

Ingersoll

COMPACT TRACTORS

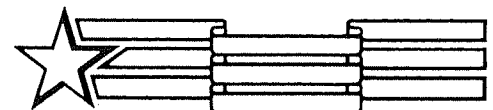
220 - S/N 9702946 TO 9734870

222 - S/N 9706651 TO 9736998

224 - S/N 9708665 TO 9738335

444 - S/N 9711027 TO 9739739

Parts Catalog No. B1322



QUALITY IN THE AMERICAN TRADITION

Ingersoll Tractor Company

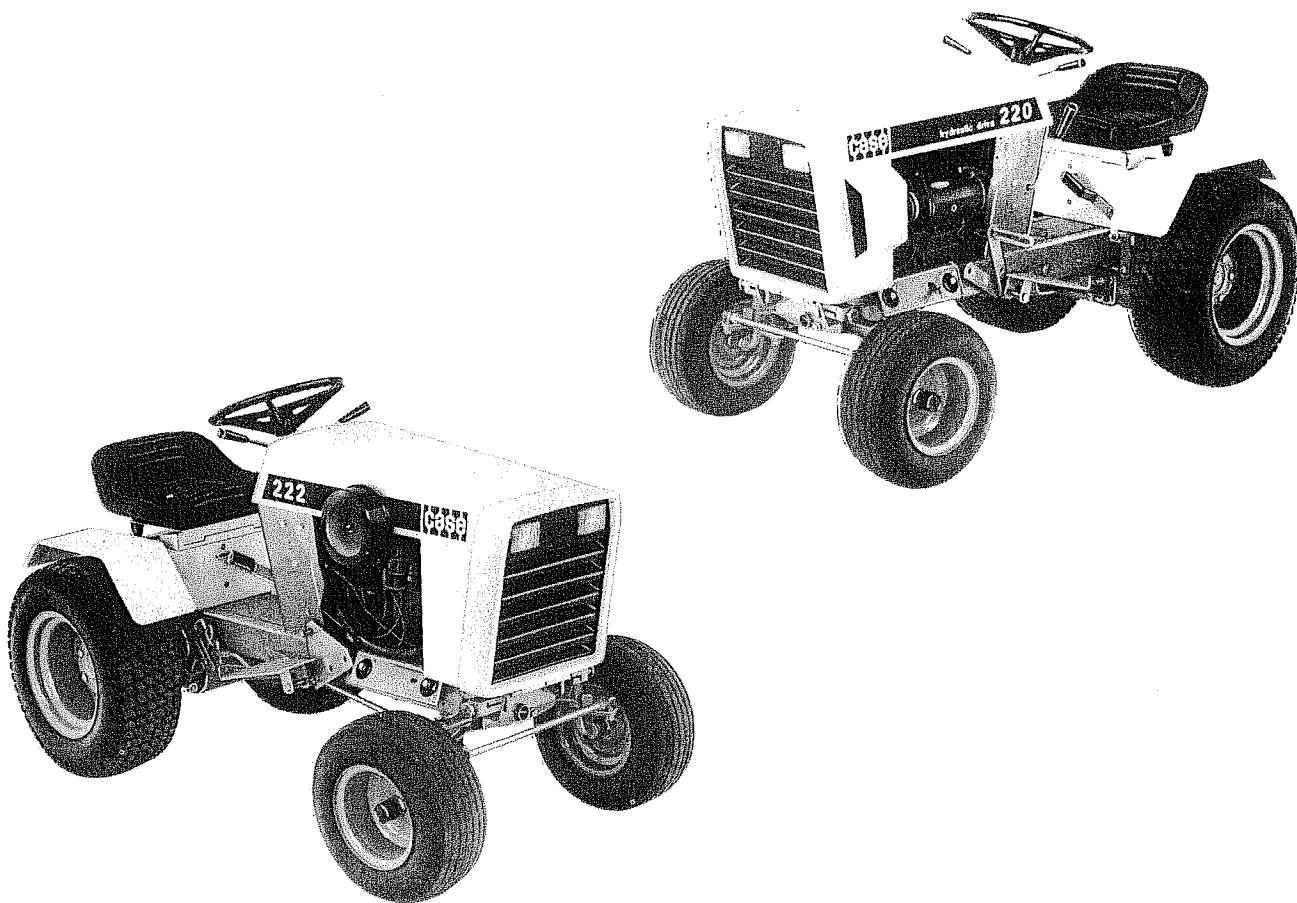
COMPACT TRACTORS

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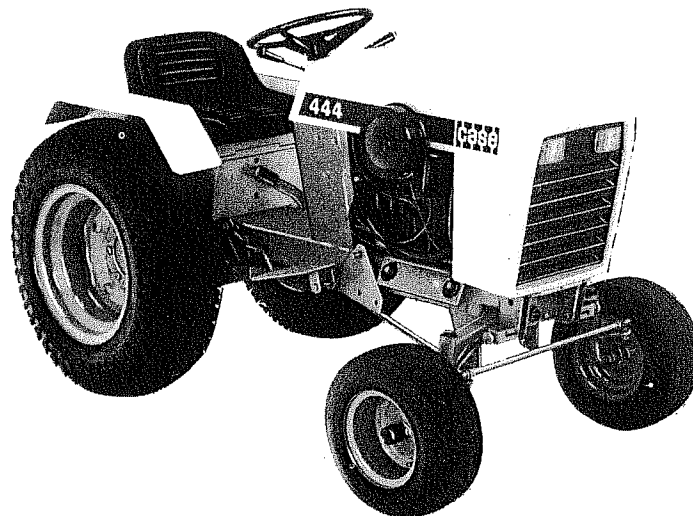
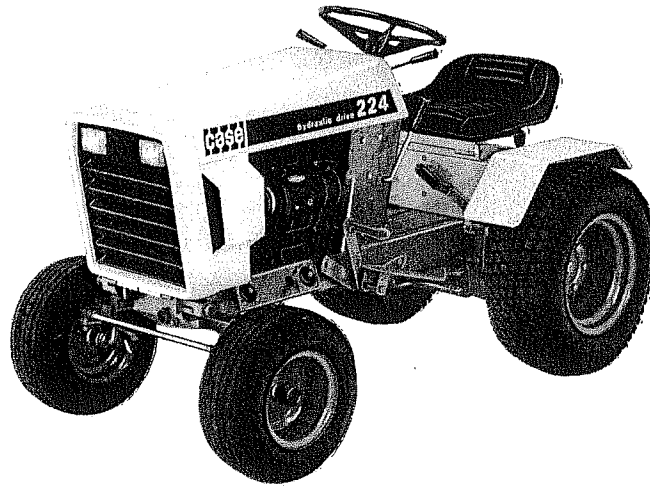
Parts Catalog No. B1322

NOTE: This catalog replaces the
Catalog A1322 and all revisions.

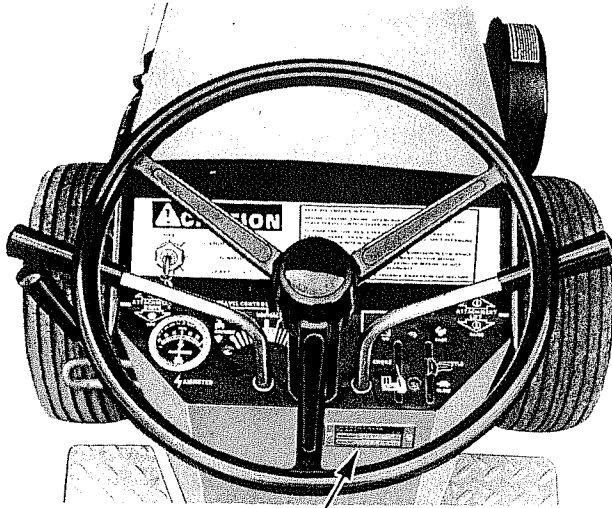
12-95-RP-250-600



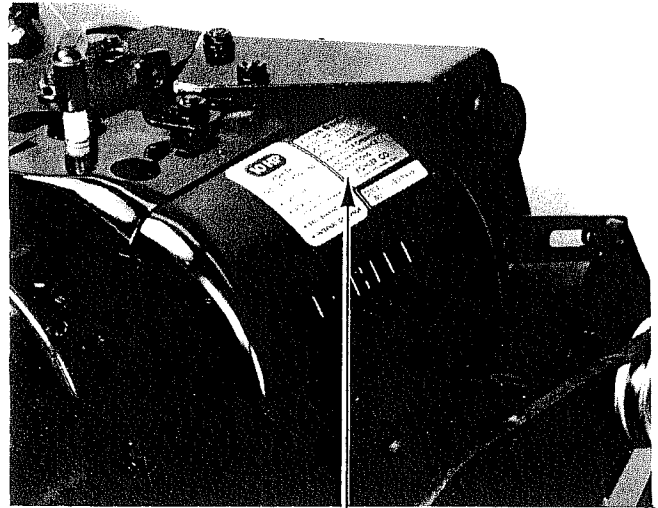
200 Ingersoll Road
Winneconne, Wisconsin 54986



CASE 220, 222, 224 AND 444 COMPACT TRACTORS



TRACTOR MODEL AND
SERIAL NUMBER



ENGINE MODEL, SERIAL AND
SPECIFICATION NUMBER

TRACTOR MODEL DESIGNATIONS	ENGINE MODEL DESIGNATIONS
220 TRACTOR	K-241-A C22857 SPEC. 46736D
222 TRACTOR	K-301-A C22858 SPEC. 47588D
224 TRACTOR	K-321-A C22770 SPEC. 60294D AND PF60313D
444 TRACTOR	K-321-A C22770 SPEC. 60294D AND PF60313D

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.

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.

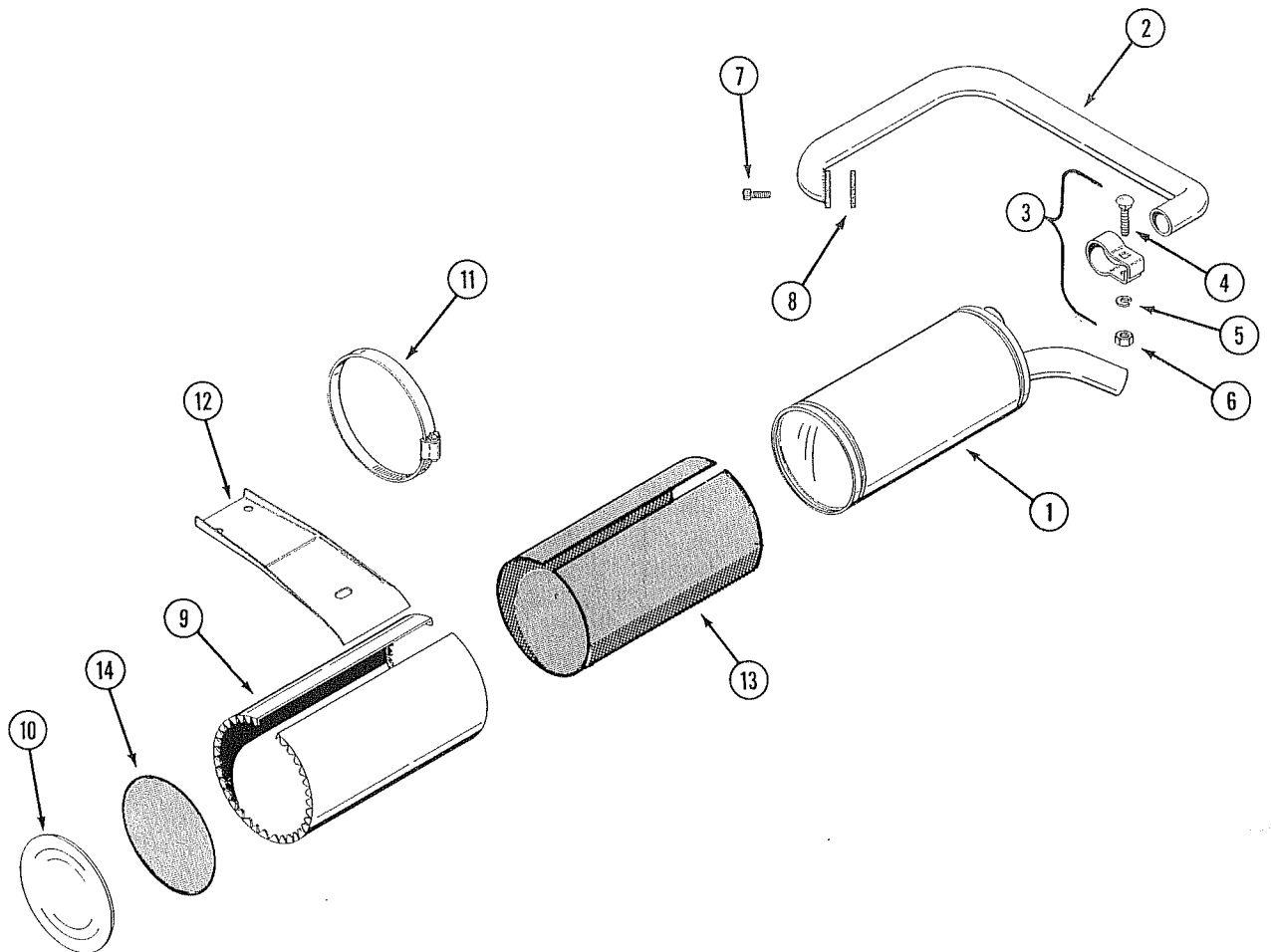
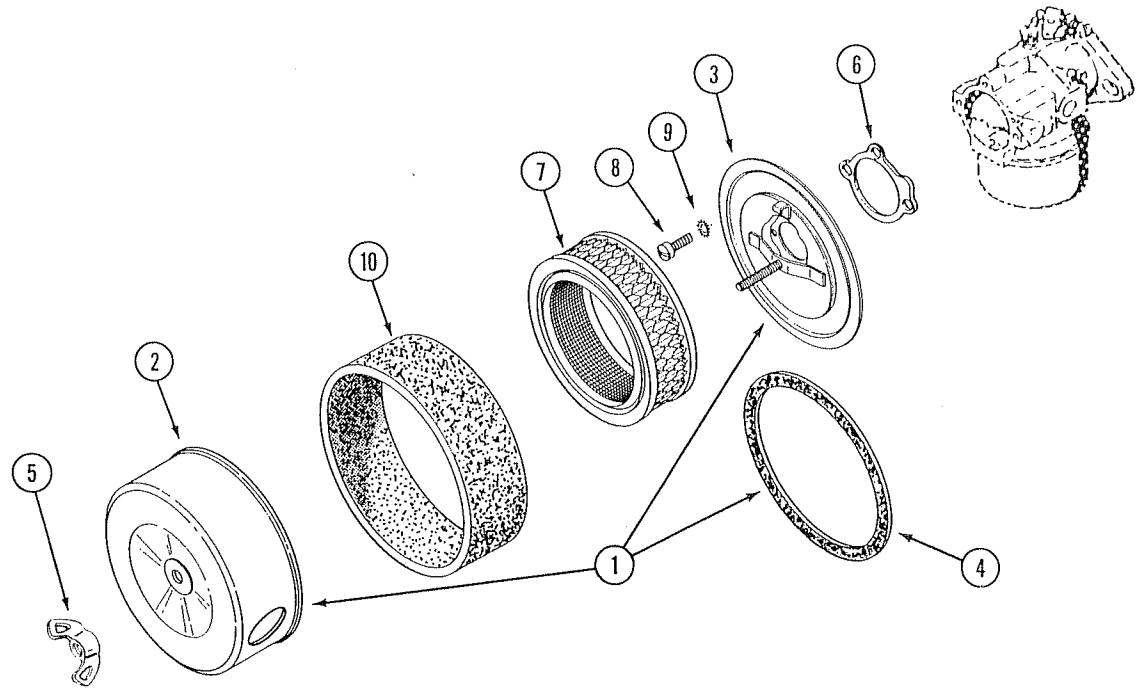
REF.	PART NO.	DESCRIPTION	REQ'D
	C 55159	CYLINDER ASSY - rear steering	1
28	C 56208	SOCKET ASSY - rear cylinder	1
29	C 55956	PLUG - adjusting, socket assy	1
30	C 55957	SEAT - socket ball	2
31	C 56210	SPRING - socket	1
32	C 56209	SEAT - socket spring	1
33	G 45175	CLAMP ASSY - socket assy	1
	16- 836	BOLT - 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

ENGINE SECTION

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222	444	222	444
	Page		Page
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Breaker Contacts	69	Fuel Strainer	25
Breather, Crankcase	7	Fuel System	25
Camshaft	7	Gasket Kits	23
Carburetor	25-27	Governor	29
Connecting Rod	11-13	Muffler	5
Crankshaft	11-13	Shields	61
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Cylinder Head	17-19	Piston	11-13
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Fan	33	Valves	7

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Valve, Control	53-57	Tail Lamp	67
Valve, Control Linkage	59	Tool Box	39
Implement Lift Lever	47	Transmission	49-51
		Wheels, Front & Rear	45

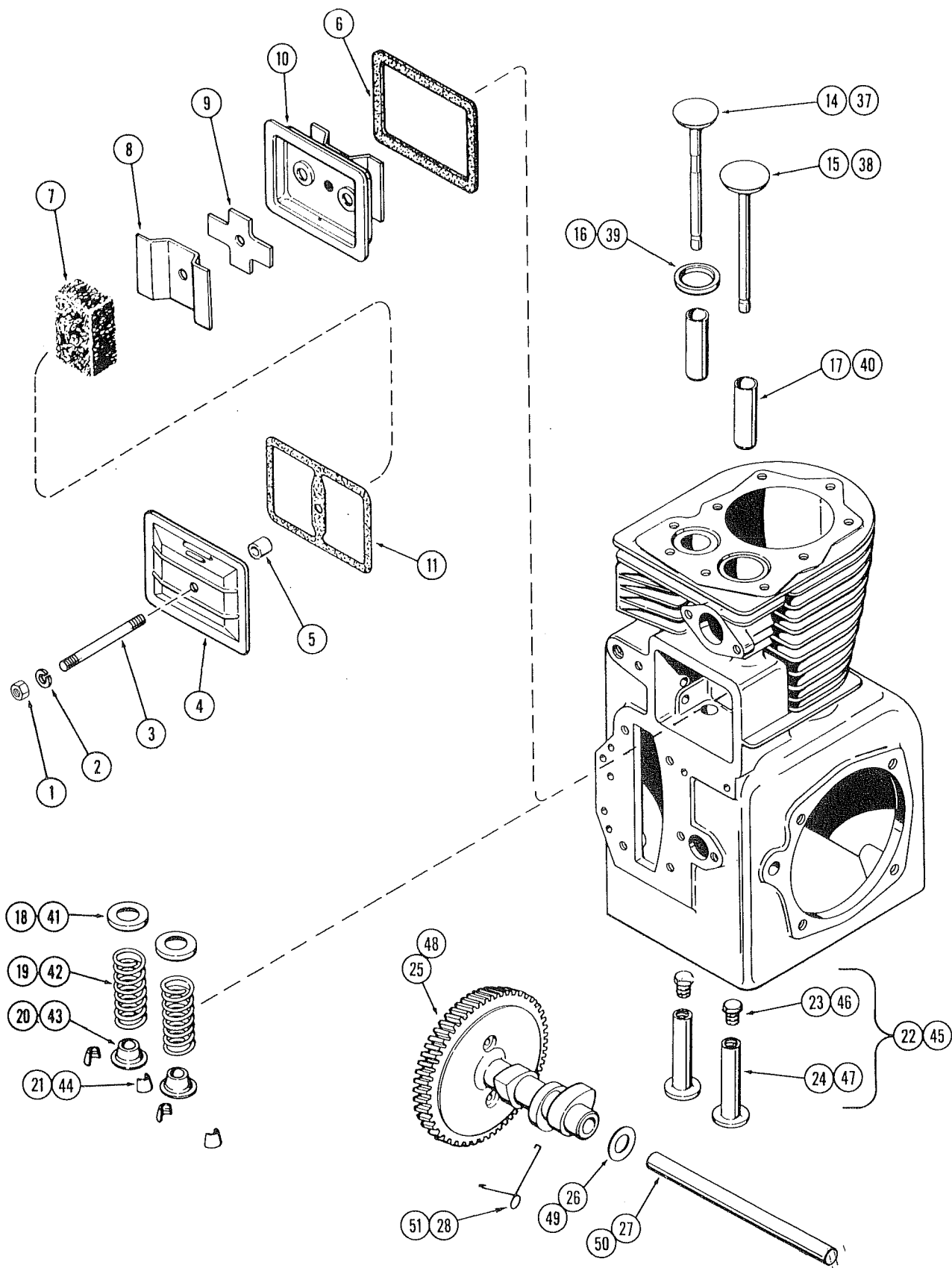


AIR CLEANER

REF.	PART NO.	DESCRIPTION	REQ'D
1	KO 237895	AIR CLEANER ASSEMBLY	1
2	NSS	COVER - air cleaner (order KO237895)	1
3	NSS	BASE - air cleaner (order KO237895)	1
4	KO 237423	GASKET - cover, air cleaner	1
5	C 26703	NUT - wing 1/4" N.C.	1
6	KO 275341	GASKET - air horn	1
7	C 28883	ELEMENT - air cleaner	1
8	177- 94	SCREW - fillister head 10-32 x 5/16"	3
9	193- 6	LOCKWASHER - ext. tooth	3
10	KO 237421	PRE-CLEANER	1

EXHAUST SYSTEM

1	C 26063	MUFFLER ASSEMBLY - exhaust (includes ref. 9, 10, 13 and 14 banded together)	1
2	C 22747	PIPE - engine exhaust	1
3	C 28294	CLAMP ASSEMBLY - muffler	1
4	111- 256	BOLT - 5/16" x 1-1/4" round head NC	1
5	192- 20	LOCKWASHER - 5/16"	1
6	129- 102	NUT - 5/16" N.C. hex	1
7	61- 510	BOLT - 5/16" x 5/8" socket head	2
8	C 10372	GASKET - exhaust	1
9	C 24295	WRAPPER - muffler	1
10	C 22889	COVER - muffler end	1
11	214- 272	CLAMP - muffler and wrapper mounting	3
12	C 22819	BRACKET - muffler mounting	1
13	C 22859	INSULATION - muffler	1
14	C 29290	INSULATION - muffler end	1



220 AND 222 CRANKCASE BREATHER

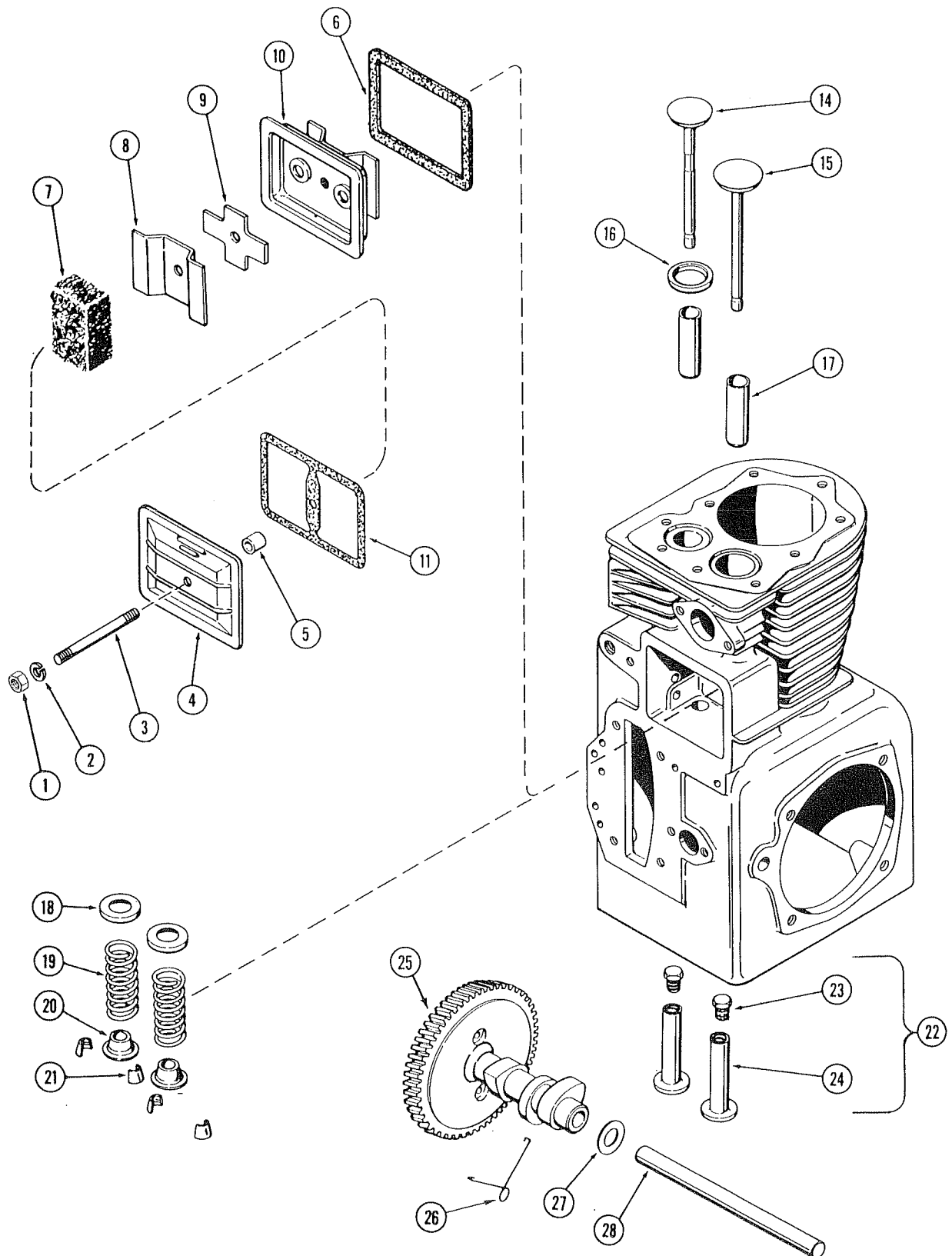
REF.	PART NO.	DESCRIPTION	REQ'D
1	129- 101	NUT - 1/4" NC hex	1
2	92- 4	LOCKWASHER - 1/4"	1
3	KO 275220	STUD - valve cover	1
4	KO 275143	COVER - valve	1
5	KO 231032	SEAL - breather	1
6	KO 235048	GASKET - breather plate	1
7	KO 235118	FILTER - breather	1
8	KO 235117	BAFFLE - breather	1
9	KO 235047	REED - 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 235168	SPRING - valve	2
20	KO 230011	RETAINER - valve spring	2
21	C 24884	KIT - lock, valve retainer (1 pair)	2
22	KOD 235327	LIFTER ASSEMBLY	2
23	NSS	SCREW - tappet adjusting	1
24	NSS	LIFTER - valve	1
25	C 25043	CAMSHAFT ASSEMBLY	1
26	KO 275066	SPACER - camshaft, .005"	UAR
26	KO 275067	SPACER - camshaft, .010"	UAR
27	C 30487	PIN - camshaft	1
28	C 28680	SPRING - actuating	1

222 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 235168	SPRING - valve	2
43	KO 230011	RETAINER - valve spring	2
44	C 24884	KIT - lock, valve retainer (1 pair)	2
45	KOD 235327	LIFTER ASSEMBLY	2
46	NSS	SCREW - tappet adjusting	1
47	NSS	LIFTER - valve	1
48	C 25043	CAMSHAFT ASSEMBLY	1
49	KO 275066	SPACER - camshaft, .005"	UAR
49	KO 275067	SPACER - camshaft, .010"	UAR
50	C 30487	PIN - camshaft	1
51	C 28680	SPRING - actuating	1

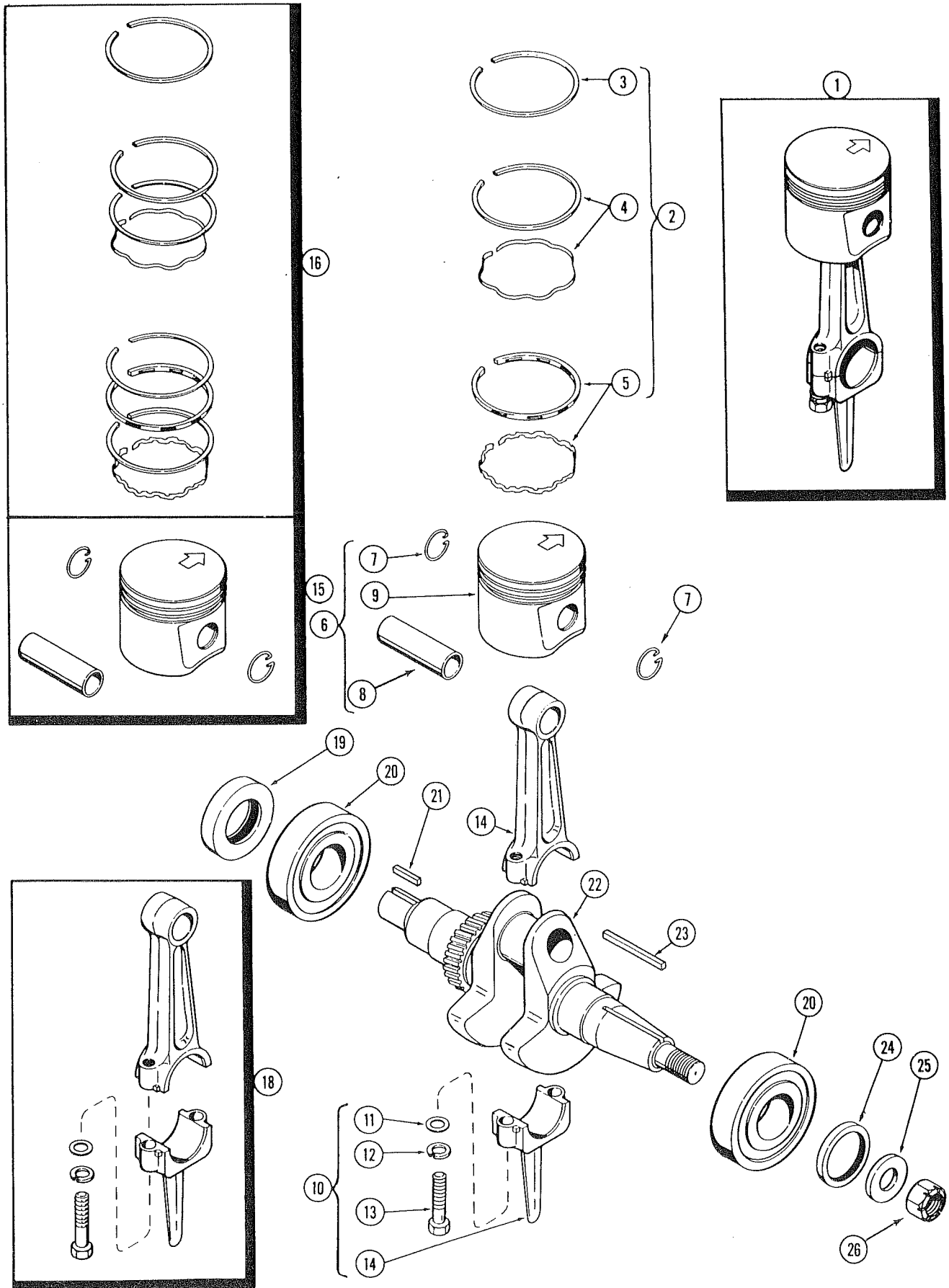


224 AND 444 CRANKCASE BREATHER

REF.	PART NO.	DESCRIPTION	REQ'D
1	129- 101	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

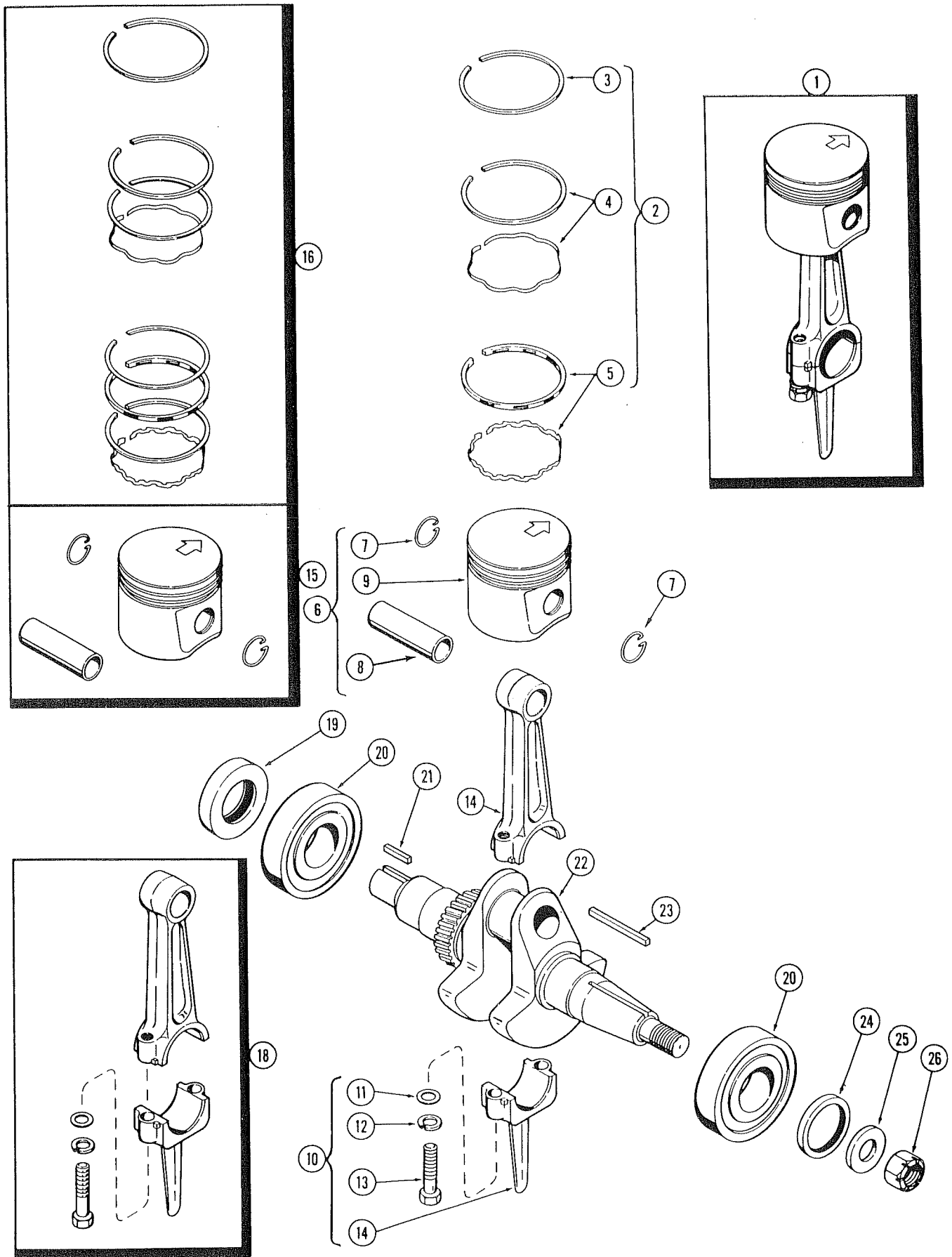
224 AND 444 CAMSHAFT AND VALVES

14	KO 237672	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	KIT - lock, valve retainer (1 pair)	2
22	KOD 235327	LIFTER ASSEMBLY	2
23	NSS	SCREW - tappet adjusting	1
24	NSS	LIFTER - valve	1
25	C 25043	CAMSHAFT ASSEMBLY	1
26	C 28680	SPRING - actuating	1
27	KO 275066	SPACER - camshaft, .005"	UAR
27	KO 275067	SPACER - camshaft, .010"	UAR
28	KO 235053	PIN - camshaft.	1



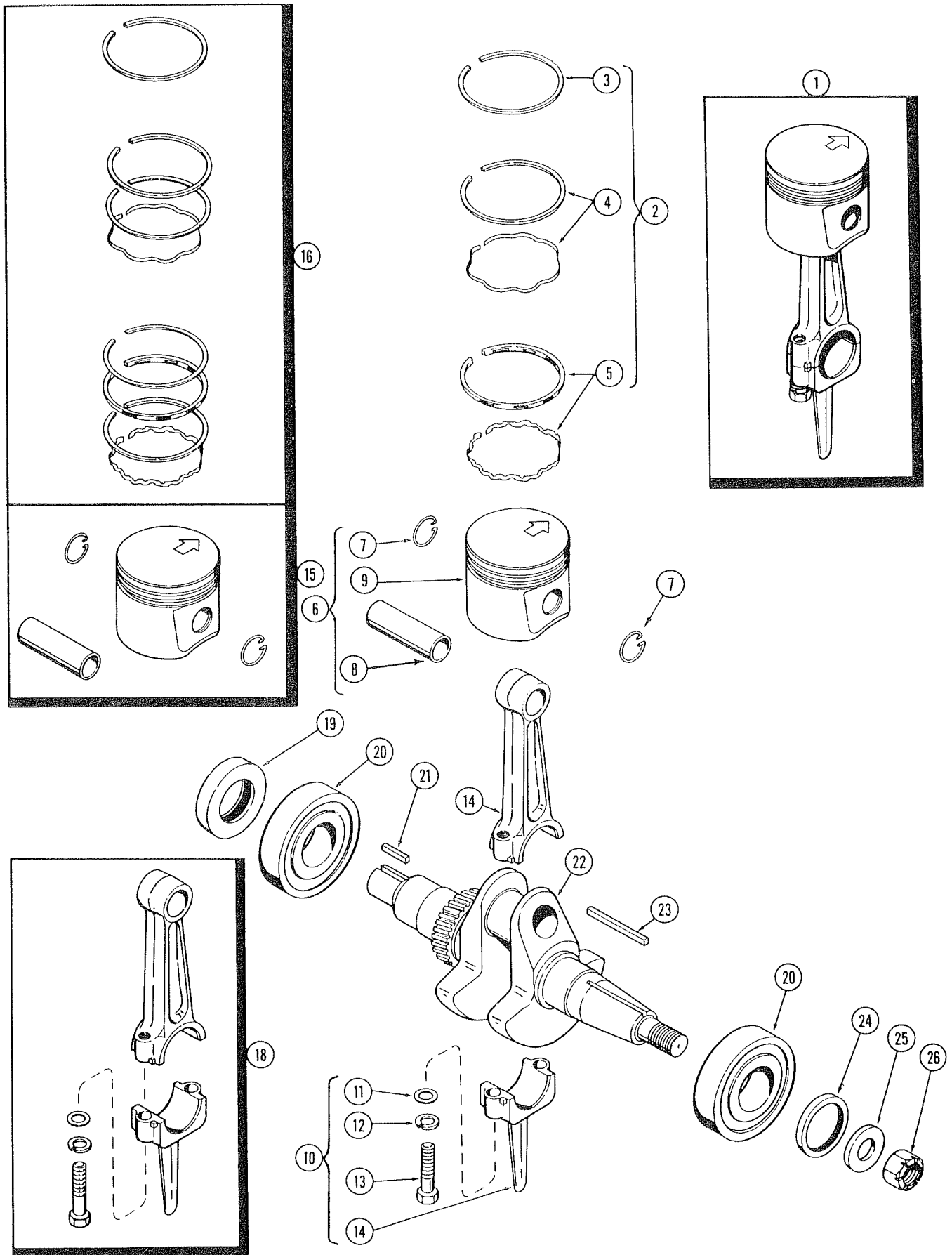
220 CRANKSHAFT, PISTON — CONNECTING ROD

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	C 29516	PISTON ASSEMBLY (For oversize, see item 15) (Includes rings) .	1
7	KO 235004	RETAINER - piston pin	2
8	NSS	PIN - piston	1
9	NSS	PISTON	1
10	C 30484	CONNECTING ROD ASSEMBLY (For undersize, see item 18) . . .	1
11	KO 235003	WASHER - special	2
12	92- 6	LOCKWASHER	2
13	C 22698	SCREW - cap connecting rod	2
14	NSS	ROD - connecting	1
15	C 29518	PISTON ASSEMBLY - .010" oversize (Includes rings)	1
15	C 29519	PISTON ASSEMBLY - .020" oversize (Includes rings)	1
15	C 29520	PISTON ASSEMBLY - .030" oversize (Includes rings)	1
15	C 29517	PISTON ASSEMBLY - .003" oversize (Includes rings)	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
18	C 18101	CONNECTING ROD ASSEMBLY - .010" undersize	1
19	C 28678	OIL SEAL - crankshaft rear	1
20	C 28669	BEARING - crankshaft ball	2
21	C 28321	KEY - 1/4" Sq. x 3/4" (Pump Coupling)	1
22	C 29025	CRANKSHAFT	1
23	C 28289	KEY - flat 3/16" x 3/16" x 1-3/8" (Flywheel)	1
24	C 32891	OIL SEAL - crankshaft front	1
25	195- 541	WASHER - 5/8"	1
26	131- 580	NUT - special Marsden 5/8" NF	1



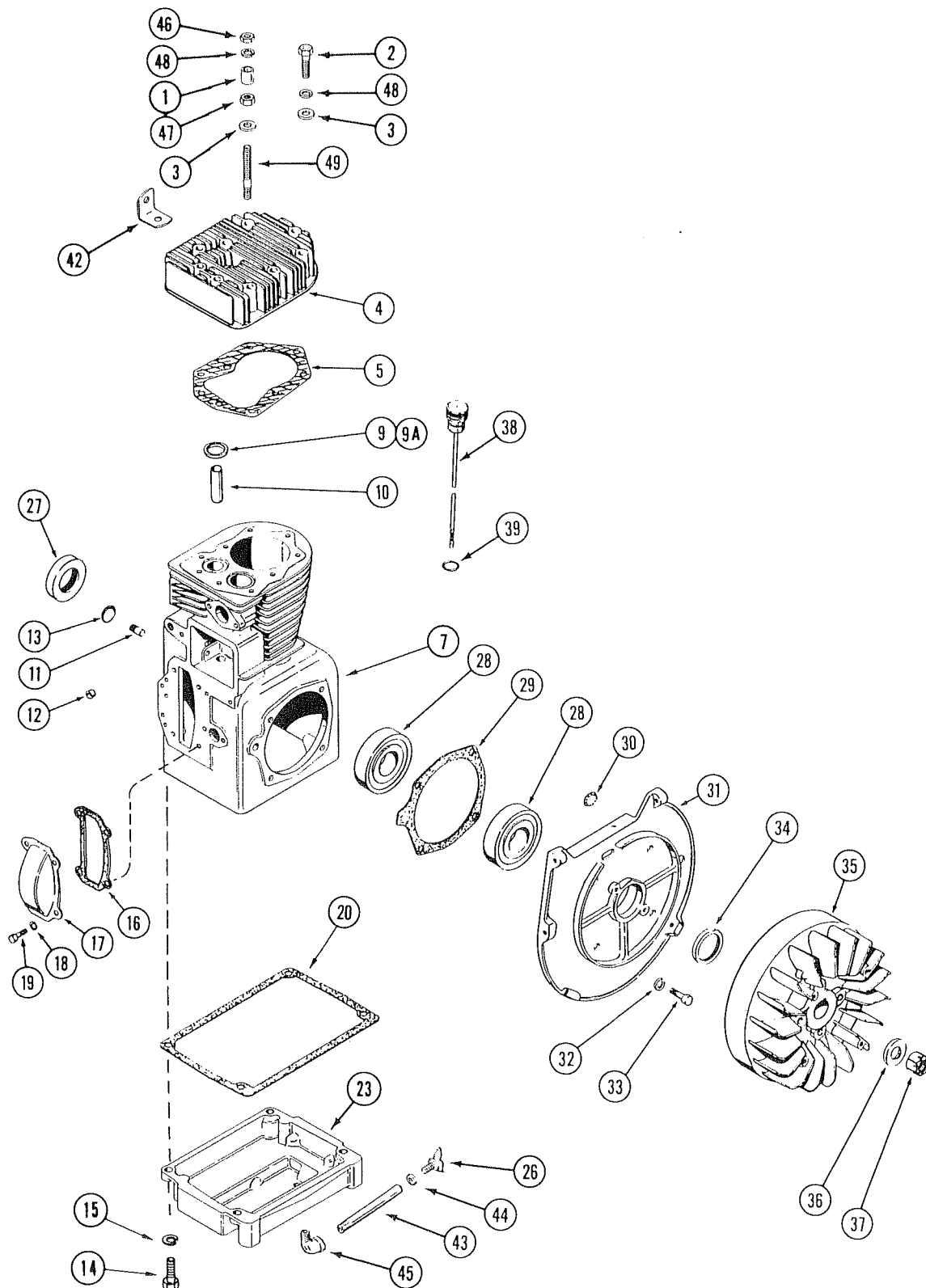
222 CRANKSHAFT, PISTON – CONNECTING ROD

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	C 29521	PISTON ASSEMBLY (For oversize, see item 15) (Includes rings) .	1
7	KO 235004	RETAINER - piston pin	2
8	NSS	PIN - piston	1
9	NSS	PISTON	1
10	C 30483	CONNECTING ROD ASSEMBLY (For undersize, see item 18) . . .	1
11	KO 235003	WASHER - special	2
12	92- 6	LOCKWASHER	2
13	C 22698	SCREW - cap connecting rod	2
14	NSS	ROD - connecting	1
15	C 29523	PISTON ASSEMBLY - .010" oversize (Includes rings)	1
15	C 29524	PISTON ASSEMBLY - .020" oversize (Includes rings)	1
15	C 29525	PISTON ASSEMBLY - .030" oversize (Includes rings)	1
15	C 29522	PISTON ASSEMBLY - .003" oversize (Includes rings)	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
18	C 23135	CONNECTING ROD ASSEMBLY - .010" undersize	1
19	C 28678	OIL SEAL - crankshaft rear	1
20	C 28669	BEARING - crankshaft ball	2
21	C 28321	KEY - 1/4" Sq. x 3/4" (Pump Coupling)	1
22	C 29022	CRANKSHAFT	1
23	C 28289	KEY - flat 3/16" x 3/16" x 1-3/8" (Flywheel)	1
24	C 32891	OIL SEAL - crankshaft front	1
25	195- 541	WASHER - 5/8"	1
26	131- 580	NUT - special Marsden 5/8" NF	1



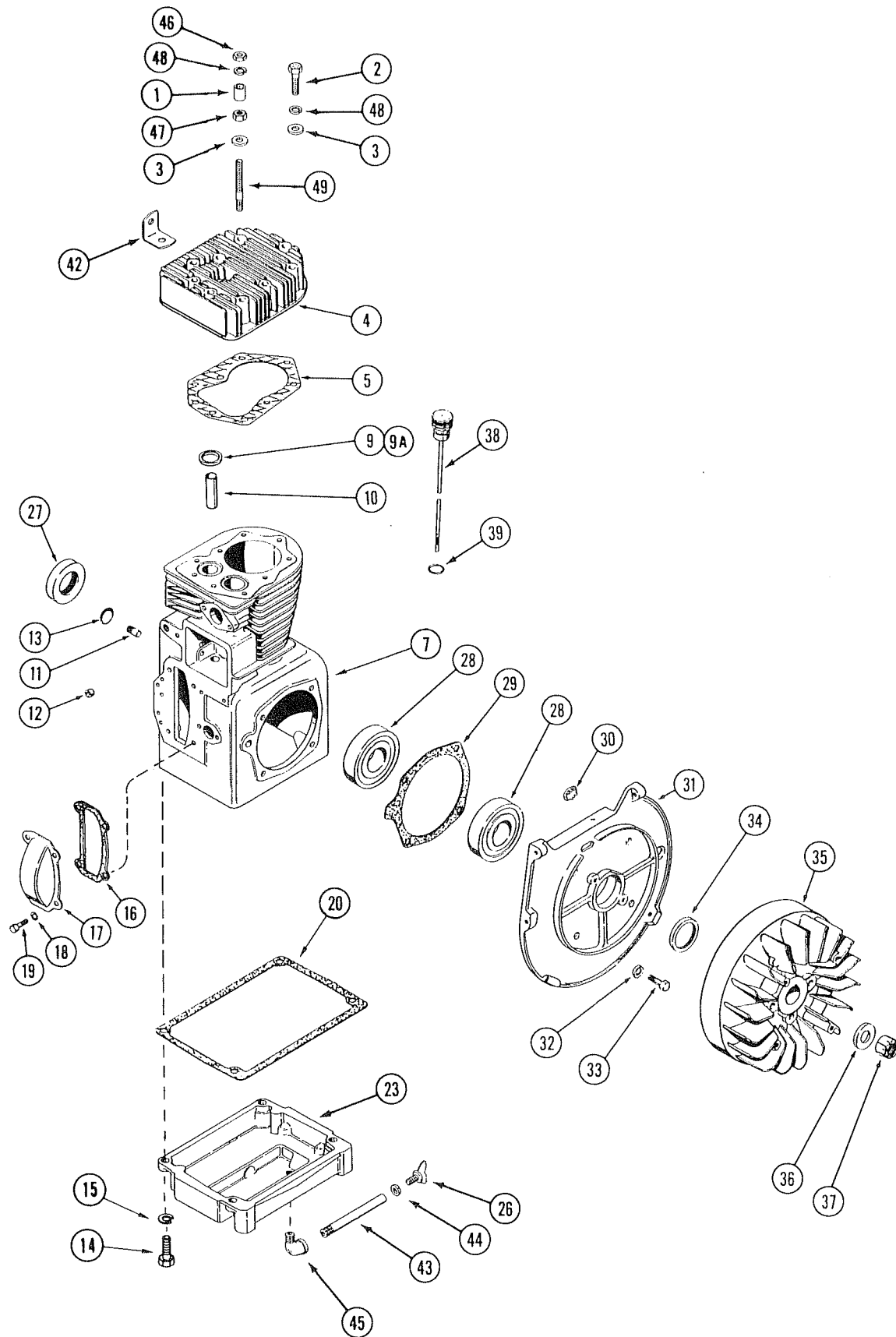
224 AND 444 CRANKSHAFT, PISTON – CONNECTING ROD

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	C 29526	PISTON ASSEMBLY (For oversize, see item 15) (Includes rings) .	1
7	KO 235004	RETAINER - piston pin	2
8	NSS	PIN - piston	1
9	NSS	PISTON	1
10	C 30483	CONNECTING ROD ASSEMBLY (For undersize, see item 18) . . .	1
11	KO 235003	WASHER - special	2
12	92- 6	LOCKWASHER	2
13	C 22698	SCREW - cap connecting rod	2
14	NSS	ROD - connecting	1
15	C 29528	PISTON ASSEMBLY - .010" oversize (Includes rings)	1
15	C 29529	PISTON ASSEMBLY - .020" oversize (Includes rings)	1
15	C 29530	PISTON ASSEMBLY - .030" oversize (Includes rings)	1
15	C 29527	PISTON ASSEMBLY - .003" oversize (Includes rings)	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
18	C 23135	CONNECTING ROD ASSEMBLY - .010" undersize	1
19	C 28678	OIL SEAL - crankshaft rear	1
20	C 28669	BEARING - crankshaft ball	2
21	C 28321	KEY - 1/4" Sq. x 3/4" (Pump Coupling)	1
22	C 30504	CRANKSHAFT	1
23	C 28289	KEY - flat 3/16" x 3/16" x 1-3/8" (Flywheel)	1
24	C 32891	OIL SEAL - crankshaft front	1
25	195- 541	WASHER - 5/8"	1
26	131- 580	NUT - special Marsden 5/8" NF	1



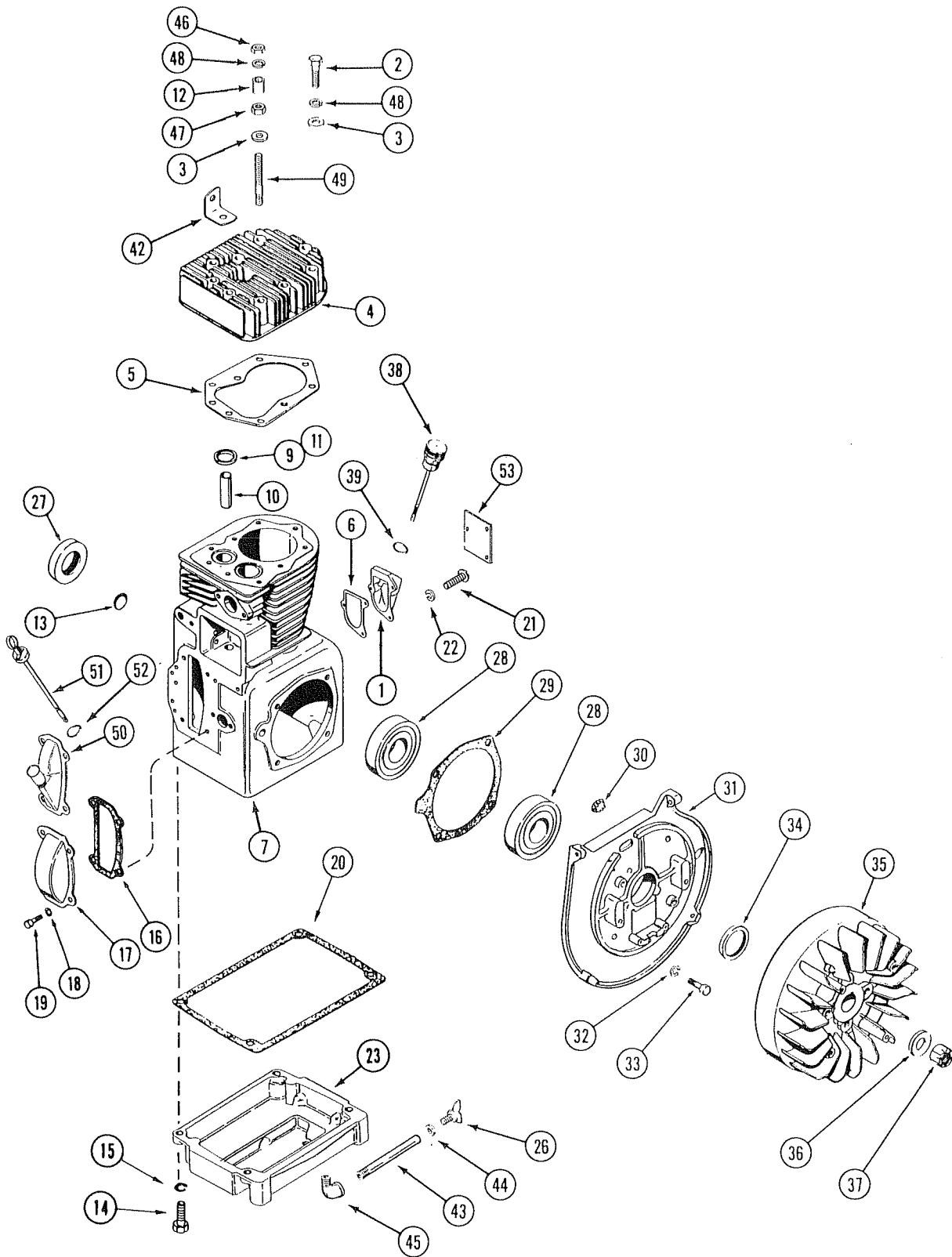
220 ENGINE BLOCK AND ATTACHING PARTS

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 21814	SPACER - cylinder head	6
2	KO 270158	BOLT - cylinder head	2
3	KO 270889	WASHER - cylinder head	9
4	KO 236675	HEAD - cylinder	1
5	C 30482	GASKET - head	1
7	C 27283	BLOCK ASSEMBLY - cylinder, short (Includes crankshaft, piston assembly, ring set, crankshaft seals, rod assembly, camshaft assembly, valves, bearings, plate and plate gasket, governor gear assembly, cross shaft, and gasket kit)	1
9	KO 230170	INSERT - exhaust valve	1
10	KO 235007S	GUIDE - valve	2
11	KO 235125S	SHAFT - stub, governor	1
12	C 28691	BEARING - needle, governor shaft	1
13	O/L	PLUG - expansion - 1-1/8"	1
14	113- 209	BOLT - 3/8" x 1-1/2" 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	O/L	BOLT - 1/4" x 1/2" NC plated	4
20	KO 235353	GASKET - oil pan	1
23	C 22699	BASE - oil pan	1
26	C 14399	PLUG - oil drain	1
27	C 28678	OIL SEAL - crankshaft rear	1
28	C 28669	BEARING - crankshaft ball	2
29	KO 235757	GASKET - bearing plate	1
29	KO 235070	GASKET - shim, .010	UAR
30	O/L	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 32891	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"	1
38	C 30868	DIPSTICK ASSEMBLY	1
39	C 28217	"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
45	221- 1412	ELBOW - street	1
46	129- 143	NUT - 3/8" NC hex. jam	6
47	129- 103	NUT - 3/8" NC hex.	6
48	192- 21	LOCKWASHER - 3/8"	9
49	KO 237277	STUD - cylinder head	7



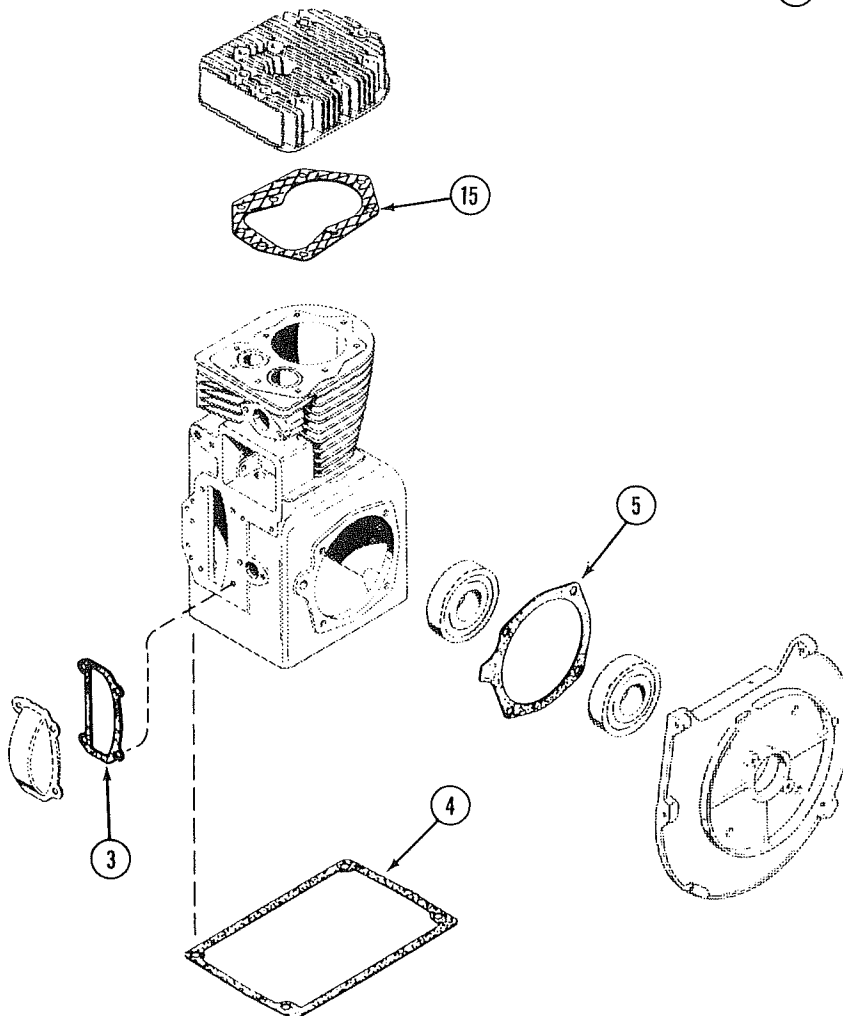
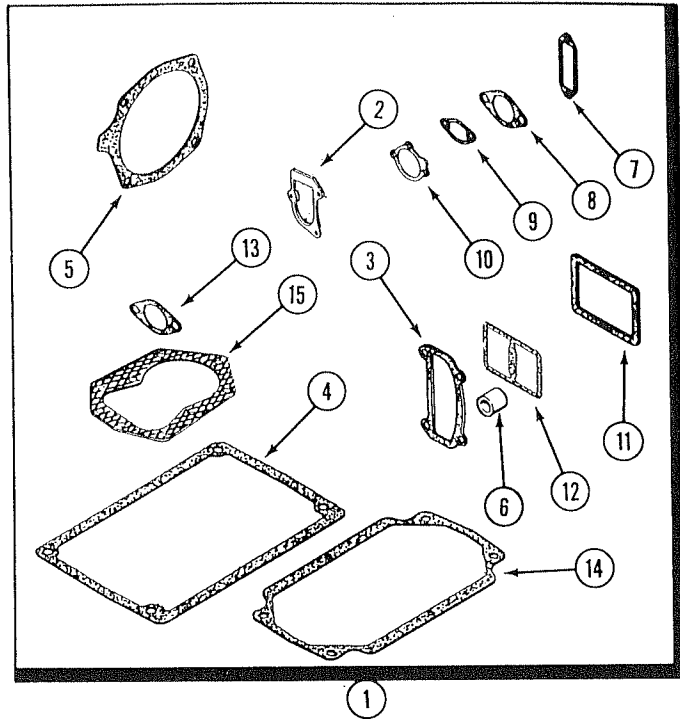
222 ENGINE BLOCK AND ATTACHING PARTS

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 21814	SPACER - cylinder head	6
2	KO 270158	BOLT - cylinder head	2
3	KO 270889	WASHER - cylinder head	9
4	KO 237670	HEAD - cylinder	1
5	C 30482	GASKET - head	1
7	C 24141	BLOCK ASSEMBLY - cylinder, short (Includes crankshaft, piston assembly, ring set, crankshaft seals, rod assembly, camshaft assembly, valves, bearings, plate and plate gasket, governor gear assembly, cross shaft, and gasket kit)	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	C 28691	BEARING - needle, governor shaft	1
13	O/L	PLUG - expansion - 1-1/8"	1
14	113- 209	BOLT - 3/8" x 1-1/2" 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	O/L	BOLT - 1/4" x 1/2" NC plated	4
20	KO 235353	GASKET - oil pan	1
23	C 22699	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	C 28678	OIL SEAL - crankshaft rear	1
28	C 28669	BEARING - crankshaft ball	2
29	KO 235757	GASKET - bearing plate	6
29	KO 235070	GASKET - shim, .010	UAR
30	O/L	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 32891	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"	1
38	C 30868	DIPSTICK ASSEMBLY	1
39	C 28217	"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
45	221- 1412	ELBOW - street	1
46	129- 143	NUT - 3/8" NC hex. jam	6
47	129- 103	NUT - 3/8" NC hex.	6
48	192- 21	LOCKWASHER - 3/8"	9
49	KO 237277	STUD - cylinder head	7



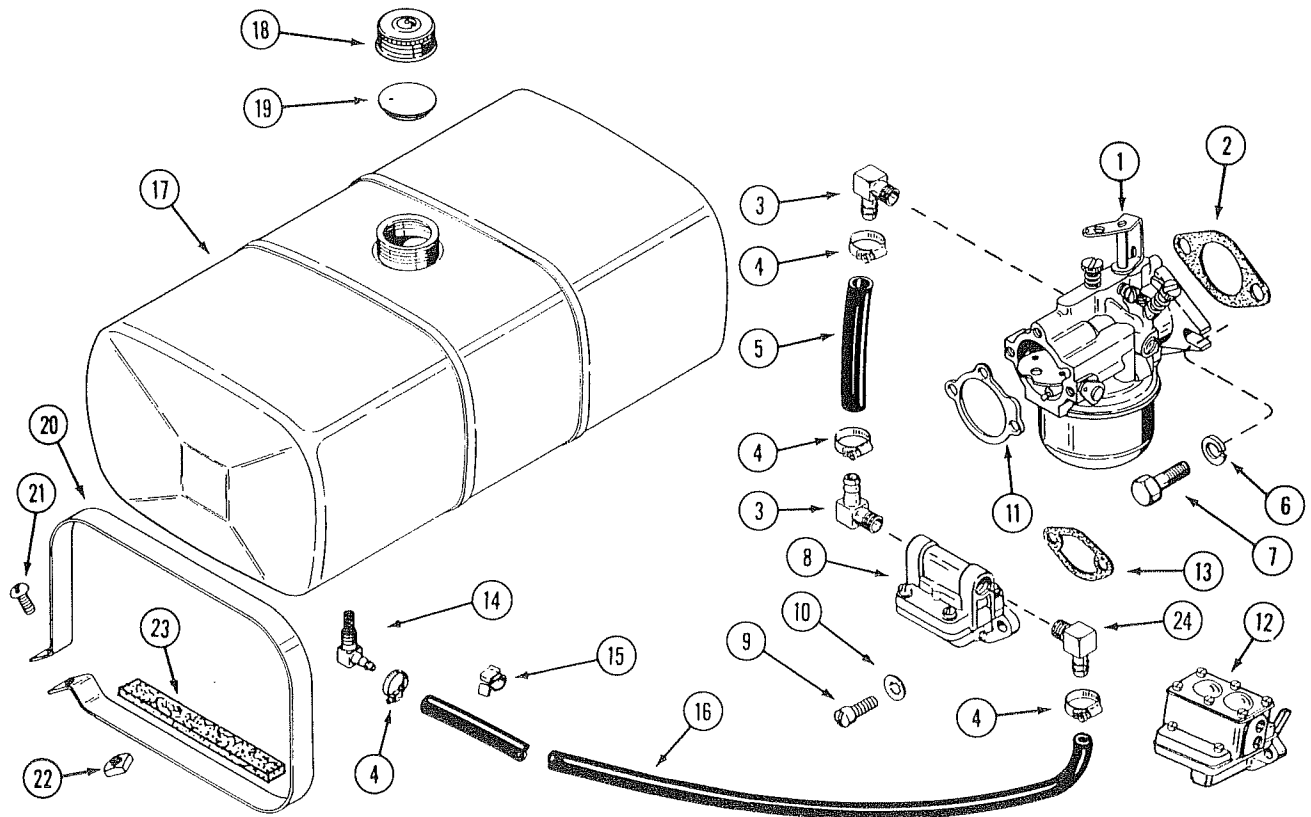
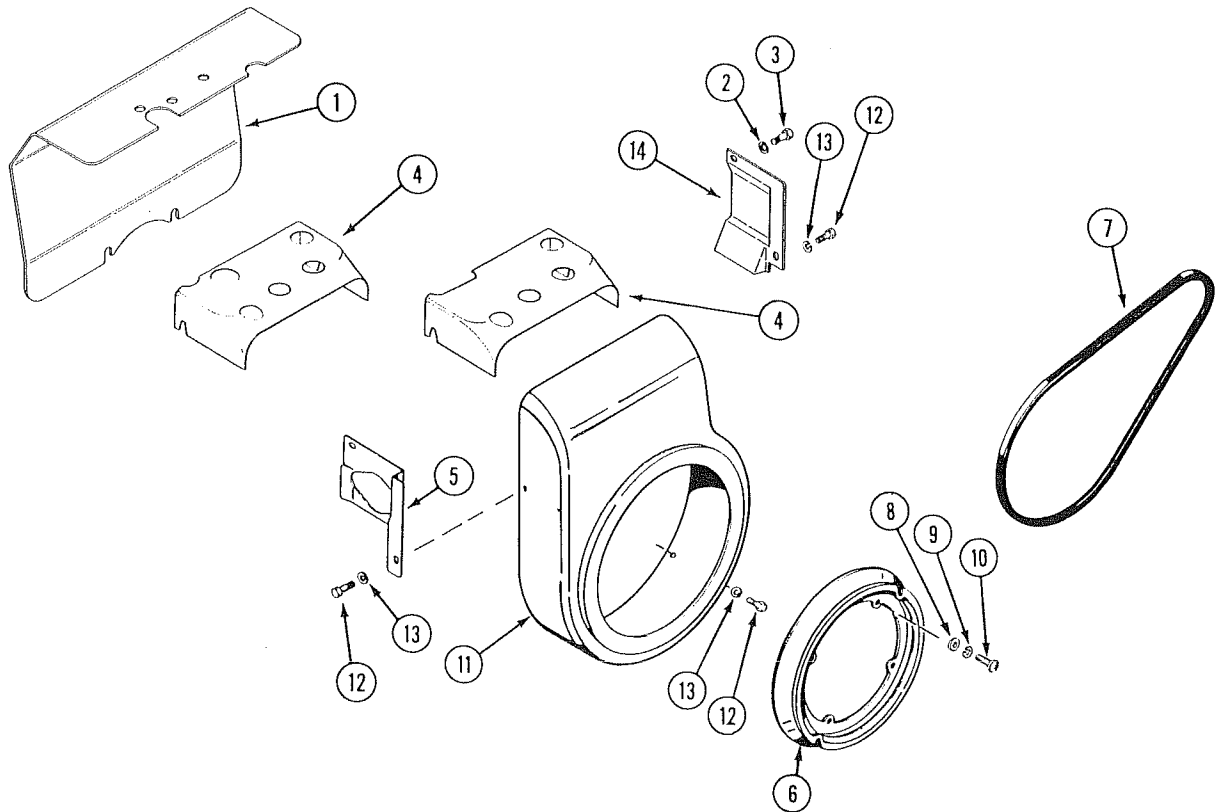
224 AND 444 ENGINE BLOCK AND ATTACHING PARTS

REF.	PART NO.	DESCRIPTION	REQ'D
1	KO 236886	FILLER TUBE - (use before engine Spec. PF60313D)	1
2	KO 270158	BOLT - cylinder head special 3/8" x 1-1/2" NC hex	2
3	KO 270889	WASHER - cylinder head bolt	9
4	KO 237670	HEAD - cylinder	1
5	C 30482	GASKET - head	1
6	KO 237064	GASKET - filler tube	1
7	C 30506	BLOCK ASSEMBLY - cylinder, short (Includes crankshaft and seals, ring set, piston assembly, rod assembly, camshaft assembly, valves, bearings, plate and plate gasket, governor gear assembly, cross shaft, and gasket kit)	1
9	KO 230170	INSERT - exhaust valve	1
10	KO 235007-S	GUIDE - valve	2
11	KO 230265	INSERT - intake valve	1
12	C 21814	SPACER - cylinder head	1
13	O/L	PLUG - expansion - 1-1/8"	1
14	113- 209	BOLT - 3/8" x 1-1/2" 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	O/L	BOLT - 1/4" x 1/2" NC plated	4
20	KO 235353	GASKET - oil pan	1
21	173- 96	SCREW - #10 x 7/16" round head machine	3
22	193- 26	LOCKWASHER - #10 internal tooth	7
23	C 22699	BASE - oil pan	1
26	C 14399	PLUG - oil drain	1
27	C 28678	OIL SEAL - crankshaft rear	1
28	C 28669	BEARING - crankshaft ball	2
29	KO 235757	GASKET - bearing plate	6
29	KO 235070	GASKET - shim, .010	UAR
30	O/L	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 32891	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"	1
38	C 30868	DIPSTICK ASSEMBLY	1
39	C 28217	"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
45	221- 1412	ELBOW - street	1
46	129- 143	NUT - 3/8" NC hex. jam	6
47	129- 103	NUT - 3/8" NC hex	6
48	192- 21	LOCKWASHER - 3/8"	9
49	KO 237277	STUD - cylinder head	7
50	C 24490	FILLER TUBE - (use engine Spec. PF60313D and after)	1
51	C 24491	DIPSTICK - (use engine Spec. PF60313D and after)	1
52	C 28217	O-RING - dipstick (use engine Spec. PF60313D and after)	1
53	C 24495	PLATE - oil fill pad (use engine Spec. PF60313D and after)	1



ENGINE GASKET AND SEAL KIT

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 29737	KIT - engine gasket (10 thru 14 hp engines)	1
2	KO 237064	GASKET - oil fill tube (used on 14 hp)	1
3	KO 235025	GASKET - camshaft cover	1
4	KO 235353	GASKET - oil pan	1
5	KO 235757	GASKET - bearing plate	6
5	KO 235070	GASKET - shim (.010'')	UAR
6	KO 231032	SEAL - breather (14 hp engine)	1
7	C 26518	GASKET - breaker cover	1
8	C 23860	GASKET - carburetor flange	1
9	C 24887	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	C 10372	GASKET - exhaust	1
14	KO 235057	GASKET - pan (not used)	1
15	C 30482	GASKET - cylinder head	1

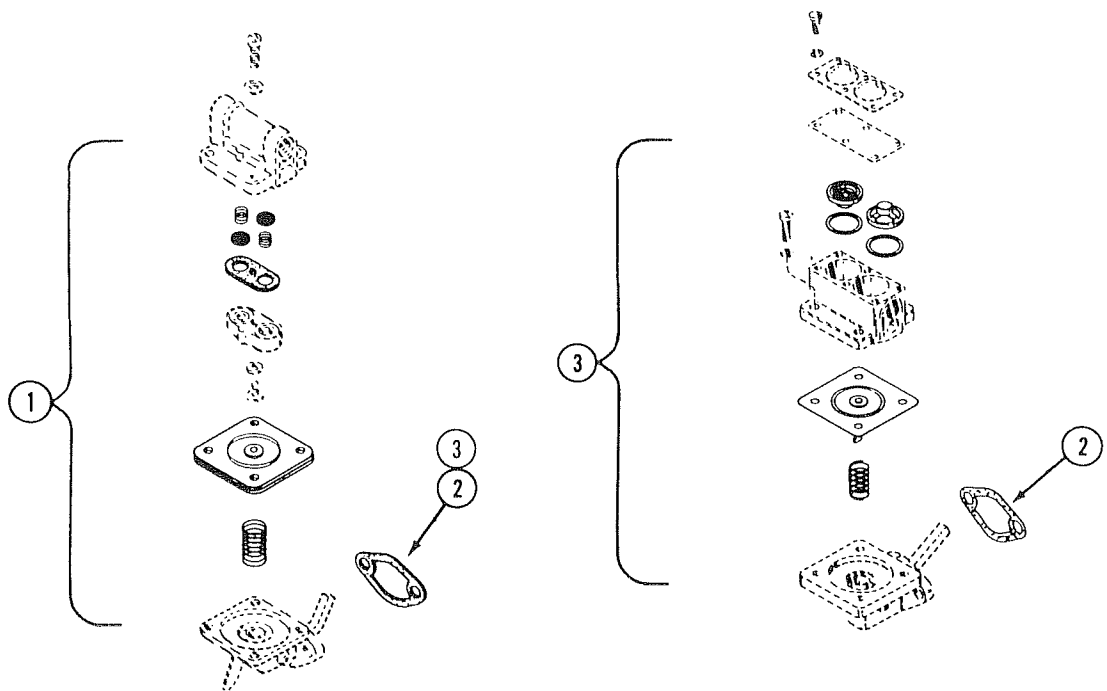
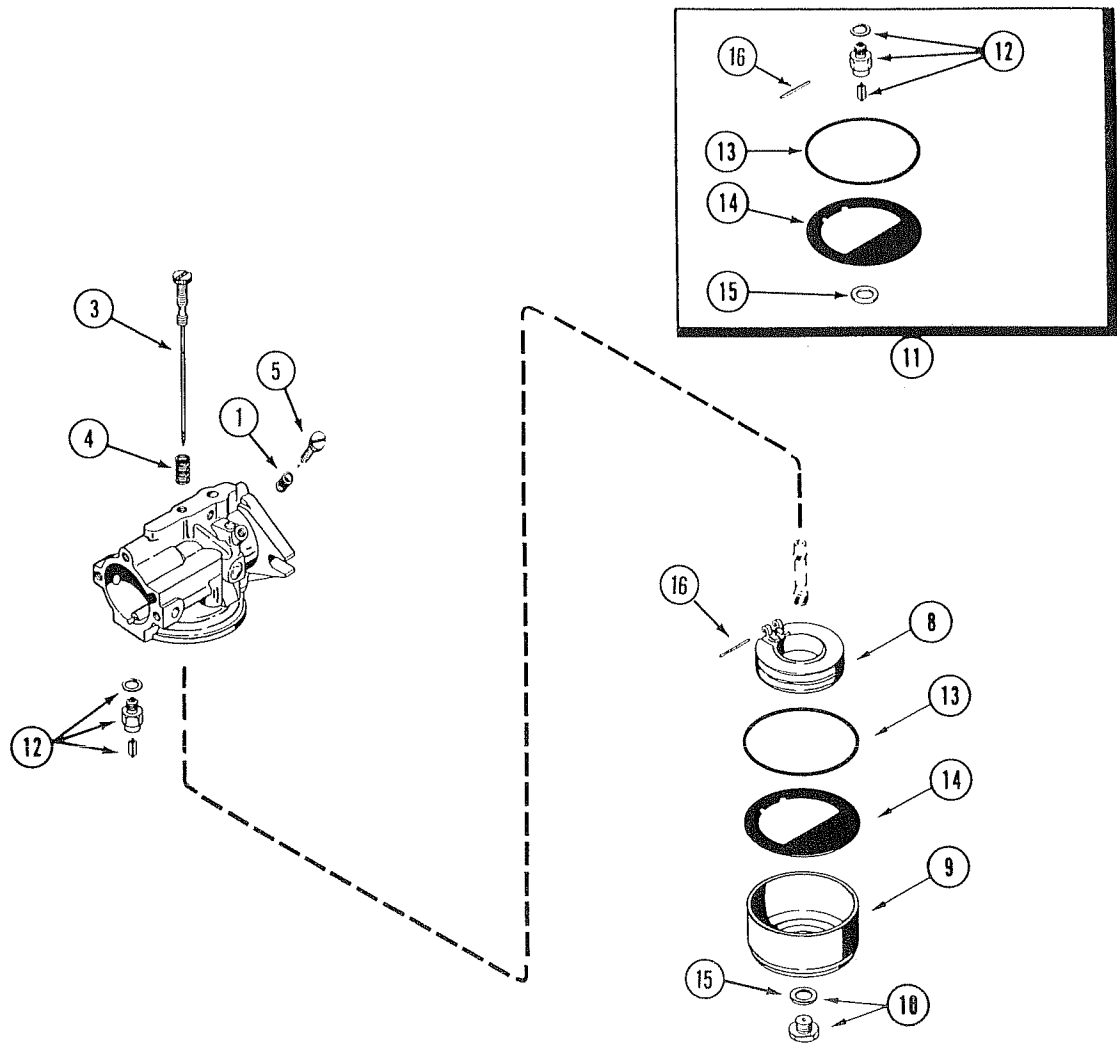


BAFFLES AND SHROUDS

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 26985	DEFLECTOR - engine air	1
2	192- 19	LOCKWASHER - 1/4" zinc plated	2
3	O/L	BOLT - 1/4" x 1/2" NC hex, zinc plated	2
4	KO 237520	BAFFLE - cylinder head (10 hp engine)	1
4	KO 237677	BAFFLE - cylinder head (12 - 14 hp engine)	1
5	KO 235652	BAFFLE - carburetor side air	1
6	KO 235207	PULLEY - starter	1
7	C 14345	BELT - drive, starter - generator	1
8	195- 518	WASHER - 1/4" zinc plated	4
9	192- 19	LOCKWASHER - 1/4" zinc plated	4
10	O/L	SCREW - 1/4" x 5/8" NC truss head Phillips, zinc plated	4
11	C 24729	HOUSING - blower	1
12	113- 3	BOLT - 1/4" x 3/4" NC hex, zinc plated	4
13	192- 19	LOCKWASHER - 1/4" zinc plated	4
14	C 23171	BAFFLE - cylinder	1

FUEL SYSTEM

1	NSS	CARBURETOR ASSEMBLY - 444 & 224 (Repairs page 27) (use C33214)	1
1	NSS	CARBURETOR ASSEMBLY - 220 & 222 (Repairs page 27) (use C33213)	1
2	C 23860	GASKET - carburetor flange	1
3	C 10678	ELBOW - fuel pump and carburetor	2
4	214- 103	CLAMP - hose 1/2"	4
5	C 28937	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	NSS	PUMP - fuel, 10 h.p. models (Repairs page 27) (use C24851) . .	1
9	O/L	SCREW - 1/4" x 3/4" NC fillister head	2
10	192- 19	LOCKWASHER - 1/4"	2
11	KO 275341	GASKET - air horn	1
12	NSS	PUMP - fuel, 12 and 14 h.p. models (Repairs page 27) (use C24851)	1
13	C 24887	GASKET - fuel pump mounting, all models	1
14	C 10657	ELBOW ASSEMBLY - fuel tank	1
15	C 28962	CLIP - fuel line	2
16	C 28937	HOSE - fuel line 38-1/2"	1
17	C 16363	TANK - fuel	1
18	C 11529	CAP - fuel tank (Includes insert)	1
19	NSS	INSERT - fuel cap	1
20	C 16796	STRAP - fuel tank mounting	2
21	O/L	SCREW - 1/4" x 1/2" NC round head, machine, zinc plated . . .	2
22	O/L	NUT - square 1/4" NC	2
23	C 14690	CUSHION - fuel tank	2
24	217- 292	ELBOW - hose 90°	1

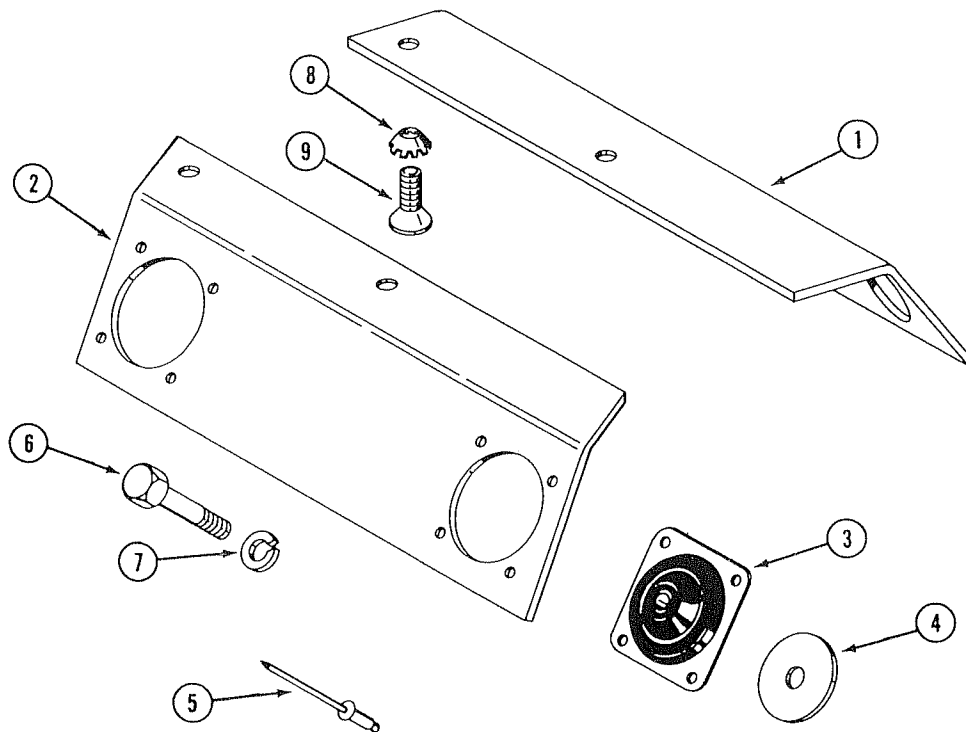
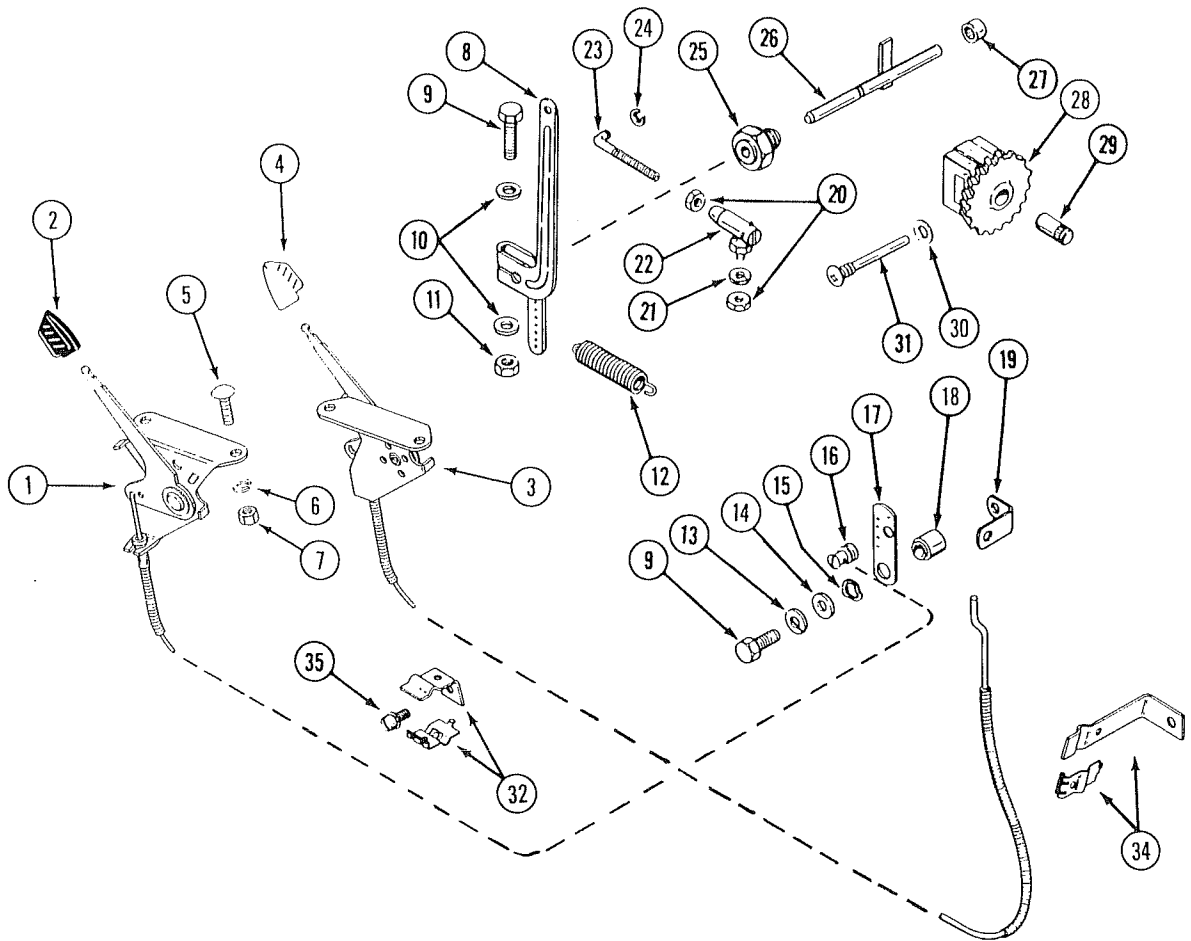


CARBURETOR

REF.	PART NO.	DESCRIPTION	REQ'D
	NSS	CARBURETOR ASSEMBLY - 220, 222 (use C33213)	1
	NSS	CARBURETOR ASSEMBLY - 224 & 444 (use C33214)	1
1	A 72098	SPRING - tension, idle adjust	1
3	C 28879	NEEDLE - main fuel adjust, 220, 222	1
3	KO 237489	NEEDLE - main fuel adjust, 224 & 444 (use before engine S/N 5125238)	1
3	C 24652	NEEDLE - main fuel adjust, 224 & 444 (use engine S/N 5125238 and after)	1
4	KO 200383	SPRING - main fuel adjust	1
5	C 28880	NEEDLE - idle adjust (220, 222)	1
5	KO 275231	NEEDLE - idler adjust (224 & 444)	1
8	C 27276	FLOAT - carburetor	1
9	KO 235448	BOWL - carburetor	1
10	C 26422	SCREW AND GASKET ASSEMBLY - carburetor bowl	1
11	C 27278	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	KO 200372	GASKET - bowl screw	1
16	C 28676	PIN - float	1

FUEL PUMP**(Plastic Fuel Pump Not Serviced)**

1	NSS	KIT - fuel pump for KOA235845 pump (220) (use C24851)	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	NSS	KIT - fuel pump for C22988 pump (222, 224 and 444) (use C24851)	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

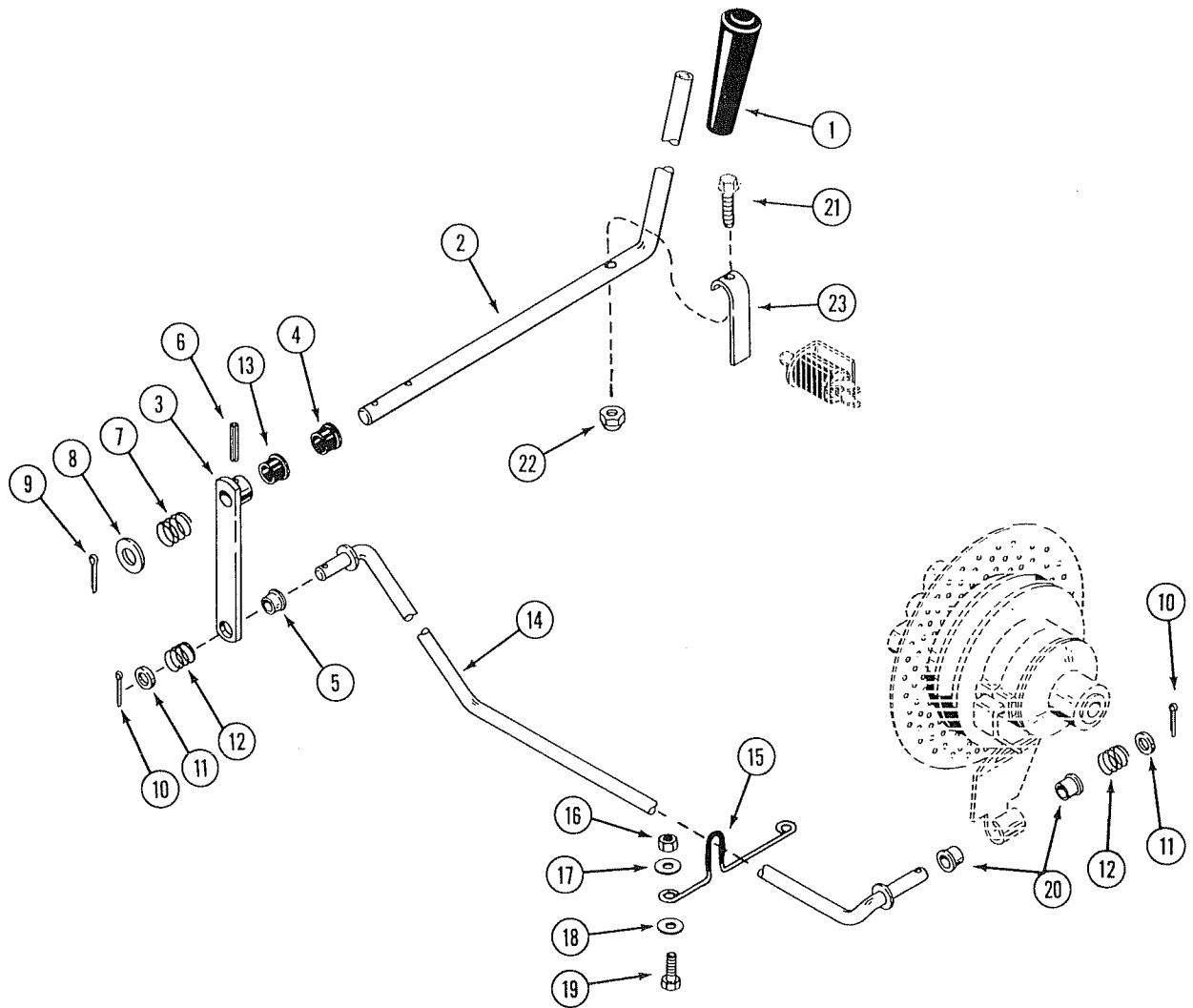


CHOKE, THROTTLE AND GOVERNOR

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 33411	CONTROL - throttle	1
2	C 35291	HANDLE - throttle control, black	1
3	C 25605	CONTROL - choke	1
4	C 30074	HANDLE - choke control, white	1
5	111- 5	BOLT - 10-24 x 5/8" 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	113- 17	BOLT - 1/4" x 1-1/4" NC hex	2
10	195- 518	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	C 32935	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"	1
22	C 28990	JOINT - ball	1
23	KO 235277	ROD - throttle	1
24	C 28670	RING - retaining, throttle rod	1
25	KO 235476	BUSHING - governor cross shaft	1
26	C 23126	SHAFT - governor cross	1
27	C 28691	BEARING - needle, governor shaft	1
28	C 27274	GEAR ASSEMBLY - governor	1
29	KO 235125-S	SHAFT - governor stub	1
30	C 18099	WASHER - governor stop pin	1
31	C 28690	PIN - governor stop	1
32	KOA237559	BRACKET - throttle cable	1
34	KOA236919	BRACKET - choke cable	1
35	182- 516	SCREW - #10 x 3/8" NC fillister head	1
36	KO 235603	CLIP	1

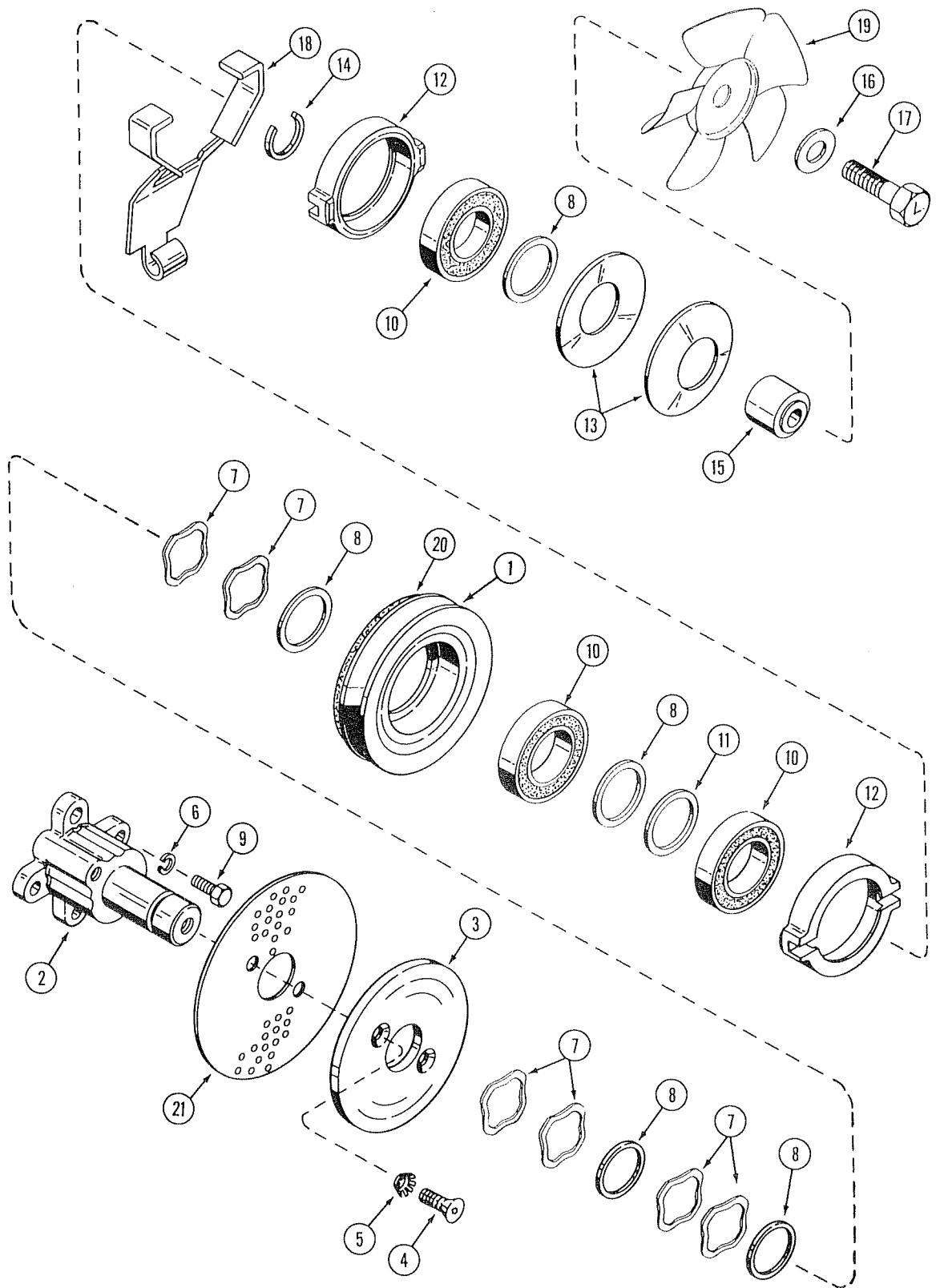
ENGINE MOUNT PLATES

1	C 17717	PLATE - engine mount L.H.	1
2	C 17718	PLATE - engine mount R.H.	1
3	C 29731	MOUNT - engine	4
4	C 25556	WASHER - snubbing	4
5	151- 210	RIVET - semi tubular 3/16"	16
6	113- 219	BOLT - 3/8" x 2" NC hex	4
7	192- 21	LOCKWASHER - 3/8"	4
8	193- 56	LOCKWASHER - 3/8" countersunk external tooth	4
9	164- 50	BOLT - flat head hex socket	4



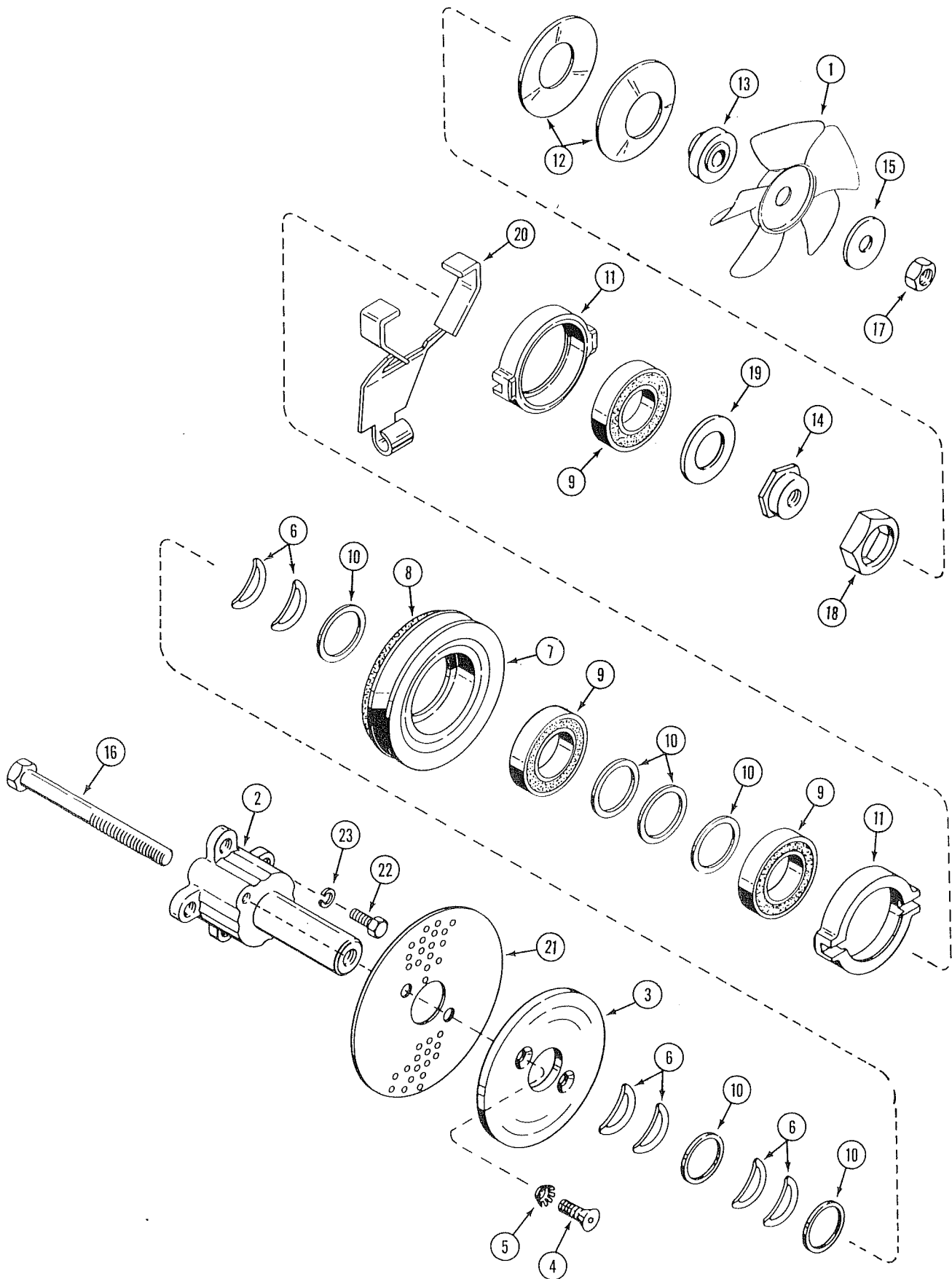
PTO CLUTCH AND LINKAGE

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 28237	KNOB - lever, PTO	1
2	C 22998	LEVER - PTO engaging	1
3	C 22921	ARM ASSEMBLY - PTO	1
4	353- 462	BUSHING - lever, dash tower	1
5	C 20093	BUSHING - fliplock	1
6	138- 96	PIN - roll - 3/16" x 1"	1
7	C 20036	SPRING - lever, PTO	1
8	C 28240	WASHER - nylon	1
9	132- 91	PIN - cotter 3/16" x 1"	1
10	132- 310	PIN - cotter 1/8" x 1"	2
11	C 14906	WASHER - nylon 3/8"	2
12	C 19867	SPRING - clutch rod	2
13	353- 442	BUSHING - heyco	1
14	C 27734	ROD - clutch	1
15	C 19767	GUIDE - clutch rod	1
16	131- 1181	NUT - lock 3/8" n.c. hex	2
17	195- 104	WASHER - 3/8"	2
18	195- 137	WASHER - spacer (used on models without hyd. lift)	2
19	113- 207	BOLT - 3/8" x 1" n.c. hex	2
20	C 20053	BUSHING - nylon	2
21	163- 24	SCREW - #10 - 24 x 1-1/4" hex head, washer	1
22	131- 67	NUT - #10 - 24 zinc plated	1
23	C 23004	ACTUATOR - PTO switch	1



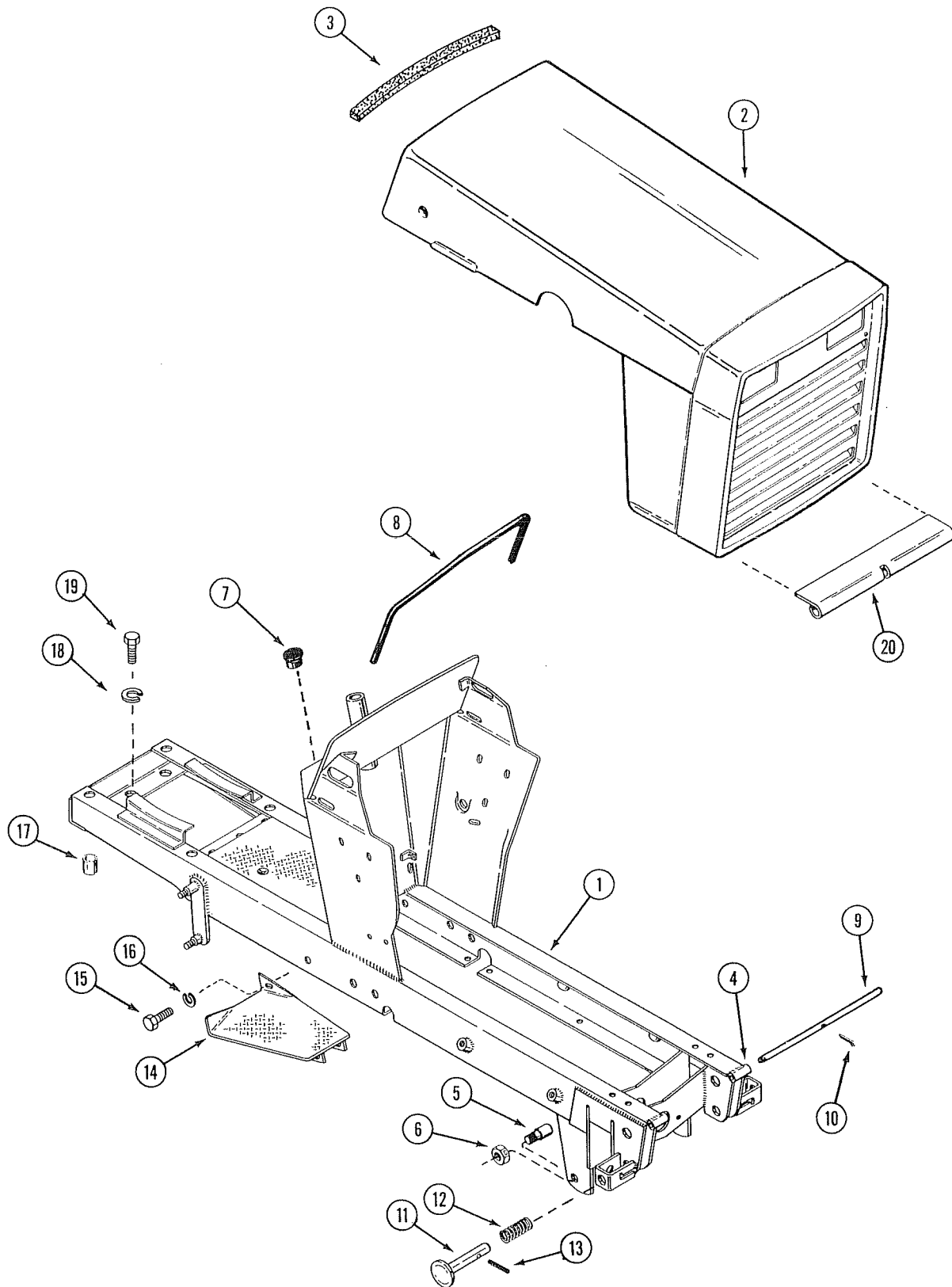
C19803 CLUTCH ASSEMBLY (PTO)

REF.	PART NO.	DESCRIPTION	REQ'D
	NSS	CLUTCH AND FAN ASSEMBLY - less screen (use C27150)	1
1	C 31045	PULLEY ASSEMBLY - clutch and disc	1
2	C 18907	HUB - clutch	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	192- 21	LOCKWASHER - 3/8"	4
7	C 15515	WASHER - spring	6
8	C 15557	WASHER - sapcer .050"	UAR
9	113- 207	BOLT - 3/8" x 1" NC hex ZP	4
10	C 29735	BEARING - cam and pulley	3
11	C 21596	WASHER - spacer .005"	UAR
11	C 15556	WASHER - spacer .010"	UAR
12	C 32169	CAM - clutch (used S/N 9703017 and after) 220	2
12	C 32169	CAM - clutch (used S/N 9706746 and after) 222	2
12	C 32169	CAM - clutch (used S/N 9708741 and after) 224	2
12	C 32169	CAM - clutch (used S/N 9711160 and after) 444	2
12	NSS	CAM - clutch (used prior to S/N 9703017) 220 (must service with (2) C32169 cams and (1) C26702 arm) .	2
12	NSS	CAM - clutch (used prior to S/N 9706746) 222 (must service with (2) C32169 cams and (1) C26702 arm) .	2
12	NSS	CAM - clutch (used prior to S/N 9708741) 224 (must service with (2) C32169 cams and (1) C26702 arm) .	2
12	NSS	CAM - clutch (used prior to S/N 9711160) 444 (must service with (2) C32169 cams and (1) C26702 arm) .	2
13	C 16786	SPRING - clutch load	2
14	C 18941	RING - retaining	1
15	C 18908	SPACER - hub	1
16	C 28677	WASHER - fan 17/32"	1
17	C 18940	BOLT - 1/2" x 1-3/4" NC hex L.H. threads	1
18	C 26702	ARM - engaging	1
19	C 16616	FAN - cooling	1
20	C 23740	KIT - friction disc	1
21	C 15721	SCREEN - grass	1



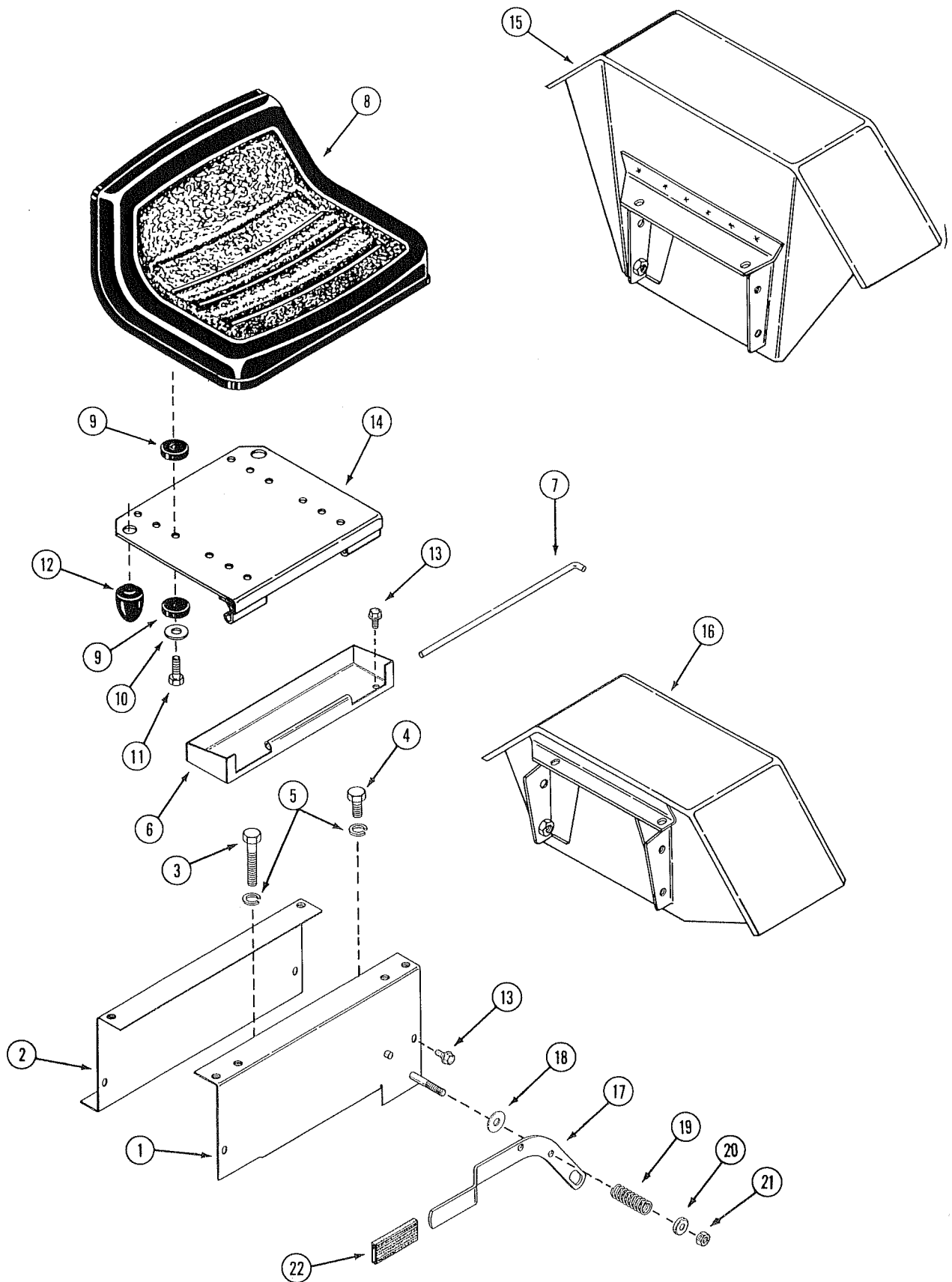
CLUTCH ASSEMBLY (PTO)

REF.	PART NO.	DESCRIPTION	REQ'D
	C 27150	CLUTCH AND FAN ASSEMBLY	1
1	C 16616	FAN - cooling	1
2	C 23677	HUB - clutch	1
3	C 15718	PLATE - clutch	1
4	164- 40	BOLT - 5/16" - 18 x 3/4"	2
5	193- 76	LOCKWASHER - 5/16" countersunk external tooth	2
6	C 15515	WASHER - spring	6
7	C 31045	PULLEY AND DISC ASSEMBLY	1
8	C 23740	KIT - friction disc	1
9	C 29735	BEARING - ball	3
10	C 15557	WASHER - spacer .050	6
11	C 32169	CAM - clutch	2
12	C 16786	SPRING - clutch load	2
13	C 23630	SPACER - hub	1
14	C 23625	NUT - adjust	1
15	C 28677	WASHER - fan 17/32"	1
16	C 24743	BOLT - 1/2" - 20 x 5-1/2" NF	1
17	129- 125	NUT - 1/2" - 20 NF	1
18	C 23627	GUIDE - adjusting nut	1
19	C 23624	WASHER - spacer	1
20	C 26702	ARM - engaging	1
21	NSS	SCREEN - grass (use (2) C26758)	1
22	113- 207	BOLT - 3/8" - 16 x 1" NC	4
23	192- 21	LOCKWASHER - 3/8"	4



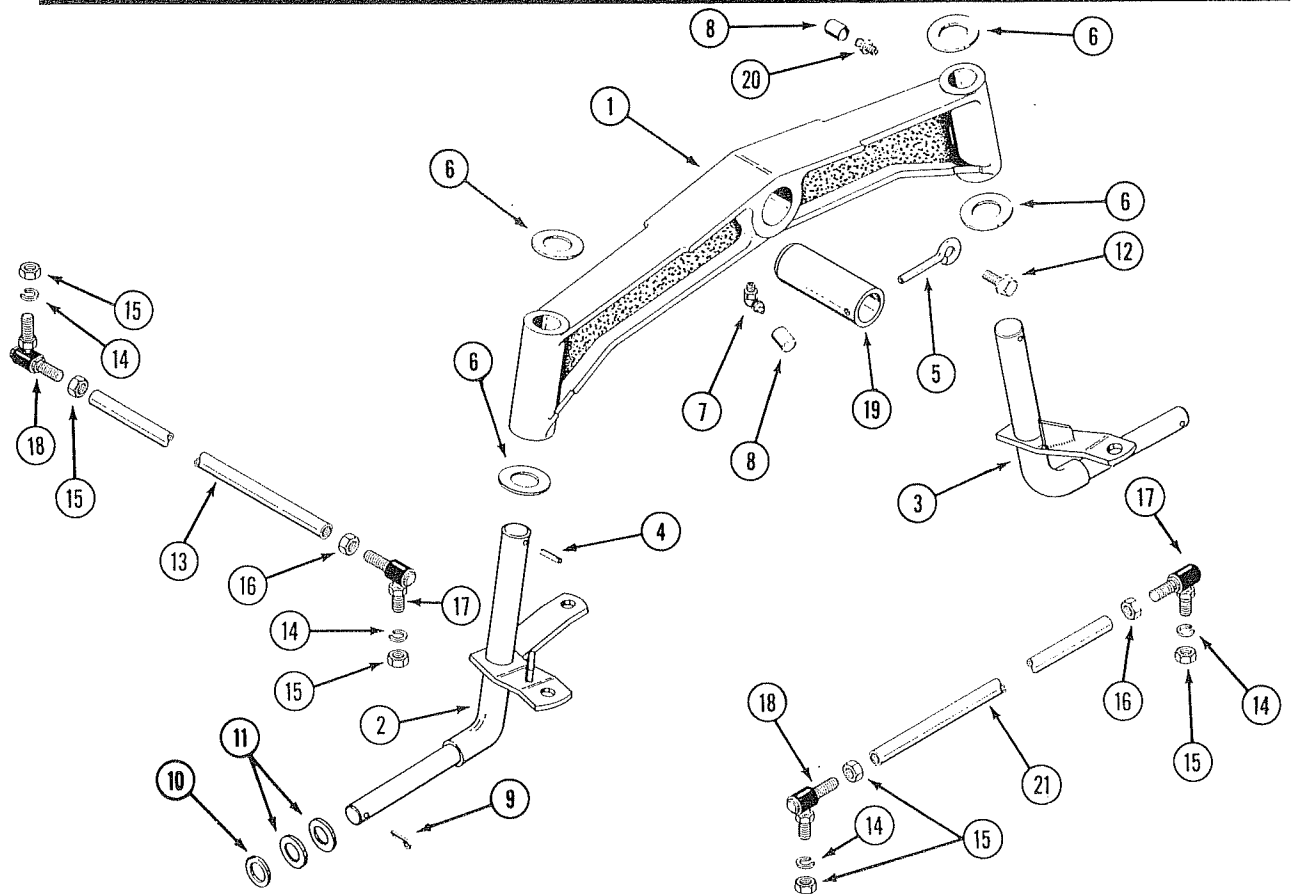
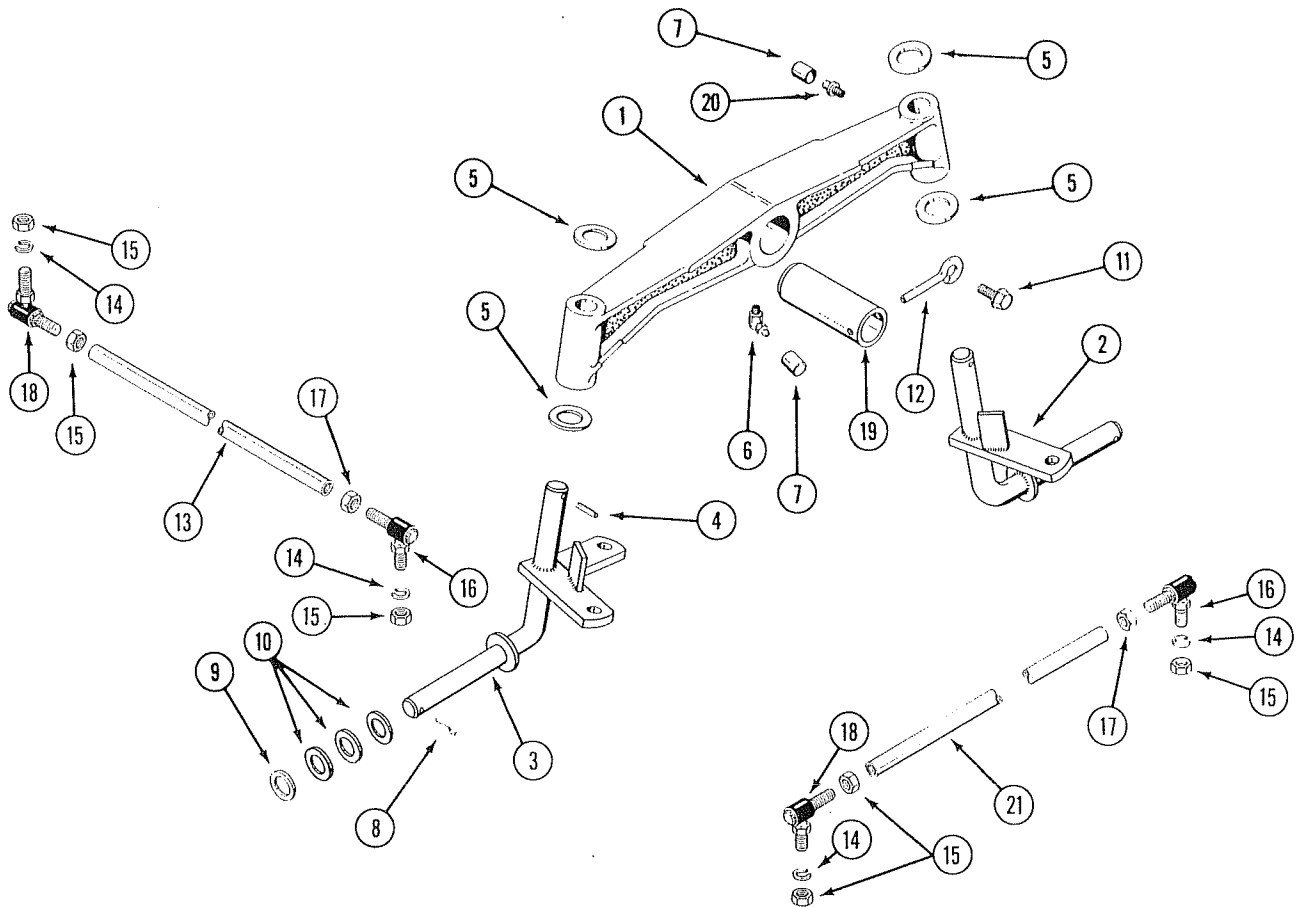
HOOD, FRAME AND GRILLE

REF.	PART NO.	DESCRIPTION	REQ'D
	NSS	FRAME - main (220, 222 and 224)	1
	NSS	FRAME - main (444)	1
2	C 22775	HOOD AND GRILLE ASSEMBLY - (includes hinge)	1
3	C 23527	LINER - hood	1
4	C 22023	HINGE - frame	2
5	C 27508	PIN - attachment	2
6	131- 1318	NUT - lock 1/2" NF jam	2
7	353- 406	PLUG - hole (models without hydraulic lift)	1
8	C 18153	CHANNEL - instrument panel	1
9	C 16362	ROD - hood hinge	1
10	132- 334	PIN - cotter 1/8" x 3/4"	1
11	C 16373	PIN - latch	2
12	C 24137	SPRING - latch	2
13	138- 319	PIN - roll 3/16" x 1-1/4"	2
14	NSS	PAD - foot rest, L.H.	1
14	NSS	PAD - foot rest, R.H.	1
15	113- 113	BOLT - 5/16" x 7/8" N.C. hex	2
16	192- 20	LOCKWASHER - 5/16"	2
17	C 14729	SPACER - frame, rear (444)	2
17	C 14730	SPACER - frame, rear (220, 222 and 224)	2
18	192- 23	LOCKWASHER - 1/2"	4
19	113- 424	BOLT - 1/2" x 1" N.C. hex	4
20	C 16361	HINGE - hood (included with hood)	1



SEAT, FENDERS AND TOOL TRAY

REF.	PART NO.	DESCRIPTION	REQ'D
1	NSS	SUPPORT - seat, front	1
2	C 16404	SUPPORT - seat, rear	1
3	113- 441	BOLT - 1/2" x 2-1/4" NC hex (444)	2
3	113- 427	BOLT - 1/2" x 3-1/4" NC hex (220, 222 and 224)	2
4	113- 424	BOLT - 1/2" x 1" NC hex	2
5	192- 23	LOCKWASHER - 1/2"	4
6	NSS	TRAY - tool (use C31004, C26029)	1
7	C 16429	PIN - seat hinge	1
8	C 30070	SEAT - (220, 222 and 224)	1
8	C 30071	SEAT - (444)	1
9	C 15410	CUSHION - rubber	8
10	195- 2021	WASHER - 5/16" x 1-1/4" OD, zinc plated	4
11	113- 122	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	10
14	C 17152	HINGE ASSEMBLY - seat	1
15	C 16444	FENDER - L.H. (444)	1
15	C 16445	FENDER - R.H. (444)	1
16	C 16446	FENDER - L.H. (220, 222 and 224)	1
16	C 16447	FENDER - R.H. (220, 222 and 224)	1
17	C 16393	LEVER - shift	1
18	C 25556	WASHER - 7/16" x 1-1/4" OD	1
19	C 17216	SPRING - shift lever	1
20	C 17066	WASHER - cupped	1
21	131- 1181	NUT - lock 3/8" NC hex	1
22	C 14728	GRIP - shift lever	1

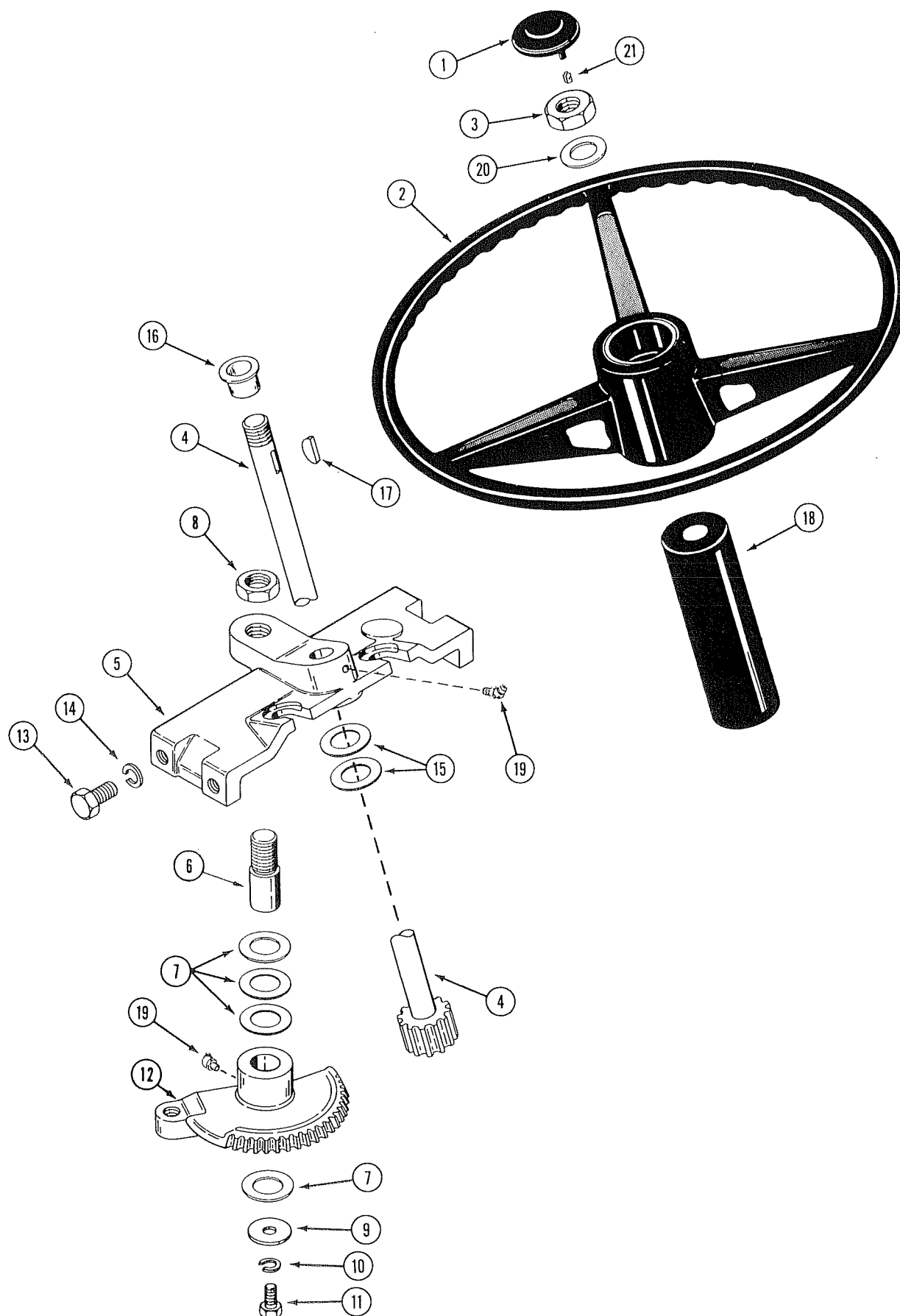


220, 222 AND 224 FRONT AXLE

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 18812	AXLE - front	1
2	C 18777	SPINDLE - left hand	1
3	C 18779	SPINDLE - right hand	1
4	138- 99	PIN - roll 3/16" x 1-3/8"	2
5	C 11906	WASHER - thrust	4
6	219- 404	FITTING - lube	1
7	C 13106	COVER - lube fitting	3
8	132- 311	PIN - cotter 5/32" x 1-1/4"	2
9	C 12975	WASHER - wheel spindle	2
10	C 28226	WASHER - wheel spacer	6
11	187- 1910	BOLT - 3/8" NC indented hex head	1
12	C 22278	PIN - retaining, axle pivot	1
13	C 22992	KIT - drag link	1
14	192- 23	LOCKWASHER - 1/2" zinc plated	3
15	129- 165	NUT - jam 1/2" N.F. hex R.H. thread	6
16	C 21527	BALLJOINT - 1/2" L.H. thread	2
17	129- 365	NUT - jam 1/2" N.F. hex L.H. thread	2
18	C 21526	BALLJOINT - R.H. thread	2
19	C 22568	TUBE - axle pivot	1
20	219- 17	FITTING - lube	2
21	NSS	TIE ROD - (use C25856, C44640, C44641)	1

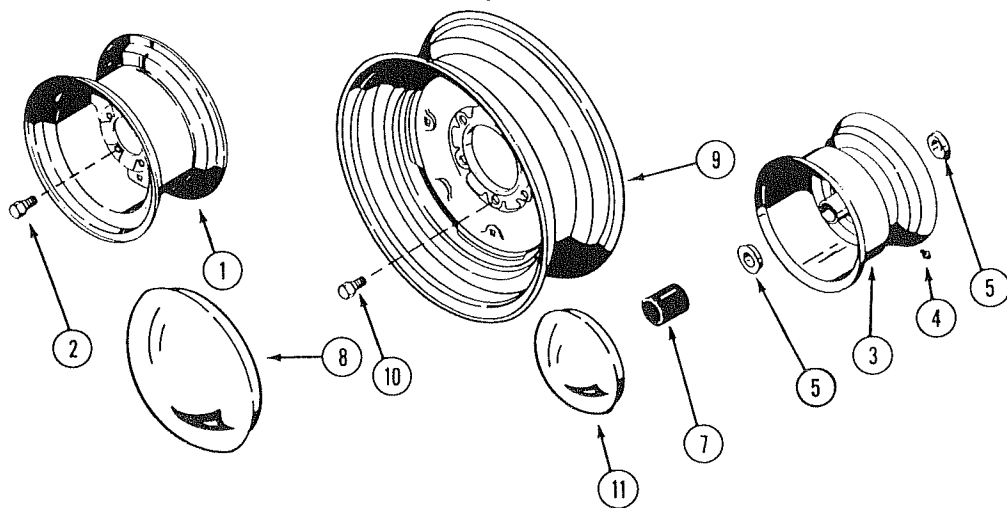
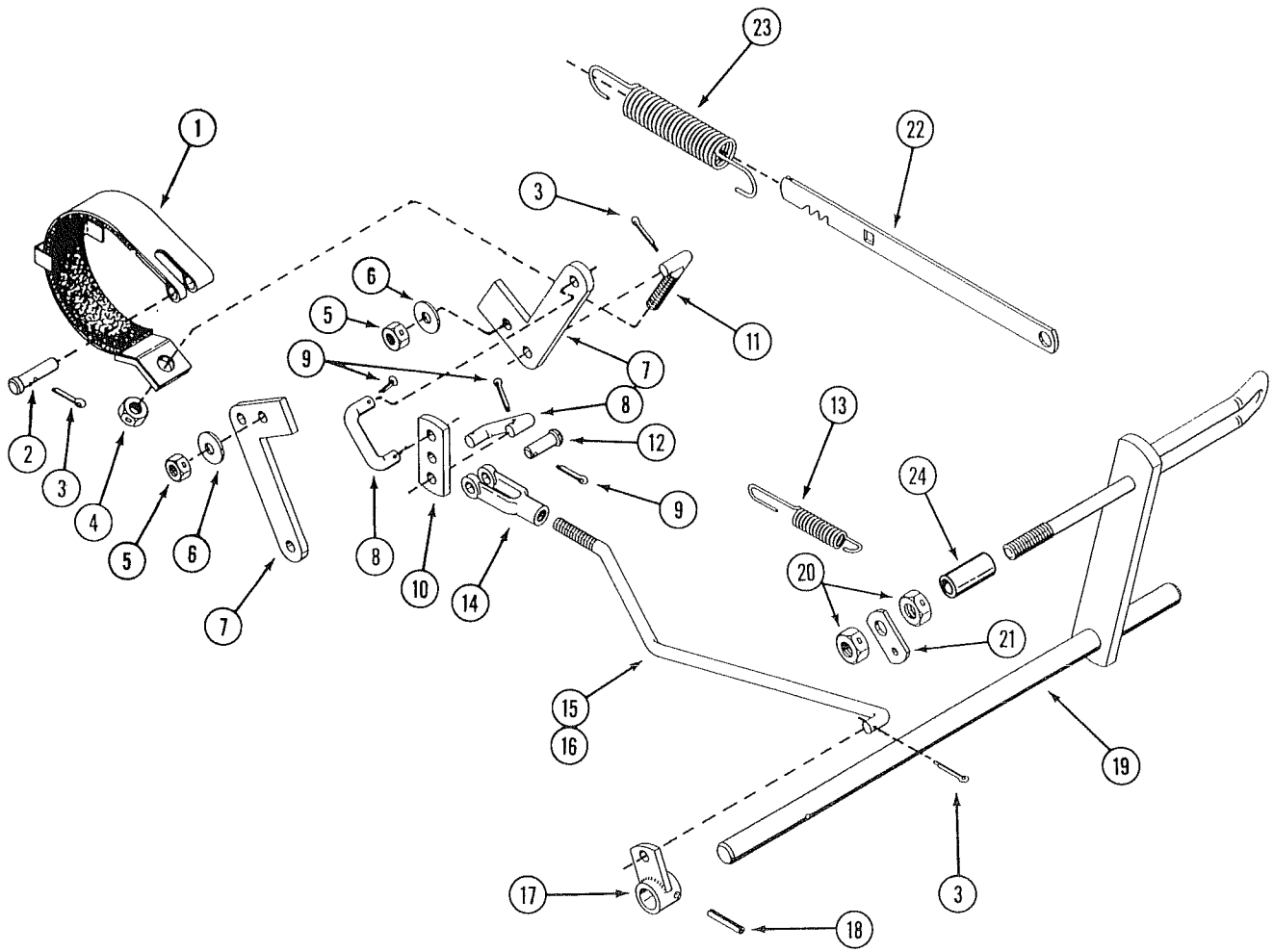
444 FRONT AXLE

1	C 40687	AXLE - front	1
2	C 18784	SPINDLE - right hand	1
3	C 18782	SPINDLE - left hand	1
4	138- 99	PIN - roll 3/16" x 1-3/8"	2
5	C 22278	PIN - retaining, axle pivot	1
6	C 13716	WASHER - thrust	4
7	219- 404	FITTING - lube	1
8	C 13106	COVER - lube fitting	3
9	132- 311	PIN - cotter 5/32 x 1-1/4"	2
10	C 12975	WASHER - wheel spindle	2
11	C 28226	WASHER - wheel spacer	4
12	187- 1910	BOLT - 3/8" NC indented hex head	1
13	C 22992	KIT - drag link	1
14	192- 23	LOCKWASHER - 1/2" zinc plated	3
15	129- 165	NUT - jam 1/2" N.F. hex R.H. thread	6
16	129- 365	NUT - jam 1/2" NF. hex L.H. thread	2
17	C 21527	BALL JOINT - L.H. thread	2
18	C 21526	BALL JOINT - R.H. thread	2
19	C 22568	TUBE - axle pivot	1
20	219- 17	FITTING - lube	2
21	C 21529	TIE ROD	1



STEERING GEAR

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 16945	CAP - steering wheel	1
2	C 18014	WHEEL - steering	1
3	131- 356	NUT - lock 5/8" Gripco	1
4	NSS	SHAFT - steering (use C26325, C26326, 138-143)	1
5	C 18992	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" x 3/4" NC hex	1
11	113- 102	BOLT - 5/16" x 3/4" NC hex	1
12	C 33309	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	2
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"	2
21	C 18017	CLIP - tinnerman	2
	C 13106	COVER - lube fitting	2

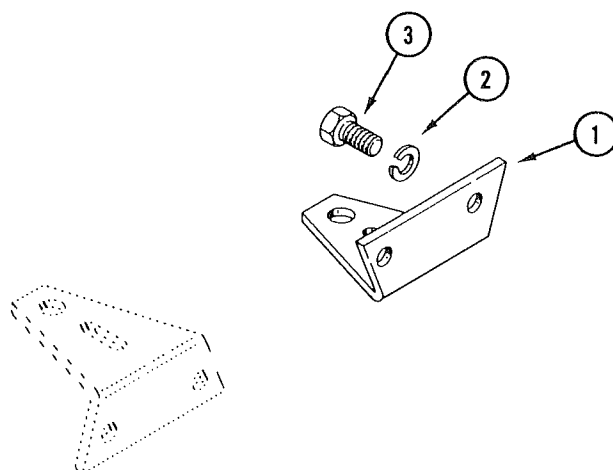
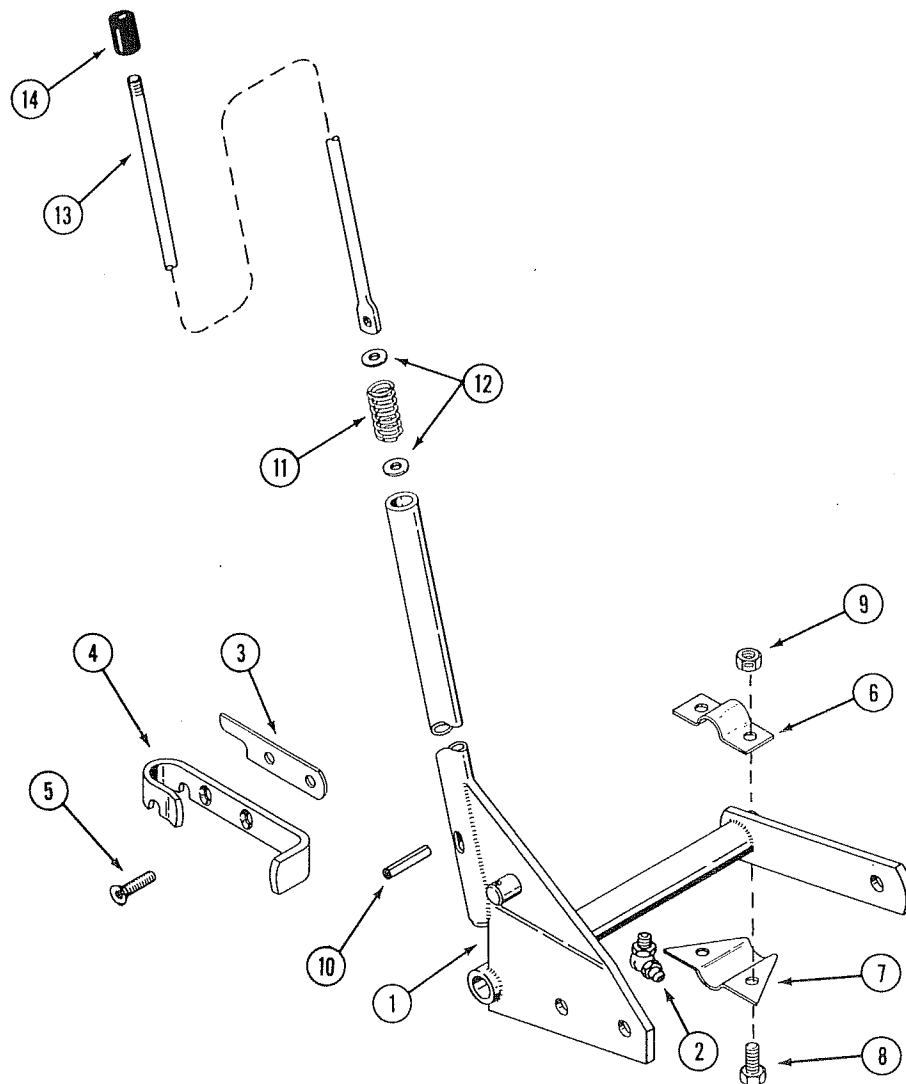


BRAKE ASSEMBLY

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 19250	BAND - brake	1
2	C 13526	PIN - clevis	1
3	132- 310	PIN - cotter 1/8" x 1"	3
4	131- 1129	LOCKNUT - 7/16" hex NC	1
5	131- 1181	LOCKNUT - 3/8" hex NC	2
6	195- 104	WASHER - 3/8" flat	2
7	C 19063	ARM - brake	2
8	C 19064	LINK - brake	2
9	132- 321	PIN - cotter 3/32" x 1"	6
10	C 19179	LINK - brake	1
11	C 19251	LINK - brake band	1
12	141- 4	PIN - clevis	1
13	C 25022	SPRING - return	1
14	213- 41	CLEVIS	1
15	NSS	ROD - brake (220, 222, and 224) (use C24097)	1
16	NSS	ROD - brake (444) (use C24096)	1
17	C 26381	ARM - brake rod	1
18	138- 319	PIN - roll 3/16" x 1-1/4"	1
19	C 21872	PEDAL - brake assembly	1
20	131- 164	NUT - centerlock jam	2
21	C 16164	TAB - lift control	1
22	C 18147	LEVER - brake lock	1
23	C 27755	SPRING - brake lock	1
24	C 21857	SPACER - brake pedal	1

FRONT AND REAR WHEELS

			220	
			222	
			224	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 44499	BEARING - wheel	4	4
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
	C 13106	COVER - lube fitting	2	2



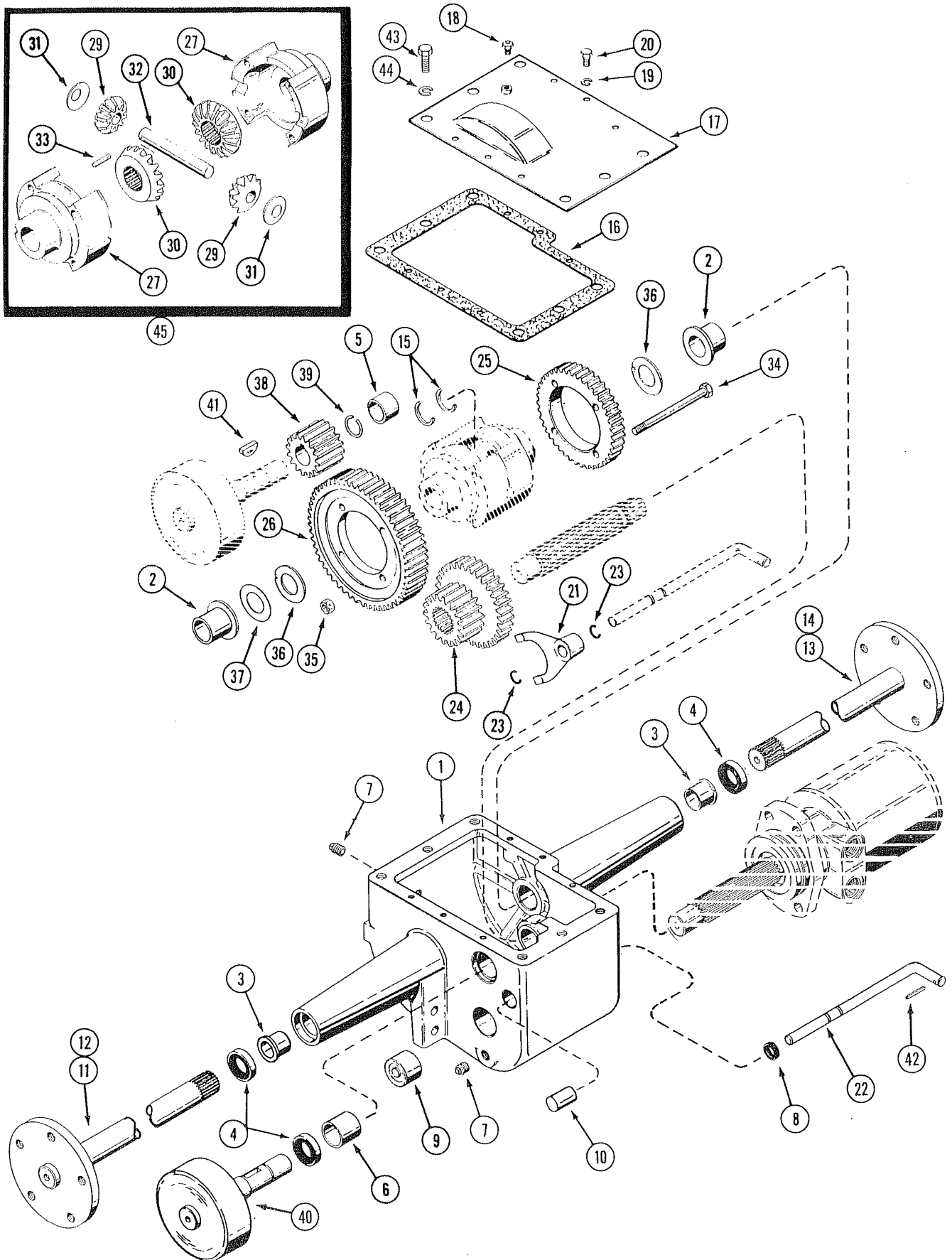
MOUNTING POSITION FOR 220, 222 AND 224 TRACTORS.

IMPLEMENT LIFT

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 18809	LEVER ASSEMBLY - implement lift	1
2	219- 404	FITTING - lube 45°	1
3	C 17281	SPACER - latch	4
4	C 18811	LIFT - latch	1
5	164- 42	SCREW - 5/16 x 1-1/4" flat head socket	2
6	C 17249	BRACKET - mounting top	1
7	C 17250	BRACKET - mounting bottom	1
8	113- 207	BOLT - 3/8" x 1" NC hex	4
9	131- 1181	NUT - lock 3/8"	4
10	138- 2054	PIN - spirol 5/16 x 1-3/4"	1
11	C 15564	SPRING - lift lever	1
12	195- 521	WASHER - 3/8" x 11/16" OD	2
13	C 17067	ROD - lift lever push	1
14	C 14525	BUTTON - thumb	1
	C 13106	COVER - lube fitting	1

DRAWBAR AND TOW HITCH

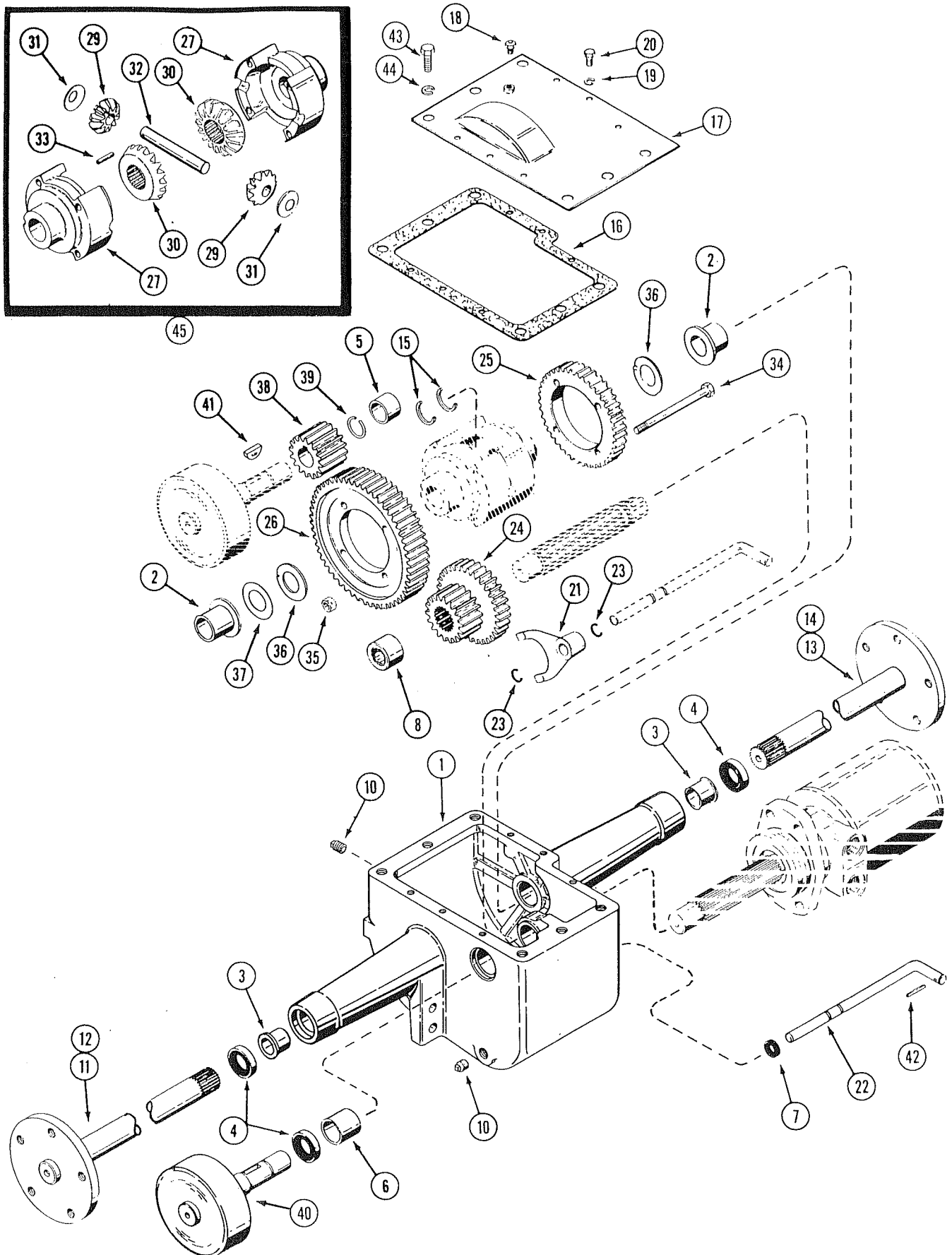
1	C 13360	DRAWBAR	1
2	192- 23	LOCKWASHER - 1/2" zinc plated	2
3	113- 424	BOLT - 1/2" x 1" NC hex zinc plated	2



TRANSMISSION AND FINAL DRIVE

(See Page 51 for Service Transmission)

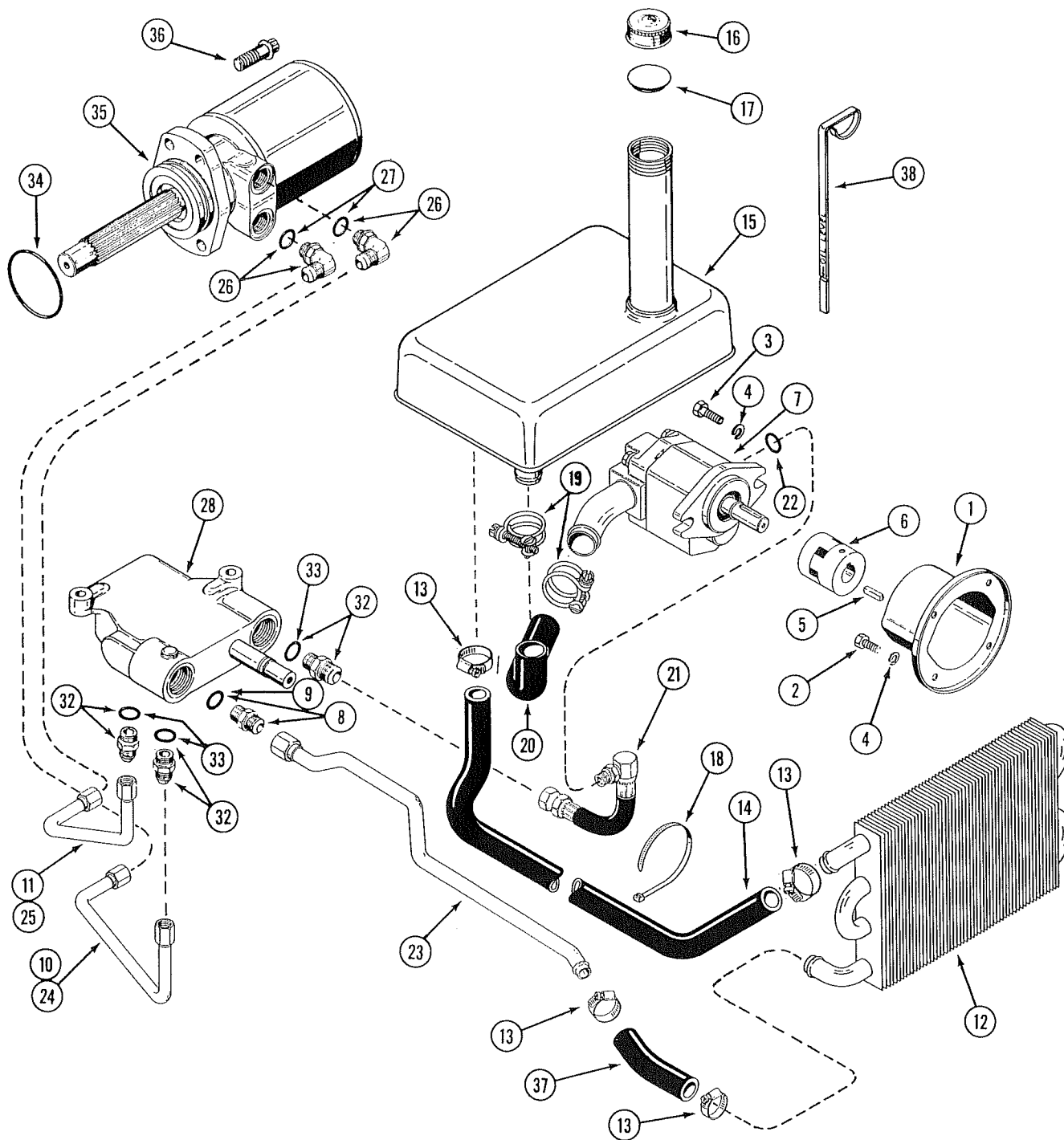
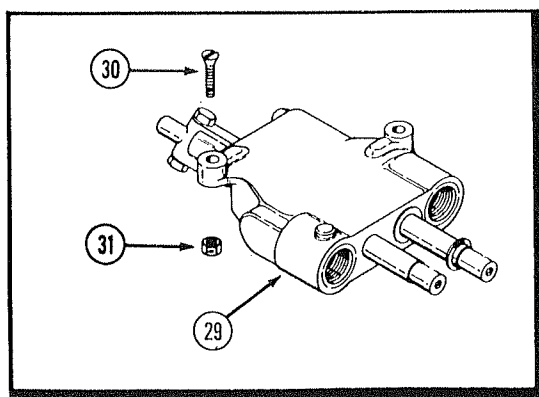
REF.	PART NO.	DESCRIPTION	REQ'D
1	NSS	CASE - transmission (see pge 51)	1
2	C 12713	BEARING - flange	2
3	C 16744	BEARING - flanged	2
4	C 14531	SEAL - axle	3
5	C 13241	BEARING - sleeve	1
6	C 13385	BEARING - sleeve	1
7	221- 4	PLUG - filler and drain 1/2"	2
8	C 13266	SEAL - shift rod	1
9	C 13211	BEARING - roller, input shaft	1
10	C 12723	CAP - shift rod	1
11	C 16699	SHAFT - axle, short R.H. (220, 222 and 224)	1
12	C 22638	SHAFT - axle, short R.H. (444)	1
13	C 16700	SHAFT - axle, long L.H. (220, 222 and 224)	1
14	C 22637	SHAFT - axle, long L.H. (444)	1
15	C 26342	RING - retainer, axle	2
16	C 13196	GASKET - transmission cover	1
17	C 36935	COVER - transmission	1
18	C 28241	BREATHER - transmission	1
19	192- 19	LOCKWASHER - 1/4"	6
20	113- 1	BOLT - 1/4" x 1/2" NC hex	6
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	1
25	C 12551	GEAR - high 41 tooth	1
26	C 12552	GEAR - low 55 tooth	1
27	NSS	KIT - diff. case (includes Ref. 34 and 35)	1
29	NSS	GEAR - differential pinion (order two of each items 29 and 30)	2
30	NSS	GEAR - differential (order two of each, items 29 and 30)	2
31	NSS	WASHER - pinion thrust	2
32	NSS	PIN - differential cross	1
33	NSS	PIN - differential cross lock	1
34	28- 680	SCREW - 3/8" x 5" NF hex	4
35	131- 1133	NUT - lock 3/8" NF hex	4
36	C 12718	WASHER - differential	2
37	C 14223	WASHER - spacer	UAR
38	C 33417	GEAR - brake idler (also use C25258)	1
39	C 14222	RING - retainer, brake idler	1
40	C 25258	BRAKE DRUM - (also use C33417)	1
41	126- 128	KEY - Woodruff, brake idler	1
42	138- 319	PIN - roll 3/16" x 1-1/2"	1
43	113- 424	BOLT - 1/2" - 13 x 1" hex	4
44	192- 23	LOCKWASHER - 1/2"	4
45	C 42852	DIFFERENTIAL	1



TRANSMISSION AND FINAL DRIVE

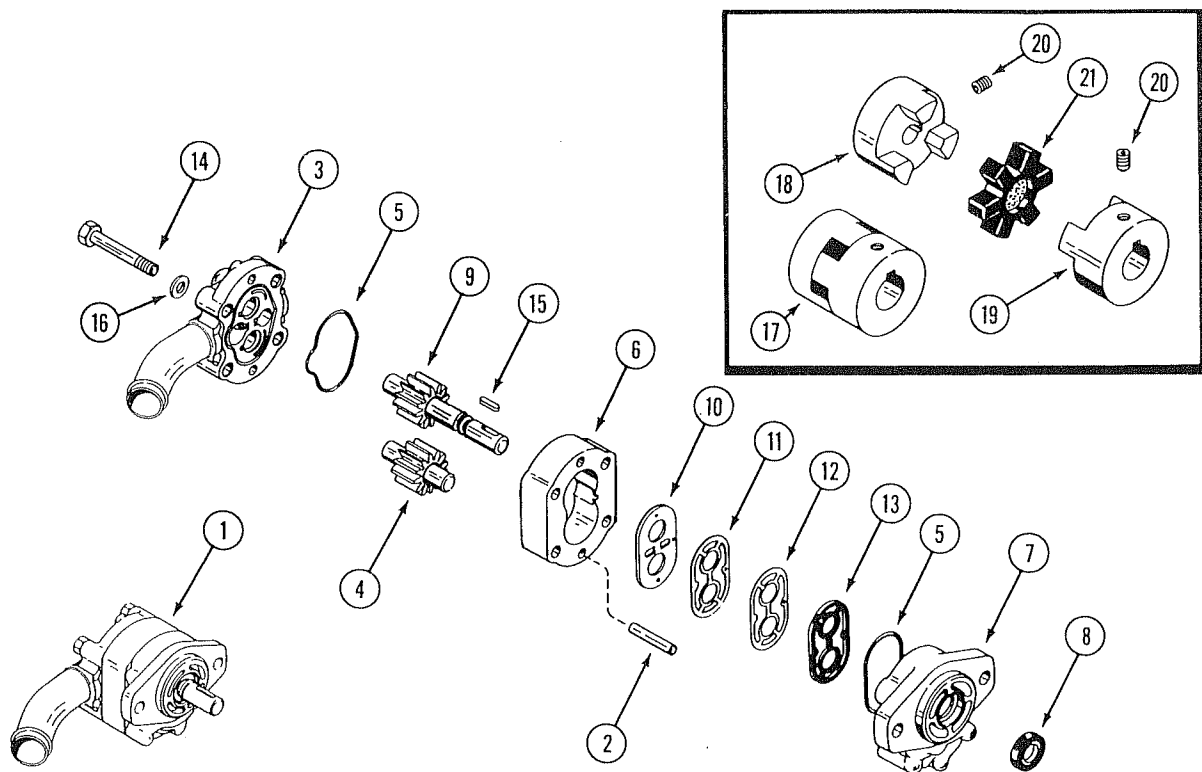
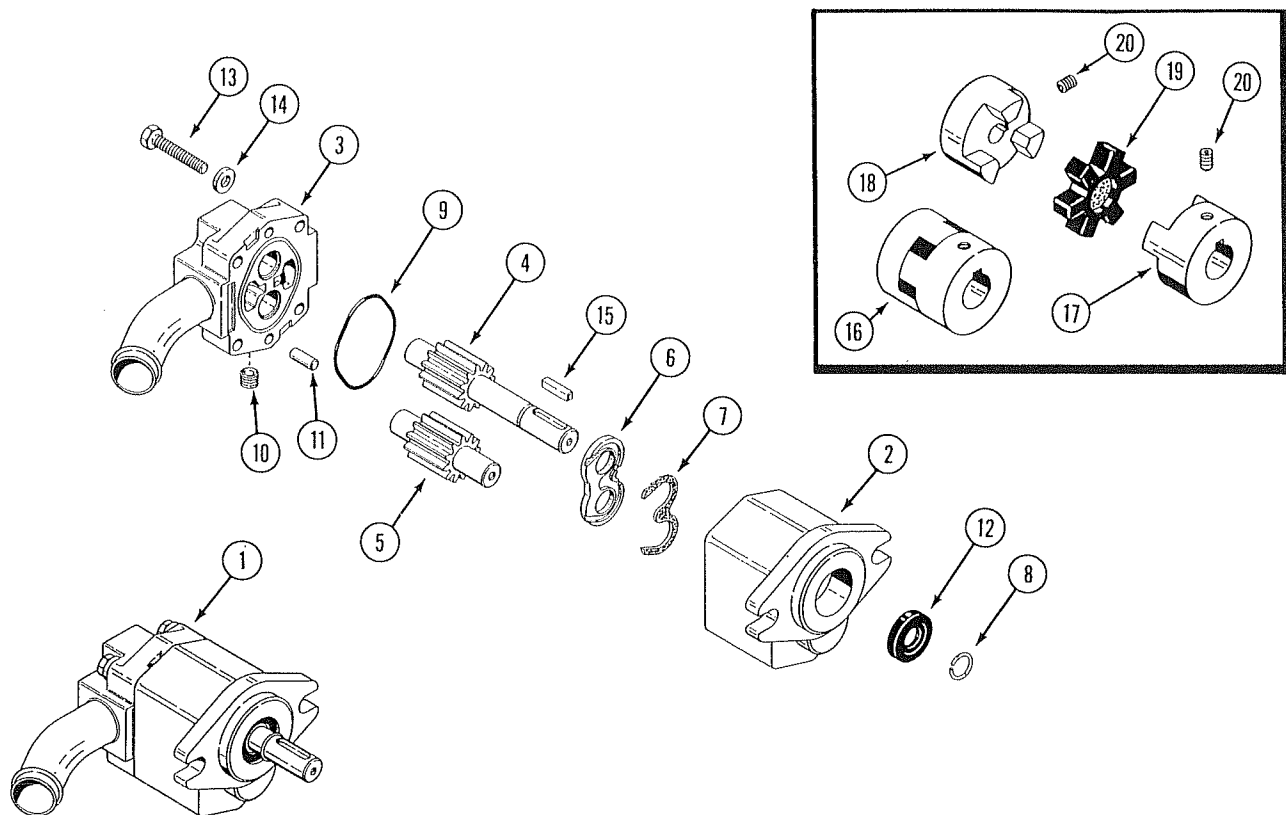
(Service Transmission)

REF.	PART NO.	DESCRIPTION	REQ'D
	C 24843	CASE ASSEMBLY - transmission	1
1	NSS	CASE - transmission	1
2	C 12713	BEARING - flange	2
3	C 24804	BEARING - flange	2
4	C 24803	SEAL - shaft	3
5	C 13241	BEARING - sleeve	1
6	C 13385	BEARING - sleeve	1
7	C 13266	SEAL - shift rod	1
8	C 28281	BEARING - roller	1
10	221- 4	PLUG - 1/2" filler and drain	2
11	C 16699	SHAFT - axle, short R.H. (220, 222 and 224)	1
12	C 22638	SHAFT - axle, short R.H. (444)	1
13	C 16700	SHAFT - axle, long L.H. (220, 222 and 224)	1
14	C 22637	SHAFT - axle, long L.H. (444)	1
15	C 26342	RING - retainer, axle	2
16	C 13196	GASKET - transmission cover	1
17	C 36935	COVER - transmission	1
18	C 28241	BREATHER - transmission	1
19	192- 19	LOCKWASHER - 1/4"	6
20	113- 1	BOLT - 1/4" x 1/2" NC hex	6
21	C 12725	FORK - shift	1
22	C 37222	ROD - gear shift	1
23	C 14168	RING - retaining	2
24	C 14644	GEAR - cluster input	1
25	C 12551	GEAR - high 41 tooth	1
26	C 12552	GEAR - low 55 tooth	1
27	NSS	KIT - diff. case (includes Ref. 34 and 35)	1
	NSS	KIT - differential pinion and side gear	1
29	NSS	GEAR - differential pinion	2
30	NSS	GEAR - differential	2
31	NsS	WASHER - pinion thrust	2
32	NSS	PIN - differential cross	1
33	NSS	PIN - differential cross lock	1
34	28- 680	SCREW - 3/8" x 5" NF hex cap	4
35	131- 1133	NUT - lock 3/8" NF hex	4
36	C 12718	WASHER - differential	2
37	C 14223	WASHER - spacer	UAR
38	C 33417	GEAR - brake idler (also use C25258)	1
39	C 14222	RING - retainer, brake idler	1
40	C 25258	BRAKE DRUM - (also use C33417)	1
41	126- 128	KEY - Woodruff, brake idler	1
42	138- 319	PIN - roll 3/16" x 1-1/4"	1
43	113- 424	BOLT - 1/2" - 13 x 1" hex	4
44	192- 23	LOCKWASHER - 1/2"	4
45	C 42852	DIFFERENTIAL	1



HYDRAULIC SYSTEM

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 15335	SUPPORT - pump mounting	1
2	113- 206	BOLT - 3/8" x 3/4" 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	C 28321	KEY - square 1/4" x 3/4" (engine shaft)	1
6	C 25207	COUPLING - pump, 9/16" shaft (220, 222) (See page 55)	1
6	C 25208	COUPLING - pump, 9/16" shaft (224, 444) (See page 55)	1
7	NSS	PUMP - hyd. 9/16" shaft (repairs page 55) (use C24868)	1
8	218- 5065	FITTING - hyd. 3/4" x 7/8" "O" Ring	1
9	218- 5007	"O" RING - 5/8" (for 218-5065 fitting)	1
10	C 16794	TUBE - valve to lower motor port (220, 222 and 224)	1
11	C 16793	TUBE - valve to upper motor port (220, 222 and 224)	1
12	C 25784	EXCHANGER - heat	1
13	214- 254	CLAMP - hose	4
14	C 29697	HOSE - rubber, tank to heat exchanger (cut to length)	1
15	C 22808	RESERVOIR - hydraulic oil	1
16	C 11529	CAP - reservoir (includes insert)	1
17	NSS	INSERT - reservoir cap	1
18	C 22947	TIE - hose clamp	2
19	C 23326	CLAMP - hose	2
20	C 24911	HOSE ASSEMBLY - suction	1
21	C 18797	HOSE - hydraulic, pump to valve	1
22	218- 5006	"O" RING - 1/2" (for C18797)	1
23	C 26182	TUBE - valve to heat exchanger	1
24	C 16687	TUBE - valve to lower motor port (444)	1
25	C 17898	TUBE - valve to upper motor port (444)	1
26	218- 5107	FITTING - motor port, 90° elbow, "O" Ring	2
27	218- 5007	"O" RING - 5/16" (for 218-5107 fitting)	2
28	C 27217	VALVE - hydraulic control, single spool (220, 222) (repairs page 57)	1
29	C 27217	VALVE - hydraulic control, two spool (all models with hydraulic lift) (repairs page 57)	1
30	171- 247	SCREW - 5/16" x 1-1/4" N.C. flat hd. machine	2
31	131- 351	NUT - lock 5/16" N.C. hex	2
32	218- 5062	FITTING - hydraulic valve 5/8" x 7/8" "O" Ring	3
33	218- 5007	"O" RING - 5/8" (for 218-5062)	3
34	C 28949	SEAL - motor to transmisson	1
35	C 16697	MOTOR - hydraulic (220, 222 and 224) (repairs page 59)	1
35	C 14655	MOTOR - hydraulic (444) (repairs page 59)	1
36	166- 86	SCREW - 1/2" x 1-1/4" N.C. flanged 12 pt.	4
37	C 29697	HOSE - rubber, 4" (cut to length)	1
38	C 23189	DIPSTICK - oil, hydraulic reservoir	1

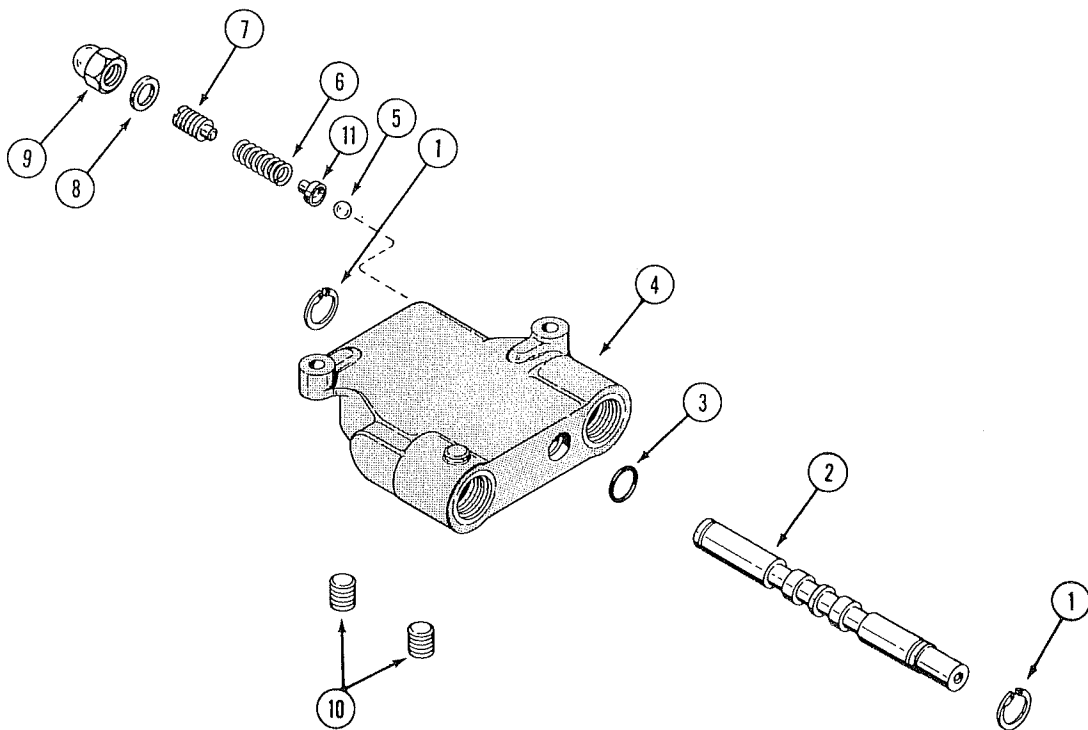
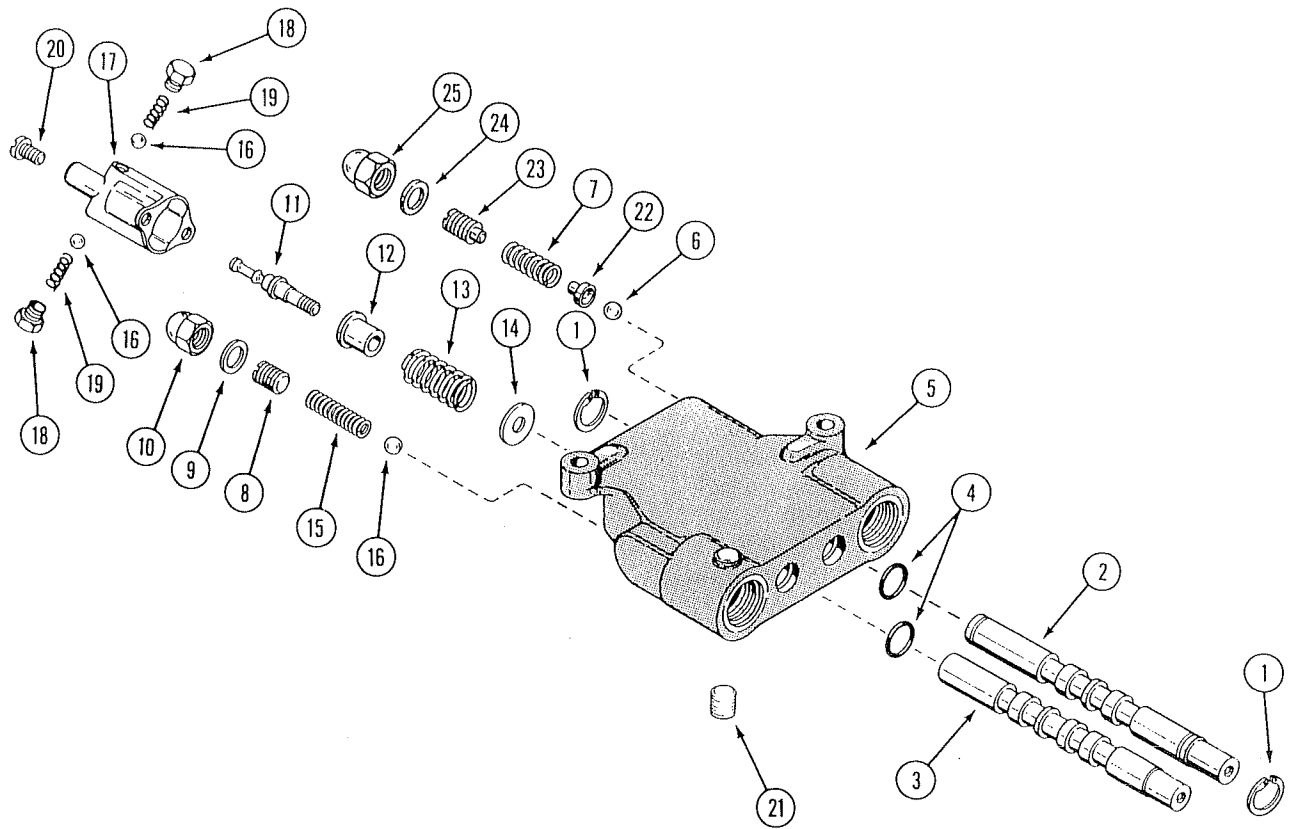


C22771 HYDRAULIC PUMP AND COUPLING (BORG-WARNER)

REF.	PART NO.	DESCRIPTION	REQ'D
1	NSS	PUMP - hyd. 9/16" shaft (use C24868 pump)	1
2	C 20456	BODY - pump	1
3	NSS	COVER ASSEMBLY - pump (use C24868)	1
4	C 20460	GEAR - drive, pump	1
5	C 20461	GEAR - driven, pump	1
6	C 20462	PLATE - wear	1
7	C 24070	SEAL AND RETAINER - wear plate	1
8	O/L	RING - retaining	1
9	C 28927	SEAL - "O" Ring	1
10	221- 849	PLUG - pipe	1
11	NSS	PIN - dowel	2
12	C 20464	SEAL - shaft	1
13	O/L	BOLT - 1/4" x 1-1/2" NC hex, grade 5	4
14	NSS	WASHER - 1/4"	4
15	C 20455	KEY - square 3/16" x 13/16"	1
16	C 25207	COUPLING - 220, 222	1
16	C 25208	COUPLING - 224, 444	1
17	NSS	HUB - coupling (order item 16)	1
18	NSS	HUB - coupling (order item 16)	1
19	C 28966	SPIDER - (for C25207 coupling)	1
19	C 15036	SPIDER - (for C25208 coupling)	1
20	83- 55	SETSCREW - 5/16" x 5/16" N.C. soc. hd.	2

C24868 HYDRAULIC PUMP AND COUPLING (PARKER—HANNIFIN)

1	C 24868	PUMP - hyd. 9/16" shaft	1
2	F 53109	PIN - dowel	2
3	C 24867	COVER - rear	1
4	C 15731	GEAR ASSEMBLY - driven	1
5	C 15732	"O" RING - cover	2
6	C 15733	BODY - pump	1
7	C 15734	COVER - front	1
8	C 15735	SEAL - shaft	1
9	NSS	GEAR ASESEMBLY - drive	1
	C 24862	SHAFT - drive	1
	C 24863	GEAR - drive	1
	C 24864	KEY - gear	1
	C 24865	RING - retaining	2
10	C 15737	PLATE - wear	1
11	C 15738	SHIELD - heat	1
12	C 15739	GASKET	1
13	C 15740	SEAL	1
14	O/L	BOLT	4
15	C 28215	KEY - 3/16" square	1
16	C 19115	WASHER	4
17	C 25207	COUPLING - pump (220 and 222)	1
17	C 25208	COUPLING - pump (224 and 444)	1
18	NSS	HUB - (order item 17)	1
19	NSS	HUB - (order item 17)	1
20	C 32199	SCREW - set 5/16" x 5/16" NC socket head	2
21	C 28966	SPIDER - (for C25207 coupling)	1
21	C 15036	SPIDER - (for C25208 coupling)	1

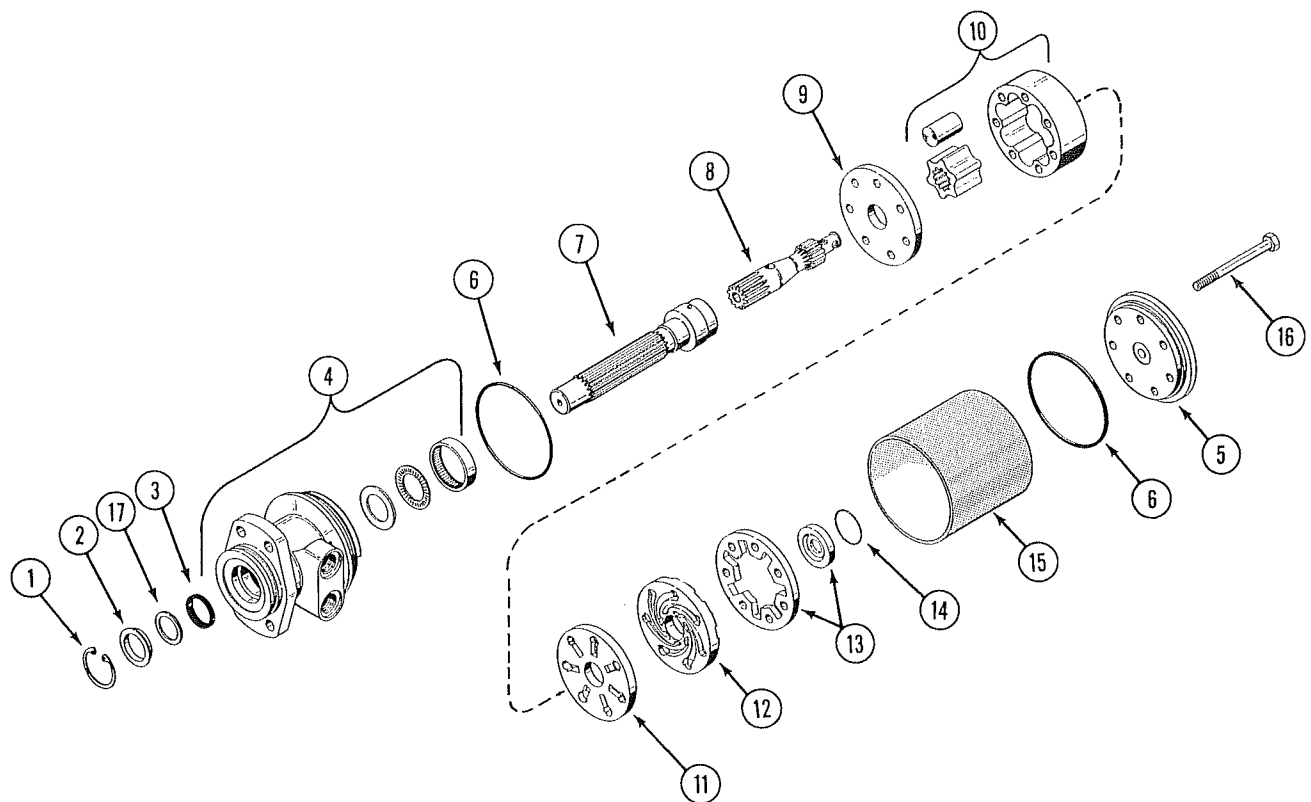
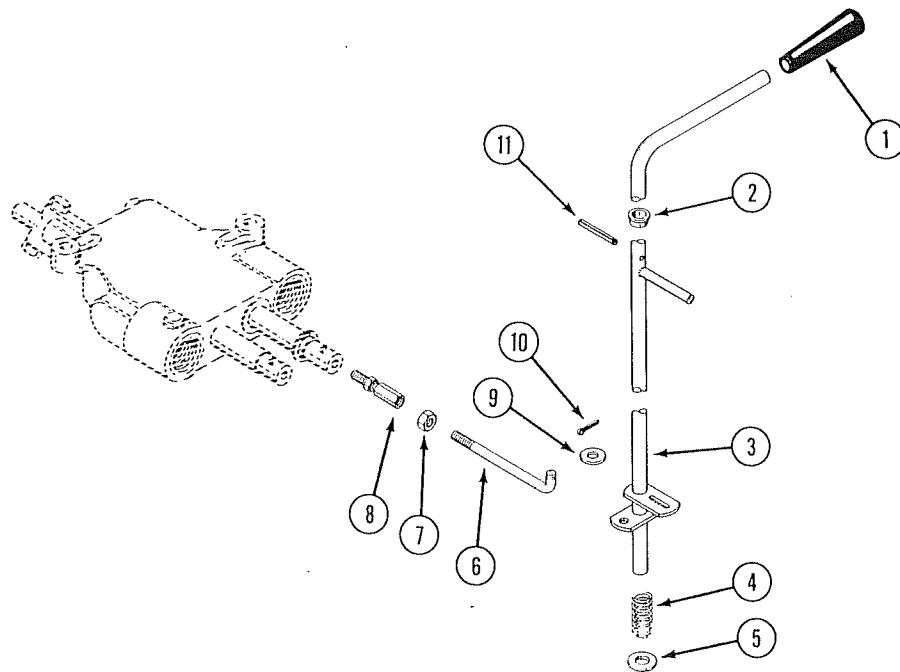


HYDRAULIC CONTROL VALVE (TWO SPOOL)

REF.	PART NO.	DESCRIPTION	REQ'D
	NSS	VALVE - control, two spool (use C27217)	1
1	C 28699	RING - retaining	2
2	NSS	SPOOL - motor (Order C27217)	1
3	NSS	SPOOL - motor (Order C27217)	1
4	C 28856	SEAL - spool	4
5	NSS	BODY - valve (Order C27217)	1
6	211- 208	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 28706	SPRING - detent return	1
14	C 17440	WASHER - return	1
15	NSS	SPRING - relief (use C21511 kit)	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
22	C 21506	RETAINER - ball seat	1
23	NSS	SCREW - adjust, relief (use C21504 kit)	1
24	C 21508	GASKET - adjust cap	1
25	C 21510	CAP - adjust screw	1
	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

HYDRAULIC CONTROL VALVE (SINGLE SPOOL)

	NSS	VALVE - control, single spool (use C27217)	1
1	C 28699	RING - retaining	2
2	NSS	SPOOL - Order C27217 valve)	1
3	C 28856	SEAL - spool	2
4	NSS	BODY - valve (Order C27217)	1
5	211- 208	BALL - steel 5/16"	1
6	C 21507	SPRING - relief	1
7	NSS	SCREW - relief adjust (use C21504 kit)	1
8	C 21508	GASKET - relief adjust cap	1
9	C 21510	CAP - adjust screw	1
10	221- 841	PLUG - 1/4"	3
11	C 21506	RETAINER - ball seat	1
	C 21504	KIT - relief (includes items 5, 6, 7, 8, 9 and 11)	1

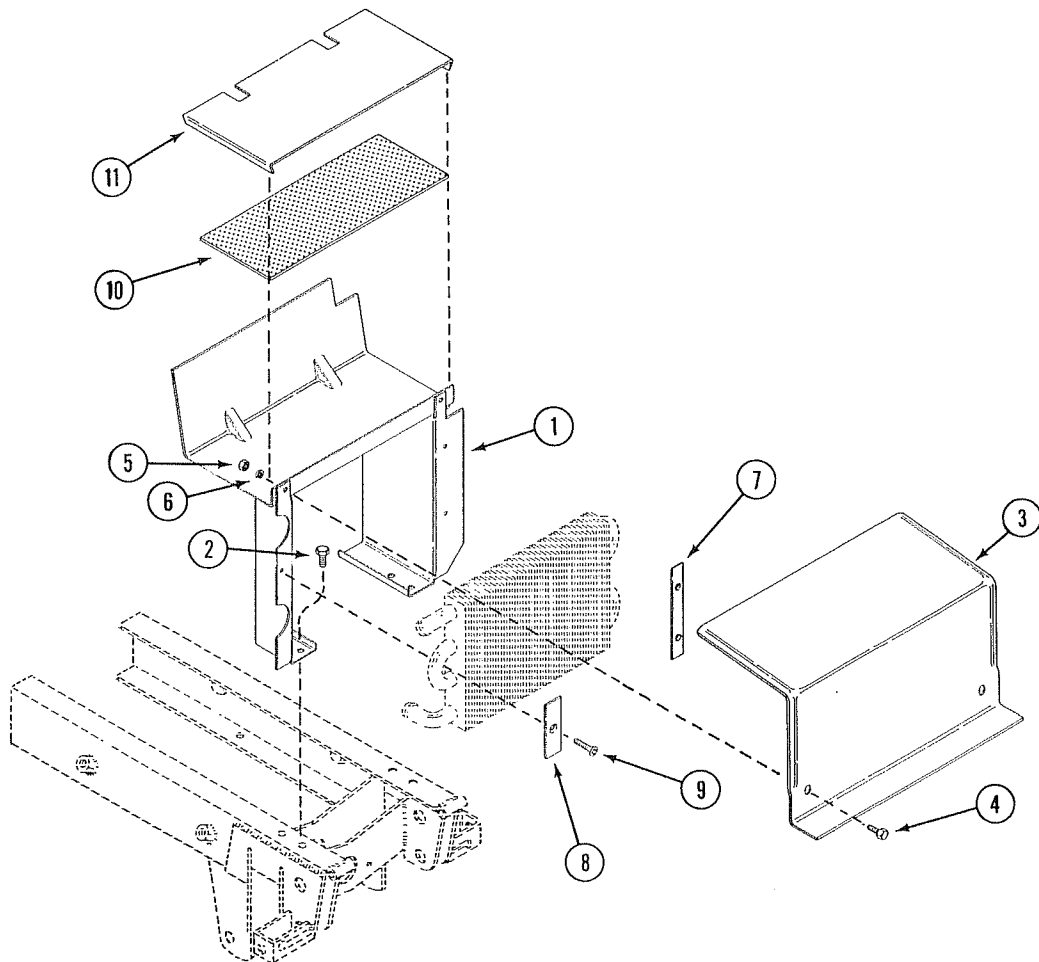
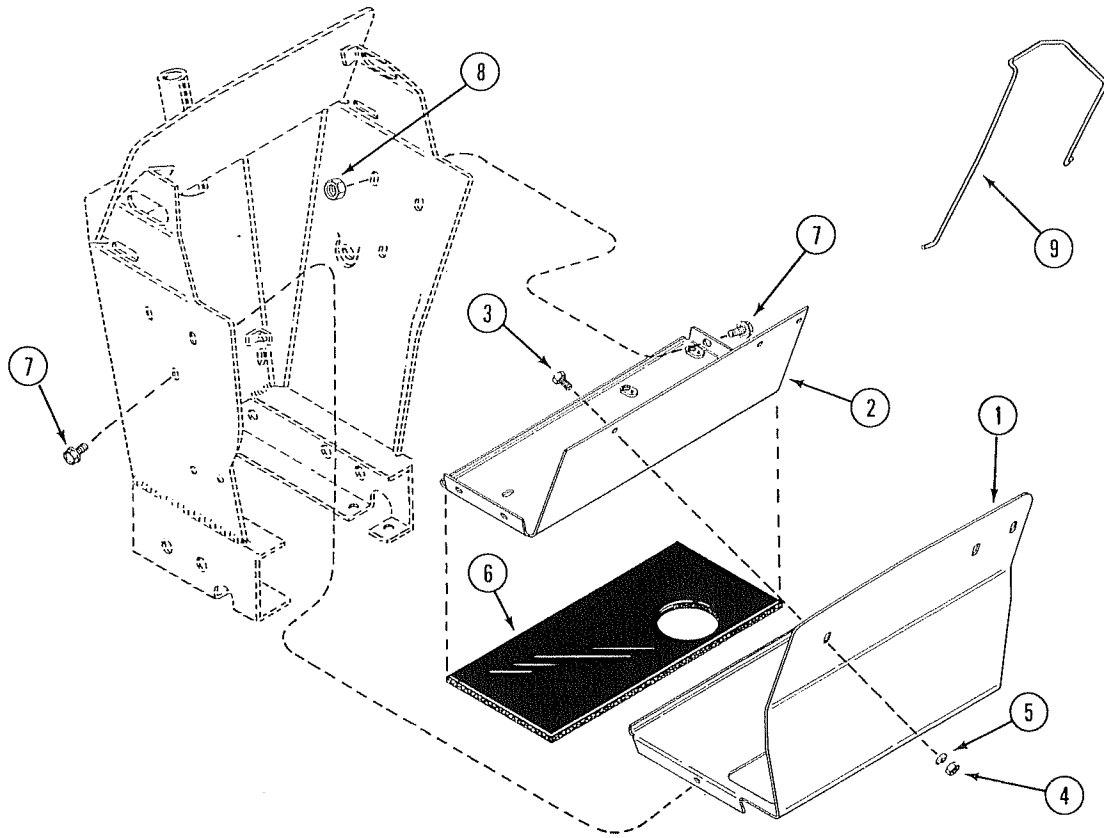


SPEED CONTROL

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 28237	KNOB - speed control	1
2	C 27593	BUSHING - lever	1
3	NSS	LEVER - speed control (use C29407, C28003)	1
4	C 27822	SPRING - compression	1
5	C 21518	WASHER - nylon	1
6	C 18742	ROD - control	1
7	129- 122	NUT - 5/16" NF hex, zinc plated	1
8	C 19025	JOINT - ball	1
9	195- 521	WASHER - 5/16"	1
10	132- 320	PIN - cotter 3/32" x 3/4"	1
11	138- 2072	PIN - roll 1/8" x 1-3/4"	1

HYDRAULIC DRIVE MOTOR

	C 16697	MOTOR - hydraulic, 220, 222 and 224	1
	C 14655	MOTOR - hydraulic, 444	1
1	C 16516	RING - retaining	1
2	NSS	SPACER - (See kit below)	1
3	NSS	SEAL - oil (See kit below)	1
4	C 14827	HOUSING ASSEMBLY	1
5	C 14837	END CAP	1
6	NSS	SEAL - (See kit below)	2
7	NLA	SHAFT - coupling	1
8	NLA	DRIVE LINK - 220, 222 and 224	1
8	NLA	DRIVE LINK - 444	1
9	C 14830	PLATE - wear	1
10	C 18110	ROTOR ASSEMBLY - 220, 222 and 224	1
10	C 14831	ROTOR ASSEMBLY - 444	1
11	C 28703	PLATE - manifold (used prior to motor code 127-7)	1
12	NLA	MANIFOLD	1
13	NLA	COMMUTATOR AND RING SET	1
14	NSS	RING - sealing (See kit below)	1
15	C 18092	SLEEVE - 220, 222 and 225	1
15	C 14836	SLEEVE - 444	1
16	O/L	BOLT - 3/8" x 3-7/8" NF hex, 220, 222 and 224	7
16	C 14838	BOLT - 3/8" x 4-3/8" NF hex, 444	7
17	NSS	WASHER - back up, .010" (See kit below)	1
	C 29732	KIT - "O" ring and seal	1
	NSS	RING - sealing	1
	NSS	SEAL - dirt (not used - throw away item)	1
	NSS	SEAL	2
	NSS	SEAL	1
	NSS	RING - retaining	1
	NSS	SPACER - seal	1
	NSS	WASHER - back up, .010"	1

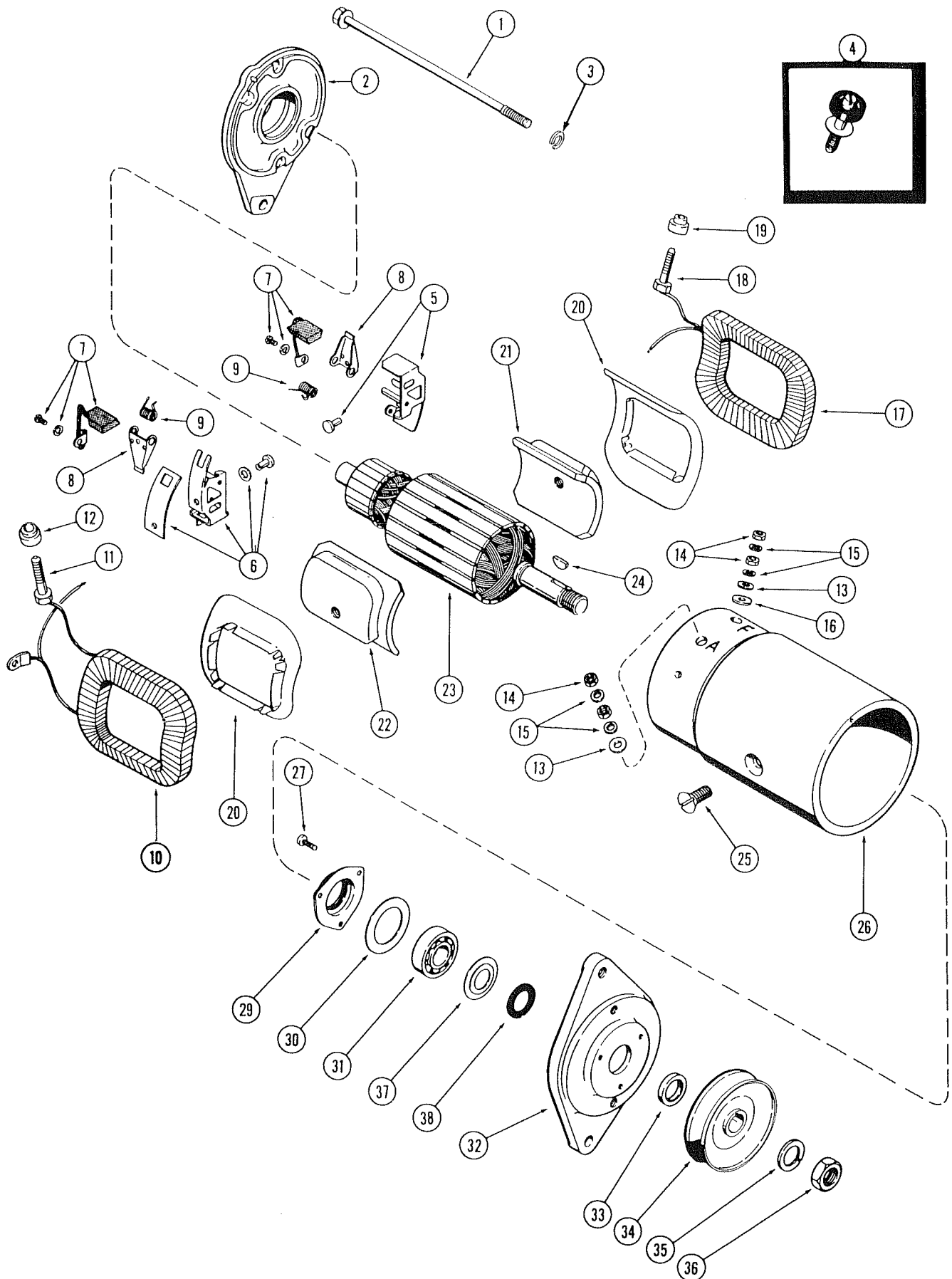


BATTERY MOUNT AND HYDRAULIC RESERVOIR MOUNT

REF.	PART NO.	DESCRIPTION	REQ'D
1	NLA	SUPPORT - hydraulic reservoir	1
2	C 27596	TRAY - battery	1
3	113- 1	BOLT - 1/4" x 1/2" hex z.p.	3
4	129- 101	NUT - 1/4" z.p.	3
5	192- 19	LOCKWASHER - 1/4" z.p.	3
6	C 22896	PAD - rubber	1
7	121- 106	SCREW - 5/16" x 1/2" Whizlock	6
8	129 102	NUT - 5/16" N.C. hex	4
9	C 16239	STRAP - battery holddown	1

HEAT EXCHANGER MOUNTS AND MUFFLER SHIELDS

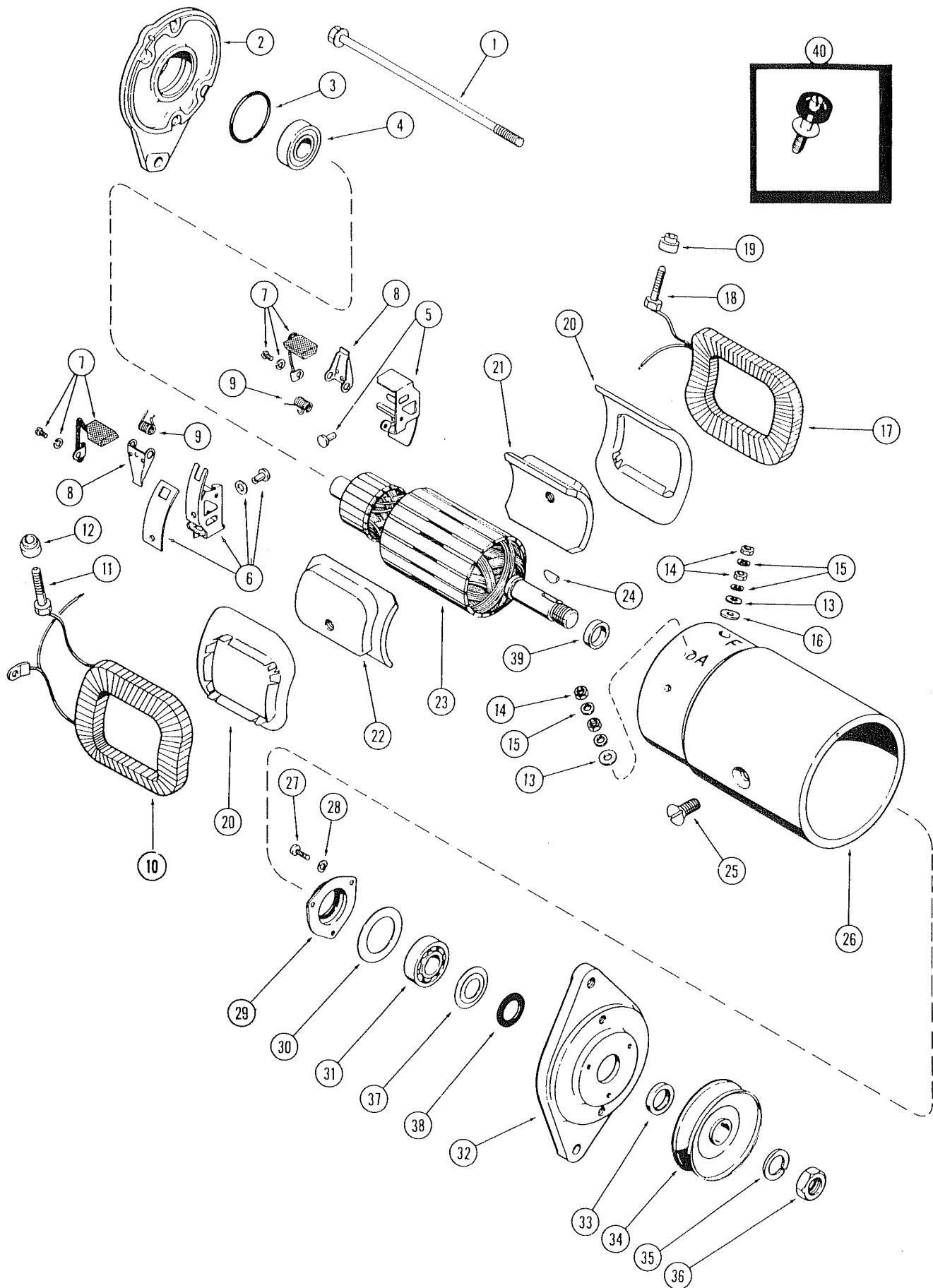
1	C 27602	SUPPORT - heat exchanger	1
2	113- 118	BOLT - 5/16" x 5/8"	4
3	C 26455	SHIELD - heat, muffler	1
4	113- 1	BOLT - 1/4" x 1/2" hex z.p.	2
5	129- 101	NUT - 1/4" z.p. (early production)	2
6	192- 19	LOCKWASHER - 1/4" z.p. (early production)	2
7	NSS	BRACKET - heat exchanger L.H. (use (2) C25556)	1
8	NSS	BRACKET - heat exchanger R.H. (use C25556)	1
9	187- 1252	SCREW - 1/4" x 1-1/2" N.C. flat hd. Phillips	3
10	C 22903	PAD - insulation	1
11	C 22874	RETAINER - insulation	1



C 16852 STARTER-GENERATOR
(Order C25256 For Service Replacement)

REF.	PART NO.	DESCRIPTION	REQ'D
1	O/L	BOLT - through	2
2	O/L	FRAME ASSEMBLY - commutator end (Delco No. 800213)	1
3	192- 20	LOCKWASHER - 5/16"	2
4	C 28809	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	O/L	BRUSH ASSEMBLY - (Delco No. 1946427)	2
8	NLA	ARM - brush pressure	2
9	C 28929	SPRING - brush arm	2
10	A 72043	COIL ASSEMBLY - field R.H.	1
11	A 72048	STUD - armature terminal	1
12	NLA	BUSHING - insulated, armature stud	1
13	NLA	WASHER - armature stud	2
14	O/L	NUT - terminal stud #12-24 hex	4
15	O/L	LOCKWASHER - terminal stud #12	4
16	C 28810	WASHER - insulated, field stud (Order C28809)	1
17	O/L	COIL ASSEMBLY - field L.H. (Delco No. 1939889)	1
18	NSS	STUD - field terminal (Order C28809)	1
19	NSS	BUSHING - insulated, field stud (Order C28809)	1
20	NLA	INSULATOR - field coil	2
21	NLA	SHOE - pole	1
22	NLA	SHOE - pole	1
23	C 28819	ARMATURE	1
24	126- 111	KEY - Woodruff, armature	1
25	O/L	SCREW - pole	2
26	NSS	BODY - starter, generator (Order C25256 starter)	1
27	O/L	SCREW - 10-32 x 1/2" round head	3
29	C 31096	RETAINER ASSEMBLY - bearing	1
30 *	NSS	GASKET - bearing retainer (order C31096)	1
31	C 28823	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	O/L	NUT - armature shaft, drive end	1
37	NLA	RETAINER - grease	1
38 *	NSS	SEAL - felt (Order C31096)	1

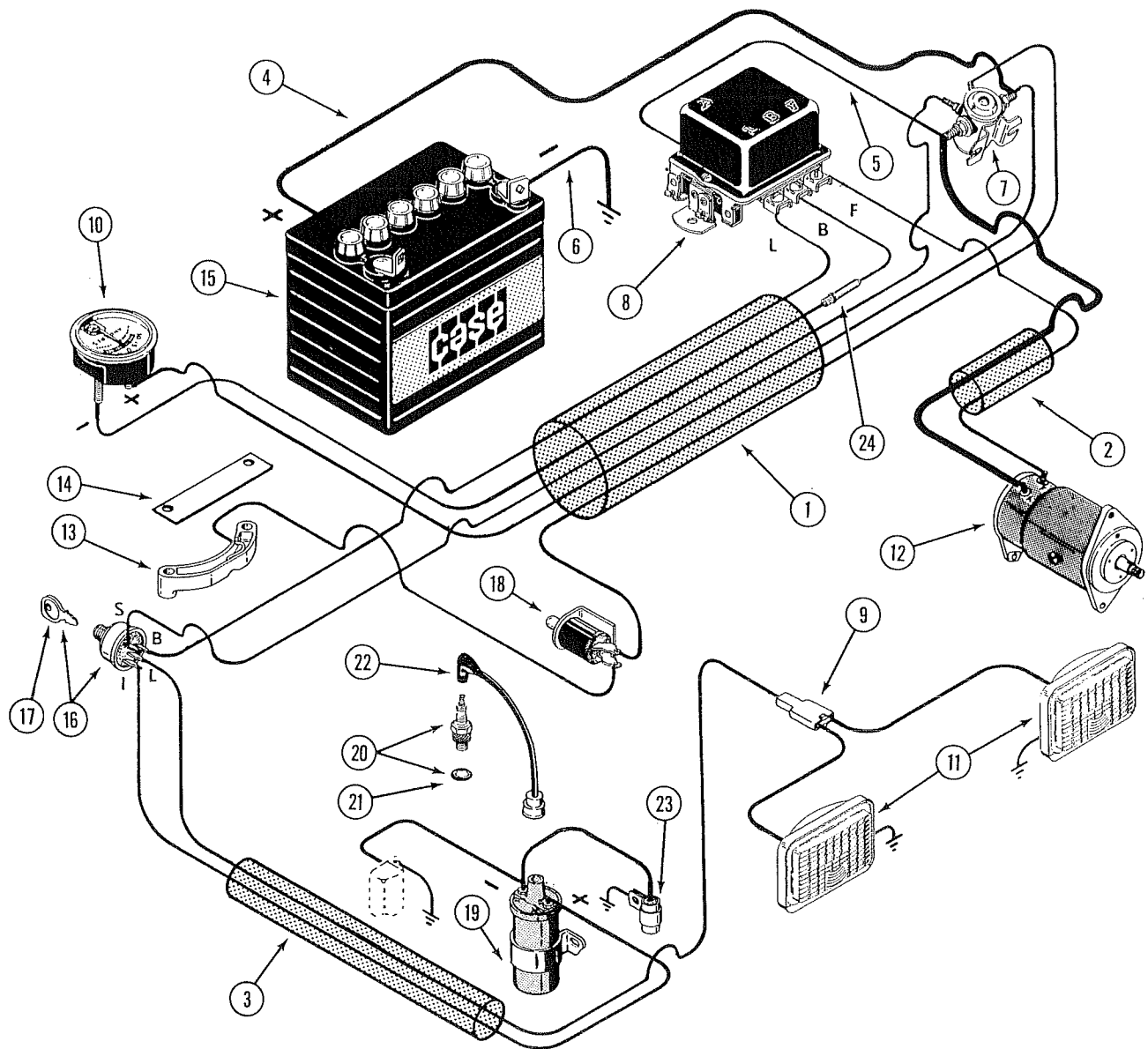
*Bearing retainer gasketet and felt seal not required.
 New retainer assembly services all starters.



A70202 STARTER-GENERATOR (DELCO NO. 1101970)

REF.	PART NO.	DESCRIPTION	REQ'D
1	O/L	BOLT - through (includes washer)	2
2	A 72104	FRAME ASSEMBLY - commutator end	1
3	O/L	RING - bearing retainer	1
4	A 45230	BEARING - commutator end, ball	1
5	A 72039	HOLDER KIT - ground brush	1
6	A 72040	HOLDER KIT - insulated brush	1
7	O/L	BRUSH ASSEMBLY - (Delco No. 1946427)	2
8	NLA	ARM - brush pressure	2
9	NLA	SPRING - brush arm	2
10	A 72043	COIL ASSEMBLY - field R.H.	1
11	A 72048	STUD - armature terminal	1
12	NLA	BUSHING - insulated, armature stud	1
13	O/L	WASHER - armature stud	2
14	O/L	NUT - terminal stud #12-24 hex	4
15	O/L	LOCKWASHER - terminal stud #12	4
16	C 28810	WASHER - insulated, field stud	1
17	O/L	COIL ASSEMBLY - field L.H. (Delco No. 1939889)	1
18	NSS	STUD - field terminal (See Ref. 40)	1
19	NSS	BUSHING - insulated, field stud (Order C28809)	1
20	NLA	INSULATOR - field coil	2
21	NLA	SHOE - pole, plain	1
22	NLA	SHOE - pole, notched	1
23	A 72041	ARMATURE	1
24	126- 111	KEY - Woodruff, armature	1
25	O/L	SCREW - pole	2
26	NSS	BODY - starter, generator (Order C25256)	1
27	O/L	SCREW - #10-32 x 1/2" rd. hd.	3
28	192- 18	LOCKWASHER - 3/16" plated	3
29	C 31096	RETAINER ASSEMBLY - bearing	1
30 *	NSS	GASKET - bearing retainer (Order C31096)	1
31	C 28823	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	O/L	NUT - armature shaft, drive end	1
37	NLA	RETAINER - grease	1
38 *	NSS	SEAL - felt (Order C31096)	1
39	NSS	SPACER - armature shaft, inner	1
40	C 28809	KIT - stud (Includes items 16, 18 and 19)	1

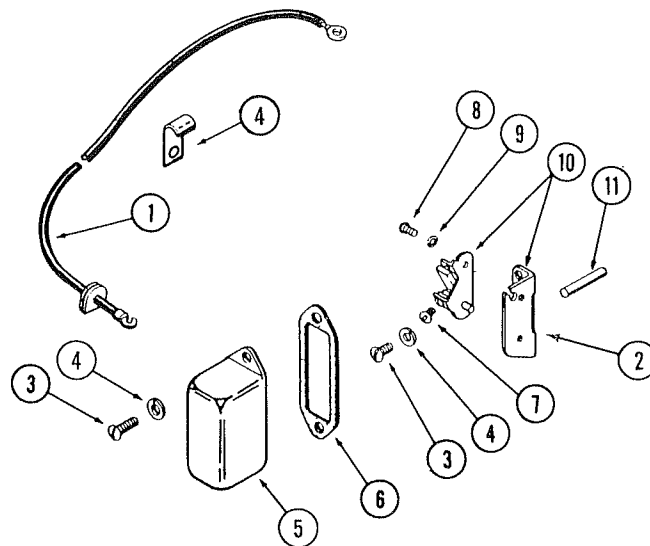
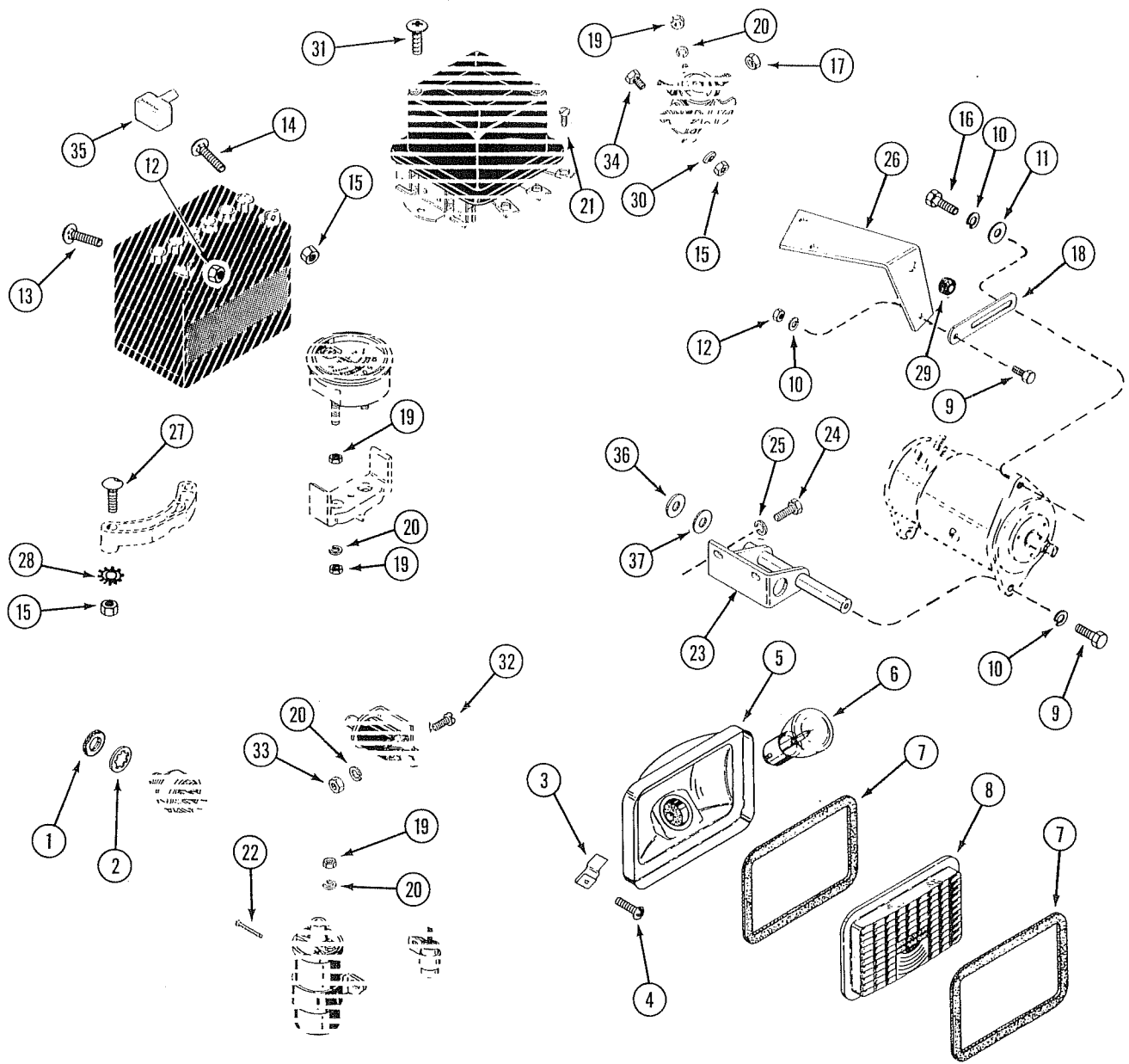
* Bearing retainer gasket and felt seal not required.
New retainer assembly services all starters.



ELECTRICAL SYSTEM

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 23023	HARNESS - wire	1
2	C 23024	HARNESS - wire	1
3	C 23025	HARNESS - wire	1
4	C 14565	CABLE - battery, positive to solenoid (red, 10-1/2'')	1
5	C 23030	WIRE - regulator "A" terminal to solenoid (white, 10'')	1
6	C 24814	CABLE - battery, negative (black, 18'')	1
7	C 14553	SOLENOID - start, 12 v.	1
8	C 28386	REGULATOR - voltage, 12 v.	1
9	C 14537	CONNECTOR - headlamp	1
10	C 29413	AMMETER - 30 amp	1
11	C 32178	HEADLAMP ASSEMBLY - 12 v. (repairs page 65)	2
12	NSS*	STARTER-GENERATOR - 12 v. (repairs page 59) Delco No. 1101875	1
12	NSS*	STARTER-GENERATOR - 12 v. (repairs page 61) Delco No. 1101970	1
13	C 23002	SWITCH - neutral start	1
14	C 21989	INSULATOR - switch, neutral start	1
15	C 41010	BATTERY - 12 v.	1
16	C 30268	SWITCH ASSEMBLY - ignition (includes key)	1
17	C 32407	KEY - ignition	1
18	C 22765	SWITCH - P.T.O.	1
19	KO 231281	COIL - ignition, 12 v.	1
	C 28694	BRACKET - coil mounting	1
20	C 29738	SPARK PLUG - (includes gasket)	1
21	NSS	GASKET - spark plug	1
22	C 28693	CABLE - high tension	1
23	KO 230722	CONDENSER	1
24	O/L	FUSE - 20 amp. (included in C23023 harness)	1

* Use C25256 remanufactured starter

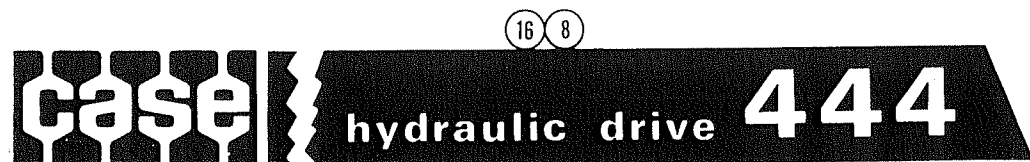
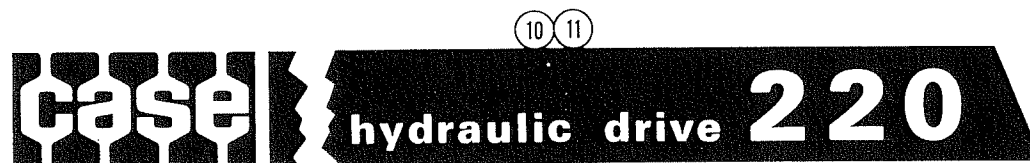
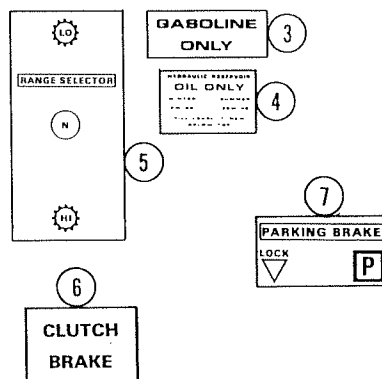
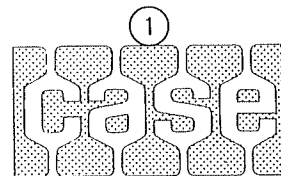
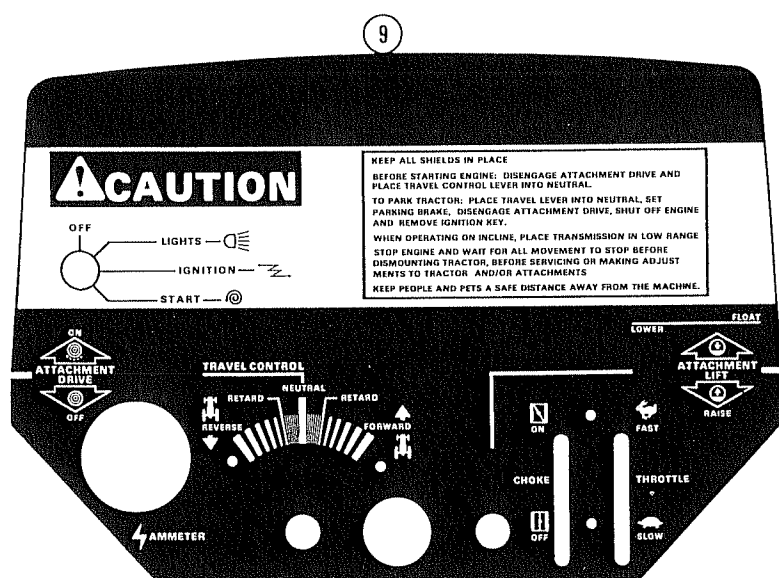


ELECTRICAL SYSTEM HARDWARE

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 23330	NUT - switch mounting	1
2	C 23012	LOCKWASHER - internal tooth	1
3	131- 629	NUT - speed type "U"	4
4	187- 1334	SCREW - #8 x 1/2" self tapping, round head, Phillips	4
	C 32178	HEADLAMP ASSEMBLY	2
5	NSS	RECEPTACLE - headlamp (Order C32178)	1
6	C 28932	BULB - headlamp	1
7	C 14304	GASKET - headlamp	2
8	C 22573	LENS - headlamp	1
9	113- 185	BOLT - 5/16" x 1" N.C. hex, grade 8 (Torque Spec. 24-29 ft. lb)	3
10	192- 20	LOCKWASHER - 5/16" zinc plated	4
11	195- 520	WASHER - 5/16" plain, zinc plated	2
12	129- 102	NUT - 5/16" plain, zinc plated	2
13	111- 202	BOLT - 5/16" x 3/4" N.C. round head, square neck	1
14	111- 108	BOLT - 1/4" x 3/4" N.C. round head, square neck	1
15	129- 101	NUT - 1/4" N.C. hex	5
16	113- 185	BOLT - 5/16" x 1" N.C. hex, zinc plated grade 8	1
17	129- 122	NUT - 5/16" N.F. hex	2
18	C 14599	BRACKET - starter generator adjust	2
19	129- 27	NUT - #10 N.F. hex	8
20	192- 18	LOCKWASHER - #10	8
21	169- 133	SCREW - #8 x 3/8" N.C. fillister head	3
22	O/L	SCREW - #10 x 1-1/2" U.N.F. self tap	1
23	C 18788	SUPPORT - starter generator	1
24	113- 221	BOLT - 3/8" x 3/4" N.C. hex	2
25	192- 21	LOCKWASHER - 3/8"	2
26	NLA	SUPPORT - starter generator adjust	1
27	111- 131	BOLT - 1/4" x 1-1/8" N.C. round head, square neck	2
28	193- 57	LOCKWASHER - 1/4" external tooth	4
29	NLA	GROMMET - wire	1
30	192- 19	LOCKWASHER - 1/4" zinc plated	2
31	173- 296	SCREW - 1/4" - 20 x 1/4" zinc plated	2
32	182- 528	SCREW - #10 - 32 x 1/2" zinc plated, pan head	2
33	129- 37	NUT - #10 - 32 zinc plated	2
34	113- 1	BOLT - 1/4" - 20 x 1/2" hex head, zinc plated	2
35	C 24069	COVER - terminal	1
36	C 24836	WASHER - shim .005	UAR
37	C 24837	WASHER - shim .010	UAR
	C 19521	CLIP - wire, headlamp	1

BREAKER CONTACTS

1	NSS	LEAD - breaker contact (order from local supplier)	1
2	NSS	BRACKET - breaker contacts	1
3	182- 516	SCREW - #10 x 3/8" round head, zinc plated	4
4	KO 275182	CLIP - wire	1
5	C 28695	COVER - breaker contact	1
6	C 26518	GASKET - cover	1
7	O/L	SCREW - #6 x 3/8" self-tapping	1
8	O/L	SCREW - #8 x 1/4" N.C. round head	1
9	O/L	LOCKWASHER - #8 internal tooth	1
10	NSS	POINT SET - breaker contact assembly (Use C27439, C27440)	1
11	C 27440	ROD - breaker contact push	1



DECALS

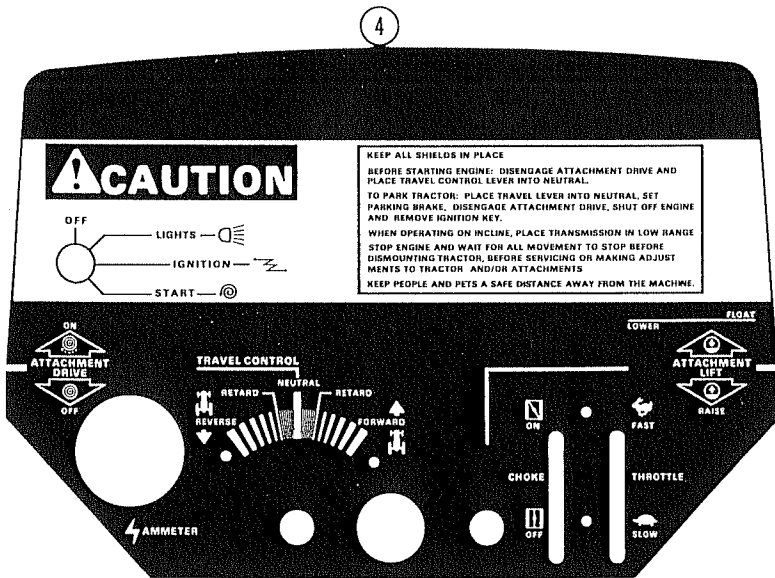
220 used prior to S/N 9722422

222 used prior to S/N 9724053

224 used prior to S/N 9725192

444 used prior to S/N 9726789

REF.	PART NO.	DESCRIPTION	REQ'D
1	O/L	DECAL - "CASE" (Case No. 321-1423)	1
3	C 29031	DECAL - gasoline	1
4	C 23209	DECAL - hydraulic reservoir	1
5	C 33589	DECAL - shift range	1
6	C 26932	DECAL - "Clutch-Brake"	1
7	C 27481	DECAL - brake	1
8	NSS	DECAL - hood 444 L.H., hydraulic drive (use C30859, C30866)	1
9	321- 3585	DECAL - instrument panel	1
10	NSS	DECAL - hood 220 R.H., (use C30860, C30862)	1
11	NSS	DECAL - hood 220 L.H., hydraulic drive (use C30859, C30862)	1
12	NSS	DECAL - hood 222 R.H., (use C30860, C30863)	1
13	NSS	DECAL - hood 222 L.H., hydraulic drive (use C30859, C30863)	1
14	NSS	DECAL - hood 224 R.H., (use C30860, C30864)	1
15	NSS	DECAL - hood 224 L.H., hydraulic drive (use C30859, C30864)	1
16	NSS	DECAL - hood 444 R.H., (use C30860, C30866)	1



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CASE

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220

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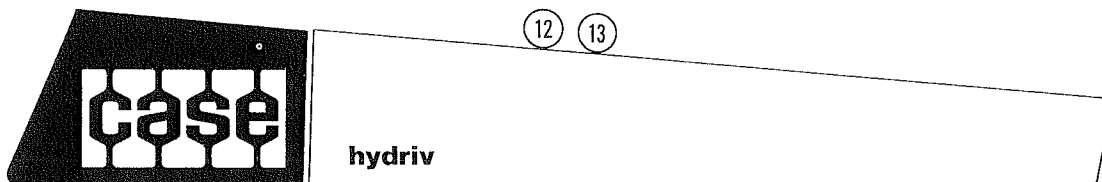
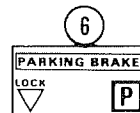
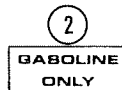
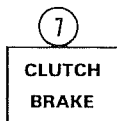
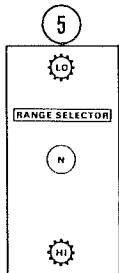
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DECALS (English)

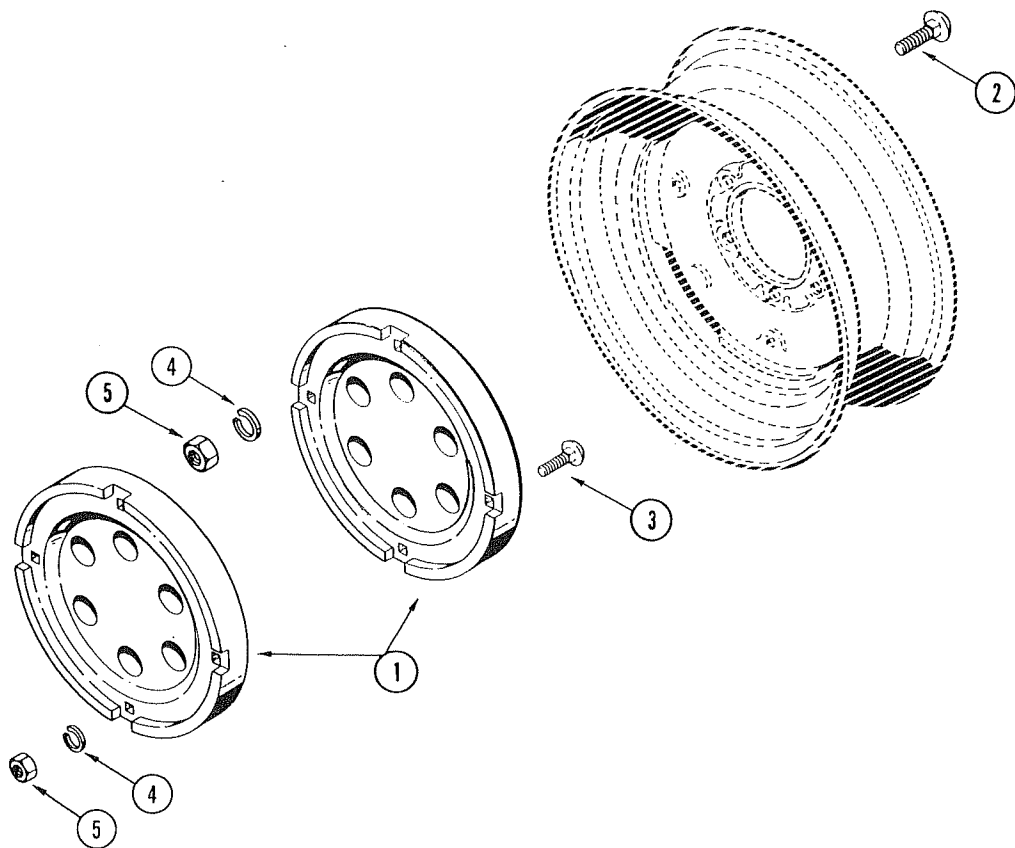
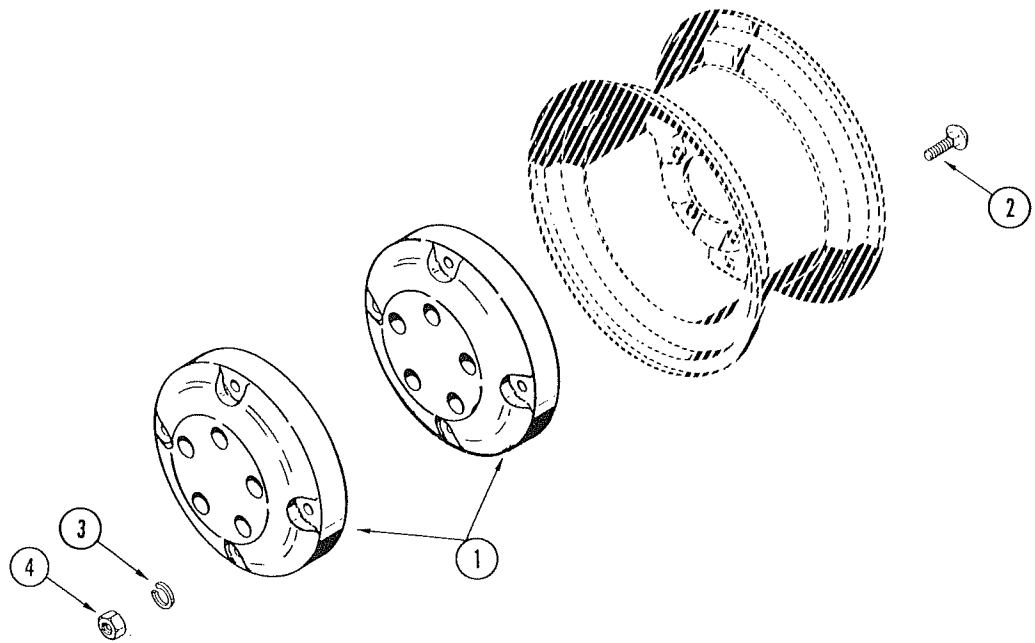
220 used S/N 9722422 and after

222 used S/N 9724053 and after

224 used S/N 9725192 and after

444 used S/N 9726789 and after

REF.	PART NO.	DESCRIPTION	REQ'D
1	O/L	DECAL - "CASE", fender (Case No. 321-2677)	1
2	C 29031	DECAL - gasoline	1
3	C 23209	DECAL - hydraulic reservoir	1
4	321- 3585	DECAL - instrument panel	1
5	C 33589	DECAL - shift range	1
6	NSS	DECAL - parking brake (use C27481)	1
7	NSS	DECAL - clutch, brake (use C27481)	1
8	321- 4162	DECAL - hood top, 220	1
9	NLA	DECAL - hood top, 222	1
10	321- 4164	DECAL - hood top, 224	1
11	321- 4165	DECAL - hood top, 444	1
12	NLA	DECAL - hood, R.H. (shown)	1
13	NLA	DECAL - hood, L.H.	1
14	NLA	DECAL - fender, "220"	1
15	321- 4150	DECAL - fender, "222"	1
16	321- 4151	DECAL - fender, "224"	1
17	NLA	DECAL - fender, "444"	1

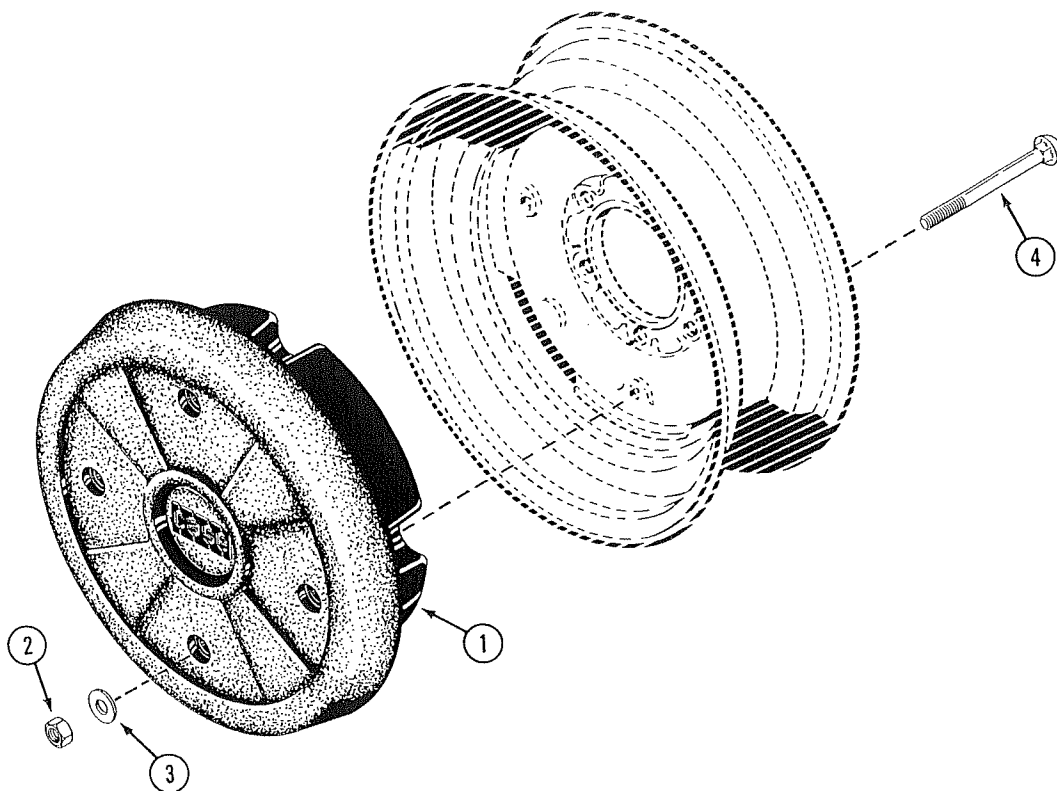
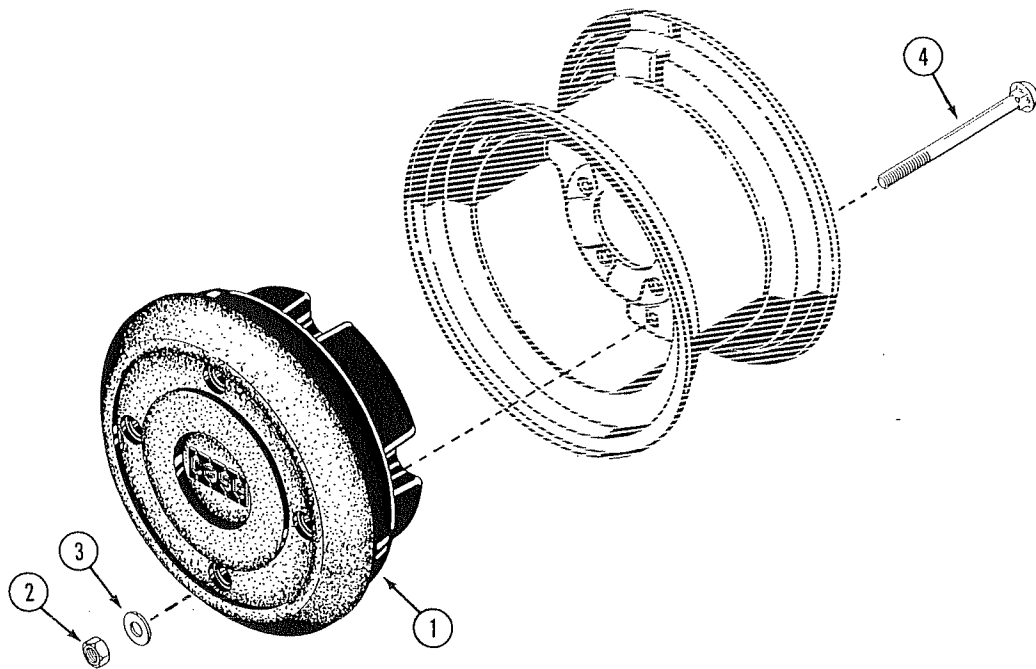


D8 WHEEL WEIGHTS - MODELS 220, 222 AND 224

REF.	PART NO.		DESCRIPTION	REQ'D
1	NSS		WEIGHT - wheel 12" (Order as Machinery Item)	4
2	O/L		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 444

1	NSS		WEIGHT - wheel 15" and 16" (Order as Machinery Item)	4
2	O/L		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

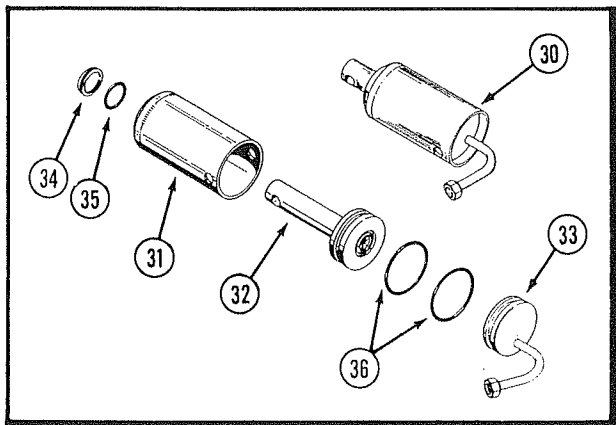
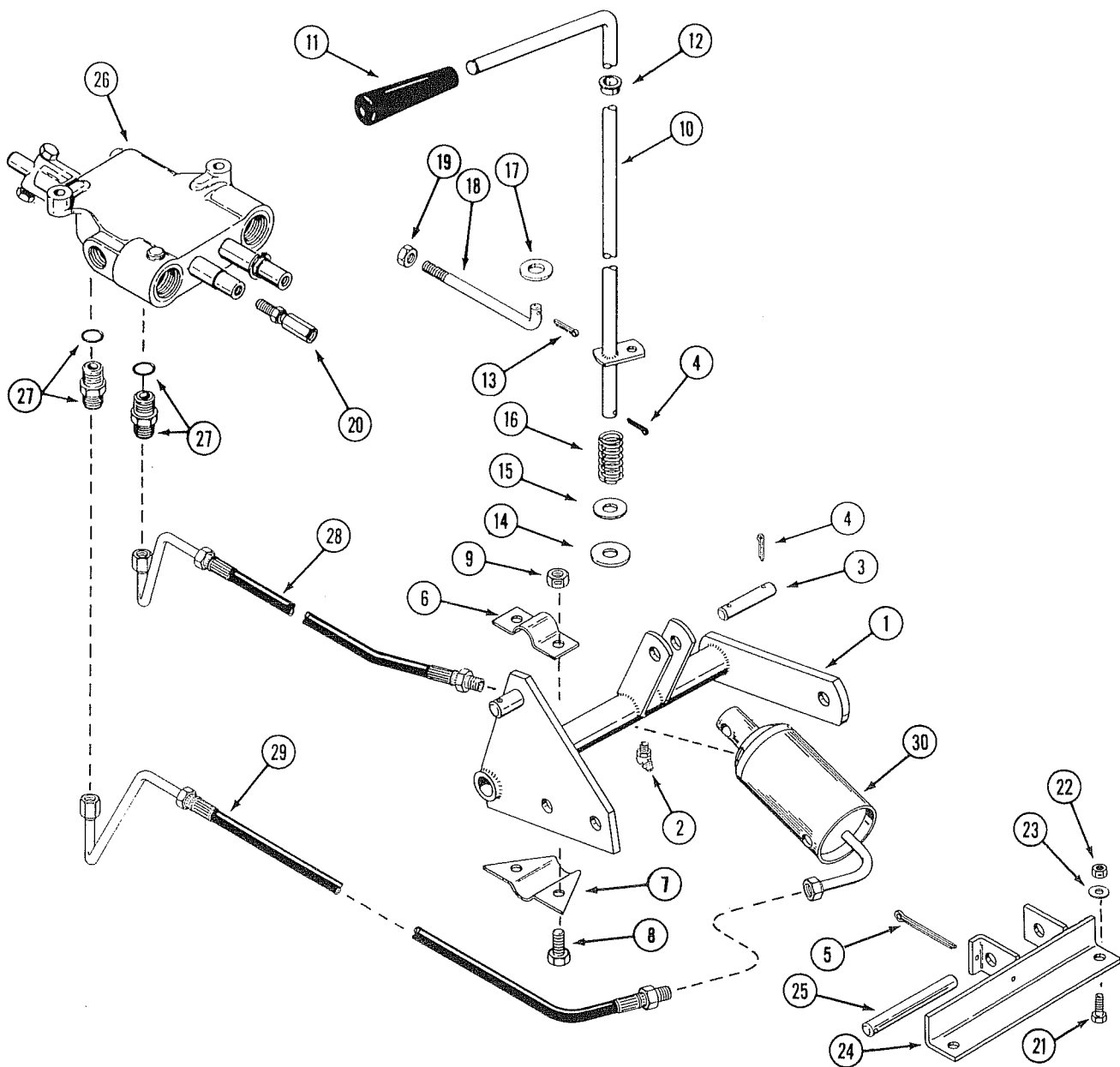


K8 WHEEL WEIGHTS — MODEL 220, 222, AND 224

REF.	PART NO.		DESCRIPTION	REQ'D
1	NSS		WEIGHT - wheel 55 lb. (Order as Machinery Item)	2
2	129-	105	NUT - 1/2" NC hex	8
3	195-	533	WASHER - 1/2"	8
4	111-	521	BOLT - 1/2" x 7" Rd. head Sq. neck	8

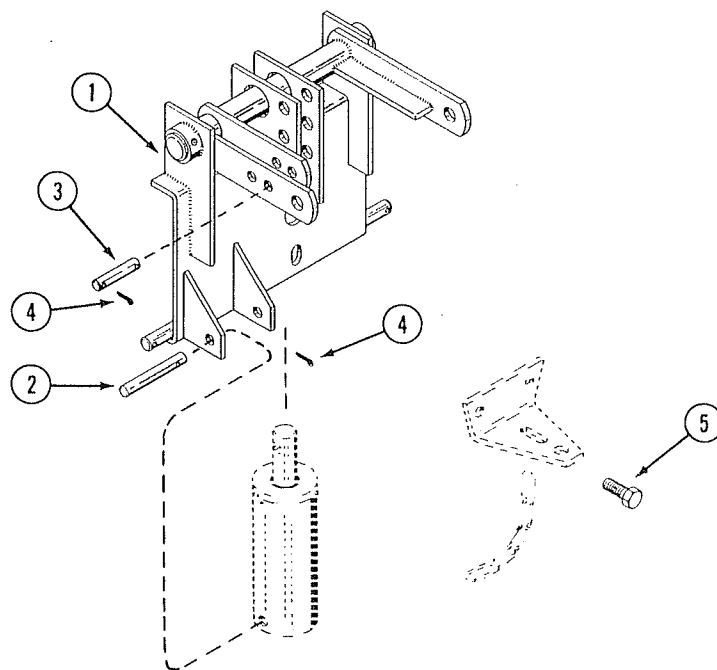
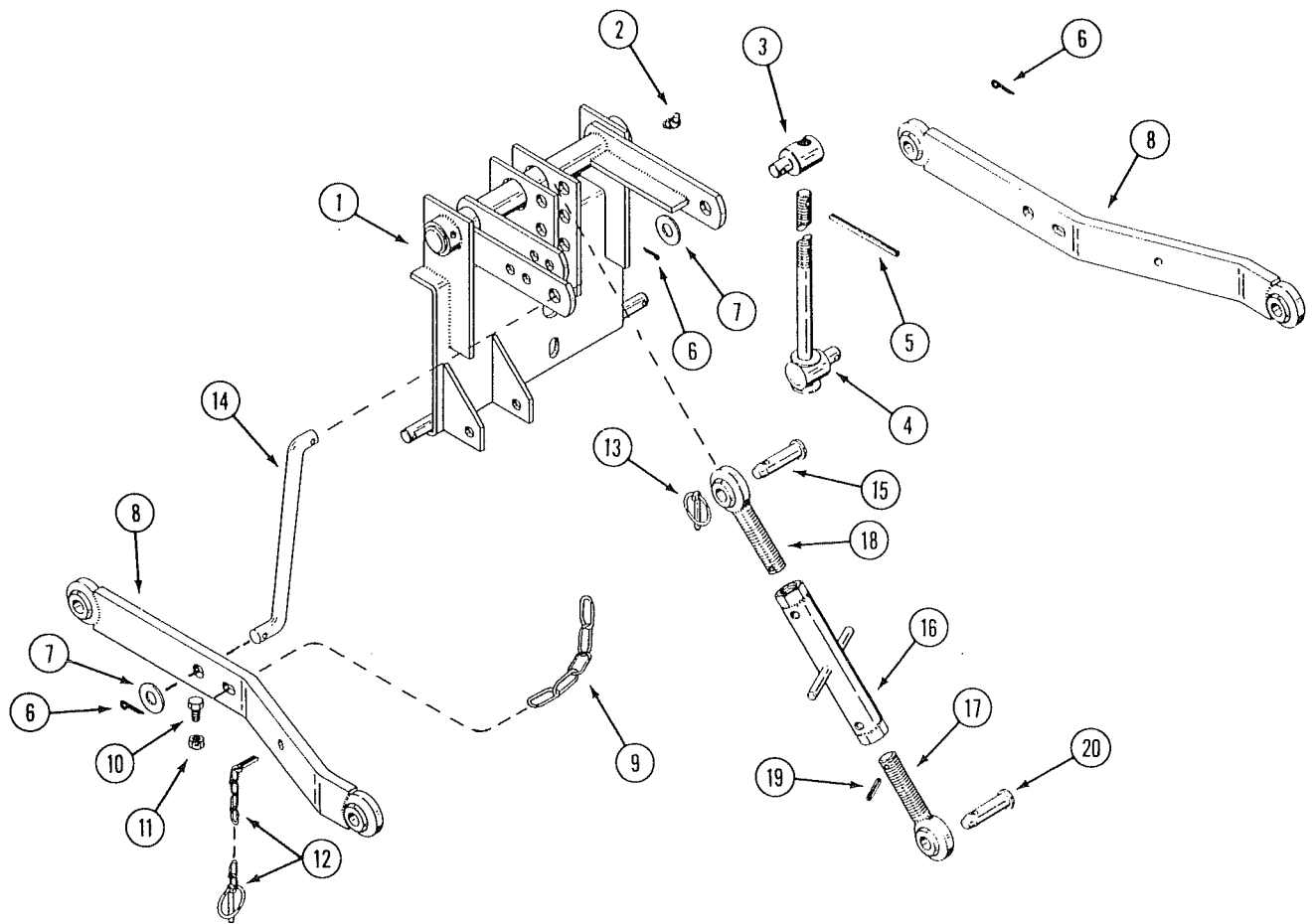
K10 WHEEL WEIGHTS — MODEL 444

1	NSS		WEIGHT - wheel 75 lb. (Order as Machinery Item)	2
2	129-	105	NUT - 1/2" NC hex	8
3	195-	533	WASHER - 1/2"	8
4	111-	525	BOLT - 1/2" x 6" Rd. head Sq. neck	8



MODEL J30 HYDRAULIC LIFT

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 32259	CROSS SHAFT ASSEMBLY	1
2	219- 404	FITTING - lube	1
3	C 18251	PIN - cylinder to lever	1
4	132- 310	PIN - cotter 1/8" x 1"	3
5	132- 361	PIN - cotter 1/8" x 2-1/2"	1
6	C 17249	BRACKET - mounting, top	2
7	C 17250	BRACKET - mounting, bottom	2
8	113- 207	BOLT - 3/8" x 1" NC hex	4
9	131- 1181	NUT - 3/8" NC hex	4
10	C 29408	LEVER - lift control	1
11	C 28237	KNOB - control lever	1
12	C 27593	BUSHING - lift lever	1
13	132- 320	PIN - cotter 3/32" x 3/4"	1
14	195- 533	WASHER - 1/2"	1
15	C 21518	WASHER - nylon	1
16	C 27822	SPRING - control lever	1
17	195- 521	WASHER - 5/16"	1
18	C 18742	ROD - control	1
19	129- 122	NUT - 5/16 NF hex	1
20	C 19025	BALL JOINT	1
21	113- 207	BOLT - 3/8" x 1" NC hex	2
22	131- 1181	LOCKNUT - 3/8" NC hex	2
23	195- 104	WASHER - 3/8" x 1-1/8" OD	2
24	NSS	BRACKET - cylinder (use C33138, C26188)	1
25	C 26188	PIN - cylinder foot	1
26	C 27217	VALVE - hydraulic, 2 spool	1
27	218- 5056	FITTING - valve (includes 218-5004 "O" ring)	2
28	NSS	HOSE - short (use C31682, 218-1093)	1
29	C 17734	HOSE - long	1
30	NSS	CYLINDER - lift (use C26493, C30049)	1
31	NSS	BODY - cylinder	1
32	NSS	ROD AND PISTON ASSEMBLY	1
33	NSS	FOOT - cylinder	1
34	C 14970	SEAL	1
35	C 28487	"O" RING	1
36	C 28697	"O" RING	2
	C 13106	COVER - lube fitting	1

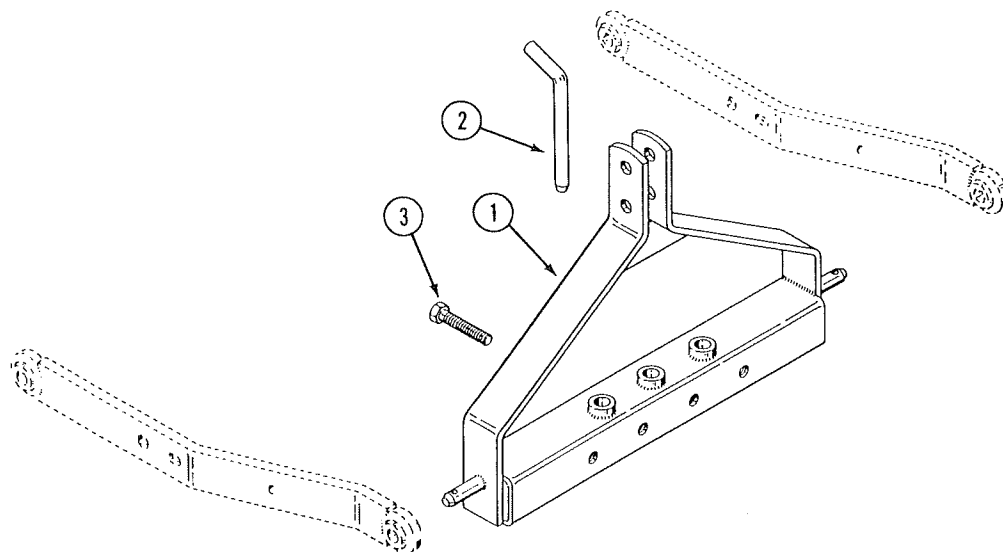
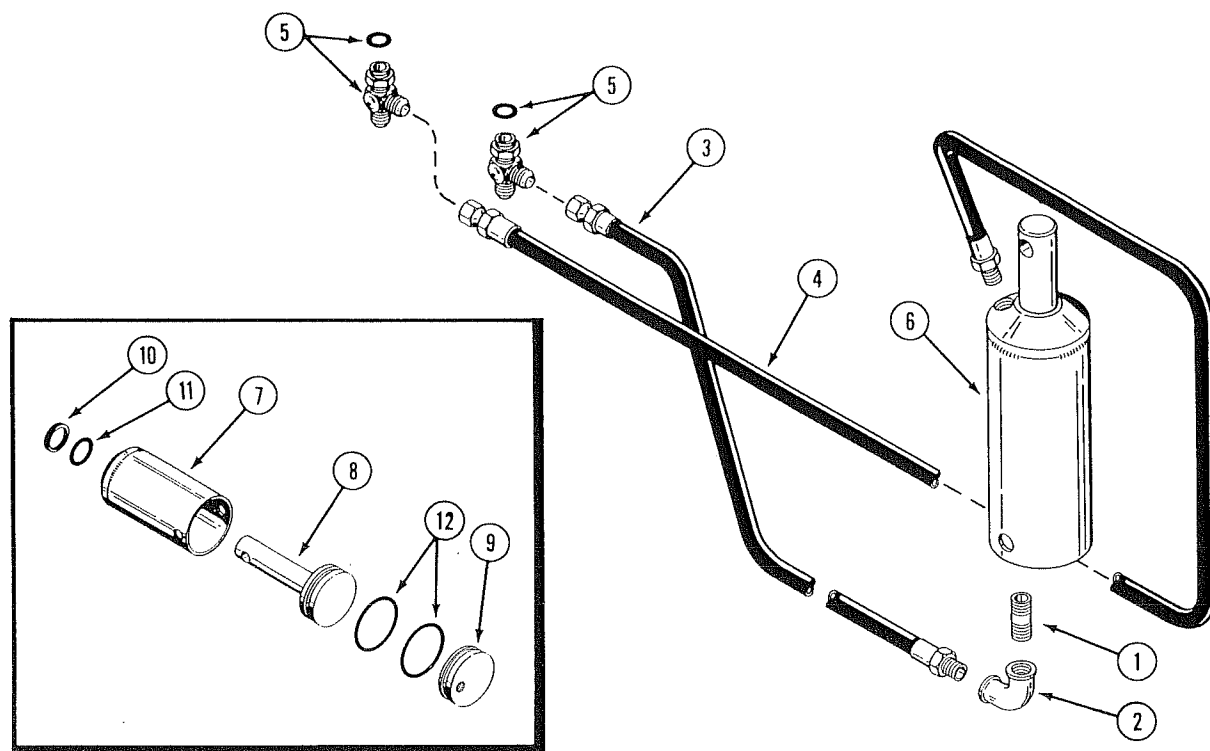


H26 THREE POINT HITCH 444 FRAME, LIFT RODS AND ARMS

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 19740	HITCH PLATE ASSEMBLY	1
2	219- 405	FITTING - lube	2
	C 24447	ROD ASSEMBLY	1
3	C 14722	NUT - lift rod	1
4	C 14724	ROD - R.H. lift	1
5	138- 308	PIN - roll 1/4 x 3"	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" hex, zinc plated	2
11	131- 176	NUT - lock 5/16" NC hex	2
12	C 28985	PIN - klik	2
13	C 28222	PIN - klik	3
14	C 14725	ROD - lift L.H.	1
15	C 14717	PIN - clevis	1
	NSS	LINK ASSEMBLY	1
16	C 14703	CENTER TUBE ASSEMBLY	1
17	C 14709	BALL END ASSEMBLY R.H. THREAD	1
18	C 32427	BALL END ASSEMBLY L.H. THREAD	1
19	138- 59	PIN - roll 1/8" x 7/8"	2
20	C 14717	PIN - clevis 5/8" x 3"	1

CYLINDER AND DRAWBAR MOUNTING

1	C 19740	HITCH PLATE ASSEMBLY	1
2	C 26188	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

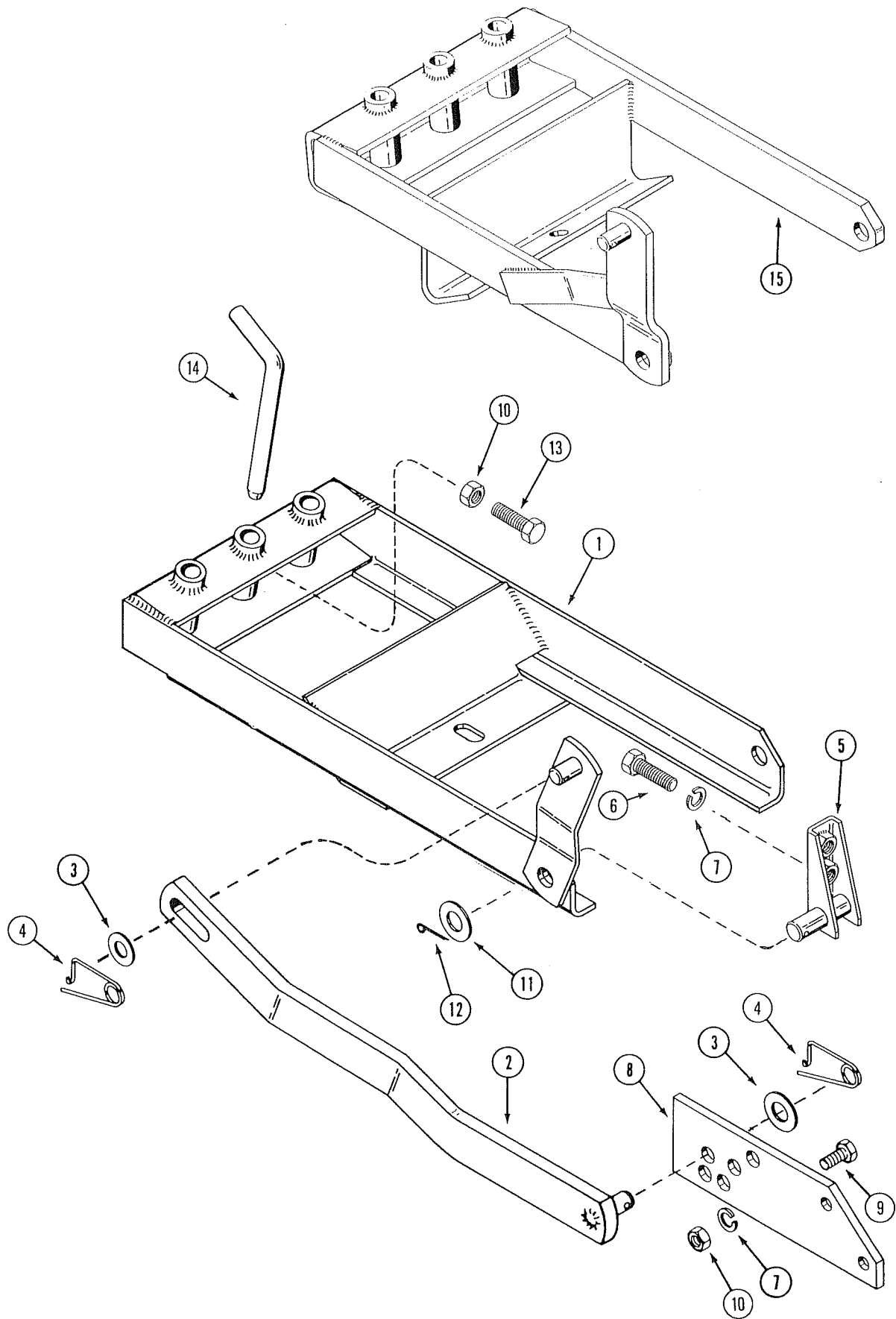


**MODEL H26 THREE POINT HITCH AND
MODEL F27 HITCH ADAPTER
HYDRAULIC CONNECTIONS AND COMPONENTS**

REF.	PART NO.	DESCRIPTION	REQ'D
1	221- 1139	NIPPLE - 1/4 x 3"	1
2	221- 1375	ELBOW - 90°	1
3	C 25369	HOSE - hydraulic short	1
4	C 25368	HOSE - hydraulic long	1
5	218- 5291	FITTING - tee (Includes 218-5004 "O" ring)	2
6	NSS	CYLINDER ASSEMBLY - (use C26494, C26188)	1
7	C 19476	BODY - cylinder	1
8	C 19469	ROD AND PISTON ASSEMBLY	1
9	NSS	FOOT - cylinder	1
10	C 14970	SEAL - wiper	1
11	C 28487	"O" RING	1
12	C 28697	"O" RING	2

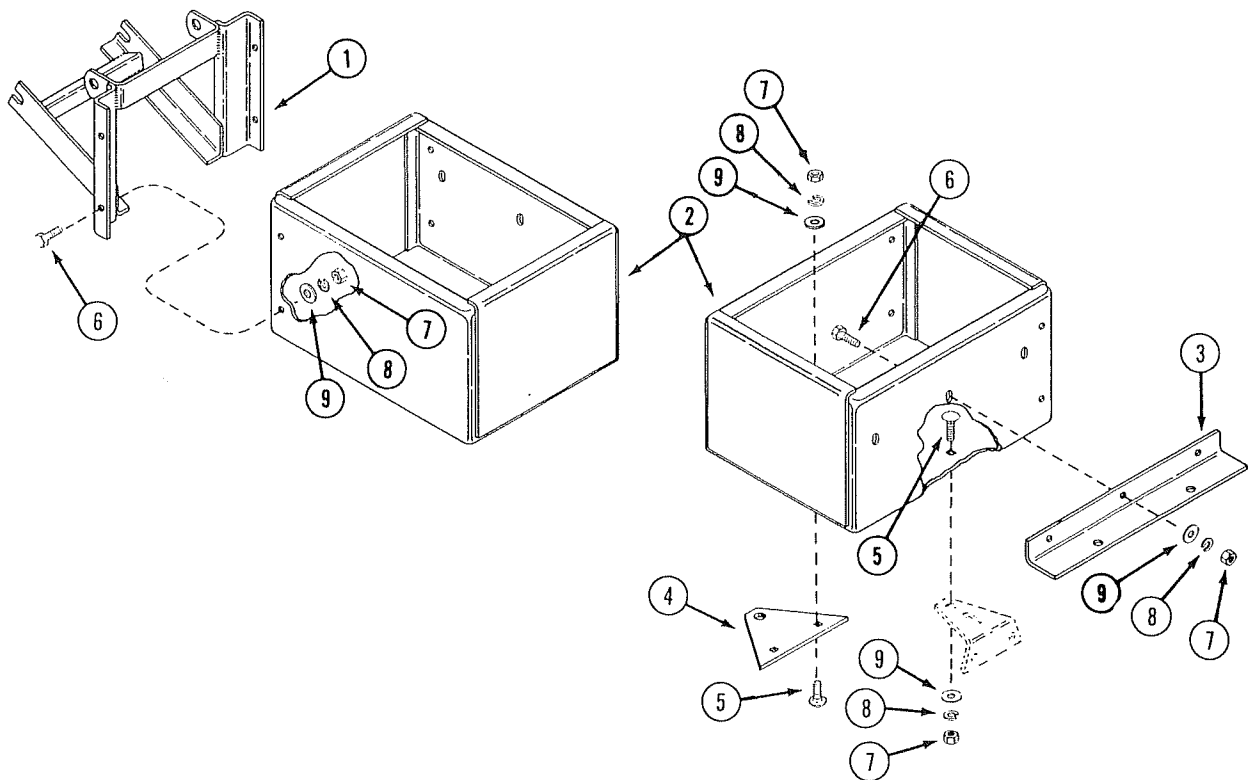
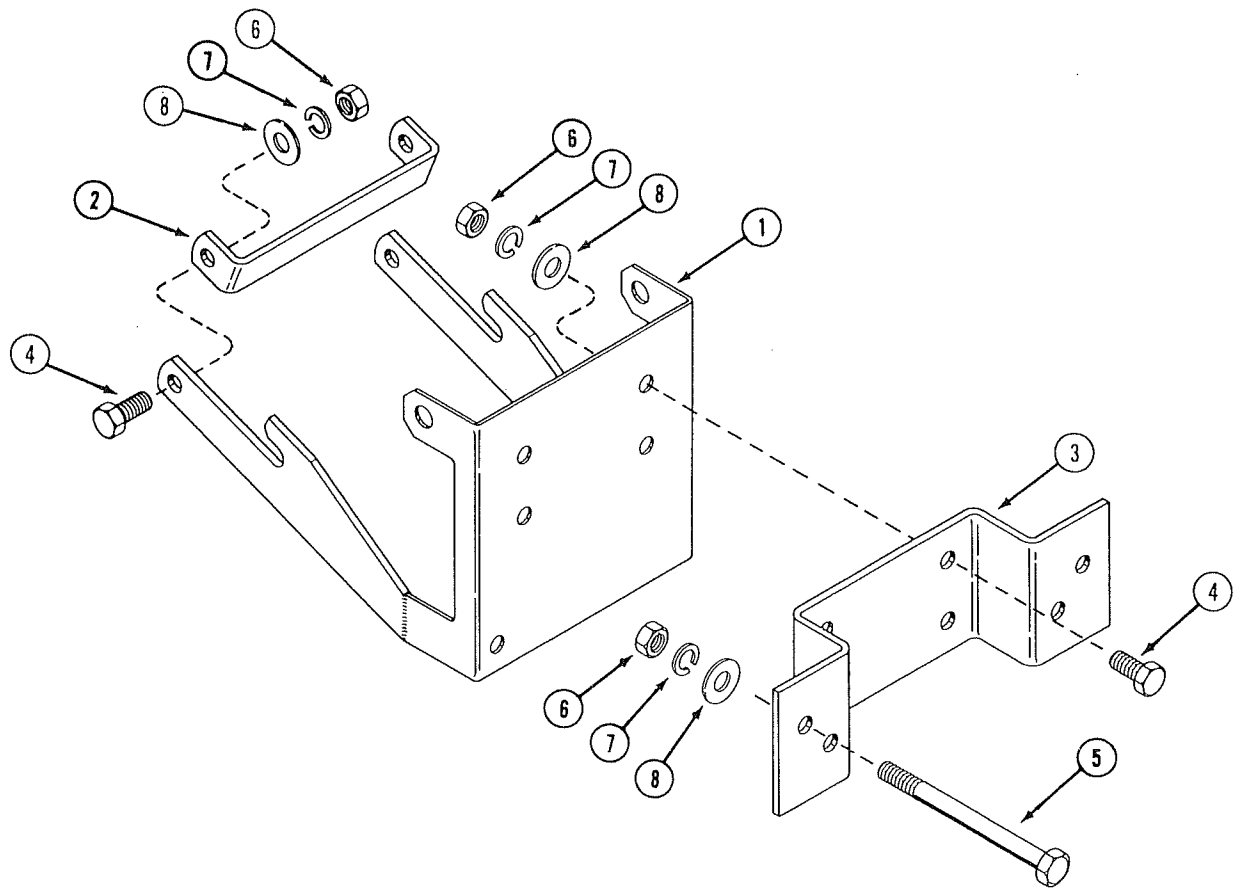
MODEL F-27 HITCH ADAPTER

	NSS	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 J24 SLEEVE HITCH

REF.	PART NO.	DESCRIPTION	REQ'D
1	NSS	HITCH FRAME ASSEMBLY (444) (J24)	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. (shown)	1
5	C 25789	BRACKET - hitch mounting L.H.	1
6	113- 2400	BOLT - 1/2" x 1-3/8" hex, zinc plated	4
7	192- 23	LOCKWASHER - 1/2" zinc plated	6
8	NSS	PLATE - lift lever (use C24839)	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	22- 844	BOLT - 1/2 x 2-3/4" NC hex, zinc plated	2
14	C 14568	PIN - drawbar	1
15	NSS	HITCH FRAME ASSEMBLY - (220, 222 and 224) (H22) shown (use C23707)	1

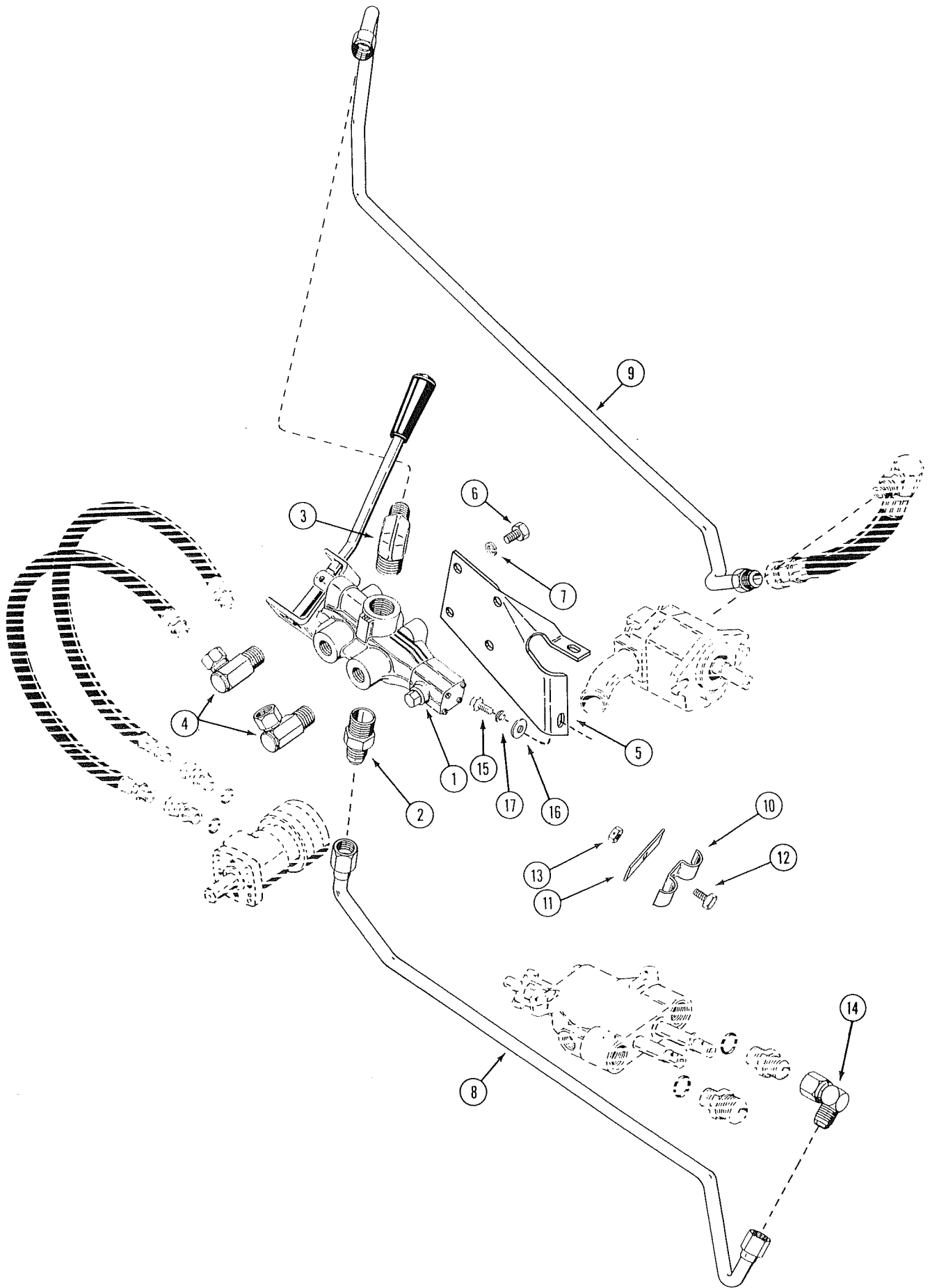


MODEL H18 AND K18 FRONT END WEIGHT BRACKETS

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 (H18)	2
6	25- 108	NUT - 1/2" NC hex, zinc plated	8
7	192- 23	LOCKWASHER - 1/2" zinc plate	8
8	195- 533	WASHER - 1/2"	8

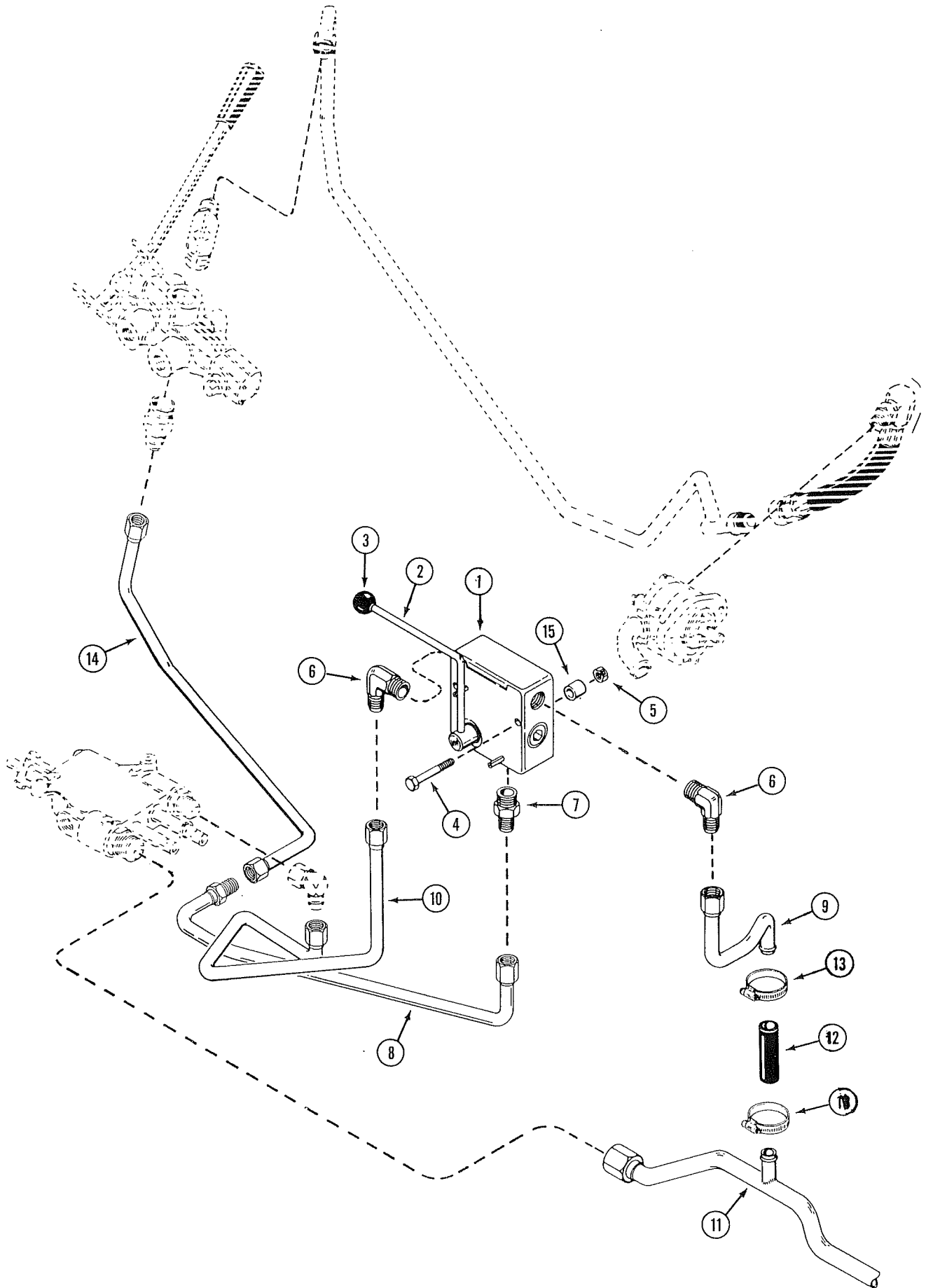
MODEL H13 WEIGHT BOX

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- 371	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



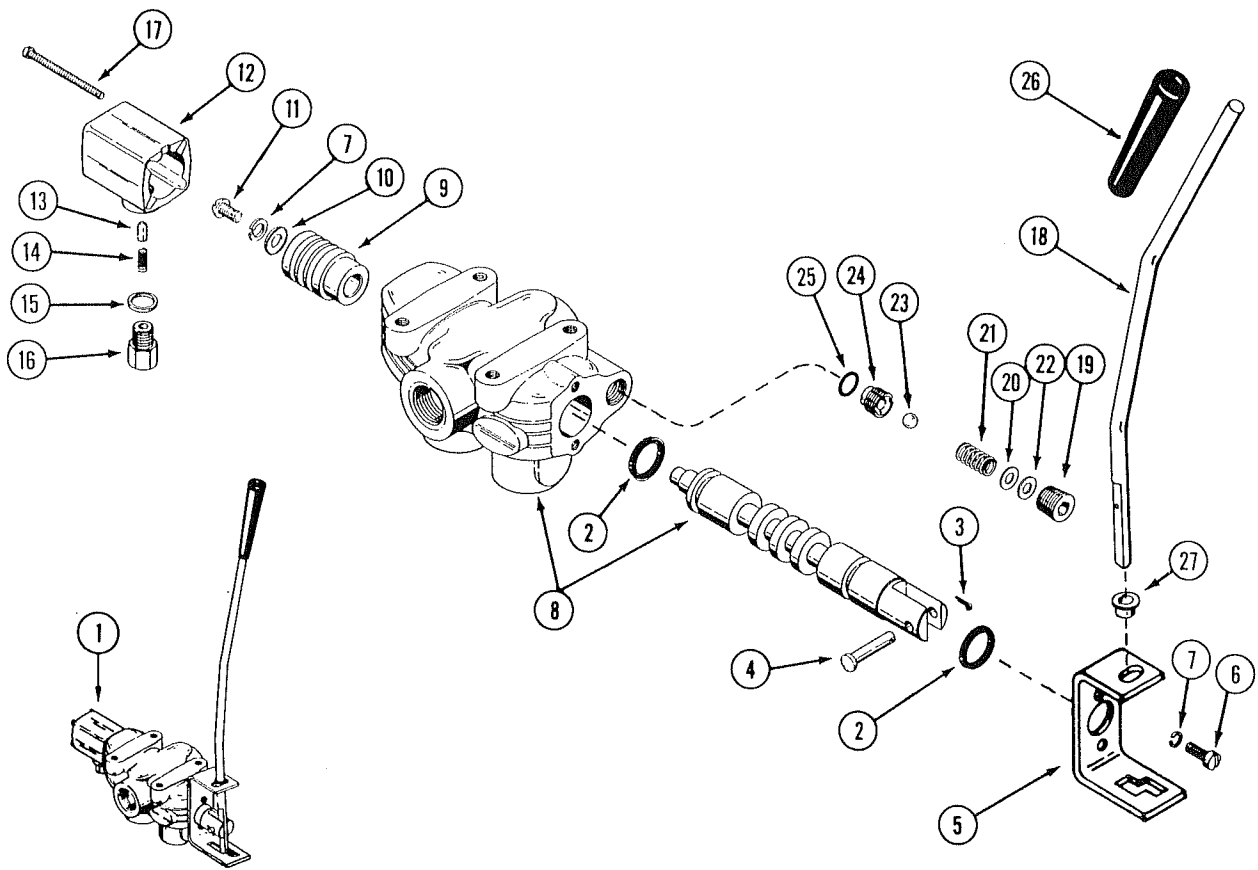
J-17 HYDRAULIC PTO KIT

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 30044	VALVE - PTO control	1
2	218- 457	FITTING - straight 3/4" NPT x 5/8" tube	1
3	218- 494	FITTING - elbow 90° 3/4" NPT x 5/8" tube	1
4	218- 927	FITTING - elbow 90° 1/2" NPT x 1/2" female NPSM swivel	2
5	C 23337	BRACKET - valve mounting	1
6	113- 206	BOLT - 3/8" hex NC x 3/4"	4
7	192- 21	LOCKWASHER - 3/8"	4
8	C 23888	TUBE - PTO valve to travel control valve	1
9	C 23962	TUBE - pump to PTO valve	1
10	C 15389	CLAMP - double tubing (early production)	1
11	NLA	BAR - clamp (early production)	1
12	113- 102	BOLT - 5/16" hex NC x 3/4" (early production)	1
13	129- 102	LOCKNUT - 5/16" NC hex (early production)	1
14	218- 5232	FITTING - 90° swivel elbow 37° x 37° flare 3/4" NPT x 5/8" tube	1
15	113- 103	BOLT - 5/16" x 1" NC hex (fender mtg.)	3
16	195- 521	WASHER - 5/16" (fender mtg.)	3
17	192- 20	LOCKWASHER - 5/16" (fender mtg.)	3



MODEL L-19 FLOW CONTROL VALVE KIT

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 23618	VALVE - flow control	1
2	C 36848	LEVER - valve	1
3	C 28251	KNOB - lever	1
4	113- 12	BOLT - 1/4" x 2-1/2" NC hex	2
5	131- 1180	NUT - lock 1/4" NC hex	2
6	218- 485	FITTING - elbow 90° 1/2" NPT	2
7	C 45431	FITTING - straight 1/2" NPT	1
8	C 25390	TUBE - flow control valve to tube	1
9	C 23407	TUBE - bypass to return line	1
10	C 23600	TUBE - valve to tractor valve	1
11	C 26181	TUBE - heat exchanger	1
12	C 18721	HOSE - return	1
13	214- 6	CLAMP - hose	2
14	C 23879	TUBE - PTO valve to tube	1
15	C 21592	SPACER	2
	C 18719	DECAL - valve, "slow-fast"	1
	C 28217	"O" RING - shaft	2
	C 28710	SNAP RING - shaft	2



J-17 HYDRAULIC PTO VALVE

REF.	PART NO.	DESCRIPTION	REQ'D
1	C 30044	VALVE - control	1
2	C 11891	SEAL - U-cup	2
3	O/L	PIN - cotter 1/16" x 1/2"	1
4	C 28875	PIN - handle	1
5	C 19422	BRACKET - handle	1
6	71- 410	SCREW - 1/4" x 5/8" NC fillister head	2
7	192- 19	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	NLA	CAP - detent	1
17	169- 88	SCREW - bonnet #8-32 x 2" fillister head	4
18	C 19423	LEVER - valve	1
19	221- 842	PLUG - relief 3/8" NPT	1
20	C 28700	SHIM - .010" thick	UAR
21	C 28716	SPRING - relief	1
22	C 28698	SHIM - .020" thick	UAR
23	211- 11	BALL - relief 3/8"	1
24	NLA	SEAT - relief	1
25	C 28696	"O" RING - relief seat	1
26	C 28237	KNOB - hand throttle	1
27	C 26266	BUSHING - nylon	1

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