



# **PARTS CATALOG**

## **540 articulated 4-wheel drive loader**

LITHO U.S.A.

FORM 9005080  
APRIL 1977

**FOREWORD****ALPHABETICAL INDEX**

The alphabetical index is located at the front of this catalog. It is used to locate major groups, assemblies and components.

**NUMERICAL INDEX**

The numerical index is located at the end of this catalog and indicated on which page or pages a part number appears.

**ILLUSTRATIONS**

All illustrations are located on the left hand page with the text on the right. Except for some common hardware, all parts are identified with an item number which corresponds to the "item" column on the text page. This is followed by the part number, quantity and description.

**HARDWARE**

Common hardware not identified such as bolts, nuts, cotter pins and lube fittings, are listed indented in the text beneath the item which they attach or fit into. Common hardware listed indented beneath an item is NOT included unless specified. Example: (Incl. BOLT, LOCKWASHER & NUT).

**ORDERING PARTS**

Be sure to refer to both the text and the illustration to assure ordering the correct part.

The Plus "+" sign preceding various numbers in the Numerical Index, shown at the end of this book, indicates those which are new since the last issue of the 540 Loader Parts Catalog Form 1013006.



INDUSTRIAL TRACTOR OPERATION  
BOX 512, MILWAUKEE, WIS. 53201

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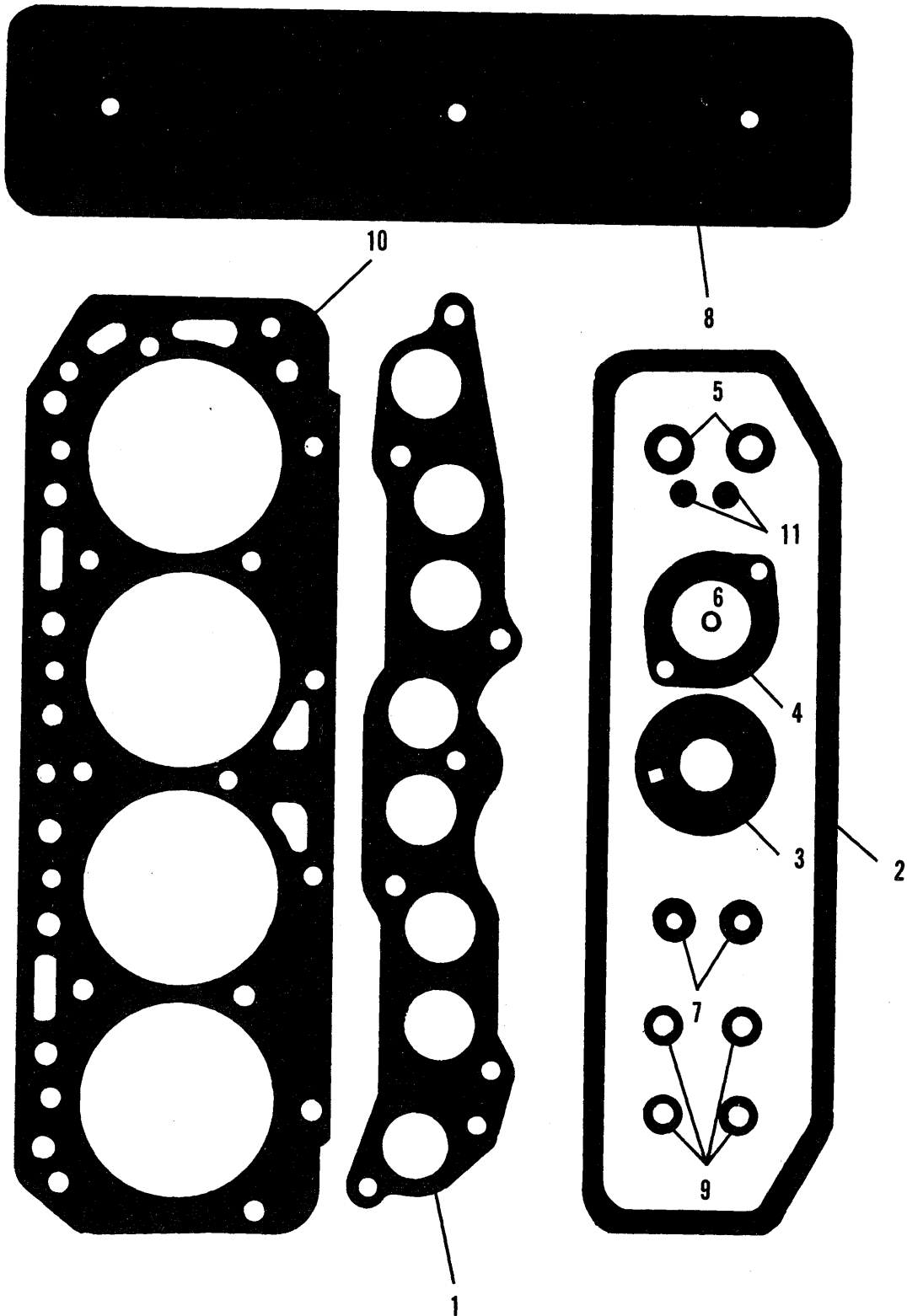
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540 LOADER  
ENGINE

GASKET SET  
UPPER SERVICE  
540D



**540 LOADER**  
ENGINE

**3**

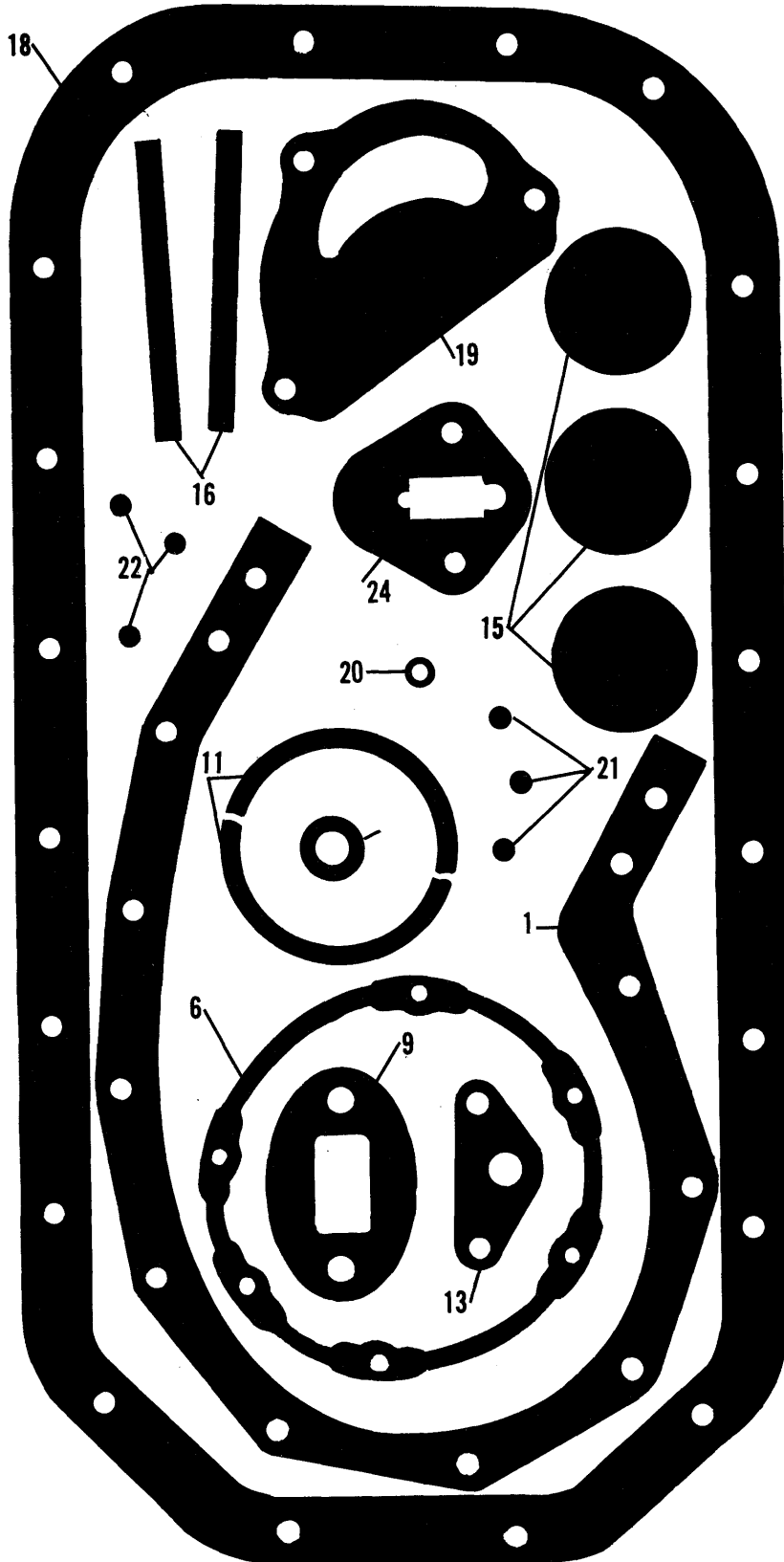
**GASKET SET**  
UPPER SERVICE  
540D

ITEM	NUMBER	QTY.	DESCRIPTION
-	1017365	1	GASKET SET, upper service
1	1013146	1	GASKET, manifold
2	1013087	1	GASKET, rocker cover
3	1017366	1	GASKET, rocker vent
4	1013116	1	GASKET, water outlet
5	1013084	8	SEAL, valve stem
6	1017367	4	SEAL, injector nozzle
7	1010740	5	SEAL, push rod & rocker cover
8	1010683	1	GASKET, push rod cover
9	1013129	8	WASHER, leak-off line
10	1013065	1	GASKET, head
11	1017368	2	PLUG, rod arm shaft



540 LOADER  
ENGINE

GASKET SET  
LOWER SERVICE  
540D



540 LOADER  
ENGINE

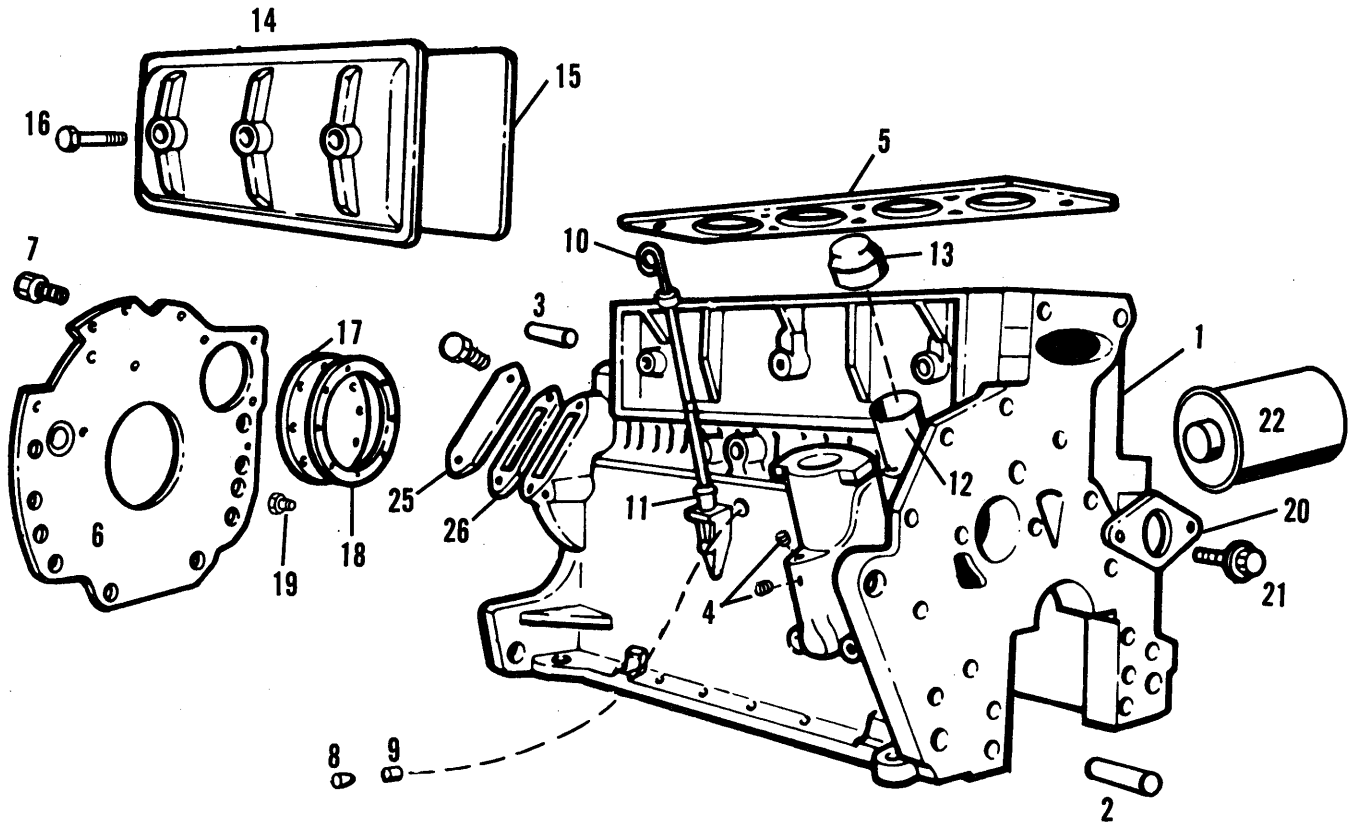
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GASKET SET  
LOWER SERVICE  
540D

ITEM	NUMBER	QTY.	DESCRIPTION
-	1010909	1	GASKET SET, lower service
1	1010554	1	GASKET, frt. cover
2	-----	1	GASKET, frt. cover
3	-----	1	GASKET, frt. cover
4	-----	1	SEAL ASY.
5	-----	1	GASKET
6	1010580	1	GASKET
7	-----	2	PLUG
8	-----	1	GASKET
9	-----	1	GASKET
10	-----	1	GASKET
11	1010705	2	SEAL
12	-----	1	GASKET
13	1010746	1	GASKET
14	-----	1	GASKET
15	1010895	3	PLUG
16	1010605	2	SEAL
17	1010747	1	GASKET
18	1010688	1	GASKET, oil pan
19	1010789	1	GASKET
20	1010751	1	SEAL
21	1010744	3	SEAL
22	1010743	3	PLUG
23	1010811	1	SEAL
24	1010806	1	GASKET
25	-----	1	GASKET
26	-----	2	PLUG
27	-----	1	GASKET
28	-----	1	GASKET

540 LOADER  
ENGINE

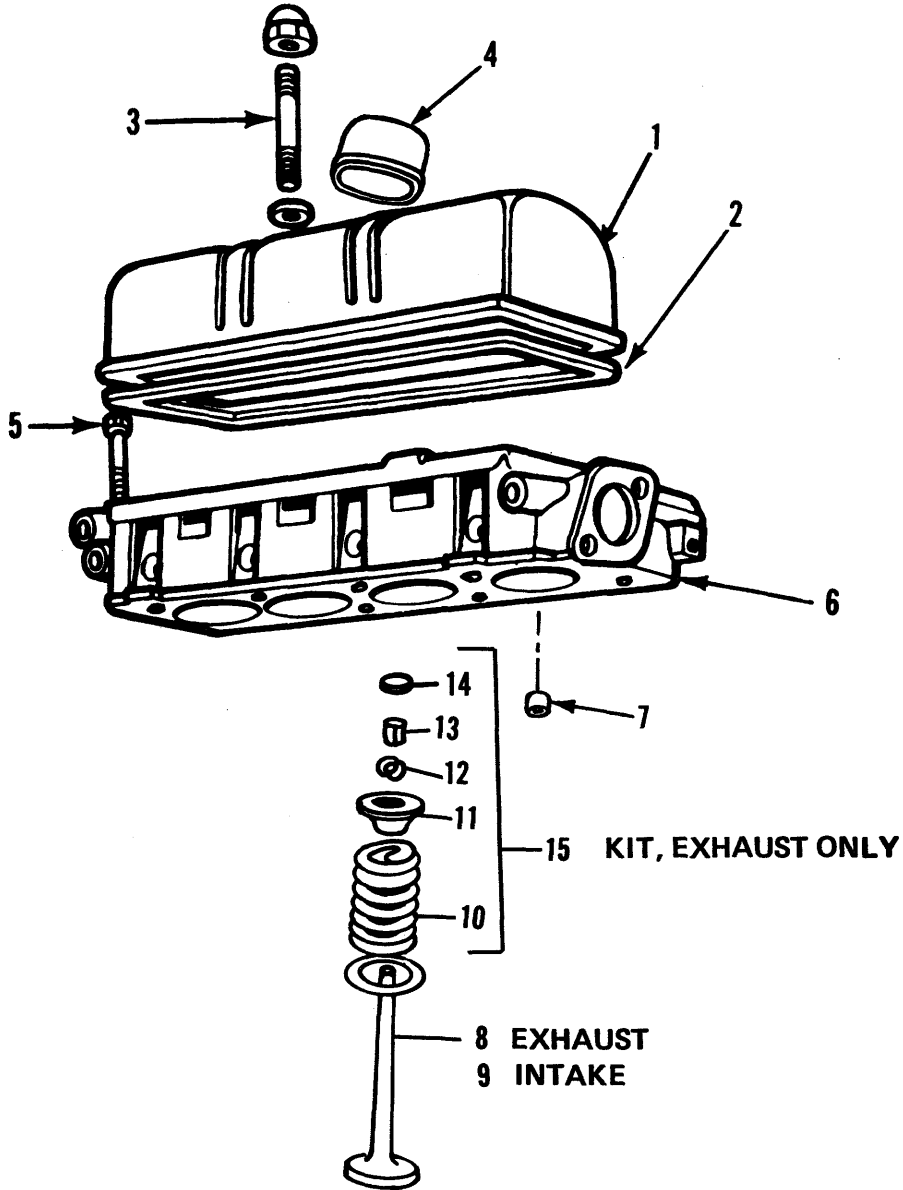
CYLINDER BLOCK  
540D



CYLINDER BLOCK  
540D

ITEM	NUMBER	QTY.	DESCRIPTION
1	1013155	1	BLOCK ASY., cylinder
	1010554	4	PLUG, oil line
2	1010552	2	PIN, dowel
3	1010553	2	PIN, dowel
4	1010555	2	PLUG, oil line
5	1013065	1	GASKET, cylinder head
6	1010741	1	PLATE, cover rear
7	1012636	4	BOLT, rear cover
8	1010743	3	PLUG
9	1010744	3	SEAL, cyl. block
10	1010697	1	INDICATOR, oil level
11	1010724	1	TUBE, oil level indicator
12	1013101	1	PIPE ASY., oil filler
13	1013102	1	CAP ASY., oil filler & breather
14	1010682	1	COVER, push rod
15	1010683	1	GASKET, push rod cover
16	1012651	3	BOLT, cover
17	1010579	1	COVER, cam bearing
18	1010580	1	GASKET, cam rear cover
19	1012636	6	BOLT, cover to block
20	1010581	1	PLATE, camshaft thrust
21	1010896	2	BOLT, plate cylinder
	1010899	2	WASHER, camshaft
22	1010763	1	FILTER, oil
23	1010559	1	COVER, timing pin (Not shown)
24	920649	1	BOLT, 7/16NC x 1-3/8 (Not shown)
25	-----	1	COVER, pump gear housing (Not serviced)
26	-----	1	GASKET, pump cover (Not serviced)
-	1013062	-	BLOCK ASY., short
-	1014988	-	ENGINE REPLACEMENT

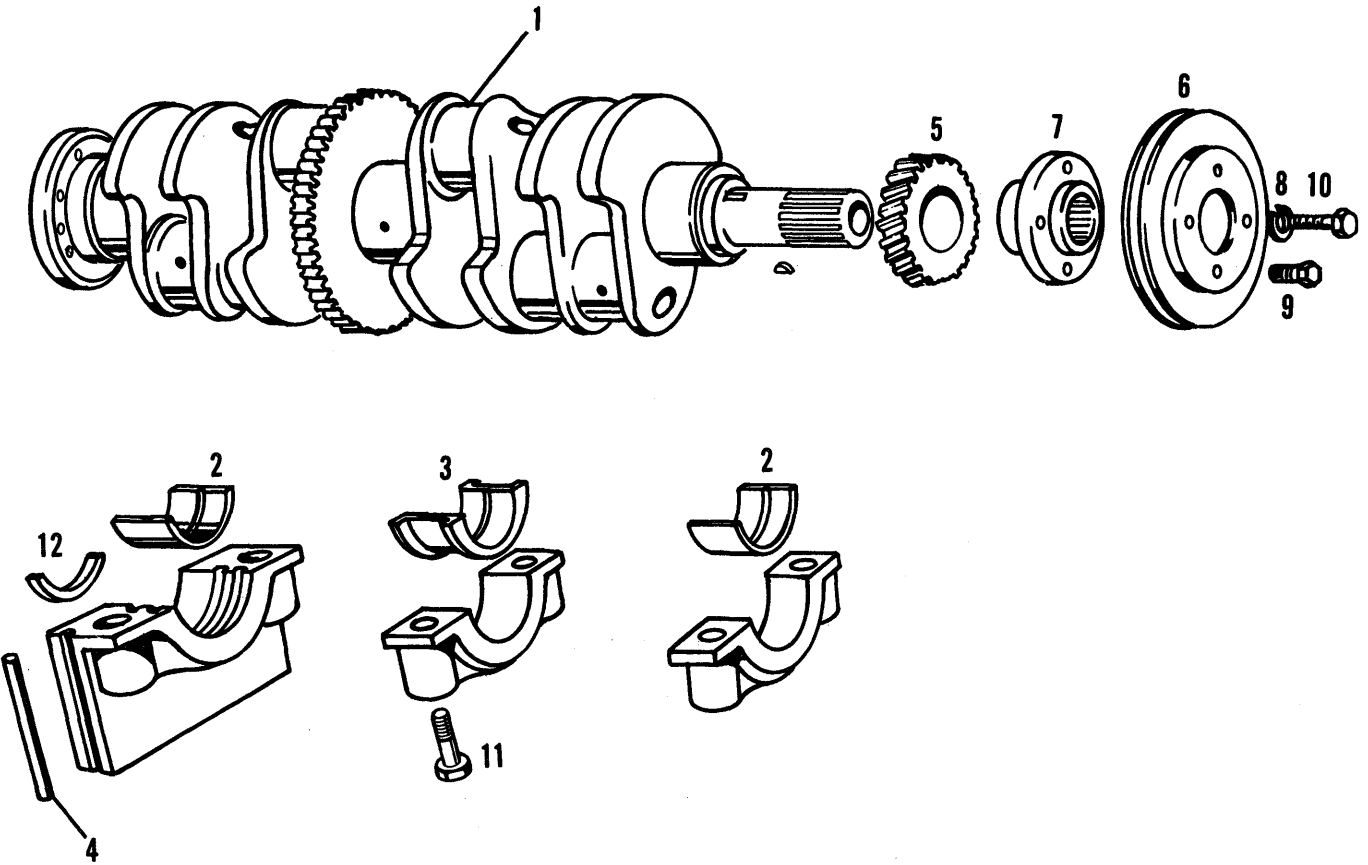
CYLINDER HEAD  
540D



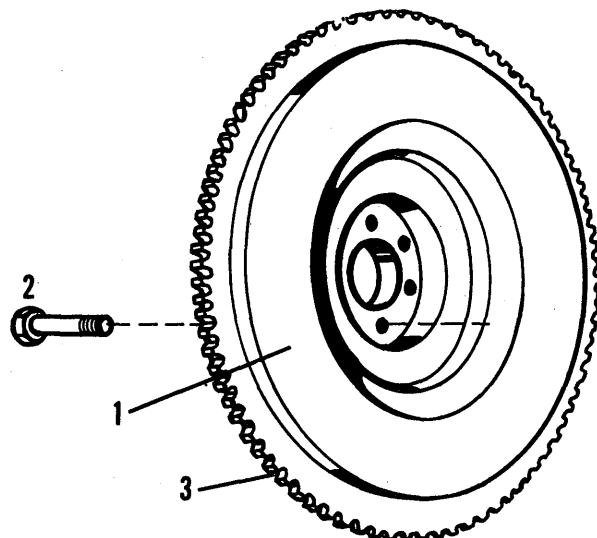
CYLINDER HEAD  
540D

ITEM	NUMBER	QTY.	DESCRIPTION
1	1013086	1	COVER, valve rocker arm
2	1013087	1	GASKET, cover
3	1015737	2	STUD, 3/8NC x 1-1/2
	1010730	2	SEAL, stud
	1012639	2	NUT
	1010740	2	GROMMET
4	1015585	1	CAP ASY., rocker cover
5	1013066	8	BOLT, head, 1/2NC x 2-3/4
	1013067	10	BOLT, head, 1/2NC x 4-21/32
	1013068	1	BOLT, head, 1/2NC x 7-1/4
6	1013064	1	HEAD ASY., cylinder
7	1010648	4	BUSHING, exhaust valve guide
	1013074	4	BUSHING, intake valve guide
8	1013071	4	VALVE, exhaust
	1013072	4	WASHER, flat (exhaust only)
9	1013073	4	VALVE, intake
10	1010657	8	SPRING, valve
11	1015735	4	RETAINER, intake
	1012699	4	RETAINER, exhaust
12	1010680	8	KEY, valve spring
	1012757	8	LOCK, valve spring
13	1013077	8	SEAL, valve stem
	1013084	8	SEAL, valve stem
14	1013082	4	CAP, valve stem
15	1010737	4	LOCKING KIT, exhaust valve (Incl. Items 10, 11, 12, 13 & 14)
16	1015736	4	SLEEVE (Not shown)
17	1015579	4	INSERT, valve seat (Not shown)

CRANKSHAFT  
540D



FLYWHEEL  
540D



**540 LOADER**  
ENGINE

11

**CRANKSHAFT**  
540D

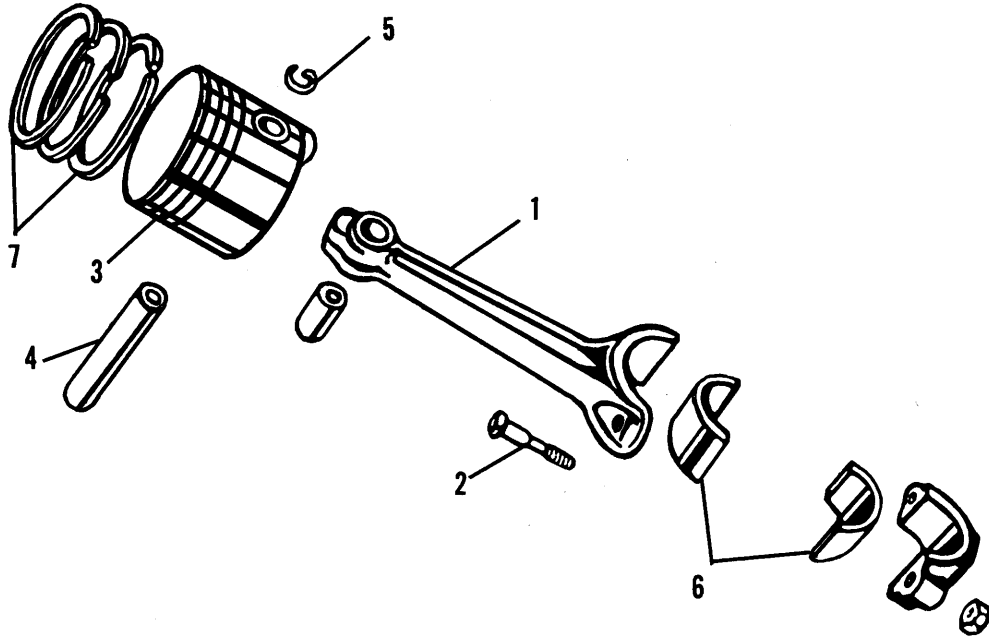
ITEM	NUMBER	QTY.	DESCRIPTION
1	1013176	1	CRANKSHAFT ASY., w/ Plug
2	1013187	4	BEARING, main, front & rear (Std.)
	1013188	4	BEARING, main, front & rear (.001")
	1013189	4	BEARING, main, front & rear (.002")
	1013190	4	BEARING, main, front & rear (.003")
3	1013192	2	BEARING, main, center (Std.)
	1013193	2	BEARING, main, center (.001")
	1013194	2	BEARING, main, center (.002")
	1013195	2	BEARING, main, center (.003")
4	1010605	2	SEAL, rear main
	1013191	2	SEAL, rear main (.010)
5	1010584	1	GEAR, crankshaft
	1010890	1	KEY, woodruff, 5/32 x 5/8
6	1015727	1	PULLEY, crankshaft
7	1010586	1	HUB, crankshaft
8	1010904	1	WASHER
9	1010905	4	BOLT, pulley to hub
10	916226	1	BOLT, hub to crankshaft
11	1013196	1	BOLT, main cap
12	1015738	2	SEAL, crank, rear (Formed)
	1013096	2	SEAL, crank, rear (Rope)

**FLYWHEEL**  
540D

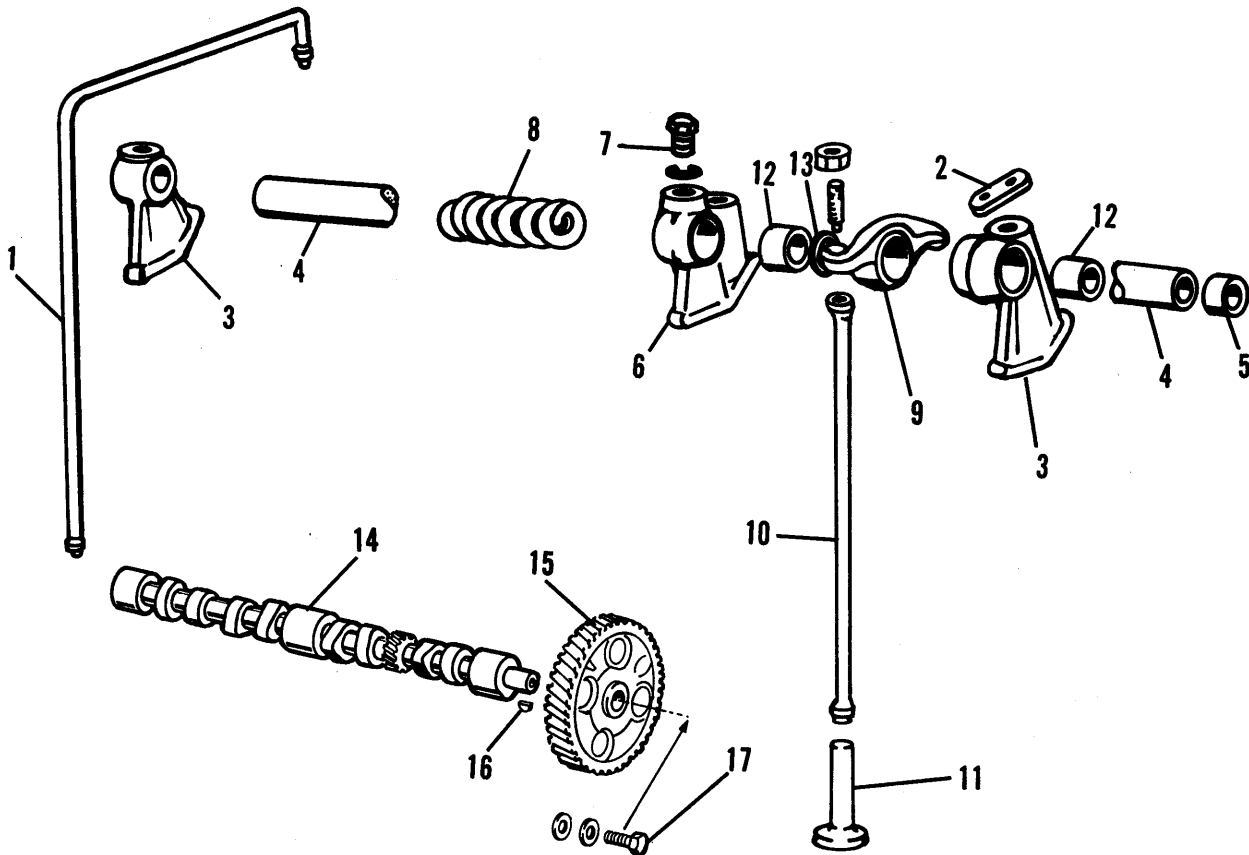
ITEM	NUMBER	QTY.	DESCRIPTION
1	1010619	1	FLYWHEEL - less bearing
2	1012637	6	BOLT, 7/16NF x 1-5/8 (self-locking)
3	1010620	1	RING, gear - flywheel
4	1010621	1	HOUSING (Not shown)
5	920677	4	BOLT, 7/16NC x 1-1/4 (Not shown)
	918199	4	WASHER, 7/16
6	920676	3	BOLT, 7/16NC x 1 (Not shown)
	918199	3	WASHER, 7/16
7	1010623	1	SEAL, flywheel housing (Not shown)



PISTON & CONNECTING ROD  
540D



VALVE OPERATING MECHANISM  
540D



PISTON & CONNECTING ROD  
540D

ITEM	NUMBER	QTY.	DESCRIPTION
1	1013165	4	ROD ASY., connecting
	1015722	4	BUSHING
2	1010576	8	BOLT, connecting rod
	1010575	8	NUT, connecting rod
3	1015032	4	PISTON SET (Incl. Items 4 & 5)
	1015719	4	PISTON SET (.005) (Incl. Items 4 & 5)
	1013156	4	PISTON SET (.010) (Incl. Items 4 & 5)
	1013157	4	PISTON SET (.020) (Incl. Items 4 & 5)
4	1013159	4	PIN, piston
5	1013160	8	RETAINER, pin
6	1013166	8	BEARING SET, connecting rod (Std.)
	1013167	8	BEARING SET, connecting rod (.001)
	1010572	8	BEARING SET, connecting rod (.002)
	1015033	8	BEARING SET, connecting rod (.003)
7	1013161	2	RING KIT, piston (Std.)
	1013163	2	RING KIT, piston (.010)
	1013164	2	RING KIT, piston (.020)
	1015720	2	RING KIT, piston (.030)
	1015721	2	RING KIT, piston (.040)

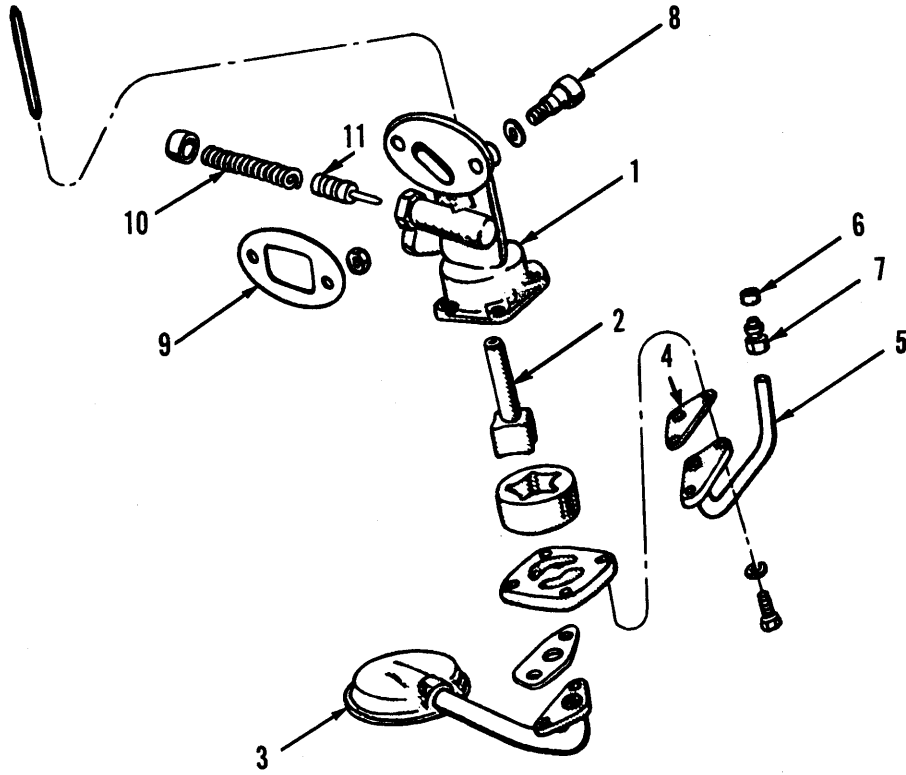
VALVE OPERATING MECHANISM  
540D

ITEM	NUMBER	QTY.	DESCRIPTION
1	1013085	1	TUBE, rocker arm shaft oil inlet
	1010811	1	SEAL, oil inlet tube
2	1010733	2	BRACKET, inlet & outlet tube
3	1010726	2	SUPPORT, rocker arm
4	1013083	1	SHAFT, rocker arm
	918452	2	PIN, cotter, 1/8 x 1
5	1010732	2	PLUG, rocker shaft
6	1010727	2	SUPPORT, inter rocker arm
7	1012638	4	BOLT, rocker & support to cyl. hd.
8	1010736	3	SPRING, arm locating
9	1013080	8	ARM ASY.
	1015583	8	PLUG, rocker arm
10	1010729	8	ROD, valve push
11	1010624	8	VALVE, tappet
12	1015581	4	WASHER
13	1015580	2	WASHER
14	1013171	1	CAMSHAFT
15	1010578	1	GEAR, camshaft
16	1010890	1	KEY, 5/8 x 5/32, woodruff
17	1010889	1	BOLT, gear to shaft

540 LOADER  
ENGINE

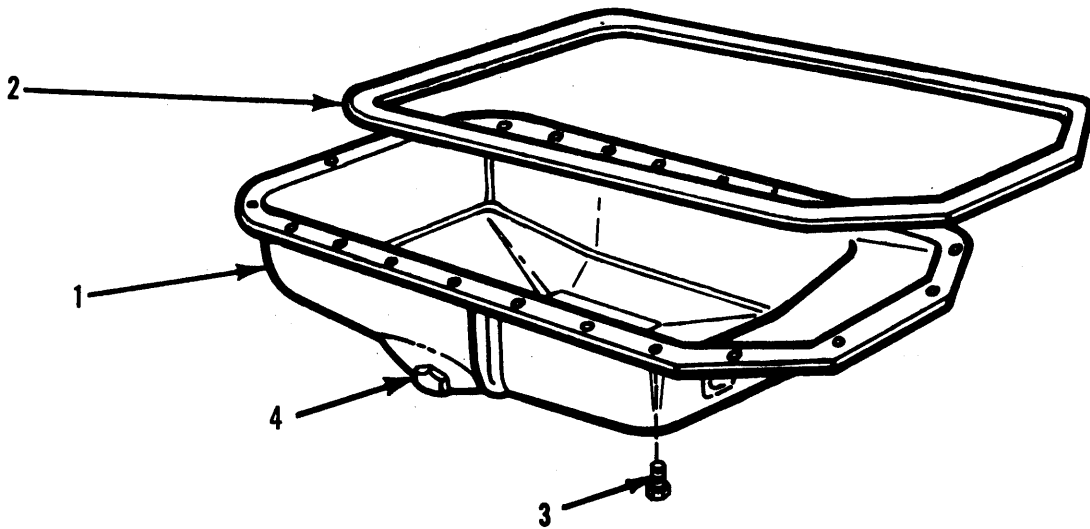
LUBRICATING SYSTEM

OIL PUMP  
540D



LUBRICATING SYSTEM

OIL PAN  
540D



**LUBRICATING SYSTEM**

OIL PUMP  
540D

ITEM	NUMBER	QTY.	DESCRIPTION
1	1010745	1	PUMP, oil
2	1013115	1	SHAFT, oil pump
3	1010753	1	SCREEN & COVER
4	1013092	1	GASKET
5	1015584	1	TUBE ASY.
6	1010751	1	SEAL, oil filler inlet tube
7	1010752	1	CONNECTOR, oil pump
8	1012643	2	BOLT
	916602	4	NUT, 3/8NF
9	1010747	1	GASKET
10	1010748	1	SPRING, oil pump
11	1010749	1	PLUNGER, oil pump

**LUBRICATING SYSTEM**

OIL PAN  
540D

ITEM	NUMBER	QTY.	DESCRIPTION
1	1010684	1	PAN ASY., engine oil
2	1010688	1	GASKET
3	1012641	20	SCREW, washer
4	1013098	1	PLUG, drain
	1013099	1	GASKET, drain plug