> <p>3) P31171951</p>
	<p>Valve Train Kit</p>	<p>1) Valve, Intake</p> <p>2) Valve, Exhaust</p>	<p>3) Guide, Valve</p> <p>a) Intake</p> <p>b) Exhaust</p>	<p>4) Spring, Valve</p> <p>a) Inner</p> <p>b) Outer</p>	<p>5) Lock, Valve</p> <p>6) Seal, Valve</p>
<p>PVTK412</p>	<p>1) P31431871 x4</p> <p>2) P31431701 x4</p>	<p>a) P3343F002 x4</p> <p>b) P3343J002 x4</p>	<p>a) P31744131 x8</p> <p>b) P31745121 x8</p>	<p>5) P33173108 x16</p> <p>6) P33817117 x8</p>	
	<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump</p> <p>2) Thermostat</p>	<p>1) Rocker Shaft</p> <p>2) Rocker Arm LH</p> <p>3) Rocker Arm RH</p>	<p>1) Cylinder Head</p> <p>2) Glowplug</p> <p>Balancer Unit</p>
<p>P41314182</p>	<p>P2641728</p>	<p>1) P4131A013</p> <p>PU5MW0105 (6)</p> <p>2) P2485666 (7)</p>	<p>1) PZZ90032</p> <p>2) P41151483</p> <p>3) P41151484</p>	<p>1) N/A</p> <p>2) N/A</p>	<p>P41733082 (2)</p>

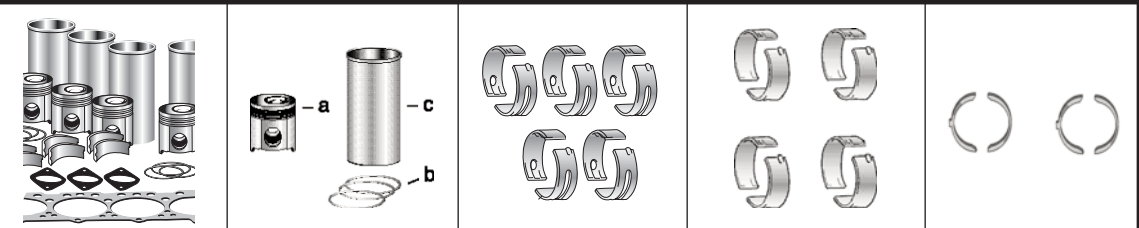
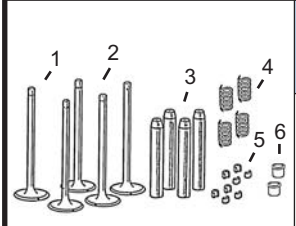
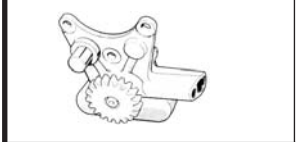
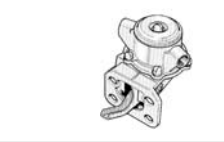
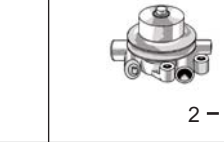
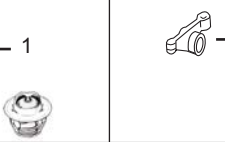
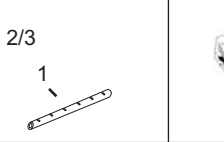
(1) Do not Use on Build No: LE70089/LE22376/LE80173.
 (2) Use on Build No: LE22376/LE80173.
 (3) Order with Kit for Build No: LE70089/LE70094.
 (4) Flanged, Semi Finished Liner available, P3135X031.

(5) Used on Build Nos: LE70089/LE80173/LE22376.
 (6) Check with Build List.
 (7) Used P248513 on Build LE70148 and P2485609 on Build LE80173.

Engine & Equipment Application					
<p>C4.236</p> <p>COMPENSATED</p> <p>4 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>To ESN U106654N</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
<p>APPLICATIONS:</p> <p>JCB</p> <p>3CX Backhoe (LH50133)</p> <p>200 Loader (LH50205)</p> <p>200 Loader (LH50226)</p>	<p>2) Basic Engine Kit</p>	<p>PCK114</p> <p>Consists of:</p> <p>a) PU5LP0011</p> <p>b) P41158147</p> <p>c) P31358394 (1)</p> <p>4 Per Engine</p>	<p>P81558 Std.</p> <p>P81558A .010</p> <p>P81558B .020</p> <p>P81558C .030</p> <p>Set of 5 Pairs</p>	<p>P85042 Std.</p> <p>P85042A .010</p> <p>P85042B .020</p> <p>P85042C .030</p> <p>Set of 4 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>
	<p>1) POK452</p>				
	<p>2) PBK452</p>				
	<p>1) Front Seal</p> <p>2) Rear Seal</p>	<p>1) Top Gasket Set</p> <p>2) Bottom Gasket</p> <p>3) Valve Cover Gsk</p>	<p>1) Bush, Con Rod</p> <p>2) Bolt, Con Rod</p> <p>3) Nut, Con Rod</p>	<p>1) Bushing, Cam</p> <p>2) Camshaft</p> <p>3) Tappet</p> <p>4) Push Rod</p>	<p>1) Crankshaft Gear</p> <p>2) Camshaft Gear</p> <p>3) Idler Gear</p>
<p>3) Crankshaft Kit</p>	<p>4) Head Gasket</p> <p>5) Oil Pan Set</p> <p>6) Timing Cover Gsk</p>	<p>4) Con Rod</p>			
<p>1) P2418F436</p> <p>2) P2418F475</p> <p>3) PZZ90082</p>	<p>1) PU5LT0176</p> <p>2) PU5LB0045</p> <p>3) P3681A027</p> <p>4) P3681E016</p> <p>5) PU5MK0600</p> <p>6) P3681P045</p>	<p>1) P31134123 x4</p> <p>2) P32762144 x8</p> <p>3) P33221328 x8</p> <p>4) PZZ90009</p>	<p>1) P31134132 x1</p> <p>2) P31415374</p> <p>3) P31434163</p> <p>4) P31434307</p>	<p>1) P31171681</p> <p>2) P31171353</p> <p>3) P31171931 (2)</p> <p>4) P41115023</p>	
	<p>Valve Train Kit</p>	<p>1) Valve, Intake</p> <p>2) Valve, Exhaust</p>	<p>3) Guide, Valve</p> <p>a) Intake</p> <p>b) Exhaust</p>	<p>4) Spring, Valve</p> <p>a) Inner</p> <p>b) Outer</p>	<p>5) Lock, Valve</p> <p>6) Seal, Valve</p>
<p>PVTK413</p>	<p>1) P31431315 x4</p> <p>2) P3142A052 x4</p>	<p>a) P3343F002 x4</p> <p>b) P3343J002 x4</p>	<p>a) P31744131 x8</p> <p>b) P31745121 x8</p>	<p>5) P33173108 x16</p> <p>6) P33817117 x8</p>	
					
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump</p> <p>2) Thermostat</p>	<p>1) Rocker Shaft</p> <p>2) Rocker Arm LH</p> <p>3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves)</p> <p>2) Glowplug</p>	
<p>P41314182</p>	<p>P2641728</p>	<p>1) PU5MW0108</p> <p>2) P2485613</p>	<p>1) PZZ90032</p> <p>2) P41151483</p> <p>3) P41151484</p>	<p>1) PZZ80175</p> <p>2) P2666108 (Bayonet Fitting)</p>	

(1) Parallel, Semi Finished Liner, P31358324, Flanged, Semi Finished Liner, P31358393, and Finished Liner in .010"Oversize, P31358398, are also available.

(2) Used on Build Nos: LH50133/LH50205.

Engine & Equipment Application					
<p>C4.236</p> <p>COMPENSATED</p> <p>4 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>From ESN U106655N</p> <p>APPLICATIONS:</p> <p>JCB 3CX Backhoe (LH50133) 200 Loader (LH50205) 200 Loader (LH50226)</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PCK416 Consists of: a) PU5LP0011 b) P41158147 c) P3135X032 (1) 4 Per Engine</p>	<p>P81558 Std.</p>	<p>P85042 Std.</p>	<p>P31137551/61</p>
	<p>1) POK455</p>		<p>P81558A .010 P81558B .020 P81558C .030</p>	<p>P85042A .010 P85042B .020 P85042C .030</p>	
	<p>2) PBK455</p>		<p>Set of 5 Pairs</p>	<p>Set of 4 Pairs</p>	<p>Set of 2 Pairs</p>
	<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p>	<p>1) Bushing, Cam 2) Camshaft 3) Tappet 4) Push Rod</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p>
	<p>3) Crankshaft Kit</p>	<p>4) Head Gasket 5) Oil Pan Set 6) Timing Cover Gsk</p>	<p>4) Con Rod</p>		
<p>1) P2418F436 2) P2418F475 3) PZZ90082</p>	<p>1) PU5LT0046 2) PU5LB0045 3) P3681A027 4) P3681E016 5) PU5MK0600 6) P3681P045</p>	<p>1) P31134123 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90009</p>	<p>1) P31134132 x1 2) P31415374 3) P31434163 4) P31434307</p>	<p>1) P31171681 2) P31171353 P31171931 (2) 3) P41115023</p>	
	<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve 6) Seal, Valve</p>
<p>PVTK413</p>	<p>1) P31431315 x4 2) P3142A052 x4</p>	<p>a) P3343F002 x4 b) P3343J002 x4</p>	<p>a) P31744131 x8 b) P31745121 x8</p>	<p>5) P33173108 x16 6) P33817117 x8</p>	
					
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves) 2) Glowplug</p>	
<p>P41314182</p>	<p>P2641728</p>	<p>1) PU5MW0108 2) P2485613</p>	<p>1) PZZ90032 2) P41151483 3) P41151484</p>	<p>1) PZZ80175 2) P2666108 (Bayonet Fitting)</p>	

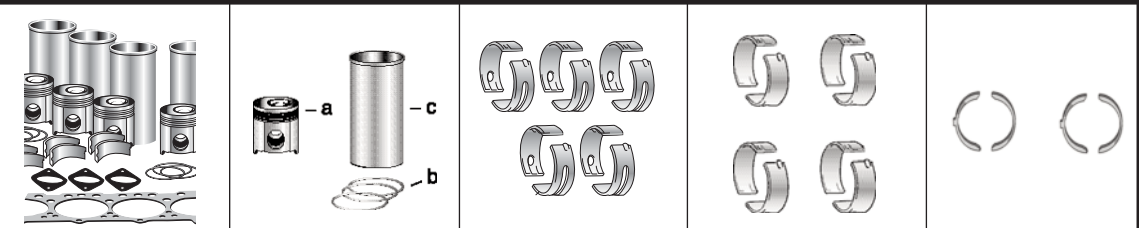
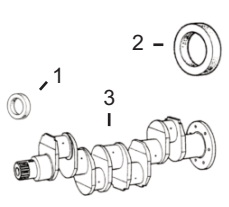
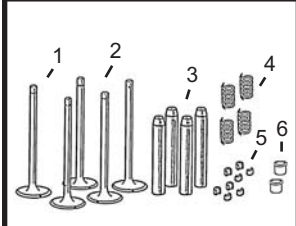
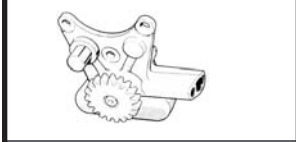

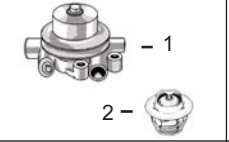
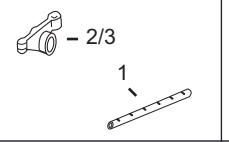

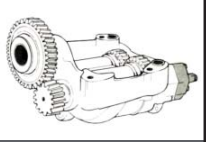
(1) Flanged, Semi Finished Liner available, P3135X031.
(2) Used on Build Nos: LH50133/LH50205.

Engine & Equipment Application					
T4.236 TURBOCHARGED 4 Cyl, Lip Seal Bore: 3.8770 in 98.476 mm					
	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PCK236T Consists of: a) PU5LP0022 b) P41158145 c) P3135X032 (2)	P81558 Std. P81558A .010 P81558B .020 P81558C .030	P85042 Std. P85042A .010 P85042B .020 P85042C .030	P31137551/61
	1) POK451 2) PBK451	4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs
APPLICATIONS: JCB (From ESN U027774M) 4CX Backhoe (LJ50117) 410M Forklift (LJ50201) 415 Loader (LJ50224) 520S Loadall (LJ50183)					
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet 4) Push Rod	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear
	3) Crankshaft Kit	4) Head Gasket 5) Oil Pan Set 6) Timing Cover Gsk	4) Con Rod		
	1) P2418F436 2) P2418F475 3) PZZ90082	1) PU5LT0046 2) PU5LB0045 3) P3681A027 4) P3681E016 5) PU5MK0600 6) P3681P045	1) P31134131 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90013	1) P31134132 x1 2) N/A 3) P31434163 4) P31434307	1) P31171681 2) P31171353 P31171931 (3) 3) N/A
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK414	1) P3142H002 x4 2) P3142A052 x4	a) P3343F002 x4 b) P3343J002 x4	a) P31744131 x8 b) P31745121 x8	5) P33173108 x16 6) P33817117 x8
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Glowplug	Balancer Unit
P4132F012 P4132F041 (1)	P2641728	1) PU5MW0108 2) P2485613	1) PZZ90032 2) P41151483 3) P41151484	1) P2666108 (Bayonet Fitting)	P4111K051 (1)

(1) For Use on Agricultural Applications.

(2) Flanged, Semi Finished Liner available, P3135X031.

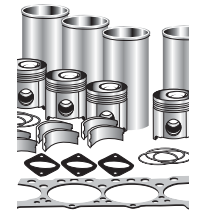
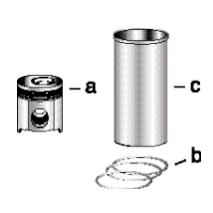
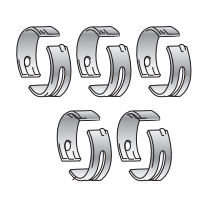

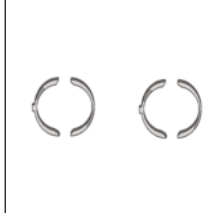
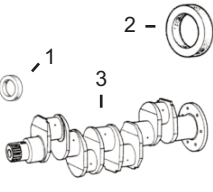
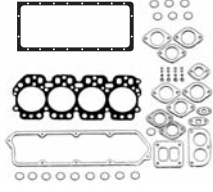
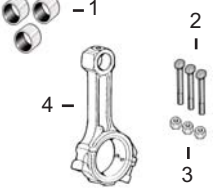
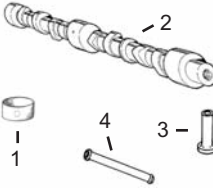
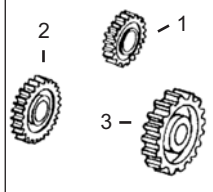
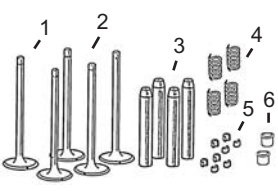
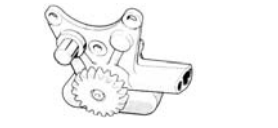

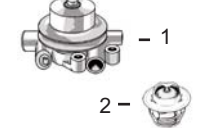
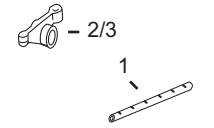

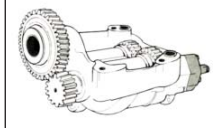
(3) Used on Build No: LJ50201.

Engine & Equipment Application					
<p>T4.236</p> <p>TURBOCHARGED</p> <p>4 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>To ESN U106654N</p> <p>APPLICATIONS:</p> <p>PERKINS USA General Industrial (LJ70128) Genset (LJ70130/LJ70151)</p> <p>SULLAIR CORP Genset (LJ70155)</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PCK022 Consists of:</p> <p>a) PU5LP0022 b) P41158145 c) P31358394 (3)</p> <p>4 Per Engine</p>	<p>P81558 Std. P81558A .010 P81558B .020 P81558C .030</p> <p>Set of 5 Pairs</p>	<p>P85042 Std. P85042A .010 P85042B .020 P85042C .030</p> <p>Set of 4 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>
	<p>1) POK458</p>				
	<p>2) PBK458</p>				
		<p>1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p>	<p>1) Bushing, Cam</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p>
	<p>1) Front Seal 2) Rear Seal</p>	<p>4) Head Gasket 5) Oil Pan Set 6) Timing Cover Gsk</p>	<p>4) Con Rod</p>	<p>2) Camshaft 3) Tappet 4) Push Rod</p>	
<p>1) P2418F436 2) P2418F475 3) PZZ90082</p>	<p>1) PU5LT0176 2) PU5LB0046 3) P3681A027 4) P36812349 5) PU5MK0600 6) P3681P045</p>	<p>1) P31134131 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90013</p>	<p>1) P31134132 x1 2) N/A 3) P31434163 4) P31434307</p>	<p>1) P31171681 2) P31171353 P31171931 (1) 3) N/A</p>	
	<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve 6) Seal, Valve</p>
<p>PVTK414</p>	<p>1) P3142H002 x4 2) P3142A052 x4</p>	<p>a) P3343F002 x4 b) P3343J002 x4</p>	<p>a) P31744131 x8 b) P31745121 x8</p>	<p>5) P33173108 x16 6) P33817117 x8</p>	
					
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Glowplug</p>	<p>Balancer Unit</p>
<p>P4132F012 P4132F041 (1)</p>	<p>P2641728</p>	<p>1) PU5MW0108 PU5MW0106 (2) 2) P2485613</p>	<p>1) PZZ90032 2) P41151483 3) P41151484</p>	<p>1) P2666108 (Bayonet Fitting)</p>	<p>P4111K051 (1)</p>

(1) Use on Build No: LJ70128.

(2) Use on Build No: LJ70155.


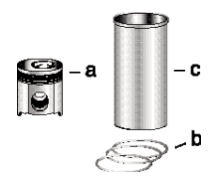
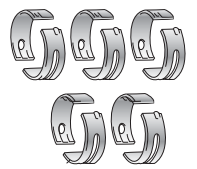


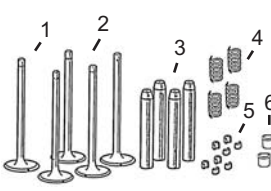
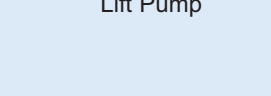

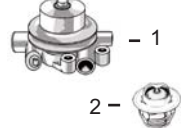
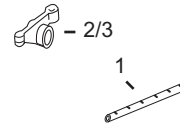

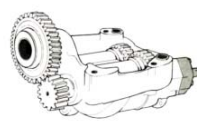
(3) Parallel, Semi Finished Liner, P31358324, Flanged, Semi Finished Liner, P31358393, and Finished Liner in .010" Oversize, P31358398, are also available.

Engine & Equipment Application					
T4.236 TURBOCHARGED 4 Cyl, Lip Seal Bore: 3.8770 in 98.476 mm From ESN U106655N	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PCK236T Consists of: a) PU5LP0022 b) P41158145 c) P3135X032 (3)	P81558 Std. P81558A .010 P81558B .020 P81558C .030	P85042 Std. P85042A .010 P85042B .020 P85042C .030	P31137551/61
	1) POK456	4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs
	2) PBK456				
APPLICATIONS: PERKINS USA General Industrial (LJ70128) Genset (LJ70130/LJ70151)					
SULLAIR CORP Genset (LJ70155)	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet 4) Push Rod	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear
	3) Crankshaft Kit	4) Head Gasket 5) Oil Pan Set 6) Timing Cover Gsk	4) Con Rod		
	1) P2418F436 2) P2418F475 3) PZZ90082	1) PU5LT0046 2) PU5LB0046 3) P3681A027 4) P3681E016 5) PU5MK0600 6) P3681P045	1) P31134131 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90013	1) P31134132 x1 2) N/A 3) P31434163 4) P31434307	1) P31171681 2) P31171353 P31171931 (1) 3) N/A
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK414	1) P3142H002 x4 2) P3142A052 x4	a) P3343F002 x4 b) P3343J002 x4	a) P31744131 x8 b) P31745121 x8	5) P33173108 x16 6) P33817117 x8
					
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Glowplug	Balancer Unit
P4132F012 P4132F041 (1)	P2641728	1) PU5MW0108 PU5MW0106 (2) 2) P2485613	1) PZZ90032 2) P41151483 3) P41151484	1) P2666108 (Bayonet Fitting)	P4111K051 (1)

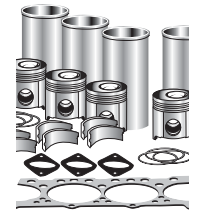
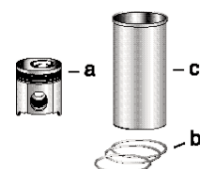
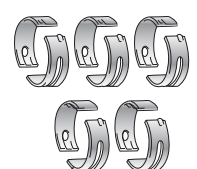


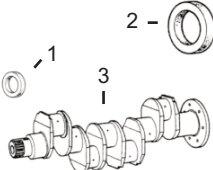
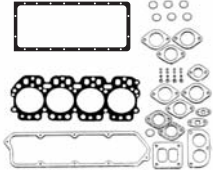
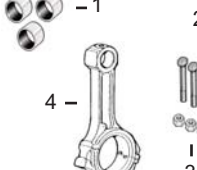
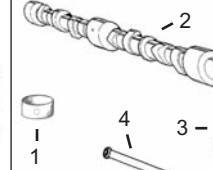
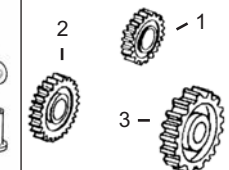
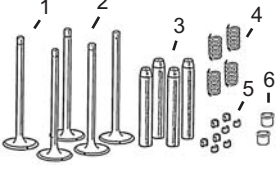

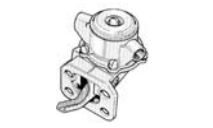
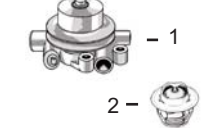
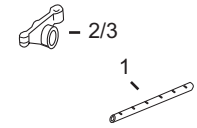

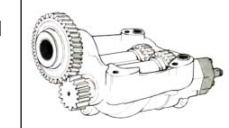
(1) Use on Build No: LJ70128.

(2) Use on Build No: LJ70155.

(3) Flanged, Semi Finished Liner available, P3135X031.

Engine & Equipment Application					
<p>4.248</p> <p>4 Cyl Both rear seal types in kit</p> <p>Bore: 3.9785 in 101.054 mm</p> <p>To ESN UA123423L</p> <p>APPLICATIONS: MF AGRICULTURAL 275 Tractor</p>					
	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PU5MK0067 Consists of:</p>	<p>P81558 Std.</p>	<p>P85042 Std.</p>	<p>P31137551/61</p>
	<p>1) POK460 2) PBK460</p>	<p>a) P89207 b) P4181A009 c) P31358352 (1)</p> <p>4 Per Engine</p>	<p>P81558A .010 P81558B .020 P81558C .030</p> <p>Set of 5 Pairs</p>	<p>P85042A .010 P85042B .020 P85042C .030</p> <p>Set of 4 Pairs</p>	<p>Set of 2 Pairs</p>
	<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p>	<p>1) Bushing, Cam 2) Camshaft 3) Tappet 4) Push Rod</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p>
	<p>3) Crankshaft Kit</p>	<p>4) Head Gasket 5) Oil Pan Set 6) Timing Cover Gsk</p>	<p>4) Con Rod</p>	<p>1) P31134123 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90009</p>	<p>1) P31134132 x1 2) P31415321 3) P31434163 4) P31434307</p>
	<p>1) P2418F436 2) P36883108 x2 (2) P2418F475 (3) 3) PZZ90093 (2) PZZ90081 (3)</p>	<p>1) PU5LT0015 2) PU5LB0045 3) P3681A027 4) P36812349 5) PU5MK0600 6) P3681P045</p>	<p>1) P31134123 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90009</p>	<p>1) P31134132 x1 2) P31415321 3) P31434163 4) P31434307</p>	<p>1) P31171681 2) P31171353 3) P41115023</p>
	<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve 6) Seal, Valve</p>
<p>P2641728</p>	<p>1) P4131A013 2) P2485659</p>	<p>1) PZZ90032 2) P41151483 3) P41151484</p>	<p>1) P3343F002 x4 b) P3343J002 x4</p>	<p>a) P31744131 x8 b) P31745121 x8</p> <p>1) PZZ80175 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)</p>	<p>5) P33173108 x16 6) P33817117 x8</p> <p>P41733082</p>
					
<p>Lift Pump</p>	<p>1) Water Pump 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves) 2) Glowplug</p>	<p>Balancer Unit</p>	

(1) Parallel, Semi Finished Liner **P31358343** (4.065"OD), and Flanged, Semi Finished Liner **P31358346** are also available.
(2) Rope Seal.
(3) Lip Seal.

Engine & Equipment Application		Piston-Liner Kit		Main Bearing Set		Con Rod Bearing Set		Thrust Washer Set									
4.248 4 Cyl, Lip Seal Bore: 3.9785 in 101.054 mm From ESN UA123424L																	
	1) Engine O/H Kit 2) Basic Engine Kit	PCK2481 Consists of: a) PU5LP0009 b) P41158022 c) P3135X034 (5) 4 Per Engine	P81558 Std. P81558A .010 P81558B .020 P81558C .030 Set of 5 Pairs	P85042 Std. P85042A .010 P85042B .020 P85042C .030 Set of 4 Pairs	P31137551/61 Set of 2 Pairs												
	1) POK461 2) PBK461																
	APPLICATIONS: LANDINI TRACTORS R8500 (LF22575) MF AGRICULTURAL 194 (LF22762) 275 (LF22312/3) 285 (LF22471) 290 (LF22790) 590 (LF22486) MF INDUSTRIAL 50H						1) Front Seal 2) Rear Seal 3) Crankshaft Kit		1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk 4) Head Gasket 5) Oil Pan Set 6) Timing Cover Gsk		1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod		1) Bushing, Cam 2) Camshaft 3) Tappet 4) Push Rod		1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear		
		1) P2418F436 2) P2418F475 3) PZZ90082	1) PU5LT0065 2) PU5LB0045 3) P3681A027 4) P3681E036 5) PU5MK0600 6) P3681P045	1) P31134123 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90009	1) P31134132 x1 2) P31415321 (1) 3) P31415374 (2) 3) P31434163 4) P31434307	1) P31171681 2) P31171353 3) P41115023											
		Valve Train Kit PVTK406	1) Valve, Intake 2) Valve, Exhaust 1) P31431641 x4 2) P31431881 x4	3) Guide, Valve a) Intake b) Exhaust a) P3343F002 x4 b) P3343J002 x4	4) Spring, Valve a) Inner b) Outer a) P31744131 x8 b) P31745121 x8	5) Lock, Valve 6) Seal, Valve 5) P33173108 x16 6) P33817117 x8											
						Oil Pump		Lift Pump		1) Water Pump 2) Thermostat		1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH		1) Cylinder Head (With Valves) 2) Glowplug		Balancer Unit	
P4132F041 (6)	P2641728	1) P4131A013 2) P2485659	1) PZZ90032 2) P41151483 3) P41151484	1) PZZ80175 2) P2666108 (Bayonet Fitting)	P41733082 (3) P4111K051 (4)												


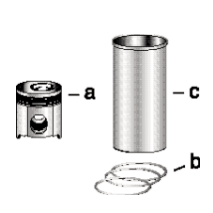
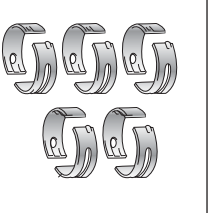


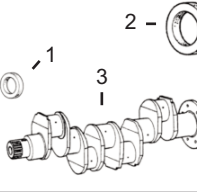
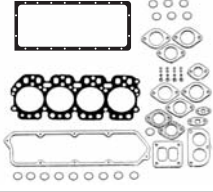
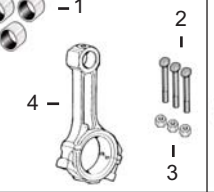
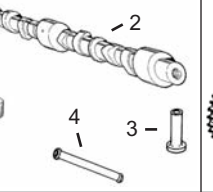
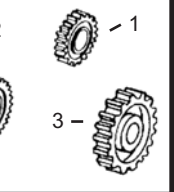
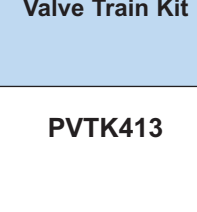
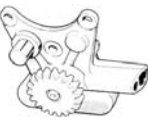

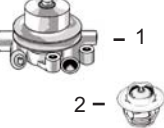
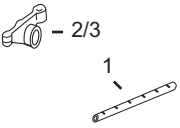

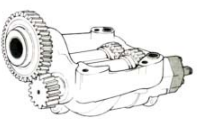
(1) To ESN U108196N.
(2) From ESN U108197N.
(3) To ESN U076241N.
(4) From ESN U076242N.

(5) Flanged, Semi Finished Liner available, **P3135X033**.
(6) Used with Balancer Unit **P4111K051**.

Engine & Equipment Application					
<p>4.248</p> <p>4 Cyl, Rope & Lip Seal</p> <p>Bore: 3.9785 in 101.054 mm</p> <p>APPLICATIONS:</p> <p>ALLIS CHALMERS 840 Loader (LF21617) D175 Tractor (LF21274)</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PCK2481 Consists of: a) PU5LP0009 b) P41158022 c) P3135X034 (6) 4 Per Engine</p>	<p>P81558 Std. P81558A .010 P81558B .020 P81558C .030 Set of 5 Pairs</p>	<p>P85042 Std. P85042A .010 P85042B .020 P85042C .030 Set of 4 Pairs</p>	<p>P31137551/61 Set of 2 Pairs</p>
	<p>1) POK463</p>				
	<p>2) PBK463</p>				
<p>1) Front Seal 2) Rear Seal 3) Crankshaft Kit</p>	<p>1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk 4) Head Gasket 5) Oil Pan Set 6) Timing Cover Gsk</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod</p>	<p>1) Bushing, Cam 2) Camshaft 3) Tappet 4) Push Rod</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p>	
<p>1) P2418F436 2) P2418F475 P36883108 x2 3) PZZ90093 (4) PZZ90082 (5)</p>	<p>1) PU5LT0065 2) PU5LB0046 3) P3681A027 4) P3681E036 5) PU5MK0600 6) P3681P045</p>	<p>1) P31134123 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90009</p>	<p>1) P31134132 x1 2) P31415321 (1) (3) P31415371 (2) (3) 3) P31434163 4) P31434307</p>	<p>1) P31171681 2) P31171353 3) P41115023</p>	
<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve 6) Seal, Valve</p>	
<p>PVTK413</p>	<p>1) P31431315 x4 2) P3142A052 x4</p>	<p>a) P3343F002 x4 b) P3343J002 x4</p>	<p>a) P31744131 x8 b) P31745121 x8</p>	<p>5) P33173108 x16 6) P33817117 x8</p>	
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves) 2) Glowplug</p>	
<p>P41314182</p>	<p>P2641728</p>	<p>1) P4131A013 2) P2485666</p>	<p>1) PZZ90032 2) P41151483 3) P41151484</p>	<p>1) PZZ80175 2) Not Used</p>	

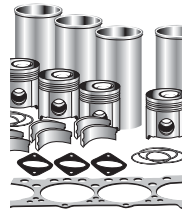
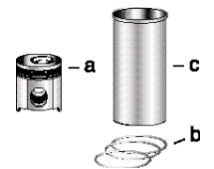
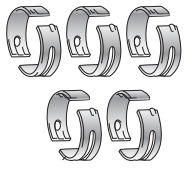


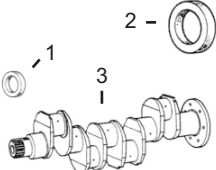
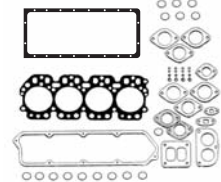
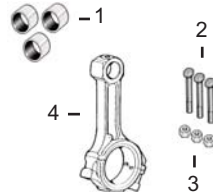
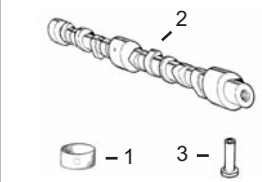
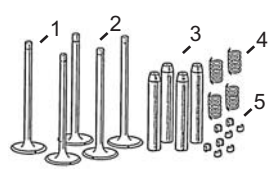
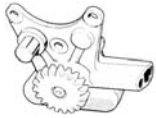

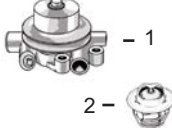
(1) To ESN U108196N.
(2) From ESN U108197N.
(3) Check with Build List.
(4) To ESN U17856L.

(5) From ESN U17857L.
(6) Flanged, Semi Finished Liner available, P3135X033.

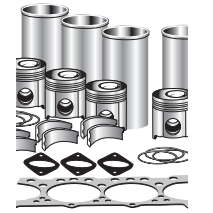
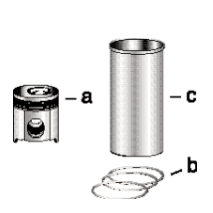


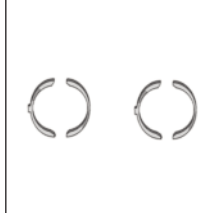
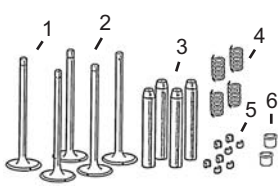
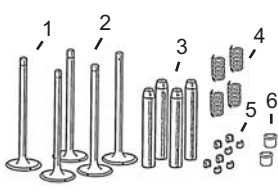
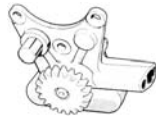

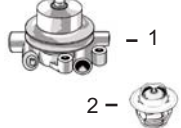
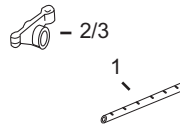

Engine & Equipment Application					
4.248.2 4 Cyl, Lip Seal Bore: 3.9785 in 101.054 mm	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PCK2482 Consists of:	P81558 Std.	P85042 Std.	P31137551/61
	1) POK462	a) P68814	P81558A .010	P85042A .010	
	2) PBK462	b) P41158022 c) P3135X034 (7)	P81558B .020 P81558C .030	P85042B .020 P85042C .030	
APPLICATIONS:		4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs
CATERPILLAR T80D (LG70149) T50-150D (LG70109) V60C (LG70069/LG70091) V80D (LG70067/LG70090)					
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet 4) Push Rod	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear
CLARK EQUIPMENT C500 (H) 60-80 (LG70159) C500Y-100-150 (LG70104) CTD20-50 (LG70097/LG70106)	3) Crankshaft Kit	4) Head Gasket 5) Oil Pan Set 6) Timing Cover Gsk	4) Con Rod		
	1) P2418F436 2) P2418F475 3) PZZ90082	1) PU5LT0176 2) PU5LB0046 3) P3681A027 4) P3681E036 5) PU5MK0600 6) P3681P045	1) P31134123 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90009	1) P31134132 x1 2) P31415292 (2) P31415381 (3) 3) P31434163 4) P31434307	1) P31171681 2) P31171353 P31171931 (6) 3) P31171951
HYSTER H60-80E (LG70063) H60-110E (LG70127)		1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK413	1) P31431315 x4 2) P3142A052 x4	a) P3343F002 x4 b) P3343J002 x4	a) P31744131 x8 b) P31745121 x8	5) P33173108 x16 6) P33817117 x8
					
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head (With Valves) 2) Glowplug	Balancer Unit
P41314182 P4132F041 (5)	P2641728	1) P4131A013 (1) PU5MW0105 (1) 2) P2485666 (8)	1) PZZ90032 2) P41151483 3) P41151484	1) PZZ80175 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)	P41733082 (4) P4111K051 (5)

(1) Check with Build List.
 (2) To ESN U108196N.
 (3) From ESN U108197N.
 (4) Use on Build No: LG70104.

(5) Use on Build No: LG70159.
 (6) Use on Build Nos: LG70067/LG70090.
 (7) Flanged, Semi Finished Liner available, **P3135X033**.
 (8) Build LG70149 use P2485613, and Build LG70159, LG70104 use P2485609.

Engine & Equipment Application						
<p>4.318</p> <p>4 Cyl, Lip Seal</p> <p>Bore: 4.5005 in 114.313 mm</p> <p>APPLICATIONS:</p> <p>MF AGRICULTURAL 285 (NC22089) 540 Combine (NC22699) 1085 (NC21725)</p>						
	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set	
	2) Basic Engine Kit	PCK318 Consists of:	P68085 Std.	P85041 Std.	P31137551/61	
	1) POK490	a) P86716	P68085A .010	P85041A .010		
	2) PBK490	b) P41158118 c) P31358534	P68085B .020 P68085C .030	P85041B .020 P85041C .030		
	4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs		
						
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam		
	3) Crankshaft Kit	3) Head Gasket	4) Con Rod	2) Camshaft 3) Tappet		
	1) P2415346 2) P2418F475 3) N/A	1) P69048 2) P68211 3) P36812348	1) P0050128 x4 2) N/A 3) Not Used 4) N/A	1) Not Used 2) N/A 3) N/A		
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve	
	PVTK408	1) P31431154 x4 2) P31431671 x4	3) P33432532 x8	a) P31744131 x8 b) P31745121 x8	5) P33173108 x16	
	Oil Pump		Lift Pump		1) Water Pump 2) Thermostat	
	P41314113		P2641336		1) PU5MW0009 (1) PU5MW0014 (2) 2) P2485666	

(1) Used on Build No: NC22089/NC22699.
(2) Used on Build No: NC21725.

Engine & Equipment Application					
6.354 6 Cyl, Rope & Lip Seal (Both Rear Seal Types Included in Kit) Bore: 3.8770 in 98.476 mm	1) Engine O/H Kit 2) Basic Engine Kit	Piston-Liner Kit PU5MK0127 Consists of: a) P86740 b) P41158041 c) P31358394 (6) 6 Per Engine	Main Bearing Set P85010 Std. P85010A .010 P85010B .020 P85010C .030 Set of 7 Pairs	Con Rod Bearing Set P85043 Std. P85043A .010 P85043B .020 P85043C .030 Set of 6 Pairs	Thrust Washer Set PW2105L (1) P31137551/61 (Both Types in Kit) Set of 2 Pairs
	APPLICATIONS: CLARK EQUIPMENT C500-CY-160-300 (TC22266)				
	HYSTER H150-250 (TC20102)				
	MF AGRICULTURAL 1100 (5) MICHIGAN 45B Shovel (TC22460)				
	1) Front Seal 2) Rear Seal 3) Crankshaft Kit	1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod	1) Camshaft 2) Tappet 3) Push Rod 4) Camshaft Gear	1) Aux. Drive Shaft 2) Gear & Shaft 3) Gear 4) Front Bush 5) Rear Bush 6) Seal
	1) P2418F436 2) P36883108 x2 P2418F475 3) PZZ90089 (2) PZZ90090 (3)	1) PU5LT0021 2) PU5LB0056 3) P36812548	1) P31134123 x6 2) P32762144 x12 3) P33221328 x12 4) PZZ90009	1) N/A 2) P31434163 3) P31434307 4) P31171353	1) P31173422 2) P41115367 3) P31171731 4) P31134129 5) P2511447 6) P2418F432
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK610	1) P31431315 x6 2) P3142A052 x6	a) P3343F002 x6 b) P3343J002 x6	a) P31744131 x12 b) P31745121 x12	5) P33173108 x24 6) P33817117 x12
					
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	
P41314067 (4) P41314131 (4)	P2641A064	1) PU5MW0112 (4) 2) P2485609	1) PZZ90046 2) P41151483 3) P41151484	1) N/A 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)	

(1) For ESN's Prior to 8504189 use Thrust Washer Set **PW2105L**.

(2) To ESN U327088L.

(3) From ESN U327089L.

(4) Check with Build List.

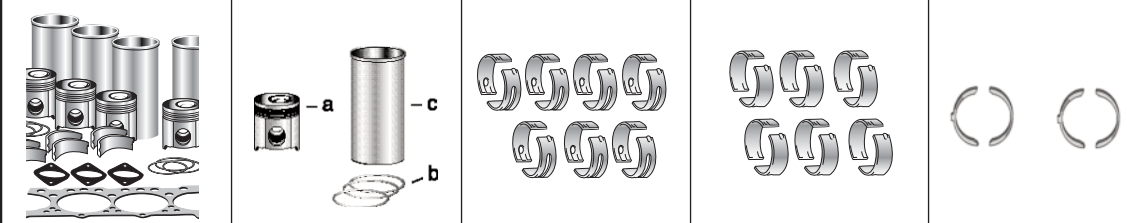
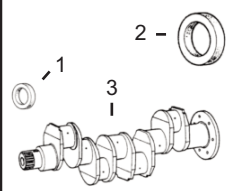
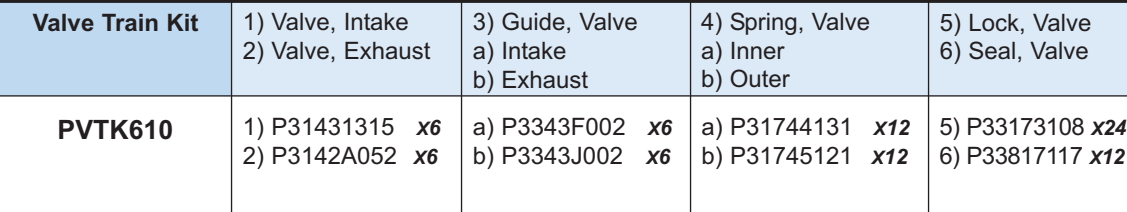
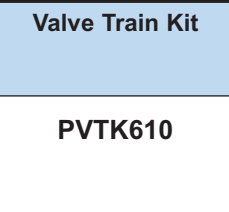
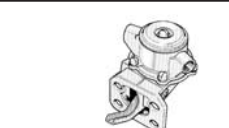
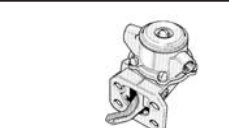
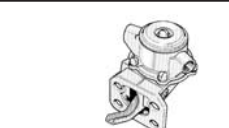
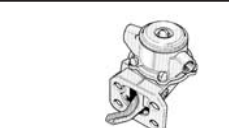
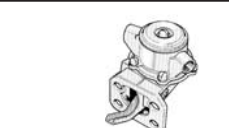
(5) To ESN 354UA10361.

(6) Parallel, Semi Finished Liner, **P31358324**, Flanged, Semi Finished Liner, **P31358393**, and Finished Liner in .010" Oversize, **P31358398**, are also available.

Engine & Equipment Application					
<p>6.354</p> <p>6 Cyl, Rope Seal</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>APPLICATIONS: MF AGRICULTURAL 1100 (1)</p>					
	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PU5MK0127</p> <p>Consists of:</p> <p>a) P86740 b) P41158041 c) P31358394 (2)</p> <p>6 Per Engine</p>	<p>P85010 Std.</p> <p>P85010A .010 P85010B .020 P85010C .030</p> <p>Set of 7 Pairs</p>	<p>P85043 Std.</p> <p>P85043A .010 P85043B .020 P85043C .030</p> <p>Set of 6 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>
	<p>1) POK652</p>				
	<p>2) PBK652</p>				
<p>1) Front Seal 2) Rear Seal 3) Crankshaft Kit</p> <p>1) P2418F436 2) P36883108 x2 3) PZZ90089</p>	<p>1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket</p> <p>1) PU5LT0026 2) PU5LB0056 3) P36812547</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod</p> <p>1) P31134123 x6 2) P32762144 x12 3) P33221328 x12 4) PZZ90009</p>	<p>1) Camshaft 2) Tappet 3) Push Rod 4) Camshaft Gear</p> <p>1) N/A 2) P31434163 3) P31434307 4) P31171353</p>	<p>1) Aux. Drive Shaft 2) Gear & Shaft 3) Gear 4) Front Bush 5) Rear Bush 6) Seal</p> <p>1) P31173422 2) P41115367 3) P31171731 4) P31134129 5) P2511447 6) P2418F432</p>	
<p>Valve Train Kit</p> <p>PVTK610</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p> <p>1) P31431315 x6 2) P3142A052 x6</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p> <p>a) P3343F002 x6 b) P3343J002 x6</p>	<p>4) Spring, Valve a) Inner b) Outer</p> <p>a) P31744131 x12 b) P31745121 x12</p>	<p>5) Lock, Valve 6) Seal, Valve</p> <p>5) P33173108 x24 6) P33817117 x12</p>	
<p>Oil Pump</p> <p>P41314067</p>	<p>Lift Pump</p> <p>P2641A064</p>	<p>1) Water Pump 2) Thermostat</p> <p>1) PU5MW0016 2) P2485666 P2485613</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p> <p>1) PZZ90046 2) P41151483 3) P41151484</p>	<p>1) Cylinder Head 2) Glowplug</p> <p>1) N/A 2) P2666103 (Screw Fitting) P2666108 (Bayonet Fitting)</p>	

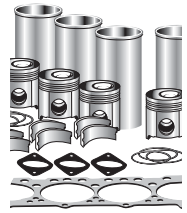
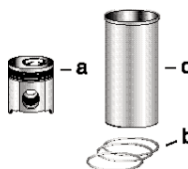



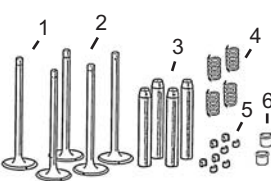
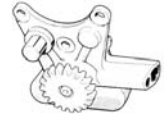

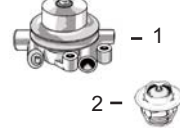
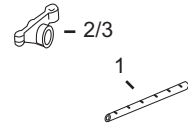

(1) From ESN 354UA10362.

(2) Parallel, Semi Finished Liner, P31358324, Flanged, Semi Finished Liner, P31358393, and Finished Liner in .010" Oversize, P31358398, are also available.

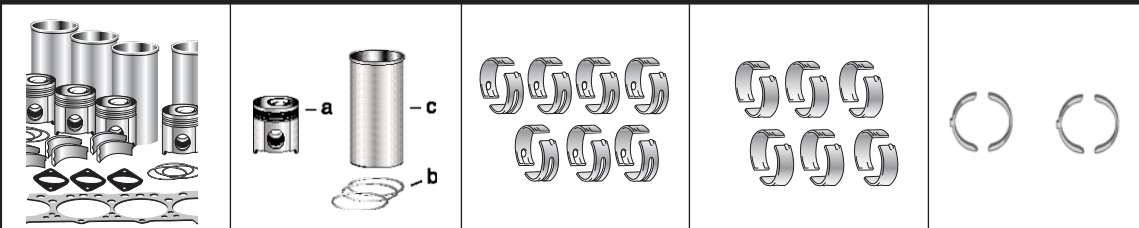
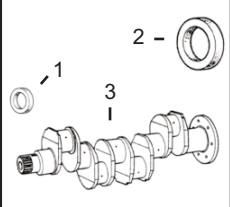
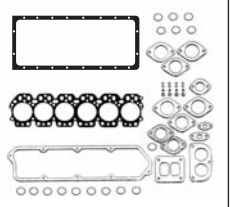
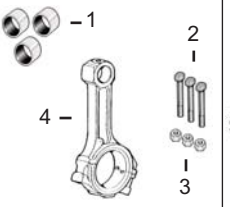
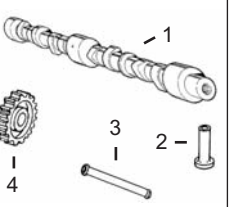


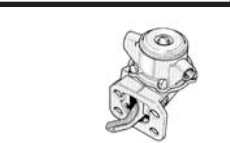
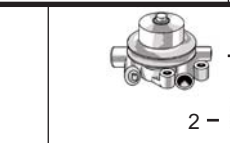
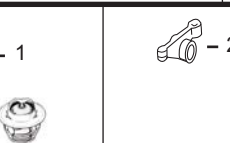
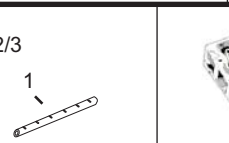

Engine & Equipment Application					
T6.354 TURBOCHARGED 6 Cyl, Rope Seal Bore: 3.8770 in 98.476 mm	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PCK354 Consists of: a) P86726 b) P41158031 c) P31358394 (2)	PU5MB0011 Std. PU5MB0011A .010 PU5MB0011B .020 PU5MB0011C .030	PU5ME0007 Std. PU5ME0007A .010 PU5ME0007B .020 PU5ME0007C .030	P31137551/61
	1) POK660 2) PBK660	6 Per Engine	Set of 7 Pairs	Set of 6 Pairs	Set of 2 Pairs
	APPLICATIONS: MF AGRICULTURAL 1130 (1)				
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Camshaft 2) Tappet 3) Push Rod	1) Aux. Drive Shaft 2) Gear & Shaft 3) Gear 4) Front Bush 5) Rear Bush 6) Seal
	3) Crankshaft Kit	3) Head Gasket			
	1) P2418F436 2) P36883108 x2 3) PZZ90159	1) PU5LT0021 2) PU5LB0056 3) P36812548	1) P31134134 x6 2) P32762144 x12 3) P33221328 x12	1) N/A 2) P31434163 3) P31434307	1) N/A 2) P41115367 3) P31171731 4) P31134129 5) P2511447 6) P2418F432
					
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK610	1) P31431315 x6 2) P3142A052 x6	a) P3343F002 x6 b) P3343J002 x6	a) P31744131 x12 b) P31745121 x12	5) P33173108 x24 6) P33817117 x12
					
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head (With Valves) 2) Glowplug	
P41314067	P2641A064	1) PU5MW0016 (1) 2) P2485666 P2485613	1) PZZ90046 2) P41151483 3) P41151484	1) N/A 2) P2666108 (Bayonet Fitting)	

(1) To ESN 354UA3355T.

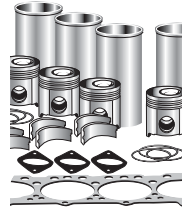
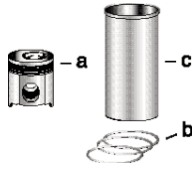

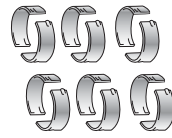

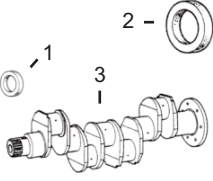
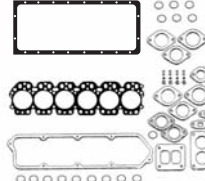
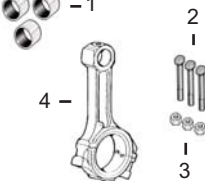
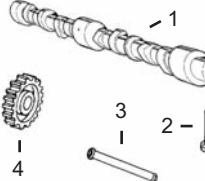

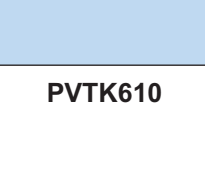
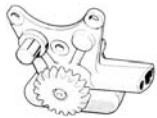

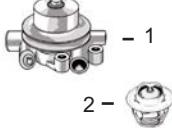
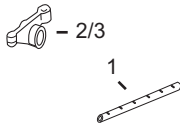

(2) Parallel, Semi Finished Liner, P31358324, Flanged, Semi Finished Liner, P31358393, and Finished Liner in .010" Oversize, P31358398, are also available.

Engine & Equipment Application					
<p>T6.354.1/TC6.354.1</p> <p>TURBOCHARGED</p> <p>6 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>APPLICATIONS:</p> <p>MF AGRICULTURAL 750 760 (1) (TH21794) 1105 (TT21724) 1130 (4) 1135 (TH22431/TH21722)</p> <p>NEW IDEA Combine (TH22481)</p> <p>WHITE FARM 2-105 (TH22282)</p>	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	<p>PCK354</p> <p>Consists of:</p> <p>a) P86726 b) P41158031 c) P31358394 (5)</p> <p>6 Per Engine</p>	<p>PU5MB0011 Std. PU5MB0011A .010 PU5MB0011B .020 PU5MB0011C .030</p> <p>Set of 7 Pairs</p>	<p>PU5ME0007 Std. PU5ME0007A .010 PU5ME0007B .020 PU5ME0007C .030</p> <p>Set of 6 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>
	1) POK661				
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Camshaft 2) Tappet 3) Push Rod 4) Camshaft Gear	1) Aux. Drive Shaft 2) Gear & Shaft 3) Gear 4) Front Bush 5) Rear Bush 6) Seal
	3) Crankshaft Kit	3) Head Gasket			
					
<p>P41314067</p>	<p>P2641A064</p>	<p>1) PU5MW0016 (2) PU5MW0123 (3) 2) P2485666 (6) P2485613</p>	<p>1) PZZ90046 2) P41151483 3) P41151484</p>	<p>1) N/A 2) P2666108 (Bayonet Fitting)</p>	

(1) From ESN UA48970L.
 (2) Do Not Use on Build No: TH21794.
 (3) Use on Build No: TH22481.
 (4) From ESN 354UA3356T.
 (5) Parallel, Semi Finished Liner, P31358324, Flanged, Semi Finished Liner, P31358393, and Finished Liner in .010" Oversize, P31358398, are also available.
 (6) Check with Build List.
 (7) Do not use on Build numbers TH22431 and TH22282.

Engine & Equipment Application					
<p>6.354.1</p> <p>6 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>APPLICATIONS:</p> <p>WHITE FARM 2-85 Tractor (TG22453)</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PU5MK0125</p> <p>Consists of:</p> <p>a) P86745 b) P41158032 c) P31358394 (1)</p> <p>6 Per Engine</p>	<p>PU5MB0011 Std.</p>	<p>PU5ME0003 Std.</p>	<p>P31137551/61</p>
	<p>1) POK667</p>		<p>PU5MB0011A .010 PU5MB0011B .020 PU5MB0011C .030</p>	<p>PU5ME0003A .010 PU5ME0003B .020 PU5ME0003C .030</p>	
	<p>2) PBK667</p>		<p>Set of 7 Pairs</p>	<p>Set of 6 Pairs</p>	<p>Set of 2 Pairs</p>
					
<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod</p>	<p>1) Camshaft 2) Tappet 3) Push Rod 4) Camshaft Gear</p>	<p>1) Aux. Drive Shaft 2) Gear & Shaft 3) Gear 4) Front Bush 5) Rear Bush 6) Seal</p>	
<p>3) Crankshaft Kit</p>	<p>3) Head Gasket</p>	<p>1) P31134123 x6 2) P32762144 x12 3) P33221328 x12 4) PZZ90009</p>	<p>1) N/A 2) P31434163 3) P31434307 4) P31171931</p>	<p>1) N/A 2) P41115367 3) P31171731 4) P31134129 5) P2511447 6) P2418F432</p>	
<p>1) P2418F436 2) P2418F475 3) PZZ90092</p>	<p>1) PU5LT0026 2) PU5LB0056 3) P36812547</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve 6) Seal, Valve</p>	
	<p>PVTK616</p> <p>1) P31431315 x6 2) P31431931 x6</p>	<p>a) P3343F002 x6 b) P3343J002 x6</p>	<p>a) P31744131 x12 b) P31745121 x12</p>	<p>5) P33173108 x24 6) P33817117 x12</p>	
					
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head 2) Glowplug</p>	
<p>P41314067</p>	<p>P2641A064</p>	<p>1) PU5MW0016 2) P2485666 P2485613</p>	<p>1) PZZ90046 2) P41151483 3) P41151484</p>	<p>1) N/A 2) P2666108 (Bayonet Fitting)</p>	

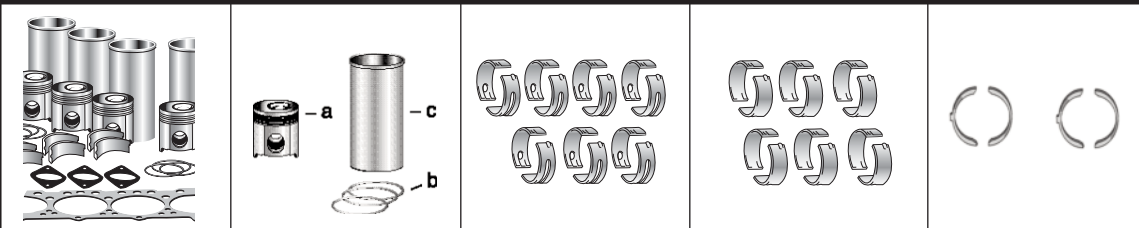
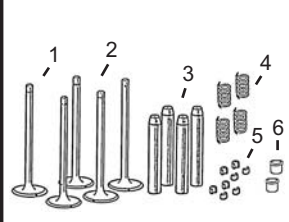
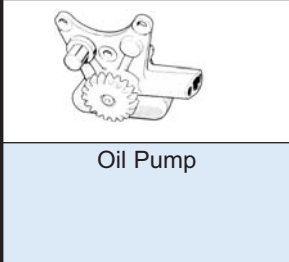
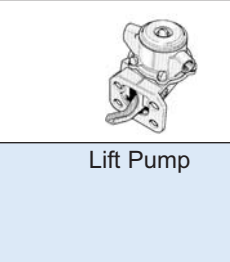
(1) Parallel, Semi Finished Liner, P31358324, Flanged, Semi Finished Liner, P31358393, and Finished Liner in .010" Oversize, P31358398, are also available.

Engine & Equipment Application					
<p>6.354.2</p> <p>6 Cyl, Rope & Lip Seal</p> <p>Kits include both rear seals</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>APPLICATIONS: WHITE COCKSHUTT 7600 Combine (TJ22189)</p>					
	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PU5MK0125</p> <p>Consists of:</p> <p>a) P86745 b) P41158032 c) P31358394 (3)</p> <p>6 Per Engine</p>	<p>P85010 Std. P85010A .010 P85010B .020 P85010C .030</p> <p>Set of 7 Pairs</p>	<p>P85043 Std. P85043A .010 P85043B .020 P85043C .030</p> <p>Set of 6 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>
	<p>1) POK668</p>				
	<p>2) PBK668</p>				
					
	<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p>	<p>1) Camshaft 2) Tappet 3) Push Rod 4) Camshaft Gear</p>	<p>1) Aux. Drive Shaft 2) Gear & Shaft 3) Gear 4) Front Bush 5) Rear Bush 6) Seal</p>
	<p>3) Crankshaft Kit</p>	<p>3) Head Gasket</p>	<p>4) Con Rod</p>		
	<p>1) P2418F436 2) P36883108 x2 P2418F475 3) PZZ90089 (1) PZZ90090 (2)</p>	<p>1) PU5LT0028 2) PU5LB0056 3) P36812545</p>	<p>1) P31134123 x6 2) P32762144 x12 3) P33221328 x12 4) PZZ90009</p>	<p>1) N/A 2) P31434163 3) P31434307 4) P31171353</p>	<p>1) P31173422 2) P41115367 3) P31171731 4) P31134129 5) P2511447 6) P2418F432</p>
		<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve 6) Seal, Valve</p>
	<p>PVTK610</p>	<p>1) P31431315 x6 2) P3142A052 x6</p>	<p>a) P3343F002 x6 b) P3343J002 x6</p>	<p>a) P31744131 x12 b) P31745121 x12</p>	<p>5) P33173108 x24 6) P33817117 x12</p>
					
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head 2) Glowplug</p>	
<p>P41314067</p>	<p>P2641A064</p>	<p>1) PU5MW0123 2) P2485604 x2</p>	<p>1) PZZ90046 2) P41151483 3) P41151484</p>	<p>1) N/A 2) Not Used</p>	

(1) To ESN U12128L.

(2) From ESN U12129L.

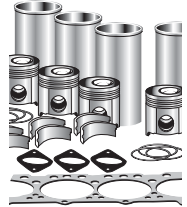
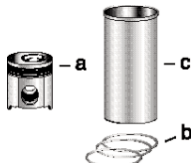



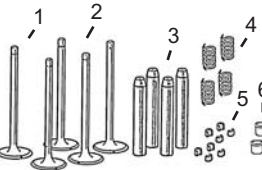
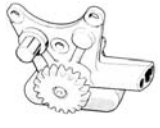
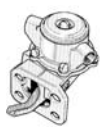
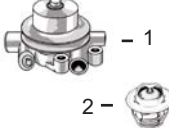
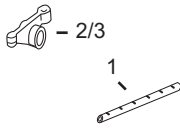

(3) Parallel, Semi Finished Liner, **P31358324**, Flanged, Semi Finished Liner, **P31358393**, and Finished Liner in .010" Oversize, **P31358398**, are also available.

Engine & Equipment Application					
<p>6.354.4</p> <p>6 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>APPLICATIONS:</p> <p>CLARK EQUIPMENT 16000-30000 (TW70007) C500-160-300D (TW70142)</p> <p>HYSTER H150-275-300-350H (TW70005)</p> <p>MF AGRICULTURAL 1014 (TW31087) TX550 Combine (TW31015)</p> <p>PERKINS USA General Industrial (TW33425)</p> <p>WHITE FARM 8600 Combine (TW70114)</p>	<p>1) Engine O/H Kit</p> <p>2) Basic Engine Kit</p> <p>1) POK671</p> <p>2) PBK671</p>	<p>Piston-Liner Kit</p> <p>PU5MK0127</p> <p>Consists of:</p> <p>a) P86740</p> <p>b) P41158041</p> <p>c) P31358394 (3)</p> <p>6 Per Engine</p>	<p>Main Bearing Set</p> <p>PU5MB0030 Std.</p> <p>PU5MB0030A .010</p> <p>PU5MB0030B .020</p> <p>PU5MB0030C .030</p> <p>Set of 7 Pairs</p>	<p>Con Rod Bearing Set</p> <p>P85043 Std.</p> <p>P85043A .010</p> <p>P85043B .020</p> <p>P85043C .030</p> <p>Set of 6 Pairs</p>	<p>Thrust Washer Set</p> <p>P31137551/61</p> <p>Set of 2 Pairs</p>
<p>CLARK EQUIPMENT 16000-30000 (TW70007) C500-160-300D (TW70142)</p> <p>HYSTER H150-275-300-350H (TW70005)</p> <p>MF AGRICULTURAL 1014 (TW31087) TX550 Combine (TW31015)</p> <p>PERKINS USA General Industrial (TW33425)</p> <p>WHITE FARM 8600 Combine (TW70114)</p>	<p>1) Front Seal</p> <p>2) Rear Seal</p> <p>3) Crankshaft Kit</p> <p>1) P2418F436</p> <p>2) P2418F475</p> <p>3) PZZ90086</p>	<p>1) Top Gasket Set</p> <p>2) Bottom Gasket</p> <p>3) Head Gasket</p> <p>1) PU5LT0017</p> <p>2) PU5LB0056</p> <p>3) P3681H202</p>	<p>1) Bush, Con Rod</p> <p>2) Bolt, Con Rod</p> <p>3) Nut, Con Rod</p> <p>4) Con Rod</p> <p>1) P31134123 X6</p> <p>2) P32762144 X12</p> <p>3) P33221328 X12</p> <p>4) PZZ90009</p>	<p>1) Camshaft</p> <p>2) Tappet</p> <p>3) Push Rod</p> <p>4) Camshaft Gear</p> <p>1) P31416303</p> <p>2) P31434163</p> <p>3) P31434307</p> <p>4) P31171353</p> <p>P31171931 (1)</p>	<p>1) Aux. Drive Shaft</p> <p>2) Gear & Shaft</p> <p>3) Gear</p> <p>4) Front Bush</p> <p>5) Rear Bush</p> <p>6) Seal</p> <p>1) P31173423</p> <p>2) P41115367</p> <p>3) P31171733</p> <p>4) P31134129</p> <p>5) P2511447</p> <p>6) P2418F432</p>
	<p>Valve Train Kit</p> <p>1) Valve, Intake</p> <p>2) Valve, Exhaust</p> <p>PVTK611</p> <p>1) P31431315 X6</p> <p>2) P3142A051 X6</p>	<p>3) Guide, Valve</p> <p>a) Intake</p> <p>b) Exhaust</p> <p>a) P3343F002 X6</p> <p>b) P3343J002 X6</p>	<p>4) Spring, Valve</p> <p>a) Inner</p> <p>b) Outer</p> <p>a) P31744131 X12</p> <p>b) P31745121 X12</p>	<p>5) Lock, Valve</p> <p>6) Seal, Valve</p> <p>5) P33173108 X24</p> <p>6) P33817117 X12</p>	
 <p>Oil Pump</p>	 <p>Lift Pump</p>	<p>1) Water Pump</p> <p>2) Thermostat</p>	<p>1) Rocker Shaft</p> <p>2) Rocker Arm LH</p> <p>3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves)</p> <p>2) Glowplug</p>	
<p>P4132F015</p>	<p>P2641729</p>	<p>1) P41313027 (2)</p> <p>PU5MW0129 (2)</p> <p>2) P2485613 X2</p>	<p>1) PZZ90046</p> <p>2) P41151483</p> <p>3) P41151484</p>	<p>1) PZZ80024</p> <p>2) P2666108 (Bayonet Fitting)</p>	


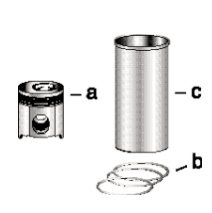

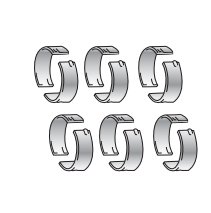
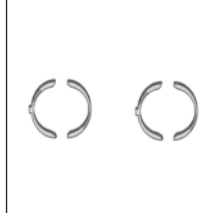
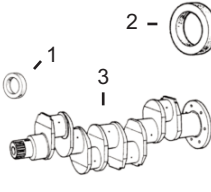
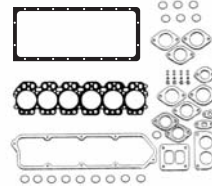
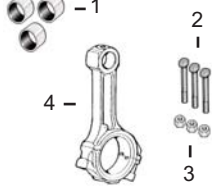
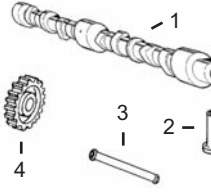

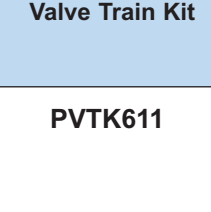

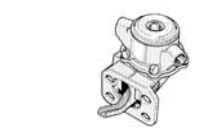

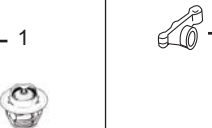

(1) Use Only on Build No: TW70014.

(2) Check with Build List.

(3) Flanged, Semi Finished Liner, P31358393, and Finished Liner in .010" Oversize, P31358398, are also available.

Engine & Equipment Application					
<p>6.354.4</p> <p>6 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>APPLICATIONS:</p> <p>CLARK EQUIPMENT 45C Shovel (TW70016)</p> <p>NEW HOLLAND Stack Cruiser (TW70031)</p> <p>WHITE FARM 8600 Combine (TW70003)</p>					
	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PCK619</p> <p>Consists of:</p> <p>a) PU5LP0019</p> <p>b) P41158017</p> <p>c) P31358394 (3)</p> <p>6 Per Engine</p>	<p>PU5MB0030 Std.</p>	<p>P85043 Std.</p>	<p>P31137551/61</p>
	<p>1) POK672</p>		<p>PU5MB0030A .010</p>	<p>P85043A .010</p>	
	<p>2) PBK672</p>		<p>PU5MB0030B .020</p> <p>PU5MB0030C .030</p>	<p>P85043B .020</p> <p>P85043C .030</p>	
<p>1) Front Seal</p> <p>2) Rear Seal</p> <p>3) Crankshaft Kit</p>	<p>1) Top Gasket Set</p> <p>2) Bottom Gasket</p> <p>3) Head Gasket</p>	<p>1) Bush, Con Rod</p> <p>2) Bolt, Con Rod</p> <p>3) Nut, Con Rod</p> <p>4) Con Rod</p>	<p>1) Camshaft</p> <p>2) Tappet</p> <p>3) Push Rod</p> <p>4) Camshaft Gear</p>	<p>1) Aux. Drive Shaft</p> <p>2) Gear & Shaft</p> <p>3) Gear</p> <p>4) Front Bush</p> <p>5) Rear Bush</p> <p>6) Seal</p>	
<p>1) P2418F436</p> <p>2) P2418F475</p> <p>3) PZZ90086</p>	<p>1) PU5LT0017</p> <p>2) PU5LB0056</p> <p>3) P3681H202</p>	<p>1) P31134123 X6</p> <p>2) P32762144 X12</p> <p>3) P33221328 X12</p> <p>4) PZZ90009</p>	<p>1) P31416303</p> <p>2) P31434163</p> <p>3) P31434307</p> <p>4) P31171353 (4)</p> <p>P31171931 (1)</p>	<p>1) P31173423</p> <p>2) P41115367</p> <p>3) P31171733</p> <p>4) P31134129</p> <p>5) P2511447</p> <p>6) P2418F432</p>	
	<p>Valve Train Kit</p> <p>PVTK611</p>	<p>1) Valve, Intake</p> <p>2) Valve, Exhaust</p> <p>3) Guide, Valve</p> <p>a) Intake</p> <p>b) Exhaust</p>	<p>4) Spring, Valve</p> <p>a) Inner</p> <p>b) Outer</p>	<p>5) Lock, Valve</p> <p>6) Seal, Valve</p>	
<p>1) P31431315 x6</p> <p>2) P3142A051 x6</p>	<p>a) P3343F002 x6</p> <p>b) P3343J002 x6</p>	<p>a) P31744131 x12</p> <p>b) P31745121 x12</p>	<p>5) P33173108 x24</p> <p>6) P33817117 x12</p>		
					
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump</p> <p>2) Thermostat</p>	<p>1) Rocker Shaft</p> <p>2) Rocker Arm LH</p> <p>3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves)</p> <p>2) Glowplug</p>	
<p>P4132F015</p>	<p>P2641729</p>	<p>1) P41313027 (1)</p> <p>PU5MW0129 (2)</p> <p>2) P2485613 x2</p>	<p>1) PZZ90046</p> <p>2) P41151483</p> <p>3) P41151484</p>	<p>1) PZZ80024</p> <p>2) P2666108 (Bayonet Fitting)</p>	

(1) Use on Build No: TW70016.
 (2) Use on Build No: TW70031/TW70003.
 (3) Flanged, Semi Finished Liner, **P31358393**, and Finished Liner in .010" Oversize, **P31358398**, are also available.
 (4) Use on Build No: TW70003.

Engine & Equipment Application					
<p>6.354.4</p> <p>6 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p> <p>APPLICATIONS:</p> <p>MF AGRICULTURAL 699 (TW31125) 2675 (TW31008) 3090 (TW31159)</p> <p>WHITE FARM 2-85 Tractor (TW70008)</p>					
	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PCK619 Consists of:</p> <p>a) PU5LP0019 b) P41158017 c) P31358394 (3)</p> <p>6 Per Engine</p>	<p>PU5MB0030 Std. PU5MB0030A .010 PU5MB0030B .020 PU5MB0030C .030</p> <p>Set of 7 Pairs</p>	<p>P85043 Std. P85043A .010 P85043B .020 P85043C .030</p> <p>Set of 6 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>
	<p>1) POK673</p>				
<p>2) PBK673</p>					
					
<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod</p>	<p>1) Camshaft 2) Tappet 3) Push Rod 4) Camshaft Gear</p>	<p>1) Aux. Drive Shaft 2) Gear & Shaft 3) Gear 4) Front Bush 5) Rear Bush 6) Seal</p>	
<p>3) Crankshaft Kit</p>	<p>3) Head Gasket</p>	<p>1) P31134123 X6 2) P32762144 X12 3) P33221328 X12 4) PZZ90009</p>	<p>1) P31416303 2) P31434163 3) P31434307 4) P31171353 (1) P31171931</p>	<p>1) P31173423 (2) 2) P41115367 3) P31171733 4) P31134129 5) P2511447 6) P2418F432 (4)</p>	
	<p>Valve Train Kit</p> <p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve 6) Seal, Valve</p>	
<p>PVTK611</p>	<p>1) P31431315 x6 2) P3142A051 x6</p>	<p>a) P3343F002 x6 b) P3343J002 x6</p>	<p>a) P31744131 x12 b) P31745121 x12</p>	<p>5) P33173108 x24 6) P33817117 x12</p>	
					
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head (With Valves) 2) Glowplug</p>	
<p>P4132F015</p>	<p>P2641729</p>	<p>1) P41313027 2) P2485613 x2</p>	<p>1) PZZ90046 2) P41151483 3) P41151484</p>	<p>1) PZZ80024 2) P2666108 (Bayonet Fitting)</p>	

(1) Use Only with Build No: TW31008.



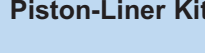



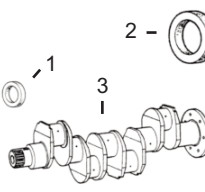
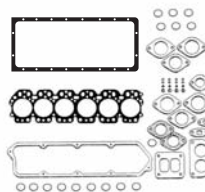
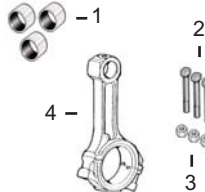
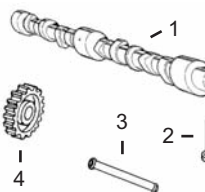

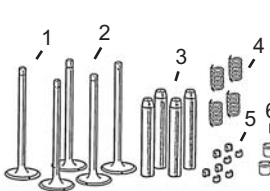
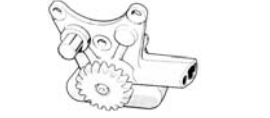




(2) Do Not Use on Build No: TW70008.

(3) Flanged, Semi Finished Liner, **P31358393**, and Finished Liner in .010" Oversize, **P31358398**, are also available.


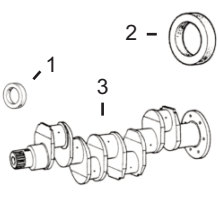
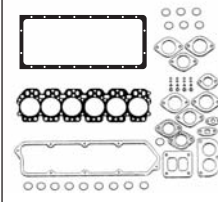
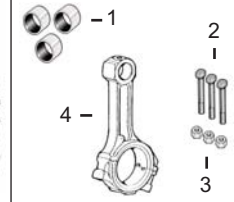
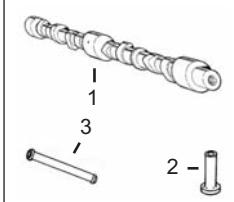



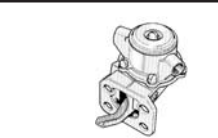
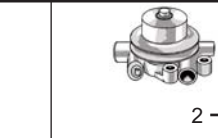
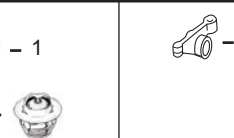
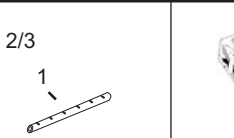
(4) Do not use on Build TW70008.

Engine & Equipment Application					
<p>6.354.4</p> <p>6 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p>	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	<p>PU5MK0127</p> <p>Consists of:</p> <p>a) P86740 b) P41158041 c) P31358394 (1)</p> <p>6 Per Engine</p>	<p>PU5MB0030 Std.</p> <p>PU5MB0030A .010 PU5MB0030B .020 PU5MB0030C .030</p> <p>Set of 7 Pairs</p>	<p>P85043 Std.</p> <p>P85043A .010 P85043B .020 P85043C .030</p> <p>Set of 6 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>
	1) POK675				
	2) PBK675				
<p>APPLICATIONS:</p> <p>MARINE</p> <p>Pleasure Craft (TW33196/7)</p> <p>Commercial/Pleasure Craft (TW70087)</p>					
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Camshaft 2) Tappet 3) Push Rod 4) Camshaft Gear	1) Aux. Drive Shaft 2) Gear & Shaft 3) Gear 4) Front Bush 5) Rear Bush 6) Seal
	3) Crankshaft Kit	3) Head Gasket	4) Con Rod		
	1) P2418F436 2) P2418F475 3) PZZ90086	1) P68243 2) PU5LB0056 3) P3681H202	1) P31134123 x6 2) P32762144 x12 3) P33221328 x12 4) PZZ90009	1) P31416303 2) P31434163 3) P31434307 4) P31171931	1) P31173423 2) P41115367 3) P31171733 4) P31134129 5) P2511447 6) P2418F432
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK617	1) P31431315 x6 2) P3142A051 x6	a) P3343F002 x6 b) P3343J002 x6	a) N/A b) N/A	5) P33173108 x24 6) P33817117 x12
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	
P4132F015	P2641729	1) N/A 2) P2485604 x2	1) PZZ90046 2) P41151483 3) P41151484	1) PZZ80071 2) P2666108 (Bayonet Fitting)	

(1) Flanged, Semi Finished Liner, P31358393, and Finished Liner in .010" Oversize, P31358398, are also available.

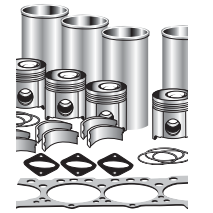
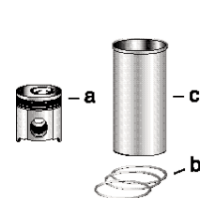

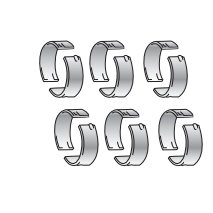
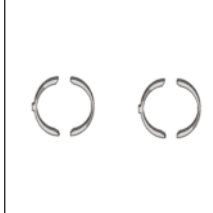
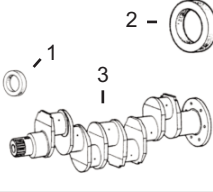
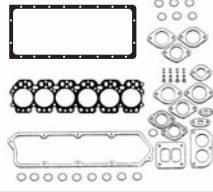
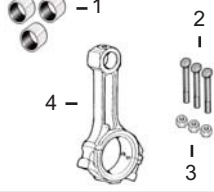
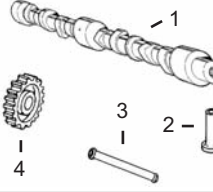

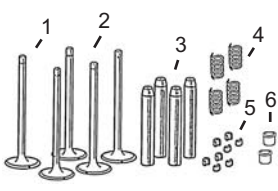

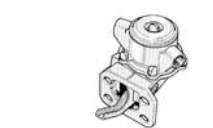



Engine & Equipment Application					
<p>T6.354.4</p> <p>TURBOCHARGED</p> <p>6 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p>	 <p>1) Engine O/H Kit</p>	 <p>Piston-Liner Kit</p>	 <p>Main Bearing Set</p>	 <p>Con Rod Bearing Set</p>	 <p>Thrust Washer Set</p>
<p>APPLICATIONS:</p> <p>MF AGRICULTURAL 560 (TU31074/TU31126) 660 (TU31076) TX750/850 (TU31006)</p> <p>WHITE FARM 8800 Combine (TU70001)</p>	<p>2) Basic Engine Kit</p>	<p>PU5MK0071</p> <p>Consists of:</p> <p>a) P68803 b) P41158005 c) P31358394 (1)</p> <p>6 Per Engine</p>	<p>PU5MB0030 Std.</p> <p>PU5MB0030A .010 PU5MB0030B .020 PU5MB0030C .030</p> <p>Set of 7 Pairs</p>	<p>PU5ME0003 Std.</p> <p>PU5ME0003A .010 PU5ME0003B .020 PU5ME0003C .030</p> <p>Set of 6 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>
	<p>1) POK680</p>	<p>a) P68803</p>	<p>PU5MB0030A .010</p>	<p>PU5ME0003A .010</p>	
	<p>2) PBK680</p>	<p>b) P41158005 c) P31358394 (1)</p>	<p>PU5MB0030B .020 PU5MB0030C .030</p>	<p>PU5ME0003B .020 PU5ME0003C .030</p>	
 <p>1) Front Seal 2) Rear Seal</p>	 <p>1) Top Gasket Set 2) Bottom Gasket</p>	 <p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p>	 <p>1) Camshaft 2) Tappet 3) Push Rod 4) Camshaft Gear</p>	 <p>1) Aux. Drive Shaft 2) Gear & Shaft 3) Gear 4) Front Bush 5) Rear Bush 6) Seal</p>	
<p>3) Crankshaft Kit</p> <p>1) P2418F436 2) P2418F475 3) PZZ90105</p>	<p>3) Head Gasket</p> <p>1) PU5LT0018 2) PU5LB0056 3) P3681H202</p>	<p>4) Con Rod</p> <p>1) P31134131 x6 2) P32762144 x12 3) P33221328 x12 4) PZZ90013</p>	<p>1) P31416303 2) P31434163 3) P31434307 4) P31171931</p>	<p>1) P31173423 2) P41115367 3) P31171733 4) P31134129 5) P2511447 6) P2418F432</p>	
	<p>Valve Train Kit</p> <p>PVTK611</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p> <p>1) P31431315 x6 2) P3142A051 x6</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p> <p>a) P3343F002 x6 b) P3343J002 x6</p>	<p>4) Spring, Valve a) Inner b) Outer</p> <p>a) P31744131 x12 b) P31745121 x12</p>	<p>5) Lock, Valve 6) Seal, Valve</p> <p>5) P33173108 x24 6) P33817117 x12</p>
 <p>Oil Pump</p>	 <p>Lift Pump</p>	 <p>1) Water Pump 2) Thermostat</p>	 <p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	 <p>1) Cylinder Head (With Valves) 2) Glowplug</p>	
<p>P4132F016</p>	<p>P2641729</p>	<p>1) PU5MW0132 2) P2485613 x2</p>	<p>1) PZZ90046 2) P41151483 3) P41151484</p>	<p>1) PZZ80024 2) P2666108 (Bayonet Fitting)</p>	

(1) Flanged, Semi Finished Liner, P31358393, and Finished Liner in .010" Oversize, P31358398, are also available.

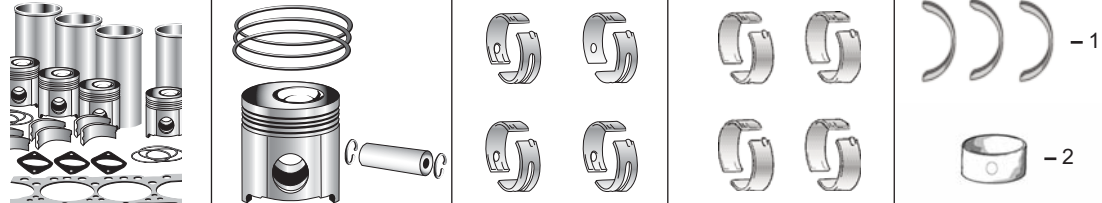
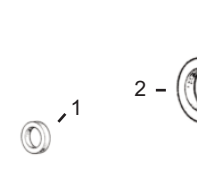
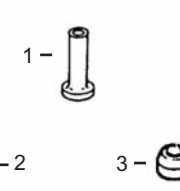
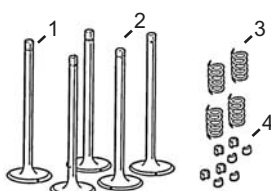
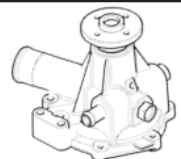


Engine & Equipment Application					
<p>T6.354.4</p> <p>TURBOCHARGED</p> <p>6 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p>	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
<p>APPLICATIONS:</p> <p>JCB 418 Wheel Loader (TU50037)</p> <p>MF AGRICULTURAL 2680/2685 (TU31045/6) 3530 (TU31143) RX95 (TU31010)</p> <p>WHITE FARM 2-105 (TU70018)</p>	2) Basic Engine Kit	<p>PU5MK0071</p> <p>Consists of:</p> <p>a) P68803 b) P41158005 c) P31358394 (2)</p> <p>6 Per Engine</p>	<p>PU5MB0030 Std. PU5MB0030A .010 PU5MB0030B .020 PU5MB0030C .030</p> <p>Set of 7 Pairs</p>	<p>PU5ME0003 Std. PU5ME0003A .010 PU5ME0003B .020 PU5ME0003C .030</p> <p>Set of 6 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>
	1) POK681				
	2) PBK681				
<p>APPLICATIONS:</p> <p>JCB 418 Wheel Loader (TU50037)</p> <p>MF AGRICULTURAL 2680/2685 (TU31045/6) 3530 (TU31143) RX95 (TU31010)</p> <p>WHITE FARM 2-105 (TU70018)</p>					
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Camshaft 2) Tappet 3) Push Rod	1) Aux. Drive Shaft 2) Gear & Shaft 3) Gear 4) Front Bush 5) Rear Bush 6) Seal
	3) Crankshaft Kit	3) Head Gasket	4) Con Rod		
<p>WHITE FARM 2-105 (TU70018)</p>	1) P2418F436 2) P2418F475 3) PZZ90105	1) PU5LT0033 2) PU5LB0056 3) P3681H202	1) P31134131 x6 2) P32762144 x12 3) P33221328 x12 4) PZZ90013	1) P31416303 2) P31434163 3) P31434307	1) P31173423 2) P41115367 3) P31171733 4) P31134129 5) P2511447 6) P2418F432
	1) P2418F436 2) P2418F475 3) PZZ90105	1) PU5LT0033 2) PU5LB0056 3) P3681H202	1) P31134131 x6 2) P32762144 x12 3) P33221328 x12 4) PZZ90013	1) P31416303 2) P31434163 3) P31434307	1) P31173423 2) P41115367 3) P31171733 4) P31134129 5) P2511447 6) P2418F432
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK611	1) P31431315 x6 2) P3142A051 x6	a) P3343F002 x6 b) P3343J002 x6	a) P31744131 x12 b) P31745121 x12	5) P33173108 x24 6) P33817117 x12
					
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head (With Valves) 2) Glowplug	
P4132F016	P2641729	1) P41313027 (1) PU5MW0128 2) P2485613 x2	1) PZZ90046 2) P41151483 3) P41151484	1) PZZ80024 2) P2666108 (Bayonet Fitting)	

(1) Use Only on Build No: TU31143/TU70018.

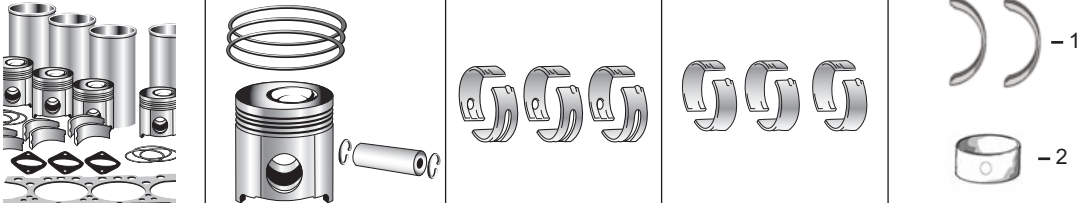
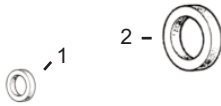
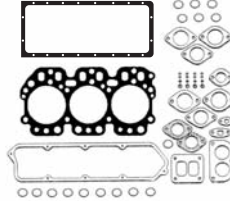
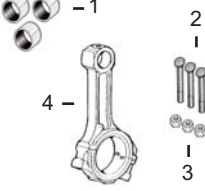
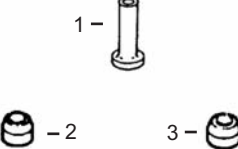
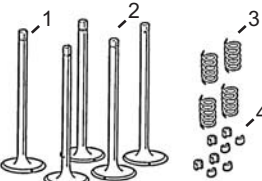
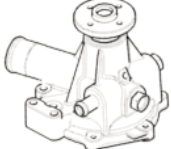



(2) Flanged, Semi Finished Liner, P31358393, and Finished Liner in .010" Oversize, P31358398, are also available.

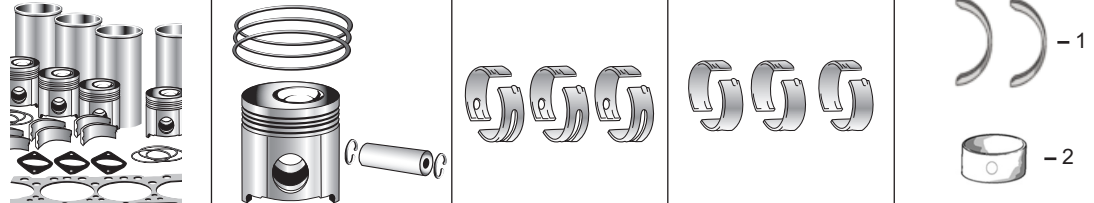
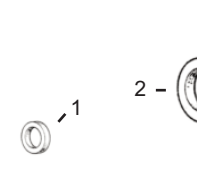
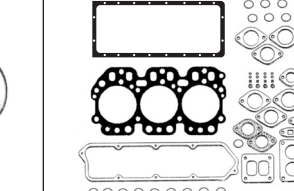
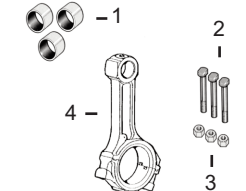
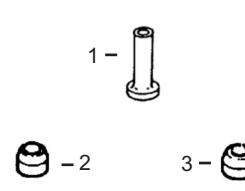
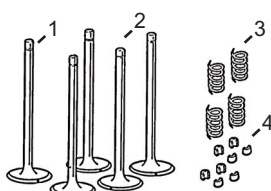
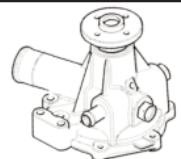
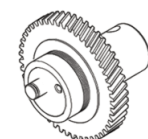
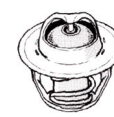

Engine & Equipment Application					
<p>T6.354.4</p> <p>TURBOCHARGED</p> <p>6 Cyl, Lip Seal</p> <p>Bore: 3.8770 in 98.476 mm</p>					
	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PU5MK0071 Consists of: a) P68803 b) P41158005 c) P31358394 (1)	PU5MB0030 Std. PU5MB0030A .010 PU5MB0030B .020 PU5MB0030C .030	PU5ME0003 Std. PU5ME0003A .010 PU5ME0003B .020 PU5ME0003C .030	P31137551/61
	1) POK682 2) PBK682	6 Per Engine	Set of 7 Pairs	Set of 6 Pairs	Set of 2 Pairs
<p>APPLICATIONS:</p> <p>MARINE</p> <p>Pleasure Craft (TU33203) Pleasure Craft (TU70025) Pleasure Craft (TU70027)</p>					
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Camshaft 2) Tappet 3) Push Rod 4) Camshaft Gear	1) Aux. Drive Shaft 2) Gear & Shaft 3) Gear 4) Front Bush 5) Rear Bush 6) Seal
	3) Crankshaft Kit	3) Head Gasket	4) Con Rod		
	1) P2418F436 2) P2418F475 3) PZZ90105	1) P68243 2) PU5LB0056 3) P3681H202	1) P31134131 X6 2) P32762144 X12 3) P33221328 X12 4) PZZ90013	1) P31416303 2) P31434163 3) P31434307 4) P31171931	1) P31173423 2) P41115367 3) P31171733 4) P31134129 5) P2511447 6) P2418F432
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK617	1) P31431315 x6 2) P3142A051 x6	a) P3343F002 x6 b) P3343J002 x6	a) N/A b) N/A	5) P33173108 x24 6) P33817117 x12
					
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	
P4132F016	P2641729	1) N/A 2) P2485604 x2	1) PZZ90046 2) P41151483 3) P41151484	1) N/A 2) P2666108 (Bayonet Fitting)	


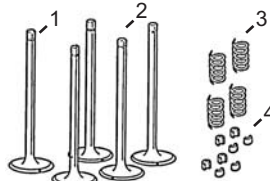
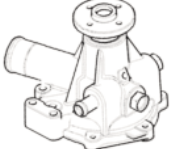



(1) Flanged, Semi Finished Liner, **P31358393**, and Finished Liner in .010" Oversize, **P31358398**, are also available.

Engine & Equipment Application					
<p>104-22</p> <p>NATURALLY ASPIRATED</p> <p>4 Cyl</p> <p>USED IN KR BUILDS</p> <p>Bore: 3.3 in 84.00 mm</p> <p>Stroke: 3.9 in 100.00 mm</p> <p>Displacement: 135 in³ 2.216 Liter</p> <p>Compression Ratio: 22:1</p>	<p>1) Engine O/H Kit</p>	<p>Piston Kit Ring Set</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>1) Thrust Washer 2) Crank Bushing</p>
	<p>2) Basic Engine Kit</p>	<p>P115017491 Std. P115017491B 0.50</p>	<p>P198586140 Std.</p>	<p>PU5ME0011 Std.</p>	<p>1) P199266200/10</p>
	<p>1) POK404 Std. POK405 0.50</p>	<p>P115107970 Std. P115107970B 0.50</p>	<p>P198586150 .010 P198586160 .020</p>	<p>PU5ME0011A .010 PU5ME0011B .020</p>	<p>Set of 3 Pcs</p>
	<p>2) PBK404 Std. PBK405 0.50</p>	<p>4 Per Engine</p>	<p>Set of 4 Pairs</p>	<p>Set of 4 Pairs</p>	<p>2) P198517222 Std. P198517226 .010 P198517229 .020</p>
		<p>1) O/H Gasket Set</p> <p>2) Cylinder Head Gasket 3) Seal Rocker Box 4) Seal, Cyl Head Cover 5) Oil Pan Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p> <p>4) Con Rod</p>	<p>1) Tappet 2) Seal, Intake Valve 3) Seal, Exhaust Valve</p>	
<p>1) P198636160 2) P050209083</p>		<p>1) PU5LC0017 (1) 2) P111147741 3) P120996130 4) P111996401 5) P110996920</p>	<p>1) P198517265 x4 2) P115176140 x8 3) P020109120 x8 4) P115026330</p>	<p>1) P120116160 2) P120406070 x4 3) P120406050 x4</p>	
	<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Spring, Valve</p>	<p>4) Lock, Valve</p>	
	<p>PVTK440</p>	<p>1) P120166350 x4 2) P120176360 x4</p>	<p>3) P198216700 x8</p>	<p>4) P120226070 x16</p>	
	<p>Water Pump</p>		<p>Oil Pump</p>		<p>Thermostat</p>
<p>P145017951</p>		<p>PU5MK8266</p>		<p>P145206182</p>	<p>Repair Sleeve</p>
<p>P145017951</p>		<p>PU5MK8266</p>		<p>P145206182</p>	<p>P404RS</p>

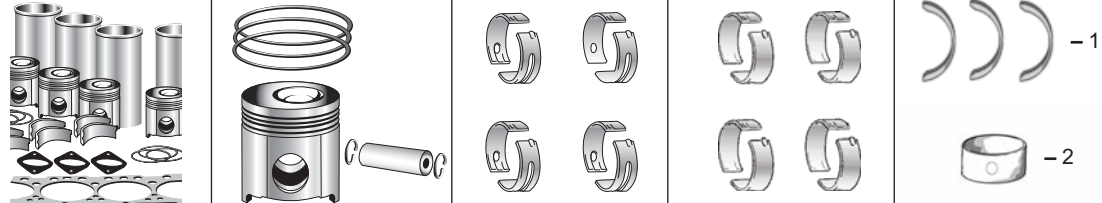
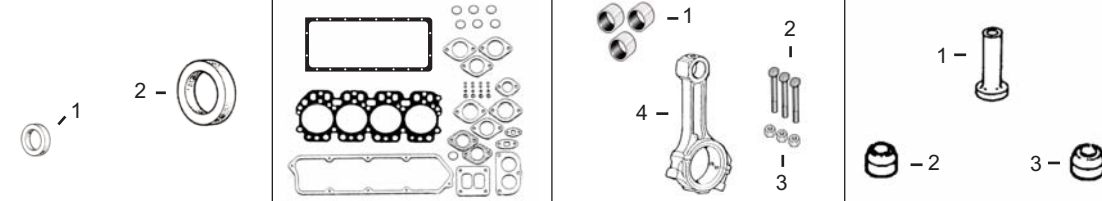
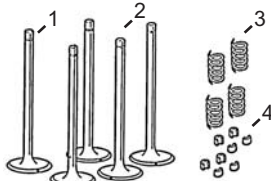
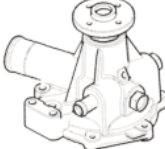



(1) Does not include Crankshaft Oil Seals.

Engine & Equipment Application					
<p>403C-15</p> <p>NATURALLY ASPIRATED</p> <p>SHIBAURA[®]</p> <p>N843-C</p> <p>3 Cyl</p> <p>USED IN HL BUILDS</p> <p>Bore: 3.3 in 84.00 mm</p> <p>Stroke: 3.5 in 90.00 mm</p> <p>Displacement: 91 in³ 1.496 Liter</p> <p>Compression Ratio: 22.5:1</p>	<p>1) Engine O/H Kit</p> <p>2) Basic Engine Kit</p> <p>1) POK316 Std. POK317 0.50</p> <p>2) PBK316 Std. PBK317 0.50</p>	<p>Piston Kit Ring Set</p> <p>P115017541 Std. P115017541B 0.50</p> <p>P115107970 Std. P115107970B 0.50</p> <p>3 Per Engine</p>	<p>Main Bearing Set</p> <p>P198586050 Std. P198586054 .010 P198586057 .020</p> <p>Set of 3 Pairs</p>	<p>Con Rod Bearing Set</p> <p>P198586080 Std. P198586084 .010 P198586087 .020</p> <p>Set of 3 Pairs</p>	<p>1) Thrust Washer 2) Crank Bushing</p> <p>1) P199266200 x2</p> <p>2) P198517222 Std. P198517226 .010 P198517229 .020</p>
					
	<p>1) Front Seal 2) Rear Seal</p> <p>1) P198636160 2) P198636170</p>	<p>1) O/H Gasket Set</p> <p>2) Cylinder Head Gasket 3) Seal Rocker Box 4) Seal, Cyl Head Cover 5) Oil Pan Gasket</p> <p>1) PU5LC0018 2) P111147501 3) P120996140 4) P111996410 5) P110996910</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p> <p>4) Con Rod</p> <p>1) P198517265 x3 2) P115176140 x6 3) P020109120 x6 4) P115026251</p>	<p>1) Tappet 2) Seal, Intake Valve 3) Seal, Exhaust Valve</p> <p>1) P120116160 2) P120406070 x3 3) P120406050 x3</p>	
	<p>Valve Train Kit</p> <p>PVTK308</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p> <p>1) P120166350 x3 2) P120176360 x3</p>	<p>3) Spring, Valve</p> <p>3) P198217470 x6</p>	<p>4) Lock, Valve</p> <p>4) P120226070 x12</p>	
					
<p>Water Pump</p>	<p>Oil Pump</p>	<p>Thermostat</p>	<p>Repair Sleeve</p>		
<p>P145017951</p>	<p>PU5MK8266</p>	<p>P145206182</p>	<p>P404RS</p>		


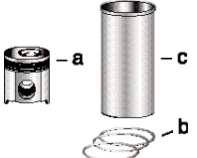
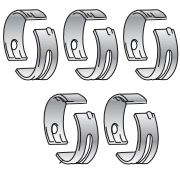


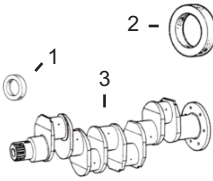
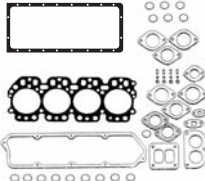
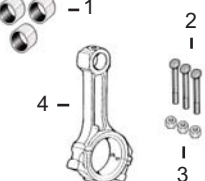
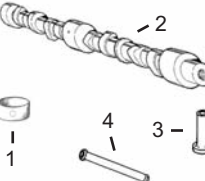
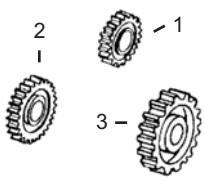
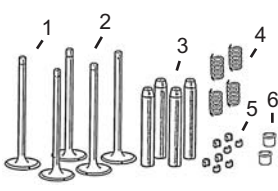
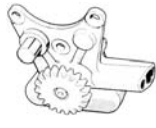
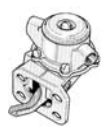
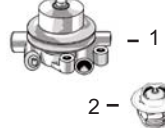
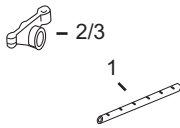

Engine & Equipment Application					
<p>403C-17</p> <p>NATURALLY ASPIRATED</p> <p>3 Cyl</p> <p>USED IN HM BUILDS</p> <p>Bore: 3.3 in 84.00 mm</p> <p>Stroke: 3.5 in 100.00 mm</p> <p>Displacement: 101.4 in³ 1.662 Liter</p> <p>Compression Ratio: 22.5:1</p>	<p>1) Engine O/H Kit</p> <p>2) Basic Engine Kit</p> <p>1) POK318 Std. POK319 0.50</p> <p>2) PBK318 Std. PBK319 0.50</p>	<p>Piston Kit Ring Set</p> <p>P115017491 Std. P115017491B 0.50</p> <p>P115107970 Std. P115107970B 0.50</p> <p>3 Per Engine</p>	<p>Main Bearing Set</p> <p>P198586050 Std. P198586054 .010 P198586057 .020</p> <p>Set of 3 Pairs</p>	<p>Con Rod Bearing Set</p> <p>P198586080 Std. P198586084 .010 P198586087 .020</p> <p>Set of 3 Pairs</p>	<p>1) Thrust Washer 2) Crank Bushing</p> <p>1) P199266200 x2</p> <p>2) P198517222 Std. P198517226 .010 P198517229 .020</p>
					
	<p>1) Front Seal 2) Rear Seal</p>	<p>1) O/H Gasket Set</p> <p>2) Cylinder Head Gasket 3) Seal Rocker Box 4) Seal, Cyl Head Cover 5) Oil Pan Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p> <p>4) Con Rod</p>	<p>1) Tappet 2) Seal, Intake Valve 3) Seal, Exhaust Valve</p>	
	<p>1) P198636160 2) P050209083</p>	<p>1) PU5LC0018 2) P111147501 3) P120996140 4) P111996410 5) P110996910</p>	<p>1) P198517265 x3 2) P115176140 x6 3) P020109120 x6 4) P115026330</p>	<p>1) P120116160 2) P120406070 x3 3) P120406050 x3</p>	
	<p>Valve Train Kit</p> <p>PVTK309</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p> <p>1) P120166350 x3 2) P120176360 x3</p>	<p>3) Spring, Valve</p> <p>3) P198216700 x6</p>	<p>4) Lock, Valve</p> <p>4) P120226070 x12</p>	
					
<p>Water Pump</p>	<p>Oil Pump</p>	<p>Thermostat</p>	<p>Repair Sleeve</p>		
<p>P145017951</p>	<p>PU5MK8266</p>	<p>P145206182</p>	<p>P404RS</p>		

Engine & Equipment Application					
<p>404C-22 NATURALLY ASPIRATED</p> <p>SHIBAURA[®] N844L-C</p> <p>4 Cyl</p> <p>USED IN HP BUILDS</p> <p>Bore: 3.3 in 84.00 mm</p> <p>Stroke: 3.9 in 100.00 mm</p> <p>Displacement: 135 in³ 2.216 Liter</p> <p>Compression Ratio: 23.3:1</p>	<p>1) Engine O/H Kit</p> <p>2) Basic Engine Kit</p> <p>1) POK404 Std. POK405 0.50</p> <p>2) PBK404 Std. PBK405 0.50</p>	<p>Piston Kit Ring Set</p> <p>P115017491 Std. P115017491B 0.50</p> <p>P115107970 Std. P115107970B 0.50</p> <p>4 Per Engine</p>	<p>Main Bearing Set</p> <p>P198586140 Std. P198586150 .010 P198586160 .020</p> <p>Set of 4 Pairs</p>	<p>Con Rod Bearing Set</p> <p>PU5ME0011 Std. PU5ME0011A .010 PU5ME0011B .020</p> <p>Set of 4 Pairs</p>	<p>1) Thrust Washer 2) Crank Bushing</p> <p>1) P199266200/10</p> <p>Set of 3 Pcs</p> <p>2) P198517222 Std. P198517226 .010 P198517229 .020</p>
<p>1) Front Seal 2) Rear Seal</p> <p>1) P198636160 2) P050209083</p>	<p>1) O/H Gasket Set</p> <p>2) Cylinder Head Gasket 3) Seal Rocker Box 4) Seal, Cyl Head Cover 5) Oil Pan Gasket</p> <p>1) PU5LC0017 (1) 2) P111147741 3) P120996130 4) P111996401 5) P110996920</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod</p> <p>1) P198517265 x4 2) P115176140 x8 3) P020109120 x8 4) P115026330</p>	<p>1) Tappet 2) Seal, Intake Valve 3) Seal, Exhaust Valve</p> <p>1) P120116160 2) P120406070 x4 3) P120406050 x4</p>		
	<p>Valve Train Kit</p> <p>1) Valve, Intake 2) Valve, Exhaust</p> <p>PVTK440</p> <p>1) P120166350 x4 2) P120176360 x4</p>	<p>3) Spring, Valve</p> <p>3) P198216700 x8</p>	<p>4) Lock, Valve</p> <p>4) P120226070 x16</p>		
 <p>Water Pump</p>	 <p>Oil Pump</p>	 <p>Thermostat</p>	 <p>Repair Sleeve</p>		
<p>P145017951</p>	<p>PU5MK8266</p>	<p>P145206182</p>	<p>P404RS</p>		

(1) Does not include Crankshaft Oil Seals.

Engine & Equipment Application					
<p>404C-22T TURBOCHARGED</p> <p>SHIBAURA® N844LT-C</p> <p>4 Cyl</p> <p>USED IN HR BUILDS</p> <p>Bore: 3.3 in 84.00 mm</p> <p>Stroke: 3.9 in 100.00 mm</p> <p>Displacement: 135 in³ 2.216 Liter</p> <p>Compression Ratio: 23.3:1</p>	1) Engine O/H Kit	Piston Kit Ring Set	Main Bearing Set	Con Rod Bearing Set	1) Thrust Washer 2) Crank Bushing
	2) Basic Engine Kit	P115017581 Std. P115017581B 0.50	P198586140 Std.	PU5ME0011 Std.	1) P199266200/10
	1) POK406 Std. POK407 0.50	P115104021 Std. P115104021B 0.50	P198586150 .010 P198586160 .020	PU5ME0011A .010 PU5ME0011B .020	Set of 3 Pcs
	2) PBK406 Std. PBK407 0.50	4 Per Engine	Set of 4 Pairs	Set of 4 Pairs	2) P198517222 Std. P198517226 .010 P198517229 .020
	1) Front Seal 2) Rear Seal	1) O/H Gasket Set 2) Cylinder Head Gasket 3) Seal Rocker Box 4) Seal, Cyl Head Cover 5) Oil Pan Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod	1) Tappet 2) Seal, Intake Valve 3) Seal, Exhaust Valve	
1) P198636160 2) P050209083	1) P404TOG (1) 2) P111147741 3) P120996130 4) P111996401 5) P110996920	1) P198517265 x4 2) P115176140 x8 3) P020109120 x8 4) P115026330	1) P120116160 2) P120406070 x4 3) P120406050 x4		
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Spring, Valve	4) Lock, Valve	
PVTK440	1) P120166350 x4 2) P120176360 x4	3) P198216700 x8	4) P120226070 x16		
	Water Pump		Oil Pump		
P145017951		PU5MK8266	P145206182	Thermostat	Repair Sleeve
P145017951		PU5MK8266	P145206182	P145206182	P404RS

(1) Does not include Crankshaft Oil Seals.

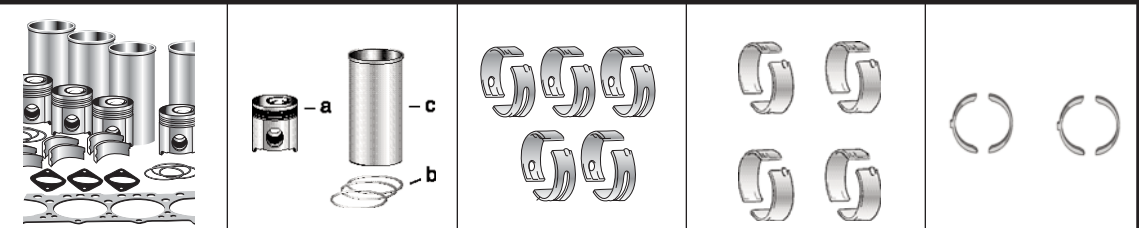
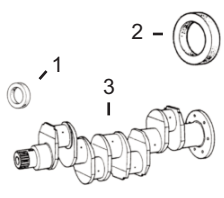
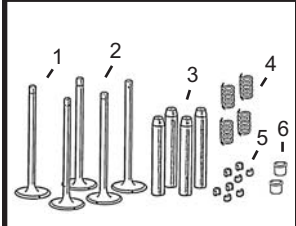
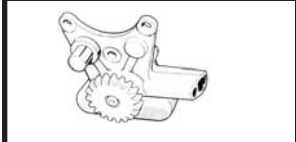
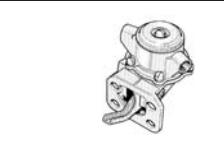
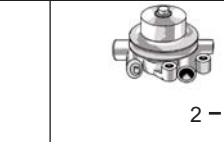
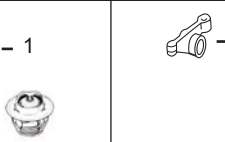

Engine & Equipment Application	    				
1004.40 NATURALLY ASPIRATED 4 Cyl, Lip Seal Kits include both rear seals Bore: 3.937 in 100 mm	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PCK142 Consists of: a) PMXF0015 b) P4181A019 c) P3135X042 (1)	P81558 Std. P81558A .010 P81558B .020 P81558C .030	P85042 Std. P85042A .010 P85042B .020 P85042C .030	P31137551/61
	1) POK470	4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs
	2) PBK470				
APPLICATIONS: HYSTER H70-155XL (AA70218) S80-S155XL (AA70216) JCB 3CX Backhoe (AA50508) Backhoe Loader (AA50608)					
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet 4) Push Rod	1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear
	3) Crankshaft Kit	4) Head Gasket 5) Oil Pan Set	4) Con Rod		
	1) P2418F436 2) P2418F475 (3) P2418F701 (4) 3) PZZ90202	1) PU5LT0178 2) PU5LB0151 3) P3681A021 4) P3681E025 5) PU5MK0600	1) P31134123 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90009	1) P31134132 x1 2) P31415361 3) P31434163 4) P31434307	1) N/A 2) P31171353 3) N/A
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve (2) a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK415	1) P3142L051 x4 2) P3142A051 x4	a) P3343F002 x4 b) P3343J002 x4	a) P31744133 x8 b) P31745122 x8	5) P33173108 x16 6) P33817117 x8
					
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	
P4132F051	P2641A067	1) P4131E012 2) P2485613	1) PZZ90032 2) P41151483 3) P41151484	1) N/A 2) P2666108 (Bayonet Fitting)	

(1) Flanged, Semi Finished Liner available, **P3135X041**.

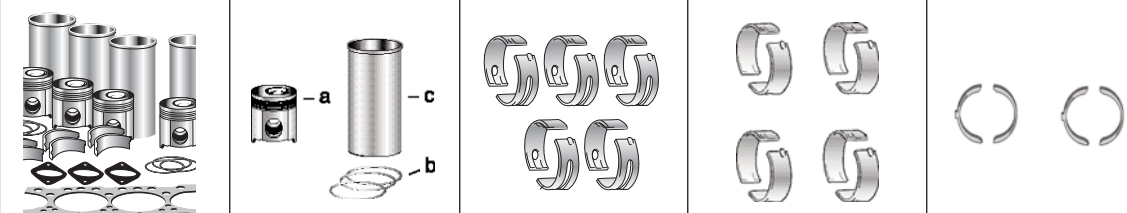
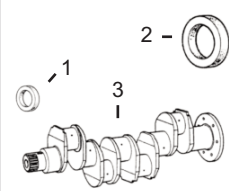
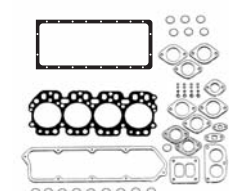
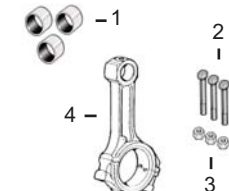
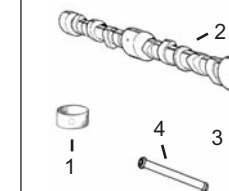
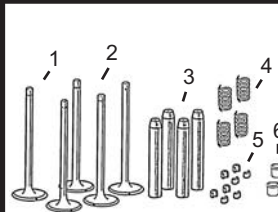


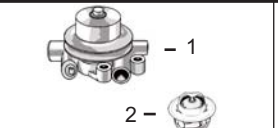
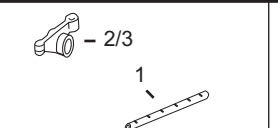

(4) From ESN U176357H.

(2) Use Single Spring, Valve **P3174P405** for low speed applications (Not included in Kit).

(3) To ESN U176356H.

Engine & Equipment Application					
<p>1004.40</p> <p>NATURALLY ASPIRATED</p> <p>4 Cyl, Lip Seal</p> <p>Kits include both rear seals</p> <p>Bore: 3.937 in 100 mm</p> <p>APPLICATIONS:</p> <p>GENSETS FG WILSON (AA50721) GENSET (AA37530)</p> <p>PERKINS SABRE 44GM ELECTROPAK (AA30415) (AA30416)</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PCK1562</p> <p>Consists of:</p> <p>a) PMXF0015</p> <p>b) P4181A019</p> <p>c) P3135X062 (1)</p> <p>4 Per Engine</p>	<p>P81558 Std.</p> <p>P81558A .010</p> <p>P81558B .020</p> <p>P81558C .030</p> <p>Set of 5 Pairs</p>	<p>P85042 Std.</p> <p>P85042A .010</p> <p>P85042B .020</p> <p>P85042C .030</p> <p>Set of 4 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>
	<p>1) POK478</p>				
	<p>2) PBK478</p>				
		<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p>	<p>1) Bushing, Cam</p>
	<p>3) Crankshaft Kit</p>	<p>4) Head Gasket 5) Oil Pan Set</p>	<p>4) Con Rod</p>	<p>2) Camshaft 3) Tappet 4) Push Rod</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p>
<p>1) P2418F436</p> <p>2) P2418F475 (2)</p> <p> P2418F701 (3)</p> <p>3) PZZ90202</p>	<p>1) PU5LT0178</p> <p>2) PU5LB0151</p> <p>3) P3681A021</p> <p>4) P3681E025</p> <p>5) PU5MK0600</p>	<p>1) P31134123 x4</p> <p>2) P32762144 x8</p> <p>3) P33221328 x8</p> <p>4) PZZ90009</p>	<p>1) P31134132 x1</p> <p>2) P31415361</p> <p>3) P31434163</p> <p>4) P31434307</p>	<p>1) N/A</p> <p>2) P31171353</p> <p>3) N/A</p>	
	<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p>	<p>4) Spring, Valve (2) a) Inner b) Outer</p>	<p>5) Lock, Valve 6) Seal, Valve</p>
<p>PVTK415</p>	<p>1) P3142L051 x4</p> <p>2) P3142A051 x4</p>	<p>a) P3343F002 x4</p> <p>b) P3343J002 x4</p>	<p>a) P31744133 x8</p> <p>b) P31745122 x8</p>	<p>5) P33173108 x16</p> <p>6) P33817117 x8</p>	
					
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head 2) Glowplug</p>	
<p>P4132F051</p>	<p>P2641A067</p>	<p>1) P4131E012</p> <p>2) P2485613</p>	<p>1) PZZ90032</p> <p>2) P41151483</p> <p>3) P41151484</p>	<p>1) N/A</p> <p>2) P2666108 (Bayonet Fitting)</p>	

(1) Flanged, Semi Finished Liner available, **P3135X063**.
(2) To ESN U176356H.
(3) From ESN U176357H.


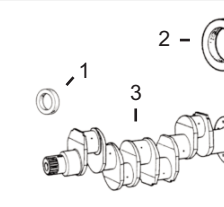
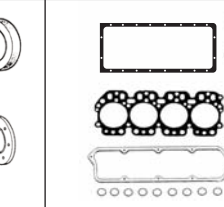
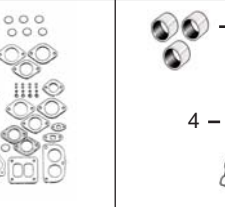
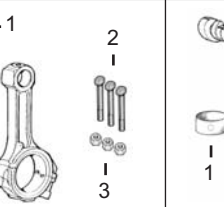
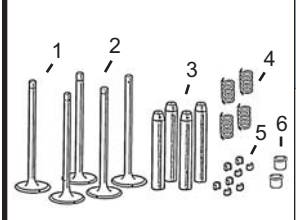
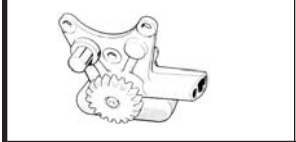
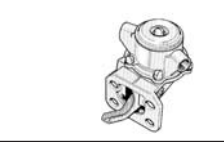
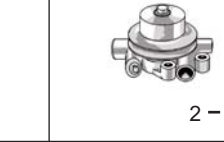
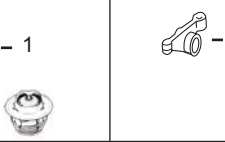
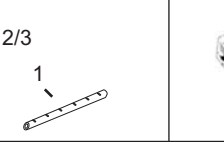
Engine & Equipment Application					
1004.40T TURBOCHARGED 4 Cyl, Lip Seal Bore: 3.937 in 100 mm To ESN U608300W (1992)	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PCK245 Consists of: a) PMXF0013 b) P4181A021 c) P3135X042 (1) 4 Per Engine	P81558 Std. P81558A .010 P81558B .020 P81558C .030 Set of 5 Pairs	PU5ME0006 Std. PU5ME0006A .010 PU5ME0006B .020 PU5ME0006C .030 Set of 4 Pairs	P31137551/61 Set of 2 Pairs
	1) POK471				
	2) PBK471				
APPLICATIONS: JCB 3CX Backhoe (AB50609) 3CX Backhoe (AB50279) 415 Loader (AB50253)					
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam	
	3) Crankshaft Kit	4) Head Gasket 5) Oil Pan Set	4) Con Rod	2) Camshaft 3) Tappet 4) Push Rod	
	1) P2418F436 2) P2418F475 3) PZZ90212	1) PU5LT0178 2) PU5LB0152 3) P3681A021 4) P3681E025 5) PU5MK0600	1) P31134131 x4 2) P32762144 x8 3) P33221328 x8 4) PZZ90013 (3) PZZ90058 (3) (4)	1) P31134132 x1 2) P31415361 3) P31434163 4) P31434307	
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve (2) a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK416	1) P3142L071 x4 2) P3142A051 x4	a) P3343F002 x4 b) P3343J002 x4	a) P31744133 x8 b) P31745122 x8	5) P33173108 x16 6) P33817117 x8
					
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	
P4132F056	P2641A067	1) P4131E012 2) P2485613	1) PZZ90032 2) P41151483 3) P41151484	1) N/A 2) P2666108 (Bayonet Fitting)	

(1) Flanged, Semi Finished Liner available, **P3135X041**.

(2) Use Single Spring, Valve **3174P405** for low speed applications (Not available from Maxiforce).

(3) Check with Build List.

(4) Fracture Split Type.

Engine & Equipment Application					
<p>1004.40T</p> <p>TURBOCHARGED</p> <p>4 Cyl, Lip Seal</p> <p>Kits include both rear seals</p> <p>Bore: 3.937 in 100 mm</p> <p>From ESN U608301W (1992)</p> <p>APPLICATIONS:</p> <p>JCB</p> <p>3CX Backhoe (AB50609)</p> <p>3CX Backhoe (AB50279)</p> <p>415 Loader (AB50253)</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PCK275</p> <p>Consists of:</p> <p>a) PMXF0014</p> <p>b) P4181A026</p> <p>c) P3135X042 (1)</p> <p>4 Per Engine</p>	<p>P81558 Std.</p> <p>P81558A .010</p> <p>P81558B .020</p> <p>P81558C .030</p> <p>Set of 5 Pairs</p>	<p>PU5ME0006 Std.</p> <p>PU5ME0006A .010</p> <p>PU5ME0006B .020</p> <p>PU5ME0006C .030</p> <p>Set of 4 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>
					
	<p>1) Front Seal</p> <p>2) Rear Seal</p>	<p>1) Top Gasket Set</p> <p>2) Bottom Gasket</p> <p>3) Valve Cover Gsk</p>	<p>1) Bush, Con Rod</p> <p>2) Bolt, Con Rod</p> <p>3) Nut, Con Rod</p>	<p>1) Bushing, Cam</p>	<p>2) Camshaft</p> <p>3) Tappet</p> <p>4) Push Rod</p>
	<p>3) Crankshaft Kit</p>	<p>4) Head Gasket</p> <p>5) Oil Pan Set</p>	<p>4) Con Rod</p>		
	<p>1) P2418F436</p> <p>2) P2418F475 (4)</p> <p>P2418F701 (5)</p> <p>3) PZZ90212</p>	<p>1) PU5LT0178</p> <p>2) PU5LB0152</p> <p>3) P3681A021</p> <p>4) P3681E025</p> <p>5) PU5MK0600</p>	<p>1) P31134131 x4</p> <p>2) P32762144 x8</p> <p>3) P33221328 x8</p> <p>4) PZZ90013 (3)</p>		<p>1) P31134132 x1</p> <p>2) P31415361</p> <p>3) P31434163</p> <p>4) P31434307</p>
	<p>Valve Train Kit</p>	<p>1) Valve, Intake</p> <p>2) Valve, Exhaust</p>	<p>3) Guide, Valve</p> <p>a) Intake</p> <p>b) Exhaust</p>	<p>4) Spring, Valve (2)</p> <p>a) Inner</p> <p>b) Outer</p>	<p>5) Lock, Valve</p> <p>6) Seal, Valve</p>
	<p>PVTK417</p>	<p>1) P3142L072 x4</p> <p>2) P3142A051 x4</p>	<p>a) P3343F002 x4</p> <p>b) P3343J002 x4</p>	<p>a) P31744133 x8</p> <p>b) P31745122 x8</p>	<p>5) P33173108 x16</p> <p>6) P33817117 x8</p>
					
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump</p> <p>2) Thermostat</p>	<p>1) Rocker Shaft</p> <p>2) Rocker Arm LH</p> <p>3) Rocker Arm RH</p>	<p>1) Cylinder Head</p> <p>2) Glowplug</p>	
<p>P4132F056</p>	<p>P2641A067</p>	<p>1) P4131E012</p> <p>2) P2485613</p>	<p>1) PZZ90032</p> <p>2) P41151483</p> <p>3) P41151484</p>	<p>1) N/A</p> <p>2) P2666108 (Bayonet Fitting)</p>	

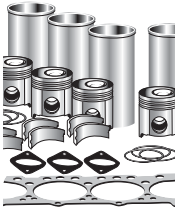
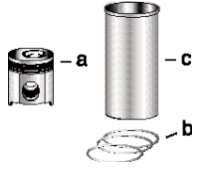

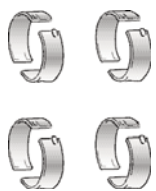

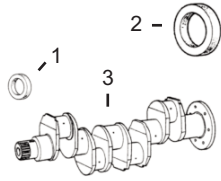
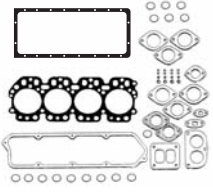
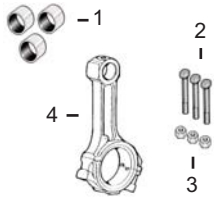
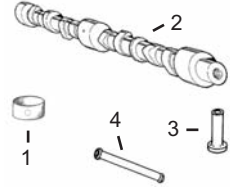
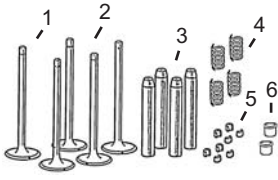
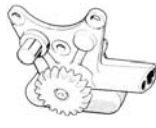

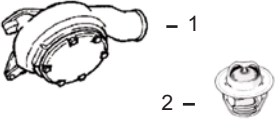
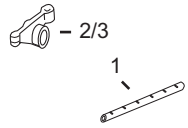

(1) Flanged, Semi Finished Liner available, **P3135X041**.

(2) Use Single Spring, Valve **3174P405** for low speed applications (Not available from Maxiforce).

(3) Check with Build List.

(4) To ESN U176356H.

(5) From ESN U176357H.

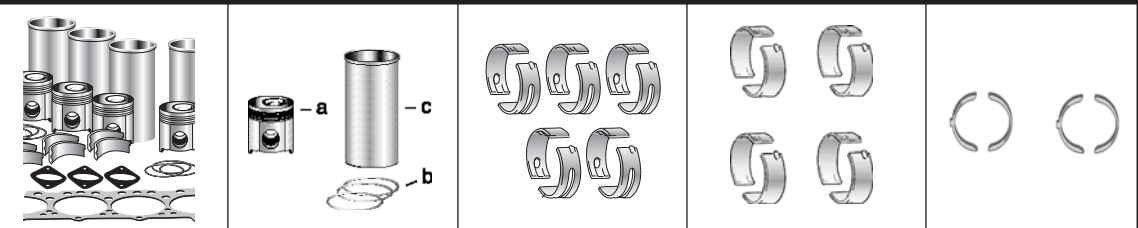
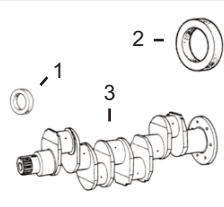
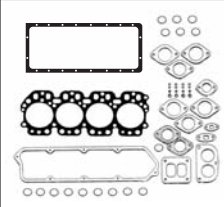
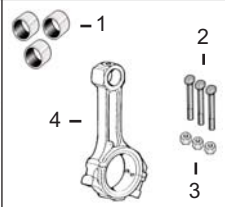
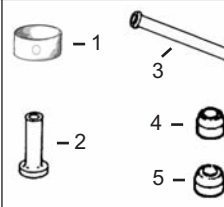
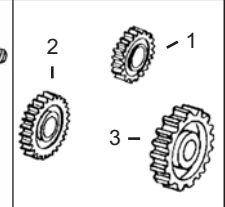
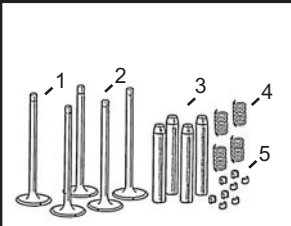
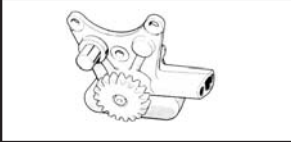

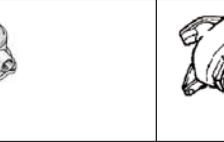

Engine & Equipment Application	    				
1004.40T TURBOCHARGED / INTERCOOLED 4 Cyl, Lip Seal Bore: 3.9370 in 100.00 mm Stroke: 5.00 in 127.00 mm Displacement: 365 in ³ 6 Liter GRADE "K": PU5LF0023 GRADE "L": PU5LF0024 <u>APPLICATIONS:</u> YE Builds and some YD builds used in Emission Controlled Areas	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PCK623 Consists of: a) PU5LF0023 (4) b) P4181A026 c) P3135X062 (1)	P81558 Std. P81558A .010 P81558B .020 P81558C .030	PU5ME0006 Std. PU5ME0006A .010 PU5ME0006B .020 PU5ME0006C .030	P31137551/61
	1) POK495	4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs
	2) PBK495				
   	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket 3) Valve Cover Gsk	1) Bush, Con Rod 2) Bolt, Con Rod 3) Dowel, Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet 4) Push Rod	
	3) Crankshaft Kit	4) Head Gasket 5) Oil Pan Set	4) Con Rod	1) P31134132 x1 2) P31415361 3) P31434163 4) P31434307	
	1) P2418F436 2) P2418F475 3) PZZ90212	1) PU5LT0178 2) PU5LB0152 3) P3681A021 4) P3681E025 5) PU5MK0600	1) P3112E005 x4 (2) 2) P32186142 x8 3) P3246A001 x8 4) PZZ90146		
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK417	1) P3142L072 x4 2) P3142A051 x4	a) P3343F002 x4 b) P3343J002 x4	a) P31744133 x8 b) P31745122 x8	5) P33173108 x16 6) P33817117 x8
					
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	
P4132F056	P2641A067	1) P4131E012 2) P2485613	1) PZZ90032 2) P41151483 3) P41151484	1) N/A 2) P2666108 (Bayonet Fitting)	

(1) Flanged, Semi Finished Liner available, **P3135X063**.

(2) Use with Con Rod ZZ90146.

(3) 30° Angle.

(4) Grade "L" Piston **PU5LF0024**, Also available. For Kit Request **PBK496** or **POK496**.

Engine & Equipment Application					
<p>1004.40/40T</p> <p>TURBOCHARGED or NATURALLY ASPIRATED</p> <p>4 Cyl, Lip Seal</p> <p>Kits include both rear seals</p> <p>Bore: 3.937 in 100 mm</p>	<p>1) Engine O/H Kit</p> <p>2) Basic Engine Kit</p> <p>1) POK473/45 POK473/30</p> <p>2) PBK473</p>	<p>Piston-Liner Kit</p> <p>PCK5762</p> <p>Consists of:</p> <p>a) PU5LP0057 b) P4181A033 c) P3135X062 (1)</p> <p>4 Per Engine</p>	<p>Main Bearing Set</p> <p>P81558 Std.</p> <p>P81558A .010 P81558B .020 P81558C .030</p> <p>Set of 5 Pairs</p>	<p>Con Rod Bearing Set</p> <p>PU5ME0006 Std. (6)</p> <p>PU5ME0006A .010 PU5ME0006B .020 PU5ME0006C .030</p> <p>Set of 4 Pairs</p>	<p>Thrust Washer Set</p> <p>P31137551/61</p> <p>Set of 2 Pairs</p>
<p><u>ENGINES</u> <u>BUILDS</u></p> <p>4.401 AJ T4.401 AK CCW4.401 AM N4.401 AP TN4.401 AQ</p> <p><u>APPLICATIONS:</u></p> <p>JCB Backhoe (AK50628) Shovel Loader (AM50610)</p> <p>MF AGRICULTURAL Tractor (AK31299)</p>	 <p>1) Front Seal 2) Rear Seal 3) Crankshaft Kit</p>	 <p>1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket 4) Valve Cover Gsk</p>	 <p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod</p>	 <p>1) Bushing, Cam 2) Tappet 3) Push Rod 4) Seal, Exhaust Valve 5) Seal, Intake Valve</p>	 <p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p>
	<p>Valve Train Kit a) 45° Angle b) 30° Angle</p> <p>a) PVTK423 b) PVTK424</p>	<p>1) Valve, Intake 2) Valve, Exhaust a) 45° Angle b) 30° Angle</p> <p>1a) P3142D041 x4 b) P3142L081 x4 2a) P3142D031 x4 b) P3142D051 x4</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p> <p>a) P3313A012 x4 b) P3318A705 x4</p>	<p>4) Spring, Valve</p> <p>4) P3174P409 x8</p>	<p>5) Lock, Valve</p> <p>5) P3142W004 x16</p>
 <p>Oil Pump</p>	 <p>Lift Pump</p>	 <p>1) Water Pump 2) Thermostat</p>	 <p>1) Cylinder Head 2) Glowplug</p>		
<p>P4132F056 P4132F041 (2)</p>	<p>P2641A067</p>	<p>1) PU5MW0192 2) P2485C036</p>	<p>1) N/A 2) P2666108 (Bayonet Fitting)</p>		

(1) Flanged, Semi Finished Liner available, **P3135X063**.
(2) Use in engines with Balancer Units.
(3) To ESN U176356H.
(4) From ESN U176357H.
(5) Use with Fractured Split Con Rod.

(6) Use Con Rod Bearing Set, **PU5ME0013**, from ESN U284278J. Order POK473/45NB or /30NB or PBK473NB and nominate the bearings.
(7) **PZZ90212** To ESN U284277J and **PZZ90226** From ESN U284278J.
(8) Grade J, Color Coded Green.
(9) May use Bottom Gasket Set **PU5LB1310**.

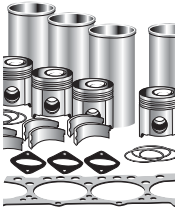
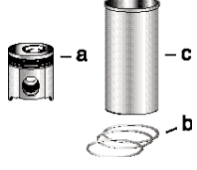



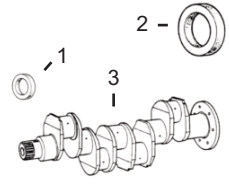
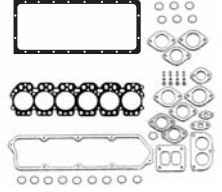
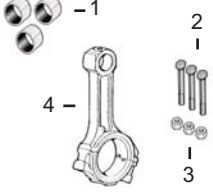
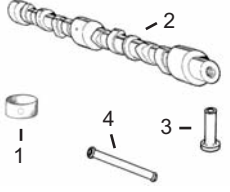
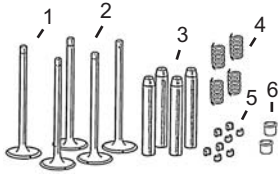
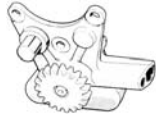

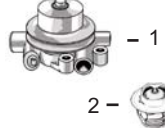
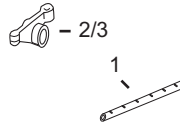

Engine & Equipment Application					
<p>1004.42</p> <p>NATURALLY ASPIRATED</p> <p>4 Cyl, Lip Seal</p> <p>Kits include both rear seals</p> <p>Sleeveless Engines</p> <p>Bore: 4.055 in 103 mm</p> <p>ENGINES BUILDS</p> <p>4.421 AR N4.421 AS</p> <p>APPLICATIONS:</p> <p>JCB (AR50690)</p>	<p>1) Engine O/H Kit</p>	<p>a) Piston b) Ring Set</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
<p>2) Basic Kit</p> <p>1) POK474 Std. POK475 0.50 POK476 1.00</p> <p>2) PBK474 Std. PBK475 0.50 PBK476 1.00</p>	<p>a) PU5LP0058 Std. PU5LP0058B 0.50 PU5LP0058D 1.00</p> <p>b) P4181A045 Std. P4181A046 0.50 P4181A047 1.00</p> <p>4 Per Engine</p>	<p>P81558 Std.</p> <p>P81558A .010</p> <p>P81558B .020</p> <p>P81558C .030</p> <p>Set of 5 Pairs</p>	<p>P85042 Std. (5)</p> <p>P85042A .010</p> <p>P85042B .020</p> <p>P85042C .030</p> <p>Set of 4 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>	
<p>1) Front Seal 2) Rear Seal 3) Crankshaft Kit</p> <p>1) P2418F436 2) P2418F475 (1) P2418F701 (2) 3) PZZ90202 (6) PZZ90226 (6)</p>	<p>1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket 4) Valve Cover Gsk</p> <p>1) PU5LT0317 2) PU5LB1171 (7) 3) P3681E042 4) P3681A049</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod</p> <p>1) P3112E011 x4 2) P32762144 x8 P3212V003 x8 (3) 3) P33221328 x8 4) P4115C314 (4)</p>	<p>1) Bushing, Cam 2) Tappet 3) Push Rod 4) Seal, Exhaust Valve 5) Seal, Intake Valve</p> <p>1) P31134132 x1 2) P31434163 3) P31434307 4) P2418M505 x4 5) P2418M506 x4</p>	<p>1) Crankshaft Gear 2) Camshaft Gear 3) Idler Gear</p> <p>1) P31171681 2) P3117L023 3) N/A</p>	
<p>1) Valve, Intake 2) Valve, Exhaust</p> <p>PVTK422</p> <p>1) P3142H041 x4 2) P3142D061 x4</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p> <p>a) P3313A012 x4 b) P3318A705 x4</p>	<p>4) Spring, Valve</p> <p>4) P3174P412 x8</p>	<p>5) Lock, Valve</p> <p>5) P3142W004 x16</p>		
<p>Oil Pump</p> <p>P4132F051</p>	<p>Lift Pump</p> <p>P2641A067</p>	<p>1) Water Pump 2) Thermostat</p> <p>1) PU5MW0192 2) P2485C036</p>	<p>1) Cylinder Head 2) Glowplug</p> <p>1) N/A 2) P2666108 (Bayonet Fitting)</p>		

(1) To ESN U176356H.
(2) From ESN U176357H.
(3) Use with fractured split conrod.
(4) Grade J, Color Coded Green.

(5) Use Con Rod Bearing Set, **PU5ME0013**, from ESN U284278J. Order POK473/45NB or /30NB or PBK473NB and nominate the bearings.
(6) **PZZ90202** To ESN U284277J and **PZZ90226** From ESN U284278J.
(7) May use Bottom Gasket Set **PU5LB1310**.

Engine & Equipment Application					
<p>1006.60</p> <p>6 Cyl, Lip Seal Kits include both rear seals</p> <p>Bore: 3.9370 in 100.00 mm</p> <p>APPLICATIONS:</p> <p>HYSTER H165-280 Forklift (YA70217)</p> <p>JCB Wheeled Loader (YA50214) Industrial (YA50339)</p> <p>MF AGRICULTURAL 396 (YA31257) 399 (YA31240)</p>	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	<p>PCK142 Consists of:</p> <p>a) PMXF0015 b) P4181A019 c) P3135X042 (1)</p> <p>6 Per Engine</p>	PU5MB0030 Std.	P85043 Std.	P31137551/61
	1) POK690		PU5MB0030A .010 PU5MB0030B .020 PU5MB0030C .030	P85043A .010 P85043B .020 P85043C .030	
	2) PBK690		Set of 7 Pairs	Set of 6 Pairs	Set of 2 Pairs
	1) Front Seal	1) Top Gasket Set	1) Bush, Con Rod	1) Bushing, Cam	
	2) Rear Seal	2) Bottom Gasket	2) Bolt, Con Rod		
	3) Crankshaft Kit	3) Head Gasket	3) Nut, Con Rod	2) Camshaft 3) Tappet 4) Push Rod	
1) P2418F436 2) P2418F475 (3) P2418F701 (4) 3) PZZ90087	1) PU5LT0179 2) PU5LB0153 3) P3681H205	1) P31134123 x6 2) P32762144 x12 3) P33221328 x12 4) PZZ90009	1) P31134132 x1 2) P31416307 3) P31434163 4) P31434307		
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve (2) a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
PVTK612	1) P3142L051 x6 2) P3142A051 x6	a) P3343F002 x6 b) P3343J002 x6	a) P31744133 x12 b) P31745122 x12	5) P33173108 x24 6) P33817117 x12	
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	
P4132F043	P2641729	1) PU5MW0092 2) P2485613 x2	1) N/A 2) P41151483 3) P41151484	1) N/A 2) P2666108 (Bayonet Fitting)	

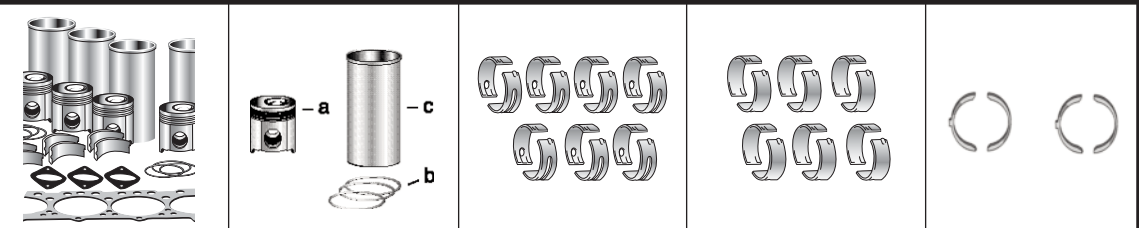
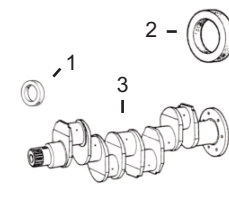
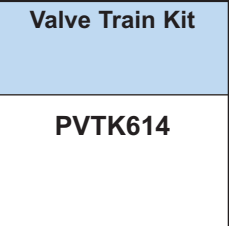
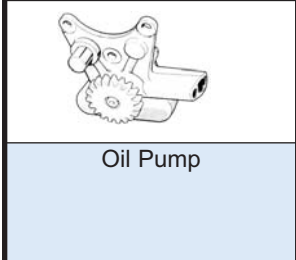
(1) Flanged, Semi Finished Liner available, **P3135X041**.
 (2) Use Single Valve Spring, 3174P405 for low speed applications, not available from Maxiforce.
 (3) To ESN U764751H.
 (4) From ESN U764752H.

Engine & Equipment Application	    				
1006.60T TURBOCHARGED 6 Cyl, Lip Seal Bore: 3.9370 in 100.00 mm To ESN 557976X APPLICATIONS: JCB 435 Front Loader (YB50292) MF AGRICULTURAL 3625 (YB31245) PERKINS USA Power Units (YB30127) Power Units (YB30650)	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PCK245 Consists of: a) PMXF0013 b) P4181A021 c) P3135X042 (3)	PU5MB0030 Std. PU5MB0030A .010 PU5MB0030B .020 PU5MB0030C .030	PU5ME0003 Std. PU5ME0003A .010 PU5ME0003B .020 PU5ME0003C .030	P31137551/61
	1) POK691	6 Per Engine	Set of 7 Pairs	Set of 6 Pairs	Set of 2 Pairs
	2) PBK691				
   	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet 4) Push Rod	
	3) Crankshaft Kit	3) Head Gasket	4) Con Rod	2) Camshaft 3) Tappet 4) Push Rod	
	1) P2418F436 2) P2418F475 3) PZZ90085	1) PU5LT0179 2) PU5LB0153 3) P3681H205	1) P31134131 x6 2) P32762144 x12 3) P33221328 x12 4) PZZ90013 (1)	1) P31134132 x1 2) P31416307 3) P31434163 4) P31434307	
	1) P2418F436 2) P2418F475 3) PZZ90085	1) PU5LT0179 2) PU5LB0153 3) P3681H205	1) P31134131 x6 2) P32762144 x12 3) P33221328 x12 4) PZZ90013 (1)	1) P31134132 x1 2) P31416307 3) P31434163 4) P31434307	
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK613	1) P3142L071 x6 (2) 2) P3142A051x6	a) P3343F002 x6 b) P3343J002 x6	a) P31744133 x12 b) P31745122 x12	5) P33173108 x24 6) P33817117 x12
					
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	
P4132F057	P2641729	1) PU5MW0092 2) P2485613 x2	1) N/A 2) P41151483 3) P41151484	1) N/A 2) P2666108 (Bayonet Fitting)	

(1) Check with Build List.

(2) 45° Angle.

(3) Flanged, Semi Finished Liner available, P3135X041.

Engine & Equipment Application					
<p>1006.60T</p> <p>TURBOCHARGED</p> <p>6 Cyl, Lip Seal Kits include both rear seals</p> <p>Bore: 3.9370 in 100.00 mm</p> <p>From ESN 557977X</p> <p>APPLICATIONS:</p> <p>JCB 435 Front Loader (YB50292)</p> <p>MF AGRICULTURAL 3625 (YB31245)</p> <p>PERKINS USA Power Units (YB30127)</p>	<p>1) Engine O/H Kit</p>	<p>Piston-Liner Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>
	<p>2) Basic Engine Kit</p>	<p>PCK275 Consists of: a) PMXF0014 b) P4181A026 c) P3135X042 (3)</p> <p>6 Per Engine</p>	<p>PU5MB0030 Std. PU5MB0030A .010 PU5MB0030B .020 PU5MB0030C .030</p> <p>Set of 7 Pairs</p>	<p>PU5ME0003 Std. PU5ME0003A .010 PU5ME0003B .020 PU5ME0003C .030</p> <p>Set of 6 Pairs</p>	<p>P31137551/61</p> <p>Set of 2 Pairs</p>
	<p>1) POK692</p>				
	<p>2) PBK692</p>				
	<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod</p>	<p>1) Bushing, Cam 2) Camshaft 3) Tappet 4) Push Rod</p>	
	<p>3) Crankshaft Kit</p>	<p>3) Head Gasket</p>	<p>4) Con Rod</p>		
	<p>1) P2418F436 2) P2418F475 (4) P2418F701 (5) 3) PZZ90085</p>	<p>1) PU5LT0179 2) PU5LB0153 3) P3681H205</p>	<p>1) P31134131 x6 2) P32762144 x12 3) P33221328 x12 4) PZZ90013 (1)</p>		<p>1) P31134132 x1 2) P31416307 3) P31434163 4) P31434307</p>
		<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve a) Intake b) Exhaust</p>	<p>4) Spring, Valve a) Inner b) Outer</p>	<p>5) Lock, Valve 6) Seal, Valve</p>
	<p>PVTK614</p>	<p>1) P3142L072 x6 (2) 2) P3142A051 x6</p>	<p>a) P3343F002 x6 b) P3343J002 x6</p>	<p>a) P31744133 x12 b) P31745122 x12</p>	<p>5) P33173108 x24 6) P33817117 x12</p>
<p>Oil Pump</p>	<p>Lift Pump</p>	<p>1) Water Pump 2) Thermostat</p>	<p>1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH</p>	<p>1) Cylinder Head 2) Glowplug</p>	<p>1) N/A 2) P41151483 3) P41151484</p>
<p>P4132F057</p>	<p>P2641729</p>	<p>1) PU5MW0092 2) P2485613</p>	<p>1) N/A 2) P41151483 3) P41151484</p>	<p>1) N/A 2) P2666108 (Bayonet Fitting)</p>	

(1) Check with Build List.

(2) 30° Angle.

(3) Flanged, Semi Finished Liner available, P3135X041.

(4) To ESN U764751H.

(5) From ESN U764752H.

Engine & Equipment Application					
1006.60T TURBOCHARGED / INTERCOOLED 6 Cyl, Lip Seal Kits include both rear seals Bore: 3.9370 in 100.00 mm Stroke: 5.00 in 127.00 mm Displacement: 365 in ³ 6 Liter GRADE "K": PU5LF0023 GRADE "L": PU5LF0024 <u>APPLICATIONS:</u> YE Builds and some YD builds used in Emission Controlled Areas					
	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Engine Kit	PCK623 Consists of: a) PU5LF0023 (6) b) P4181A026 c) P3135X062 (3)	PU5MB0030 Std. PU5MB0030A .010 PU5MB0030B .020 PU5MB0030C .030	PU5ME0003 Std. (7) PU5ME0003A .010 PU5ME0003B .020 PU5ME0003C .030	P31137551/61
	1) POK695				
	2) PBK695	6 Per Engine	Set of 7 Pairs	Set of 6 Pairs	Set of 2 Pairs
	1) Front Seal 2) Rear Seal 3) Crankshaft Kit	1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Dowel, Con Rod 4) Con Rod	1) Bushing, Cam 2) Camshaft 3) Tappet 4) Push Rod	
	1) P2418F436 2) P2418F475 (4) P2418F701 (5) 3) PZZ90085	1) PU5LT0179 2) PU5LB0153 3) P3681H205	1) P3112E005 x6 (1) 2) P32186142 x12 3) P3246A001 x12 4) PZZ90146	1) P31134132 x1 2) P31416307 3) P31434163 4) P31434307	
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve a) Intake b) Exhaust	4) Spring, Valve a) Inner b) Outer	5) Lock, Valve 6) Seal, Valve
	PVTK614	1) P3142L072 x6 (2) 2) P3142A051 x6	a) P3343F002 x6 b) P3343J002 x6	a) P31744133 x12 b) P31745122 x12	5) P33173108 x24 6) P33817117 x12
Oil Pump	Lift Pump	1) Water Pump 2) Thermostat	1) Rocker Shaft 2) Rocker Arm LH 3) Rocker Arm RH	1) Cylinder Head 2) Glowplug	
P4132F057	P2641729	1) PU5MW0092 2) P2485613	1) N/A 2) P41151483 3) P41151484	1) N/A 2) P2666108 (Bayonet Fitting)	

(1) Use with Con Rod ZZ90146.

(2) 30° Angle.

(3) Flanged, Semi Finished Liner available, **P3135X063**.

(4) To ESN U764751H.

(5) From ESN U764752H.

(6) Grade "L" Piston **PU5LF0024**, Also available. For Kit Request **PBK696** or **POK696**.

(7) Use Con Rod Bearing Set, **PU5ME0025**, from ESN U801518J. For engine kit with these bearings, order **POK693/45NB** or /30NB or **PBK693NB** and nominate the bearings.

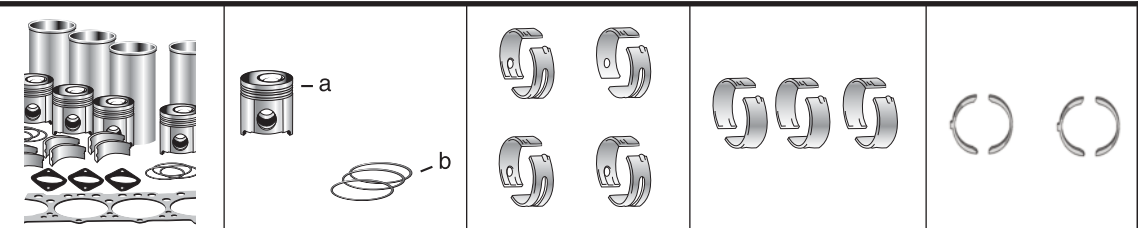
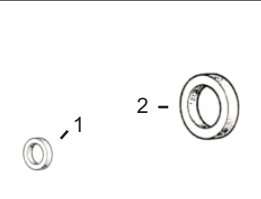
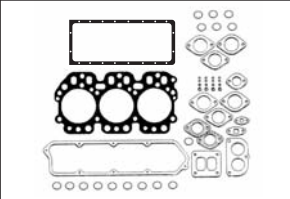
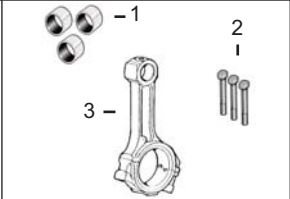
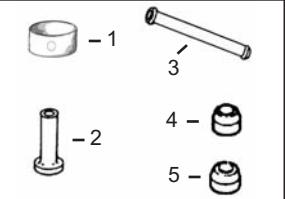
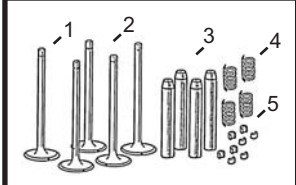
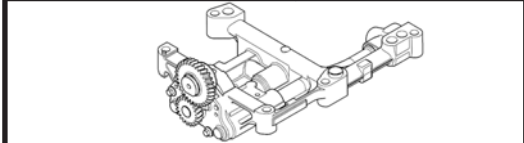
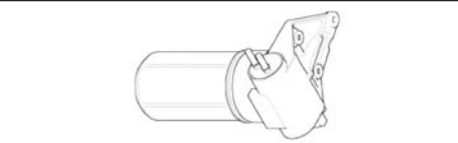
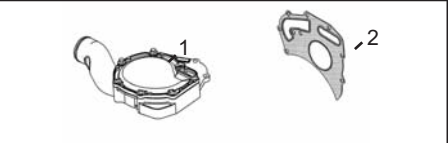
Engine & Equipment Application											
1006.60T TURBOCHARGED or NATURALLY ASPIRATED 6 Cyl, Lip Seal Kits include both rear seals Bore: 3.9370 in 100.00 mm ENGINES BUILDS 6.601 YG T6.601 YH CCW6.601 YK CCA6.601 YJ APPLICATIONS: Mc CORMICK MTX 110 (YH50918) MTX 125 (YH50919) MTX 140 (YH50920) MTX 155 (YK50921) MTX 170 (YJ51192) MF AGRICULTURAL 6180 (YH31310)		1) Engine O/H Kit		Piston-Liner Kit		Main Bearing Set		Con Rod Bearing Set		Thrust Washer Set	
		2) Basic Engine Kit		PCK5762 Consists of: a) PU5LP0057 b) P4181A033 c) P3135X062 (1)		PU5MB0030 Std. PU5MB0030A .010 PU5MB0030B .020 PU5MB0030C .030		PU5ME0003 Std. (5) PU5ME0003A .010 PU5ME0003B .020 PU5ME0003C .030		P31137551/61	
		1) POK693/45 POK693/30		6 Per Engine		Set of 7 Pairs		Set of 6 Pairs		Set of 2 Pairs	
		2) PBK693		6 Per Engine		Set of 7 Pairs		Set of 6 Pairs		Set of 2 Pairs	
1) Front Seal 2) Rear Seal 3) Crankshaft Kit 1) P2418F436 2) P2418F475 (2) P2418F701 (3) 3) PZZ90085				1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket				1) Bush, Con Rod 2) Bolt, Con Rod 3) Nut, Con Rod 4) Con Rod			
		1) Bushing, Cam 2) Tappet 3) Push Rod 4) Seal, Exhaust Valve 5) Seal, Intake Valve		1) P3112E011 x6 2) P32762144 x12 P3212V003 x12 (4) 3) P33221328 x12 4) P4115C314 (6)		1) P31134132 x1 2) P31434163 3) P31434307 4) P2418M505 x6 5) P2418M506 x6					
		Valve Train Kit a) 45° Angle b) 30° Angle a) PVTK618 b) PVTK619		1) Valve, Intake 2) Valve, Exhaust a) 45° Angle b) 30° Angle 1a) P3142D041 x6 b) P3142L081 x6 2a) P3142D031 x6 b) P3142D051 x6		3) Guide, Valve a) Intake b) Exhaust a) P3313A012 x6 b) P3318A705 x6		4) Spring, Valve 4) P3174P409 x12		5) Lock, Valve 5) P3142W004 x24	
						1) Water Pump 2) Thermostat					
P4132F057		P2641729		1) PU5MW0192 2) P2485C036							

(1) Flanged, Semi Finished Liner available, **P3135X063**.
 (2) To ESN U764751H.
 (3) From ESN U764752H.
 (4) Use with Fractured Split Con Rod.
 (4) Use Con Rod Bearing Set, **PU5ME0025**, from ESN U801518J. For engine kit with these bearings, order POK693/45NB or /30NB or PBK693NB and nominate the bearings.
 (5) Grade J, Color Coded Green.

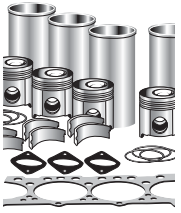
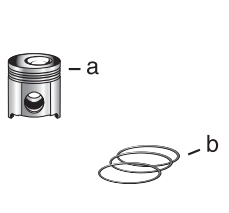
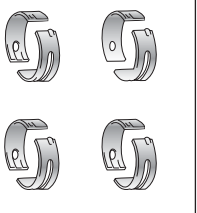
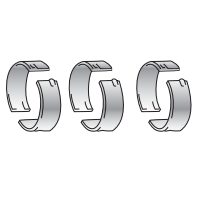

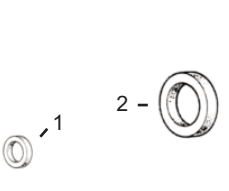
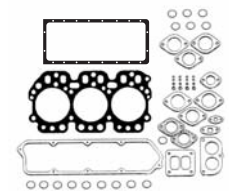
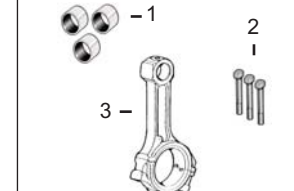
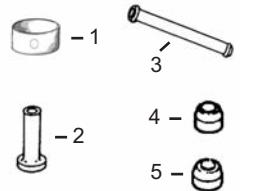
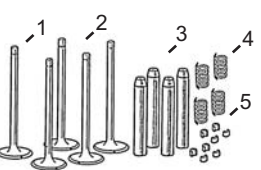
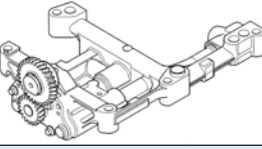
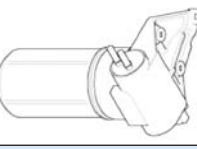
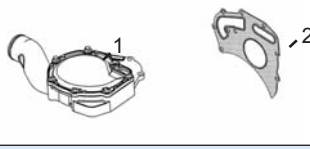
Engine & Equipment Application											
1103C - 33 (DC) 1103B - 33 (DF) 1103A - 33 (DJ)	1) Engine O/H Kit	Piston & Ring Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set						
<p>NATURALLY ASPIRATED</p> <p>Bore: 4.133 in 105.00 mm</p> <p>Stroke: 5.00 in 127.00 mm</p> <p>Displacement: 201 in³ 3.3 Liter</p> <p>APPLICATIONS:</p> <p>MF AGRICULTURAL 410 (DC38077) 431 (DC38027)</p>	2) Basic Kit	P4115P011 Std.	PU5MB0019 Std.	PU5ME0018 Std.	P31137551/61						
	1) POK320 Std. POK321 0.50 POK322 1.00	P4115P012 0.50 mm P4115P013 1.00 mm	PU5MB0019A .010 PU5MB0019B .020 PU5MB0019C .030	PU5ME0018A .010 PU5ME0018B .020 PU5ME0018C .030							
	2) PBK320 Std. PBK321 0.50 PBK322 1.00	3 Per Engine	Set of 4 Pairs	Set of 3 Pairs	Set of 2 Pairs						
	<p>* Piston Kit consists of:</p> <table border="0"> <tr> <td>1) 1 X PMXFP011 Piston Std,</td> <td>1 X PUPRK0003 Ring Set Std.</td> </tr> <tr> <td>2) 1 X PMXFP012 Piston 0.50 mm,</td> <td>1 X PUPRK0003B Ring Set 0.50 mm.</td> </tr> <tr> <td>3) 1 X PMXFP013 Piston 1.00 mm,</td> <td>1 X PUPRK0003D Ring Set 1.00 mm.</td> </tr> </table>						1) 1 X PMXFP011 Piston Std,	1 X PUPRK0003 Ring Set Std.	2) 1 X PMXFP012 Piston 0.50 mm,	1 X PUPRK0003B Ring Set 0.50 mm.	3) 1 X PMXFP013 Piston 1.00 mm,
1) 1 X PMXFP011 Piston Std,	1 X PUPRK0003 Ring Set Std.										
2) 1 X PMXFP012 Piston 0.50 mm,	1 X PUPRK0003B Ring Set 0.50 mm.										
3) 1 X PMXFP013 Piston 1.00 mm,	1 X PUPRK0003D Ring Set 1.00 mm.										
	1) Front Seal	1) Top Gasket Set	1) Bush, Con Rod	1) Bushing, Cam							
	2) Rear Seal	2) Bottom Gasket	2) Bolt, Con Rod	2) Tappet	3) Push Rod						
		3) Head Gasket 4) Valve Cover Gasket 5) Oil Pan Gasket	3) Con Rod Kit	4) Seal, Exhaust Valve 5) Seal, Intake Valve							
	1) P2418F436 2) P2418F704	1) PU5LT0355 2) PU5LB0379 3) P3681E049 4) P3681A057 5) P3681K038	1) P3112A005 x3 2) P3212V003 x6 3) P4115C314 (2)	1) P3112D071 x1 2) P31434163 3) P31434307 4) P2418M517 x3 5) P2418M519 x3							
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve	5) Lock, Valve						
	PVTK307	1) P3142H071 x3 2) P3142A151 x3	3) P3313A012 x6	4) P3174A016 x6	5) P3142W004 x12						
<p>Oil Pump</p>			Lift Pump (Electronic)	1) Water Pump 2) Water Pump Gasket							
P4132F071 (1)			PULPK0039	1) PU5MW0197 2) P3682A011							

(1) Not to be used on engines with balancer units.

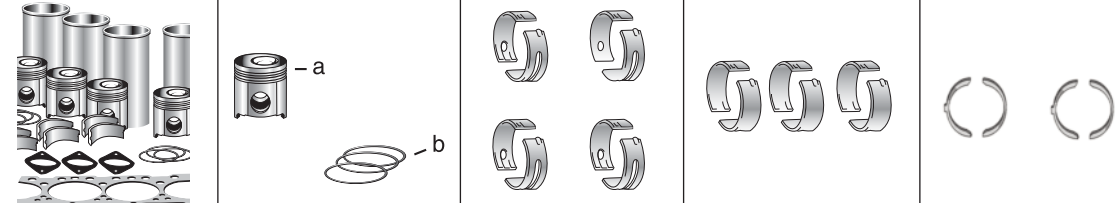
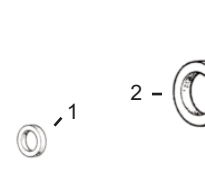
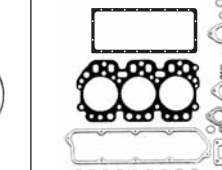

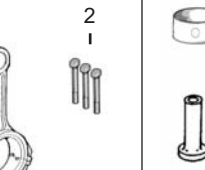
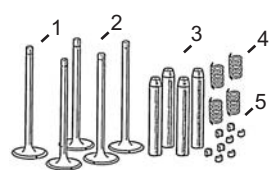
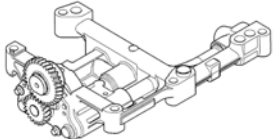
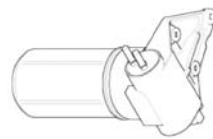
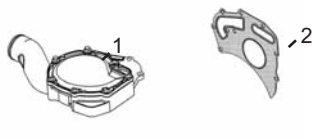
(2) Grade J, Color Coded Green.

Engine & Equipment Application										
<p>1103C - 33 (DC)</p> <p>NATURALLY ASPIRATED</p> <p>Bore: 4.133 in 105.00 mm</p> <p>Stroke: 5.00 in 127.00 mm</p> <p>Displacement: 201 in³ 3.3 Liter</p> <p>APPLICATIONS:</p> <p>Used in Wheeled Tractors</p>	1) Engine O/H Kit	Piston & Ring Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set					
	2) Basic Kit	P4115P011 Std.	PU5MB0019 Std.	PU5ME0018 Std.	P31137551/61					
	1) POK331 Std. POK332 0.50 POK333 1.00	P4115P012 0.50 mm P4115P013 1.00 mm 3 Per Engine	PU5MB0019A .010 PU5MB0019B .020 PU5MB0019C .030	PU5ME0018A .010 PU5ME0018B .020 PU5ME0018C .030						
	2) PBK331 Std. PBK332 0.50 PBK333 1.00					3 Per Engine	Set of 4 Pairs	Set of 3 Pairs	Set of 2 Pairs	
	<p>* Piston Kit consists of:</p> <table border="0"> <tr> <td>1) 1 X PMXFP011 Piston Std,</td> <td>1 X PUPRK0003 Ring Set Std.</td> </tr> <tr> <td>2) 1 X PMXFP012 Piston 0.50 mm,</td> <td>1 X PUPRK0003B Ring Set 0.50 mm.</td> </tr> <tr> <td>3) 1 X PMXFP013 Piston 1.00 mm,</td> <td>1 X PUPRK0003D Ring Set 1.00 mm.</td> </tr> </table>					1) 1 X PMXFP011 Piston Std,	1 X PUPRK0003 Ring Set Std.	2) 1 X PMXFP012 Piston 0.50 mm,	1 X PUPRK0003B Ring Set 0.50 mm.	3) 1 X PMXFP013 Piston 1.00 mm,
1) 1 X PMXFP011 Piston Std,	1 X PUPRK0003 Ring Set Std.									
2) 1 X PMXFP012 Piston 0.50 mm,	1 X PUPRK0003B Ring Set 0.50 mm.									
3) 1 X PMXFP013 Piston 1.00 mm,	1 X PUPRK0003D Ring Set 1.00 mm.									
										
1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket 4) Valve Cover Gasket 5) Oil Pan Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Con Rod Kit	1) Bushing, Cam 2) Tappet 3) Push Rod 4) Seal, Exhaust Valve 5) Seal, Intake Valve							
1) P2418F436 2) P2418F704	1) PU5LT0355 2) PU5LB0380 3) P3681E049 4) P3681A057 5) P3681K038	1) P3112A005 x3 2) P3212V003 x6 3) P4115C314 (2)	1) P3112D071 x1 2) P31434163 3) P31434307 4) P2418M517 x3 5) P2418M519 x3							
	Valve Train Kit PVTK307	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve	5) Lock, Valve					
1) P3142H071 x3 2) P3142A151 x3	3) P3313A012 x6	4) P3174A016 x6	5) P3142W004 x12							
										
Oil Pump	Lift Pump (Electronic)	1) Water Pump 2) Water Pump Gasket								
P4132F071 (1)	PULPK0039	1) PU5MW0197 2) P3682A011								

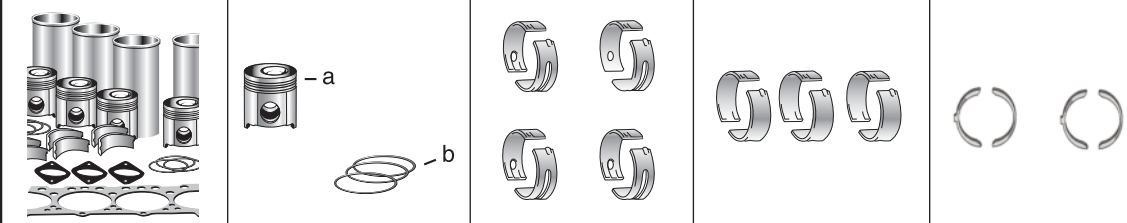
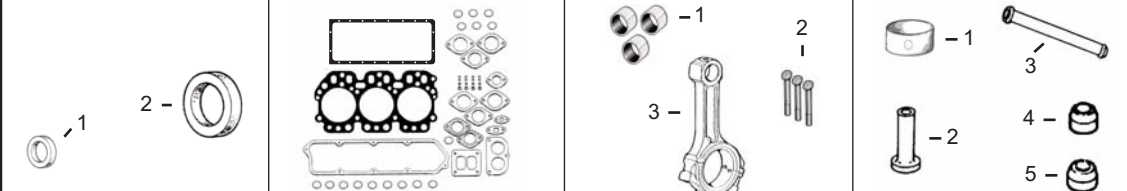
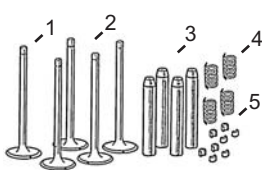
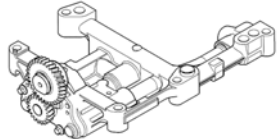
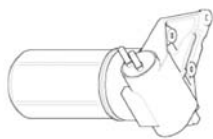

(1) Not to be used on engines with balancer units.
(2) Grade J, Color Coded Green.

Engine & Equipment Application	    				
1103C - 33T (DD)					
1103C - 33TA (DE)					
1103A - 33T (DG)					
TURBOCHARGED					
Bore: 4.133 in 105.00 mm					
Stroke: 5.00 in 127.00 mm					
Displacement: 201 in ³ 3.3 Liter					
APPLICATIONS:					
MF AGRICULTURAL 3425S/F/GE/GEV (DD37992) 420/461 (DD38078) 430 (DD38311)					
1) Engine O/H Kit	Piston & Ring Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set	
2) Basic Kit	P4115P015 Std.	PU5MB0019 Std.	PU5ME0018 Std.	P31137551/61	
1) POK325 Std. POK326 0.50 POK327 1.00	P4115P016 0.50 mm P4115P017 1.00 mm	PU5MB0019A .010 PU5MB0019B .020 PU5MB0019C .030	PU5ME0018A .010 PU5ME0018B .020 PU5ME0018C .030		
2) PBK325 Std. PBK326 0.50 PBK327 1.00	3 Per Engine	Set of 4 Pairs	Set of 3 Pairs	Set of 2 Pairs	
* Piston Kit consists of:					
1) 1 X PMXFP015 Piston Std,		1 X PUPRK0002 Ring Set Std.			
2) 1 X PMXFP016 Piston 0.50 mm,		1 X PUPRK0002B Ring Set 0.50 mm.			
3) 1 X PMXFP017 Piston 1.00 mm,		1 X PUPRK0002D Ring Set 1.00 mm.			
					
1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod	1) Bushing, Cam		
	3) Head Gasket 4) Valve Cover Gasket 5) Oil Pan Gasket	3) Con Rod Kit	2) Tappet 3) Push Rod 4) Seal, Exhaust Valve 5) Seal, Intake Valve		
1) P2418F436 2) P2418F704	1) PU5LT0355 2) PU5LB0379 3) P3681E049 4) P3681A057 5) P3681K038	1) P3112A005 x3 2) P3212V003 x6 3) P4115C314 (2)	1) P3112D071 x1 2) P31434163 3) P31434307 4) P2418M517 x3 5) P2418M519 x3		
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve	5) Lock, Valve
	PVTK307	1) P3142H071 x3 2) P3142A151 x3	3) P3313A012 x6	4) P3174A016 x6	5) P3142W004 x12
					
Oil Pump	Lift Pump (Electronic)	1) Water Pump 2) Water Pump Gasket			
P4132F071 (1)	PULPK0039	1) PU5MW0197 2) P3682A011			

(1) Not to be used on engines with balancer units.
(2) Grade J, Color Coded Green.

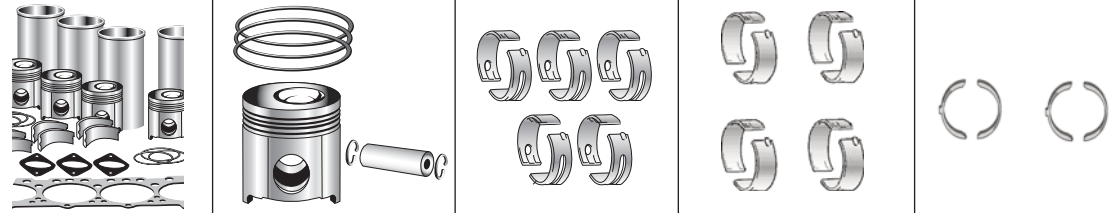
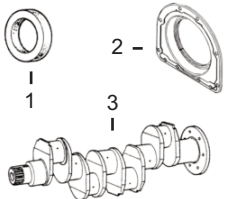
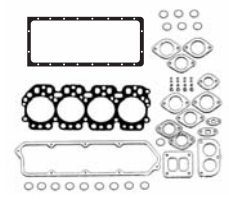
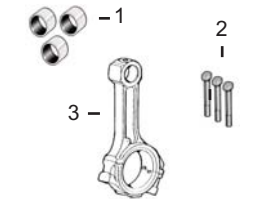
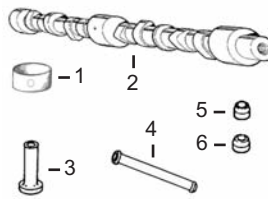
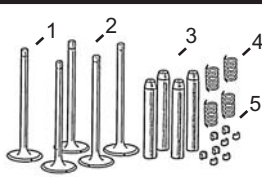
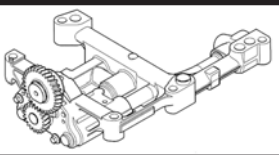
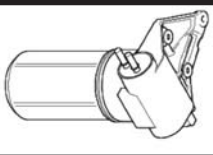
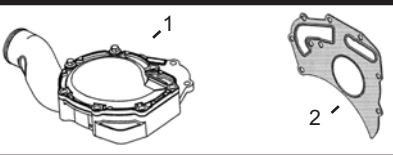
Engine & Equipment Application										
<p>1103C - 33T (DD)</p> <p>TURBOCHARGED</p> <p>Bore: 4.133 in 105.00 mm</p> <p>Stroke: 5.00 in 127.00 mm</p> <p>Displacement: 201 in³ 3.3 Liter</p> <p>APPLICATIONS:</p> <p>Used in Wheeled Tractors</p>	<p>1) Engine O/H Kit</p>	<p>Piston & Ring Kit</p>	<p>Main Bearing Set</p>	<p>Con Rod Bearing Set</p>	<p>Thrust Washer Set</p>					
	<p>2) Basic Kit</p>	<p>P4115P015 Std.</p>	<p>PU5MB0019 Std.</p>	<p>PU5ME0018 Std.</p>	<p>P31137551/61</p>					
	<p>1) POK334 Std. POK335 0.50 POK336 1.00</p>	<p>P4115P016 0.50 mm P4115P017 1.00 mm</p>	<p>PU5MB0019A .010 PU5MB0019B .020 PU5MB0019C .030</p>	<p>PU5ME0018A .010 PU5ME0018B .020 PU5ME0018C .030</p>						
	<p>2) PBK334 Std. PBK335 0.50 PBK336 1.00</p>	<p>3 Per Engine</p>	<p>Set of 4 Pairs</p>	<p>Set of 3 Pairs</p>	<p>Set of 2 Pairs</p>					
	<p>* Piston Kit consists of:</p> <table border="0"> <tr> <td>1) 1 X PMXFP015 Piston Std,</td> <td>1 X PUPRK0002 Ring Set Std.</td> </tr> <tr> <td>2) 1 X PMXFP016 Piston 0.50 mm,</td> <td>1 X PUPRK0002B Ring Set 0.50 mm.</td> </tr> <tr> <td>3) 1 X PMXFP017 Piston 1.00 mm,</td> <td>1 X PUPRK0002D Ring Set 1.00 mm.</td> </tr> </table>					1) 1 X PMXFP015 Piston Std,	1 X PUPRK0002 Ring Set Std.	2) 1 X PMXFP016 Piston 0.50 mm,	1 X PUPRK0002B Ring Set 0.50 mm.	3) 1 X PMXFP017 Piston 1.00 mm,
1) 1 X PMXFP015 Piston Std,	1 X PUPRK0002 Ring Set Std.									
2) 1 X PMXFP016 Piston 0.50 mm,	1 X PUPRK0002B Ring Set 0.50 mm.									
3) 1 X PMXFP017 Piston 1.00 mm,	1 X PUPRK0002D Ring Set 1.00 mm.									
<p>APPLICATIONS:</p>										
<p>1) Front Seal 2) Rear Seal</p>	<p>1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket 4) Valve Cover Gasket 5) Oil Pan Gasket</p>	<p>1) Bush, Con Rod 2) Bolt, Con Rod 3) Con Rod Kit</p>	<p>1) Bushing, Cam 2) Tappet 3) Push Rod 4) Seal, Exhaust Valve 5) Seal, Intake Valve</p>							
<p>1) P2418F436 2) P2418F704</p>	<p>1) PU5LT0355 2) PU5LB0380 3) P3681E049 4) P3681A057 5) P3681K038</p>	<p>1) P3112A005 x3 2) P3212V003 x6 3) P4115C314 (2)</p>	<p>1) P3112D071 x1 2) P31434163 3) P31434307 4) P2418M517 x3 5) P2418M519 x3</p>							
	<p>Valve Train Kit</p>	<p>1) Valve, Intake 2) Valve, Exhaust</p>	<p>3) Guide, Valve (Intake & Exhaust)</p>	<p>4) Spring, Valve</p>	<p>5) Lock, Valve</p>					
<p>PVTK307</p>	<p>1) P3142H071 x3 2) P3142A151 x3</p>	<p>3) P3313A012 x6</p>	<p>4) P3174A016 x6</p>	<p>5) P3142W004 x12</p>						
			<p>1) Water Pump 2) Water Pump Gasket</p>							
<p>P4132F071 (1)</p>	<p>PULPK0039</p>	<p>1) PU5MW0197 2) P3682A011</p>								

(1) Not to be used on engines with balancer units.
(2) Grade J, Color Coded Green.

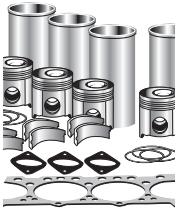
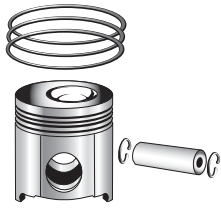



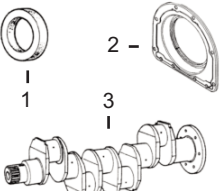
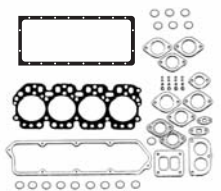
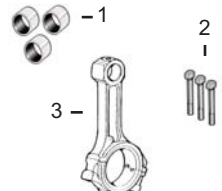
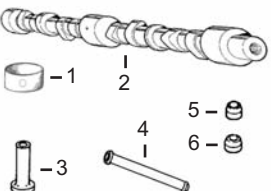
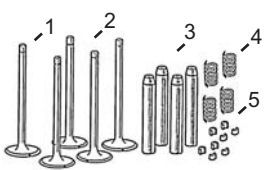
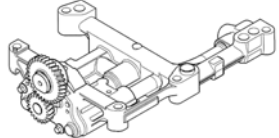
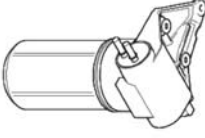
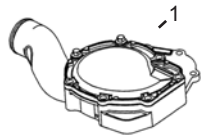
Engine & Equipment Application						
1103A - 33 (DK) NATURALLY ASPIRATED Bore: 4.133 in 105.00 mm Stroke: 5.00 in 127.00 mm Displacement: 201 in ³ 3.3 Liter APPLICATIONS: Genset (DK51280)	1) Engine O/H Kit	Piston & Ring Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set	
	2) Basic Kit	P4115P025 Std.	PU5MB0019 Std.	PU5ME0018 Std.	P31137551/61	
	1) POK340 Std. POK341 0.50 POK342 1.00	P4115P026 0.50 mm P4115P027 1.00 mm	PU5MB0019A .010 PU5MB0019B .020 PU5MB0019C .030	PU5ME0018A .010 PU5ME0018B .020 PU5ME0018C .030		
	2) PBK340 Std. PBK341 0.50 PBK342 1.00		3 Per Engine	Set of 4 Pairs	Set of 3 Pairs	Set of 2 Pairs
	* Piston Kit consists of: 1) 1 X PMXFP025 Piston Std., 1 X PUPRK0002 Ring Set Std. 2) 1 X PMXFP026 Piston 0.50 mm, 1 X PUPRK0002B Ring Set 0.50 mm. 3) 1 X PMXFP027 Piston 1.00 mm, 1 X PUPRK0002D Ring Set 1.00 mm.					
						
1) Front Seal 2) Rear Seal		1) Top Gasket Set 2) Bottom Gasket 3) Head Gasket 4) Valve Cover Gasket 5) Oil Pan Gasket	1) Bush, Con Rod 2) Bolt, Con Rod 3) Con Rod Kit	1) Bushing, Cam 2) Tappet 3) Push Rod 4) Seal, Exhaust Valve 5) Seal, Intake Valve		
1) P2418F436 2) P2418F704		1) PU5LT0355 2) PU5LB0379 3) P3681E049 4) P3681A057 5) P3681K038	1) P3112A005 x3 2) P3212V003 x6 3) P4115C314 (2)	1) P3112D071 x1 2) P31434163 3) P31434307 4) P2418M517 x3 5) P2418M519 x3		
		1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve	5) Lock, Valve	
PVTK307		1) P3142H071 x3 2) P3142A151 x3	3) P3313A012 x6	4) P3174A016 x6	5) P3142W004 x12	
						
Oil Pump		Lift Pump (Electronic)		1) Water Pump 2) Water Pump Gasket		
P4132F071 (1)		PULPK0039		1) PU5MW0197 2) P3682A011		

(1) Not to be used on engines with balancer units.

(2) Grade J, Color Coded Green.

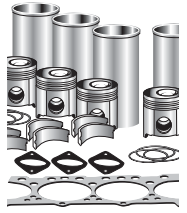
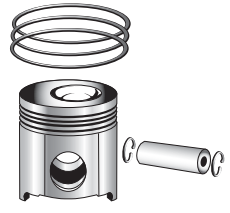
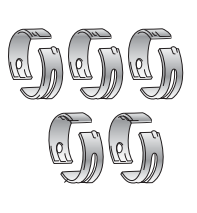

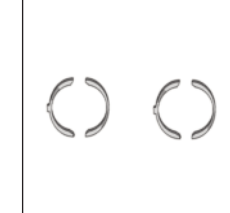
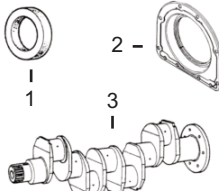
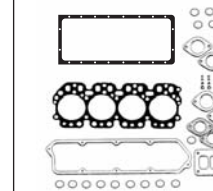
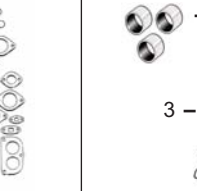
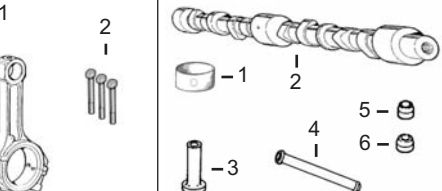
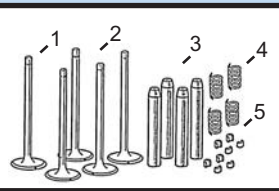
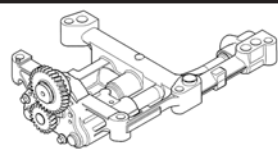
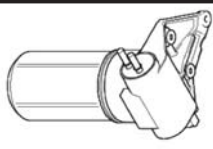
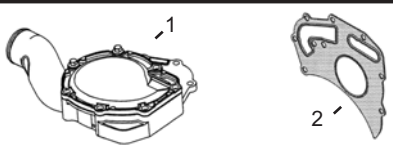
Engine & Equipment Application						
1104C - 44 1104C - E44 NATURALLY ASPIRATED Bore: 4.133 in 105.00 mm Stroke: 5.00 in 127.00 mm Displacement: 269 in ³ 4.4 Liter	1) Engine O/H Kit	Piston & Ring Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set	
	2) Basic Kit	P4115P011 Std.	PU5MB0018 Std.	PU5ME0013 Std.	P31137551/61	
	1) POK412 Std. POK413 0.50 POK414 1.00	P4115P012 0.50 mm P4115P013 1.00 mm	PU5MB0018A .010 PU5MB0018B .020 PU5MB0018C .030	PU5ME0013A .010 PU5ME0013B .020 PU5ME0013C .030		
	2) PBK412 Std. PBK413 0.50 PBK414 1.00	4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs	
	* Piston Kit consists of: 1) 1 X PMXFP011 Piston Std, 1 X PUPRK0003 Ring Set Std. 2) 1 X PMXFP012 Piston 0.50 mm, 1 X PUPRK0003B Ring Set 0.50 mm. 3) 1 X PMXFP013 Piston 1.00 mm, 1 X PUPRK0003D Ring Set 1.00 mm.					
<u>APPLICATIONS:</u> INDUSTRIAL BACKHOE LOADER (RE38238) GENSET (RE51215)						
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod	1) Bushing, Cam		
	3) Crankshaft Kit	3) Head Gasket 4) Valve Cover Gasket 5) Oil Pan Gasket	3) Con Rod Kit		2) Camshaft 3) Tappet 4) Pushrod 5) Seal, Exhaust Valve 6) Seal, Intake Valve	
	1) P2418F436 2) P2418F704 3) PZZ90224	1) PU5LT0357 2) PU5LB0382 3) P3681E051 4) P3681A055 5) P3681K037	1) P3112A005 x4 2) P3212V003 x8 3) P4115C314 (2)	1) P3112D071 x1 2) P3141D211 3) P31434163 4) P31434307 5) P2418M517 x4 6) P2418M519 x4		
		Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve	5) Lock, Valve
		PVTK425 1) P3142H071 x4 2) P3142A151 x4	3) P3313A012 x8	4) P3174A016 x8	5) P3142W004 x16	
						
	Oil Pump	Lift Pump (Electronic)	1) Water Pump 2) Water Pump Gasket			
	P4132F071 (1)	PULPK0038	1) PU5MW0194 2) P3682A011			

(1) Not to be used on engines with balancer units.
 (2) Grade J, Color Coded Green.

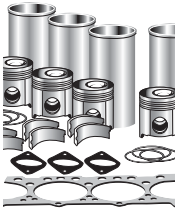
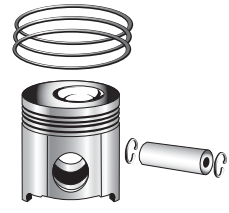
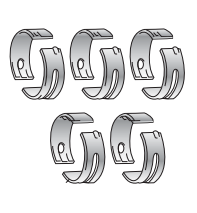


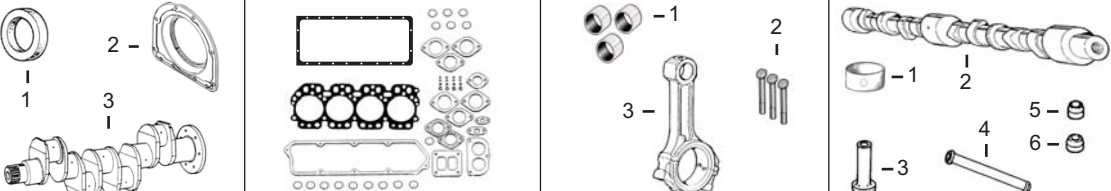
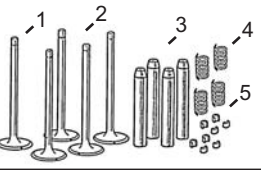
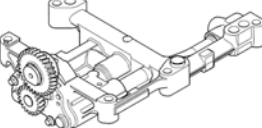
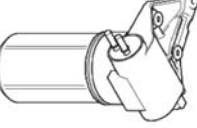
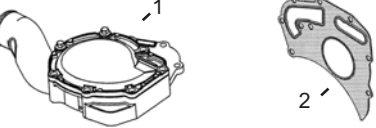
Engine & Equipment Application					
1104C - 44 1104C - E44					
NATURALLY ASPIRATED	1) Engine O/H Kit	Piston & Ring Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Kit	P4115P011 Std.	PU5MB0018 Std.	PU5ME0013 Std.	P31137551/61
	1) POK415 Std. POK416 0.50 POK417 1.00	P4115P012 0.50 mm P4115P013 1.00 mm	PU5MB0018A .010	PU5ME0013A .010	
	2) PBK415 Std. PBK416 0.50 PBK417 1.00		PU5MB0018B .020 PU5MB0018C .030	PU5ME0013B .020 PU5ME0013C .030	
Bore: 4.133 in 105.00 mm		4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs
Stroke: 5.00 in 127.00 mm	* Piston Kit consists of:				
Displacement: 269 in ³ 4.4 Liter	1) 1 X PMXFP011 Piston Std,		1 X PUPRK0003 Ring Set Std.		
	2) 1 X PMXFP012 Piston 0.50 mm,		1 X PUPRK0003B Ring Set 0.50 mm.		
	3) 1 X PMXFP013 Piston 1.00 mm,		1 X PUPRK0003D Ring Set 1.00 mm.		
APPLICATIONS:					
TRACTORS (RE38396)	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod	1) Bushing, Cam	
INDUSTRIAL (RE38082)	3) Crankshaft Kit	3) Head Gasket 4) Valve Cover Gasket 5) Oil Pan Gasket	3) Con Rod Kit	2) Camshaft 3) Tappet 4) Pushrod 5) Seal, Exhaust Valve 6) Seal, Intake Valve	
	1) P2418F436 2) P2418F704 3) PZZ90224	1) PU5LT0357 2) PU5LB0384 3) P3681E051 4) P3681A055 5) P3681K036	1) P3112A005 x4 2) P3212V003 x8 3) P4115C314 (2)	1) P3112D071 x1 2) P3141D211 3) P31434163 4) P31434307 5) P2418M517 x4 6) P2418M519 x4	
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve	5) Lock, Valve
	PVTK425	1) P3142H071 x4 2) P3142A151 x4	3) P3313A012 x8	4) P3174A016 x8	5) P3142W004 x16
	Oil Pump		Lift Pump (Electronic)		1) Water Pump 2) Water Pump Gasket
	P4132F071 (1)		PULPK0038	1) PU5MW0194 2) P3682A011	

(1) Not to be used on engines with balancer units.

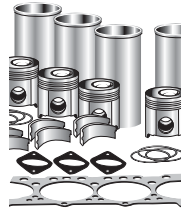
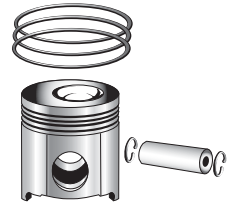

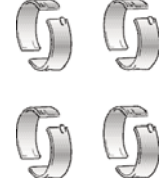

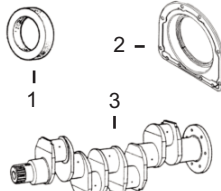
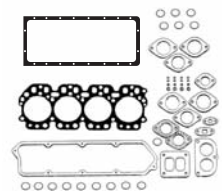
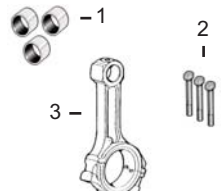
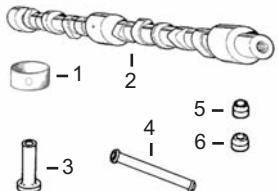
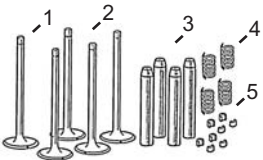
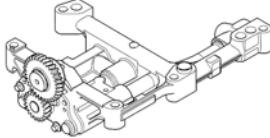
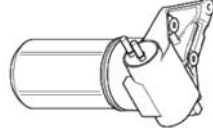
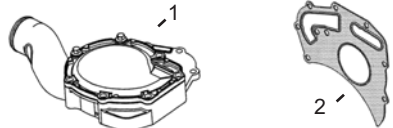
(2) Grade J, Color Coded Green.

Engine & Equipment Application					
1104C - 44 1104C - E44					
NATURALLY ASPIRATED	1) Engine O/H Kit	Piston & Ring Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Kit	P4115P011 Std.	PU5MB0018 Std.	PU5ME0013 Std.	P31137551/61
	1) POK480 Std. POK481 0.50 POK482 1.00	P4115P012 0.50 mm P4115P013 1.00 mm	PU5MB0018A .010 PU5MB0018B .020 PU5MB0018C .030	PU5ME0013A .010 PU5ME0013B .020 PU5ME0013C .030	
	2) PBK480 Std. PBK481 0.50 PBK482 1.00	4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs
Bore: 4.133 in 105.00 mm	* Piston Kit consists of:				
Stroke: 5.00 in 127.00 mm	1) 1 X PMXFP011 Piston Std, 2) 1 X PMXFP012 Piston 0.50 mm, 3) 1 X PMXFP013 Piston 1.00 mm,		1 X PUPRK0003 Ring Set Std. 1 X PUPRK0003B Ring Set 0.50 mm. 1 X PUPRK0003D Ring Set 1.00 mm.		
Displacement: 269 in ³ 4.4 Liter					
APPLICATIONS:	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod	1) Bushing, Cam	
AGRICULTURAL	3) Crankshaft Kit	3) Head Gasket 4) Valve Cover Gasket 5) Oil Pan Gasket	3) Con Rod Kit	2) Camshaft 3) Tappet 4) Pushrod 5) Seal, Exhaust Valve 6) Seal, Intake Valve	
AGCO	1) P2418F436 2) P2418F704 3) PZZ90224	1) PU5LT0357 2) PU5LB0383 3) P3681E051 4) P3681A055 5) P3681K036	1) P3112A005 x4 2) P3212V003 x8 3) P4115C314 (2)	1) P3112D071 x1 2) P3141D211 3) P31434163 4) P31434307 5) P2418M517 x4 6) P2418M519 x4	
3435S/F/V (RE37990) 3435GE/GEV (RE37990) 3425C (RE38157) 471 (RE37827) 481 (RE37830) 5425 (RE37873/RE37917) 5435 (RE37831/RE37919)	JCB				
Telehandler (RE51141)		Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve 5) Lock, Valve
	PVTK425	1) P3142H071 x4 2) P3142A151 x4	3) P3313A012 x8	4) P3174A016 x8	5) P3142W004 x16
					
	Oil Pump	Lift Pump (Electronic)	1) Water Pump 2) Water Pump Gasket		
	P4132F071 (1)	PULPK0038	1) PU5MW0194 2) P3682A011		

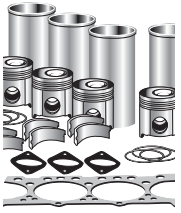
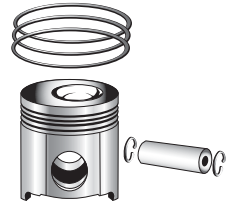
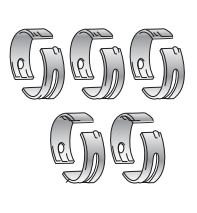


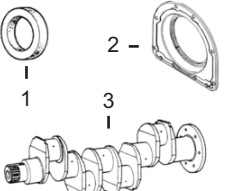
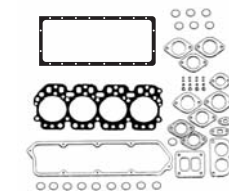
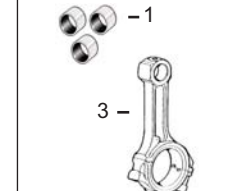
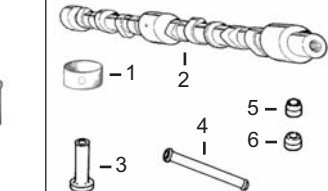
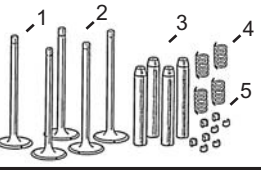
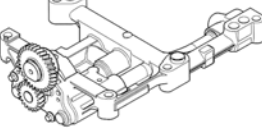
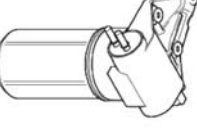
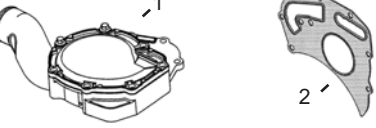
(1) Not to be used on engines with balancer units.
(2) Grade J, Color Coded Green.

Engine & Equipment Application					
1104C - 44 1104C - E44					
NATURALLY ASPIRATED	1) Engine O/H Kit	Piston & Ring Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Kit	P4115P011 Std.	PU5MB0018 Std.	PU5ME0013 Std.	P31137551/61
	1) POK483 Std. POK484 0.50 POK485 1.00	P4115P012 0.50 mm P4115P013 1.00 mm	PU5MB0018A .010 PU5MB0018B .020 PU5MB0018C .030	PU5ME0013A .010 PU5ME0013B .020 PU5ME0013C .030	
	2) PBK483 Std. PBK484 0.50 PBK485 1.00		4 Per Engine	Set of 5 Pairs	Set of 4 Pairs
* Piston Kit consists of:					
1) 1 X PMXFP011 Piston Std, 1 X PUPRK0003 Ring Set Std. 2) 1 X PMXFP012 Piston 0.50 mm, 1 X PUPRK0003B Ring Set 0.50 mm. 3) 1 X PMXFP013 Piston 1.00 mm, 1 X PUPRK0003D Ring Set 1.00 mm.					
Bore: 4.133 in 105.00 mm					
Stroke: 5.00 in 127.00 mm					
Displacement: 269 in ³ 4.4 Liter					
APPLICATIONS:					
INDUSTRIAL					
GEHL Skid Steer Loader (RE37911)	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod	1) Bushing, Cam	
HYSTER Forklift (RE38037)	3) Crankshaft Kit	3) Head Gasket 4) Valve Cover Gasket 5) Oil Pan Gasket	3) Con Rod Kit	2) Camshaft 3) Tappet 4) Pushrod 5) Seal, Exhaust Valve 6) Seal, Intake Valve	
	1) P2418F436 2) P2418F704 3) PZZ90224	1) PU5LT0357 2) PU5LB0381 3) P3681E051 4) P3681A055 5) P3681K037	1) P3112A005 x4 2) P3212V003 x8 3) P4115C314 (2)	1) P3112D071 x1 2) P3141D211 3) P31434163 4) P31434307 5) P2418M517 x4 6) P2418M519 x4	
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve	5) Lock, Valve
	PVTK425	1) P3142H071 x4 2) P3142A151 x4	3) P3313A012 x8	4) P3174A016 x8	5) P3142W004 x16
	Oil Pump		Lift Pump (Electronic)		1) Water Pump 2) Water Pump Gasket
P4132F071 (1)		PULPK0038		1) PU5MW0194 2) P3682A011	

(1) Not to be used on engines with balancer units.
(2) Grade J, Color Coded Green.

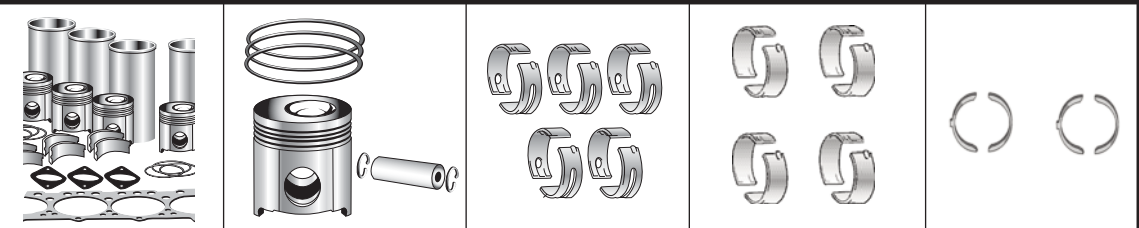
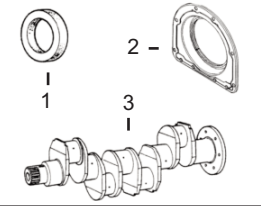
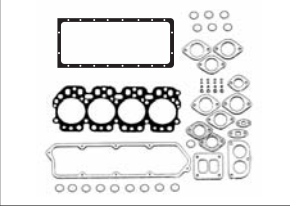
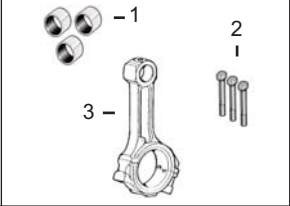
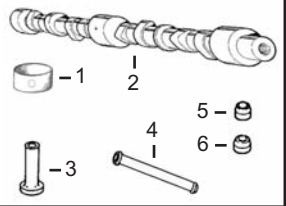
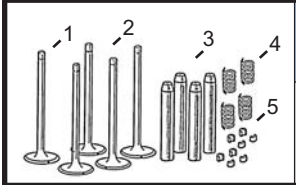
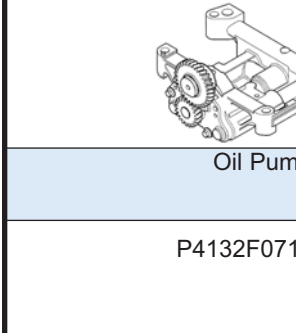


Engine & Equipment Application					
1104C - 44T (RG)	1) Engine O/H Kit 2) Basic Kit 1) POK418 Std. POK419 0.50 POK420 1.00 2) PBK418 Std. PBK419 0.50 PBK420 1.00	Piston & Ring Kit P4115P015 Std. P4115P016 0.50 mm P4115P017 1.00 mm 4 Per Engine	Main Bearing Set PU5MB0018 Std. PU5MB0018A .010 PU5MB0018B .020 PU5MB0018C .030 Set of 5 Pairs	Con Rod Bearing Set PU5ME0013 Std. PU5ME0013A .010 PU5ME0013B .020 PU5ME0013C .030 Set of 4 Pairs	Thrust Washer Set P31137551/61 Set of 2 Pairs
1104C - E44T (RH)					
1104A - 44TA (RJ)					
1104C - E44TA (RK)					
1104A - 44T (RS)					
TURBOCHARGED	* Piston Kit consists of: 1) 1 X PMXFP015 Piston Std, 1 X PUPRK0002 Ring Set Std. 2) 1 X PMXFP016 Piston 0.50 mm, 1 X PUPRK0002B Ring Set 0.50 mm. 3) 1 X PMXFP017 Piston 1.00 mm, 1 X PUPRK0002D Ring Set 1.00 mm.				
Bore: 4.133 in 105.00 mm					
Stroke: 5.00 in 127.00 mm	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod	1) Bushing, Cam	
Displacement: 269 in ³ 4.4 Liter	3) Crankshaft Kit	3) Head Gasket 4) Valve Cover Gasket 5) Oil Pan Gasket	3) Con Rod Kit	2) Camshaft 3) Tappet 4) Pushrod 5) Seal, Exhaust Valve 6) Seal, Intake Valve	
APPLICATIONS:					
Telehandler (RG37985)	1) P2418F436 2) P2418F704 3) PZZ90222	1) PU5LT0357 2) PU5LB0382 3) P3681E051 4) P3681A055 5) P3681K037	1) P3112A005 x4 2) P3212V003 x8 3) P4115C314 (2)	1) P3112D071 x1 2) P3141D211 3) P31434163 4) P31434307 5) P2418M517 x4 6) P2418M519 x4	
Genset (RG51247)					
PERKINS SABRE 44TW2GM (RJ30890)					
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve	5) Lock, Valve
	PVTK425	1) P3142H071 x4 2) P3142A151 x4	3) P3313A012 x8	4) P3174A016 x8	5) P3142W004 x16
	Oil Pump		Lift Pump (Electronic)		1) Water Pump 2) Water Pump Gasket
P4132F071 (1)		PULPK0038		1) PU5MW0194 2) P3682A011	

(1) Not to be used on engines with balancer units.
(2) Grade J, Color Coded Green.

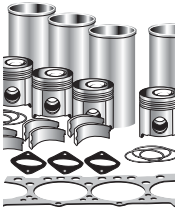
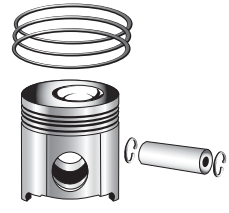
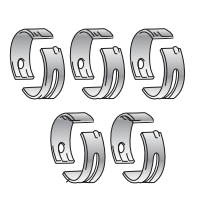


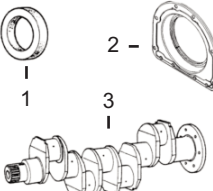
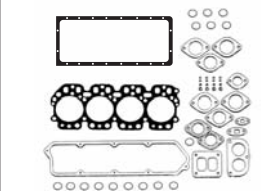
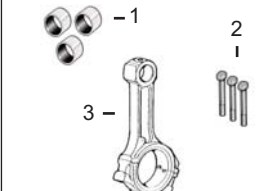
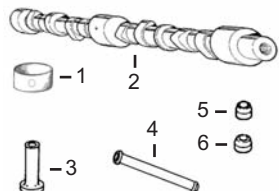
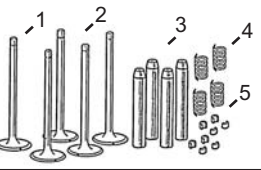
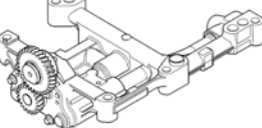
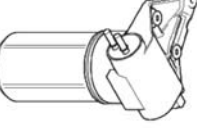
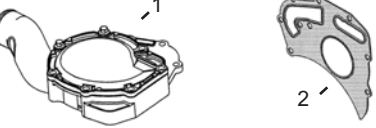
Engine & Equipment Application							
1104C - 44TA (RG)	1) Engine O/H Kit	Piston & Ring Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set		
1104C - E44TA (RJ)							
TURBOCHARGED	2) Basic Kit	P4115P015 Std.	PU5MB0018 Std.	PU5ME0013 Std.	P31137551/61		
Bore: 4.133 in 105.00 mm	1) POK421 Std.	4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs		
	POK422 0.50					P4115P016 0.50 mm	PU5MB0018A .010
POK423 1.00	P4115P017 1.00 mm					PU5MB0018B .020	PU5ME0013B .020
Stroke: 5.00 in 127.00 mm	2) PBK421 Std.	4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs		
	PBK422 0.50					PU5MB0018C .030	PU5ME0013C .030
PBK423 1.00	* Piston Kit consists of:						
Displacement: 269 in ³ 4.4 Liter	1) 1 X PMXFP015 Piston Std,		1 X PUPRK0002 Ring Set Std.				
	2) 1 X PMXFP016 Piston 0.50 mm,		1 X PUPRK0002B Ring Set 0.50 mm.				
3) 1 X PMXFP017 Piston 1.00 mm,		1 X PUPRK0002D Ring Set 1.00 mm.					
APPLICATIONS:							
	1) Front Seal	1) Top Gasket Set	1) Bush, Con Rod	1) Bushing, Cam			
	2) Rear Seal	2) Bottom Gasket	2) Bolt, Con Rod	2) Camshaft			
	3) Crankshaft Kit	3) Head Gasket	3) Con Rod Kit	3) Tappet			
		4) Valve Cover Gasket		4) Pushrod			
	5) Oil Pan Gasket	5) Seal, Exhaust Valve		6) Seal, Intake Valve			
	1) P2418F436	1) PU5LT0357	1) P3112A005 x4	1) P3112D071 x1			
	2) P2418F704	2) PU5LB0384	2) P3212V003 x8	2) P3141D211			
	3) PZZ90222	3) P3681E051	3) P4115C314 (2)	3) P31434163			
		4) P3681A055		4) P31434307			
		5) P3681K036		5) P2418M517 x4			
				6) P2418M519 x4			
	Valve Train Kit	1) Valve, Intake	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve	5) Lock, Valve		
	PVTK425	2) Valve, Exhaust	3) P3313A012 x8	4) P3174A016 x8	5) P3142W004 x16		
		1) P3142H071 x4					
		2) P3142A151 x4					
							
Oil Pump	Lift Pump (Electronic)	1) Water Pump					
		2) Water Pump Gasket					
P4132F071 (1)	PULPK0038	1) PU5MW0194					
		2) P3682A011					

(1) Not to be used on engines with balancer units.

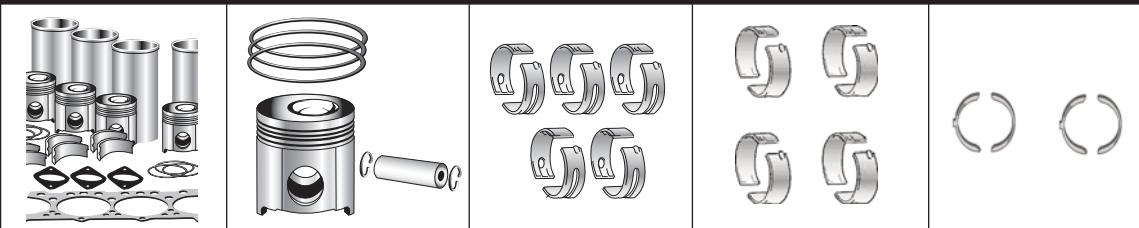
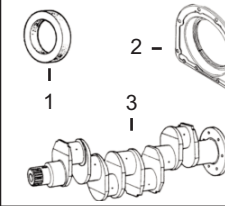
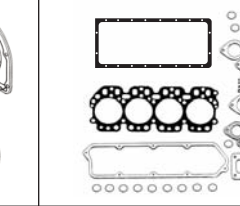
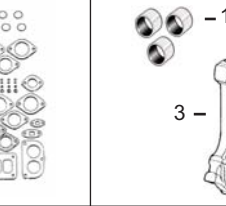
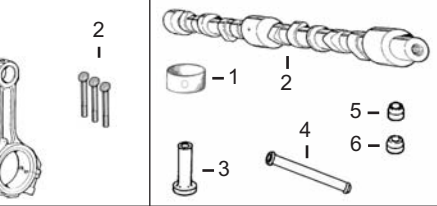
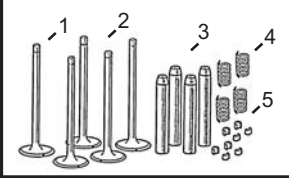
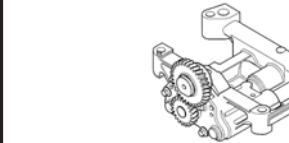
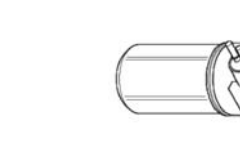
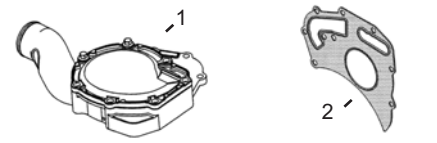
(2) Grade J, Color Coded Green.

Engine & Equipment Application					
<p>1104A - 44T (RS)</p> <p>TURBOCHARGED</p> <p>Bore: 4.133 in 105.00 mm</p> <p>Stroke: 5.00 in 127.00 mm</p> <p>Displacement: 269 in³ 4.4 Liter</p>	1) Engine O/H Kit	Piston & Ring Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Kit	P4115P025 Std.	PU5MB0018 Std.	PU5ME0013 Std.	P31137551/61
	1) POK424 Std. POK425 0.50 POK426 1.00	P4115P026 0.50 mm P4115P027 1.00 mm	PU5MB0018A .010 PU5MB0018B .020 PU5MB0018C .030	PU5ME0013A .010 PU5ME0013B .020 PU5ME0013C .030	
	2) PBK424 Std. PBK425 0.50 PBK426 1.00	4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs
<p><u>APPLICATIONS:</u></p> <p>GENSETS</p>	<p>* Piston Kit consists of:</p> <p>1) 1 X PMXFP025 Piston Std, 1 X PUPRK0002 Ring Set Std. 2) 1 X PMXFP026 Piston 0.50 mm, 1 X PUPRK0002B Ring Set 0.50 mm. 3) 1 X PMXFP027 Piston 1.00 mm, 1 X PUPRK0002D Ring Set 1.00 mm.</p>				
					
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod	1) Bushing, Cam	
	3) Crankshaft Kit	3) Head Gasket 4) Valve Cover Gasket 5) Oil Pan Gasket	3) Con Rod Kit	2) Camshaft 3) Tappet 4) Pushrod 5) Seal, Exhaust Valve 6) Seal, Intake Valve	
1) P2418F436 2) P2418F704 3) PZZ90222	1) PU5LT0357 2) PU5LB0381 3) P3681E051 4) P3681A055 5) P3681K037	1) P3112A005 x4 2) P3212V003 x8 3) P4115C314 (2)	1) P3112D071 x1 2) P3141D211 3) P31434163 4) P31434307 5) P2418M517 x4 6) P2418M519 x4		
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve	5) Lock, Valve
	PVTK425	1) P3142H071 x4 2) P3142A151 x4	3) P3313A012 x8	4) P3174A016 x8	5) P3142W004 x16
			1) Water Pump 2) Water Pump Gasket		
P4132F071 (1)		PULPK0038	1) PU5MW0194 2) P3682A011		

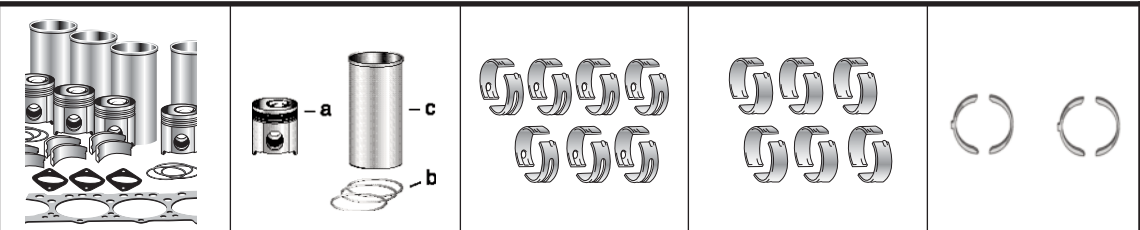
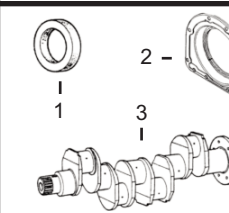
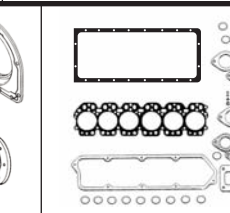
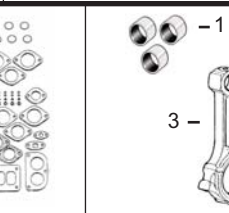
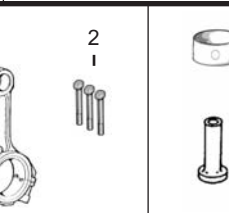
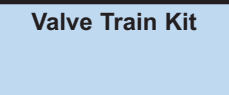

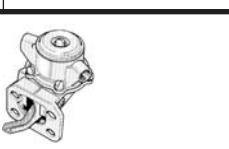
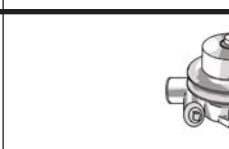
(1) Not to be used on engines with balancer units.
(2) Grade J, Color Coded Green.

Engine & Equipment Application					
1104A - 44T (RS) TURBOCHARGED Bore: 4.133 in 105.00 mm Stroke: 5.00 in 127.00 mm Displacement: 269 in ³ 4.4 Liter	1) Engine O/H Kit	Piston & Ring Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
	2) Basic Kit	P4115P025 Std.	PU5MB0018 Std.	PU5ME0013 Std.	P31137551/61
	1) POK427 Std. POK428 0.50 POK429 1.00	P4115P026 0.50 mm P4115P027 1.00 mm	PU5MB0018A .010 PU5MB0018B .020 PU5MB0018C .030	PU5ME0013A .010 PU5ME0013B .020 PU5ME0013C .030	
	2) PBK427 Std. PBK428 0.50 PBK429 1.00		4 Per Engine	Set of 5 Pairs	Set of 4 Pairs
* Piston Kit consists of: 1) 1 X PMXFP025 Piston Std, 1 X PUPRK0002 Ring Set Std. 2) 1 X PMXFP026 Piston 0.50 mm, 1 X PUPRK0002B Ring Set 0.50 mm. 3) 1 X PMXFP027 Piston 1.00 mm, 1 X PUPRK0002D Ring Set 1.00 mm.					
APPLICATIONS: GENSETS					
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod	1) Bushing, Cam	
	3) Crankshaft Kit	3) Head Gasket 4) Valve Cover Gasket 5) Oil Pan Gasket	3) Con Rod Kit	2) Camshaft 3) Tappet 4) Pushrod 5) Seal, Exhaust Valve 6) Seal, Intake Valve	
	1) P2418F436 2) P2418F704 3) PZZ90222	1) PU5LT0357 2) PU5LB0382 3) P3681E051 4) P3681A055 5) P3681K037	1) P3112A005 x4 2) P3212V003 x8 3) P4115C314 (2)	1) P3112D071 x1 2) P3141D211 3) P31434163 4) P31434307 5) P2418M517 x4 6) P2418M519 x4	
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve	5) Lock, Valve
	PVTK425	1) P3142H071 x4 2) P3142A151 x4	3) P3313A012 x8	4) P3174A016 x8	5) P3142W004 x16
					
Oil Pump		Lift Pump (Electronic)		1) Water Pump 2) Water Pump Gasket	
P4132F071 (1)		PULPK0038		1) PU5MW0194 2) P3682A011	

(1) Not to be used on engines with balancer units.
 (2) Grade J, Color Coded Green.

Engine & Equipment Application					
1104C - 44T 1104C - E44T TURBOCHARGED	1) Engine O/H Kit	Piston & Ring Kit	Main Bearing Set	Con Rod Bearing Set	Thrust Washer Set
Bore: 4.133 in 105.00 mm Stroke: 5.00 in 127.00 mm Displacement: 269 in ³ 4.4 Liter	2) Basic Kit	P4115P015 Std.	PU5MB0018 Std.	PU5ME0013 Std.	P31137551/61
	1) POK491 Std. POK492 0.50 POK493 1.00	P4115P016 0.50 mm P4115P017 1.00 mm	PU5MB0018A .010 PU5MB0018B .020 PU5MB0018C .030	PU5ME0013A .010 PU5ME0013B .020 PU5ME0013C .030	
	2) PBK491 Std. PBK492 0.50 PBK493 1.00	4 Per Engine	Set of 5 Pairs	Set of 4 Pairs	Set of 2 Pairs
	* Piston Kit consists of:				
	1) 1 X PMXFP015 Piston Std, 1 X PUPRK0002 Ring Set Std. 2) 1 X PMXFP016 Piston 0.50 mm, 1 X PUPRK0002B Ring Set 0.50 mm. 3) 1 X PMXFP017 Piston 1.00 mm, 1 X PUPRK0002D Ring Set 1.00 mm.				
APPLICATIONS: INDUSTRIAL BOBCAT Telehandler (RG37985) PERKINS SABRE 4.4TGM (RG30881)					
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod	1) Bushing, Cam	
	3) Crankshaft Kit	3) Head Gasket 4) Valve Cover Gasket 5) Oil Pan Gasket	3) Con Rod Kit		2) Camshaft 3) Tappet 4) Pushrod 5) Seal, Exhaust Valve 6) Seal, Intake Valve
	1) P2418F436 2) P2418F704 3) PZZ90222	1) PU5LT0357 2) PU5LB0381 3) P3681E051 4) P3681A055 5) P3681K037	1) P3112A005 x4 2) P3212V003 x8 3) P4115C314 (2)		1) P3112D071 x1 2) P3141D211 3) P31434163 4) P31434307 5) P2418M517 x4 6) P2418M519 x4
	Valve Train Kit	1) Valve, Intake 2) Valve, Exhaust	3) Guide, Valve (Intake & Exhaust)	4) Spring, Valve	5) Lock, Valve
	PVTK425	1) P3142H071 x4 2) P3142A151 x4	3) P3313A012 x8	4) P3174A016 x8	5) P3142W004 x16
	Oil Pump		Lift Pump (Electronic)		
	P4132F071 (1)	PULPK0038		1) PU5MW0194 2) P3682A011	

(1) Not to be used on engines with balancer units.
 (2) Grade J, Color Coded Green.

Engine & Equipment Application 1106 - E60TA					
Bore: 3.9370 in 100.00 mm APPLICATIONS: MF AGRICULTURAL 5465/6465 (VK31483/VK31486) 5465/6465 (VK31505) 6360 (VK31483) 6370 (VK31484) 6380 (VK31485) 6475 (VK31484) 6480 (VK31485) 6475/7475 (VK31487/VK31503) 6475/7475 (VK31506) 6480/7480 (VK31507) 7465 (VK31486/VK31505) McCORMICK Wheeled Tractors (VK 37779 to 37787)	1) Engine O/H Kit	Piston-Liner Kit	Main Bearing Set	Con Rod Bearing Set (3)	Thrust Washer Set
	2) Basic Engine Kit	PCK0162 Consists of:	PU5MB0030 Std.	PU5ME0025 Std.	P31137551/61
	1) POK694	a) P4115P001 b) PUPRK0001	PU5MB0030A .010 PU5MB0030B .020	PU5ME0025A .010 PU5ME0025B .020	
	2) PBK694	c) P3135X062 6 Per Engine	PU5MB0030C .030 Set of 7 Pairs	PU5ME0025C .030 Set of 6 Pairs	Set of 2 Pairs
					
	1) Front Seal 2) Rear Seal	1) Top Gasket Set 2) Bottom Gasket	1) Bush, Con Rod 2) Bolt, Con Rod	1) Bushing, Cam	
	3) Crankshaft Kit	3) Head Gasket	3) Con Rod	2) Tappet 3) Push Rod 4) Seal, Exhaust Valve 5) Seal, Intake Valve	
	1) P2418F436 2) P2418F701 3) PZZ90213 (1) PZZ90228 (2)	1) PU5LT0349 2) PU5LB0374 (4) 3) P3681E043	1) P3112A005 x6 2) P3212V003 x12 3) P4115C314 (5)	1) P31134132 x1 2) P31434163 3) P31434307 4) P2418M505 x6 5) P2418M506 x6	
		Valve Train Kit PVTK620	1) Valve, Intake 2) Valve, Exhaust 1) P3142L081 x6 2) P3142D031 x6	3) Guide, Valve a) Intake b) Exhaust a) P3313A012 x6 b) P3318A705 x6	4) Spring, Valve Inner & Outer 4) P3174P409 x12
	5) Lock, Valve			5) P3142W004 x24	
					
	Oil Pump		Lift Pump	Water Pump	
	P4132F067		PULPK0036	PU5MW0196	

(1) To ESN U090153J.
 (2) From ESN U090154J.

(3) For ESN prior to U090154J use **PU5ME0003**.
 (4) For Builds (VK37779 to VK37787) use U5LB0370.

(5) Grade J, Color Coded Green.

Miscellaneous Parts

Available from Maxiforce

Part Number	Description	Engines
P0410236	Starter Ring Gear 115 Teeth	All
P0410264	Starter Ring Gear 122 Teeth	All
P69042	Top Gasket Set	V8.540
P92508	Piston	V8.540
P165990A	Gasket, Rocker Cover	6.354 (Oliver Tractor)
P2551A014	Bearing, Balancer Unit	4.236/1000 Series
P2551A201	Bearing, Balancer Unit	4.236/1000 Series
P2557181	Bearing, Balancer Unit	4.236/4.248
P2557182	Bearing, Balancer Unit	4.236/4.248
P31134121	Bushing, Idler Gear	6.354
P31162121	Starter Ring Gear 126 Teeth	All
P31165461	Gear, Balancer Unit	4.236/4.248
P31165531	Gear, Balancer Unit	4.236/4.248
P31171211	Gear, Crankshaft	6.354 Series (1)
P31171276	Shaft, Balancer Unit	4.236/4.248
P31171682	Gear, Crankshaft	6.354 Series (2)
P31171931	Gear, Camshaft	6.354
P3117C071	Gear, Balancer Unit	4.236/1000 Series
P31358126	Cylinder Liner	V8.540
P31431385	Exhaust Valve	V8.540
P31431822	Intake Valve	V8.540
P32731127	Shaft, Balancer Unit	4.236/4.248
P33124428	Insert, Valve Seat, Exhaust	D3.152/D4.203/4.203.2
P33125121	Insert, Valve Seat	6.354
P33152153	Insert, Valve Seat	G4.236/C4.236/T4.236
P33152154	Insert, Valve Seat, Exhaust	6.354.2/6.354.4/T6.354.4
P33152155	Insert, Valve Seat, Intake	6.354.2/6.354.4/T6.354.4
P33246423	Hub, Idler Upper	6.354
P33431505	Valve Guide	V8.540
P36811428	Gasket, Rocker Cover	6.354/T6.354
P41115006	Gear, Idler Upper	6.354 Series (3)
P41115007	Gear, Idler Lower	6.354 Series (3)
P41115056	Gear, Idler Upper	6.354 Series (4)
P41115057	Gear, Idler Lower	6.354 Series (4)
P41158137	Ring Set	V8.540
P41371077	Relief Valve, Oil Pressure	4.236
P41371115	Relief Valve, Oil Pressure	6.354.1/6.354.2/T6.354.1/TC6.354.1
P41371158	Relief Valve, Oil Pressure	6.354.2
P41371193	Relief Valve, Oil Pressure	6.354.4
P41371194	Relief Valve, Oil Pressure	T6.354.4
P41371195	Relief Valve, Oil Pressure	6.354.4
PU5LB0027	Bottom Gasket Set	V8.540
PU5MK0073	Cylinder, Kit	V8.540


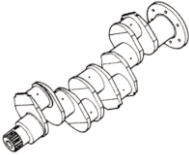
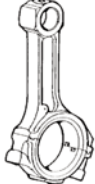

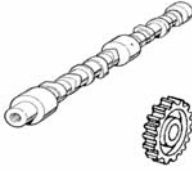
(1) Use on Original and Early Style Crankshaft.

(2) Use on Later Style Crankshaft Prefixed ZZ.

(3) For Early Blocks.

(4) For Late Blocks Prefixed ZZ.

Torque Information

				
ENGINE MODEL	CRANKSHAFT	CONROD	TIMING GEARS	CAMSHAFT
	Lb / Ft	Lb / Ft	Lb / Ft	Lb / Ft
3.152, D3.152, G3.152	110	45	50	21
4.108	85	42	36	21
4.203, 4.203.2, D4.203	115	45	21	21
4.212, 4.236, C4.236, G4.236, 4.248, 4.248.2	180 (1)	95 (1)	30	50
T4.236	180	95	30	50
6.354, T6.354, 6.354.2	180 (1)	95 (1)	(2) 50 (3) 65 (4) 24	50
6.354.4, T6.354.4	200	95 (1)	36	50
1004.40, 1006.60	196	92	33	58
1103, 1104, 1106	180	Step 1 Tighten to 13 Step 2 Tighten to 52 Step 3 Tighten to 120	33	70

(1) Early Engines Have Different Torque Specifications.

(2) 7/16 " Nuts.

(3) 1/2 " Nuts.

(4) 1/8 " Heavy Duty Nuts.

Abbreviations used throughout this catalog:

A	Turbo Aftercooled	(m)	Marked
A/C	Air Conditioned	MF	Massey Ferguson
AG	Agricultural	N/A	Not Available
BLK	Engine Block	O/H	Overhaul
CDC	Consolidated Diesel	OK	Overhaul Kit
CPL	Control Part List	O/S	Oversize
C/H	Cylinder Head	P.T.	PowerTech
C/R	Connecting Rod	Q	Quantity
C/S	Crankshaft	SBS	Short Block Serial Number.
D	Diesel, Naturally Aspirated	STD	Standard
ESN	Engine Serial No	T	Turbocharged
I/E	Intake/Exhaust	TS	Tractor Serial Number.
I/F	In Frame	U/S	Undersize
IK	In Frame Kit		

**(1) Please refer to RED Numbered Cells in each page.
They are the source of important information.**

Serial Number References:

> 154,165	Denotes: from 1 up to 154,165
215,000 - 335,845	Denotes: in between the two serial numbers
335,846 >	Denotes: from 335,846 up