
Bolens[®]

**Tractor (HT23)
23 HP**

Model 2389

Serial Number

0100101 thru

0299999

Model 2389S

Serial Number

0100101 thru

0499999

Parts List

BOLENS HT-23 TRACTOR

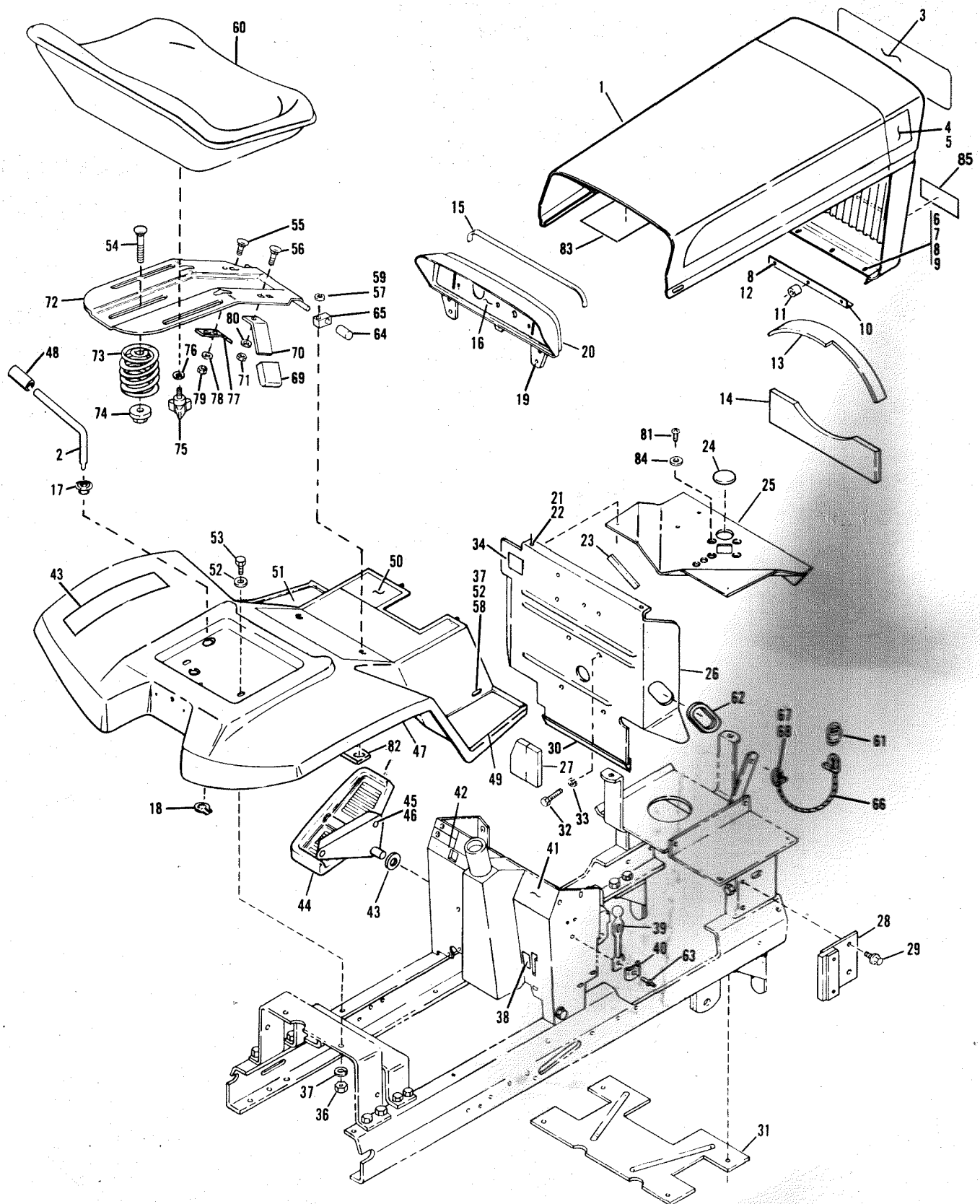


Figure 1 TRIM ASSEMBLY

REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D.	REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D.
1	1727279	Grille and Hood w/o		42	1736297	Decal, Hydraulic Control . .	1
		Decals (1)(2)	1	43	1736270	2 Speed Decal.	1
	1750422	Grille and Hood w/o		44	1724522	Foot Pedal, Left Hand . . .	1
		Decals (3)	1	45	1177548	Lockwasher, 5/16	2
2	1738882	Shift Lever.	1	46	• 1103195	Capscrew, 5/16-18 x 5/8. . .	2
3	1749857	Decal, Grille.	1	47	1736014	Rear Fender.	1
4	1749840	Decal, Hood, Right Hand . .	1	48	1736271	Handle Grip.	1
5	1749839	Decal, Hood, Left Hand . . .	1	49	1719183	Foot Pad, Right Hand	1
6	• 1103195	Capscrew, 5/16-18 x 5/8. . .	3	50	1737119	Decal, Instructions.	1
7	• 1107382	Flat Washer, 5/16	3	51	1719182	Foot Pad, Left Hand	1
8	• 1100242	Lockwasher, 5/16	6	52	• 1107383	Flat Washer, 3/8	4
9	• 1186230	Nut, 5/16-18	3	53	• 1100046	Capscrew, 3/8-16 x 1	2
10	1717246	Hinge	1	54	• 1186130	Carriage Bolt, 3/8-16 x 1-1/4	1
11	1722833	Spacer.	3	55	• 1186067	Carriage Bolt, 1/4-20 x 1/2 .	1
12	• 1100779	Capscrew, 5/16-18 x 1-3/4 .	3	56	• 1186098	Round Hd Bolt, 5/16-18 x	
13	1726054	Heat Shield	1			3/4(1)	1
14	1726055	Heat Shield	1	57	• 1100242	Lockwasher	2
15	1717599	Rubber Pad	1	58	• 1103212	Capscrew, 3/8-16 x 5/8. . . .	2
16	1737121	Decal, Instructions.	1	59	• 1100808	Capscrew, 5/16-18 x 1-1/4 .	2
	1749863	Decal, Instructions (3) . . .	1	60	1746380	Seat (1)(2)	1
17	1735131	Grommet.	1		1748757	Seat (3)	1
18	1735132	Grip Ring.	1	61	1727269	Spring	1
19	• 1186389	Nut, Flange, 1/4-20	5	62	1726554	Trim, Cover	1
20	1733054	Instrument Panel (1)(2) . . .	1	63	1728772	Pop Rivet, 3/16.	2
	1749862	Instrument Panel (3)	1	64	1734898	Plastic Grip (1)	2
21	• 1186308	Flange Lock Capscrew,		65	1735265	Pivot Block	2
		1/4-20 x 1/2	2	66	1727268	Lanyard.	1
22	• 1186389	Flange Lock Nut, 1/4-20. . .	2	67	• 1100805	Capscrew, 1/4-20 x 3/4. . . .	1
23	1726129	Deflector, Air.	1	68	• 1110106	Nut, 1/4-20	1
24	1718180	Plug, Button.	1	69	1735054	Handle Grip (1).	1
25	1738205	Heat Shield	1	70	1735517	Seat Support Stand (1). . . .	1
26	1734638	Heat Shield Assembly.	1	71	• 1110107	Locknut, 5/16-18 (1).	1
27	1726415	Heat Shield	1	72	1734115	Seat Support Assy.	1
28	1726090	Heat Shield Assembly.	2	73	1733960	Spring.	1
29	1724492	Flange-Lock Screw,		74	1735125	Nut and Washer.	1
		1/4-20 x 1/2	4	75	1734269	Seat Knob	2
30	1730248	Wear Strip	1	76	• 1100256	Flat Washer, 3/8	2
31	1733473	Deflector, Air.	1	77	1734637	Actuator Bracket.	1
32	• 1100051	Screw, Cap, 7/16-14 x 1-1/2	4	78	• 1100241	Lockwasher, 1/4	1
33	• 1100244	Lockwasher, 7/16	4	79	• 1186229	Hex Nut, 1/4-20	1
34	1751065	Decal, Hot Surface.	1	80	1705905	Bowed Washer (1)	1
35	1734393	Reinforcing Strap	1	81	1114838	Phil. Hd. Screw No. 10-32 x	
36	• 1186231	Nut, 3/8-16	2			5/16	4
37	• 1100243	Lockwasher, 3/8	4	82	1734393	Reinforcing Plate.	1
38	1736295	Decal, PTO.	1	83	1745681	Service Inst. (1)(2)	1
39	1727127	Latch	2		1748716	Service Inst. (3)	1
40	1727126	Clip	2	84	1187949	Shakeproof Washer No. 10 .	4
41	1751062	Decal, Caution	1	85	1749847	Decal (3)	1

• Common Hardware - Purchase Locally (Grade 5 where applicable)

Model 2389

(1) Serial Number 0100101 thru 0199999

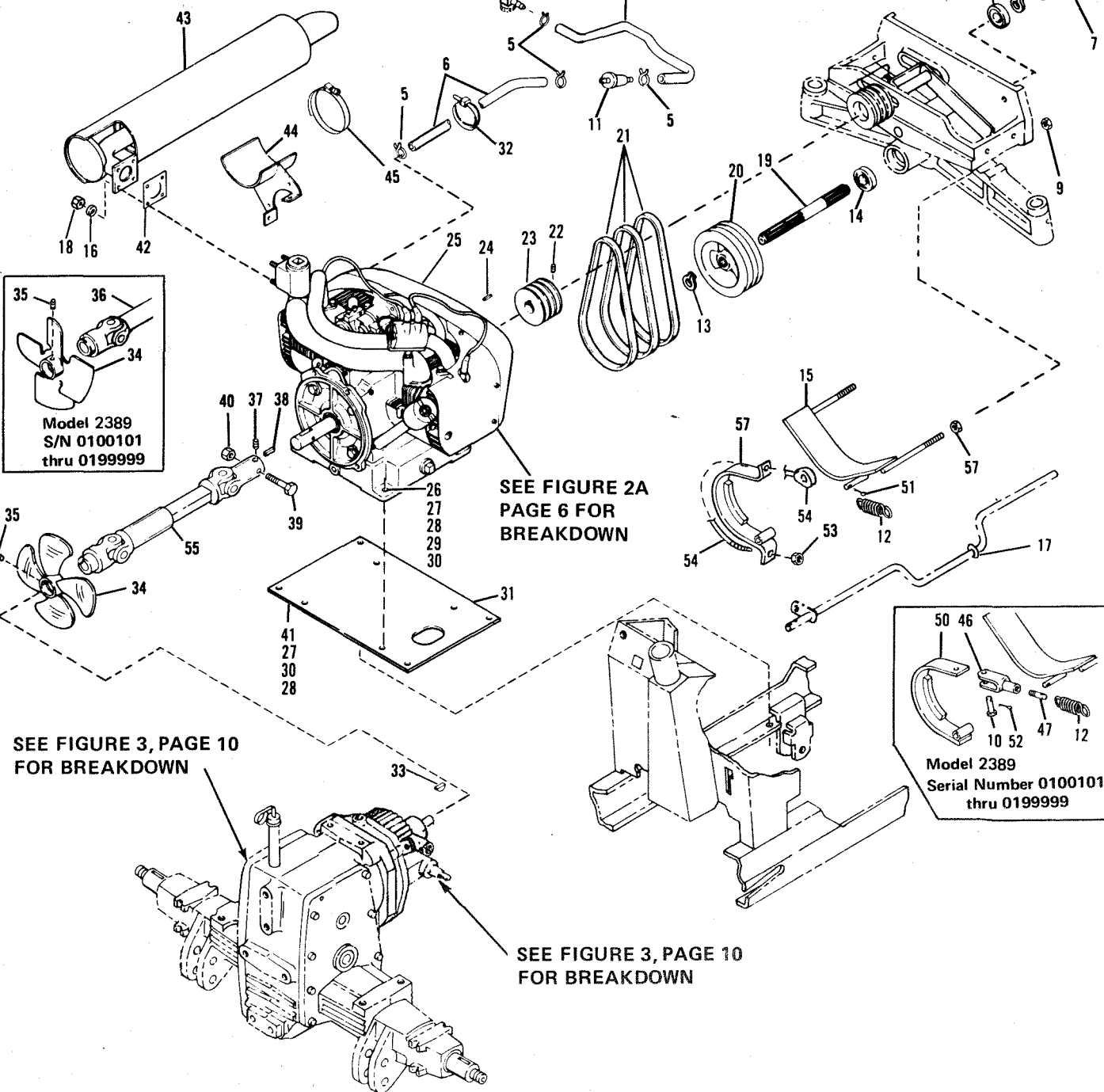
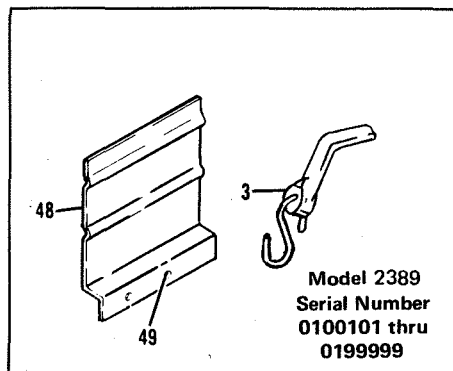
(2) Serial Number 0200101 thru 0299999

Model 2389S

(2) Serial Number 0100101 thru 0199999

(3) Serial Number 0200101 thru 0499999

BOLENS HT-23 TRACTOR



REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D.
1	1735066	Gas Tank (Incl. Ref. No. 2).	1
2	1727340	Fuel Gauge.	1
3	1727577	Strap (1)	1
4	1734532	Shut Off Valve (1).....	1
	1718029	Shut Off Valve (2).....	1
5	1718185	Hose Clamp	4
6	1734399	Fuel Line.	2
7	1723790	Universal Joint	1
8	1723474	Hose Clamp	1
9	• 1186231	Hex Nut, 3/8-16	4
10	1734998	Clevis Pin (1)	1
11	1727491	Filter	1
12	1723117	Ext. Spring.	1
13	1185689	Retaining Ring	2
14	1185100	Ball Bearing	2
15	1733484	Belt Guide Assembly	1
16	• 1100242	Lockwasher, 5/16	4
17	1725197	Grip Ring.	1
18	• 1186230	Nut, 5/16-18	6
19	1736353	PTO Shaft	1
20	1733475	PTO Sheave	1
21	1722639	Drive Belt 3" (Matched Set Of 3).	1
22	1741846	Set Screw, 5/16-18 x 1/2 ..	2
23	1722662	Drive Sheave.	1
24	1108844	Square Key, 1/4 x 1-1/4 ...	1
25	*	Kohler K582 S Spec 36272A Engine (2389)	1
	*	Kohler K582 S Spec 36328 Engine (2389S)	1
26	• 1100065	Capscrew, 1/2-13 x 1-3/4 ..	4
27	• 1100245	Lockwasher, 1/2	8
28	• 1107385	Flat Washer, 1/2	8
29	• 1103997	Lockwasher, 1/2 External ..	4
30	• 1186233	Nut, 1/2-13	8
31	1722559	Engine Support.	1
32	1805345	Tie	2

REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D.
33	1104436	Woodruff Key.	1
34	1736067	Fan (1)	1
	1738427	Fan (2)	1
35	1100113	Set Screw, 1/4-20 x 1/2 (1).	1
	1738814	Set Screw, 5/16-18 x 1-1/4 (2)	1
36	1732183	Drive Shaft (1)	1
	1724401	Drive Shaft Repair Kit (Rockwell or Weasler) ...	2
	1714208	Drive Shaft Repair Kit (NEAPCO)	2
37	1182554	Set Screw, 5/16-18 x 5/16. .	1
38	1108844	Square Key, 1/4 x 1-1/4 ...	1
39	• 1111608	Capscrew, 5/16-18 x 2-1/2. .	1
40	• 1110107	Lock Nut, 5/16-18.	1
41	• 1100055	Capscrew, 1/2-13 x 1-1/4 ..	4
42	1722530	Gasket, Exhaust	1
43	1735230	Exhaust Muffler	1
44	1722533	Support, Muffler	1
45	1723599	Snaplock Hose Clamp.	1
46	1710583	Rod End (1)	1
47	1721515	Stud Adjusting (1)	1
48	1728838	Baffle (1)	1
49	1724492	Screw, Self Tapping.	1
50	1733479	Band Assy., Brake (1)	1
51	• 1185147	Cotter Pin, 3/32 x 5/8	1
52	• 1100347	Cotter Pin, 1/8 x 1/2 (1) ...	1
53	• 1110106	Lock Nut, 1/4-20 (2)	1
54	1738657	PTO Brake Cable (2)	1
55	1740006	Drive Shaft (2)	1
	1724401	Drive Shaft Repair Kit (Weasler) (2)	2
56	1737149	Extension Spring (2)	1
57	1738655	Brake Band Assy. (2)	1

• Common Hardware - Purchase Locally

Model 2389S

(2) Serial Number 0100101 thru 0499999

Model 2389

(1) Serial Number 0100101 thru 0199999

(2) Serial Number 0200101 thru 0299999

BOLENS HT-23 TRACTOR

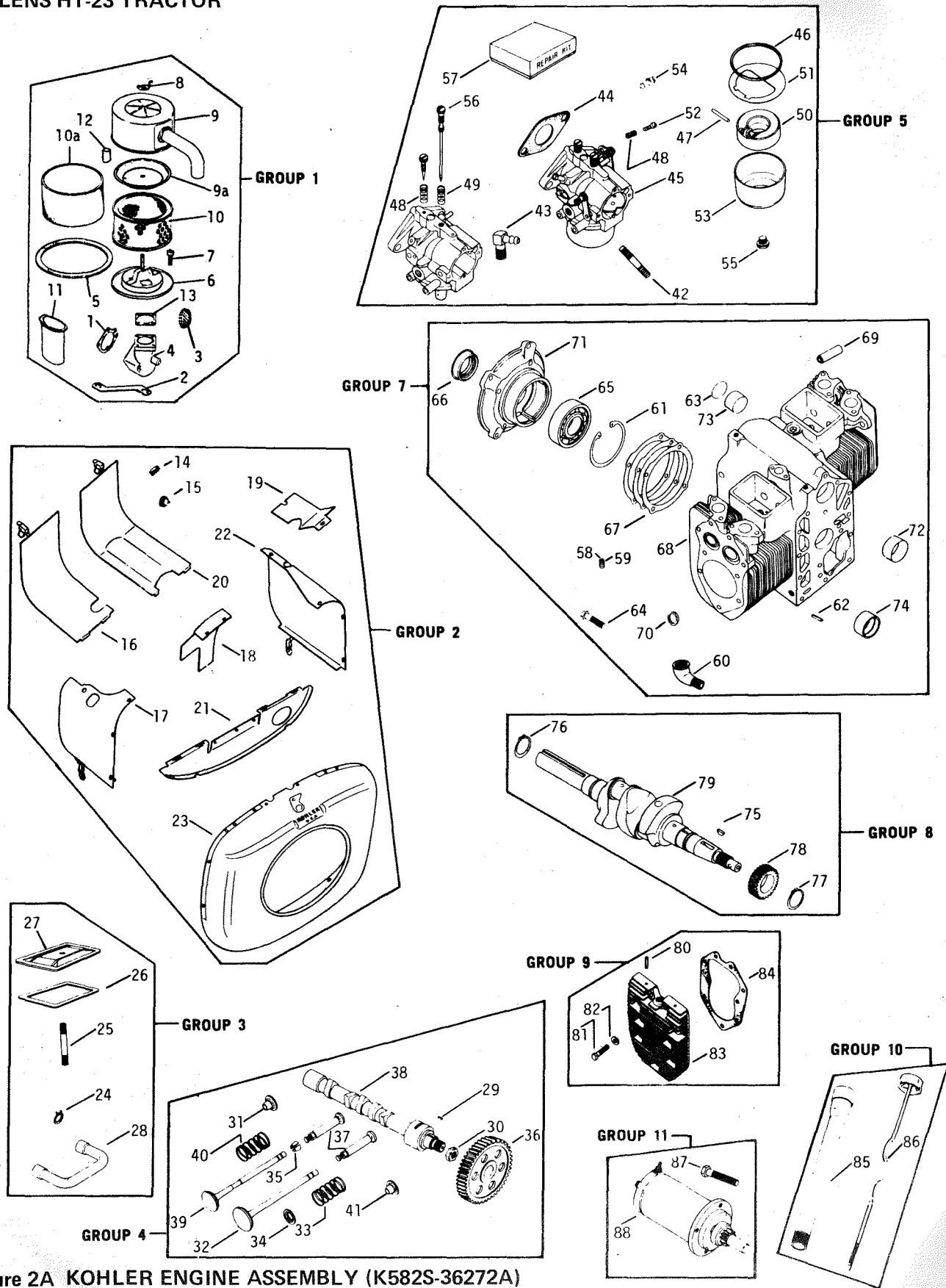


Figure 2A KOHLER ENGINE ASSEMBLY (K582S-36272A)
KOHLER ENGINE ASSEMBLY (K582S-36328)

ORDER PARTS FROM YOUR LOCAL KOHLER ENGINE DEALER

REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D.	REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D.
<u>AIR INTAKE - GROUP 1</u>				45	48 053 06	Carburetor - assembly	
1	277069	Gasket, elbow		46	200375	Gasket, bowl	
2	277116	Brace, elbow		47	200376	Pin, float lever (2)	
3	48 162 05	Screen (A)		48	200380	Spring, thr. lever (2)	
4	48 054 01	Elbow, air cleaner		49	200383	Spring, idle needle	
5	237423	Seal, cover		50	25 757 03	Float Kit	
6	48 094 03	Base, air cleaner (A)		51	25 041 02	Gasket, bowl	
	47 094 04	Base, air cleaner (B)		52	234945	Screw, idle speed adj.	
7	X-167-2	Screw (4)		53	235448	Bowl	
8	X-276-7	Nut, wing		54	48 755 10	Kit, clamp	
9	52 254 11	Cover, air cleaner snorkel		55	47 100 06	Nut, bowl	
9a	52 082 04	Cover, air cleaner		56	48 103 01	Needle, hi-speed	
10	45 083 02	Element, air cleaner		57	25 757 02	Kit, repair	
10a	52 083 02	Precleaner (A)		<u>CRANKCASE - GROUP 7</u>			
	45 083 01	Precleaner (B)		58	X-75-23	Plug, pipe 1/8 H. socket (3)	
11	47 134 02	Tube (A)		59	X-75-31	Plug, pipe	
12	47 032 03	Seal		60	X-211-10	Elbow	
13	277093	Gasket		61	X-269-31	Ring, retaining	
<u>BAFFLES & SHROUD - GROUP 2</u>				62	X-599-2	Pin (2)	
14	X-301-8	Button, plug		63	160037	Plug, welch 1-1/2	
15	243035	Grommet		64	270956	Screw, H.C. 3/8-16x1-1/4 (4)	
16	277048	Baffle, #1 barrel		65	277062	Bearing, ball	
17	277051	Baffle, #1 cylinder head		66	277065	Seal, rear oil	
18	277054	Baffle, #1 upper cylinder		67	277087	Gasket, closure plate	
19	48 063 01	Baffle		68	48 005 06	Crankcase - assembly	
20	277168	Baffle, #2 barrel				(USE: 48 522 23 Shortblock)	
21	277230	Baffle, bl. hsg. support		69	235007	Guide, valve (4)	
22	48 124 04	Baffle, #2 cylinder head		70	230265	Insert, exhaust valve (2)	
23	277056	Housing, blower		71	48 009 01	Plate, rear closure	
<u>VENT & VALVE COVERS - GROUP 3</u>				72	277038	Bushing	
24	X-426-3	Clamp, hose (2)		73	277039	Bushing	
25	220368	Stud, valve cover (2)		74	277208	Bearing	
26	270034	Gasket, valve cover (2)		<u>CRANKSHAFT - GROUP 8</u>			
27	270036	Cover, valve (2)		75	X-42-15	Key, woodruff	
28	277392	Hose, breather		76	X-269-30	Ring, retaining	
<u>CAMSHAFT & VALVES - GROUP 4</u>				77	X-269-32	Ring, retaining	
29	X-43-1	Key, woodruff		78	277009	Gear, crankshaft	
30	X-119-17	Nut, jam 3/4-16		79	277659	Crankshaft	
31	230011	Retainer, valve spr. exh. (2)		<u>CYLINDER HEAD - GROUP 9</u>			
32	235008	Valve, intake (2)		80	X-280-13	Pin, roll 3/16x1-1/8 (2)	
33	235010	Spring, valve intake (2)		81	270158	Screw, H.C. 3/8-16x1-1/2 (18)	
34	235011	Retainer, valve spring (4)		82	270889	Washer 3/8 (18)	
35	41 755 10	Kit, retainer (4)		83	277043	Head, cylinder (2)	
36	277012	Gear, camshaft		84	48 052 01	Gasket, cylinder head (2)	
37	D-277031	Tappet (4)		<u>DIPSTICK - GROUP 10</u>			
38	48 012 01	Camshaft		85	271825	Tube, oil fill	
39	48 016 01	Valve exhaust (2)		86	277668	Dipstick	
40	235010	Spring, valve exh. (2)		<u>ELECTRIC START - GROUP 11</u>			
41	230011	Retainer, valve spr. intake (2)		87	X-154-1	Screw, H.C. 5/16-18x7/8 (3)	
<u>CARBURETOR - GROUP 5</u>				88	A-277599	Starter - assembly	
42	X-352-10	Stud (2)					
43	X-391-1	Elbow					
44	271030	Gasket, carburetor					

(A) KOHLER ENGINE ASSEMBLY (K582S-36272A)

(B) KOHLER ENGINE ASSEMBLY (K582S-36328)

BOLENS HT-23 TRACTOR

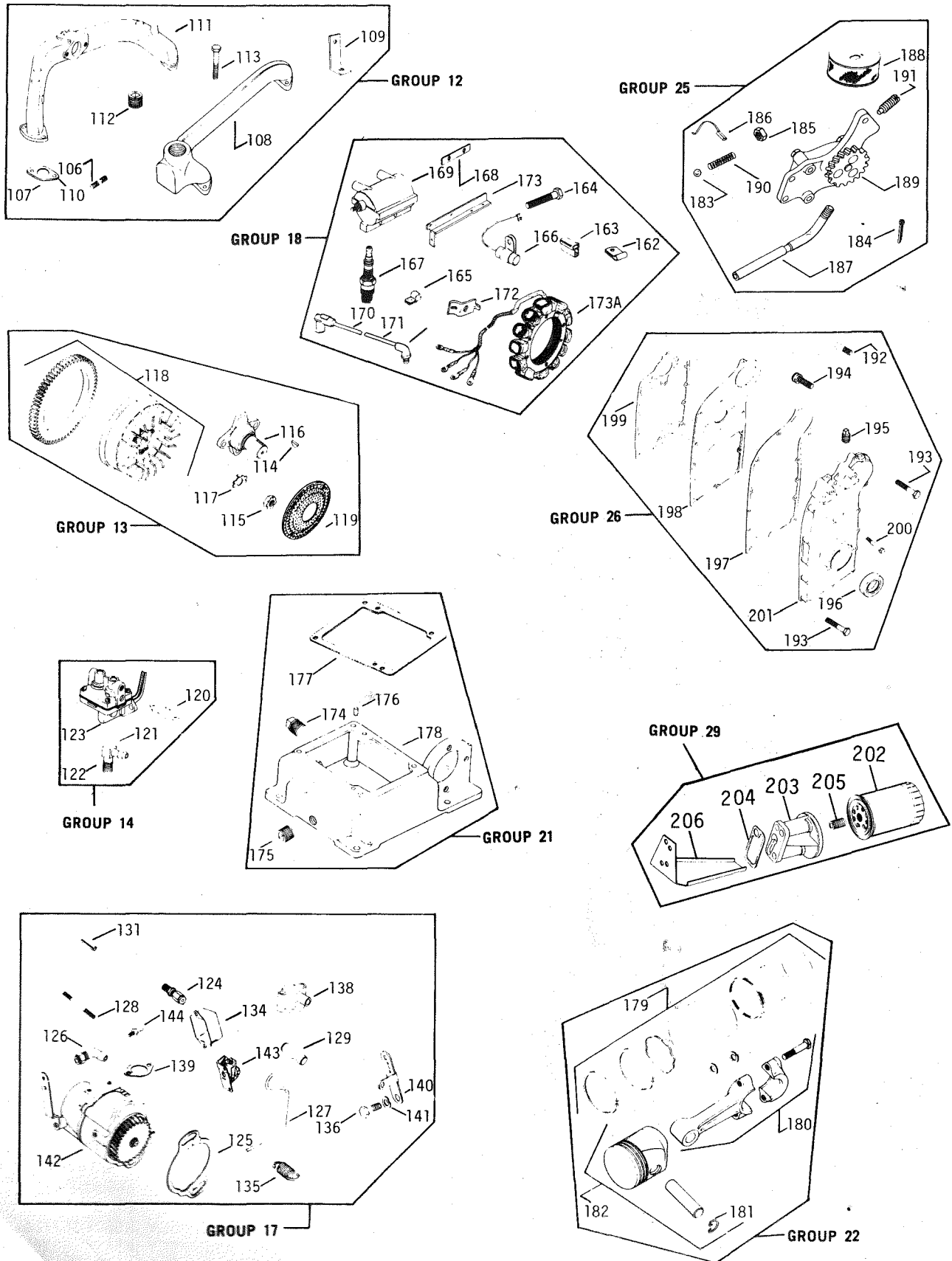


Figure 2A KOHLER ENGINE ASSEMBLY

ORDER PARTS FROM YOUR LOCAL KOHLER ENGINE DEALER

REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D.	REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D.
<u>INTAKE & EXHAUST MANIFOLDS - GROUP 12</u>				<u>OIL PAN - GROUP 21</u>			
106	235899	Stud (4)		174	X-75-6	Plug, pipe	
107	277091	Gasket, manifold (2)		175	X-75-18	Plug, pipe	
108	277482	Manifold, exhaust		176	230125	Pin, dowel (2)	
109	47 445 01	Strap, lifting (2)		177	277014	Gasket, oil pan	
110	48 052 02	Gasket, intake (2)		178	48 199 03	Pan, oil	
111	48 164 07	Manifold, intake		<u>PISTON & ROD - GROUP 22</u>			
112	X-75-37	Plug, pipe 1-1/2		179	48 108 05	Ring set - Std. & .003 (2) (Service)	
113	X-125-14	Screw, H.C. 5/16-18x2-3/4			48 108 06	Ring set - .010 (Service)	
<u>FLYWHEEL - GROUP 13</u>					48 108 07	Ring set - .020 (Service)	
114	X-45-3	Key, woodruff			48 108 08	Ring set - .030 (Service)	
115	X-80-1	Nut, hex.		180	48 067 12	Rod, conn. (Std.) (2)	
116	277637	Shaft, front drive			48 067 13	Rod, conn. (.010 U.S.)	
117	277595	Nut, lock		181	235004	Retainer (4)	
118	48 025 14	Flywheel - assembly (Includes magnets & ring gear)		182	48 074 06	Piston - assy. (Std.) (2) (Includes pin & retainers)	
119	48 162 02	Screen, grass			48 074 07	Piston - assy. (.003) (Includes pin & retainers)	
<u>FUEL PUMP - GROUP 14</u>					48 074 08	Piston - assy. (.010) (Includes pin & retainers)	
120	47 041 04	Gasket			48 074 09	Piston - assy. (.020) (Includes pin & retainers)	
121	X-391-1	Connector			48 074 10	Piston - assy. (.030) (Includes pin & retainers)	
122	X-391-11	Connector		<u>OIL PUMP - GROUP 25</u>			
123	47 559 01	Pump, fuel		183	X-212-3	Ball, steel	
<u>GOVERNOR - GROUP 17</u>				184	X-36-6	Pin, cotter	
124	X-343	Connector		185	X-629-1	Palnut 1/8-27	
125	277078	Gasket, governor housing		186	270085	Clip, oil tube	
126	277337	Elbow		187	277201	Tube, oil inlet	
127	277669	Line, oil		188	277202	Strainer, oil	
128	271151	Rod, throttle		189	48 393 20	Pump, fuel	
129	45 208 03	Joint, ball		190	50 089 01	Spring, relief valve	
131	X-280-8	Pin, roll		191	277694	Screw, socket set	
134	232535	Cover, breaker		<u>GEAR COVER - GROUP 26</u>			
135	271547	Spring, governor		192	X-6-11	Screw, H.C. 5/16-18x3/4 (4)	
136	275691	Screw, shoulder		193	X-6-22	Screw, H.C. 5/16-18x1-3/4 (7)	
138	A-277905	Housing, breather		194	X-55-6	Screw, allen 5/16-18x3/4	
139	277073	Gasket		195	X-75-2	Plug	
140	277080	Lever, throttle		196	X-379-9	Seal, front oil	
141	277341	Washer, tension		197	277020	Gasket, gear cover	
142	B-277112	Governor - assembly		198	277021	Plate, gear cover	
143	47 150 01	Breaker		199	277022	Gasket, gear cover plate	
144	48 194 01	Joint, ball		200	277086	Screw, H.C. 5/16-18x1-3/4 (2)	
<u>IGNITION - GROUP 18</u>				201	277493	Cover, gear	
162	270154	Clip, cable (2)		<u>OIL FILTER - GROUP 29</u>			
163	48 155 02	Connector		202	277233	Filter, oil	
164	X-778-1	Screw, H.C. 5/16-8x7/8 (3)		203	48 029 02	Adapter, oil filter	
165	210281	Clip, cable (2)		204	48 041 03	Gasket (2)	
166	230722	Condenser		205	277234	Nipple, oil filter	
167	235041-S	Plug, spark (2)		206	48 459 01	Trough, oil spill	
168	271694	Plate, coil mounting					
169	277375	Coil					
170	48 348 04	Lead, high tension					
171	48 348 03	Lead, high tension					
172	235778	Clamp (2)					
173	48 088 01	Bracket, coil					
173A	47 085 01	Stator					

BOLENS HT-23 TRACTOR

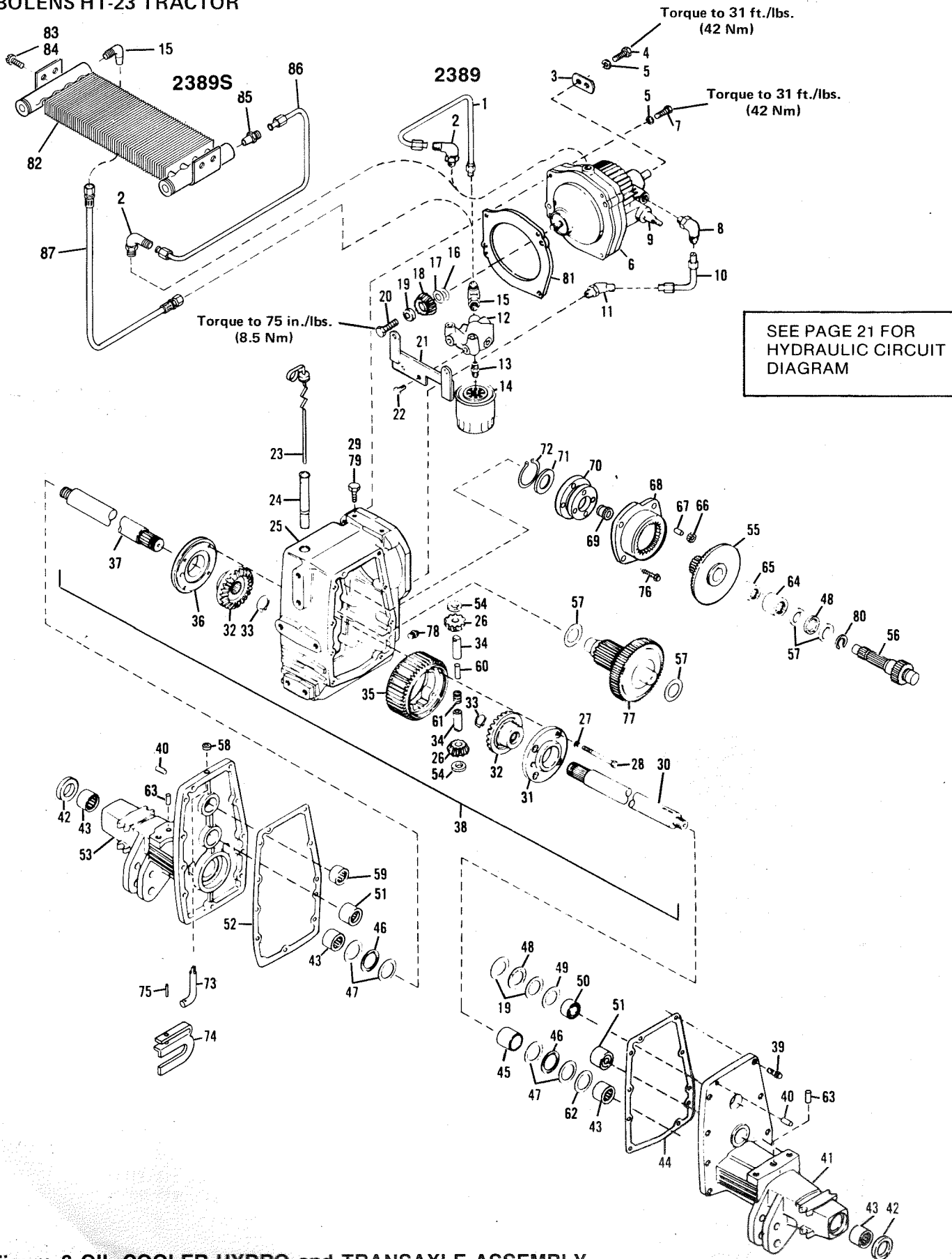


Figure 3 OIL COOLER HYDRO and TRANSAXLE ASSEMBLY

REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D	REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D
1	1736236	Tube Ass'y (4)	1	45	1724094	Spacer	1
	1738876	Tube Ass'y (1)	1	46	1186007	Bearing, Roller, Thrust	2
2	1185737	90° Elbow Fitting	1	47	1186006	Race, Thrust	4
3	1734197	Neutral Anchor	1	48	1185764	Bearing, Roller, Thrust	1
4 •	1111614	Hex Screw, 3/8-16 x 3	1	49	1718781	Shim .005	AR
5 •	1100243	Lock Washer, 3/8	4	50	1185774	Bearing Needle (Closed End)	1
6	1736048	R.H. Hydrostatic Package	1	51	1185720	Bearing Needle (Closed End)	2
7 •	1100770	Hex Screw, 3/8-16 x 2-3/4	4	52	1724087	Gasket, Cover, L.H.	1
8	1724390	90° Elbow Fitting	1	53	1738161	Cover, Transaxle Housing, L.H. (Incl. Ref. Nos. 43, 50 & 51)	1
9	1724370	Control Shaft Seal	1	54	*1715301	Thrust Washer	2
10	1734635	Tube Ass'y	1	55	1727735	Bevel Gear, 56T, 24T & 23T	1
11	1732238	45° Elbow	1	56	1734077	Pinion Shaft, 25T	1
12	1736172	Filter Manifold	1	57	1186002	Thrust Race, 1/8	6
13	1721921	Special Coupling	1	58	1729555	Oil Seal	1
14	1726450	Oil Filter	1	59	1186276	Bearing	1
15	1185739	90° Elbow	2	60	1732166	Dowel Pin	1
16	1730375	Shim	AR	61	1734339	Compression Spring	1
17	1730374	Shim	AR	62	1728080	Shim	2
18	1729531	Bevel Pinion, 18T	1	63	1735982	Pin	2
19	1729559	Spacer	1	64	1185721	Bearing	1
20	1741832	Hex Screw, 1/4-20 x 5/8	1	65	1725907	Bearing	1
21	1732230	Filter Bracket	1	66	1725945	Planet Gear	4
22	1186345	Flange Screw, 3/8-16 x 3/4	2	67	1726082	Pin	4
23	1724092	Dip Stick	1	68	1725944	Internal Ring Gear	1
24	1724090	Tube	1	69	1725909	Sliding Gear	1
25	1726046	Housing, Transaxle	1	70	1725942	Planet Carrier	1
26	*1731865	Bevel Pinion, 10T	2	71	1726050	Thrust Washer	1
27 •	1100242	Lock Washer, 5/16	4	72	1186461	Retaining Ring	1
28	1186015	Capscrew, 5/16-18 x 3-1/2 HT	4	73	1728850	Shifter Shaft	1
29 •	1100243	Lock Washer, 3/8	2	74	1725912	Shifter Plate	1
30	1724076	Axle, R.H.	1	75	1185389	Drive Pin	1
31	1724072	Carrier, Bull Gear, R.H.	1	76	1730012	Screw, Counter Box, 5/16-18 x 1	4
32	1724074	Bevel Gear, 22T	2	77	1733867	Cluster Gear, 16T & 45T	1
33	1185732	Retaining Ring, External	2	78	1185930	Pipe Plug	1
34	1732161	Pinion Shaft	2	79 •	1100046	Capscrew, 3/8-16 x 1	2
35	1724085	Bull Gear, 44T	1	80	1726051	Positioning Ring	1
36	1724071	Carrier, Bull Gear, L.H.	1	81	1720282	Gasket	1
37	1724077	Axle, L.H.	1	82	1735815	Oil Cooler (2389S) (1)	1
38	1736029	Differential Assembly (Incl. Ref. Nos. 26 thru 28 & 30 thru 37)	1	83 •	1186389	Flange Nut (2389S) (1)	4
39	1185771	Capscrew, Counterbore, 3/8-16 x 1	17	84 •	1186308	Flange Screw 1/4-20 x 1/2 (2389S) (1)	4
40	1110189	Dowel Pin, 3/8 x 1	4	85	1721989	Connector (2389S) (1)	1
41	1738162	Cover, Transaxle Housing, R.H. (Incl. Ref. Nos. 43, 50 & 51)	1	86	1738876	Tube Ass'y (2389S) (1)	1
42	1185929	Oil Seal	2	87	1863160	Hose Ass'y (2389S) (1)	1
43	1728081	Bearing, Needle, 1-3/4 O.D.	4	NI	1738157	Trans. Fluid, 1 Gal.	
44	1724086	Gasket, Cover, R.H.	1				

• Common Hardware - Purchase Locally (Grade 5 where applicable)

* If Assembly Does Not Have Thrust Washers, Install Both Bevel Pinions and Thrust Washers

BOLENS HT-23 TRACTOR

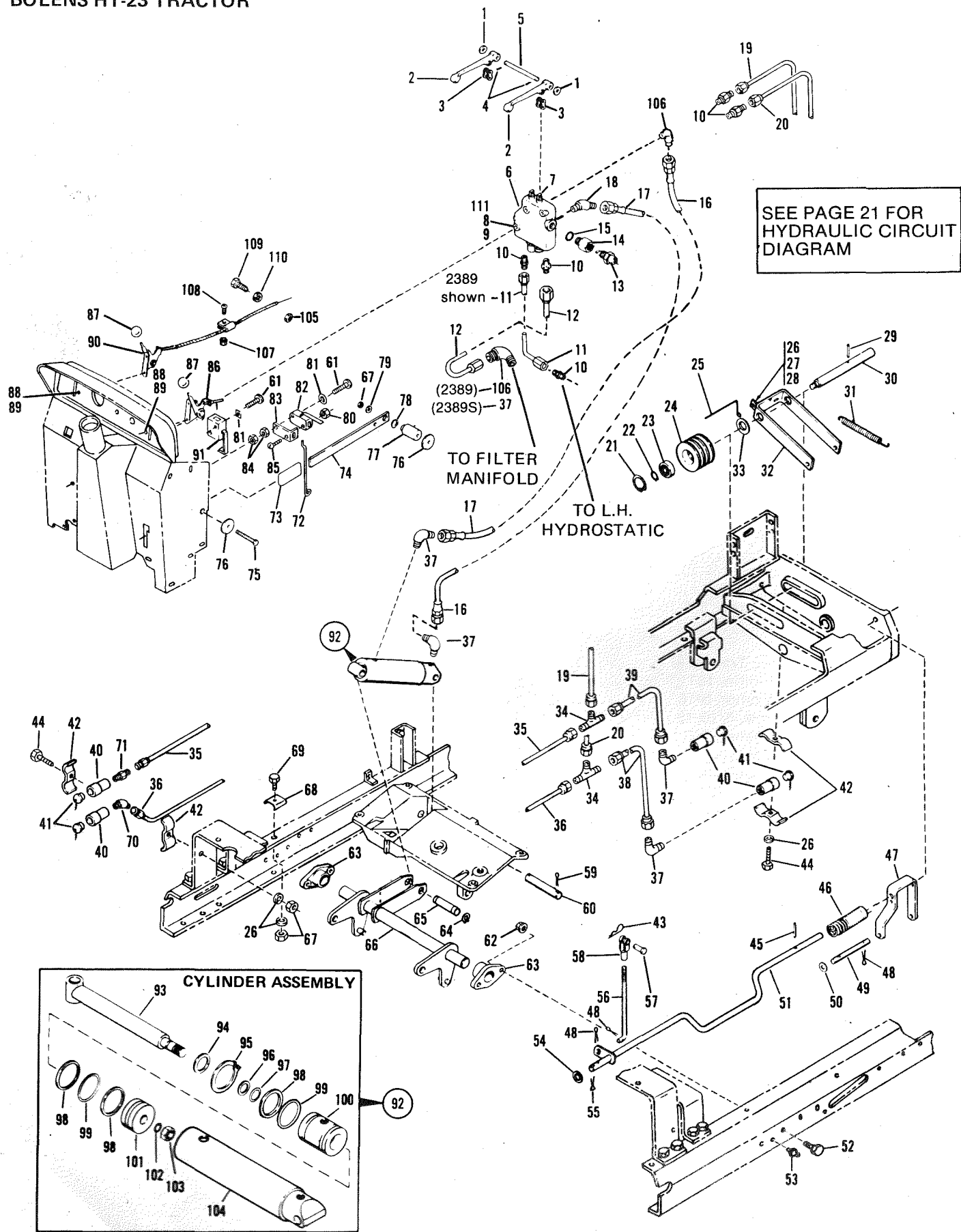


Figure 4 HAND CONTROLS and LIFT ASSEMBLY

REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D.	REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D.
1	• 1107382	Flat Washer, 5/16	2	55	• 1100356	Cotter Pin, 3/32 x 1.	2
2	1722539	Lever, Control Valve	2	56	1724458	PTO Control Rod	1
3	1185018	Link, Connector, 5/8P	2	57	1112587	Clevis Pin	1
4	• 1100346	Cotter Pin, 3/32 x 3/4	2	58	222007	Clutch Yoke	1
5	1722546	Rod, Control Valve	1	59	• 1100351	Cotter Pin, 1/8 x 1-1/4.	2
6	1734337	Control Valve Assy., 2 Spool	1	60	1724585	Pivot Pin	1
7	1738514	O-Ring Repair Kit (Sesna) . .	1	61	• 1729480	Pan Hd. Screw No. 4-40 x 5/8 (2).	3
	1742238	Repair Kit (Stamped AICO)	1	62	• 1186393	Flange Lock Nut, 3/8-16. . . .	4
	1742239	Repair Kit (Victor Fluid) . .	1	63	1718593	Block Bearing	2
8	• 1100241	Lockwasher, 1/4	2	64	1113527	Retaining Ring	2
9	• 1186229	Nut, 1/4-20	2	65	1724704	Pin, Cylinder Rod	1
10	1717563	Connector	5	66	1724357	Pivot Shaft.	1
11	1736173	Return Tube Assv (2389) . .	1	67	• 1186230	Nut, 5/16-18	3
	1739370	Tube Assy. (See page 20) (2389S)	1	68	1722667	Clamp, Tubing	1
12	1736174	Pressure Tube Assembly . . .	1	69	• 1100808	Capscrew, 1/4-20 x 1-1/4 . .	1
13	1750139	Temperature Switch.	1	70	1185903	Elbow, 45°	1
14	1750327	Plug, Adapter	1	71	1721989	Connector	1
15	1185773	O-Ring (1) (2)	1	72	1726345	Control, Switch.	1
16	1719179	Cylinder Hose Assembly . . .	1	73	1736688	Handle Grip	1
17	1719178	Cylinder Hose Assembly . . .	1	74	1723304	PTO Lever	1
18	1185902	Elbow, 45°	1	75	• 1111609	Capscrew, 5/16-18 x 2-3/4 .	1
19	1722700	Tube Assembly, 37° Flared. .	1	76	1186033	Special Washer	2
20	1722701	Tube Assembly, 37° Flared. .	1	77	1723302	PTO Lever Support	1
21	1187439	Retaining Ring, Internal . . .	1	78	1701411	Bowed Washer	1
22	1118809	Retaining Ring, External. . .	1	79	1708268	Washer	1
23	1185064	Ball Bearing	1	80	• 1726432	Lock Nut, No. 4-40	1
24	1719202	Idler Sheave	1	81	1726140	Speed Nut, Push On (1). . . .	3
25	1718606	Belt Guide	1	82	1725550	PTO Switch	1
26	• 1100242	Lockwasher, 5/16	4	83	1726346	Bracket, Switch.	1
27	• 1103195	Capscrew, 5/16-18 x 5/8. . .	1	84	• 1186225	Nut, No. 6-32.	2
28	• 1107382	Flat Washer, 5/16	1	85	• 1729480	Mach. Screw, No. 4-40 x 5/8	1
29	1185376	Roll Pin, 3/16 x 1-1/2	1	86	1730850	Throttle Control	1
30	1718567	Idler Shaft	1	87	1724527	Knob Only.	2
31	1703615	Extension Spring.	1	88	• 1116287	Mach. Screw, No. 10-24 x 5/8	4
32	1718616	Idler Shaft Bail	1	89	• 1185985	Nut, No. 10-24	4
33	• 1107387	Flat Washer, 3/4	1	90	1723312	Choke Control	1
34	1185904	Tee.	2	91	1728198	Switch	1
35	1722696	Tube Assembly, 37° Flared. .	1	92	1724520	Cylinder (Incl. Nos. 93 thru 104)	1
36	1722697	Tube Assembly, 37° Flared. .	1	93	1724512	Piston Rod Assembly	1
37	1185739	Elbow, 90°	5	94	1185266	Oil Seal	1
38	1722698	Tube Assembly, 37° Flared. .	1	95	1118735	Snap Ring	1
39	1722699	Tube Assembly, 37° Flared. .	1	96	1186019	Ring Washer	1
40	1717627	Coupling, Body.	4	97	1177395	O-Ring	1
41	1720733	Plug, Dust	4	98	1186018	Ring Washer	3
42	1722560	Clamp, Coupling	4	99	1186017	O-Ring	2
43	1703011	Pin, Hairspring	1	100	1724511	Cylinder Head.	1
44	• 1111607	Capscrew, 5/16-18 x 2-1/4 .	2	101	1724515	Piston	1
45	1185552	Drive Pin, 3/16 x 1-3/4. . . .	1	102	1177509	O-Ring	1
46	1722565	Torsion Spring	1	103	• 1110154	Lock Nut, 5/8-18	1
47	1718528	Control Arm.	1	104	1724516	Cylinder Tube.	1
48	• 1100346	Cotter Pin, 3/32 x 3/4	4	105	1186243	Nut, Jam, 1/4-28.	2
49	1718533	Arm Pin.	1	106	1185737	Elbow, 90° (2389)	1
50	1107383	Flat Washer, 3/8	2	107	• 1185869	Keps Nut, No. 8-32	2
51	• 1722564	Control Rod.	1	108	• 1110672	Rd. Hd. Screw, No. 8-32 x 5/8	2
52	• 1186349	FI Lock Screw, 3/8-18 x 1-1/2	4	109	1805169	Screw, Spec., 1/4-28 x 3/4 .	2
53	1185976	Grease Fitting.	2	110	1110148	Nut, Hex, 1/4-28	2
54	• 1107385	Flat Washer, 1/2	2	111	• 1100807	Capscrew, 1/4-20 x 2	2

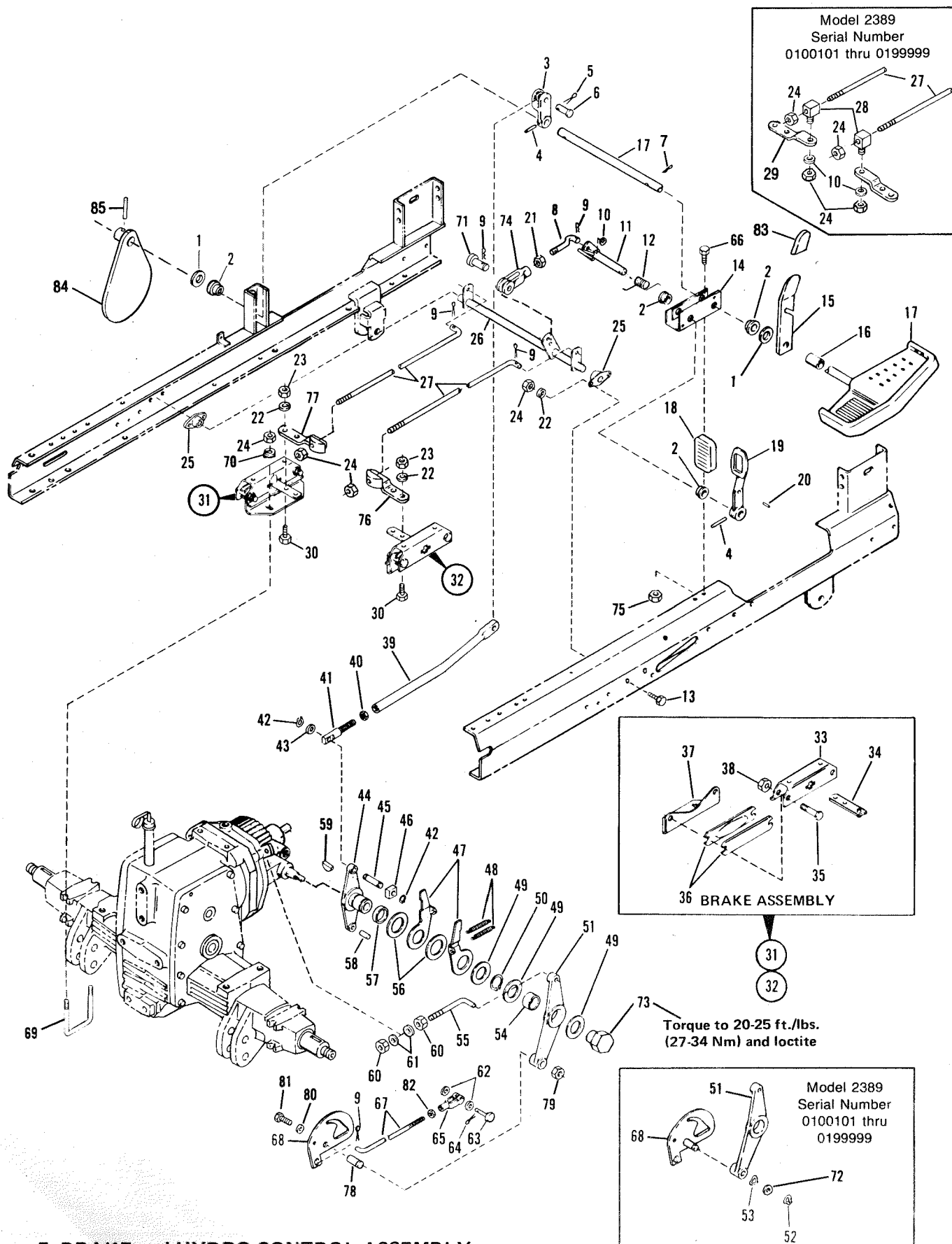


Figure 5 BRAKE and HYDRO CONTROL ASSEMBLY

REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D.
1	1706594	Washer	2
2	1734160	Flange Bushing	4
3	1736109	Control Arm.	1
4	1713432	Drive Pin, 1/16 x 1-1/4.	2
5	• 1100350	Cotter Pin, 1/8 x 1.	1
6	1724632	Clevis Pin, 1/2 x 1-1/4	1
7	• 1100351	Cotter Pin, 1/8 x 1-1/4.	1
8	1732226	Tie Rod.	1
9	• 1100346	Cotter Pin, 3/32 x 3/4	5
10	• 1107383	Flat Washer, 3/8	3
11	1724434	Brake Arm Assembly	1
12	1724453	Torsion Spring	1
13	• 1100088	Capscrew, 3/8-16 x 1/2.	6
14	1724569	Support Assembly, Control Shaft	1
15	1736199	Latch Ass'y, Brake (1)	1
	1739869	Latch Ass'y, Brake (2)(3)	1
16	1721378	Spacer (1)	1
	1739868	Spacer (2)(3).	1
17	1732323	Speed Control Pedal.	1
18	1725518	Pedal Pad.	1
19	1724437	Brake Pedal	1
20	1120209	Roll Pin, 3/16 x 3/4.	1
21	1186245	Nut, 3/8-24	1
22	• 1100243	Lockwasher, 3/8	8
23	• 1186231	Nut, 3/8-16	4
24	• 1110108	Lock Nut, 3/8-16	10
25	1724457	Flange Bearing	2
26	1724440	Shaft Assembly, Transfer	1
27	1724461	Brake Rod	2
28	1724459	Swivel (1)	2
29	1724460	Arm, Brake Extension (1)	2
30	• 1100046	Capscrew, 3/8-16 x 1	4
31	1724580	Brake Assembly, L.H. (Incl. Ref. Nos. 33 thru 38).	1
32	1724599	Brake Assembly, R.H. (Incl. Ref. Nos. 33 thru 38).	1
33	1724587	Bracket, Secondary	1
34	1724588	Lever, Actuating	1
35	1724590	Bolt	2
36	1724589	Stator Plate	2
37	1724473	Support, Brake	1
38	1724591	Lock Nut.	2
39	1732184	Control Rod.	1
40	• 1186261	Jam Nut, 1/2-13	1
41	1724446	Rod End	1
42	1185219	Retaining Ring, External.	2

REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D.
43	1890948	Flat Washer	2
44	1732391	Speed Control Arm	1
45	1724445	Control Pin	1
46	1720699	Cushion Block	1
47	1725359	Neutralizer Arm	2
48	1724582	Extension Spring.	2
49	1720529	Thrust Washer.	3
50	1185732	Retaining Ring, External.	1
51	1735998	Neutral Stop Arm (1).	1
	1740057	Neutral Stop Arm (2)(3)	1
52	1118804	Retaining Ring (2)(3)	1
53	1706782	Wave Washer (1)	1
52	1118804	Retaining Ring	1
53	1706782	Wave Washer.	1
54	1732833	Bearing	1
55	1732189	Rod, Neutral Adjuster	1
56	1720361	Thrust Washer.	2
57	1720706	Bearing	1
58	1110187	Dowel Pin	1
59	1104435	Woodruff Key.	1
60	• 1186232	Nut, 7/16-14	2
61	• 1100265	Flat Washer, 1/4	2
62	• 1107382	Flat Washer, 5/16	2
63	1705602	Clevis Pin, 5/16 x 1-1/16.	1
64	• 1100349	Cotter Pin, 1/8 x 3/4	1
65	1710583	Rod End	1
66	• 1100068	Capscrew, 3/8-16 x 3/4.	2
67	1735995	Rod, Lock Plate Control (1)	1
	1742097	Rod, Lock Plate Control (2)(3)	1
68	1735994	Lock Plate Assembly (1).	1
	1740062	Lock Plate Assembly (2)(3)	1
69	1724468	U-Bolt, 3/8-16	2
70	1185715	Lockwasher, 3/8 Pyramid	2
71	1112587	Clevis Pin.	1
72	1890234	Flat Washer (1)	1
73	1730087	Hydro Control Nut	1
74	222007	Yoke.	1
75	1186393	Flange Nut 3/8-16.	2
76	1742105	RH Arm Ext. (2)(3)	1
77	1742104	LH Arm Ext. (2)(3)	1
78	1732369	Spacer (2)(3).	1
79	1185506	Self Lock Nut, 3/8-16 (2)(3)	1
80	1701055	Flat Washer, 3/8 (2)(3)	1
81	• 1100086	Hex Screw 3/8-16 x 1-3/4 (2)(3)	1
82	1186244	Hex Nut, 5/16-24	1
83	1728696	Grip (2)(3)	1
84	1741778	Disk Ass'y (3)	1
85	1120210	Drive Pin 3/16 x 1 (3)	1

• Common Hardware - Purchase Locally (Grade 5 where applicable)

Model 2389

(1) Serial Number 0100101 thru 0199999

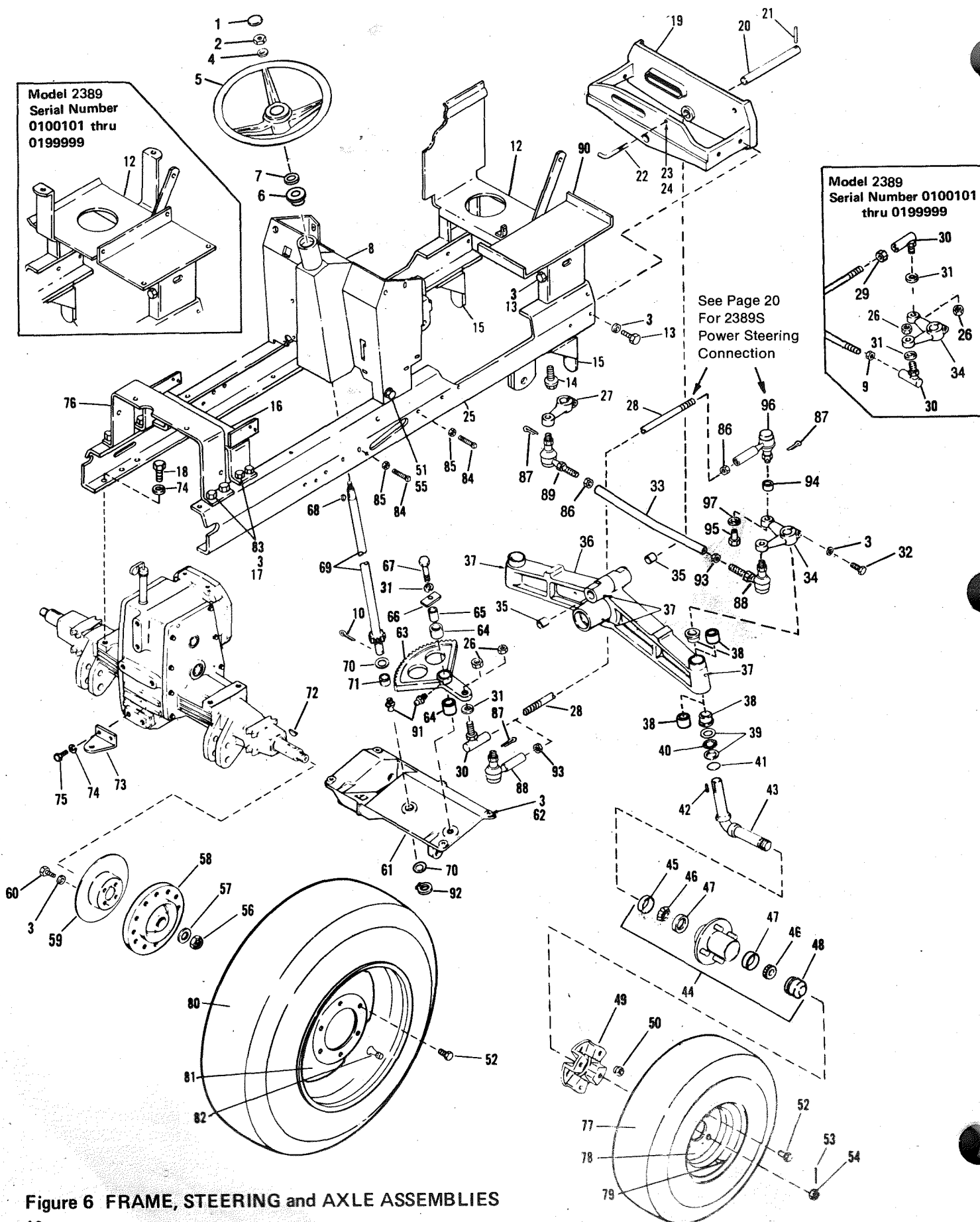
(2) Serial Number 0200101 thru 0299999

Model 2389S

(2) Serial Number 0100101 thru 0199999

(3) Serial Number 0200101 thru 0499999

BOLENS HT-23 TRACTOR



REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D	REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D
1	1746382	Steering Wheel Cap	1	50	1724322	Wheel Nut	8
2 •	1110108	Nut, 3/8-16	1	51 •	1103195	Capscrew, 5/16-18 x 5/8	4
3 •	1100243	Lockwasher, 3/8	30	52	1715428	Wheel Bolt, 1/2-20	12
4 •	1107383	Flat Washer, 3/8	1	53 •	1104222	Cotter Pin, 3/16 x 1-1/2	2
5	1736980	Steering Wheel	1	54	1185758	Castle Nut, Special 1-1/4	2
6	1720134	Bearing, Self-Aligning	1	55	1177548	Shakeproof Washer	4
7	1708012	Washer	AR	56	1120390	Lock Nut, 3/4-10	2
8	1734590	Steering Column (1) (2)	1	57	1708599	Flat Washer	2
	1749861	Steering Column (3) (4)	1	58	1724089	Wheel Hub	2
9	1185082	Nut, 5/8 (1)	1	59	1724478	Disc Brake	2
10 •	1100351	Cotter Pin, 1/8 x 1-1/4	1	60 •	1100046	Capscrew, 3/8-16 x 1	8
11	1736010	Frame, L.H. (1) (2)	1	61	1724526	Steering Bridge (1)	1
	1749859	Frame, L.H. (3) (4)	1		1742017	Steering Bridge (2) (3) (4)	1
12	1722681	Supp. Batt. and Gas Tank (1)	1	62 •	1100046	Capscrew, 3/8-16 x 1	4
	1737297	Supp. Batt. and Gas Tank (2) (3) (4)	1	63	1718506	Gear, 23T (1)	1
13 •	1100068	Capscrew, 3/8-16 x 3/4	8		1742016	Gear, 23T (2) (3) (4)	1
14	1186345	Flange Screw, 3/8-16 x 3/4	4	64	1185711	Bronze Bearing (1)	1
15	1743305	Stop Assembly	2		1185007	Needle Bearing (2) (3) (4)	1
16	1724465	Support, Trans. (2389)	1	65	1718555	Spacer (1)	1
	1737716	Support, Trans. (2389S)	1		1743389	Spacer (2) (3) (4)	2
17 •	1100913	Capscrew, 3/8-16 x 7/8	8	66	1721405	Steering Plate	1
18 •	1100054	Capscrew, 1/2-13 x 1	4	67	1107064	Capscrew, 5/8-11 x 2	1
19	1722832	Support Axle (1)	1	68	1104436	Woodruff Key, 3/16 x 3/4	1
	1742019	Support Axle (2) (3) (4)	1	69	1718588	Steering Shaft (1)	1
20	1718548	Pin, Axle Pivot (1)	1		1742009	Steering Shaft (2) (3) (4)	1
	1742013	Pin, Axle Pivot (2) (3) (4)	1	70	1707546	Thrust Washer	2
21	1185376	Roll Pin, 3/16 x 1-1/2	2	71	1185319	Bronze Bearing (1)	1
22	1719147	Belt Guide	1		1185010	Needle Bearing (2) (3) (4)	1
23 •	1100241	Lock Washer, 1/4	1	72	1187255	Woodruff Key, 5/16 x 1-1/4	2
24 •	1186229	Nut, 1/4-20	2	73	1724416	Drawbar	1
25	1736012	Frame, R.H.	1	74 •	1100245	Lockwasher, 1/2	6
26	1185082	Lock Nut, 5/8-18 (1)	4	75 •	1100055	Capscrew, 1/2-13 x 1-1/4	2
	1120103	Castle Nut, 3/8-24 (2)	4	76	1736008	Support, Fender	1
27	1718513	Steering Arm, L.H. (1)	1	77	1732925	Tire, 18 x 8.50-8 (Softrac)	2
	1742014	Steering Arm, L.H. (2) (3) (4)	1		1735720	Inner Tube (Opt.)	AR
28	1742156	Drag Link	1	78	1723115	Wheel	2
29	1186216	Nut, 5/18-18 (1)	1	79	1718086	Valve	2
30	1719003	Ball Joint (1)	4	80	1732924	Tire, 23 x 12-12 (Softrac)	2
31 •	1100247	Lockwasher, 5/8	7		1734132	Inner Tube (Optional)	AR
32 •	1100011	Capscrew, 3/8-24 x 1-1/2	2	81	1718277	Wheel	2
33	1741951	Tie Rod	1	82	1718242	Valve	2
34	1718502	Steering Arm, R.H. (1)	1	83 •	1186231	Hex Nut, 3/8-16	8
	1742015	Steering Arm, R.H. (2)	1	84	1103514	Set Screw, 3/8-16 x 1-1/2	2
	1752032	Steering Arm, R.H. (3) (4)	1	85 •	1186259	Nut, Jam, 3/8-16	2
35	1185612	Sleeve Bearing (1)	2	86	1186030	Jam Nut, LH Thd. 1/2-20 (2)	2
36	1718602	Front Axle (1)	1	87 •	1100346	Cotter Pin, 3/32 x 3/4 (2) (3) (4)	3
	1742018	Front Axle (2) (3) (4)	1	88	1724656	R.H. Socket (2) (3) (4)	2
37	1185976	Grease Fitting	4	89	1724657	L.H. Socket (2)(3)(4)	2
38	1185728	Flange Bearing (1)	4	90	1742062	Battery Locator (2) (3) (4)	1
	1187181	Needle Bearing (2) (3) (4)	4	91	1185976	Grease Fitting (2) (3) (4)	2
39	1185730	Thrust Race	4	92	1113527	Retaining Ring (2) (3) (4)	1
40	1185729	Thrust Bearing	2	93	1186247	Jam Nut 1/2-20 (2) (3) (4)	2
41	1185988	O-Ring	2	94	1750409	Spacer (2)(3)	1
42	1104336	Square Key, 1/4 x 1	2		1751563	Spacer (4)	1
43	1723468	Spindle Assembly (1)	2	95	1750410	Special Nut (2)(3)	1
	1742012	Spindle Assembly (2) (3) (4)	2		1751564	Special Nut (4)	1
44	1730406	Wheel Hub Assembly (Incl. Ref. No. 45 thru 48) (1)	2	96	1751517	L.H. Socket (4)	1
	1723110	Wheel Hub Assembly (Incl. Ref. No. 45 thru 48) (2) (3) (4)	2		1724657	L.H. Socket (2)(3)	1
45	1719601	Flat Seal	2	97	1103997	Lock Washer 3/4 (4)	1
46	1185661	Cone, Roller Bearing	4		1100247	Lock Washer 5/8 (2)(3)	1
47	1185660	Cup, Roller Bearing	4				
48	1719599	Cap	2				
49 •	1723092	Wheel Spacer (Optional)	2				

Model 2389
(1) Serial Number 0100101 thru 0199999
(2) Serial Number 0200101 thru 0299999

* Optional

• Common Hardware - Purchase Locally

Model 2389

(1) Serial Number 0100101 thru 0199999

(2) Serial Number 0200101 thru 0299999

Model 2389S

(2) Serial Number 0100101 thru 0199999

(3) Serial Number 0200101 thru 0299999

(4) Serial Number 0300101 thru 0499999

BOLENS HT-23 TRACTOR

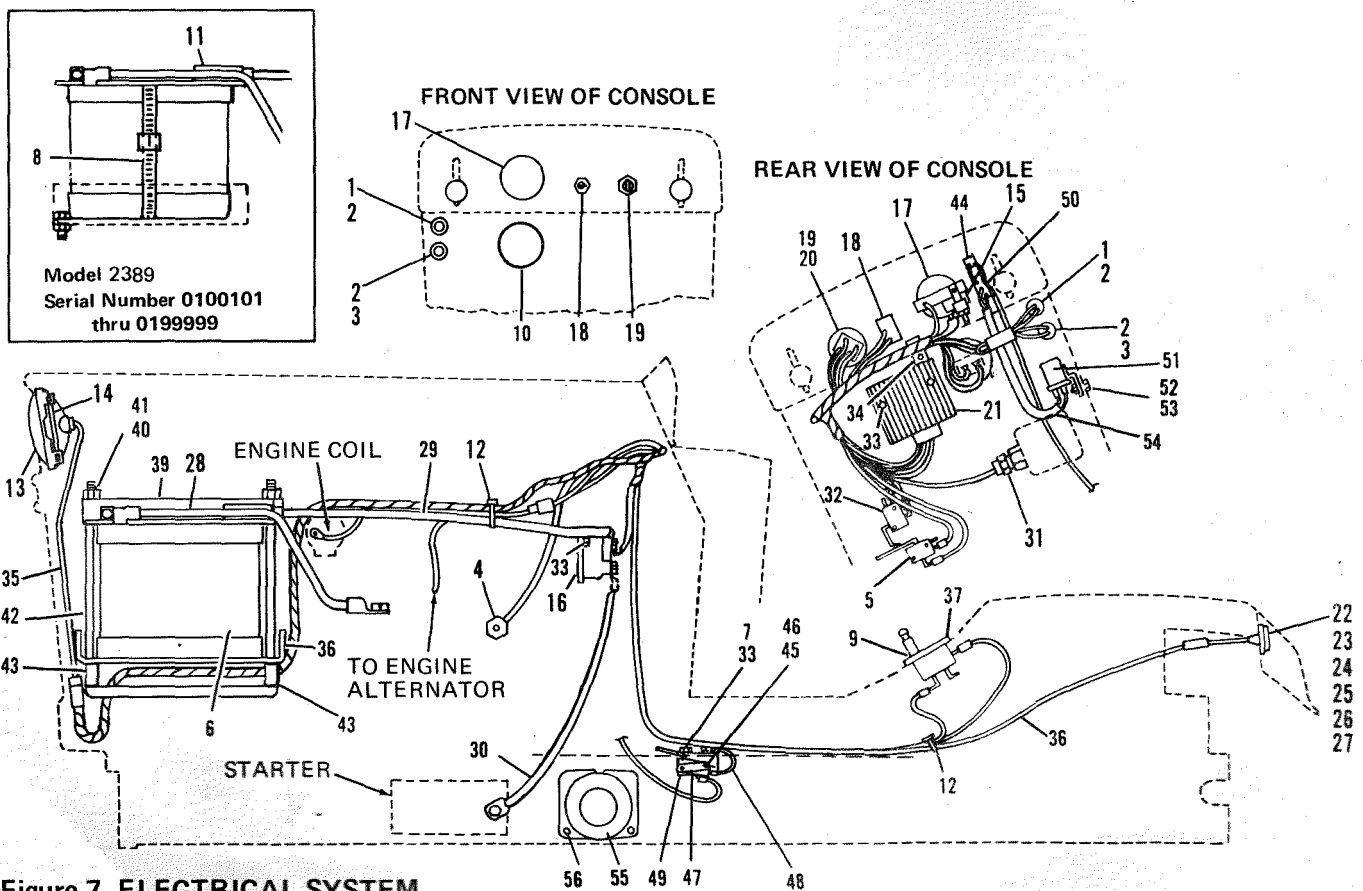
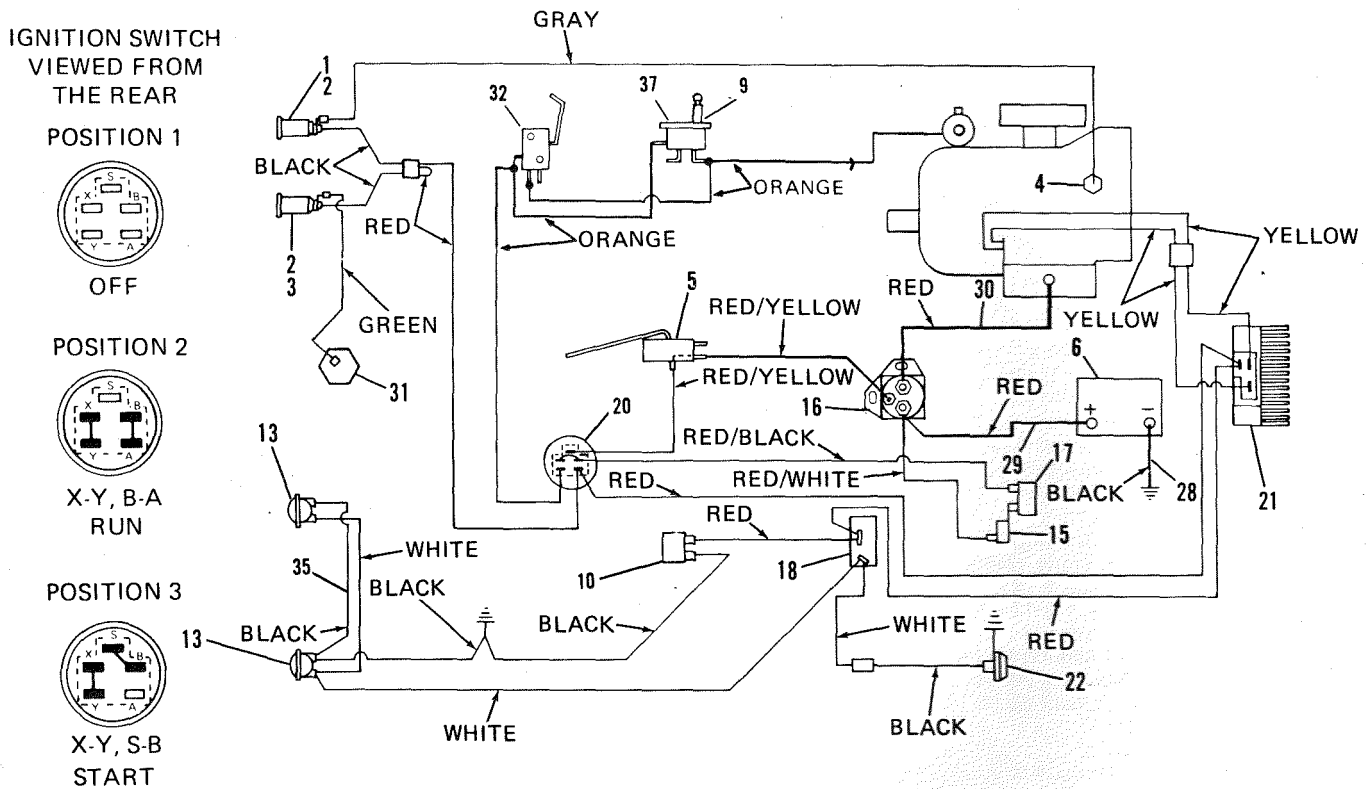
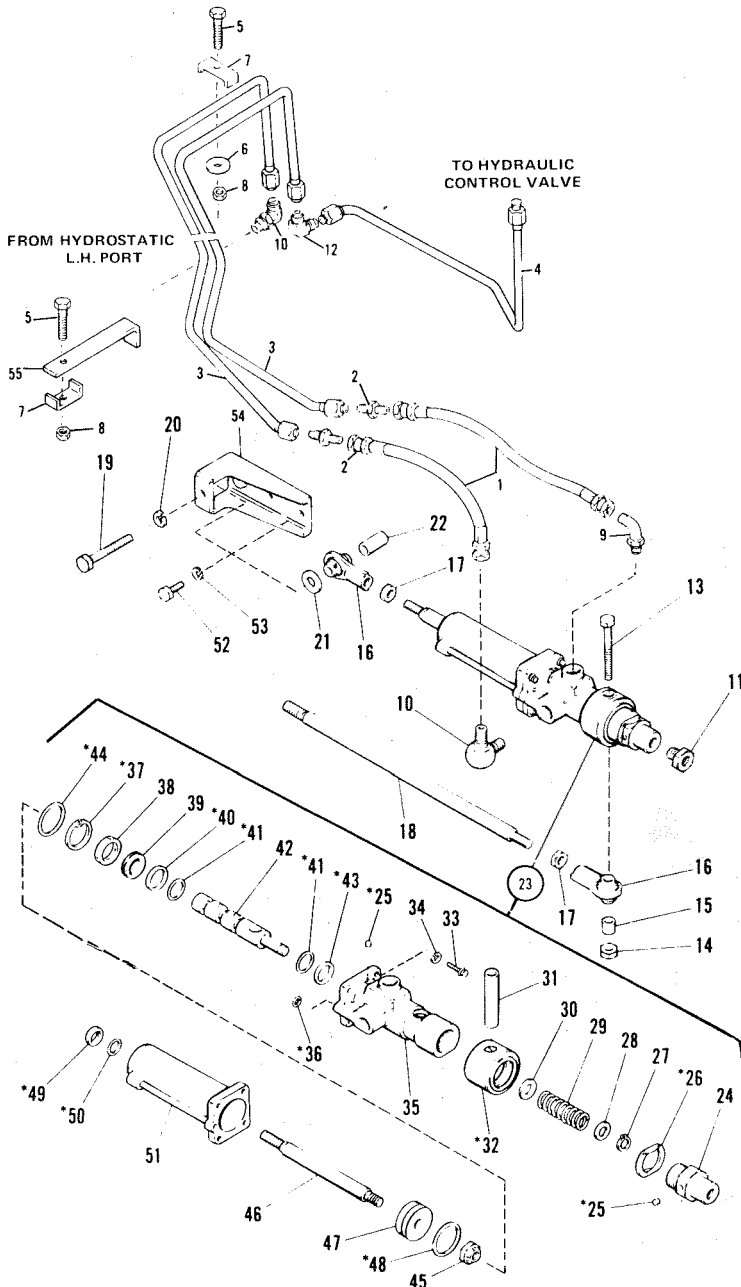


Figure 7 ELECTRICAL SYSTEM

POWER STEERING

MODEL 2389S

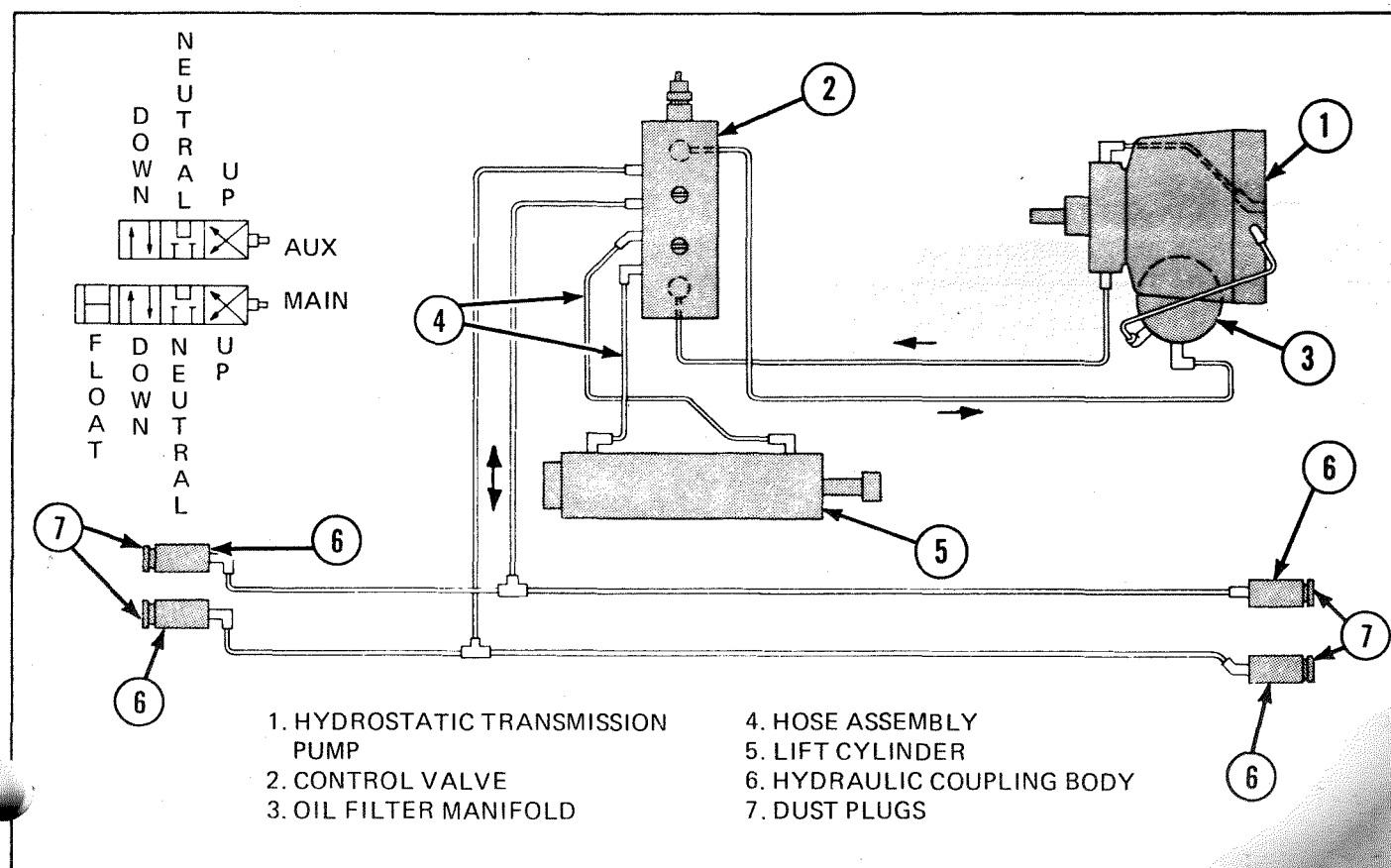
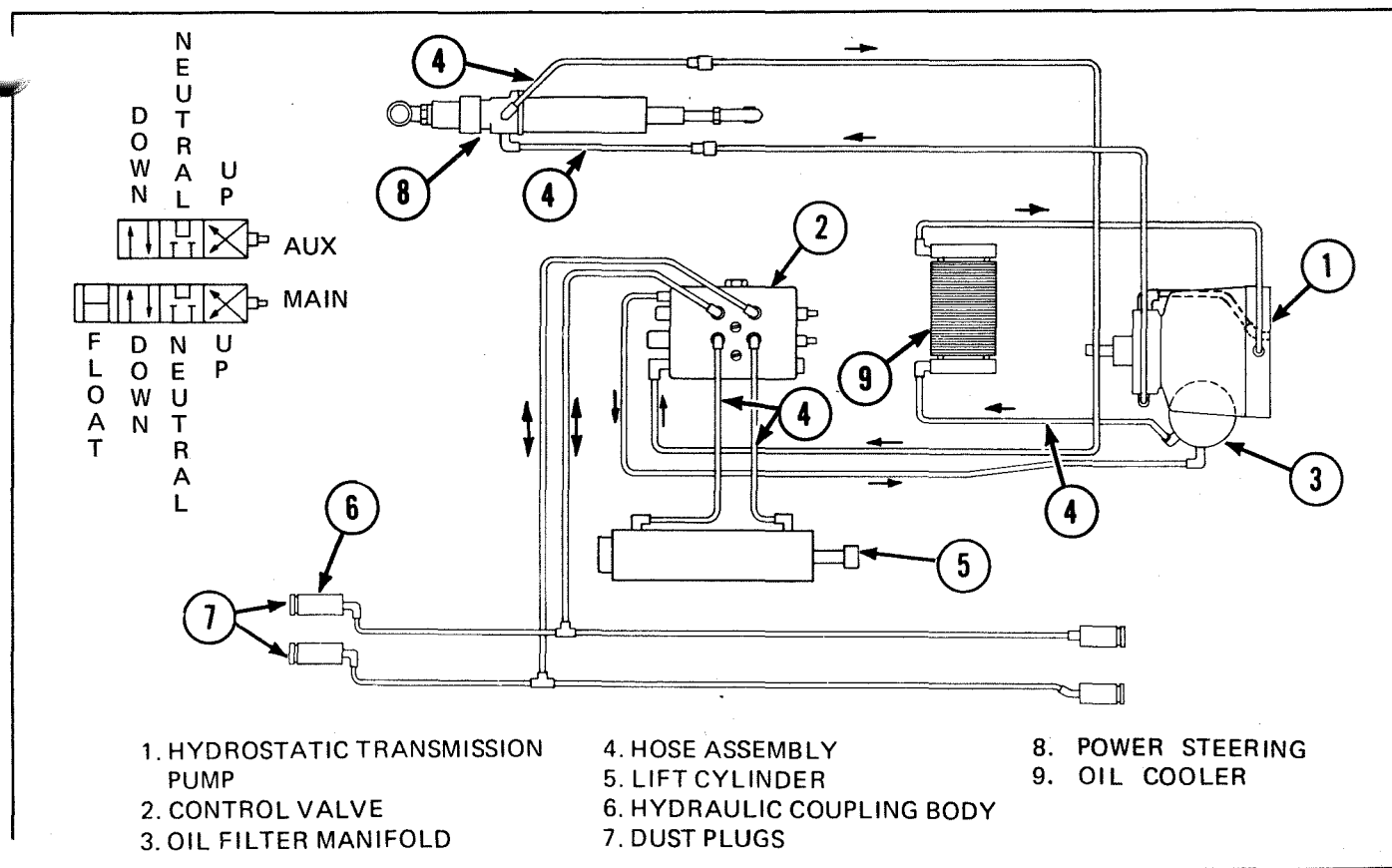


REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D.
1	1719179	Hose Assembly	2
2	1725761	Connector	2
3	1739369	Tube Assembly	2
4	1739370	Tube Assembly	1
† 5	1100045	Capscrew, 5/16-18 x 1"	2
6	1186047	Flat Washer, 5/16	1
7	1722667	Tubing Clamp	2
† 8	1732499	Hex Lock Nut, 5/16-18	2
9	1185902	Elbow, 45°	1
10	1185737	Elbow, 90°	2
11	1742157	Adapter	1
12	1740018	90° Elbow	1
† 13	1100024	Capscrew, 3/8-24 x 3-1/2	1
† 14	1186245	Hex Nut, 3/8-24	1
15	1725751	Bushing	1
16	1725754	Rod End	2
† 17	1186247	Jam Nut, 1/2-20	2
18	1742156	Drag Link	1
† 19	1100057	Capscrew, 1/2-13 x 3	1
† 20	1100245	Lockwasher, 1/2	1
† 21	1100257	Washer, 1/2 Flat	1
22	1725755	Spacer	1
23	1725750	Valve & Cylinder Assembly	1
24	1725682	• Cap & Breather Assembly	1
* 25	1725693	• Filter	2
* 26	1725692	• Washer	1
27	1725695	• Retaining Ring	1
28	1725690	• Washer	1
29	1725672	• Spring	1
30	1725691	• Washer	1
31	1725675	• Sleeve	1
* 32	1725674	• Rubber Seal	1
33	1725698	• Capscrew, 12 pt. 5/16-18 x 7/8	4
34	1725689	• Lockwasher, 5/16	4
35	1725673	• Valve Body	1
* 36	1725683	• O-Ring	1
* 37	1725694	• Retaining Ring	1
38	1725676	• Spacer	1
39	1725677	• Plug	1
* 40	1725686	• O-Ring	1
* 41	1725687	• O-Ring	2
42	1725678	• Spool	1
* 43	1726665	• Back-up Washer	1
* 44	1725688	• O-Ring	1
45	1725698	• Locknut, 1/2-20	1
46	1725680	• Piston Rod	1
47	1725679	• Piston	1
* 48	1725685	• O-Ring	1
* 49	1725699	• Seal	1
* 50	1725684	• O-Ring	1
51	1725681	• Barrel Assembly	1
† 52	1103212	Capscrew, 3/8-16 x 5/8	2
† 53	1100243	Lockwasher, 3/8	2
54	1725758	Bracket	1
55	1739373	Tube Support Bracket	1

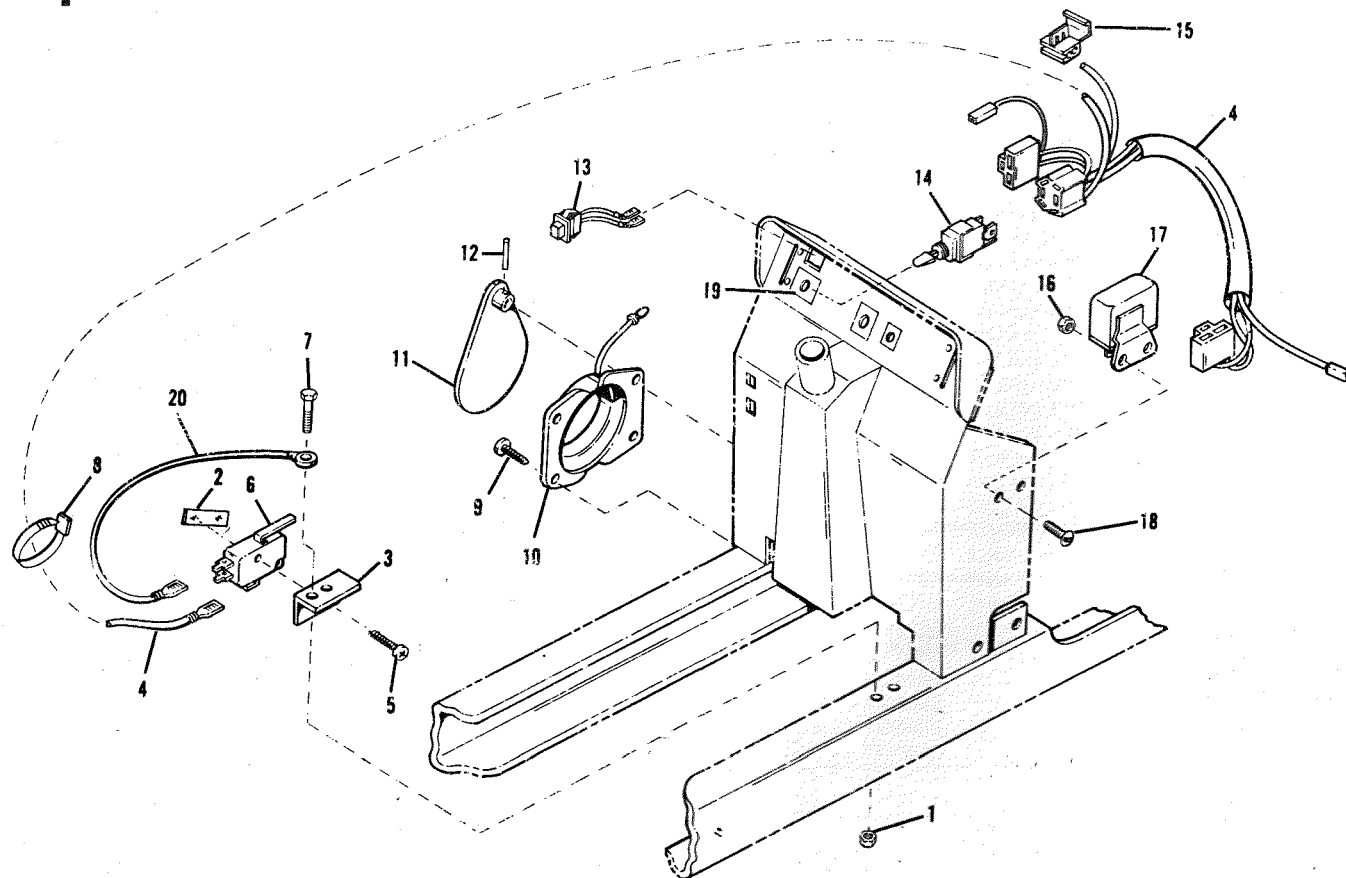
* Included in 1726666 Repair Kit

† Common Hardware - Purchase Locally
(Grade 5 Where Applicable)

HYDRAULIC CIRCUIT DIAGRAM



Speed Control



REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D
1 •	1186229	Hex Nut, 1/4-20	2
2	1727777	Speed Nut	1
3	1741779	Switch Bracket	1
4	1741958	Harness	1
5	1186273	Screw No. 4-40	1
6	1728199	Switch	1
7 •	1186308	Flange Screw, 1/4-20 x 1/2	2
8	1725531	Cable Tie	
9	1728463	Self Tap Screw No. 12-24 x 7/16	2
10	1728462	Clutch	1
11	1741778	Disc. Assembly	1

REF. NO.	PART NO.	DESCRIPTION	NO. REQ'D
12	1120210	Roll Pin	1
13	1724824	Light (1)	1
	1750058	Light (2)	1
14	1732374	Toggel Switch	1
15	1721038	Connector	1
16 •	1185460	Lock Nut No. 10-24	2
17	1738872	Relay (1)	1
	1745666	Relay (2)	1
18 •	1100115	Rd. Hd. Screw No. 10-24 x 1/2	2
19	1738943	Decal	1
20	1741910	Ground Lead	1

• Common Hardware - Purchase Locally (Grade 5 where applicable)

(1) Serial Number 0100101 thru 0199999
(2) Serial Number 0200101 thru 0499999