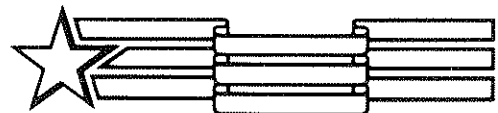


Ingersoll

220, 222, 442 AND 444
COMPACT TRACTORS
Parts catalog D1181



QUALITY IN THE AMERICAN TRADITION

Ingersoll Equipment Co., Inc.

Winneconne, Wisconsin 54986-9576

**MODELS 220, 222, 442 AND 444
COMPACT TRACTORS**

220 - S/N 9646801 to 9656747

222 - S/N 9646801 to 9658189

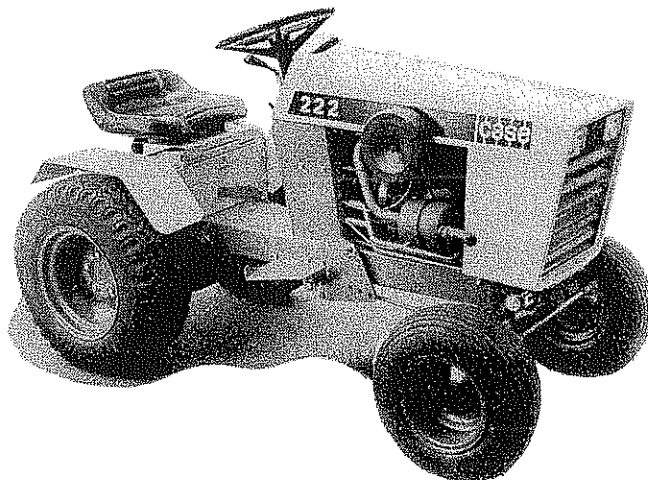
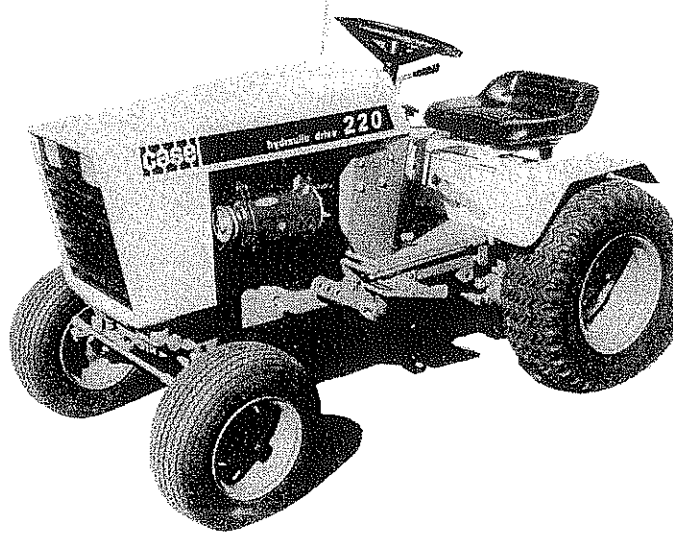
442 - S/N 9646801 to 9667000

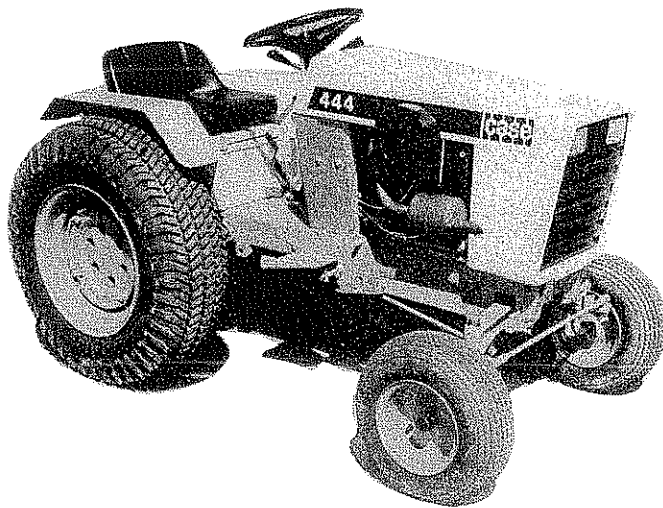
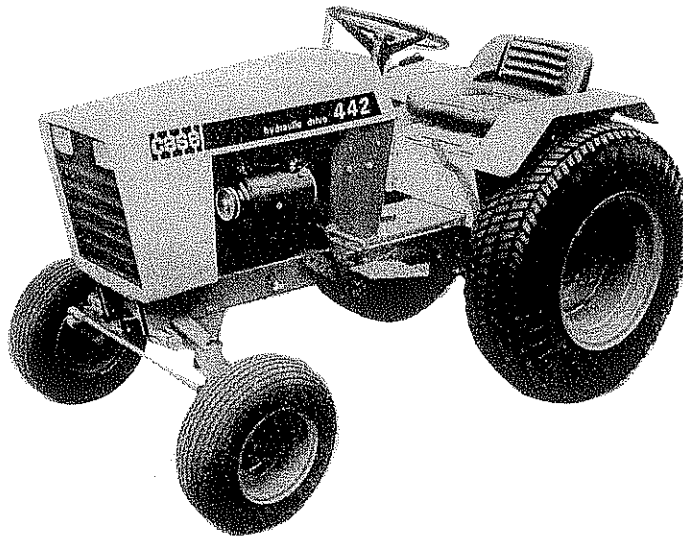
444 - S/N 9648801 to 9661261

Parts Catalog No. D1181

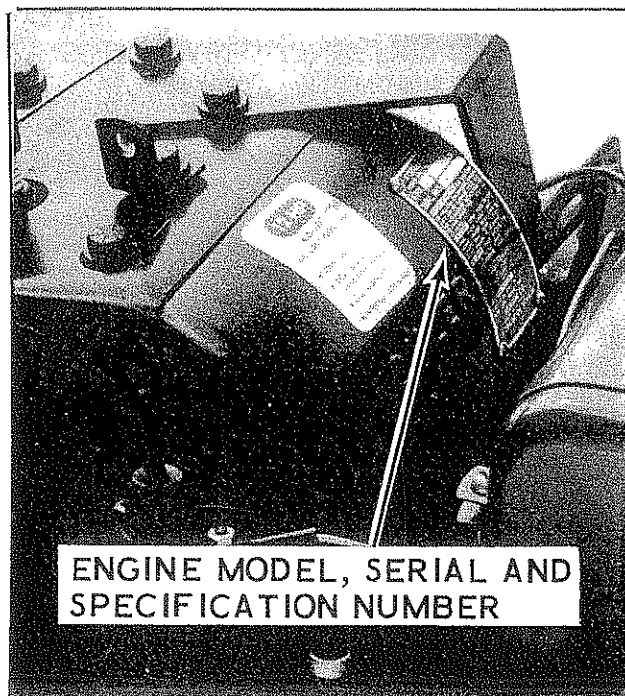
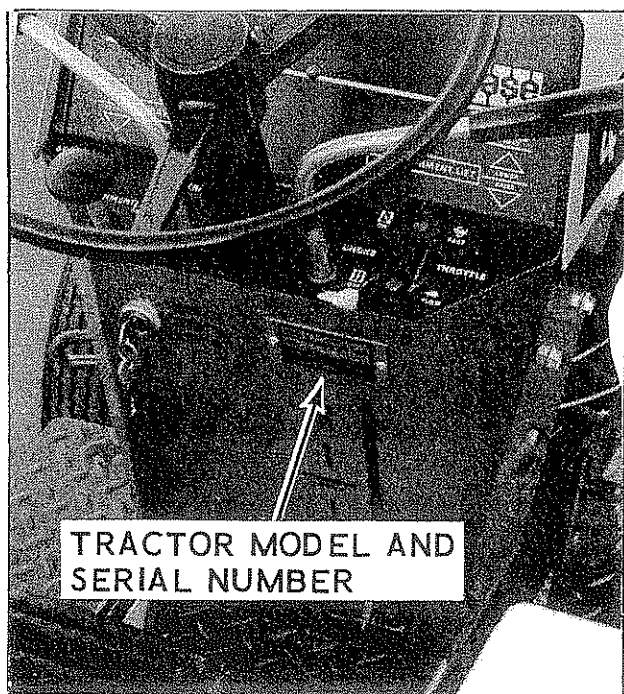
Note: This parts catalog replaces the
previous issue C1181

3-93-RP-200-240





CASE 220, 222, 442 AND 444 COMPACT TRACTORS



TRACTOR MODEL DESIGNATIONS	ENGINE MODEL DESIGNATIONS
220 TRACTOR	K-241-A C15964 Engine
222 - 442 TRACTOR	K-301-A C15965 Engine (SERVICE WITH C18983, C19021 and C20182)
444 TRACTOR	K-321-A C16695 Engine (SERVICE WITH C24297)

SERIAL NUMBERS

When using this catalog, notice the reference to serial numbers of various components noted here and listed in the "description" copy. By referring to correct serial numbers, proper parts identification will be assured.

GENERAL INFORMATION

INDEX

There is an index at the front and rear of this catalog.

The front index is an alphabetical index of the major groups or assemblies.

The rear index is a numerical index of the part numbers and pages on which these numbers are shown.

ILLUSTRATION

Each illustration in this catalog shows a group of parts or components. These parts and components are aligned approximately as the parts and components on your machine. Each part and component in an illustration has a reference number. These reference numbers are in a list on the page opposite of the illustration. Next to the reference number is the part number, description and required quantity of the part shown in the illustration.

UAR - "Use as required" indicates that the part quantity is variable.

NSS - "Not sold separately" indicates that the part is only available as a component of an assembly or the part must be purchased locally. If the part is an assembly component, the description will be indented under the assembly description in the parts list.

O/L - "Obtain locally"

** - "Footnotes" are added to a part number when more information is needed for identification. They only relate to the part numbers indicated.

PARTS ORDERS

All orders must include the following information:

1. Correct part number.
2. Complete description of part or component.
3. Total quantity of each part or component.
4. Product model number.
5. All necessary product identification numbers.
6. Method for sending the parts.
7. Complete and correct address.

CATALOG REVISIONS

As the product changes, new pages will be available for your catalog. A notice will be issued.

IMPORTANT: Put all revisions into the catalog as soon as possible.

RIGHT HAND AND LEFT HAND IDENTIFICATION

The words right hand (RH) and left hand (LH) as used in this catalog indicate the direction while you are in the operator's seat in the normal operating position.

INDENTED DESCRIPTIONS

An assembly can have many components. The components of an assembly are indicated by an indented description. The quantity for an indented part is the total needed for that complete assembly. See the example.

REF.	PART NO.	DESCRIPTION	REQ'D
	C 55159	CYLINDER ASSY - rear steering	1
28	C 56208	SOCKET ASSY - rear cylinder	1
29	C 55956	PLUG - adjusting, socket assy	1
30	C 55957	SEAT - socket ball	2
31	C 56210	SPRING - socket	1
32	C 56209	SEAT - socket spring	1
33	G 45175	CLAMP ASSY - socket assy	1
	16- 836	BOLT - 1/2" x 2-1/4" N.F. hex	1
34	132- 104	PIN - cotter, 3/16" x 3"	1
35	C 55889	STUD - ball, socket & cylinder	2
36	13- 410	BOLT - 1/4" x 5/8" N.C., hex	4
37	92- 4	LOCK WASHER - 1/4" SAE	4

ALPHABETICAL INDEX ENGINE SECTION

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442 444

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Crankshaft	11-13	15
Cylinder Block	17-19	21
Cylinder Head	17-19	21
Electrical System	63-65	63-65
Engine Block & Attaching Parts	17-19	21
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220 222 &
442 444

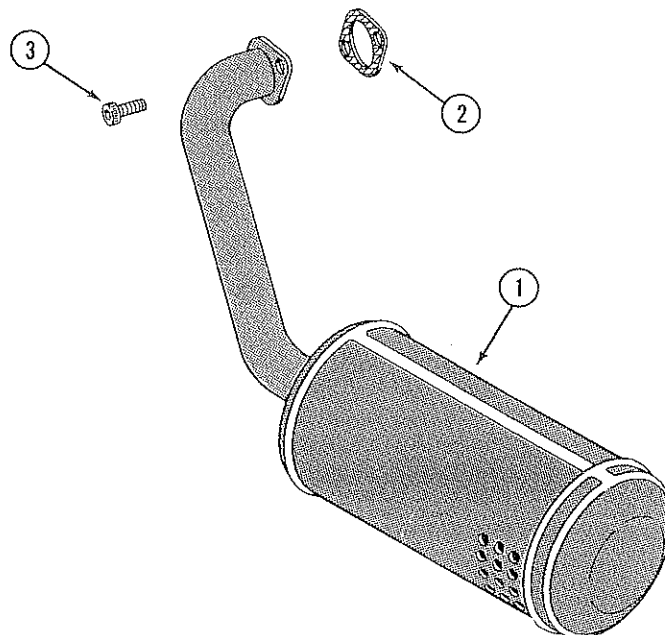
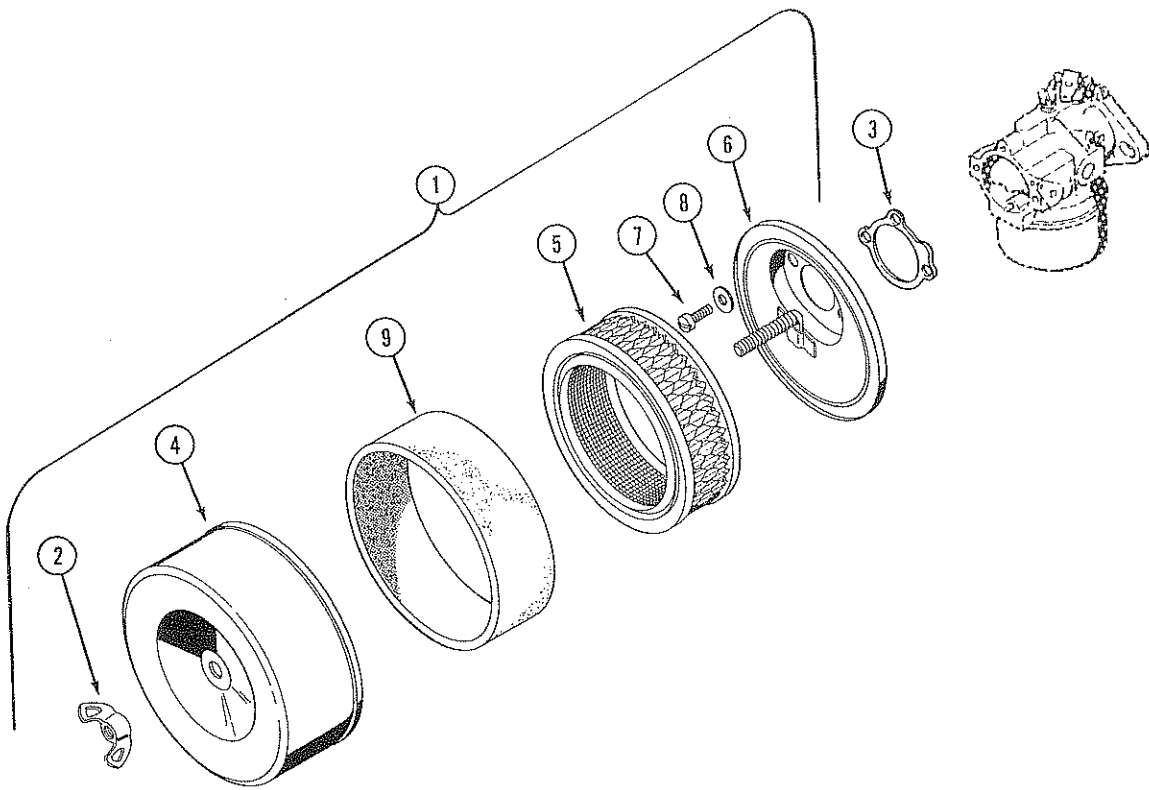
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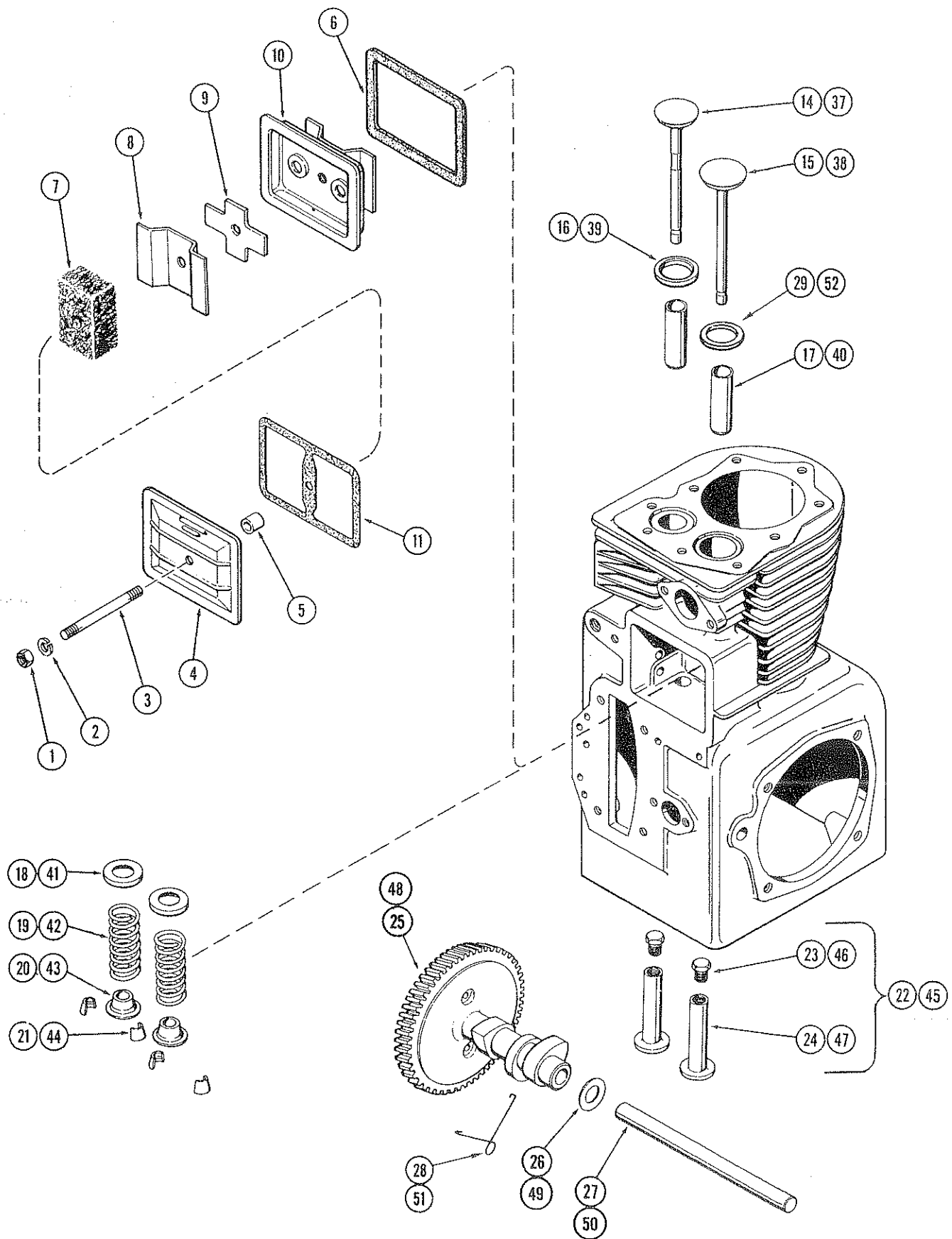


AIR CLEANER

REF.	PART NO.	DESCRIPTION	REQ'D
1	KOA235100	AIR CLEANER ASSEMBLY	1
2	C 26703	NUT - wing 3/8" NC	1
3	KO 275341	GASKET - air horn	1
4	NSS	COVER - air cleaner (Order KOA235100)	1
5	A 70090	ELEMENT - air cleaner	1
6	NSS	BASE - air cleaner (Order KOA235100)	1
7	177- 94	SCREW - fillister head 10-32 x 5/16"	3
8	195- 512	WASHER - plain 3/16"	3
9	KO 237421	PRE-CLEANER (optional)	1

EXHAUST SYSTEM

1	C 18039	MUFFLER - exhaust	1
2	C 10372	GASKET - exhaust pad	1
3	61- 510	SCREW - 5/16-18 x 5/8" Socket Head	2



CRANKCASE BREATHER

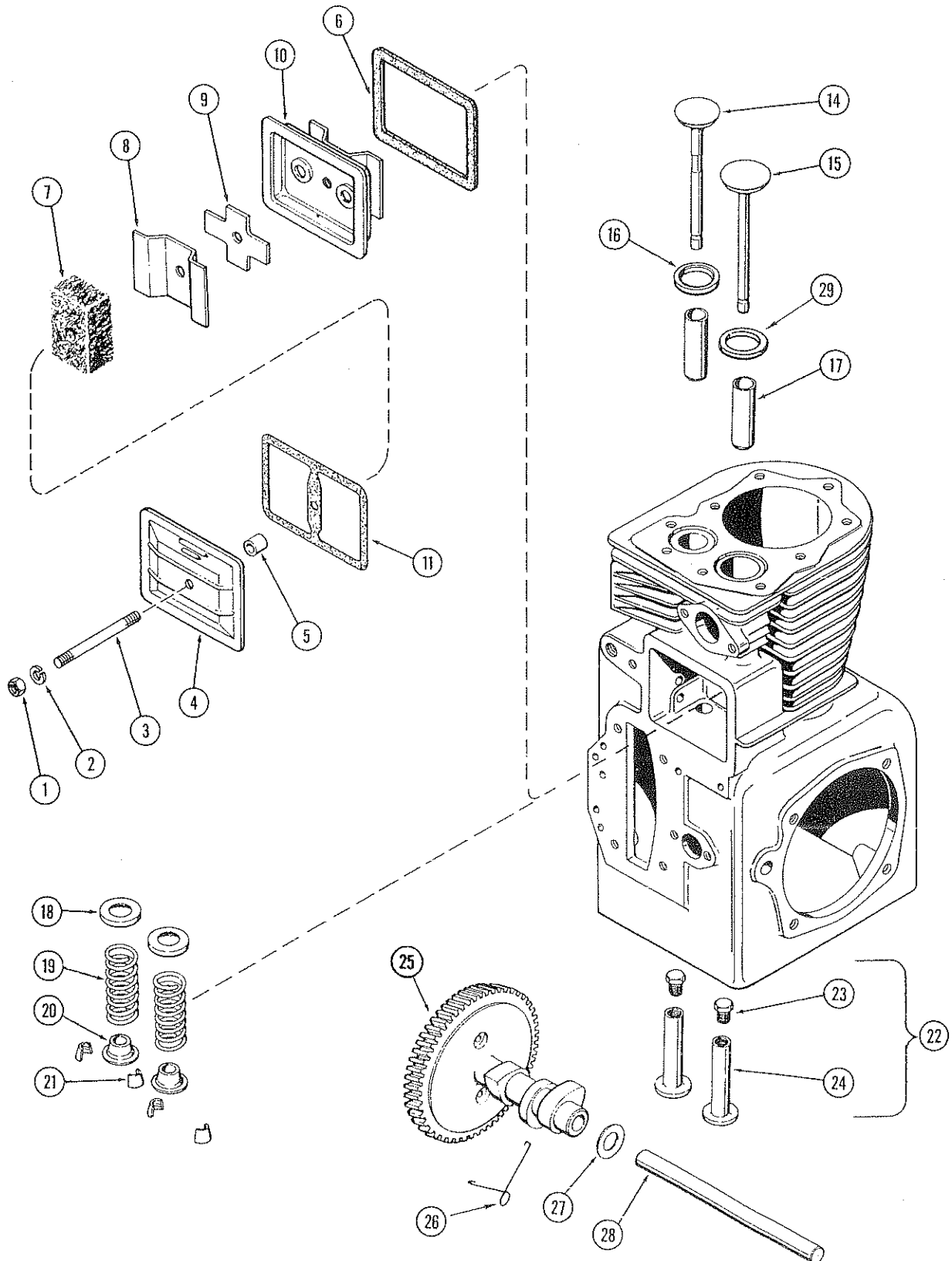
REF.	PART NO.	DESCRIPTION	REQ'D
1	25- 104	NUT - 1/4" NC Hex	1
2	92- 4	LOCKWASHER - 1/4"	1
3	KO 275220	STUD - valve cover	1
4	KO 275143	COVER - valve	1
5	KO 231032	SEAL - breather	1
6	KO 235048	GASKET - breather plate	1
7	KO 235118	FILTER - breather	1
8	KO 235117	BAFFLE - breather	1
9	KO 235047	REED- breather	1
10	KO 235631	PLATE - breather	1
11	KO 275144	GASKET - valve cover	1

220 CAMSHAFT AND VALVES

14	KO 235826	VALVE - exhaust	1
15	KO 235008	VALVE - intake	1
16	KO 230170	INSERT - exhaust valve seat	1
17	KO 235007-S	GUIDE - valve	2
18	KO 235011	SEAT - valve spring	2
19	KO 235010	SPRING - valve	2
20	KO 230011	RETAINER - valve spring	2
21	C 24844	LOCK - valve retainer	4
22	KOD235327	LIFTER ASSEMBLY	2
23	NSS	SCREW - tappet adjusting	1
24	NSS	LIFTER - valve	1
25	C 24611	CAMSHAFT ASSEMBLY	1
26	KO 275066	SPACER - camshaft, .005"	UAR
26	KO 275067	SPACER - camshaft, .010"	UAR
27	KO 235053	PIN - camshaft	1
28	V 34346	SPRING - actuating	1
29	KO 230265	INSERT - intake valve seat	1

222 AND 442 CAMSHAFT AND VALVES

37	KO 235826	VALVE - exhaust	1
38	KO 235008	VALVE - intake	1
39	KO 230170	INSERT - exhaust valve seat	1
40	KO 235007-S	GUIDE - valve	2
41	KO 235011	SEAT - valve spring	2
42	KO 235010	SPRING - valve	2
43	KO 230011	RETAINER - valve spring	2
44	C 24844	LOCK - valve retainer	4
45	KOD235327	LIFTER ASSEMBLY	2
46	NSS	SCREW - tappet adjusting	1
47	NSS	LIFTER - valve	1
48	C 24611	CAMSHAFT ASSEMBLY	1
49	KO 275066	SPACER - camshaft, .005"	UAR
49	KO 275067	SPACER - camshaft, .010"	UAR
50	KO 235053	PIN - camshaft	1
51	V 34346	SPRING - actuating	1
52	KO 230265	INSERT - intake valve seat	1

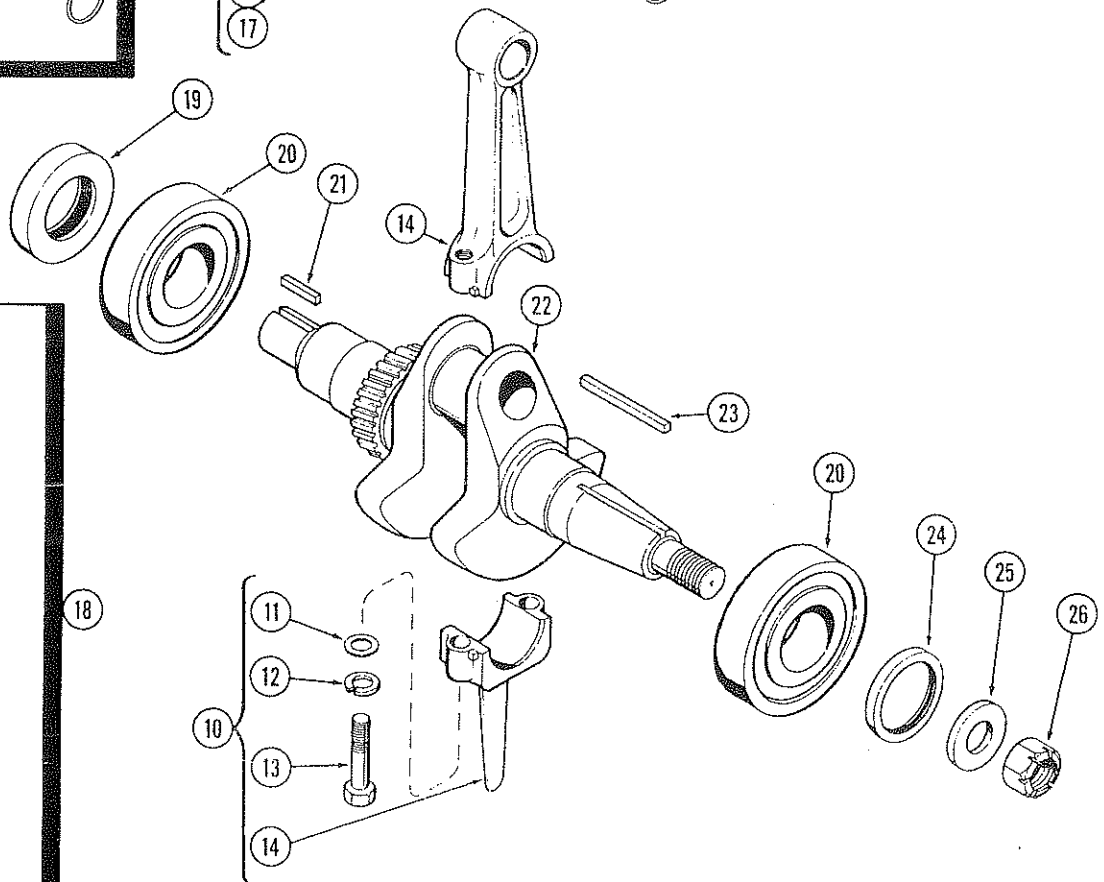
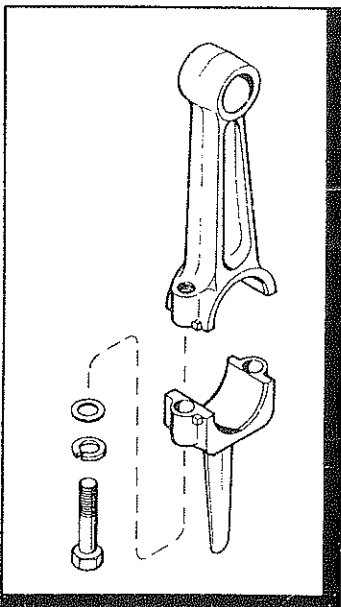
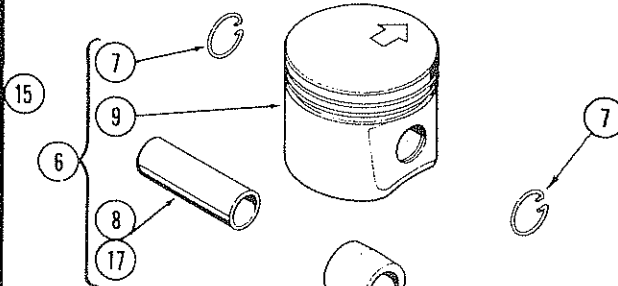
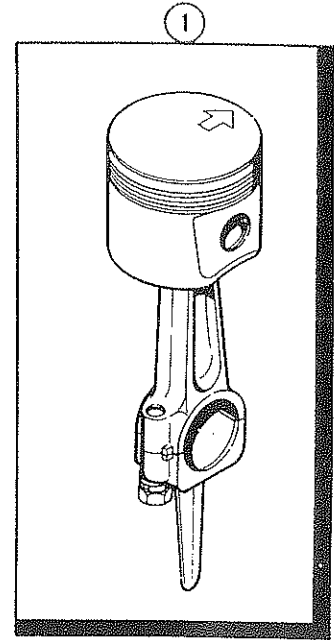
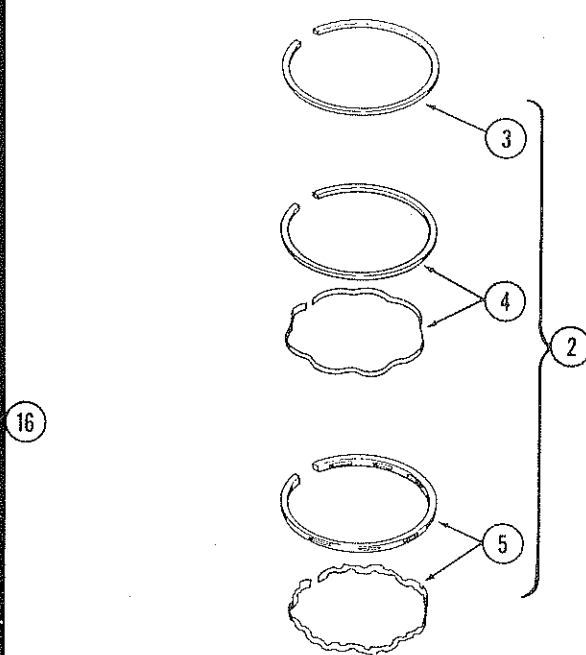
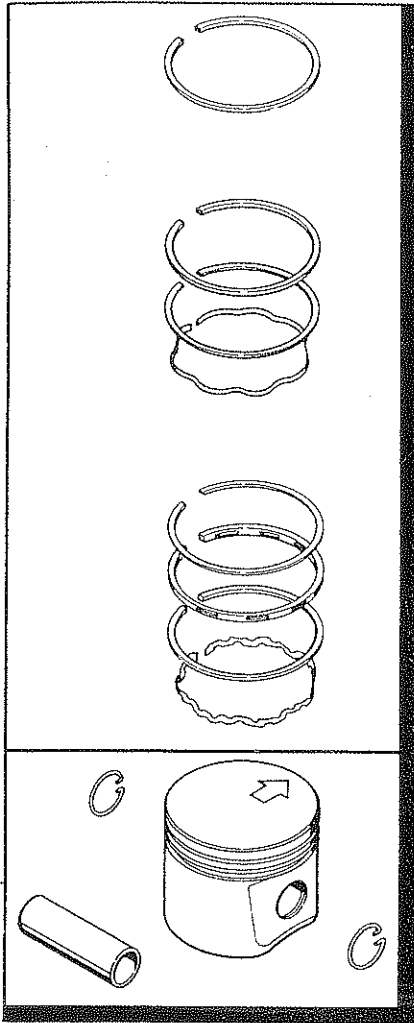


444 CRANKCASE BREATHER

REF.	PART NO.	DESCRIPTION	REQ'D
1	25- 104	NUT- 1/4" NC hex	1
2	92- 4	LOCKWASHER - 1/4"	1
3	KO 275220	STUD - valve cover	1
4	KO 275143	COVER - valve	1
5	KO 231032	SEAL - breather	1
6	KO 235048	GASKET - breather plate	1
7	KO 235118	FILTER - breather	1
8	KO 235117	BAFFLE - breather	1
9	KO 235047	REED - breather	1
10	KO 235631	PLATE - breather	1
11	KO 275144	GASKET - valve cover	1

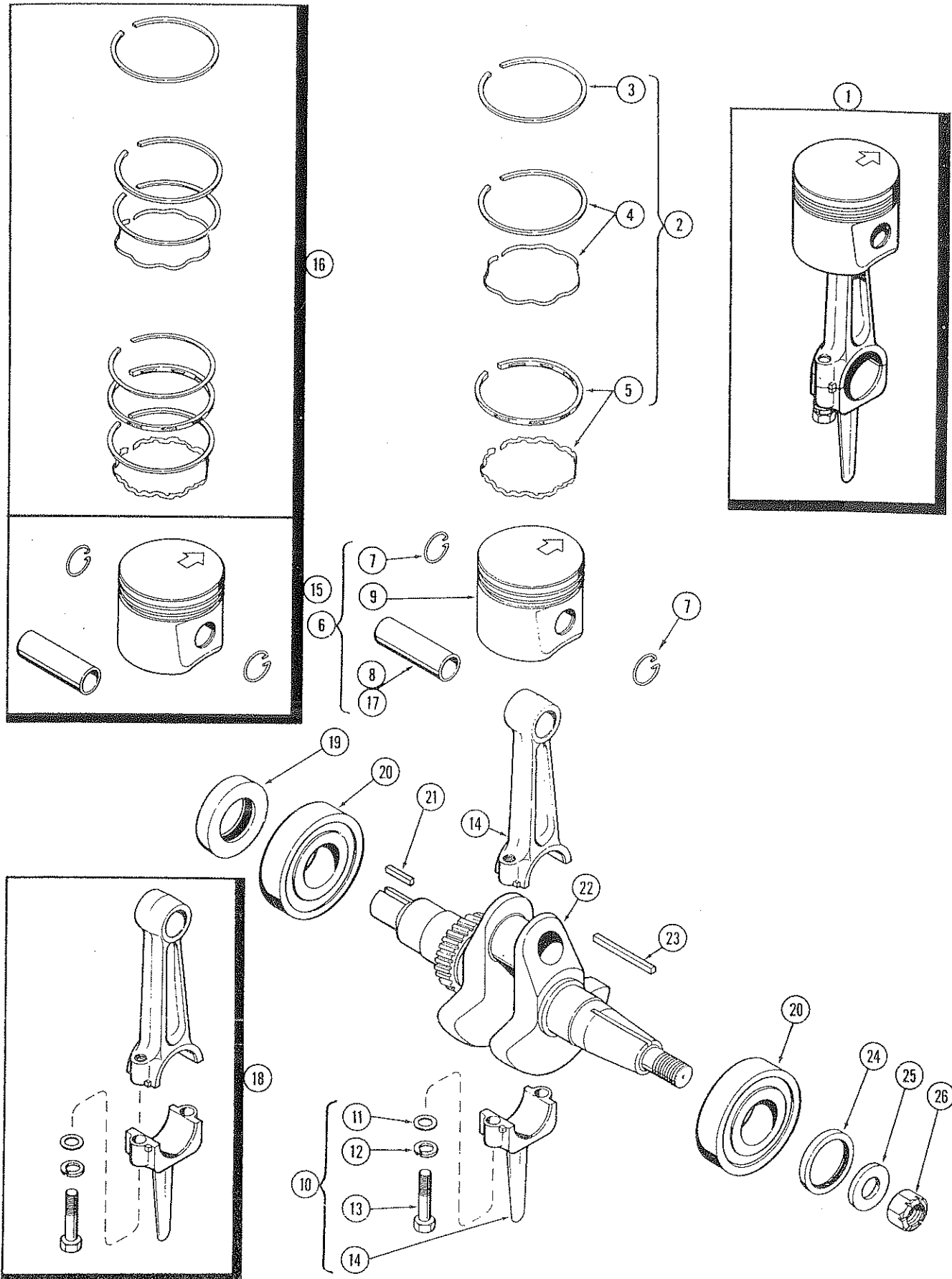
444 CAMSHAFT AND VALVES

14	KO 235838	VALVE - exhaust	1
15	KO 235582	VALVE - intake	1
16	KO 230170	INSERT - exhaust valve seat	1
17	KO 235007-S	GUIDE - valve	2
18	KO 235011	SEAT - valve spring	2
19	KO 235168	SPRING - valve	2
20	KO 230020	ROTATOR - valve (Furnished in pairs only)	2
21	C 24884	LOCK - valve retainer	2
22	KOD235327	LIFTER ASSEMBLY	2
23	NSS	SCREW - tappet adjusting	1
24	NSS	LIFTER - valve	1
25	C 24611	CAMSHAFT ASSEMBLY (includes actuating spring)	1
26	V 34346	SPRING - actuating	1
27	KO 275066	SPACER - camshaft, .005"	UAR
27	KO 275067	SPACER - camshaft, .010"	UAR
28	KO 235053	PIN - camshaft	1
29	KO 230265	INSERT - intake valve seat	1



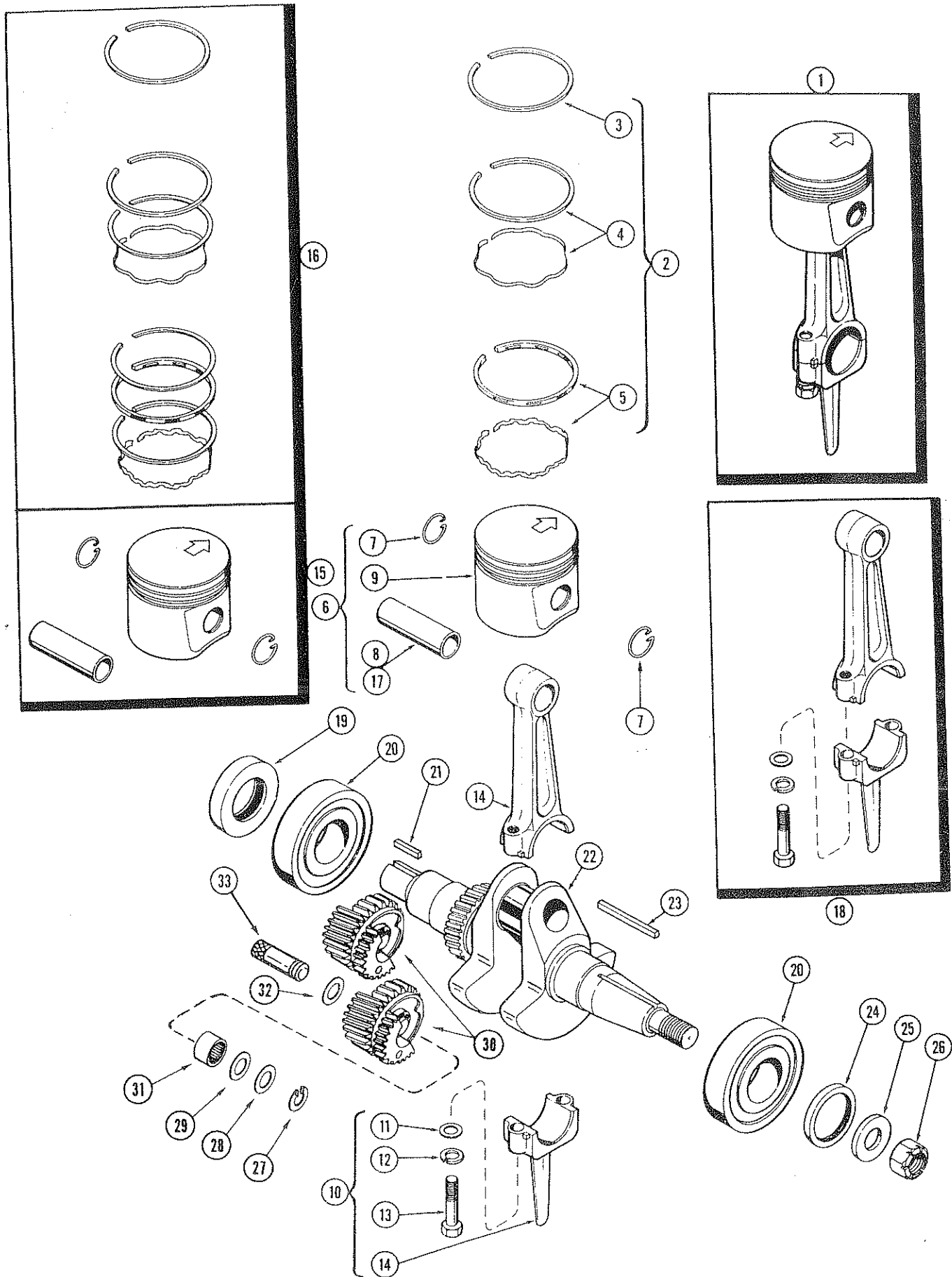
220 CRANKSHAFT, PISTON — CONNECTING ROD

REF. PART NO.	DESCRIPTION	REQ'D
1 NSS	PISTON AND ROD ASSEMBLY (Std. size)	1
2 KO 235287	RING SET - piston (For oversize, see item 16)	1
3 NSS	RING - top compression	1
4 NSS	RING - 2nd compression (Includes expander)	1
5 NSS	RING - oil (Includes expander)	1
6 KOA235611	PISTON ASSEMBLY (For oversize, see item 15)	1
7 KO 235004	RETAINER - piston pin	2
8 KO 235572	PIN - piston	1
9 NSS	PISTON	1
10 KOA235139	CONNECTING ROD ASSEMBLY (For undersize, see item 18)	1
11 KO 235003	WASHER - special	2
12 92- 6	LOCKWASHER	2
13 KO 236611	SCREW - cap, connecting rod	2
14 NSS	ROD - connecting	1
15 KOA235569	PISTON ASSEMBLY - .010" oversize	1
15 KOA235571	PISTON ASSEMBLY - .020" oversize	1
15 KOA235616	PISTON ASSEMBLY - .030" oversize	1
16 KO 235288	RING SET - piston .010" oversize	1
16 KO 235289	RING SET - piston .020" oversize	1
16 KO 235290	RING SET - piston .030" oversize	1
17 KO 235573	PIN - piston, .005" oversize	1
18 C 18101	CONNECTING ROD ASSEMBLY - .010" undersize	1
19 R 16287	OIL SEAL - crankshaft rear	1
20 40035	BEARING - crankshaft ball	2
21 W 5063-S	KEY - 1/4" Sq. x 3/4" (Pump Coupling)	1
22 KOB235711	CRANKSHAFT	1
23 A 27001	KEY - flat 3/16" x 3/16" x 1-3/8" (Flywheel)	1
24 C 18097	OIL SEAL - crankshaft front	1
25 C 18095	WASHER - 5/8"	1
26 131- 580	NUT - special Marsden 5/8" NF	1



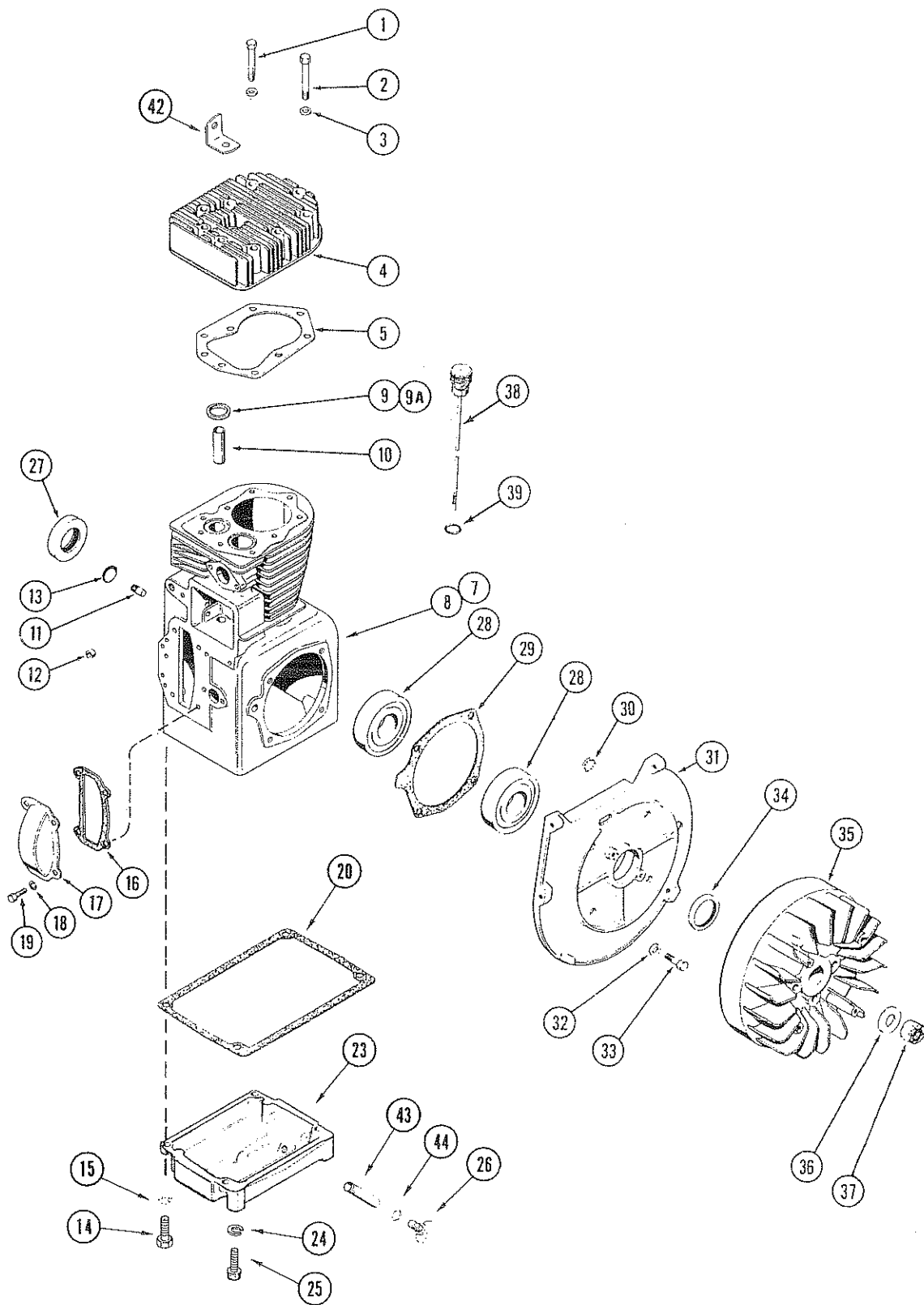
222 AND 442 CRANKSHAFT, PISTON — CONNECTING ROD

REF.	PART NO.	DESCRIPTION	REQ'D
1	NSS	PISTON AND ROD ASSEMBLY (Std. size)	1
2	KO 235889	RING SET - piston (For oversize, see item 16)	1
3	NSS	RING - top compression	1
4	NSS	RING - 2nd compression (Includes expander)	1
5	NSS	RING - oil (Includes expander)	1
6	KOA235827	PISTON ASSEMBLY (For oversize, see item 15)	1
7	KO 235811	RETAINER - piston pin	2
8	NSS	PIN - piston	1
9	NSS	PISTON	1
10	KOA237344	CONNECTING ROD ASSEMBLY (For undersize, see item 18) ...	1
11	KO 235003	WASHER - special	2
12	92- 6	LOCKWASHER	2
13	KO 236611	SCREW - cap, connecting rod	2
14	NSS	ROD - connecting	1
15	KOA235865	PISTON ASSEMBLY - .010" oversize	1
15	KOA235866	PISTON ASSEMBLY - .020" oversize	1
15	KOA235867	PISTON ASSEMBLY - .030" oversize	1
16	KO 235890	RING SET - piston .010" oversize	1
16	KO 235891	RING SET - piston .020" oversize	1
16	KO 235892	RING SET - piston .030" oversize	1
17	KO 235868	PIN - piston .005" oversize	1
18	C 23135	CONNECTING ROD ASSEMBLY - .010" undersize	1
19	R 16287	OIL SEAL - crankshaft rear	1
20	40035	BEARING - crankshaft ball	2
21	W 5063-S	KEY - 1/4" Sq. x 3/4" (Pump Coupling)	1
22	KOB235949	CRANKSHAFT	1
23	A 27001	KEY - flat 3/16" x 3/16" x 1-3/8" (Flywheel)	1
24	C 18097	OIL SEAL - crankshaft front	1
25	C 18095	WASHER - 5/8"	1
26	131- 580	NUT - special Marsden 5/8" NF	1



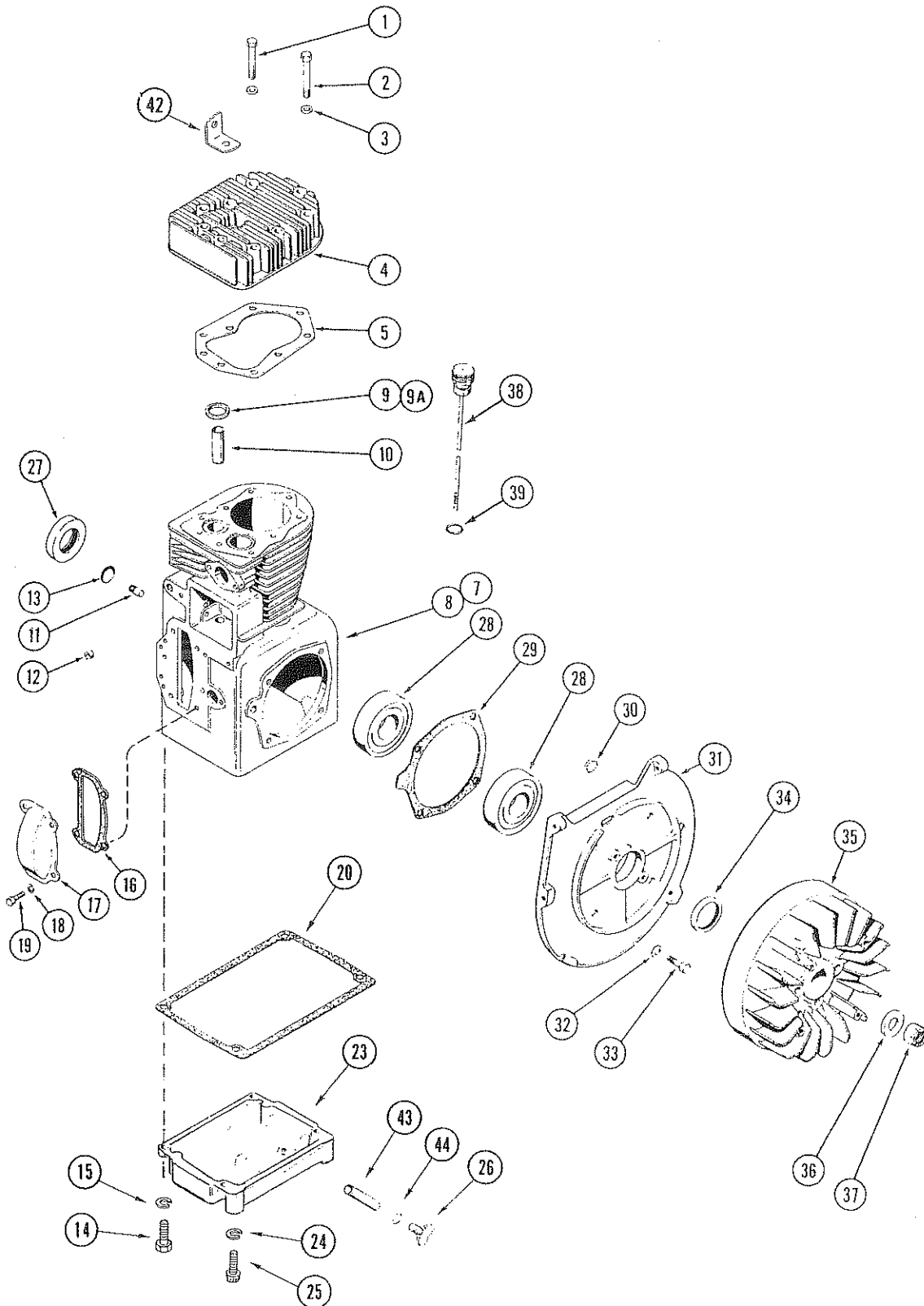
444 CRANKSHAFT, PISTON — CONNECTING ROD

REF. PART NO.	DESCRIPTION	REQ'D
1 NSS	PISTON AND ROD ASSEMBLY (Std. size)	1
2 KO 236763	RING SET - piston (For oversize, see item 16)	1
3 NSS	RING - top compression	1
4 NSS	RING - 2nd compression (Includes expander)	1
5 NSS	RING - oil (Includes expander)	1
6 KOA237401	PISTON ASSEMBLY (For oversize, see item 15)	1
7 KO 235811	RETAINER - piston pin	2
8 NSS	PIN - piston	1
9 NSS	PISTON	1
10 KOA237344	CONNECTING ROD ASSEMBLY (For undersize, see item 18)	1
11 KO 235003	WASHER - special	2
12 92- 6	LOCKWASHER - 3/8"	2
13 KO 236611	SCREW - cap, connecting rod	2
14 NSS	ROD - connecting	1
15 KOA237403	PISTON ASSEMBLY - .010" oversize	1
15 KOA237404	PISTON ASSEMBLY - .020" oversize	1
15 KOA237405	PISTON ASSEMBLY - .030" oversize	1
16 KO 236764	RING SET - piston .010" oversize	1
16 KO 236765	RING SET - piston .020" oversize	1
16 KO 236766	RING SET - piston .030" oversize	1
17 KO 235868	PIN - piston .005" oversize	1
18 C 23135	CONNECTING ROD ASSEMBLY - .010 undersize	1
19 R 16287	OIL SEAL - crankshaft rear	1
20 40035	BEARING - crankshaft ball	2
21 W 5063-S	KEY - 1/4" Sq. x 3/4" (Pump Coupling)	1
22 C 25054	CRANKSHAFT	1
23 A 27001	KEY - flat 3/16" x 3/16" x 1-3/8" (Flywheel)	1
24 C 18097	OIL SEAL - crankshaft front	1
25 C 18095	WASHER - 5/8"	1
26 131- 580	NUT - special Marsden 5/8" NF	1
27 C 15060	RETAINER - external 1/2" ID	2
28 C 22754	SPACER -	2
29 C 22754	SPACER -	2
30 KOA236507	GEAR ASSEMBLY - counter balance	2
31 KO 236506	BEARING - gear assembly	2
32 C 22754	SPACER -	2
33 KO 236559	SHAFT - counterbalance stub	2



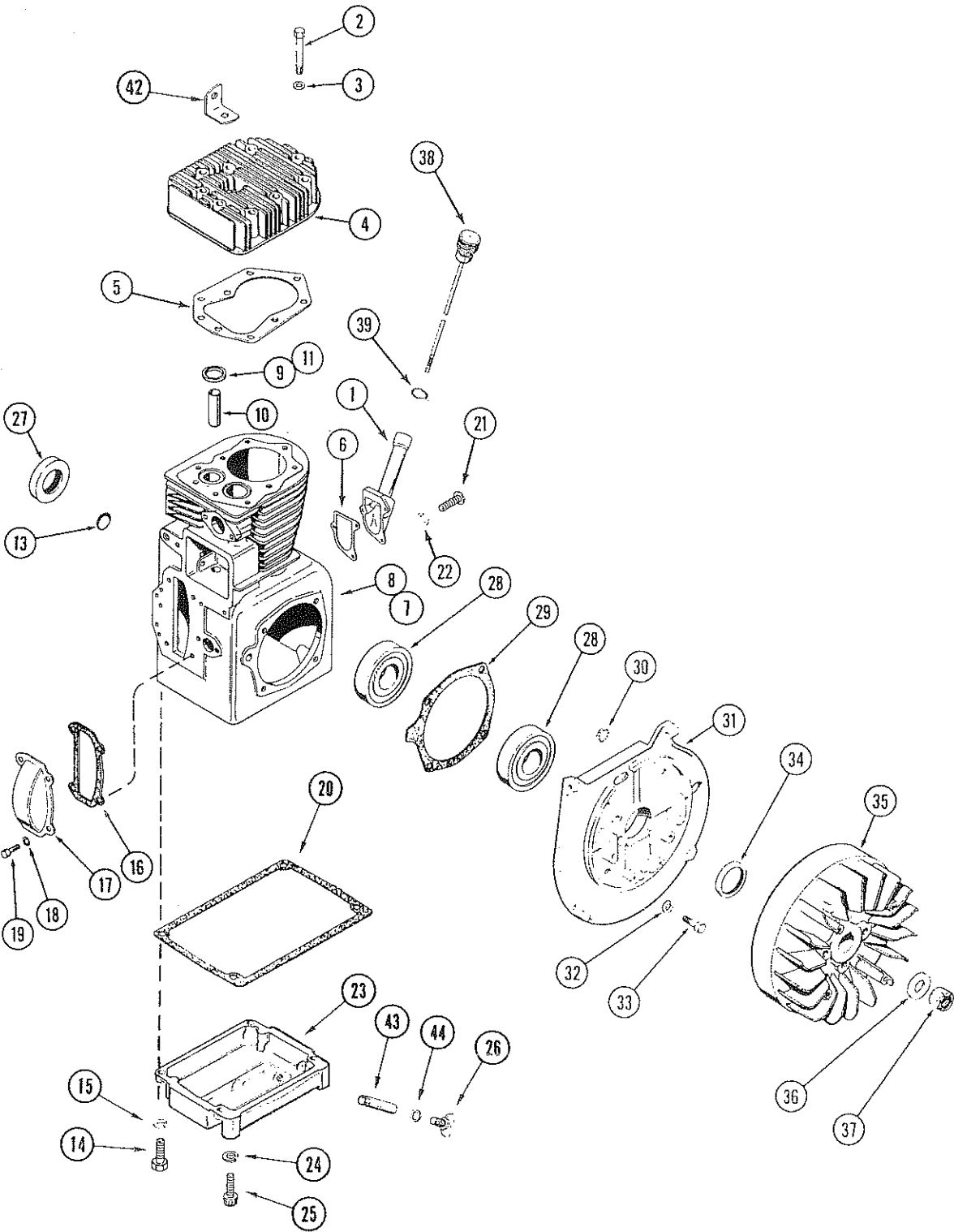
220 ENGINE BLOCK AND ATTACHING PARTS

REF.	PART NO.	DESCRIPTION	REQ'D
1	KO 271077	BOLT - cylinder head (Length 2-1/4")	6
2	KO 235175	BOLT - cylinder head (Length 2-1/2")	3
3	KO 270889	WASHER - cylinder head bolt	9
4	KO 236546	HEAD - cylinder	1
5	KO 237658	GASKET - head	1
7	KOC 236303	BLOCK ASSEMBLY - cylinder, short (Includes crankshaft, rod assembly, camshaft, valves, bearings and plate)	1
8	NSS	BLOCK ASSEMBLY - cylinder, stripped (Std. bore)	1
9	KO 230170	INSERT - exhaust valve	1
9A	KO 230265	INSERT - intake valve seat	1
10	KO 235007-S	GUIDE - valve	2
11	KO 235125-S	SHAFT - stub, governor	1
12	V 34418	BEARING - needle, governor shaft	1
13	41- 18	PLUG - expansion	1
14	113- 206	BOLT - 3/8" x 7/8" NC hex plated	4
15	192- 21	LOCKWASHER - 3/8" plated	4
16	KO 235025	GASKET - camshaft cover	1
17	KO 235026	COVER - camshaft gear	1
18	192- 19	LOCKWASHER - 1/4" plated	4
19	113- 6	BOLT - 1/4" x 1/2" NC plated	4
20	KO 235353	GASKET - oil pan	1
23	KO 237808	BASE - oil pan	1
24	192- 21	LOCKWASHER - 3/8" plated	4
25	61- 616	BOLT - 3/8" x 1" NC socket head	4
26	C 14399	PLUG - oil drain	1
27	R 16287	OIL SEAL - crankshaft rear	1
28	40035	BEARING - crankshaft ball	2
29	KO 235757	GASKET - shim, bearing plate, .010"	6
29	KO 235070	GASKET - shim, .010"	UAR
30	205- 27	PLUG - button, timing hole	1
31	C 22700	PLATE - bearing	1
32	192- 21	LOCKWASHER - 3/8" plated	4
33	113- 207	BOLT - 3/8" x 1" NC plated	4
34	C 18097	OIL SEAL - crankshaft front	1
35	KO 235818	FLYWHEEL	1
36	195- 541	WASHER - special, plated	1
37	131- 580	NUT - special, Marsden 5/8" NF	1
38	C 14953	DIPSTICK ASSEMBLY	1
39	A 27365	"O" RING - dipstick	1
42	KO 235748	STRAP - lifting	1
43	C 18814	NIPPLE - oil drain extension	1
44	C 14906	GASKET - plug, oil drain	1



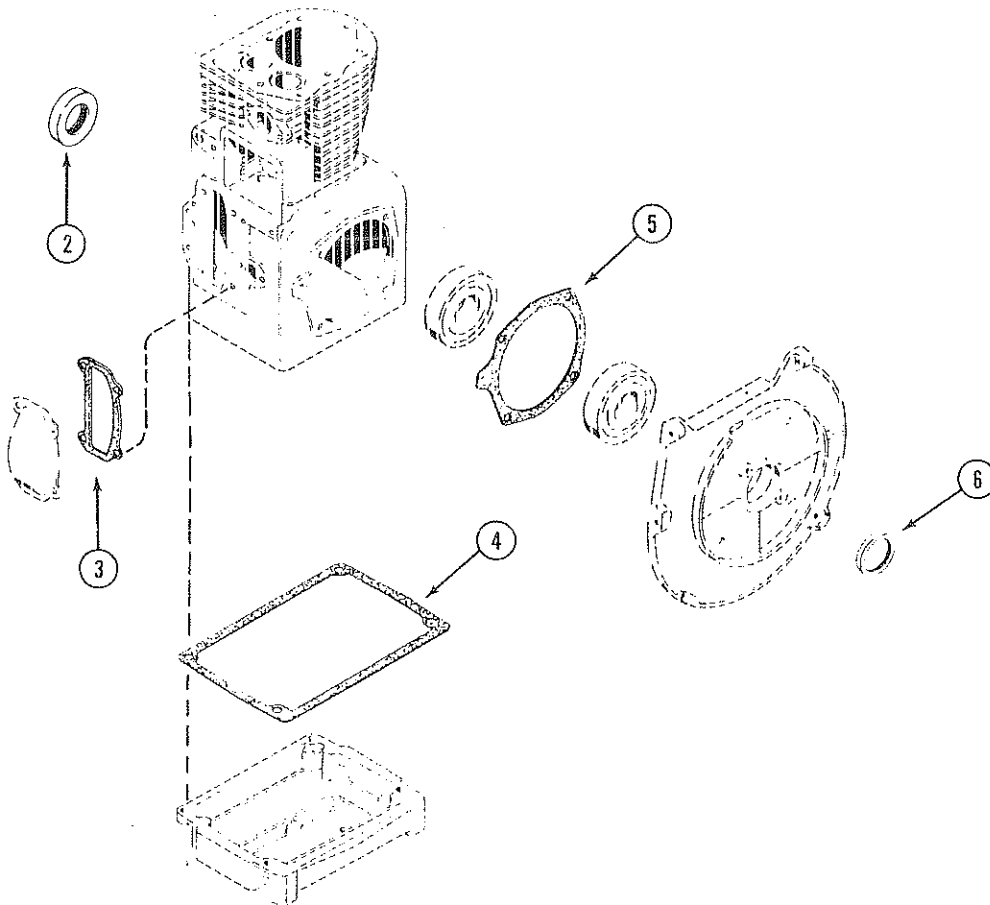
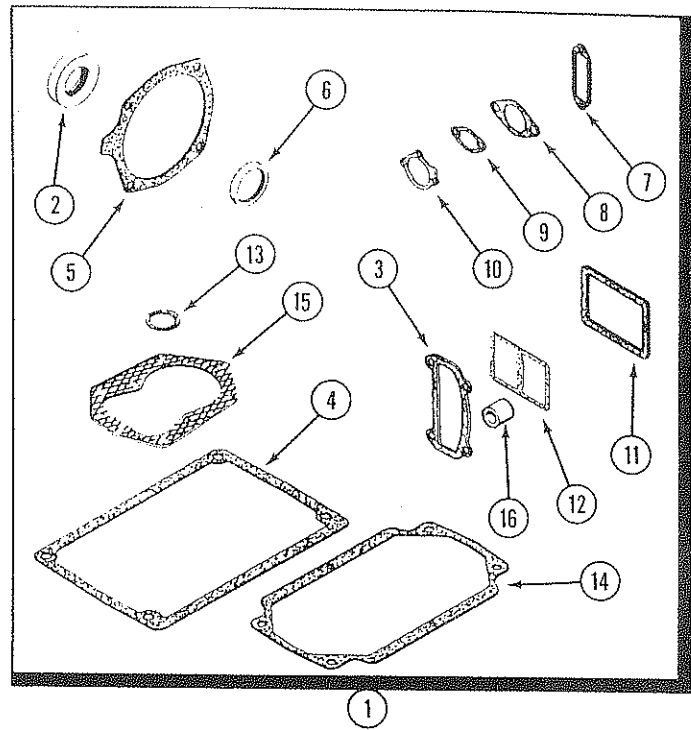
222 AND 442 ENGINE BLOCK AND ATTACHING PARTS

REF.	PART NO.	DESCRIPTION	REQ'D
1	KO 271077	BOLT - cylinder head (Length 2-1/4")	6
2	KO 235175	BOLT - cylinder head (Length 2-1/2")	3
3	KO 270889	WASHER - cylinder head bolt	9
4	KO 236438	HEAD - cylinder	1
5	KO 237658	GASKET - head	1
7	C 24141	BLOCK ASSEMBLY - cylinder, short (Includes crankshaft, rod assembly, camshaft, valves, bearings and plate)	1
8	NSS	BLOCK ASSEMBLY - cylinder, standard bore	1
9	KO 230170	INSERT - exhaust valve	1
9A	KO 230265	INSERT - intake valve seat	1
10	KO 235007-S	GUIDE - valve	2
11	KO 235125-S	SHAFT - stub governor	1
12	V 34418	BEARING - needle, governor shaft	1
13	41- 18	PLUG - expansion	1
14	113- 206	BOLT - 3/8" x 1-1/4" NC hex plated	4
15	192- 21	LOCKWASHER - 3/8" plated	4
16	KO 235025	GASKET - camshaft cover	1
17	KO 235026	COVER - camshaft gear	1
18	192- 19	LOCKWASHER - 1/4" plated	4
19	113- 6	BOLT - 1/4" x 1/2" NC plated	4
20	KO 235353	GASKET - oil pan	1
23	KO 237808	BASE - oil pan	1
24	192- 21	LOCKWASHER - 3/8" plated	4
25	61- 616	BOLT - 3/8" x 1" NC socket head	4
26	C 14399	PLUG - oil drain	1
27	R 16287	OIL SEAL - crankshaft rear	1
28	40035	BEARING - crankshaft ball	2
29	KO 235757	GASKET - shim, bearing plate .010"	6
29	KO 235070	GASKET - shim, .010"	UAR
30	205- 27	PLUG - button, timing hole	1
31	C 22700	PLATE - bearing	1
32	192- 21	LOCKWASHER - 3/8" plated	4
33	113- 207	BOLT - 3/8" x 1" NC plated	4
34	C 18097	OIL SEAL - crankshaft front	1
35	KO 235818	FLYWHEEL	1
36	195- 541	WASHER - special, plated	1
37	131- 580	NUT - special, Marsden	1
38	C 14953	DIPSTICK ASSEMBLY	1
39	A 27365	"O" RING - dipstick	1
42	KO 235748	STRAP - lifting	1
43	C 14398	NIPPLE - oil drain extension	1
44	C 14906	GASKET - plug, oil drain	1



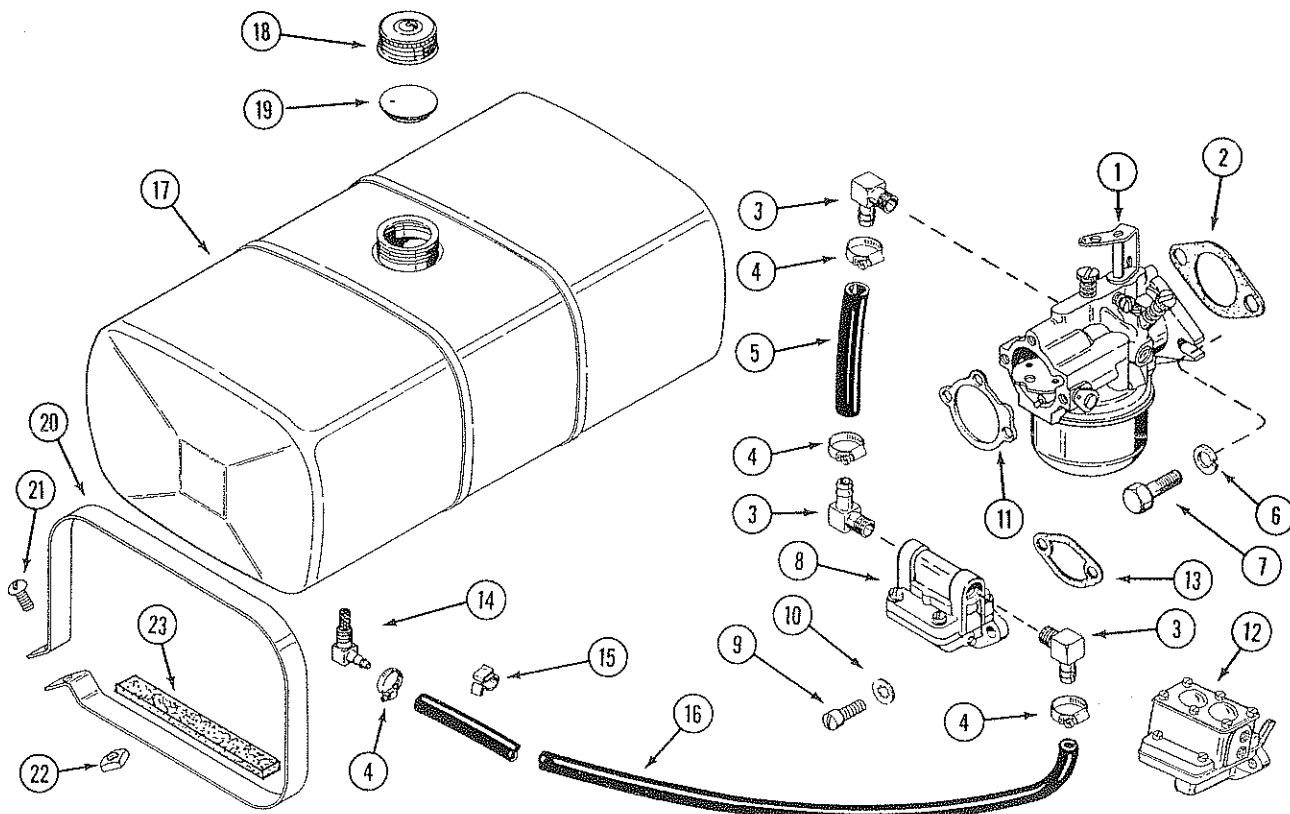
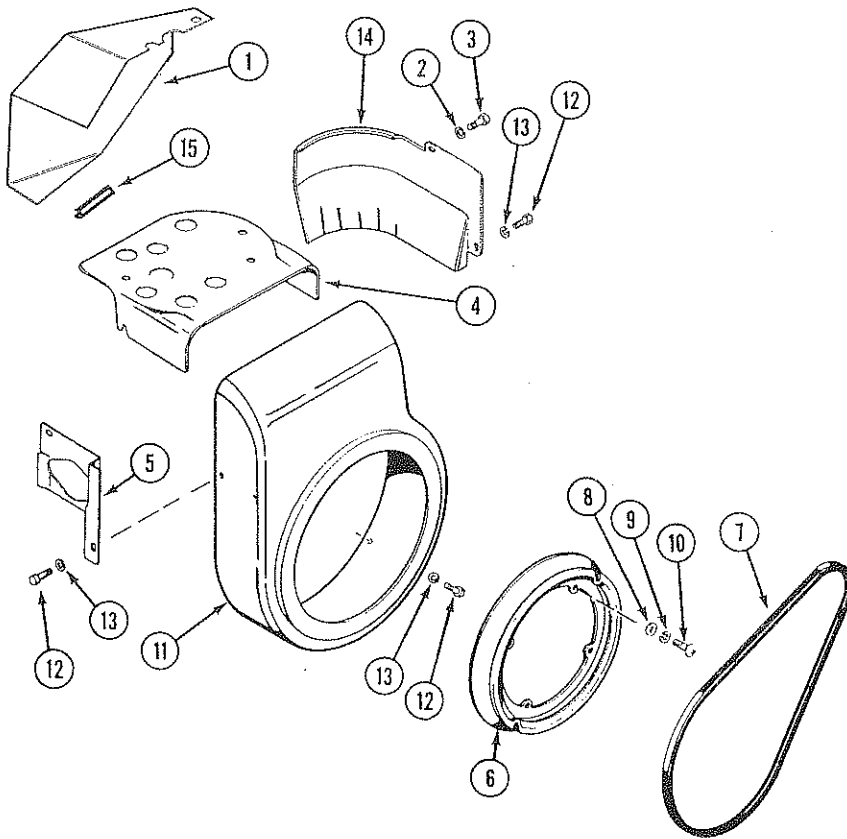
444 ENGINE BLOCK AND ATTACHING PARTS

REF. PART NO.	DESCRIPTION	REQ'D
1 NSS	FILLER TUBE - (use KO236886)	1
2 KO 235175	BOLT - cylinder head special (Length 2-1/2")	9
3 KO 270889	WASHER - cylinder head bolt	10
4 KO 237830	HEAD - cylinder	1
5 KO 237658	GASKET - head	1
6 KO 237064	GASKET - filler tube	1
7 KOC237182	BLOCK ASSEMBLY - cylinder, short (Includes crankshaft, piston, rod assembly, camshaft, valves, bearings and plate)	1
8 NSS	BLOCK ASSEMBLY - cylinder, standard bore	1
9 KO 230170	INSERT - exhaust valve	1
10 KO 235007-S	GUIDE - valve	2
11 KO 230265	INSERT - intake valve	1
13 41- 18	PLUG - expansion	1
14 113- 206	BOLT - 3/8" x 1-1/4" NC hex plated	4
15 192- 21	LOCKWASHER - 3/8" plated	4
16 KO 235025	GASKET - camshaft cover	1
17 KO 235026	COVER - camshaft gear	1
18 192- 19	LOCKWASHER - 1/4" plated	4
19 113- 6	BOLT - 1/4" x 1/2" NC plated	4
20 KO 235353	GASKET - oil pan	1
21 173- 221	SCREW - #10 x 7/16" round head machine	3
22 193- 99	LOCKWASHER - #10 internal tooth	7
23 KO 237808	BASE - oil pan	1
24 192- 21	LOCKWASHER - 3/8" plated	4
25 61- 616	BOLT - 3/8" x 1" NC socket head	4
26 C 14399	PLUG - oil drain	1
27 R 16287	OIL SEAL - crankshaft rear	1
28 40035	BEARING - crankshaft ball	2
29 KO 235757	GASKET - shim, bearing plate .312"	1
29 KO 235070	GASKET - shim, .010"	UAR
31 C 22700	PLATE - bearing	1
32 192- 21	LOCKWASHER - 3/8" plated	4
33 113- 207	BOLT - 3/8" x 1" NC plated	4
34 C 18097	OIL SEAL - crankshaft front	1
35 KO 235818	FLYWHEEL	1
36 195- 541	WASHER - special, plated 21/32" ID x 1-3/8" OD x 1/4"	1
37 131- 580	NUT - special Marsden 5/8"	1
38 C 14954	DIPSTICK ASSEMBLY	1
39 A 27365	"O" RING - dipstick	1
42 KO 235748	STRAP - lifting	1
43 C 14398	NIPPLE - oil drain extension	1
44 C 14906	GASKET - plug, oil drain	1



ENGINE GASKET KIT

REF.	PART NO.	DESCRIPTION	REQ'D
1	NSS	KIT - engine gasket (order C23858, R16289 and C18097)	
3	KO 235025	GASKET - camshaft cover	1
4	KO 235353	GASKET - oil pan	1
5	KO 235757	GASKET - shim, bearing plate (.010")	1
5	KO 235070	GASKET - shim (.010")	1
7	KO 220174	GASKET - breaker cover	6
8	C 23860	GASKET - carburetor flange	1
9	C 22738	GASKET - fuel pump flange	1
10	KO 275341	GASKET - carburetor air horn	1
11	KO 235048	GASKET - breather plate	1
12	KO 275144	GASKET - valve cover	1
13	B 53393	GASKET - fuel strainer bowl (not used)	1
14	KO 235057	GASKET - pan (not used)	1
15	KO 237658	GASKET - cylinder head (10, 12 & 14 hp engines)	1
16	KO 231032	SEAL - breather (14 hp engine)	1

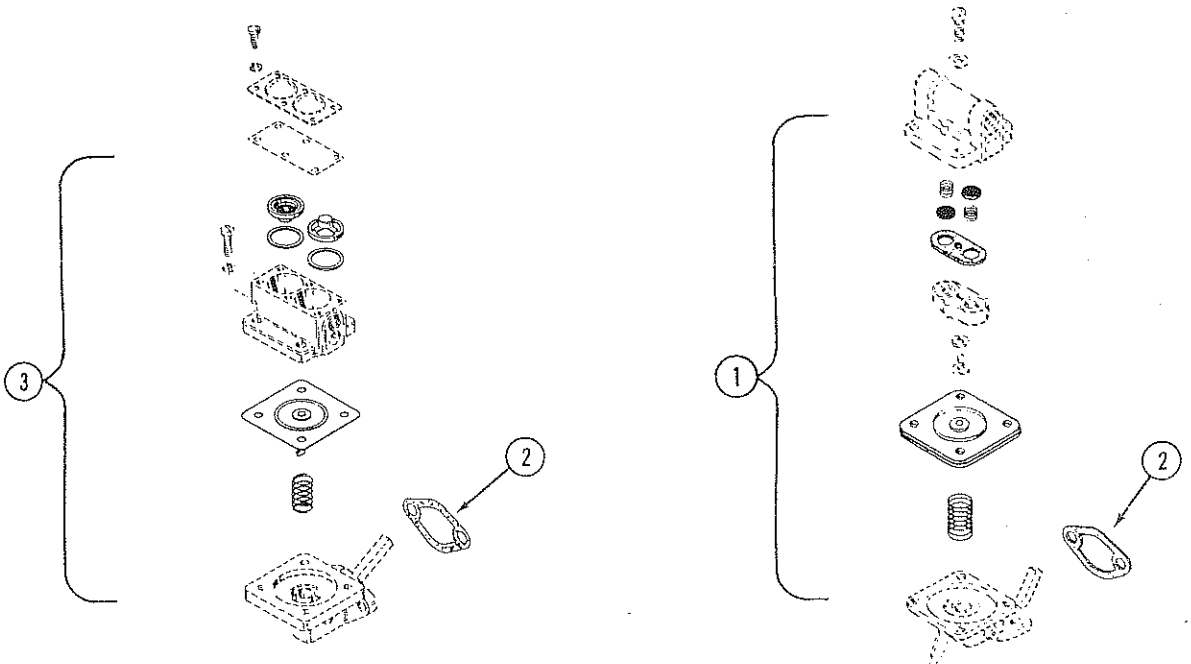
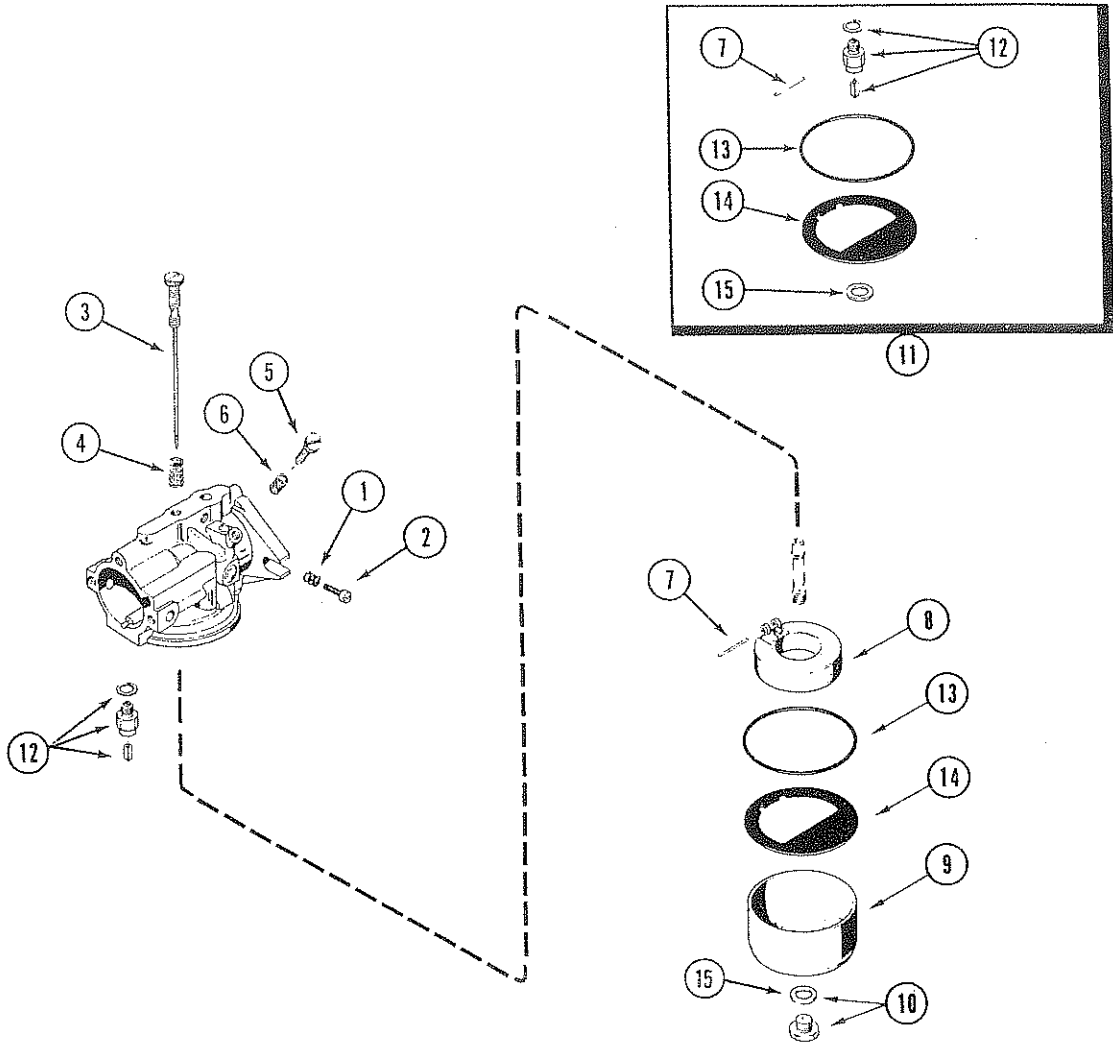


BAFFLES AND SHROUDS

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 18296	DEFLECTOR - engine air	1
2	192- 19	LOCKWASHER - 1/4" zinc plated	2
3	113- 6	BOLT - 1/4" x 1/2" NC hex, zinc plated	2
4	KO 235955	BAFFLE - cylinder head	1
5	KO 235368	BAFFLE - carburetor side air	1
6	KO 235207	PULLEY - starter	1
7	C 22902	BELT - drive, starter-generator	1
8	195- 515	WASHER - 1/4" zinc plated	4
9	192- 19	LOCKWASHER - 1/4" zinc plated	4
10	175- 436	SCREW - 1/4" x 5/8" NC truss head Phillips, zinc plated	4
11	C 24729	HOUSING - blower	1
12	113- 2	BOLT - 1/4" x 3/4" NC hex, zinc plated	4
13	192- 19	LOCKWASHER - 1/4" zinc plated	4
14	KO 235054	BAFFLE - cylinder	1
15	C 12603	CHANNEL - deflector	1

FUEL SYSTEM

1	C 24408	CARBURETOR ASSEMBLY - 444	1
		(Repairs page 27)	
1	A 72073	CARBURETOR ASSEMBLY - 220 & 222 (Repairs page 27)	1
2	C 23860	GASKET - carburetor flange	1
3	C 10678	ELBOW - fuel pump and carburetor	3
4	214- 251	CLAMP - hose	4
5	C 15007	HOSE - carburetor 5-1/4"	1
6	192- 20	LOCKWASHER 5/16"	2
7	113- 103	BOLT - 5/16" x 1" NC hex	2
8	C 24851	PUMP - fuel, 10 h.p. models (plastic, no repairs)	1
9	71- 410	SCREW - 1/4" x 5/8" NC fillister head	2
10	193- 60	LOCKWASHER - 1/4"	2
11	KO 275341	GASKET - air horn	1
12	NSS	PUMP - fuel, 12 and 14 h.p. models (use ref. 8)	1
13	C 22738	GASKET - fuel pump mounting, all models	1
14	C 10657	ELBOW ASSEMBLY - fuel tank	1
15	A 62079	CLIP - fuel line	2
16	C 17574	HOSE - fuel line 43"	1
17	C 16363	TANK - fuel	1
18	C 11529	CAP - fuel tank (Includes insert)	1
19	C 11545	INSERT - fuel cap	1
20	C 16796	STRAP - fuel tank mounting	2
21	173- 215	SCREW - 1/4 x 1/2" NC round head, machine, zinc plated	2
22	129- 504	NUT - square 1/4" NC	2
23	C 14690	CUSHION - fuel tank	2



CASE 220, 222, 442 AND 444 COMPACT TRACTORS 27

CARBURETOR

A72073 used on 220, 222 and 442

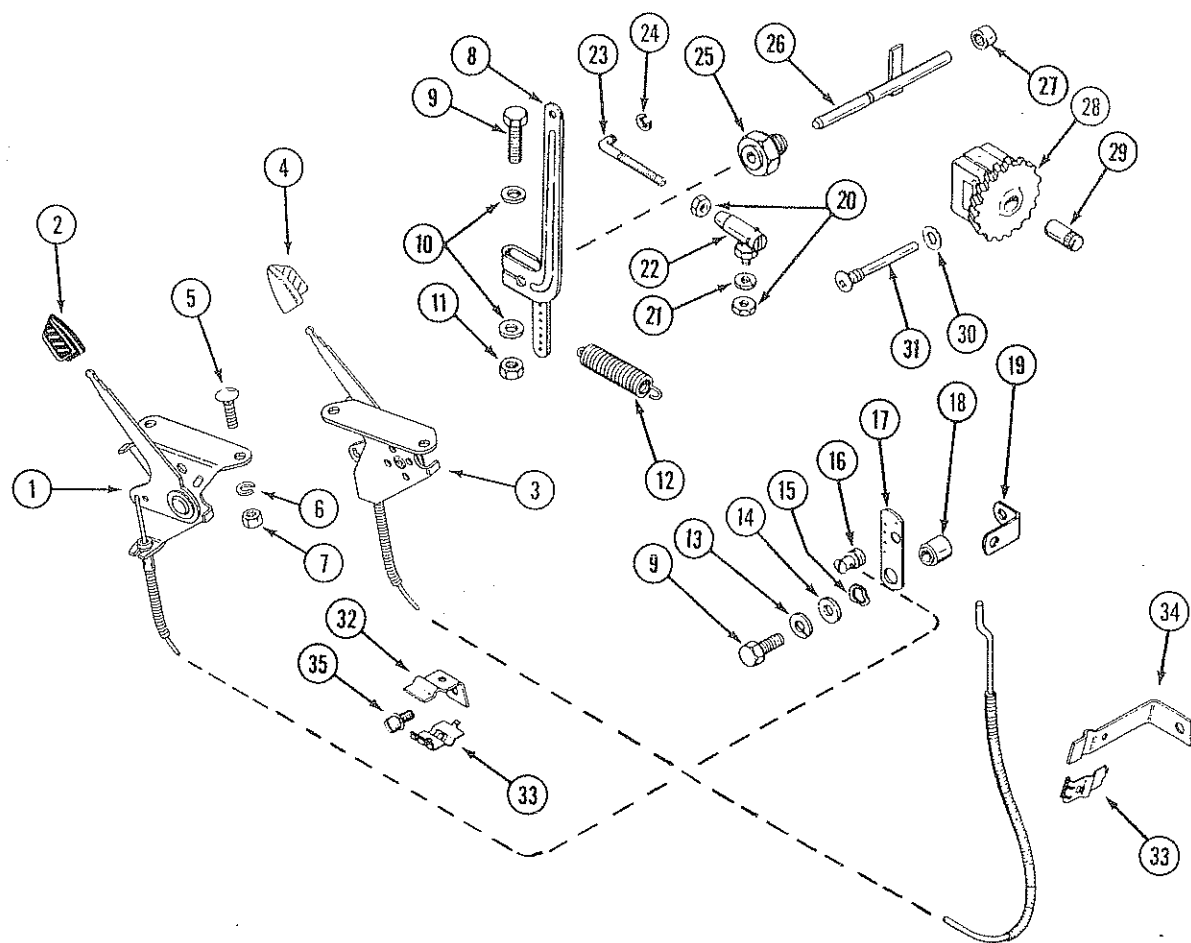
KOA236636 and KOA237490 used on 444 (service with C24408)

REF.	PART NO.	DESCRIPTION	REQ'D
	A 72073	CARBURETOR ASSEMBLY - 220, 222 & 442	1
	NSS	CARBURETOR ASSEMBLY - 444 (Used prior to S/N 9652117) . . .	1
	NSS	CARBURETOR ASSEMBLY - 444 (Used S/N 9652117 and after) . .	1
1	KO 200380	SPRING - tension, idle adjust	1
2	A 72092	SCREW - idle adjust	1
3	A 72077	NEEDLE - main fuel adjust, 220, 222 & 442	1
3	KO 275373	NEEDLE - main fuel adjust, 444 (used prior to S/N 9652117) .	1
3	KO 237489	NEEDLE - main fuel adjust, 444 (used S/N 9652117 and after). 1	
4	KO 200383	SPRING - main fuel adjust	1
5	A 72099	NEEDLE - idle adjust (220, 222 & 442)	1
5	KO 275231	NEEDLE - idle adjust (444)	1
6	KO 200380	SPRING - idle fuel adjust	1
7	A 72079	PIN - float	1
8	A 72078	FLOAT - carburetor	1
9	A 72080	BOWL - carburetor	1
10	A 72084	SCREW AND GASKET ASSEMBLY - carburetor bowl	1
11	A 72103	KIT - carburetor repair	1
12	NSS	INLET NEEDLE AND SEAT ASSEMBLY	1
13	NSS	GASKET - bowl ring	1
14	NSS	GASKET - bowl baffle	1
15	A 72083	GASKET - bowl screw	1

FUEL PUMP

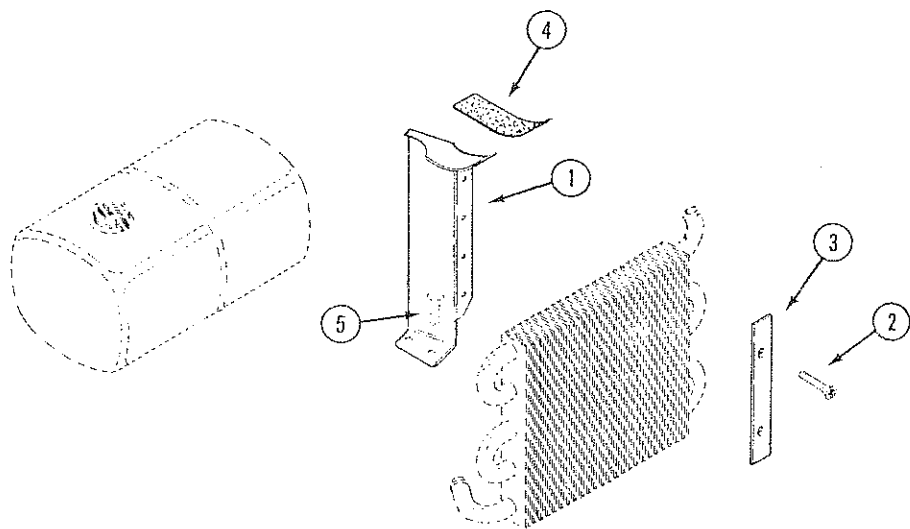
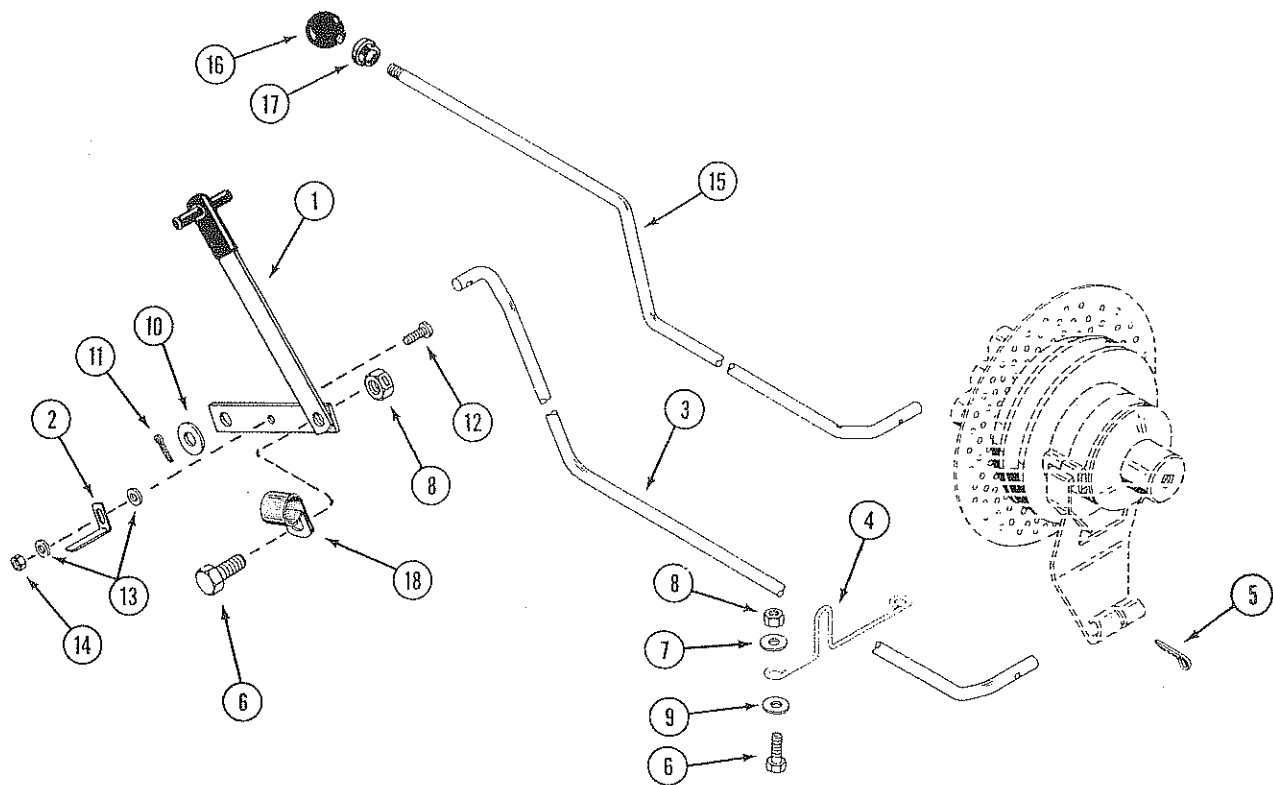
(NOT AVAILABLE FOR PLASTIC PUMP)

1	KO 230675	KIT - fuel pump for KOA235845 pump (220)	1
	NSS	SPRING - fuel pump valve	2
	NSS	VALVE	2
	NSS	GASKET - valve	1
	NSS	DIAPHRAGM ASSEMBLY	1
	NSS	SPRING - diaphragm	1
2	C 24887	GASKET - fuel pump mounting	1
3	KO 236387	KIT - fuel pump for C22988 pump (222, 442 and 444)	1
	NSS	VALVE ASSEMBLY	2
	NSS	GASKET - valve	2
	NSS	DIAPHRAGM ASSEMBLY	1
	NSS	SPRING - diaphragm	1
	NSS	GASKET - valve	1
2	C 24887	GASKET - fuel pump mounting	1



CHOKE, THROTTLE AND GOVERNOR

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 16449	CONTROL - throttle	1
2	C 12224	HANDLE - throttle control, black	1
3	C 16448	CONTROL - choke	1
4	C 14506	HANDLE - choke control, white	1
5	111- 1	BOLT - 10-24 x 1/2" round head, square neck	2
6	192- 18	LOCKWASHER - #10 Std. plated	2
7	129- 17	NUT - #10-24 plated	2
8	KOA237653	LEVER - governor	1
9	15- 420	BOLT - 1/4" x 1-1/4" NC hex	2
10	195- 515	WASHER - 1/4" plated	2
11	129- 101	NUT - 1/4" hex	1
12	KO 235496	SPRING - governor	1
13	192- 19	LOCKWASHER - 1/4" plated	1
14	C 18098	WASHER - thrust	1
15	KO 275690	WASHER - wavy	1
16	H 43034	CLAMP - swivel, wire	1
17	KO 235086	LEVER - speed control	1
18	KO 235085	SPACER - speed control bracket	1
19	KO 235084	BRACKET - high speed stop	1
20	129- 37	NUT - #10-32 hex	2
21	192- 18	LOCKWASHER - 3/16" plated	1
22	A 10326	JOINT - ball	1
23	KO 235277	ROD - throttle	1
24	49485	RING - retaining, throttle rod	1
25	KO 235476	BUSHING - governor cross shaft	1
26	KOA235256-S	SHAFT ASSEMBLY - governor cross	1
27	V 34418	BEARING - needle governor shaft	1
28	KOA 235743-S	GEAR ASSEMBLY - governor	1
29	KO 235125-S	SHAFT - governor stub	1
30	C 18099	WASHER - governor stop pin	1
31	KO 231355	PIN - governor stop	1
32	KOA237559	BRACKET - throttle cable	1
33	KO 235603	CLIP - bracket	2
34	KOA236919	BRACKET - choke cable	1
35	169- 95	SCREW - #10 x 3/8" NC fillister head	1

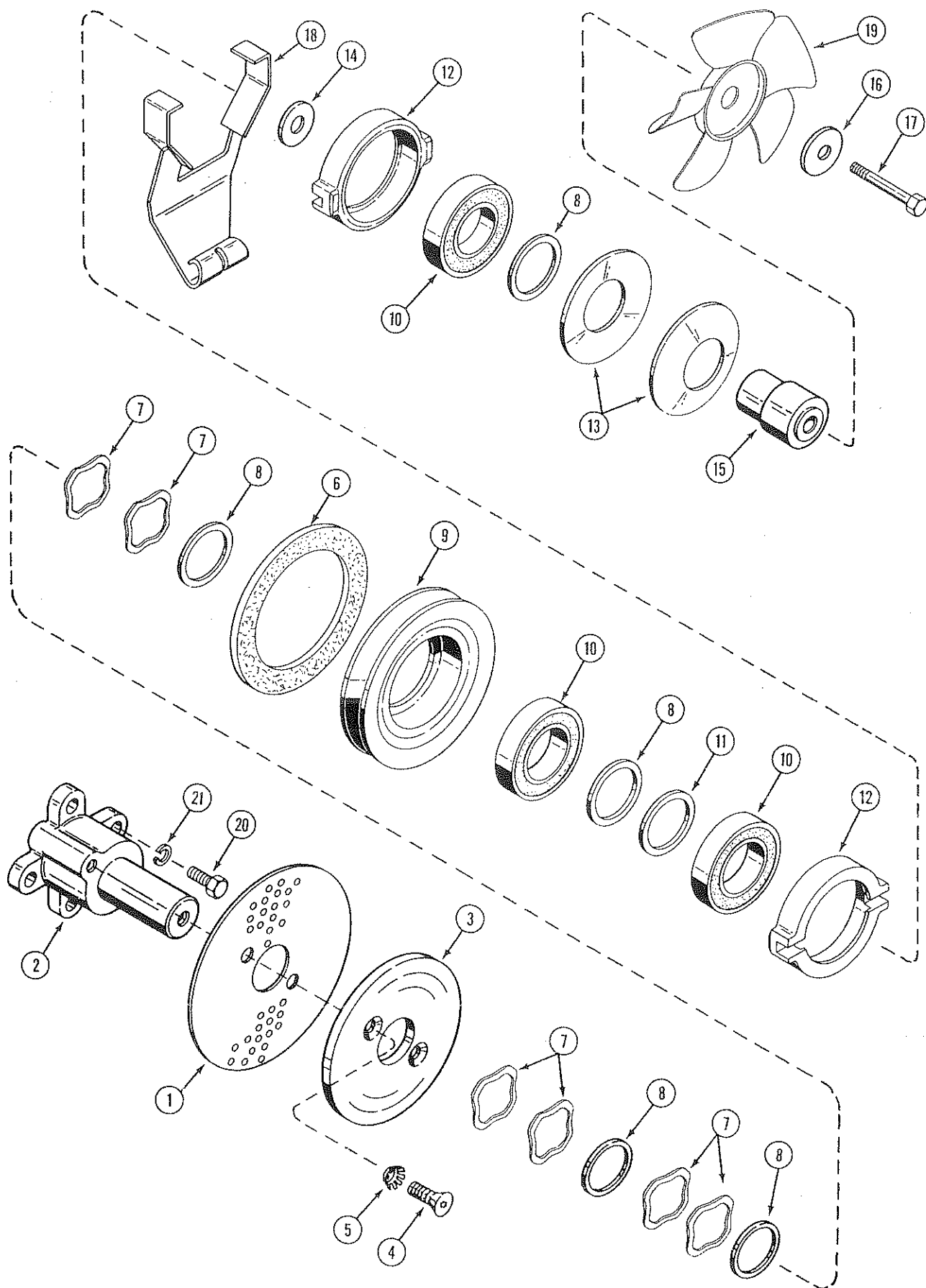


PULLEY CLUTCH & LINKAGE

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 18052	LEVER - clutch, 222 (used S/N 9649590 and after)	1
1	C 18052	LEVER - clutch, 442 (used S/N 9650949 and after)	1
1	C 18052	LEVER - clutch, 444 (used S/N 9653291 and after)	1
1	C 18052	LEVER - clutch, 220 (used S/N 9647856 and after)	1
2	C 18115	STRIP - switch, PTO safety	2
3	C 18053	ROD - clutch, 220 (used S/N 9647856 and after)	1
3	C 18053	ROD - clutch, 222 (used S/N 9649590 and after)	1
3	C 18053	ROD - clutch, 442 (used S/N 9650949 and after)	1
3	C 18053	ROD - clutch, 444 (used S/N 9653291 and after)	1
4	C 16682	RETAINER - clutch rod	1
5	132- 48	PIN - cotter 1/8" x 1"	1
6	113- 207	BOLT - 3/8" x 1" NC hex	3
7	195- 126	WASHER - spacer (used on models without hydraulic lift)	2
8	131- 178	LOCKNUT - 3/8" NC hex	3
9	195- 104	WASHER - 3/8"	2
10	195- 525	WASHER - 3/8"	1
11	132- 46	PIN - cotter 1/8" x 3/4"	1
12	C 18204	SCREW - insulating #10 x 5/8" NF binder head	2
13	C 15703	WASHER - insulating 3/16"	4
14	C 15704	NUT - insulating #10 NF	2
15	C 14224	ROD - clutch, 220 (used prior to S/N 9647856)	1
15	C 14224	ROD - clutch, 222 (used prior to S/N 9649590)	1
15	C 14224	ROD - clutch, 442 (used prior to S/N 9650949)	1
15	C 14224	ROD - clutch, 444 (used prior to S/N 9653291)	1
16	C 10487	KNOB - (for C14224 clutch rod)	1
17	353- 441	BUSHING - (for C14224 clutch rod)	1
18	49885	CLAMP - choke and throttle cable	1

HYDRAULIC RESERVOIR MOUNTING

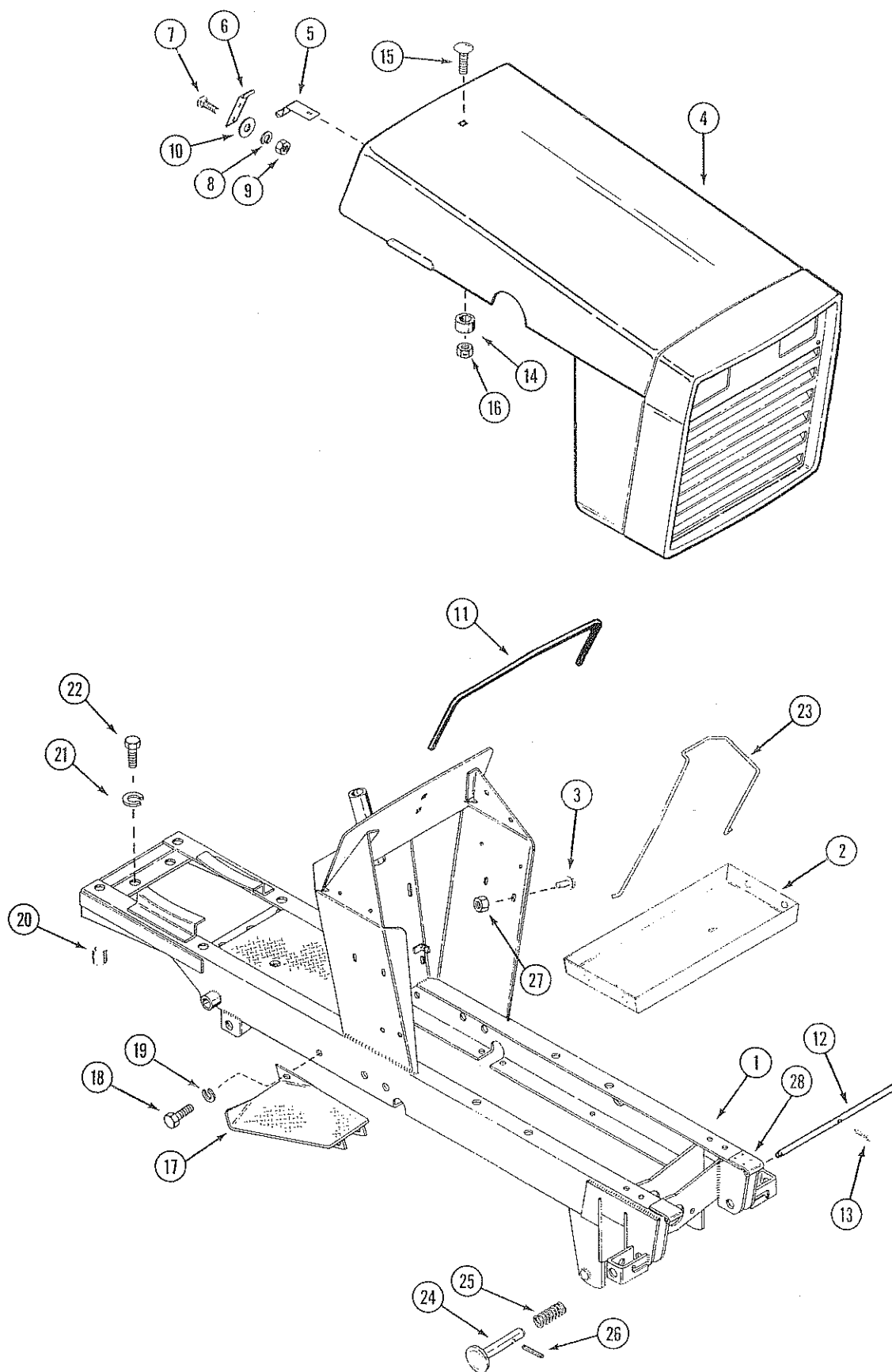
1	C 14240	SUPPORT - reservoir mounting R.H.	1
1	C 14241	SUPPORT - reservoir mounting L.H.	1
2	187- 1251	SCREW - 1/4 x 1-1/4" NC flat head Phillips	4
3	C 14246	BRACKET - heat exchanger mounting	2
4	C 14690	CUSHION - reservoir	2
5	113- 118	BOLT - 5/16 x 5/8" NC hex	4



CLUTCH ASSEMBLY (PTO)

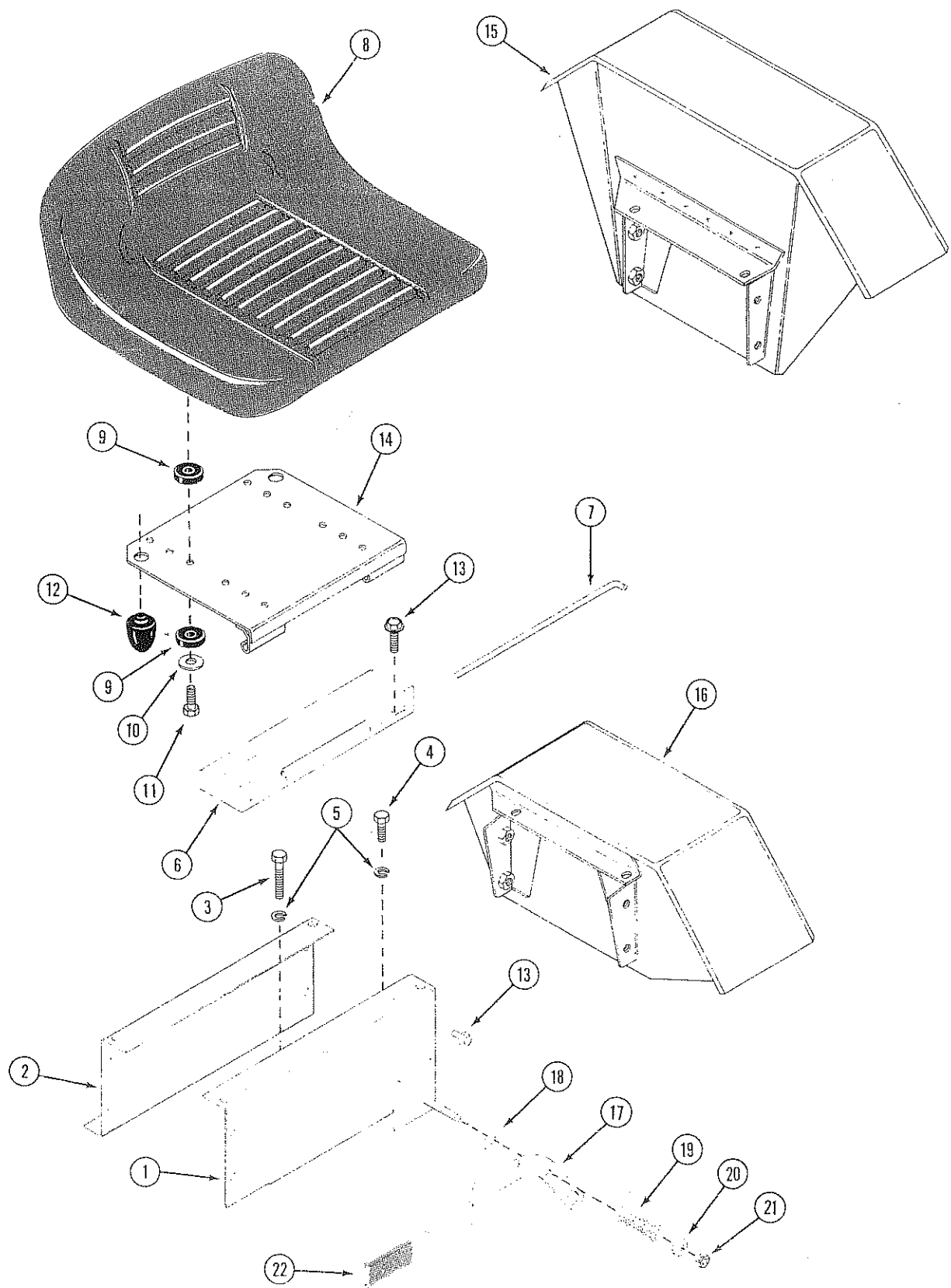
REF.	PART NO.	DESCRIPTION	REQ'D
	C 17302 *	CLUTCH ASSEMBLY - less screen, 220 (used prior to S/N 9648090)	1
	C 17302 *	CLUTCH ASSEMBLY - less screen, 222 (used prior to S/N 9649791)	1
	C 17302 *	CLUTCH ASSEMBLY - less screen, 442 (used prior to S/N 9651073)	1
	C 17302 *	CLUTCH ASSEMBLY - less screen, 444 (used prior to S/N 9653691)	1
	C 18241 *	CLUTCH ASSEMBLY - less screen, 220 (used S/N 9648090 and after)	1
	C 18241 *	CLUTCH ASSEMBLY - less screen, 222 (used S/N 9649791 and after)	1
	C 18241 *	CLUTCH ASSEMBLY - less screen, 442 (used S/N 9651073 and after)	1
	C 18241 *	CLUTCH ASSEMBLY - less screen, 444 (used S/N 9653691 and after)	1
1	C 15721	SCREEN - grass	1
2	NSS	HUB - clutch (used with C17302 clutch) order item 22	1
2	NSS	HUB - clutch (used with C18241 clutch) order item 22	1
3	C 15718	PLATE - clutch	1
4	164- 40	BOLT - 5/16" x 3/4" NC flat head socket	2
5	193- 76	LOCKWASHER - 5/16" countersunk external tooth	2
6	C 23740	DISC - friction	1
7	C 15515	WASHER - spring	6
8	C 15557	WASHER - spacer .050"	UAR
9	C 22671	PULLEY AND DISC ASSEMBLY - clutch	1
10	C 23245	BEARING - cam and pulley	3
11	C 15556	WASHER - spacer .010"	UAR
11	C 21596	WASHER - spacer .005"	UAR
12	NSS	CAM - clutch(service with (2)C23033 cams and (1)C23506 arm)	2
13	C 16786	SPRING - clutch load	2
14	C 15743	WASHER - spacer (used with C17302 clutch)	1
14	C 18243	WASHER - spacer (used with C18241 clutch)	1
15	C 16464	SPACER - hub (used with C17302 clutch)	1
15	C 18244	SPACER - hub (used with C18241 clutch)	1
16	195- 2036	WASHER - fan 13/32" (used with C17302 clutch)	1
16	O 2815N	WASHER - fan 17/32" (used with C18241 clutch)	1
17	C 15744	BOLT - 3/8" x 3-1/8" NC hex L.H. threads (used with C17302 clutch)	1
17	C 18242	BOLT - 1/2" x 3-1/8" NC hex L.H. threads (used with C18241 clutch)	1
18	C 23506	ARM - engaging	1
19	C 16616	FAN - cooling	1
20	113- 207	BOLT - 3/8" x 1" NC hex ZP	4
21	192- 21	LOCKWASHER - 3/8"	4
22	C 19472	KIT - stub shaft, clutch (includes items 2, 8, 11, 14, 15, 16, 17 & 19)	1

*Order C23506 and C21774 for clutch replacement.



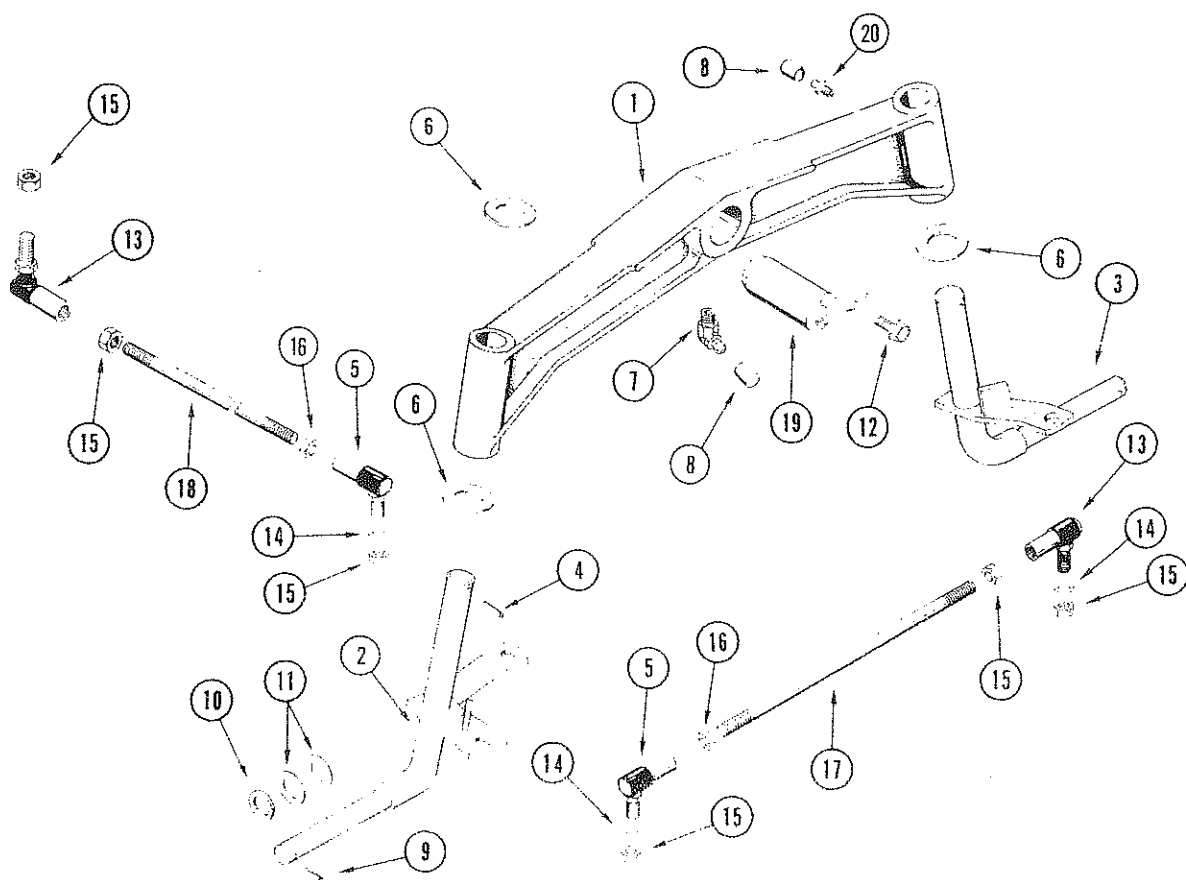
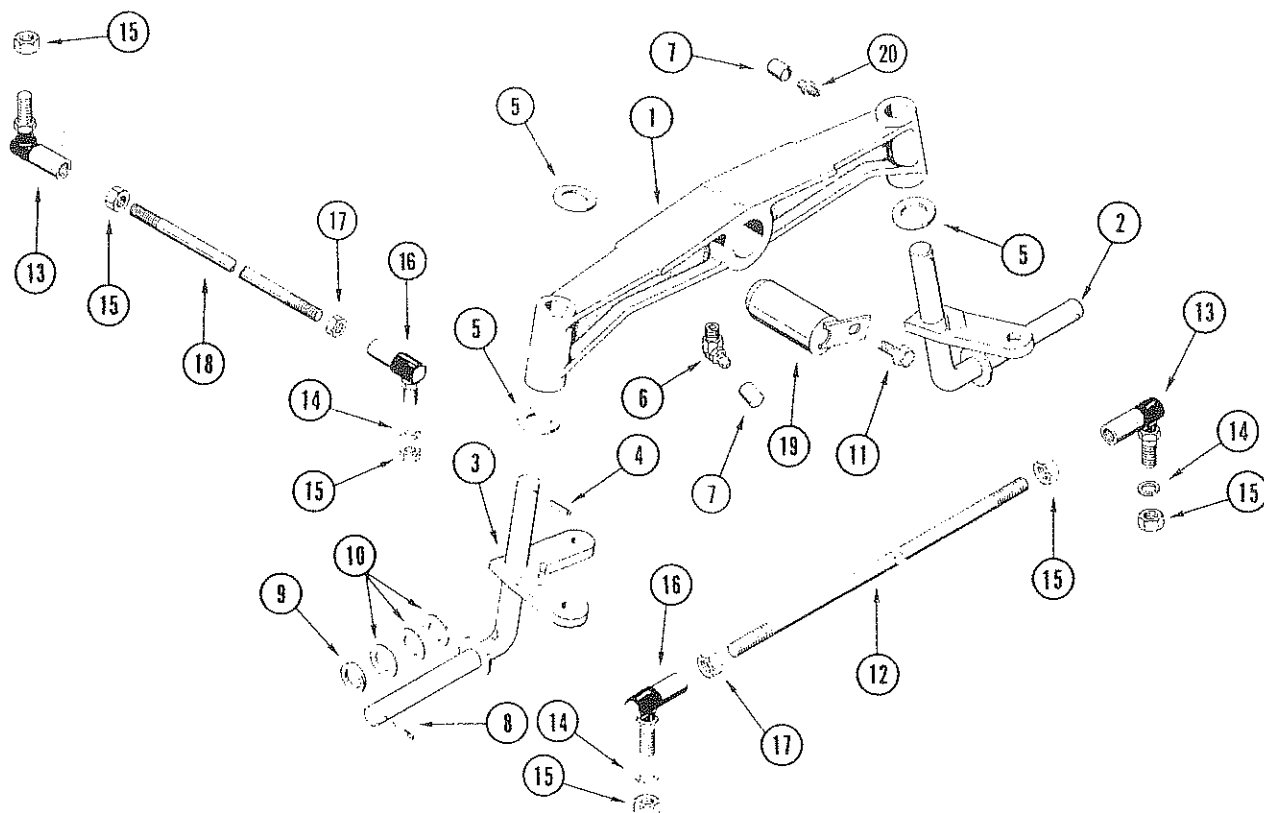
HOOD, FRAME AND GRILLE

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 16195	FRAME - main, 220 (used prior to S/N 9647856) -	1
1	C 16195	FRAME - main, 222 (used prior to S/N 9649590) -	1
1	C 16196	FRAME - main, 442 (used prior to S/N 9650949) -	1
1	C 16196	FRAME - main, 444 (used prior to S/N 9653291) -	1
1	C 18059	FRAME - main, 220 (used S/N 9647856 and after) -	1
1	C 18059	FRAME - main, 222 (used S/N 9649590 and after) -	1
1	C 18060	FRAME - main, 442 (used S/N 9650949 and after) -	1
	C 18060	FRAME - main, 444 (used S/N 9653291 and after) -	1
2	C 16170	TRAY - battery -	1
3	121- 106	SCREW - 5/16" x 1/2" whizlock -	4
4	C 16364	HOOD AND GRILLE ASSEMBLY -	1
5	C 15183	SPRING - hood latch -	1
6	C 15184	LATCH - hood -	1
7	111- 1	BOLT - #10 x 1/2" NC round head, square neck -	2
8	192- 18	LOCKWASHER - #10 -	2
9	129- 17	NUT - #10 NC hex -	2
10	195- 512	WASHER - 7/32" zinc plated -	2
11	C 18153	CHANNEL - instrument panel liner -	1
12	C 16362	ROD - hood hinge -	1
13	132- 46	PIN - cotter 1/8" x 3/4" -	1
14	C 14500	SPACER - hood -	1
15	111- 109	BOLT - 1/4" x 1-1/4" NC round head, square neck -	1
16	131- 71	LOCKNUT - 1/4" NC hex -	1
17	C 18890	PAD - foot L.H. -	1
17	C 18150	PAD - foot R.H. -	1
18	113- 113	BOLT - 5/16" x 7/8" NC hex -	2
19	192- 20	LOCKWASHER - 5/16" -	2
20	C 14729	SPACER - rear frame (442 & 444) -	2
20	C 14730	SPACER - rear frame (220 & 222) -	2
21	192- 23	LOCKWASHER - 1/2" -	4
22	113- 424	BOLT - 1/2" x 1" NC hex -	4
23	C 16239	STRAP - battery hold down -	1
24	C 16373	PIN - latch -	2
25	C 24137	SPRING - latch -	2
26	138- 319	PIN - roll 3/16" x 1-1/4" -	2
27	129- 102	NUT - 5/16" NC hex -	4
28	C 16351	HINGE - frame -	2



SEAT, FENDERS AND TOOL TRAY

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 16408	SUPPORT - seat, front	1
2	C 16404	SUPPORT - seat, rear	1
3	113- 441	BOLT - 1/2 x 2-1/4" NC hex (442 & 444)	2
3	113- 427	BOLT - 1/2 x 3-1/4" NC hex (220 & 222)	2
4	113- 424	BOLT - 1/2 x 1" NC hex	2
5	192- 23	LOCKWASHER - 1/2"	4
6	C 16430	TRAY - tool	1
7	C 16429	PIN - seat hinge	1
8	C 24318	SEAT - 220 & 222	1
8	C 24319	SEAT - 442 & 444	1
9	C 15410	CUSHION - rubber	8
10	195- 2021	WASHER - 5/16 x 1-1/4" OD, zinc plated	4
11	26- 524	BOLT - 5/16 x 1-1/2"	4
12	C 14534	BUMPER - seat	2
13	121- 106	BOLT - 5/16 x 1/2" flange whizlock	14
14	C 17152	HINGE ASSEMBLY - seat	1
15	C 16444	FENDER - L. H. (442 & 444)	1
15	C 16445	FENDER - R. H. (442 & 444)	1
16	C 16446	FENDER - L. H. (220 & 222)	1
16	C 16447	FENDER - R. H. (220 & 222)	1
17	C 16393	LEVER - shift	1
18	195- 2029	WASHER - 7/16 x 1-1/4" OD	1
19	C 17216	SPRING - shift lever	1
20	C 17066	WASHER - cupped	1
21	131- 178	NUT - lock 3/8" NC hex	1
22	C 14728	GRIP - shift lever	1

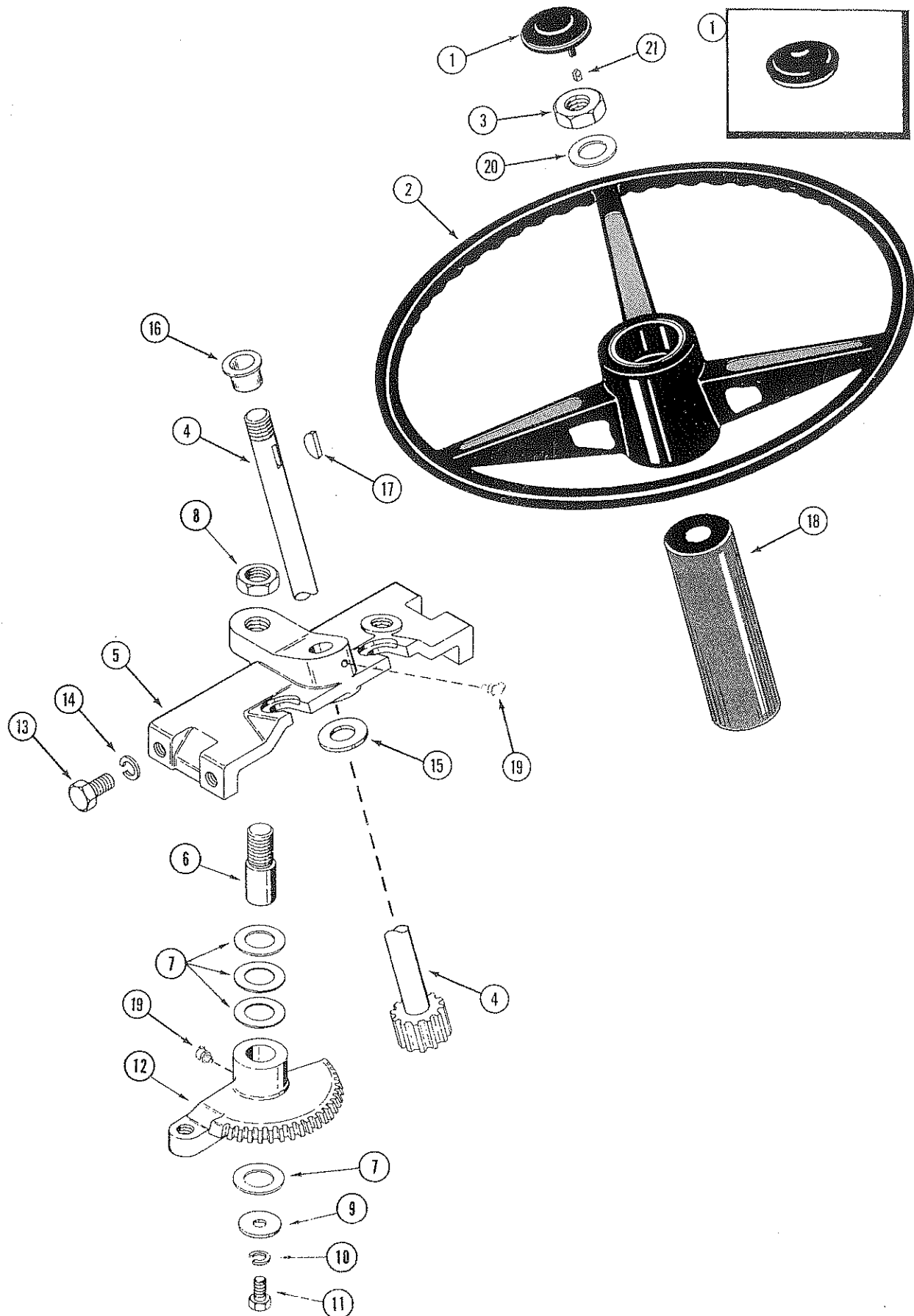


220 AND 222 FRONT AXLE

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 18812	AXLE - front	1
2	C 14128	SPINDLE - left hand	1
3	C 14131	SPINDLE - right hand	1
4	138- 99	PIN - roll	2
5	C 11906	WASHER - thrust	4
6	219- 404	FITTING - lube	3
7	C 13106	COVER - lube fitting	3
8	132- 77	PIN - cotter 5/32 x 1-1/4"	2
9	C 12975	WASHER - wheel spindle	2
10	A 30881	WASHER - wheel spacer	6
11	187- 1046	BOLT - 3/8" NC indented hex head	1
12	C 14334	TIE ROD	1
13	C 12102	BALL JOINT - 1/2" R. H. thread	2
14	192- 23	LOCKWASHER - 1/2" zinc plated	3
15	129- 125	NUT - 1/2" NF hex R. H. thread	6
16	C 13605	BALL JOINT - 1/2" L. H. thread	2
17	129- 325	NUT - 1/2" NF hex L. H. thread	2
18	C 16401	ROD - drag link	1
19	NSS	PIN - axle pivot (order C22278 and C22568)	1
20	219- 17	FITTING - lube	2

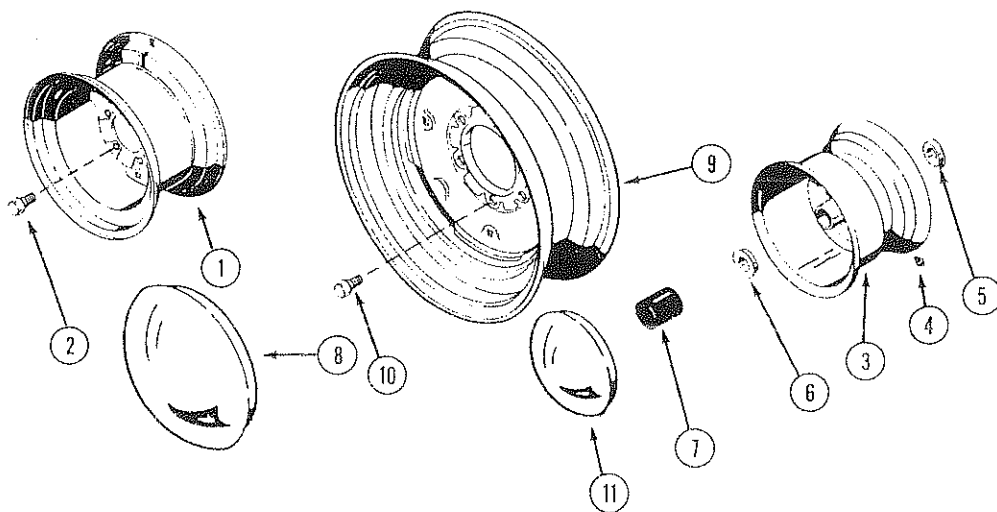
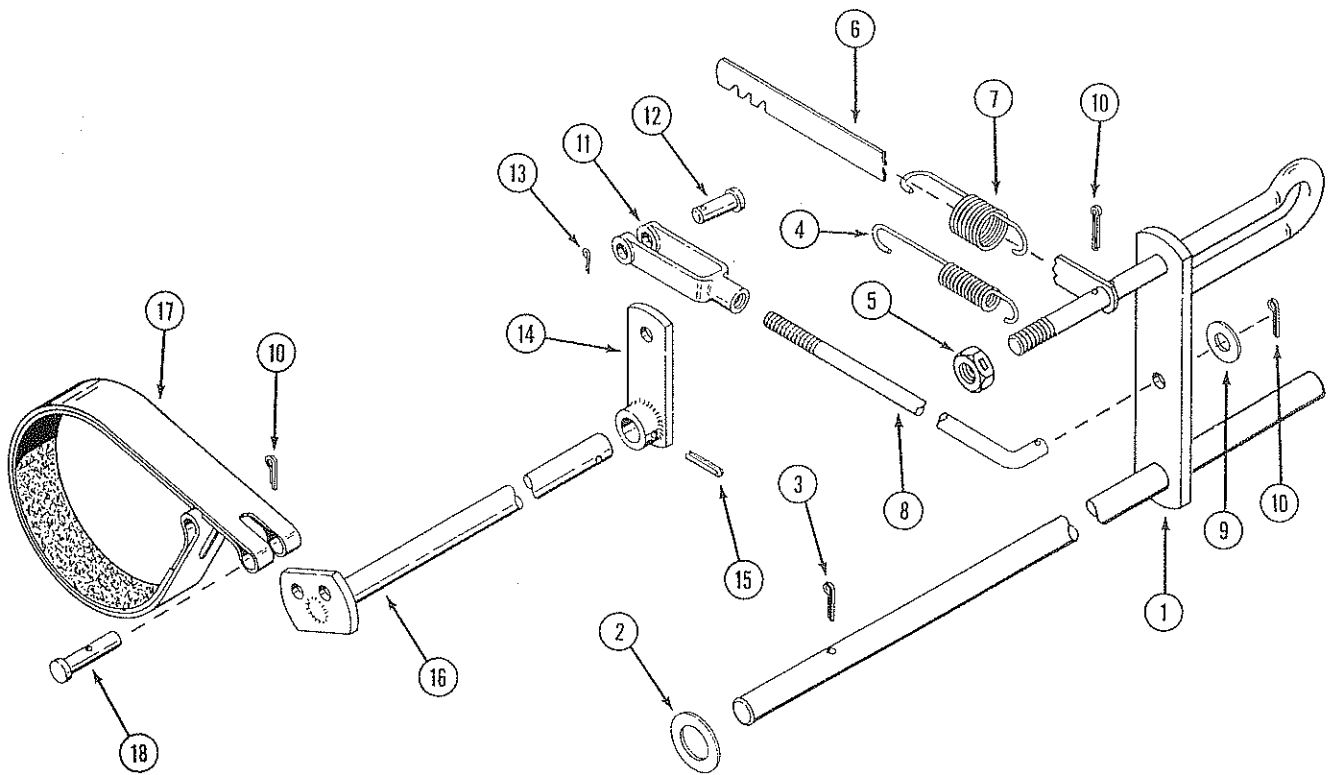
442 AND 444 FRONT AXLE

1	C 18813	AXLE - front	1
2	C 16382	SPINDLE - right hand	1
3	C 16383	SPINDLE - left hand	1
4	138- 99	PIN - roll	2
5	C 13605	BALL JOINT - 1/2" L. H. thread	2
6	C 13716	WASHER - thrust	4
7	219- 404	FITTING - lube	3
8	C 13106	COVER - lube fitting	3
9	132- 77	PIN - cotter 5/32 x 1-1/4"	2
10	C 12975	WASHER - wheel spindle	2
11	A 30881	WASHER - wheel spacer	4
12	187- 1046	BOLT - 3/8" NC indented hex head	1
13	C 12102	BALL JOINT - 1/2" R. H. thread	2
14	192- 23	LOCKWASHER - 1/2" zinc plated	3
15	129- 125	NUT - 1/2" NF hex R. H. thread	6
16	129- 325	NUT - 1/2" NF hex L. H. thread	2
17	C 16384	TIE ROD	1
18	C 16401	ROD - drag link	1
19	NSS	PIN - axle pivot (order C22278 and C22568).	1
20	219- 17	FITTING - lube	2



STEERING GEAR

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 16945	CAP - steering wheel (also order [2] C18017 clips)	1
2	C 18014	WHEEL - steering, 220 (used prior to S/N 9647434)	1
2	C 18014	WHEEL - steering, 222 (used prior to S/N 9649226)	1
2	C 18014	WHEEL - steering, 442 (used prior to S/N 9650702)	1
2	C 18014	WHEEL - steering, 444 (used prior to S/N 9652579)	1
2	C 18014	WHEEL - steering, 220 (used S/N 9647434 and after)	1
2	C 18014	WHEEL - steering, 222 (used S/N 9649226 and after)	1
2	C 18014	WHEEL - steering, 442 (used S/N 9650702 and after)	1
2	C 18014	WHEEL - steering, 444 (used S/N 9652579 and after)	1
3	131- 356	NUT - lock 5/8"	1
4	C 16200	SHAFT - steering	1
5	C 16644	SUPPORT - steering gear	1
6	C 14200	PIN - pivot	1
7	C 14201	WASHER - shim	4
8	131- 1112	NUT - jam 3/4"	1
9	195- 2021	WASHER	1
10	192- 20	LOCKWASHER - 5/16" zinc plated	1
11	113- 103	BOLT - 5/16" x 7/8" NC hex	1
12	C 14990	GEAR - steering	1
13	113- 206	BOLT - 3/8" x 3/4" NC hex	4
14	192- 21	LOCKWASHER - 3/8"	4
15	195- 2069	WASHER - 5/8" zinc plated	1
16	C 15096	BUSHING - flanged nylon	1
17	126- 16	KEY - Woodruff 3/16" x 3/4"	1
18	C 24098	TUBE - steering	1
19	219- 404	FITTING - lube 45"	2
20	C 12975	WASHER - 5/8"	1
21	C 18017	CLIP - tinnerman (use with C18014 steering wheel)	2

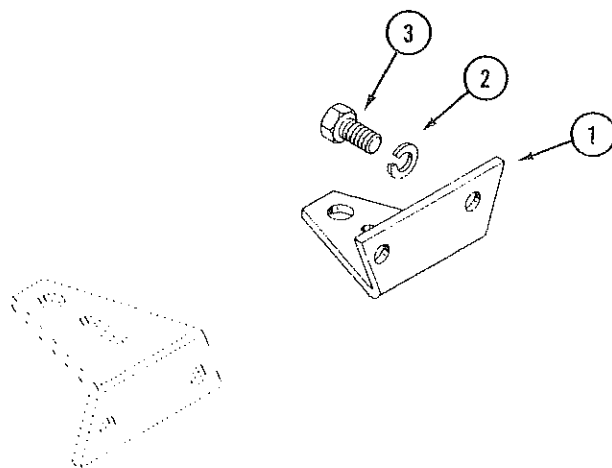
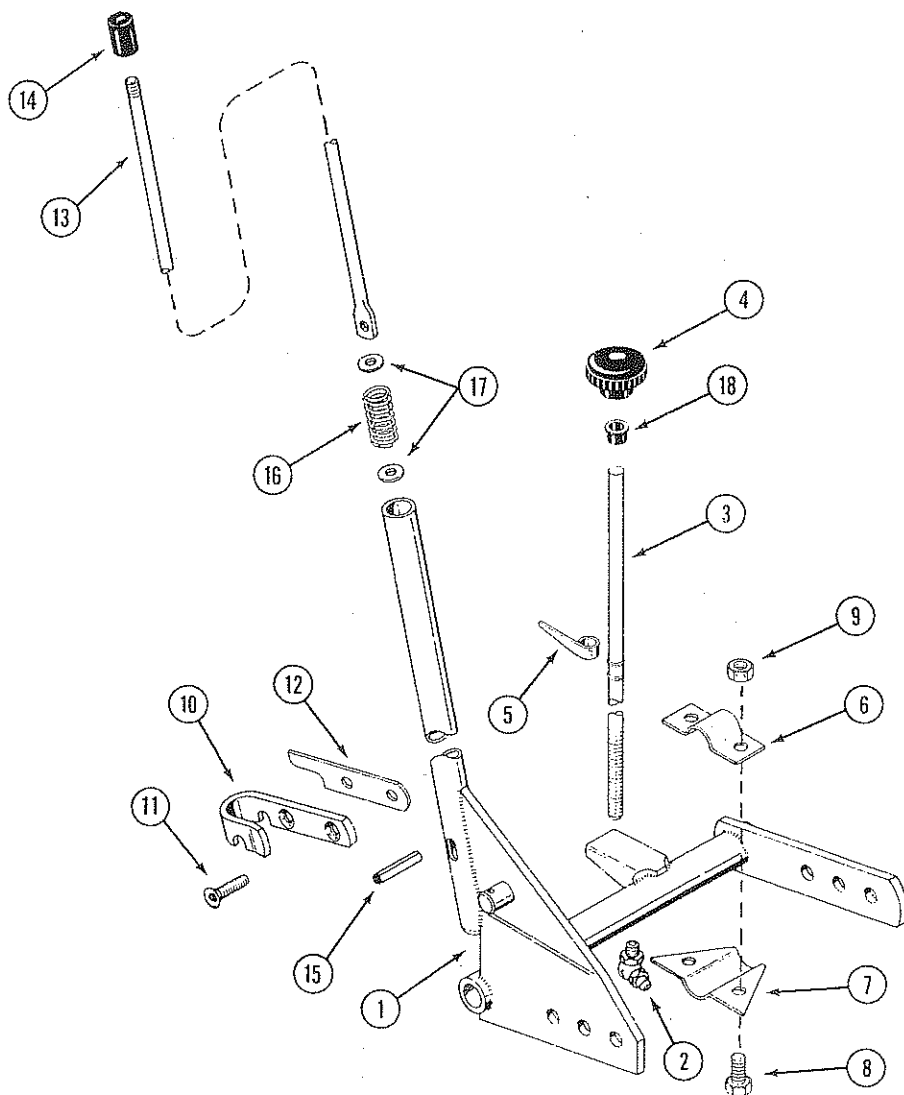


BRAKE ASSEMBLY

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 18152	PEDAL - brake	1
2	C 12975	WASHER - brake shaft	1
3	132- 336	PIN - cotter 1/8 x 1-1/2"	1
4	C 16370	SPRING - pedal return	1
5	131- 164	NUT - lock 1/2" NC hex	2
6	C 18147	LEVER - brake lock	1
7	C 16379	SPRING - brake lock	1
8	C 14946	ROD - brake (220 & 222)	1
8	C 14945	ROD - brake (442 & 444)	1
9	195- 104	WASHER - 7/16"	1
10	132- 310	PIN - cotter 1/8 x 1"	4
11	213- 4	CLEVIS - 3/8"	1
12	141- 4	PIN - clevis	1
13	132- 321	PIN - cotter 3/32 x 1"	1
14	C 13863	ARM - brake	1
15	138- 96	PIN - roll 3/16 x 1"	1
16	C 13866	SHAFT - brake	1
17	C 14187	BAND - brake	1
18	C 13526	PIN - clevis	2

FRONT AND REAR WHEELS

			220	442
			222	444
1	C 24435	WHEEL - rear, 5 bolt	2	
2	C 10314	BOLT - rear wheel	10	
3	C 24433	WHEEL - front (includes bearings)	2	2
4	219- 403	FITTING - lube	2	2
5	C 12110	BEARING - wheel, inner	2	2
6	C 12111	BEARING - wheel, outer	2	2
7	C 12370	CAP - plastic, front	2	2
8	A 70185	CAP - hub, rear (optional)	2	
9	C 24438	WHEEL - rear, 6 bolt		2
10	A 30064	BOLT - rear wheel		12
11	A 70062	CAP - hub front wheel (optional)	2	2



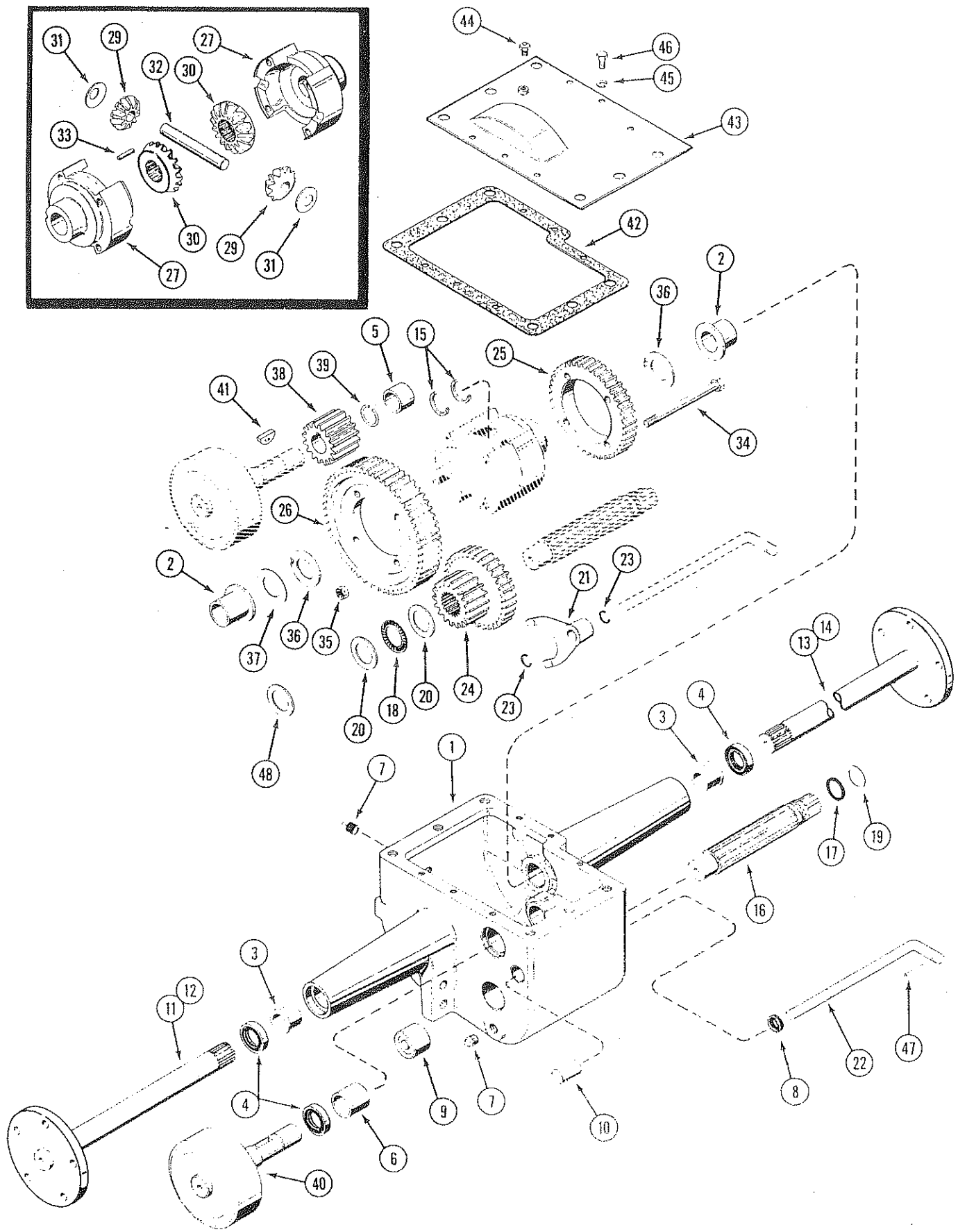
MOUNTING POSITION FOR 220 AND 222 TRACTORS

IMPLEMENT LIFT

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 17319	LEVER ASSEMBLY - implement lift	1
2	219- 404	FITTING - lube 45°	1
3	C 16741	ROD - height adjust	1
4	C 16751	KNOB - height adjust	1
5	C 16750	ARM - indicator	1
6	C 17249	BRACKET - mounting top	1
7	C 17250	BRACKET - mounting bottom	1
8	113- 221	BOLT - 3/8 x 7/8" NC hex	4
9	131- 178	NUT - lock 3/8"	4
10	C 17174	LIFT - latch	1
11	164- 42	SCREW - 5/16 x 1-1/4" flat head socket	2
12	C 17281	SPACER - latch	4
13	C 17067	ROD - lift lever push	1
14	C 14525	BUTTON - thumb	1
15	138- 2054	PIN - spirol 5/16 x 1-3/4"	1
16	C 15564	SPRING - lift lever	1
17	195- 521	WASHER - 3/8 x 11/16" OD.	2
18	C 18144	BUSHING	1

DRAWBAR AND TOW HITCH

1	C 13360	DRAWBAR	1
2	192- 23	LOCKWASHER - 1/2" zinc plated	2
3	113- 424	BOLT - 1/2 x 1" NC hex zinc plated	2



TRANSMISSION AND FINAL DRIVE

REF.	PART NO.	DESCRIPTION	REF'D
1	NSS	CASE - transmission (order C24843 and C24802)	1
2	C 12713	BEARING - flange	2
3	C 16744*	BEARING - flanged	2
4	D 31945	SEAL - axle	3
5	C 13241	BEARING - sleeve	1
6	C 13385	BEARING - sleeve	1
7	221- 4	PLUG - filler and drain 1/2"	2
8	C 13266	SEAL - shift rod	1
9	C 13211	BEARING - roller, input shaft	1
10	C 12723	CAP - shift rod	1
11	C 16699	SHAFT - axle, short R.H. (220 & 222)	1
12	C 22638	SHAFT - axle, short R.H. (442 & 444)	1
13	C 16700	SHAFT - axle, long L.H. (220 & 222)	1
14	C 22637	SHAFT - axle, long L.H. (442 & 444)	1
15	B 52144	RING - retainer, axle	2
16	C 12554	SHAFT - transmission input (220 & 222) used with C13047 motor, 20 tooth	1
17	C 14199	RING - input shaft seal (220 & 222) used with C13047 motor	1
18	T 36441	BEARING - thrust (220 & 222)	1
19	C 14656	RING - back up (220 & 222) used with C13047 motor	1
20	C 13212	RACE - thrust bearing (220 & 222)	2
21	C 12725	FORK - shift	1
22	C 16339	ROD - gear shift	1
23	C 14168	RING - retaining	2
24	C 14644	GEAR - cluster input (19 tooth spline)	1
24	C 12553	GEAR - cluster input (220 & 222) used with C13047 motor 20 tooth spline	1
25	C 12551	GEAR - high 41 tooth	1
26	C 12552	GEAR - low 55 tooth	1
27	C 16295	KIT - diff. case (includes Ref. 34 and 35)	1
	C 24192	KIT - pinion and side gear	1
29	NSS	GEAR - differential pinion	2
30	NSS	GEAR - differential	2
31	C 12559	WASHER - pinion thrust	2
32	C 12560	PIN - differential cross	1
33	R 17820	PIN - differential cross lock	1
34	28- 680	SCREW - 3/8 x 4-3/4" NC hex cap	4
35	131- 366	NUT - lock 3/8" NC hex	4
36	C 12718	WASHER - differential	2
37	C 14223	WASHER - spacer	UAR
38	C 12965	GEAR - brake idler	1
39	C 14222	RING - retainer, brake idler	1
40	C 13261	BRAKE DRUM	1
41	126- 128	KEY - Woodruff, brake idler	1
42	C 13196	GASKET - transmission cover	1
43	C 13197	COVER - transmission	1
44	A 50096	BREATHER - transmission	1
45	192- 19	LOCKWASHER - 1/4"	6
46	113- 1	BOLT - 1/4 x 1 1/2" NC hex	6
47	138- 319	PIN - roll 3/16 x 1-1/2"	1
48	C 14919	WASHER - special, shim .015" (220 & 222)	UAR

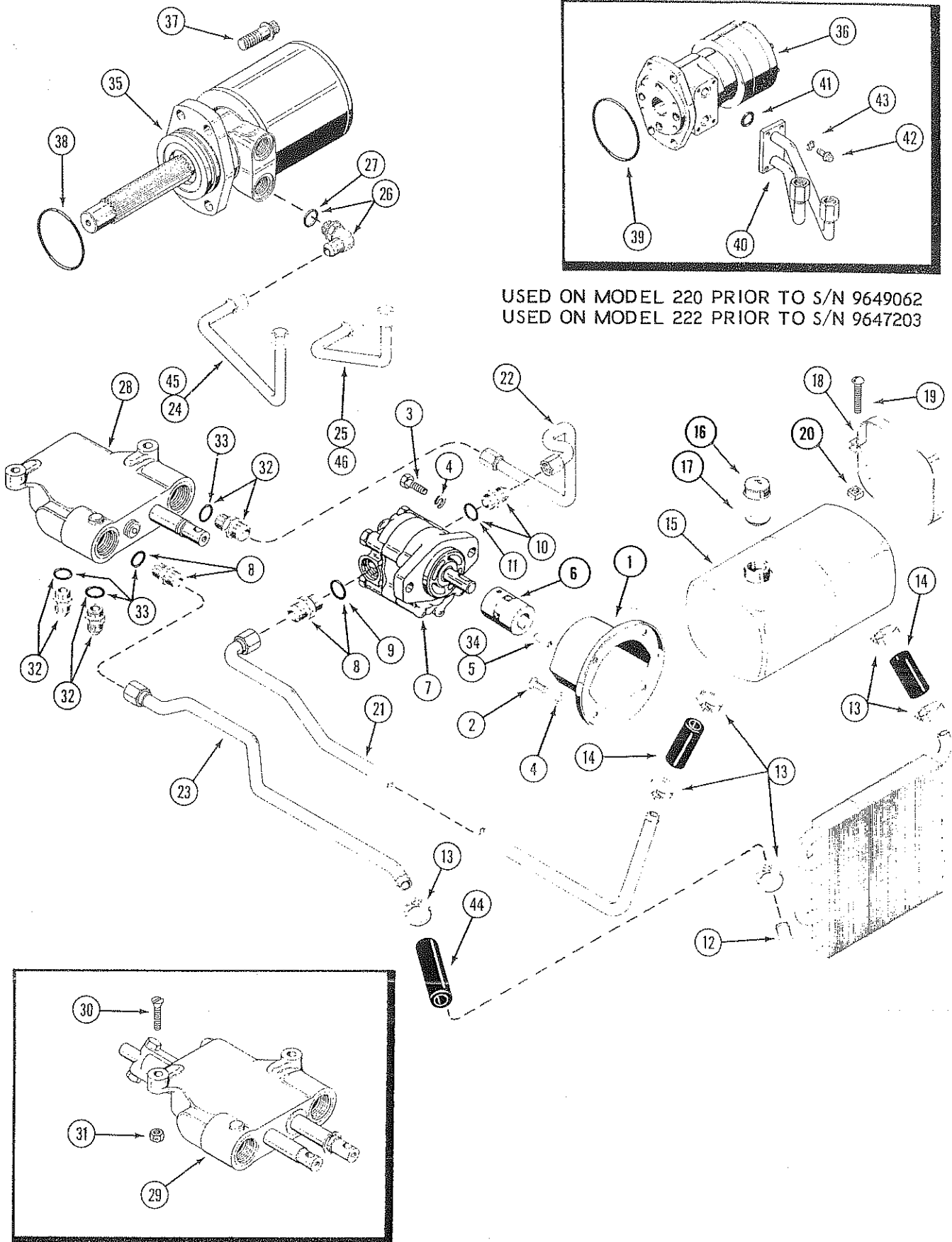
* Use C12540 bearing prior to S/N:

220 - S/N 9647434

222 - S/N 9649226

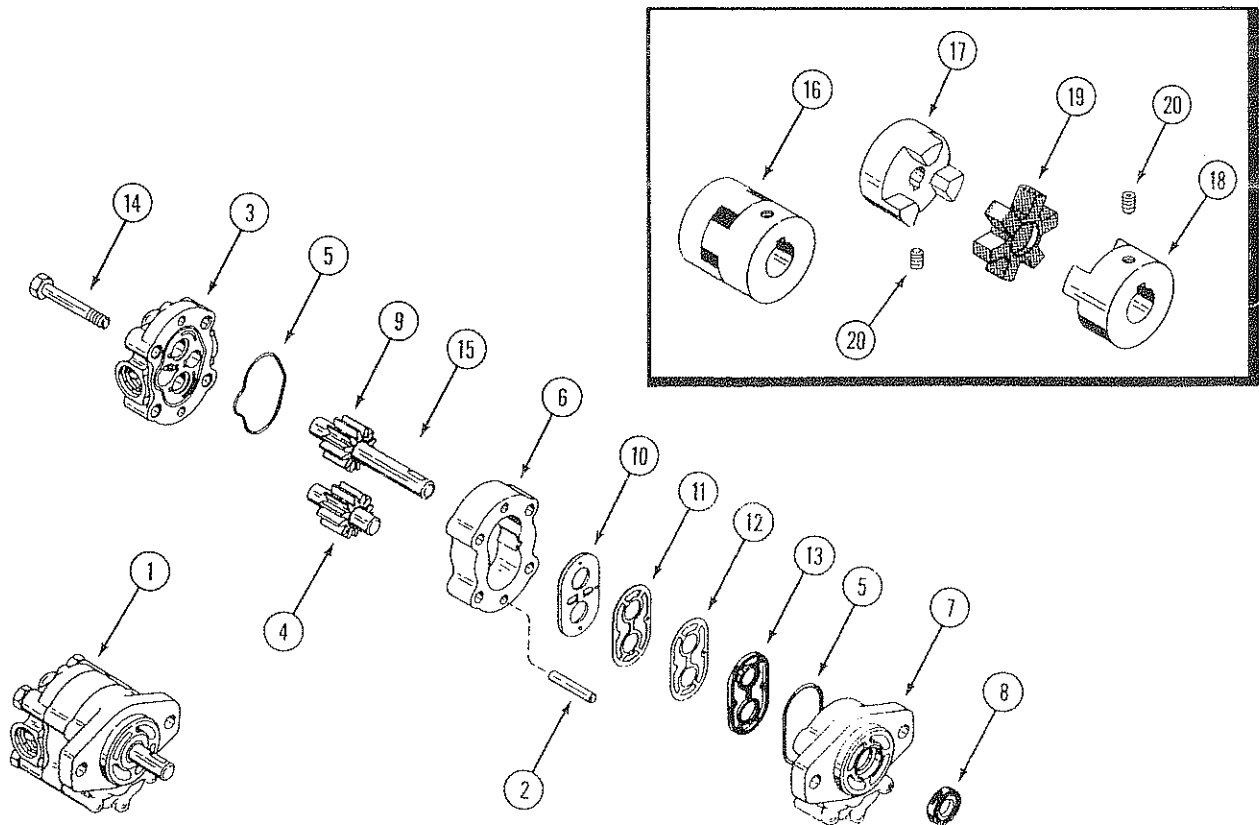
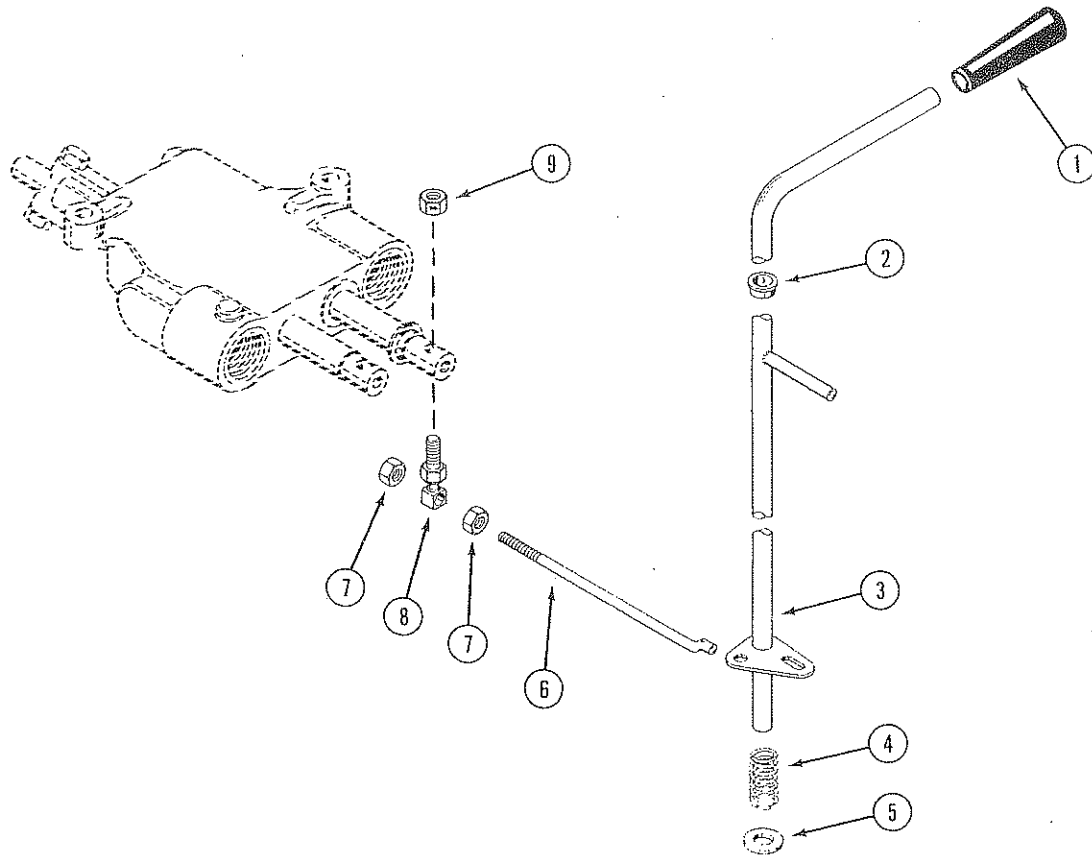
442 - S/N 9650696

444 - S/N 9652551



HYDRAULIC SYSTEM

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 15335	SUPPORT - pump mounting	1
2	113- 207	BOLT - 3/8 x 1" NC hex, support mounting	4
3	114- 200	BOLT - 3/8 x 1" NF hex, pump mounting	2
4	192- 21	LOCKWASHER - 3/8" zinc plated	6
5	W 5063-S	KEY - square 1/4 x 3/4" (220, 222 & 442)	1
6	C 15726	COUPLING - pump (220, 222 & 442) (Repairs page 51)	1
6	C 17298	COUPLING - pump (444) (Repairs page 51)	1
7	C 15481	PUMP - hydraulic (Repairs page 51)	1
8	C 17236	FITTING - hydraulic 3/4T x 7/8" "O" RING, pump and valve	2
9	218- 5007	"O" RING - 5/8" for C17263 fitting	2
10	218- 5062	FITTING - hydraulic 5/8T x 7/8" "O" RING, pump pressure	1
11	218- 5007	"O" RING - 5/8" for C18321 fitting	1
12	C 14195	EXCHANGER - heat	1
13	214- 8	CLAMP - hose	6
14	C 14245	HOSE - rubber 3"	2
15	C 16101	RESERVOIR - hydraulic oil	1
16	C 11529	CAP - reservoir with insert	1
17	C 11545	INSERT - reservoir cap	1
18	A 70100	STRAP - reservoir mounting	2
19	173- 215	SCREW - 1/4 x 1-1/4" round head machine	2
20	129- 504	NUT - square 1/4" NC zinc plated	2
21	C 16689	TUBE - hydraulic, pump to tank	1
22	C 16686	TUBE - hydraulic, pump to valve	1
23	C 16690	TUBE - valve to heat exchanger	1
24	C 16687	TUBE - valve to lower motor port (442 & 444)	1
25	C 17898	TUBE - valve to upper motor port (442 & 444)	1
26	218- 5107	FITTING - motor port, 90° elbow "O" ring	2
27	218- 5007	"O" RING - 5/8" for 218-5107 fitting	2
28	NSS	VALVE - hydraulic control, single spool (220, 222 & 442) (Repairs page 53)(Order C22020 kit, page 53B)	1
29	NSS	VALVE - hydraulic control, two spool (all models with hydraulic lift) (Repairs page 53)(Order C22019 kit, page 53B)	1
30	171- 247	SCREW - 5/16 x 1-1/4" NC flat head machine	2
31	131- 351	NUT - lock 5/16" NC hex	2
32	218- 5062	FITTING - hydraulic valve 5/8T x 7/8" "O" RING	3
33	218- 5007	"O" RING - 5/8" for 218-5062	2
34	C 17354	KEY - square 1/4 x 1/2" (444)	1
35	C 16697	MOTOR - hydraulic, 220 (Repairs page 57) (Used S/N 9649062 and after)	1
35	C 16697	MOTOR - hydraulic, 222 (Repairs page 57) (Used S/N 9647203 and after)	1
35	C 14655	MOTOR - hydraulic, 442 & 444 (Repairs page 57)	1
36	C 13047	MOTOR - hydraulic, 220 & 222 (Repairs page 55)	1
37	166- 86	SCREW - 1/2" x 1-1/4" NC flanged 12 pt.	4
38	A 30095	SEAL - motor to transmission case (442 & 444)	1
39	A 32190	SEAL - motor to transmission case (220 & 222)	1
40	C 16261	MANIFOLD - hydraulic motor (220 & 222)	1
41	A 27410	"O" RING - manifold to hydraulic motor (220 & 222)	2
42	166- 24	BOLT - 5/16" x 3/4" NC flanged 12 pt.	4
43	193- 29	LOCKWASHER - 5/16" internal tooth	4
44	C 14619	HOSE - rubber 4"	1
45	C 16794	TUBE - valve to lower motor port, 220 (used S/N 9649062 and after)	1
45	C 16794	TUBE - valve to lower motor port, 222 (used S/N 9647203 and after)	1
46	C 16793	TUBE - valve to upper motor port, 220 (used S/N 9649062 and after)	1
46	C 16793	TUBE - valve to upper motor port, 222 (used S/N 9647203 and after)	1

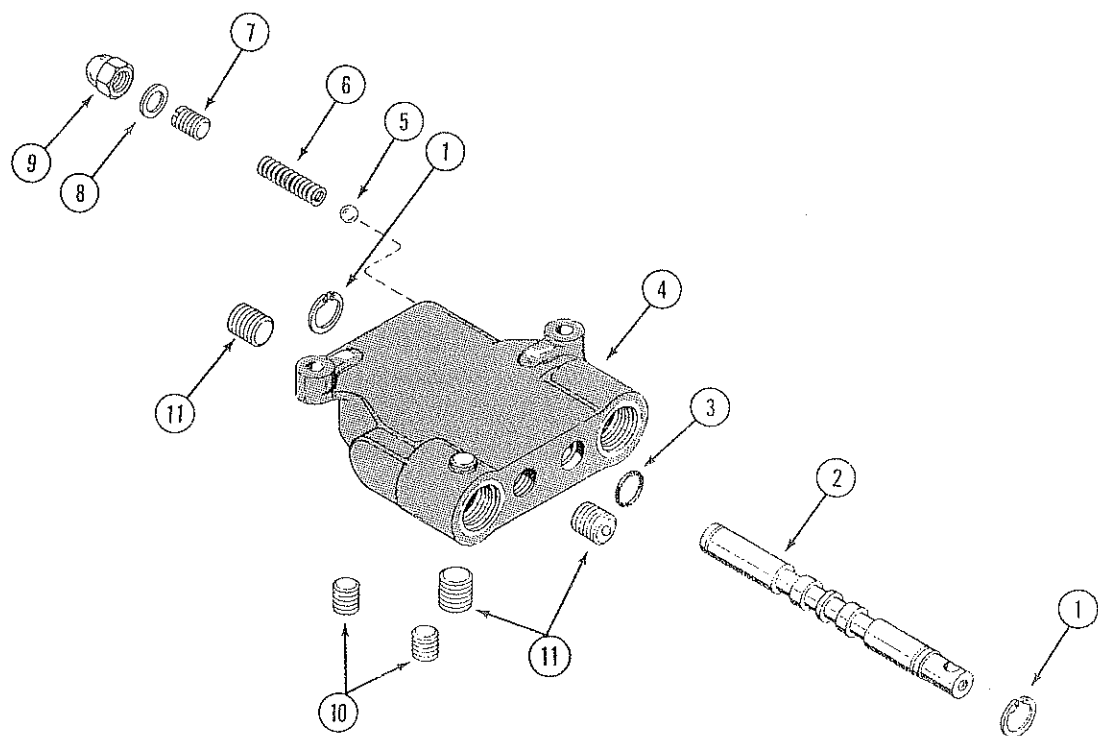
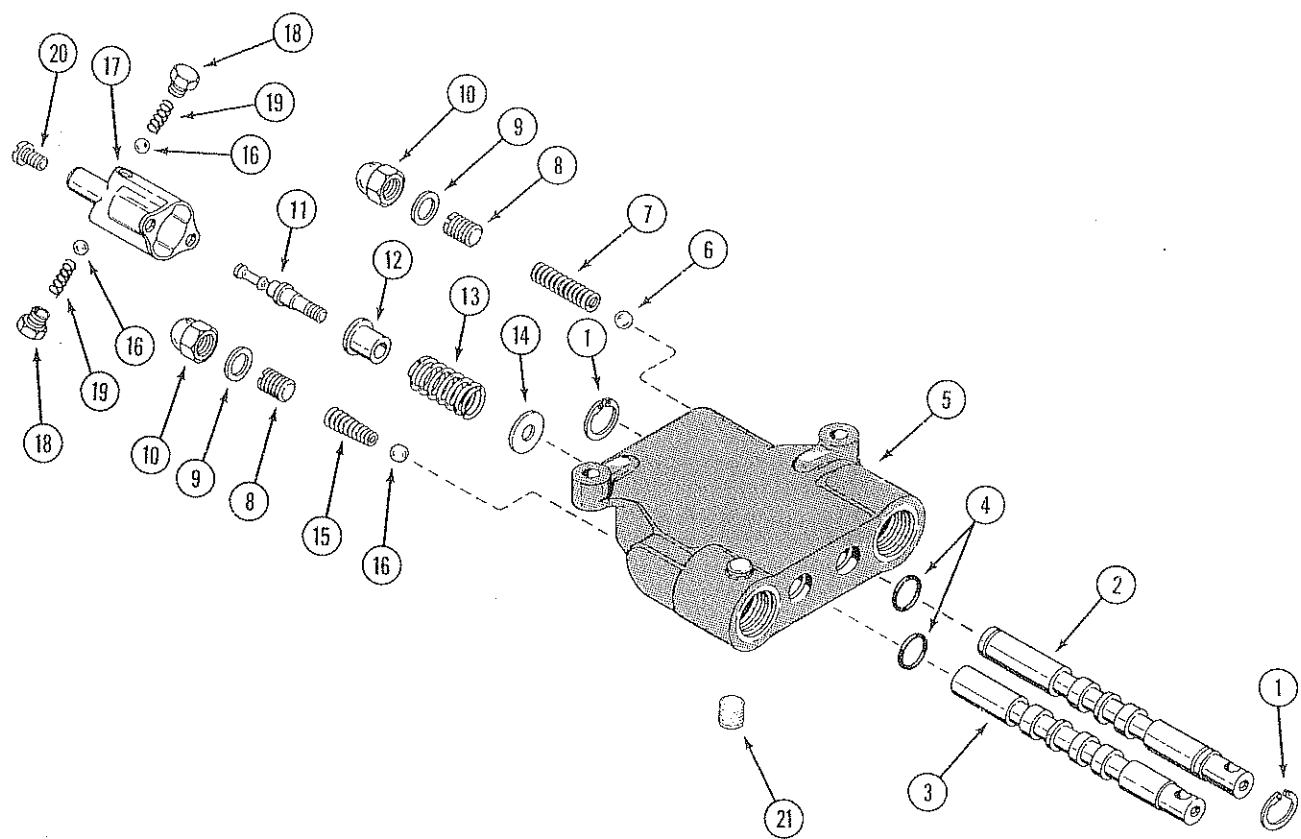


SPEED CONTROL

REF.	PART NO.	DESCRIPTION	REQ'D
1	A 37247	KNOB - speed control	1
2	C 12093	BUSHING - lever	1
3	C 16162	LEVER - speed control	1
4	C 17612	SPRING - compression	1
5	C 21518	WASHER - oilite	1
6	C 16412	ROD - control	1
7	129- 102	NUT - 5/16" NC hex, zinc plated	2
8	C 16683	JOINT - ball	1
9	131- 176	NUT - lock 5/16" NC hex, zinc plated	1

HYDRAULIC PUMP AND COUPLING

1	C 15481	PUMP - hydraulic	1
2	F 53109	PIN - dowel	2
3	C 15730	COVER - rear	1
4	C 15731	GEAR ASSEMBLY - driven	1
5	C 15732	"O" RING	2
6	C 15733	BODY - pump	1
7	C 15734	COVER - front	1
8	C 15735	SEAL - rotary	1
9	C 18384	GEAR ASSEMBLY - drive	1
10	C 15737	PLATE - wear	1
11	C 15738	SHIELD - heat	1
12	C 15739	GASKET	1
13	C 15740	SEAL	1
14	113- 111	BOLT	4
15	126- 111	KEY - 1/8 x 5/8" Woodruff	1
16	C 15726	COUPLING - pump (220, 222 & 442)	1
16	C 17298	COUPLING - pump (444)	1
17	NSS	HUB - (order item 16)	1
18	NSS	HUB - (order item 16)	1
19	A 70112	SPIDER - (for C15726 coupling)	1
19	C 15036	SPIDER - (for C17298 coupling)	1
20	83- 55	SCREW - set 5/16 x 5/16" NC socket head	2

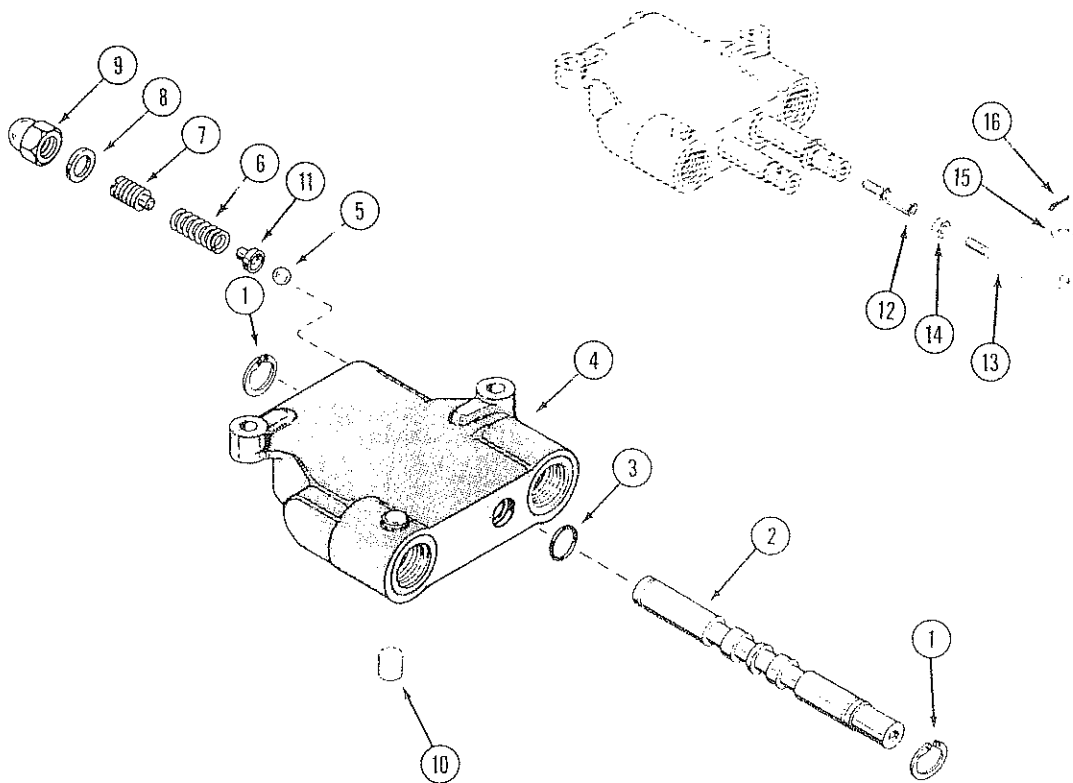
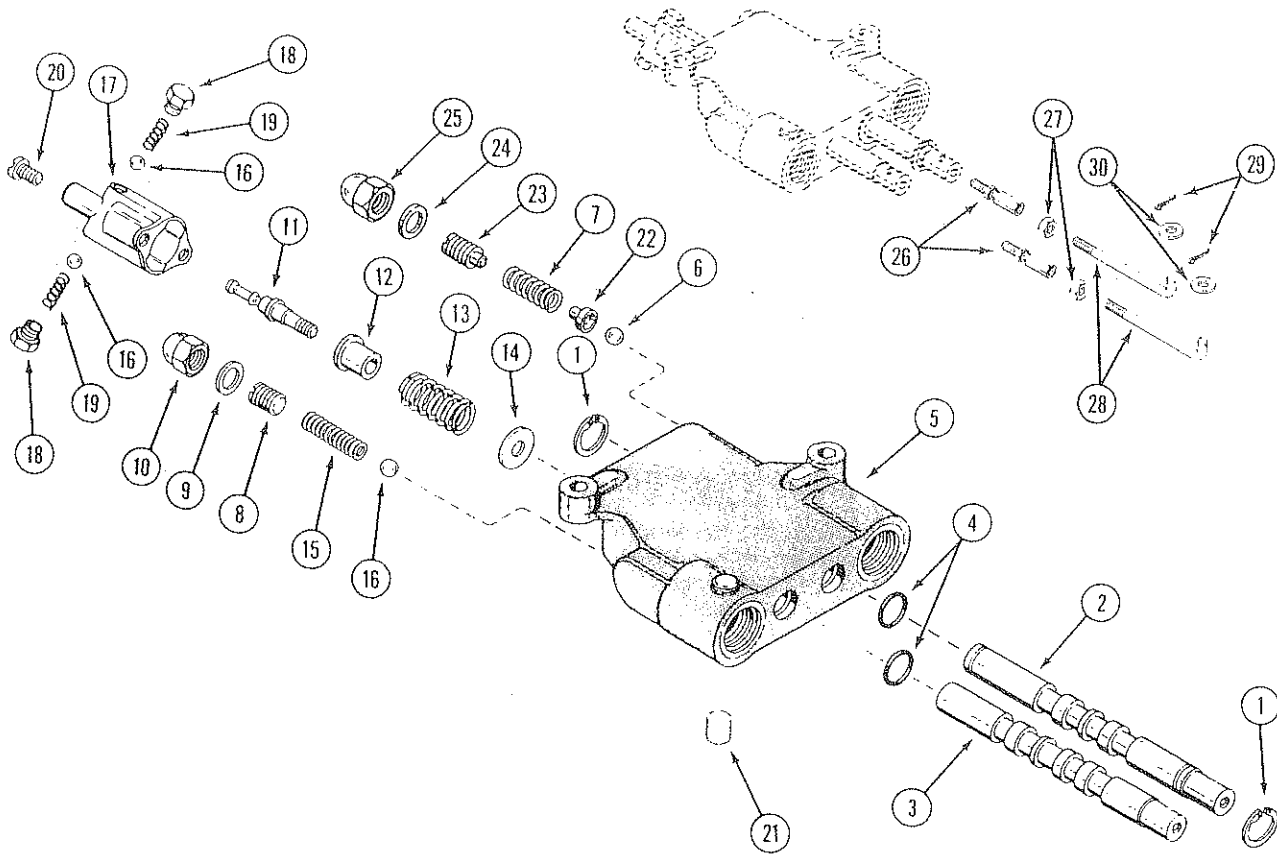


HYDRAULIC CONTROL VALVE C 16493 (TWO SPOOL)

REF.	PART NO.	DESCRIPTION	REQ'D
	NSS	VALVE - control, two spool (All models with hydraulic lift)	
		(Order C22019 kit) (repairs page 53B)	1
1	A 60273	RING - retaining	2
2	NSS	SPOOL - motor (Order C22019 kit)	1
3	NSS	SPOOL - float (Order C22019 kit)	1
4	A 7982	SEAL - spool	4
5	NSS	BODY - valve (Order C22019 kit)	1
6	211- 9	BALL - steel 5/16"	1
7	C 17432	SPRING - relief	2
8	C 17433	SCREW - relief adjust	2
9	C 17435	GASKET - relief adjust cap	2
10	129- 531	CAP - adjust screw	2
11	C 17439	DETENT - spool	1
12	C 13200	SPACER - detent	1
13	C 17441	SPRING - detent return	1
14	C 17440	WASHER - return	1
15	C 17445	SPRING - relief, tapered	1
16	211- 7	BALL - steel 1/4"	3
17	C 17438	COVER - detent	1
18	C 17443	SCREW - detent	2
19	C 17444	SPRING - detent	2
20	169- 114	SCREW - cover	2
21	221- 841	PLUG - pipe	1

HYDRAULIC CONTROL VALVE C 16492 (SINGLE SPOOL)

	NSS	VALVE - control, single spool	
		(Order C22020 kit) (repairs page 53B)	1
1	A 60273	RING - retaining	2
2	NSS	SPOOL - (Order 22020 kit)	1
3	A 7982	SEAL - spool	2
4	NSS	BODY - valve (Order C22020 kit)	1
5	211- 9	BALL - steel 5/16"	1
6	C 17432	SPRING - relief	1
7	C 17433	SCREW - relief adjust	1
8	C 17435	GASKET - relief adjust cap	1
9	129- 531	CAP - adjust screw	1
10	221- 841	PLUG - 1/4"	3
11	221- 843	PLUG - 3/8"	2



C22019 HYDRAULIC CONTROL VALVE KIT (Two Spool)

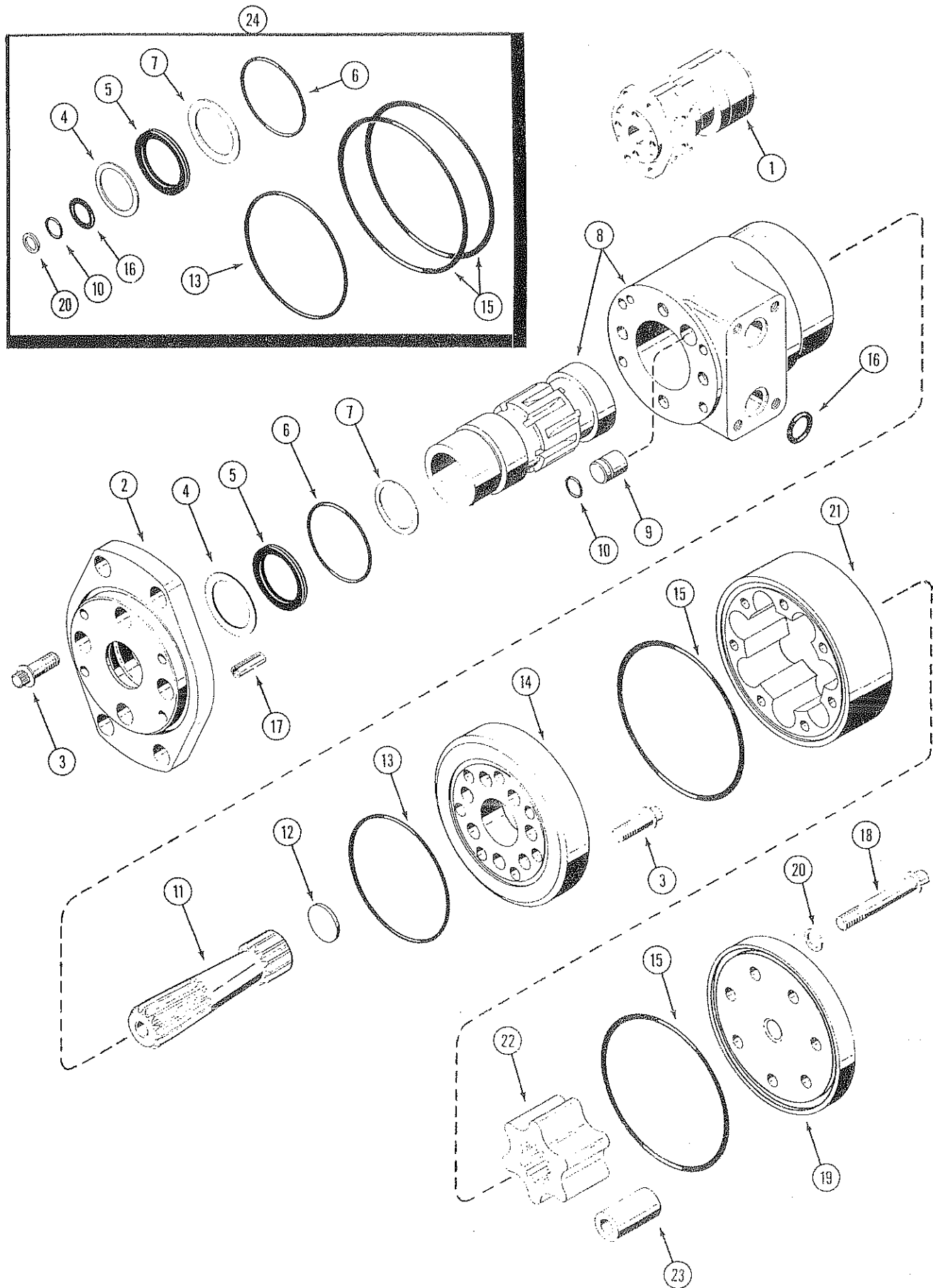
(FOR REPLACEMENT OF C16493 HYDRAULIC VALVE)

REF	PART NO.	DESCRIPTION	REQ'D
	C 21493	VALVE - control, two spool	1
1	A 60273	RING - retaining	2
2	NSS	SPOOL - motor (Order C21496)	1
3	NSS	SPOOL - float (Order C21496)	1
4	A 7982	SEAL - spool	4
5	NSS	BODY - valve (Order C21496)	1
6	211- 9	BALL - steel 5/16"	1
7	C 21507	SPRING - relief	2
8	C 17433	SCREW - relief adjust	1
9	C 17435	GASKET - relief adjust cap	1
10	129- 531	CAP - adjust screw	2
11	C 17439	DETENT - spool	1
12	C 13200	SPACER - detent	1
13	C 18850	SPRING - detent return	1
14	C 17443	WASHER - return	1
15	C 21505	SPRING - relief	1
16	211- 7	BALL - steel 1/4"	3
17	C 17433	COVER - detent	1
18	C 17443	SCREW - detent	2
19	C 17444	SPRING - detent	2
20	169- 114	SCREW - cover	2
21	221- 841	PLUG - pipe	1
22	C 21506	RETAINER - ball seat	1
23	C 21509	SCREW - adjust, relief	1
24	C 21508	GASKET - adjust cap	1
25	C 21510	CAP - adjust screw	1
26	C 19025	JOINT - ball	2
27	129- 122	NUT - 5/16" NF hex, zinc plated	2
28	C 18742	ROD - control	2
29	132- 26	PIN - cotter 3/32" x 3/4"	2
30	195- 521	WASHER - 5/16"	2
	C 21504	KIT - relief (includes items 6, 7, 22, 23, 24 and 25)	1
	C 21511	KIT - relief (includes items 8, 9, 10, 15 and 16)	1
	C 18851	KIT - detent (includes items 11, 12, 13, 14, 16, 17, 18, 19 and 20)	1

C22020 HYDRAULIC CONTROL VALVE KIT (Single Spool)

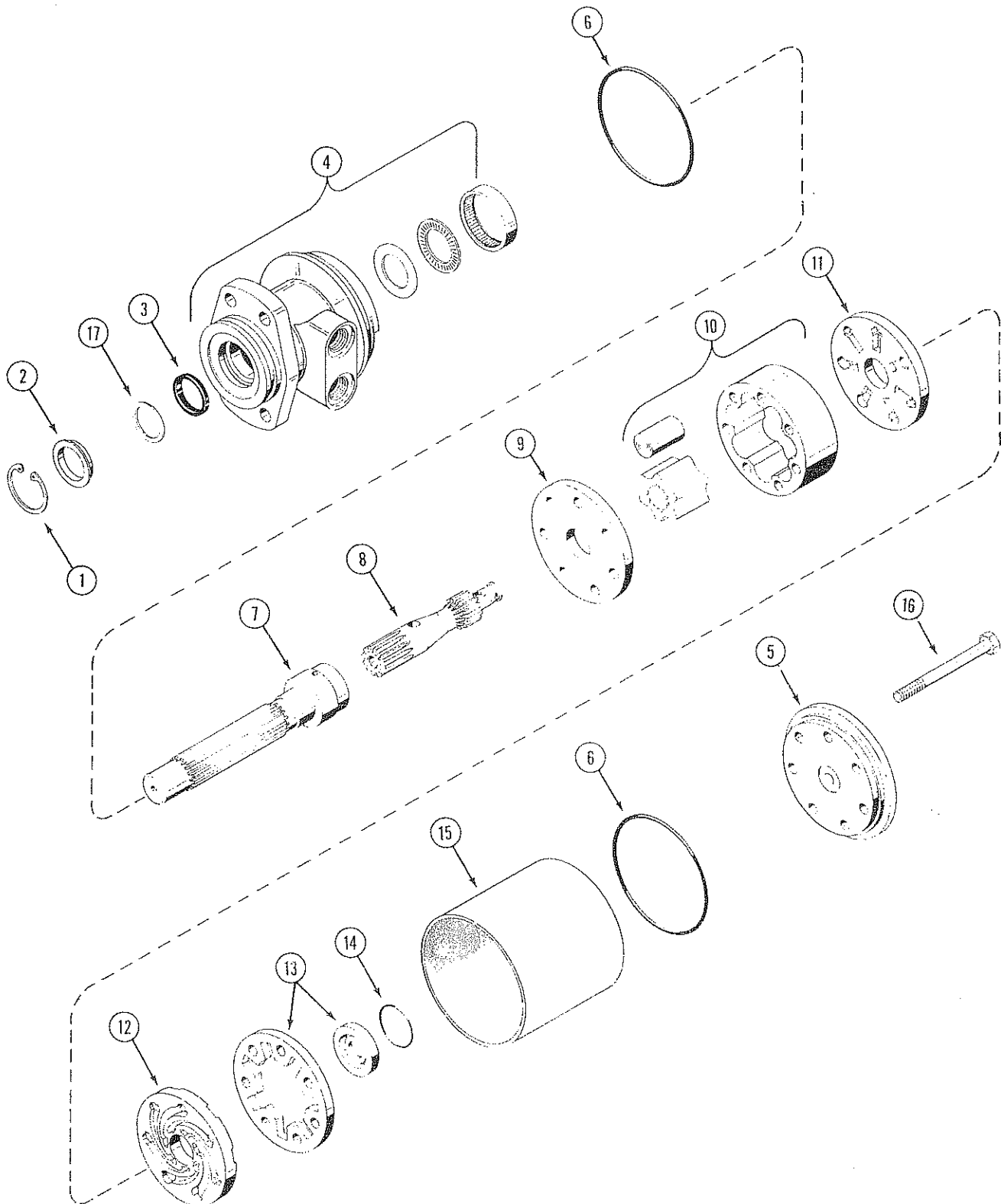
(FOR REPLACEMENT OF C16492 HYDRAULIC VALVE)

	C 21495	VALVE - control, single spool	1
1	A 60273	RING - retaining	2
2	NSS	SPOOL - control (Order C21495)	1
3	A 7982	SEAL - spool	2
4	NSS	BODY - valve (Order C21495)	1
5	211- 9	BALL - steel 5/16"	1
6	C 21507	SPRING - relief	1
7	C 21509	SCREW - relief adjust	1
8	C 21508	GASKET - relief adjust cap	1
9	C 21510	CAP - adjust screw	1
10	221- 841	PLUG - 1/4"	1
11	C 21503	RETAINER - ball seat	1
12	C 19025	JOINT - ball	1
13	C 18742	ROD - control	1
14	129- 122	NUT - 5/16" N.F. hex, zinc plated	1
15	195- 521	WASHER - 5/16"	1
16	132- 26	PIN - cotter 3/32" x 3/4"	1



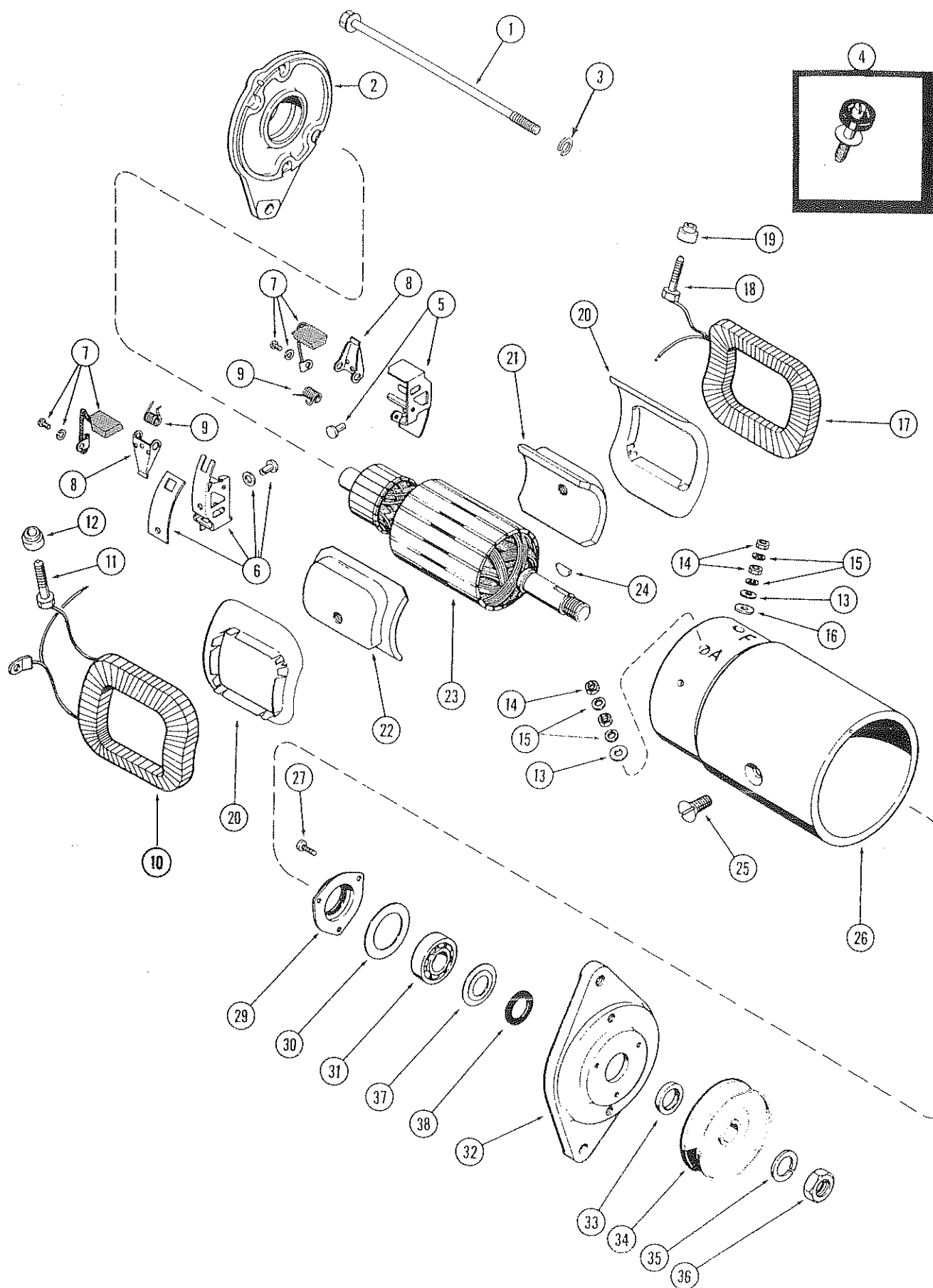
HYDRAULIC DRIVE MOTOR

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 13047	MOTOR - hydraulic drive (220) (used prior to S/N 9649062)	1
1	C 13047	MOTOR - hydraulic drive (222) (used prior to S/N 9647203)	1
2	C 14816	PLATE - mounting	1
3	166- 524	SCREW - cap, ferry 5/16 x 7/8" NF	11
4	NSS	WASHER - back up (See Ref. 24)	1
5	NSS	QUAD RING - mounting plate (See Ref. 24)	1
6	NSS	"O" RING - mounting plate (See Ref. 24)	1
7	C 14817	WASHER - thrust (See Ref. 24)	1
8	C 14818	SHAFT AND HOUSING ASSEMBLY	1
9	A 72034	PLUG - housing	1
10	NSS	"O" RING - housing plug	1
11	C 14819	COUPLING - drive for C13047 motor	1
12	C 13962	SPACER - coupling	1
13	NSS	"O" RING - housing to spacer plate (See Ref. 24)	1
14	C 14784	PLATE - spacer	1
15	NSS	"O" RING - spacer plate to geroler (See Ref. 24)	2
16	A 27410	"O" RING - housing	2
17	138- 134	PIN - roll 1/4 x 1"	4
18	166- 535	SCREW - cap, end 5/16 x 2-1/8" NF	7
19	C 14783	CAP - end	1
20	C 14301	WASHER - end cap	7
	C 14822	KIT - geroler (For C13047 motor) (220 & 222)	1
21	NSS	HOUSING - roller geroler	1
22	NSS	GEROLER	1
23	NSS	ROLLER	6
24	C 17811	KIT - "O" RING AND SEAL (Includes items 4, 5, 6, 7, 10, 13, 15, 16 and 20. Also items 17 and 19 on page 47)	1



HYDRAULIC DRIVE MOTOR

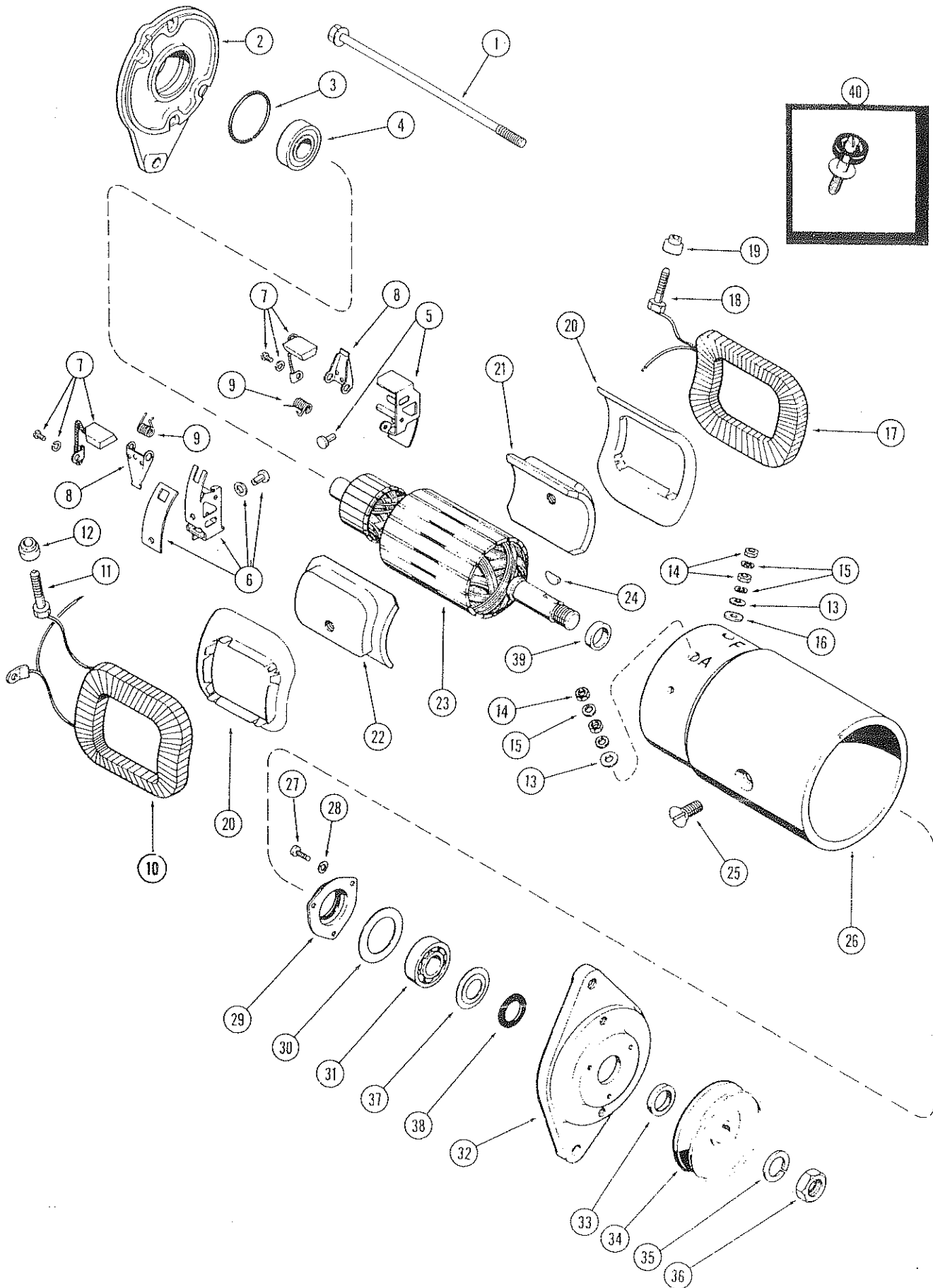
REF.	PART NO.	DESCRIPTION	REQ'D
	C 16697	MOTOR - hydraulic, 220 (used S/N 9649062 and after)	1
	C 16697	MOTOR - hydraulic, 222 (used S/N 9647203 and after)	1
	C 14655	MOTOR - hydraulic, 442 & 444	1
1	C 16516	RING - retaining	1
2	NSS	SPACER - (See kits below)	1
3	NSS	SEAL - oil (See kits below)	1
4	C 14827	HOUSING ASSEMBLY - 442 & 444	1
5	C 14837	END CAP.	1
6	NSS	SEAL - (See kits below)	2
7	C 14828	SHAFT - coupling	1
8	D 72853	DRIVE LINK - 220 & 222	1
8	C 14829	DRIVE LINK - 442 & 444	1
9	C 14830	PLATE - wear	1
10	C 18110	ROTOR ASSEMBLY - 220 & 222	1
10	C 14831	ROTOR ASSEMBLY - 442 & 444	1
11	NSS	PLATE - manifold (order C24731 kit)	1
12	C 24731	KIT - manifold (includes plate)	1
13	C 14834	COMMUTATOR AND RING SET	1
14	NSS	RING - sealing (See kit below)	1
15	C 18092	SLEEVE - 220 & 222	1
15	C 14836	SLEEVE - 442 & 444	1
16	28- 662	BOLT - 3/8" x 3-7/8" NF hex, 220 & 222	7
16	C 14838	BOLT - 3/8" x 4-3/8" NF hex, 442 & 444	7
	C 19037	KIT - "O" ring and seal, (includes items 1, 2, 3, 6, 14 & 17). . .	1
17	C 19212	WASHER - back up .010"	1



C16852 STARTER-GENERATOR

DELCO #1101875 (Order A 70202 Starter)

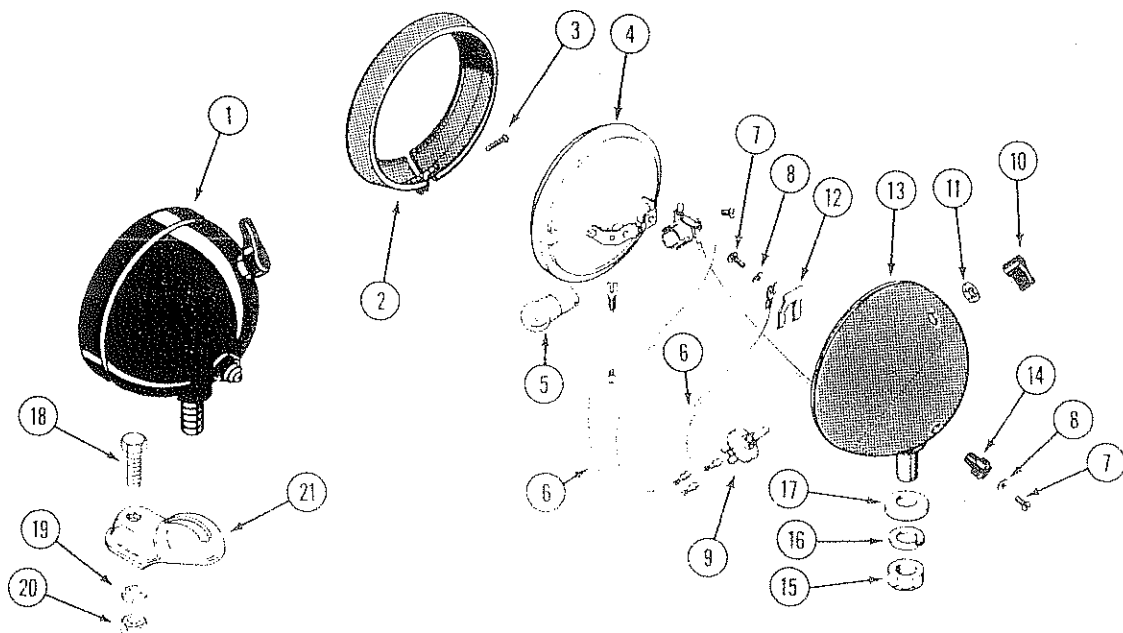
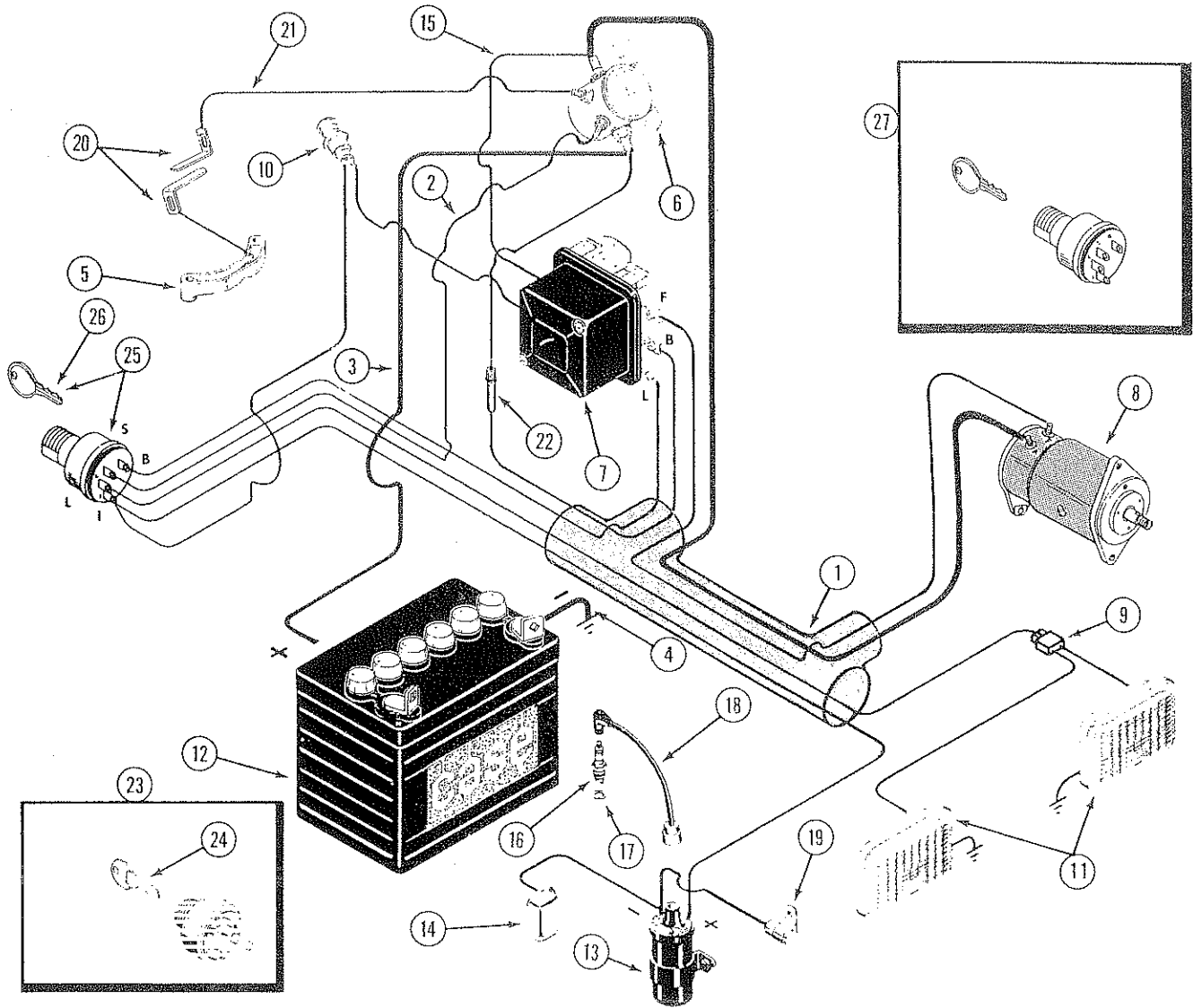
REF.	PART NO.	DESCRIPTION	REQ'D
1	R 15106	BOLT - through	2
2	A 43494	FRAME ASSEMBLY - commutator end	1
3	192- 20	LOCKWASHER - 5/16"	2
4	A 40702	KIT - stud (Includes items 16, 18 and 19)	1
5	A 72039	HOLDER KIT - ground brush	1
6	A 72040	HOLDER KIT - insulated brush	1
7	A 72038	BRUSH ASSEMBLY	2
8	R 15090	ARM - brush pressure	2
9	R 16161	SPRING - brush arm	2
10	A 72042	COIL ASSEMBLY - field R. H.	1
11	A 72048	STUD - armature terminal	1
12	R 16147	BUSHING - insulated, armature stud	1
13	A 41927	WASHER - armature stud	2
14	129- 18	NUT - terminal stud 12-24 hex	4
15	192- 17	LOCKWASHER - terminal stud #12	4
16	R 16148	WASHER - insulated, field stud (Order A40702)	1
17	A 72043	COIL ASSEMBLY - field L. H.	1
18	NSS	STUD - field terminal (Order A40702)	1
19	R 15077	BUSHING - insulated, field stud (Order A40702)	1
20	A 25447	INSULATOR - field coil	2
21	A 40736	SHOE - pole	1
22	A 40736	SHOE - pole	1
23	A 43495	ARMATURE	1
24	126- 111	KEY - Woodruff, armature	1
25	A 42127	SCREW - pole	2
26	NSS	BODY - starter, generator (Order C16852)	1
27	A 41959	SCREW - 10-32 x 1/2" round head	3
29	A 44433	RETAINER ASSEMBLY - bearing (Includes Refs. 37 and 38)	1
30	R 16170	GASKET - bearing retainer	1
31	A 43356	BEARING - ball, drive end	1
32	A 72046	FRAME ASSEMBLY - drive end	1
33	A 72047	SPACER - pulley	1
34	C 14344	PULLEY - starter, generator drive	1
35	192- 26	LOCKWASHER - 11/16" plated	1
36	A 25546	NUT - armature shaft, drive end	1
37	NSS	RETAINER - grease (Order A72050)	1
38	NSS	SEAL - felt (Order A72050)	1



A70202 STARTER-GENERATOR

DELCO 1101970 (Service Replacement)

REF.	PART NO.	DESCRIPTION	REQ'D
1	R 15106	BOLT - through (Includes washer)	2
2	A 72104	FRAME ASSEMBLY - commutator end	1
3	R 15087	RING - bearing retainer	1
4	A 25461	BEARING - commutator end ball	1
5	A 72039	HOLDER KIT - ground brush	1
6	A 72040	HOLDER KIT - insulated brush	1
7	A 72038	BRUSH ASSEMBLY	2
8	R 15090	ARM - brush pressure	2
9	R 16161	SPRING - brush arm	2
10	A 72042	COIL ASSEMBLY - field R.H.	1
11	A 72048	STUD - armature terminal	1
12	R 16147	BUSHING - insulated, armature stud	1
13	A 41927	WASHER - armature stud	2
14	129- 18	NUT - terminal stud 12-24 hex	4
15	192- 17	LOCKWASHER - terminal stud #12	4
16	R 16148	WASHER - insulated, field stud	1
17	A 72043	COIL ASSEMBLY - field L.H.	1
18	NSS	STUD - field terminal (See Ref. 40)	1
19	R 15077	BUSHING - insulated, field stud (Order A40702)	1
20	A 25447	INSULATOR - field coil	2
21	A 40736	SHOE - pole, plain	1
22	A 40736	SHOE - pole, noticed	1
23	A 72041	ARMATURE	1
24	126- 111	KEY - Woodruff, armature	1
25	74- 610	SCREW - pole	2
26	NSS	BODY - starter, generator (Order A70202)	1
27	173- 237	SCREW - 10-32 x 1/2" rd. hd.	3
28	192- 18	LOCKWASHER - 3/16" plated	3
29	A 44433	RETAINER ASSEMBLY - bearing (Includes Ref. 37 and 38)	1
30	R 16170	GASKET - bearing retainer	1
31	A 43356	BEARING - ball, drive end	1
32	A 72046	FRAME ASSEMBLY - drive end	1
33	A 72047	SPACER - pulley	1
34	C 14344	PULLEY - starter, generator drive	1
35	192- 26	LOCKWASHER - 11/16" plated	1
36	A 25546	NUT - armature shaft, drive end	1
37	NSS	RETAINER - grease (Order A72050)	1
38	NSS	SEAL - felt (Order A72050)	1
39	NSS	SPACER - armature shaft, inner	1
40	A 40702	KIT - stud (Includes items 16, 18 and 19)	1



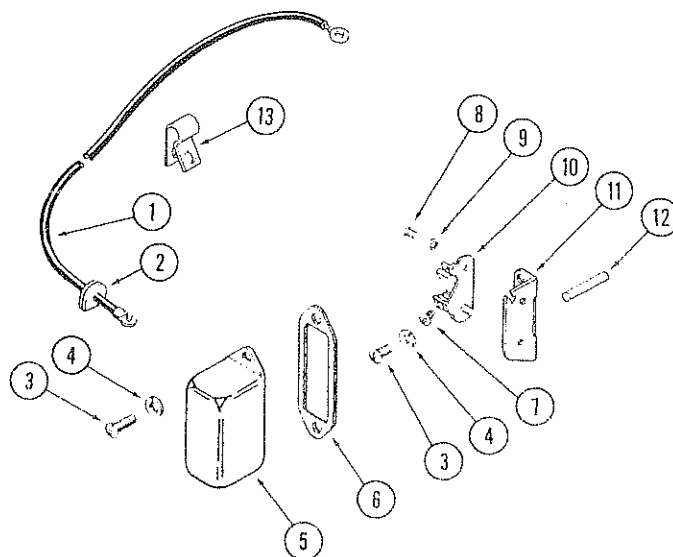
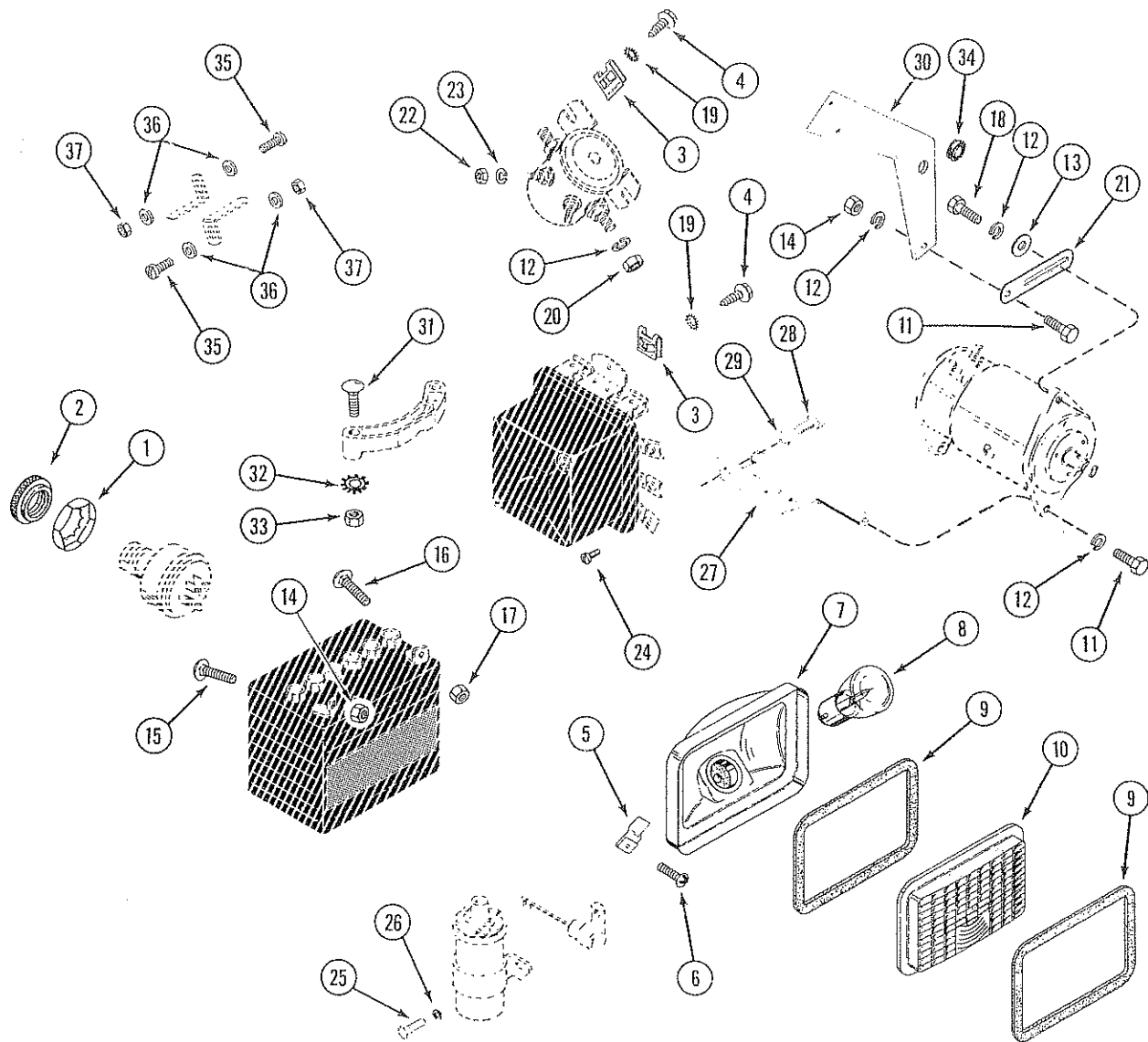
ELECTRICAL SYSTEM

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 18005	HARNESS - wire	1
2	C 17187	WIRE - ignition switch to solenoid (yellow 8")	1
3	C 14565	CABLE - battery to solenoid (red 10-1/2")	1
4	C 14566	CABLE - battery to ground (black 12")	1
5	C 21993	SWITCH - neutral safety	1
6	C 14553	SOLENOID - start	1
7	NSS	REGULATOR - voltage, 12 volt (order C24221)	1
8	C 16852	STARTER - generator 12 V. (Repairs page 59) Delco No. 1101875	1
8	A 70202	STARTER - generator 12 V. (Repairs page 61) Delco No. 1101970	1
9	C 14537	CONNECTOR - headlamp	1
10	C 17186	LAMP ASSEMBLY - warning, generator indicator	1
	B 50213	BULB - generator indicator (red)	1
11	C 22571	HEADLAMP ASSEMBLY - 12 volt (Repairs page 63)	2
12	C 18197	BATTERY - 12 volt	1
13	KO 231281	COIL - ignition 12 volt	1
14	KO 232535	COVER - breaker contacts	1
15	C 17275	WIRE - regulator ground to solenoid (white 7")	1
16	C 24301	SPARK PLUG - (includes gasket)	1
17	A 27251	GASKET - spark plug	1
18	V 34433	CABLE - high tension	1
19	KO 230722	CONDENSER	1
20	C 18115	SWITCH - PTO safety, 220 (used S/N 9647856 and after)	2
20	C 18115	SWITCH - PTO safety, 222 (used S/N 9649590 and after)	2
20	C 18115	SWITCH - PTO safety, 442 (used S/N 9650949 and after)	2
20	C 18115	SWITCH - PTO safety, 444 (used S/N 9653291 and after)	2
21	C 19055	WIRE - solenoid to PTO safety switch (black 17")	1
22	223- 20	FUSE - 20 amp. (used in C18005 harness)	1
23	NSS	SWITCH - ignition (order C23839 and C17808)	1
24	C 12684	KEY - ignition, 220 (used prior to S/N 9647623)	1
24	C 12684	KEY - ignition, 222 (used prior to S/N 9649384)	1
24	C 12684	KEY - ignition, 442 (used prior to S/N 9658013)	1
24	C 12684	KEY - ignition, 444 (used prior to S/N 9652857)	1
25	C 23839	SWITCH - ignition (includes key) used 220 S/N 9647623 and after	1
25	C 23839	SWITCH - ignition (includes key) used 222 S/N 9649384 and after	1
25	C 23839	SWITCH - ignition (includes key) used 442 S/N 9658013 and after	1
25	C 23839	SWITCH - ignition (includes key) used 444 S/N 9652857 and after	1
26	C 17763	KEY - ignition (for C17796 switch)	1
27	C 23839	KIT - ignition switch	1
	C 32407	KEY - ignition	1
	C 17808	DECAL - ignition	1

TAIL LAMP

(A20965)

1	NSS	LAMP ASSEMBLY - flood and tail (order D70115)	1
2	B 50255	MOLDING - lamp retaining	1
3	10934	SCREW - molding	1
4	A 40855	LAMP - sealed unit	1
5	B 50223	BULB - red 15 C.P. 12 volt	1
6	B 50273	WIRE - switch	2
7	173- 73	SCREW - wire	2
8	193- 4	WASHER - 1/4" lock	2
9	NSS	SWITCH (order A43182 kit)	1
10	NSS	KNOB - switch	1
11	A 39888	NUT - switch	1
12	10927	SPRING - terminal	1
13	NSS	BODY	1
14	B 50293	TERMINAL - wire	1
15	129- 105	NUT - 1/2" NC hex	1
16	192- 23	WASHER - 1/2" lock	1
17	10923	WASHER - bearing	1
18	113- 209	BOLT - 3/8 x 1-1/2" NC hex, zinc plated	1
19	192- 21	LOCKWASHER - 3/8" zinc plated	1
20	129- 103	NUT - 3/8" NC hex, zinc plated	1
21	A 34046	BRACKET - mounting, tail lamp	1
22	A 43182	KIT - switch (includes knob)	1

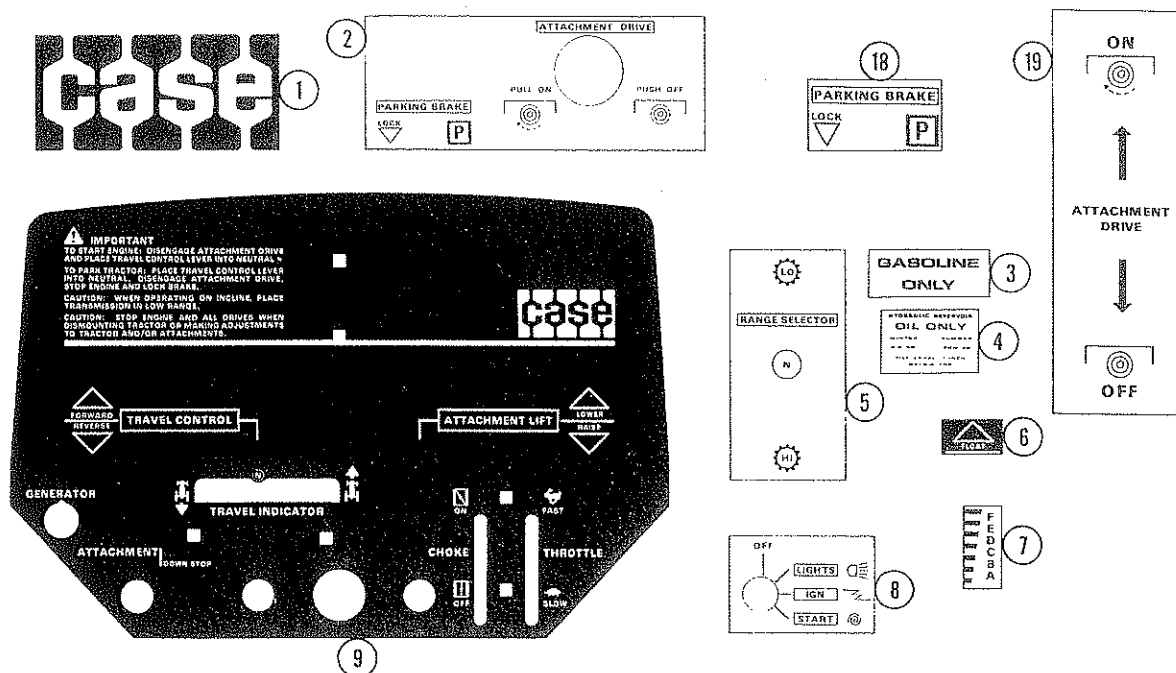


ELECTRICAL SYSTEM HARDWARE

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 14060	NUT - back up 3/4"	1
2	C 17921	NUT - escutcheon 3/4"	1
3	C 10836	NUT - speed type "U"	4
4	187- 485	SCREW - #10 x 5/8" Self-Tapping Hex, Zinc Plated	4
5	131- 629	NUT - speed type "U"	4
6	187- 1047	SCREW - #8 x 1/2" Self-Tapping round head, Phillips	4
	C 22571	HEADLAMP ASSEMBLY	2
7	NSS	RECEPTACLE - headlamp (Order C14302)	1
8	C 14305	BULB - headlamp	1
9	C 14304	GASKET - headlamp	2
10	C 22573	LENS - headlamp	1
11	113- 103	BOLT - 5/16 x 1" NC hex, zinc plated	2
12	192- 20	LOCKWASHER - 5/16" zinc plated	5
13	195- 520	WASHER - 5/16" plain, zinc plated	2
14	129- 102	NUT - 5/16" NC hex, zinc plated	2
15	111- 202	BOLT - 5/16 x 3/4" NC, round head, square neck	1
16	111- 108	BOLT - 1/4 x 3/4" NC, round head, square neck	1
17	129- 101	NUT - 1/4" NC hex	1
18	113- 102	BOLT - 5/16 x 3/4" NC hex, zinc plated	1
19	193- 70	LOCKWASHER - #10 external tooth	4
20	129- 122	NUT - 5/16" NF hex	2
21	C 14599	BRACKET - starter generator adjust	1
22	129- 27	NUT - #10 NF hex	2
23	192- 18	LOCKWASHER - #10	2
24	169- 131	SCREW - #8 x 5/16" NC fillister head	3
25	113- 1	BOLT - 1/4 x 1/2" NC hex, zinc plated	2
26	192- 19	LOCKWASHER - 1/4" zinc plated	2
27	C 18788	SUPPORT - starter generator	1
28	113- 206	BOLT - 3/8 x 3/4" NC hex	2
29	192- 21	LOCKWASHER - 3/8"	2
30	NSS	SUPPORT - starter generator adjust (order C18999)	1
31	111- 131	BOLT - 1/4 x 1-1/8" NC round head, square neck	2
32	193- 57	LOCKWASHER - 1/4" external tooth	2
33	129- 101	NUT - 1/4" NC hex	2
34	C 17546	GROMMET - wire	1
35	C 18204	SCREW - nylon #10 x 5/8" binder head	2
36	C 15703	WASHER - nylon 3/16"	4
37	C 15704	NUT - nylon #10-32	2

BREAKER CONTACTS

1	NSS	LEAD - breaker contact (purchase from local supplier)	1
2	KO 220297	GROMMET - contact lead	1
3	173- 210	SCREW - #10 x 3/8" round head, zinc plated	4
4	192- 18	LOCKWASHER - 3/16" zinc plated	4
5	KO 232535	COVER - breaker contact	1
6	KO 220174	GASKET - cover	1
7	187- 408	SCREW - #6 x 3/8" Self-Tapping	1
8	173- 224	SCREW - #8 x 1/4" NC round head	1
9	193- 5	LOCKWASHER - #8 internal tooth	1
10	C 24135	POINT SET - breaker contact assembly	1
11	NSS	BRACKET - breaker contact (order item 10)	1
12	C 23870	ROD - breaker contact push	1
13	KO 275182	CLIP - wire	1



10 11
Case hydraulic drive 220

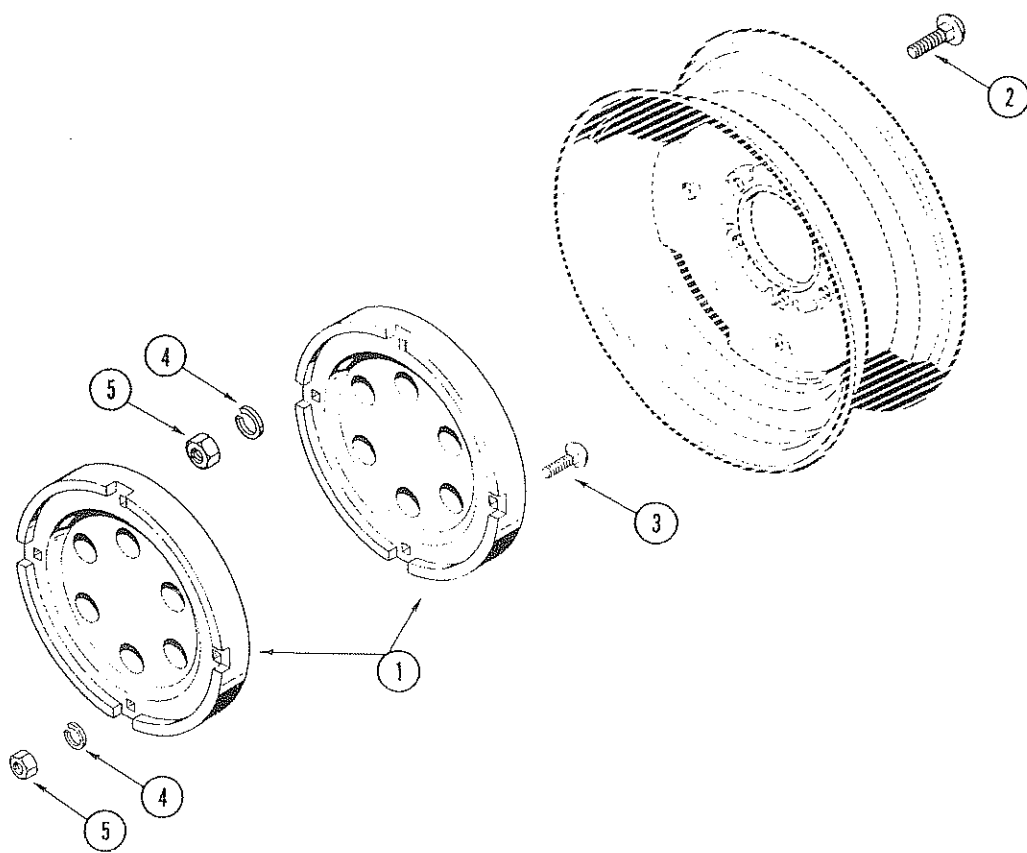
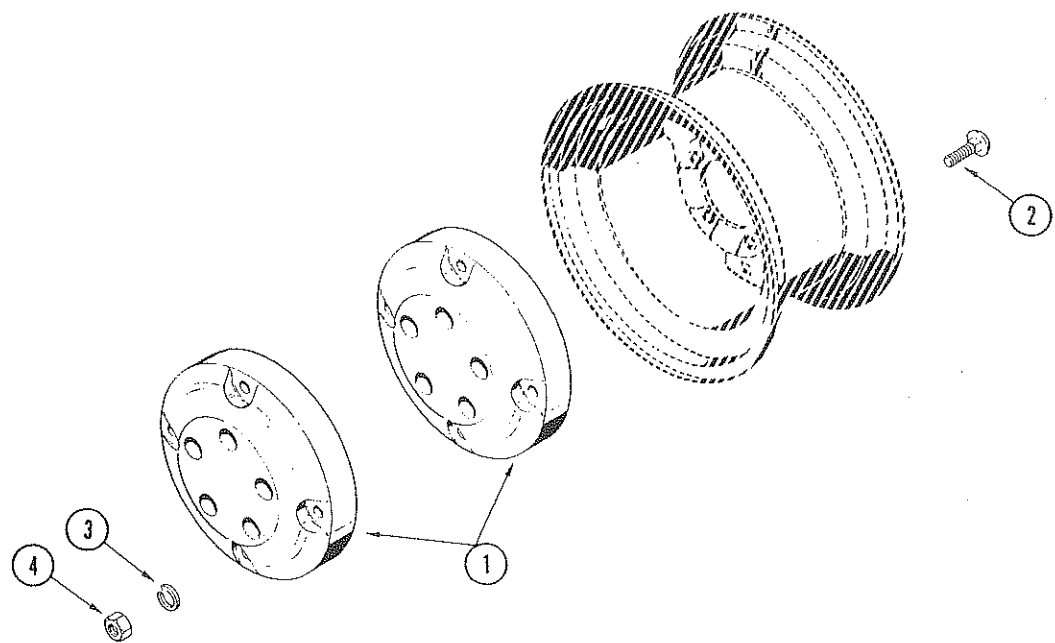
12 13
Case hydraulic drive 222

14 15
Case hydraulic drive 442

16 17
Case hydraulic drive 444

DECALS

REF.	PART NO.	DESCRIPTION	REQ'D
1	321- 1571	DECAL - "CASE"	1
2	NSS	DECAL - attachment drive (use 321-2111)	1
3	321- 18	DECAL - gasoline	1
4	C 14539	DECAL - hydraulic reservoir	1
5	321- 1788	DECAL - shift range	1
6	321- 1785	DECAL - float	1
7	321- 1789	DECAL - attachment height	1
8	321- 1786	DECAL - ignition switch	1
9	321- 1784	DECAL - instrument panel	1
10	C 15690	DECAL - hood 220 R.H.	1
11	C 15691	DECAL - hood 220 L.H., hydraulic drive	1
12	C 15692	DECAL - hood 222 R.H.	1
13	C 15693	DECAL - hood 222 L.H., hydraulic drive	1
14	C 15694	DECAL - hood 442 R.H.	1
15	C 15695	DECAL - hood 442 L.H., hydraulic drive	1
16	C 15696	DECAL - hood 444 R.H.	1
17	C 15697	DECAL - hood 444 L.H., hydraulic drive	1
18	321- 2110	DECAL - brake 220 (used S/N 9647856 and after)	1
18	321- 2110	DECAL - brake 222 (used S/N 9649590 and after)	1
18	321- 2110	DECAL - brake 442 (used S/N 9650949 and after)	1
18	321- 2110	DECAL - brake 444 (used S/N 9653291 and after)	1
19	321- 2111	DECAL - attachment drive	1

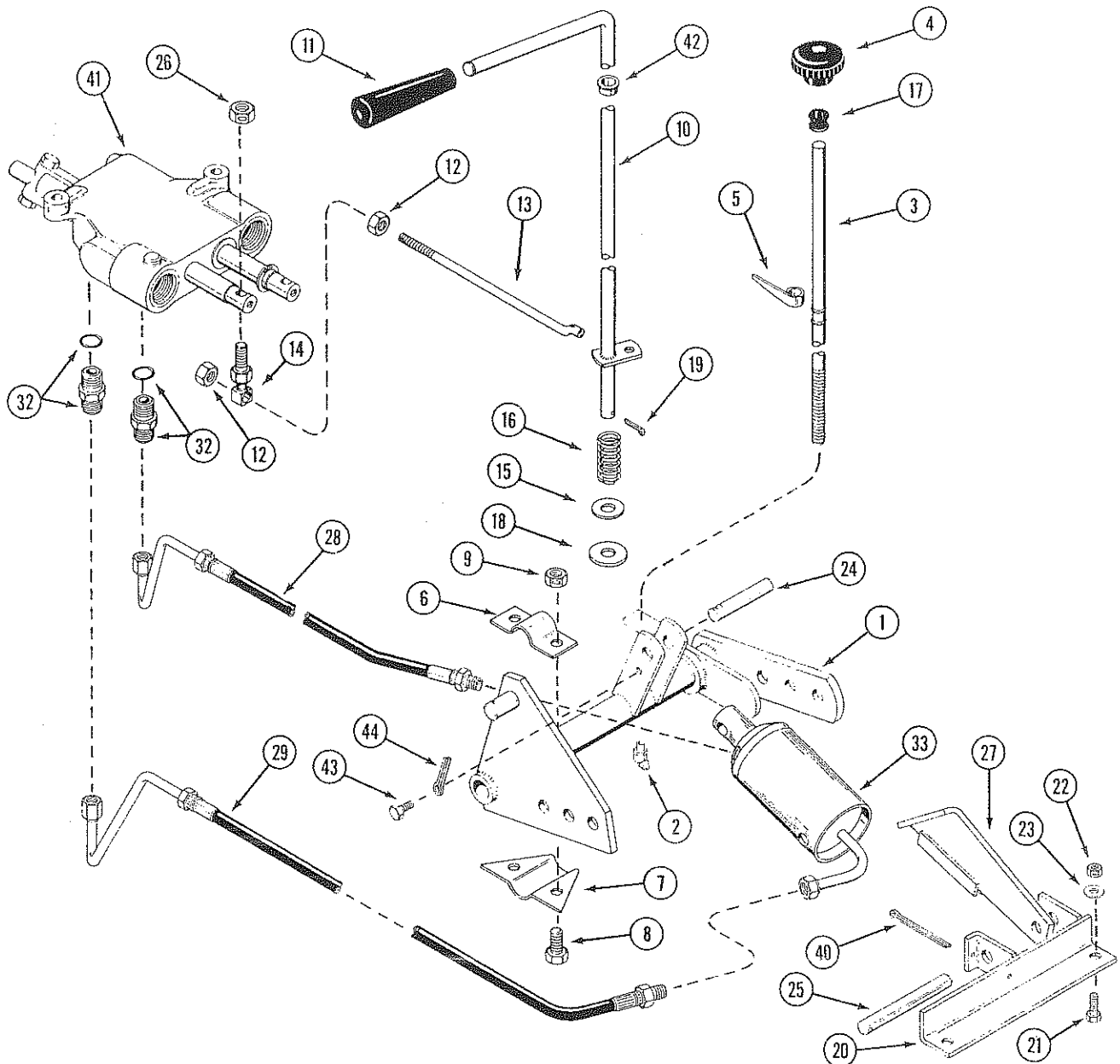


D8 WHEEL WEIGHTS - MODEL 220 AND 222

REF.	PART NO.	DESCRIPTION	REQ'D
1	NSS	WEIGHT - wheel 12" (Order as Machinery Item)	4
2	111- 532	BOLT - 1/2 x 3-3/4" round head, square neck, NC, zinc plated	8
3	192- 23	LOCKWASHER - 1/2" zinc plated	8
4	129- 105	NUT - 1/2" NC hex	8

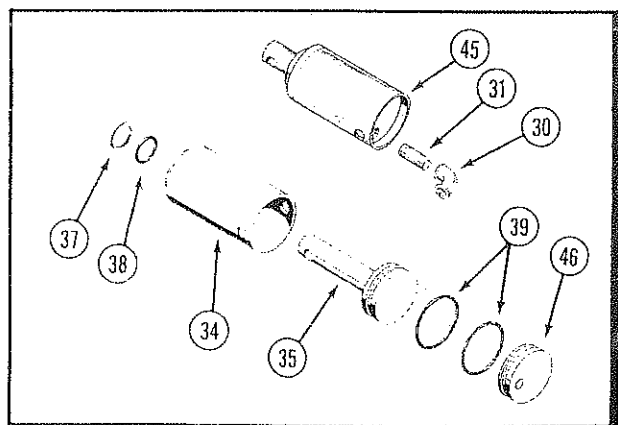
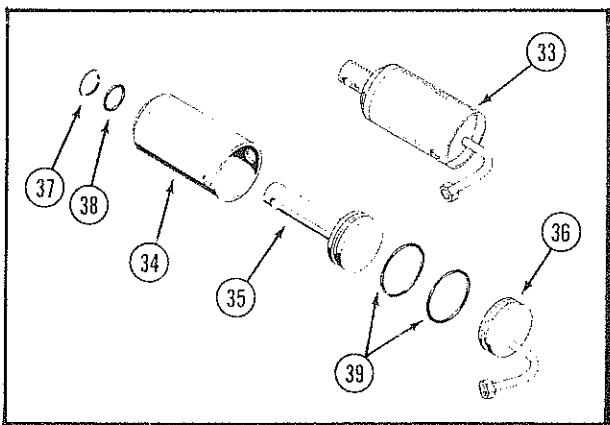
D10 WHEEL WEIGHTS - MODEL 442 AND 444

1	NSS	WEIGHT - wheel 15" & 16" (Order as Machinery Item)	4
2	111- 530	BOLT - 1/2 x 2-1/2" round head, square neck, NC, zinc plated	4
3	111- 531	BOLT - 1/2 x 2-3/4" round head, square neck, NC, zinc plated	4
4	92- 8	LOCKWASHER - 1/2" zinc plated	8
5	129- 105	NUT - 1/2" NC hex	8



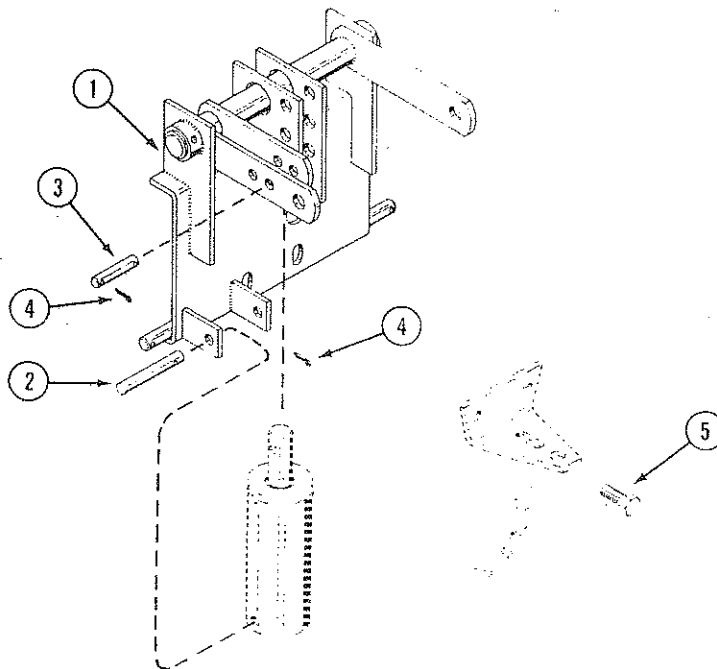
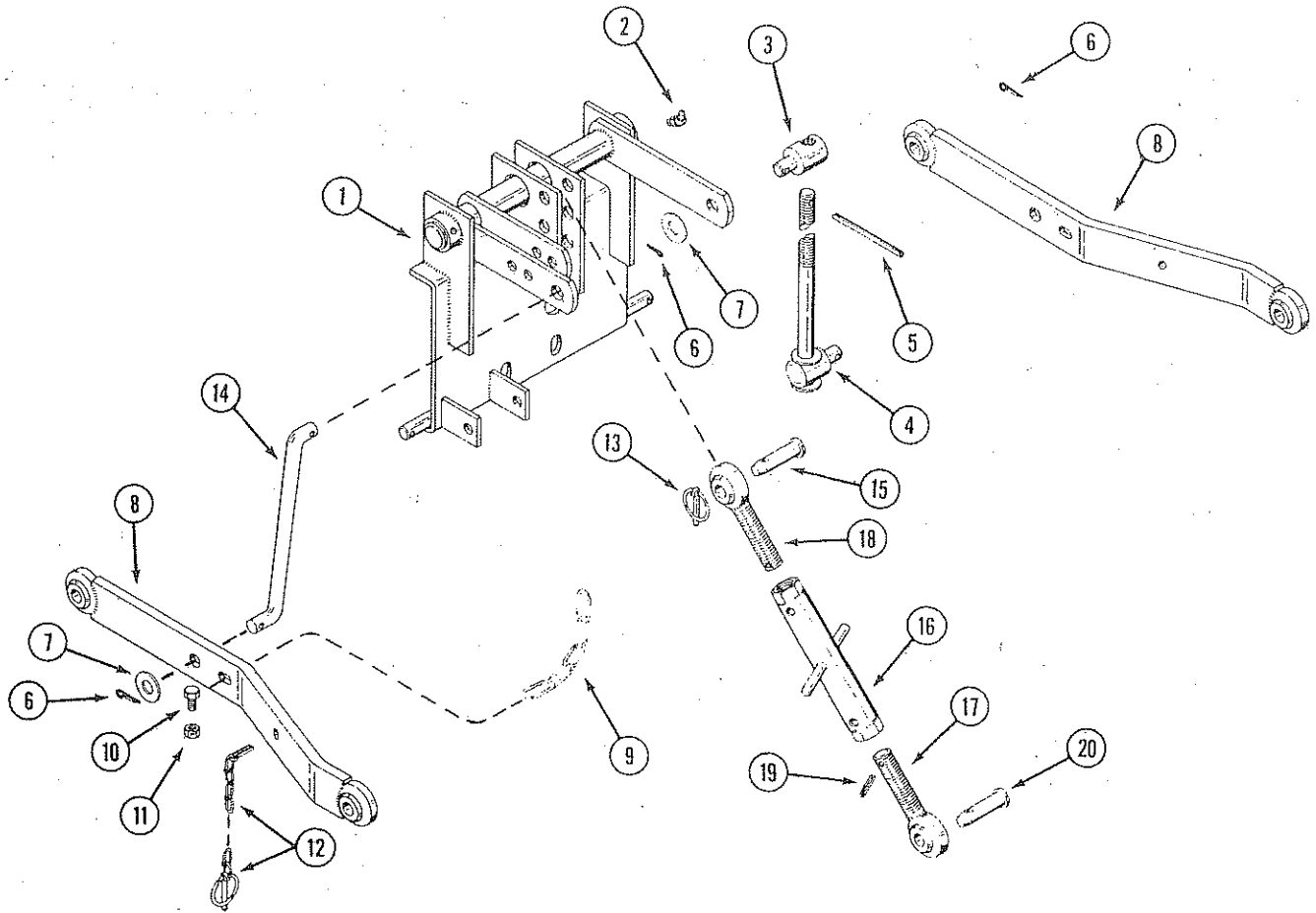
USED ON MODELS 220 S/N 9650692 AND AFTER
 USED ON MODELS 222 S/N 9649209 AND AFTER
 USED ON MODELS 442 S/N 9647413 AND AFTER
 USED ON MODELS 444 S/N 9652542 AND AFTER

USED ON MODELS 220 PRIOR TO S/N 9650692
 USED ON MODELS 222 PRIOR TO S/N 9649209
 USED ON MODELS 442 PRIOR TO S/N 9647413
 USED ON MODELS 444 PRIOR TO S/N 9652542



MODEL H30 HYDRAULIC LIFT

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 17314	CROSS SHAFT ASSEMBLY	1
2	219- 404	FITTING - lube	1
3	C 16741	ROD - height adjust	1
4	C 16751	KNOB - height adjust	1
5	C 16750	ARM - indicator	1
6	C 17249	BRACKET - mounting, top	2
7	C 17250	BRACKET - mounting, bottom	2
8	113- 221	BOLT - 3/8" x 7/8" NC hex	4
9	131- 178	NUT - 3/8" NC hex	4
10	C 16163	LEVER - lift control	1
11	A 37247	KNOB - control lever	1
12	129- 102	NUT - 5/16" NC hex	2
13	C 16412	ROD - control	1
14	C 16683	BALL JOINT	1
15	C 21518	WASHER - oilite	1
16	C 17612	SPRING - control lever	1
17	C 18144	BUSHING - height adjust	1
18	195- 533	WASHER - 1/2" ZP	1
19	132- 349	PIN - cotter 1/8" x 1"	1
20	C 17575	BRACKET - cylinder	1
21	113- 207	BOLT - 3/8" x 1" NC hex	2
22	131- 178	NUT - lock 3/8" NC hex	2
23	195- 104	WASHER - 3/8" x 1-1/8" O.D.	2
24	C 17628	PIN - cylinder to lever	1
25	C 17536	PIN - cylinder foot	1
26	131- 176	NUT - lock 5/16" NC hex	1
27	C 18019	ARM - height adjust	1
28	C 17224	HOSE - short	1
29	C 17225	HOSE - long (use with C16134 cylinder)	1
29	C 17734	HOSE - long (use with C18318 cylinder)	1
30	221- 1375	ELBOW - 1/4" x 90° (use with C16134 cylinder)	1
31	221- 1131	NIPPLE - 1/4" x 1" (use with C16134 cylinder)	1
32	218- 5056	FITTING - valve (includes 218-5004 "O" ring)	2
33	C 18318	CYLINDER - lift	1
34	C 16133	BODY - cylinder	1
35	C 19104	ROD AND PISTON ASSEMBLY	1
36	C 17732	FOOT - cylinder (use with C18318 cylinder)	1
37	NSS	SEAL	1
38	NSS	"O" RING	1
39	NSS	"O" RING	2
	C 17268	KIT - seal, cylinder (consists of items 37, 38 and 39)	1
40	132- 361	PIN - cotter 3/16" x 2-1/2"	1
41	NSS	VALVE - hydraulic, 2 spool (Repairs page 53)(Order C22019 kit)	1
42	C 12093	BUSHING - lift lever	1
43	187- 1006	SCREW - 1/4" x 5/8" NC hex, self-tapping	1
44	132- 348	PIN - cotter 1/4" x 1-1/4"	1
45	C 16134	CYLINDER - lift	1
46	C 14692	FOOT - cylinder (use with C16134 cylinder)	1

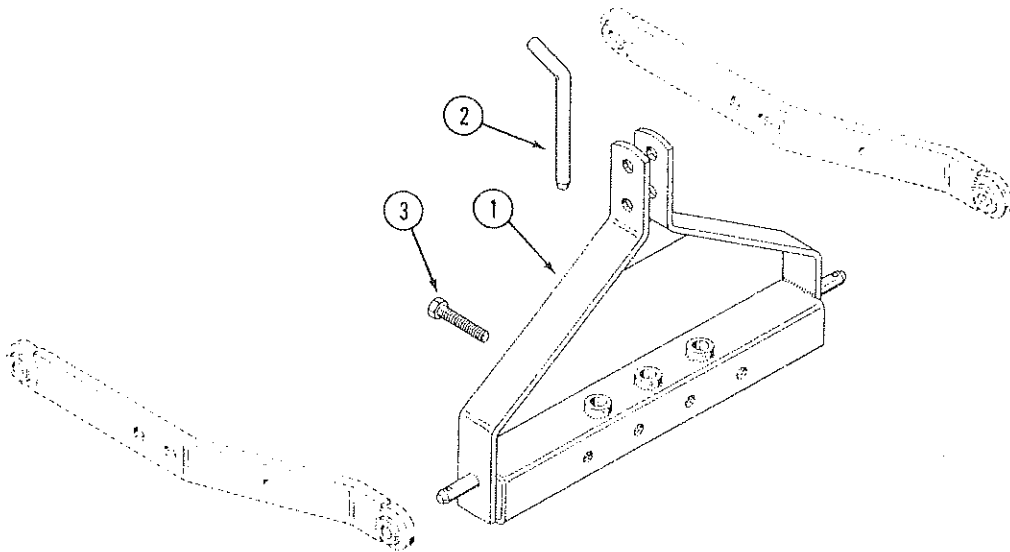
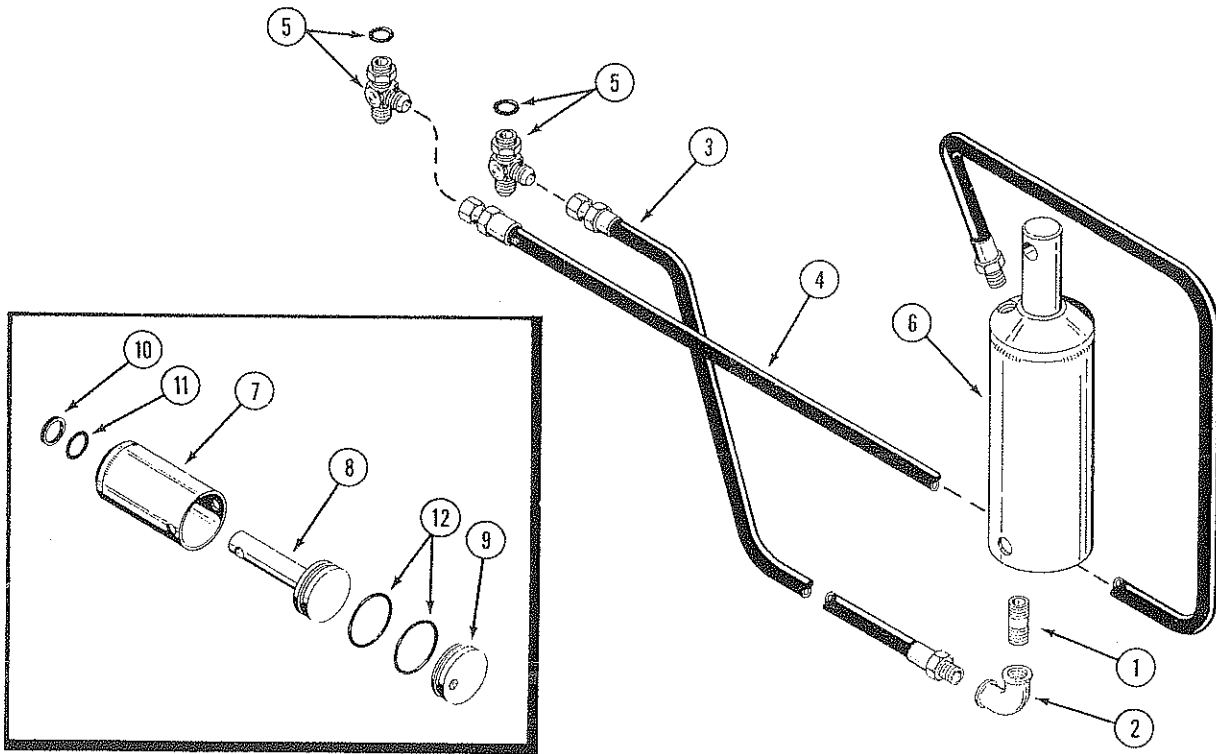


CASE 220, 222, 442 AND 444 COMPACT TRACTORS 73
H26 THREE POINT HITCH 442 AND 444
FRAME, LIFT RODS AND ARMS

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 19740	HITCH PLATE ASSEMBLY.....	1
2	219- 405	FITTING - lube	2
3	C 14722	NUT - lift rod	1
4	C 14724	ROD ASSEMBLY - R. H. lift	1
5	138- 309	PIN - roll 1/4 x 4"	1
6	132- 91	PIN - cotter 3/16 x 1"	6
7	195- 541	WASHER - plain 5/8"	4
8	C 14715	ARM - lift	2
9	C 14991	CHAIN - stay 19 links	1
10	113- 118	BOLT - 5/16 x 5/8" NC hex, zinc plated	2
11	131- 176	NUT - lock 5/16" NC hex	2
12	B 52118	PIN - klik	2
13	A 30338	PIN - klik	3
14	C 14725	ROD - lift L. H.	1
15	C 14717	PIN - clevis	1
	C 14712	LINK ASSEMBLY	1
16	C 14703	CENTER TUBE ASSEMBLY	1
17	C 14709	BALL END ASSEMBLY R. H. THREAD	1
18	C 14710	BALL END ASSEMBLY L. H. THREAD	1
19	138- 59	PIN - roll 1/8 x 7/8"	2
20	C 16128	PIN - clevis 5/8 x 3"	1

CYLINDER AND DRAWBAR MOUNTING

1	C 19740	HITCH PLATE ASSEMBLY.....	1
2	C 14975	PIN - lower cylinder mounting	1
3	C 14976	PIN - upper cylinder mounting	1
4	132- 310	PIN - cotter 1/8 x 1"	3
5	113- 417	BOLT - 1/2 x 1-1/4" NC hex, zinc plated	2

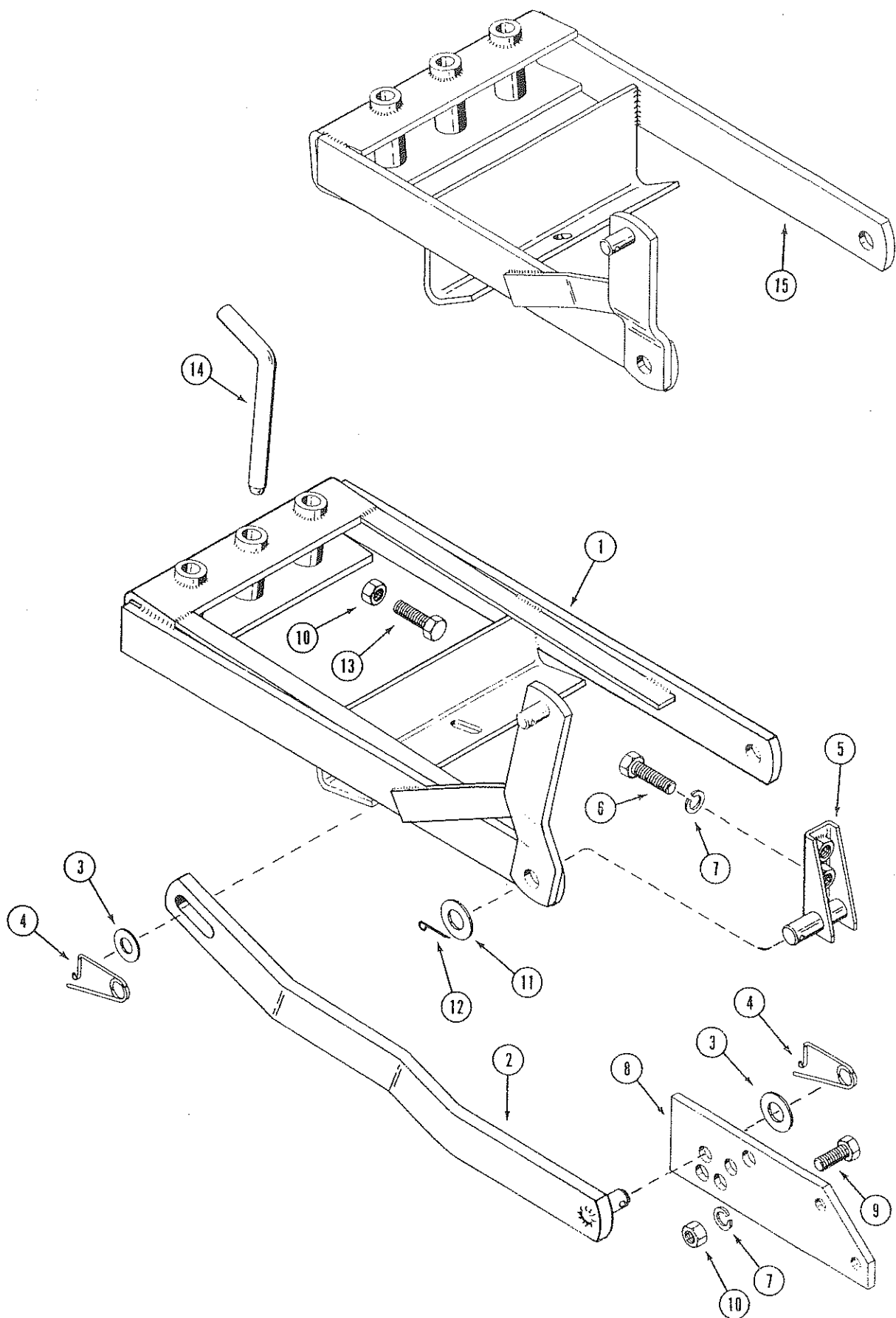


**CASE 220, 222, 442 AND 444 COMPACT TRACTORS 75
MODEL H26 THREE POINT HITCH AND MODEL
F27 HITCH ADAPTER
HYDRAULIC CONNECTIONS AND COMPONENTS**

REF.	PART NO.	DESCRIPTION	REQ'D
1	221- 1139	NIPPLE - 1/4 x 3"	1
2	221- 1375	ELBOW - 90°	1
3	C 17188	HOSE - hydraulic short	1
4	C 17189	HOSE - hydraulic long	1
5	218- 5291	FITTING - tee (Includes 218-5004 "O" ring)	2
6	C 15771	CYLINDER ASSEMBLY	1
7	C 15768	BODY - cylinder	1
8	C 15769	ROD AND PISTON ASSEMBLY	1
9	C 14692	FOOT - cylinder	1
10	NSS	SEAL - wiper	1
11	NSS	"O" RING	1
12	NSS	"O" RING	2
13	C 17268	KIT - seal (Consists of items 10, 11 and 12)	1

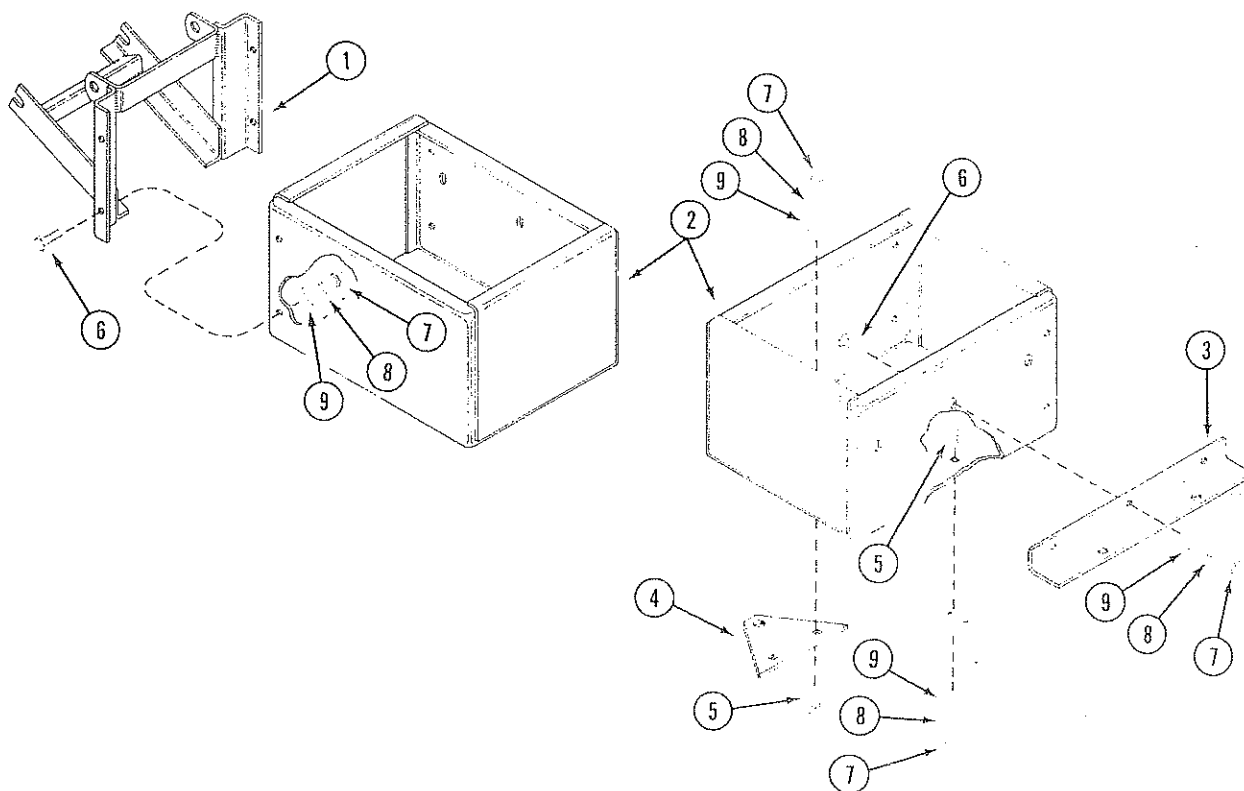
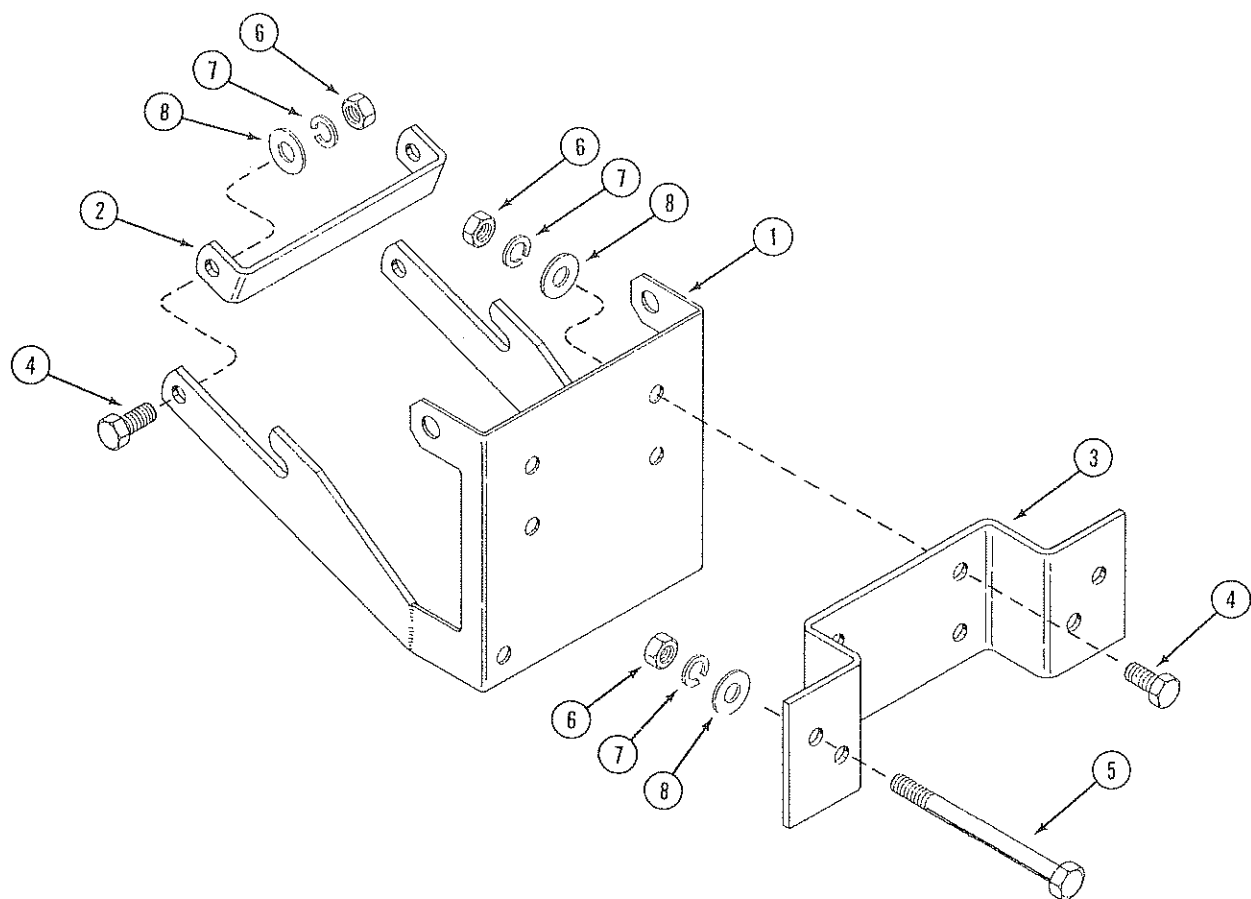
MODEL F27 HITCH ADAPTER

1	C 14872	BRACKET - hitch adapter	1
2	C 14568	PIN - drawbar	1
3	113- 425	BOLT - 1/2 x 3" NC hex, zinc plated	4



MODEL H22 AND H24 SLEEVE HITCH

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 14867	HITCH FRAME ASSEMBLY (442)	1
2	C 14457	ARM - lift	1
3	195- 541	WASHER - plain 21/32"	2
4	C 10898	PIN - safety	2
5	C 14459	BRACKET - hitch mounting R. H.	1
5	C 14460	BRACKET - hitch mounting L. H.	1
6	113- 2400	BOLT - 1/2" x 1-3/8" NC hex, zinc plated	4
7	192- 23	LOCKWASHER - 1/2" zinc plated	6
8	C 17219	PLATE - lift lever	1
9	113- 417	BOLT - 1/2 x 1-1/4" NC hex, zinc plated	2
10	129- 105	NUT - 1/2" NC hex, zinc plated	4
11	195- 545	WASHER - plain 3/4" zinc plated	2
12	132- 306	PIN - cotter 3/16 x 1-3/4"	2
13	113- 476	BOLT - 1/2 x 2-3/4" NC hex, zinc plated	2
14	C 14568	PIN - drawbar	1
15	C 14866	HITCH FRAME ASSEMBLY (220 & 222)	1

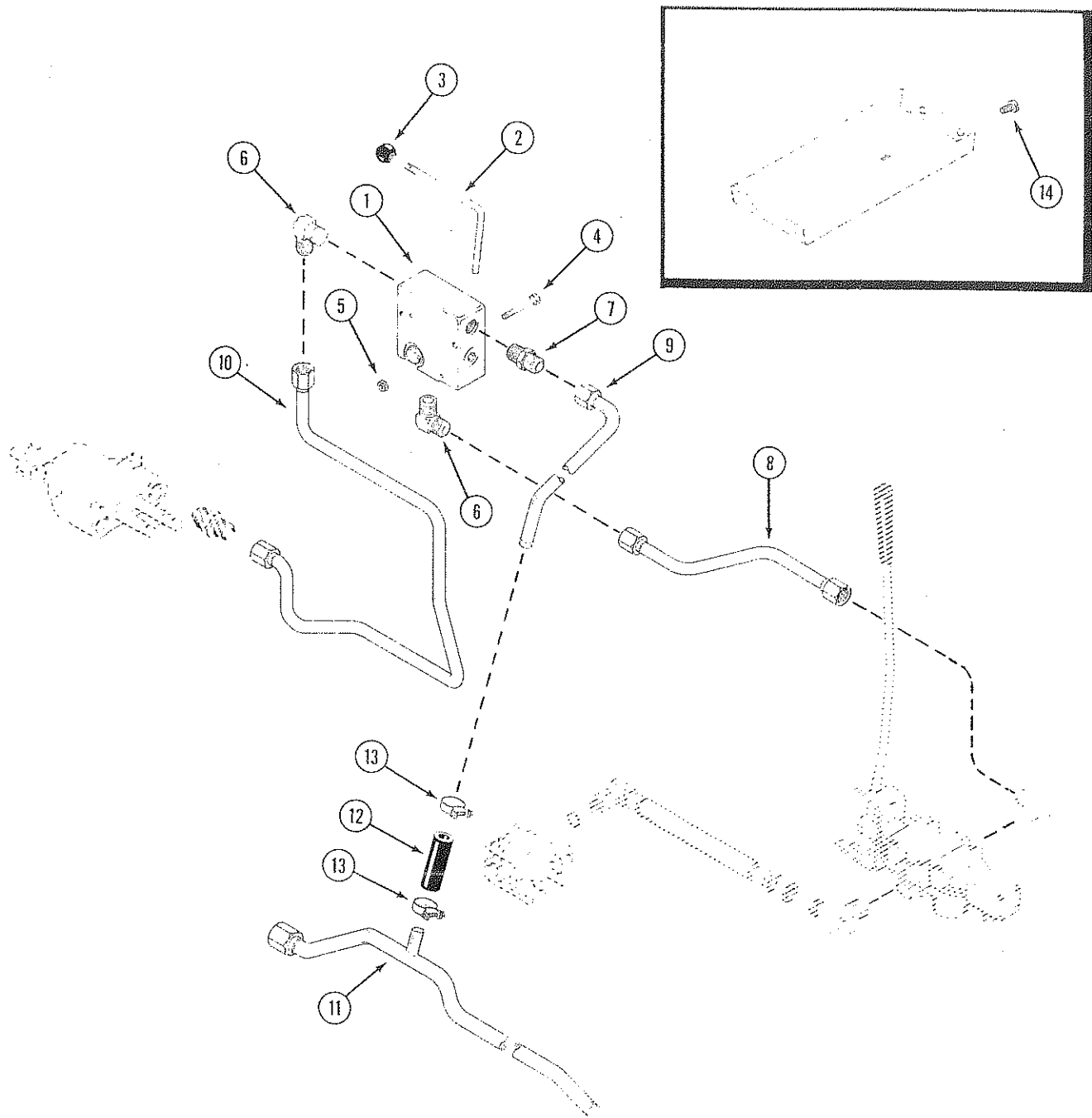


MODEL H18 FRONT END WEIGHT BRACKETS

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 16581	BRACKET - mounting	1
2	C 17161	BRACE - rear	1
3	C 17162	BRACKET - weight mounting	1
4	113- 417	BOLT - 1/2 x 1-1/4" NC hex, zinc plated	6
5	113- 443	BOLT - 1/2 x 6--1/2" NC hex	2
6	129- 105	NUT - 1/2" NC hex, zinc plated	8
7	192- 23	LOCKWASHER - 1/2"	8
8	195- 533	WASHER - 1/2" zinc plated	8

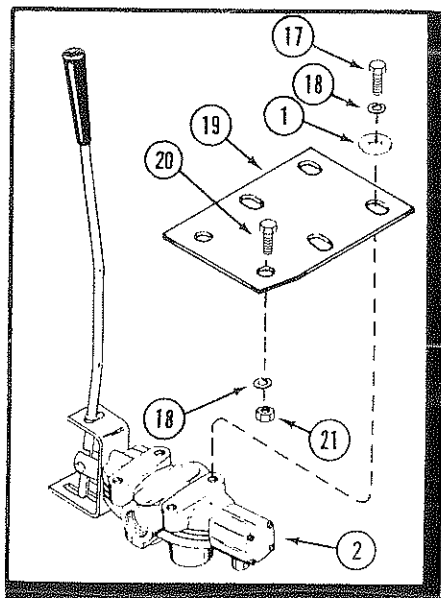
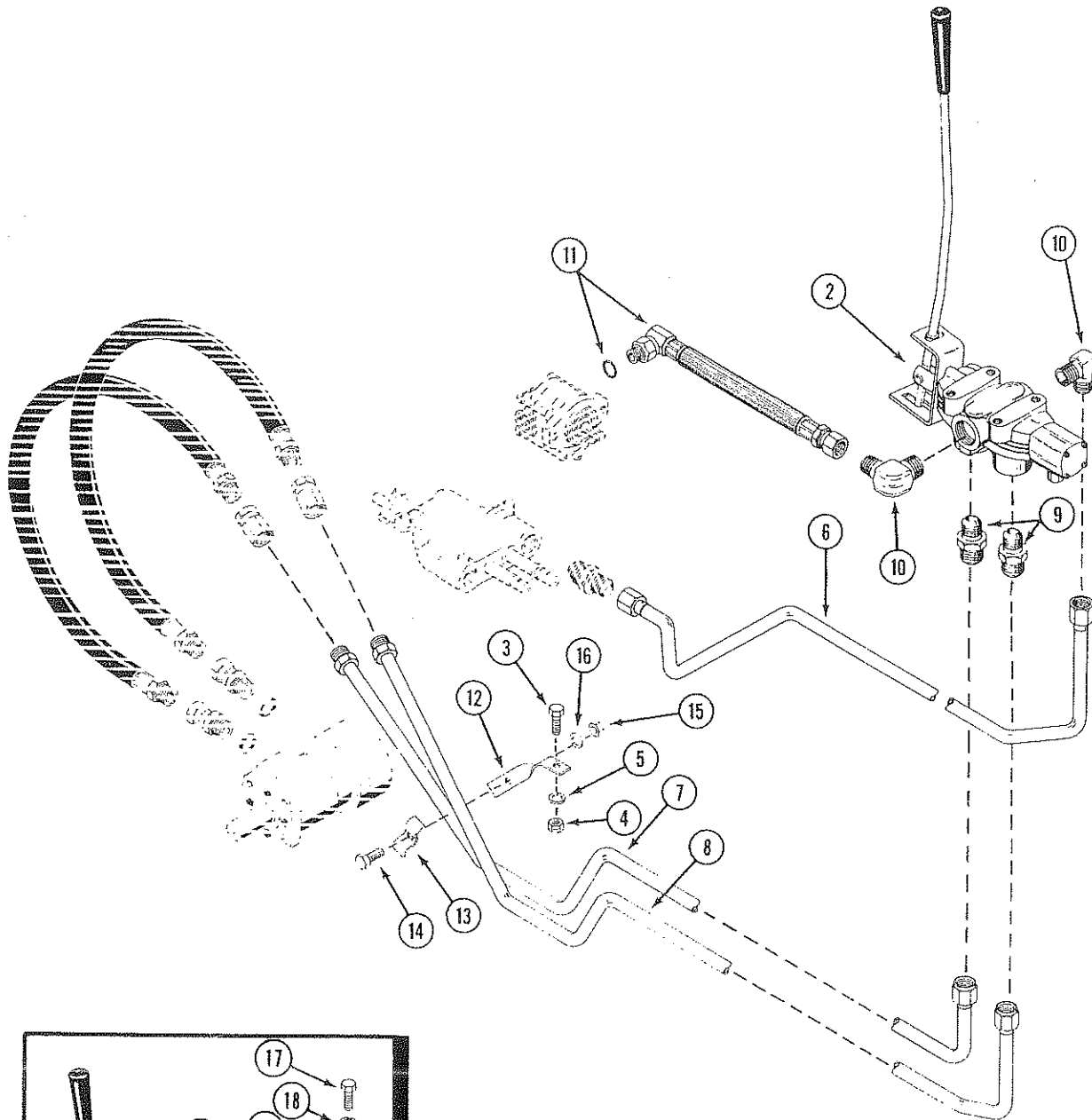
MODEL H13 WEIGHT BOX

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 17859	FRAME - weight box	1
2	C 17863	BOX - weight	1
3	C 17860	SUPPORT - weight box	1
4	C 17636	PLATE - hitch	1
5	111- 317	BOLT - 3/8 x 1" round head, square neck	3
6	113- 207	BOLT - 3/8 x 1" NC hex	4
7	129- 103	NUT - 3/8" NC hex	7
8	192- 21	LOCKWASHER - 3/8"	7
9	195- 525	WASHER - 3/8"	7



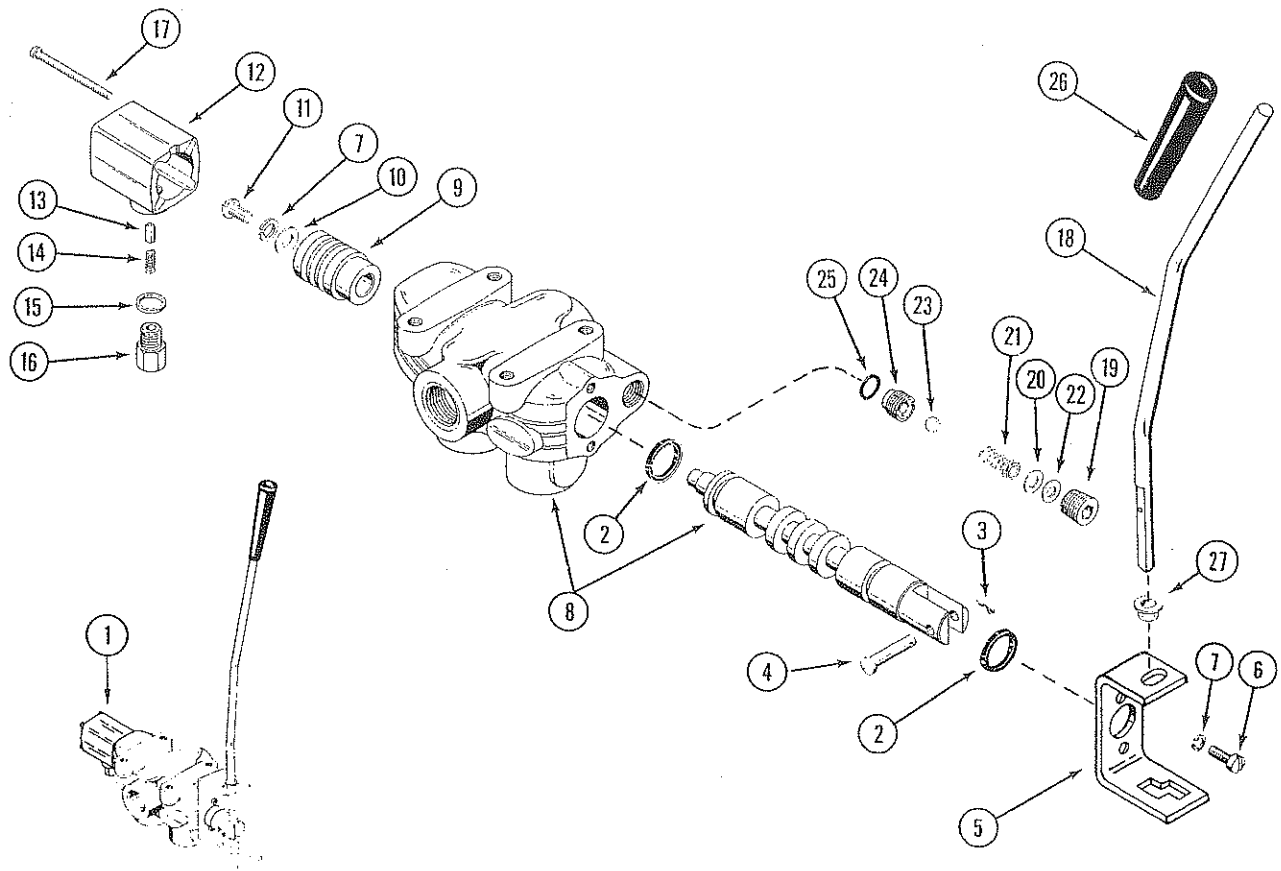
CASE 220, 222, 442 AND 444 COMPACT TRACTORS 81
MODEL H-19 FLOW CONTROL VALVE KIT

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 18722	VALVE - flow control	1
2	C 18720	LEVER - valve	1
3	A 61683	KNOB - lever	1
4	113- 12	BOLT - 1/4" x 2-1/2" NC hex	2
5	131- 1115	NUT - lock 1/4" NC hex	2
6	218- 485	FITTING - elbow 90° 1/2" NPT	2
7	218- 445	FITTING - straight 1/2" NPT	1
8	C 18672	TUBE - valve to PTO valve	1
9	C 18673	TUBE - bypass to return line	1
10	C 18674	TUBE - valve to tractor valve	1
11	C 18671	TUBE - heat exchanger	1
12	C 18721	HOSE - return	1
13	214- 6	CLAMP - hose	2
14	182- 515	SCREW - battery tray 5/16" x 5/8" pan head	2
	C 18719	DECAL - valve, "slow - fast"	1



H17 HYDRAULIC PTO KIT

REF.	PART NO.	DESCRIPTION	REQ'D
1	195- 524	WASHER - 3/8"	4
2	C 18281	VALVE - PTO (repairs page 81D)	1
3	113- 102	BOLT - 5/16 x 3/4" NC hex	1
4	129- 102	NUT - lock 5/16" NC hex.	1
5	192- 20	LOCKWASHER - 5/16"	1
6	C 17191	TUBE - tractor valve to PTO valve	1
7	C 17262	TUBE - PTO valve to motor hose	1
8	C 17263	TUBE - PTO valve to motor hose	1
9	218- 445	FITTING - 1/2" NPT x 1/2" NPT	2
10	218- 494	ELBOW - 90° 3/4 NPT x 5/8" tube	2
11	C 17409	HOSE - pump to PTO valve (includes 218-5006 "O" ring)	1
12	C 15387	BRACKET - tube support.	1
13	C 15389	CLAMP - tube support	1
14	113- 3	BOLT - 1/4 x 3/4" NC hex	1
15	129- 101	NUT - 1/4" NC hex.	1
16	192- 19	LOCKWASHER - 1/4"	1
17	113- 206	BOLT - 3/8 x 3/4" NC hex	4
18	192- 21	LOCKWASHER - 3/8"	8
19	C 14279	SUPPORT - PTO valve	1
20	113- 207	BOLT - 3/8 x 1" NC hex.	2
21	129- 103	NUT - 3/8" NC hex.	2



H17 HYDRAULIC PTO VALVE

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 18281	VALVE - tiller control	1
2	C 11891	SEAL - U-cup.	2
3	132- 5	PIN - cotter 1/16" x 1/2"	1
4	36627	PIN - handle	1
5	C 14651	BRACKET - handle	1
6	71- 410	SCREW - 1/4" x 5/8" NC fillister head	2
7	36628	LOCKWASHER - 1/4"	3
8	NSS	BODY AND SPOOL ASSEMBLY (Order C18281)	1
9	C 11895	ADAPTER - spool	1
10	95- 4	WASHER - plain 1/4"	1
11	75- 48	SCREW - 1/4" x 1/2" rd. hd. machine.	1
12	C 11893	BONNET - detent	1
13	C 11901	PIN - detent.	1
14	C 11892	SPRING - detent	1
15	C 11886	WASHER - detent spring	1
16	C 11887	CAP - detent	1
17	169- 108	SCREW - bonnet 8-32 x 2-1/4" fillister head.	4
18	C 14280	LEVER - valve.	1
19	221- 1842	PLUG - relief 3/8" NPT.	1
20	D 39712	SHIM - .010	UAR
21	T 40189	SPRING - relief	1
22	A 55894	SHIM - .020	UAR
23	211- 11	BALL - relief 3/8"	1
24	C 18417	SEAT - relief	1
25	A 27891	"O" RING - relief seat.	1
26	A 37247	KNOB - hand throttle	1
27	C 12127	BUSHING - nylon	1

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A25461	61	4	A72043	61	17	C12975	39	10
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A25546	61	36	A72046	61	32	C12975	43	2
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