

Parts & Service Manual

E1-12K801

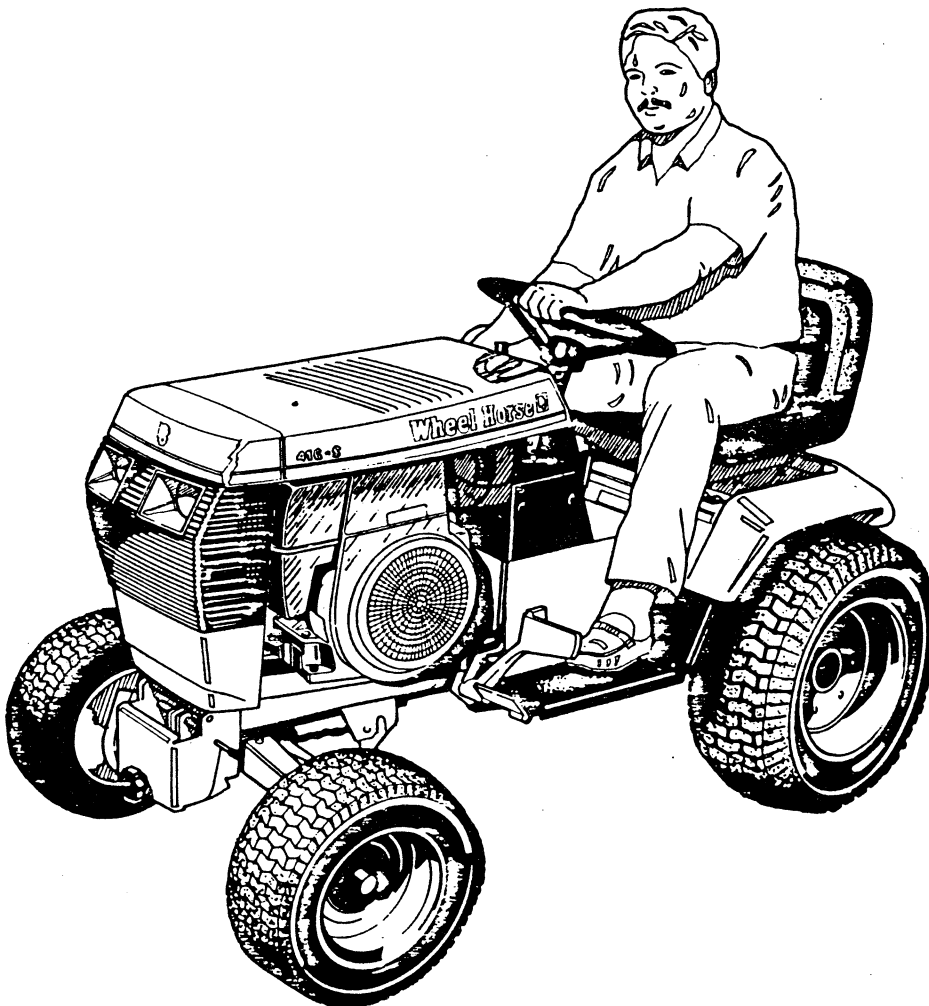
312-8

8-SPEED

B1-160801

316-8

8-SPEED



Wheel Horse

WHEEL HORSE 300/400 SERIES
PARTS & SERVICE MANUAL

INTRODUCTION PAGE

1. How to use this parts manual

- 1.1. The 300/400 Series parts manual is divided into major sections arranged in the sequence outlined on the following page. Major sections are subdivided into smaller groups of parts, each with its own illustration and illustration reference numbers.
- 1.2. Illustrated items are numerically keyed to the parts listing on the facing page. Illustrations are repeated when the parts list is too long for one page. Figure numbers are located at the bottom of each illustration and also at the beginning of each description column. Item numbers are numerically keyed to their respective illustrations.
- 1.3. A numerical index is located at the end of the manual.
- 1.4. When an (X) appears in the quantity (Qty) column use only if applicable, or as required to meet tolerances.

2. To locate parts

- 2.1. When function, use or location is known:
Refer to the List of Illustrations to locate the proper illustration.
- 2.2. When part number is known:
Refer to the Numerical Index.

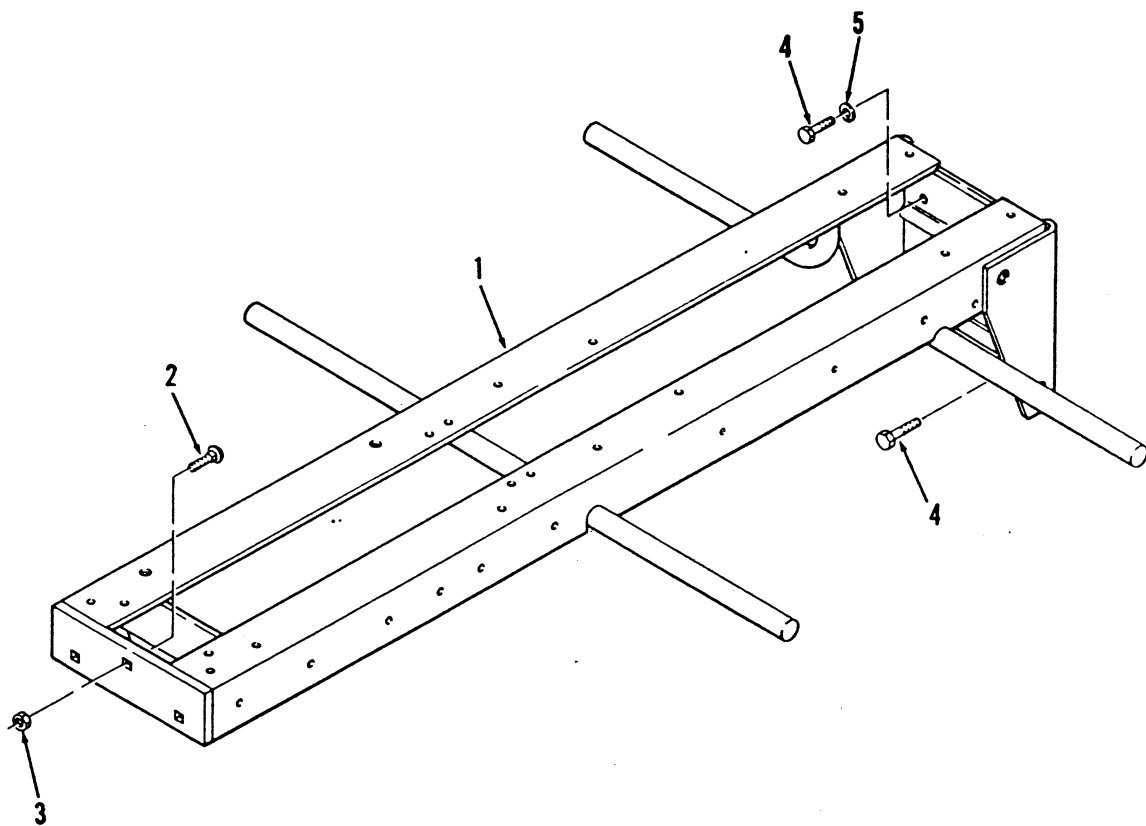
3. Service aids

- 3.1. Special notes recorded on illustrations:
Refer to available owner & repair manuals and service bulletins for detailed information.
- 3.2. Standard torque values for fasteners:
Refer to Section 18 - Torque Specifications.
- 3.3. Paint:
Refer to Section 18 - Paint

LIST OF ILLUSTRATIONS

1

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SECTION 1 - FRAME 3

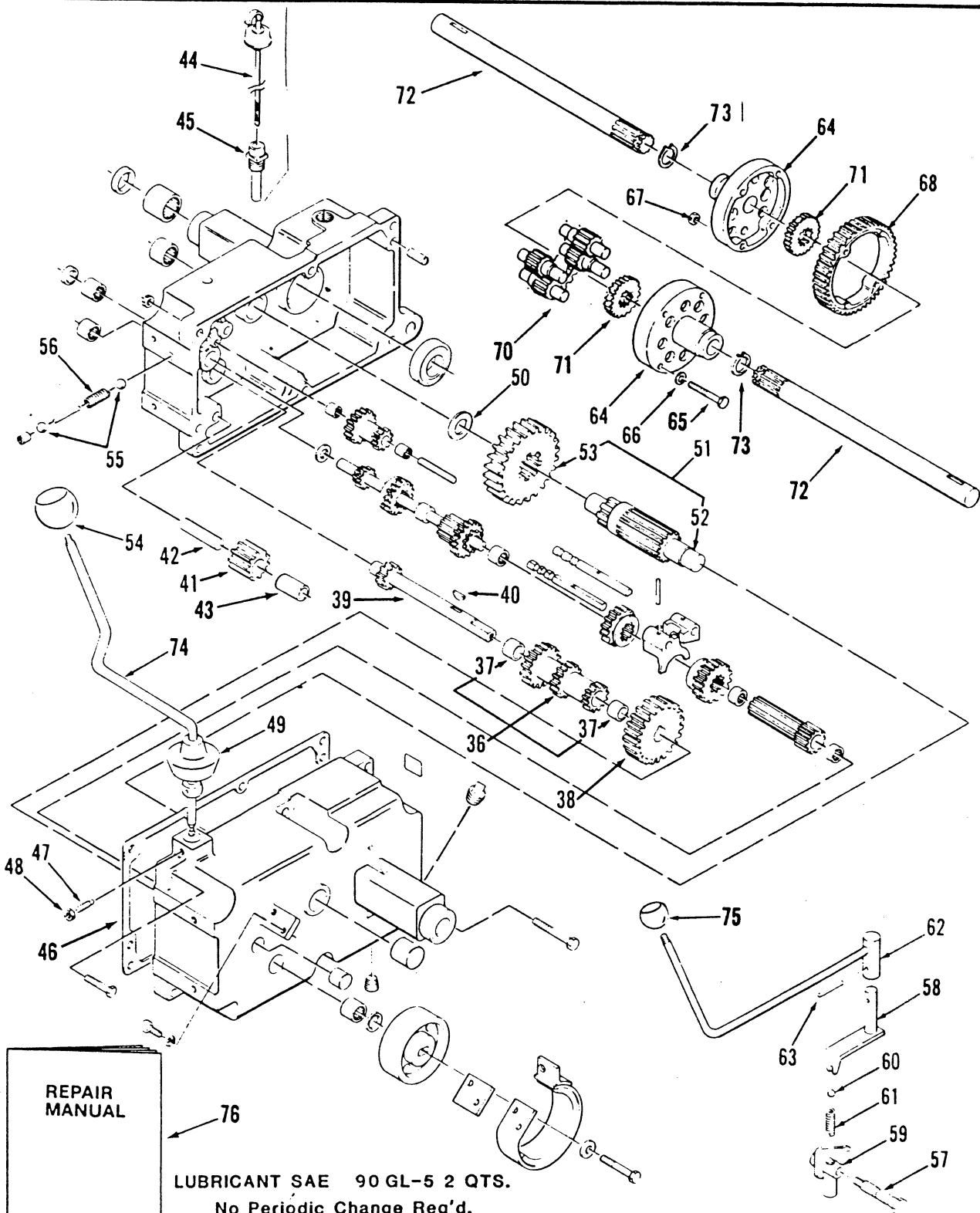
ITEM	PART NUMBER	DESCRIPTION	Quantity
		Figure 1-1 FRAME	
1	110648	Frame.....	1
2	900063	Carriage Bolt 3/8-16 x 1.....	3
3	915113	Eslok Nut 3/8-16.....	3
4	908032	Bolt 3/8-16 x 3/4.....	4
5	920083	Lockwasher 3/8.....	4

SECTION 3 - 8-SPEED TRANSMISSION 5

ITEM	PART NUMBER	DESCRIPTION	Quantity
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Figure 3 - 1
MECHANICAL TRANSMISSION - 8-SPEED

	110996	Assembly 8-Speed Transmission.....	1
1	111204	Case-Trans. RH.....	1
	114678	Case-Trans. RH Note: this case half has recess in axle housing for oil seal.....	1
2	111203	Case-Trans. LH.....	1
	114679	Case-Trans. RH Note: this case half has recess in axle housing for oil seal.....	1
3	908043	Bolt 3/8-16 x 3 1/2.....	1
4	908038	Bolt 3/8-16 x 2.....	5
5	915113	Eslok Nut 3/8-16.....	6
6	943460	Allen Hd. Pipe Plug 1/4.....	1
7	943420	Sq. Hd. Pipe Plug 3/8.....	1
8	111199	Ball Brg. 40mm I.D.	2
9	1532	Needle Bearing 1 I.D.	2
10	1542	Needle Bearing 5/8 I.D.	1
11	1528	Needle Bearing 1 I.D.	2
12	1529	Needle Bearing 3/4 I.D.	1
13	100442	Seal-Input Shaft 5/8 I.D.	1
14	100863	Seal-Axle 1 I.D. x 1-1/2 O.D.	2
	114677	Seal-Axle 1 I.D. x 1-1/4 O.D.	2
15	3915	Locating Pin.....	2
16	1523	Needle Bearing 3/4 I.D.	1
17	1531	Needle Bearing 5/8 I.D.	1
18	100441	Seal-Brake shaft 3/4 I.D.	1
19	7201	Input Shaft.....	1
20	7418	Thrust Washer.....	1
21	7204	Gear.....	1
22	1518	Needle Bearing 5/8 I.D.	4
23	5175	Gear.....	1
24	7205	Sliding Gear.....	1
25	7206	Reduction Gear.....	1
26	7207	Needle Bearing 3/8 I.D.	2
27	7208	Shaft-Reduction Gear.....	1
28	1243	Plug Cup.....	1
29	5173	Gear 2nd and 3rd.....	1
30	5174	Gear 1st and Reverse.....	1
31	5615	Shift Rail-Front.....	1
32	5616	Shift Rail-Rear.....	1
33	3503	Shift Fork.....	2
34	933156	Spirol Pin 1/8 x 1.....	2
35	5614	Shift Pin.....	1



SECTION 3 - 8-SPEED TRANSMISSION

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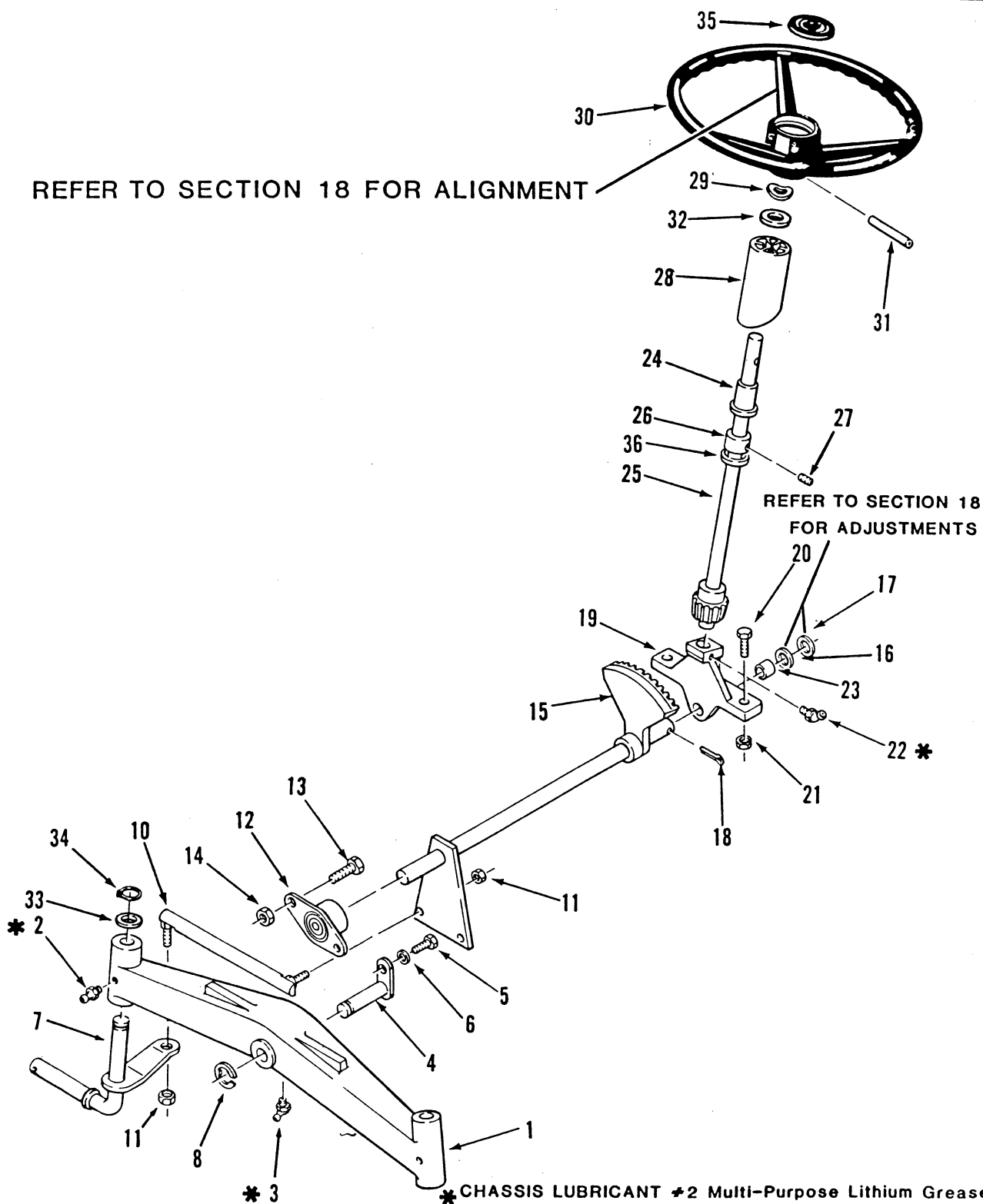
ITEM	PART NUMBER	DESCRIPTION	Quantity
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Figure 3-2

MECHANICAL TRANSMISSION - 8-SPEED (CONTINUED)

36	7269	Cluster Gear With Bushings.....	1
37	1504	Bronze Bushing.....	2
38	3527	Reduction Gear.....	1
39	9840	Cluster Shaft.....	1
40	937089	Woodruff Key 3/16 x 3/4.....	1
41	4204	Gear-Reverse Idler.....	1
42	3909	Pin-Reverse Idler.....	1
43	1516	Bushing-Reverse Idler.....	1
44	106447	Dipstick Assembly.....	1
45	106448	Nipple-Transmission Fill.....	1
46	3912	Transmission Case Gasket.....	1
47	1239	Special Set Screw.....	1
48	915111	Nut 1/4-20.....	1
49	3577	Dust Cover.....	1
50	9547	Thrust Washer.....	1
51	102974	Gear Assembly.....	1
52	101625	Gear 11 tooth.....	1
53	101626	Gear 44 Tooth.....	1
54	108758	Gear Shift Knob.....	2
55	3517	Detent Ball 1/4 Diameter.....	2
56	106030	Detent Spring.....	1
57	7213	Detent Bolt.....	1
58	7214	Shift Shaft Hi-Low Range.....	1
59	7209	Shift Fork Hi-Low Range.....	1
60	3517	Detent Ball 1/4 Diameter.....	1
61	106030	Detent Spring.....	1
62	110727	Shift Lever Hi-Low Range.....	1
63	933184	Spirol Pin 3/16 x 3/4.....	1
64	111197	Diff. End Cap.....	2
65	908138	Bolt 3/8-16 x 3 1/4 (Grade 5).....	4
66	107374	Special Washer-Case Hardened.....	4
67	108881	Nut 3/8-16 High-Tensile.....	4
68	105063	Differential Ring Gear 43Tooth.....	1
70	101623	Differential Pinion Gear 11 Tooth.....	4
71	3908	Differential Axle Gear.....	2
72	5961	Rear Axle (1" dia.).....	2
73	7939	Special Snap Ring 300-Series Only.....	2
74	110725	Gear Shift Lever.....	1
75	1001	Hi-Lo Range Shift Knob.....	1
76	A-1392	Repair Manual.....	X

REFER TO SECTION 18 FOR ALIGNMENT



REFER TO SECTION 18
FOR ADJUSTMENTS

* CHASSIS LUBRICANT #2 Multi-Purpose Lithium Grease
Service Interval 25 Hrs.



SECTION 5 - FRONT AXLE AND STEERING

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ITEM	PART NUMBER	DESCRIPTION	Quantity
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Figure 5-1
FRONT AXLE AND STEERING

1	5638	Front Axle.....	1
2	1030	Grease Fitting Straight.....	2
3	1481	Grease Fitting 45°	1
4	6216	Pin and Plate.....	1
5	908015	Bolt 5/16-18 x 1/2.....	1
6	920082	Lockwasher 5/16.....	1
7	113380	Front Spindle RH.....	1
	113379	Front Spindle LH.....	1
8	5618	E-Ring.....	1
10	102592	Tie Rod RH.....	1
	102593	Tie Rod LH.....	1
11	915002	Eslok Nut 3/8-24.....	4
12	6472	Flanged Bearing.....	1
13	908032	Bolt 3/8-16 x 3/4.....	2
14	915113	Eslok Nut 3/8-16.....	2
15	114198	Lower Steering Shaft.....	1
16	5210	Shim Washer 3/4 x .015.....	X
17	1278	Shim Washer 3/4 x .050.....	X
18	932035	Cotter Pin 3/16 x 1-1/4.....	1
19	109733	Steering Support.....	1
20	908036	Bolt 3/8-16 x 1-1/2.....	2
21	915113	Eslok Nut 3/8-16.....	2
22	1481	Grease Fitting 45 Degree.....	1
23	6397	Bearing-Lower Steering Shaft.....	1
24	109189	Bearing-Upper Steering Shaft.....	1
25	112162	Upper Steering Shaft.....	1
26	1085	Collar.....	1
27	909848	Eslok Set Screw 1/4-20 x 1/4.....	1
28	113443	Steering Tube.....	1
29	7896	Bowed Washer.....	1
30	102715	Steering Wheel.....	1
31	933221	Spirol Pin 1/4 x 2.....	1
32	109262	Special Washer.....	X
33	1278	Washer.....	2
34	104822	Retaining Ring.....	2
35	102856	Steering Wheel Insert.....	1
36	111646	Grip Ring.....	1

SECTION 6 - CLUTCH, BRAKE AND MOTION CONTROL LINKAGE

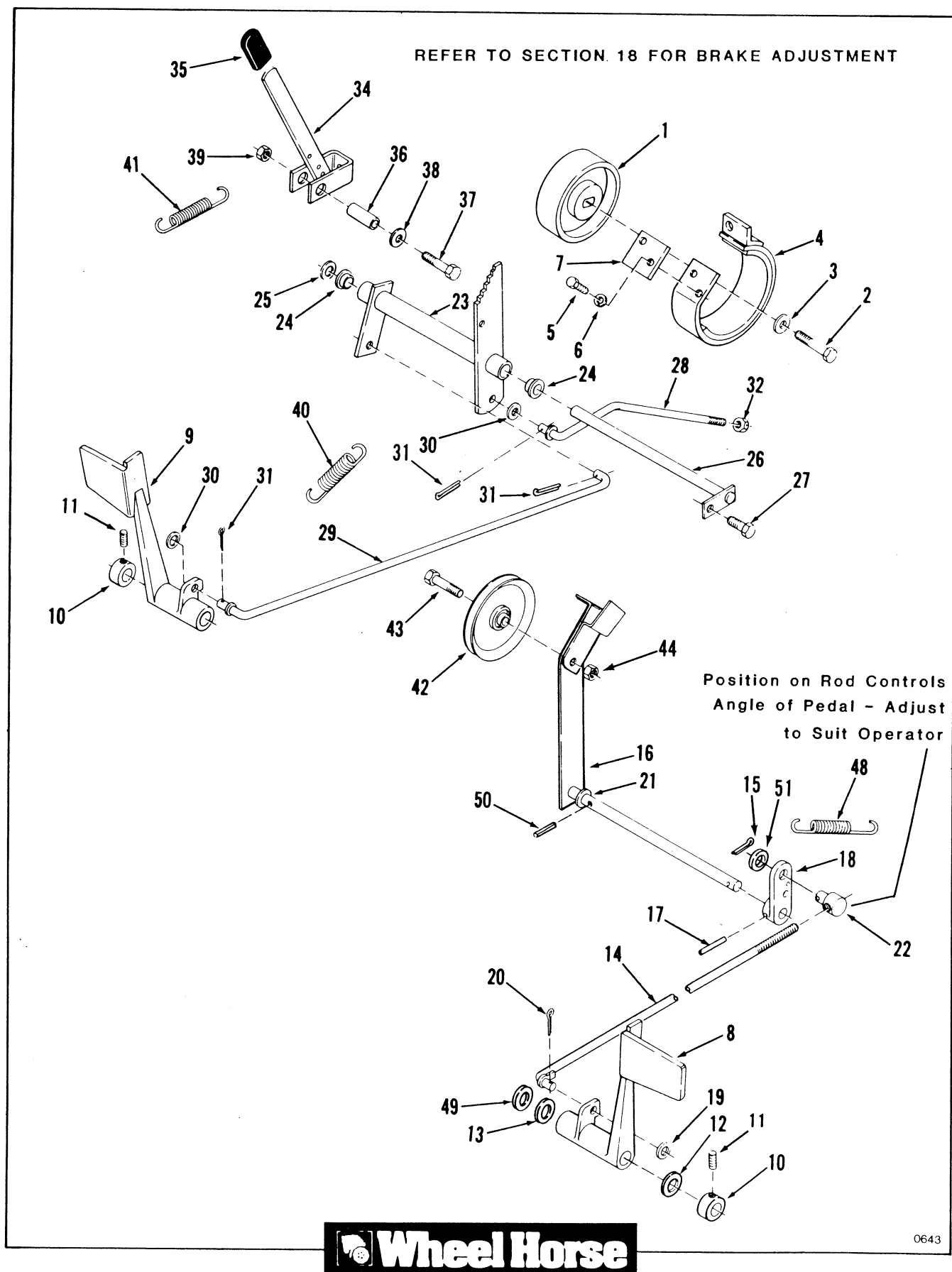


Figure 6-1 Clutch, Brake and Speed Control Linkage

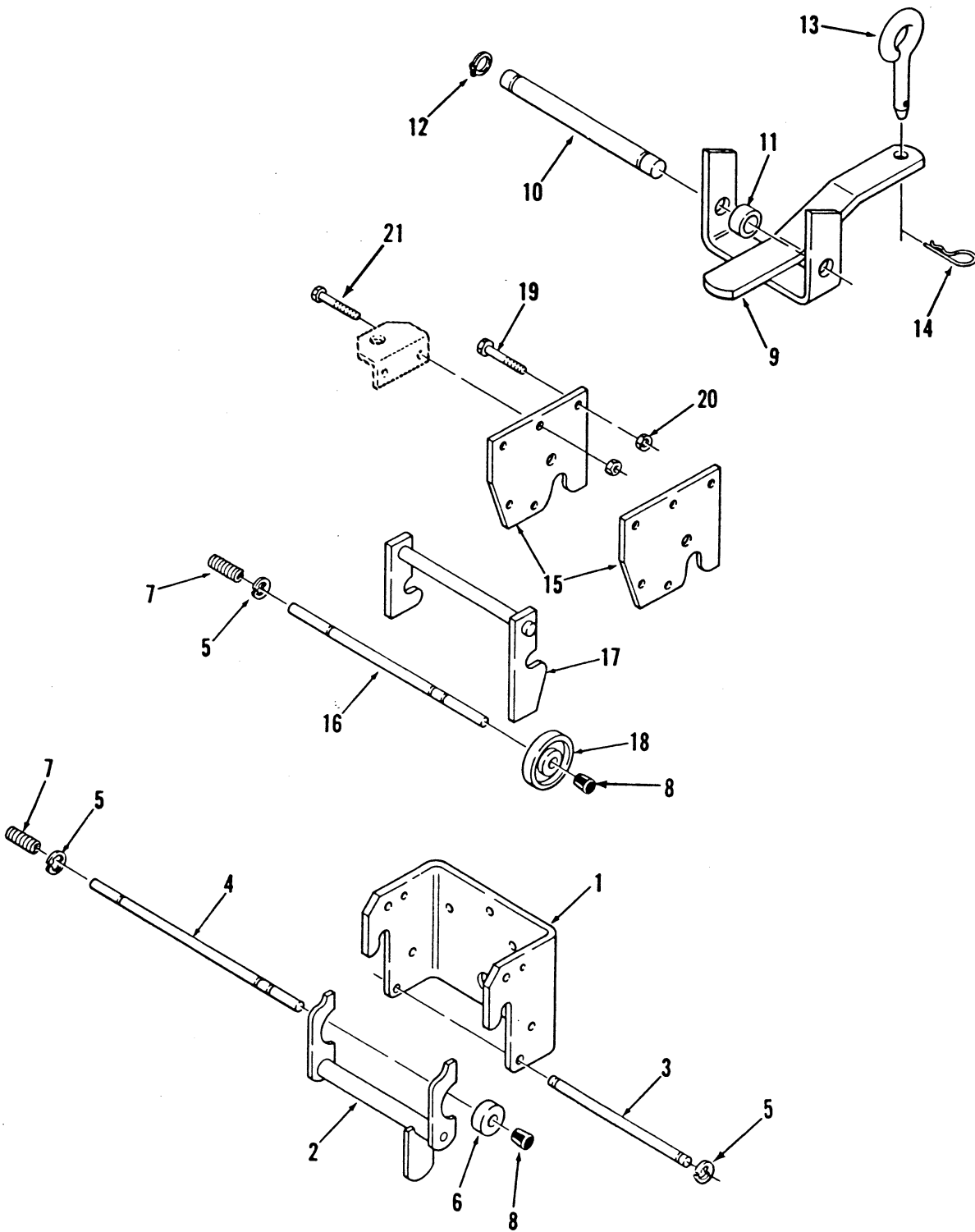
SECTION 6 - CLUTCH, BRAKE AND MOTION CONTROL LINKAGE

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ITEM	PART NUMBER	DESCRIPTION	Quantity
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Figure 6-1
CLUTCH, BRAKE AND SPEED CONTROL LINKAGE

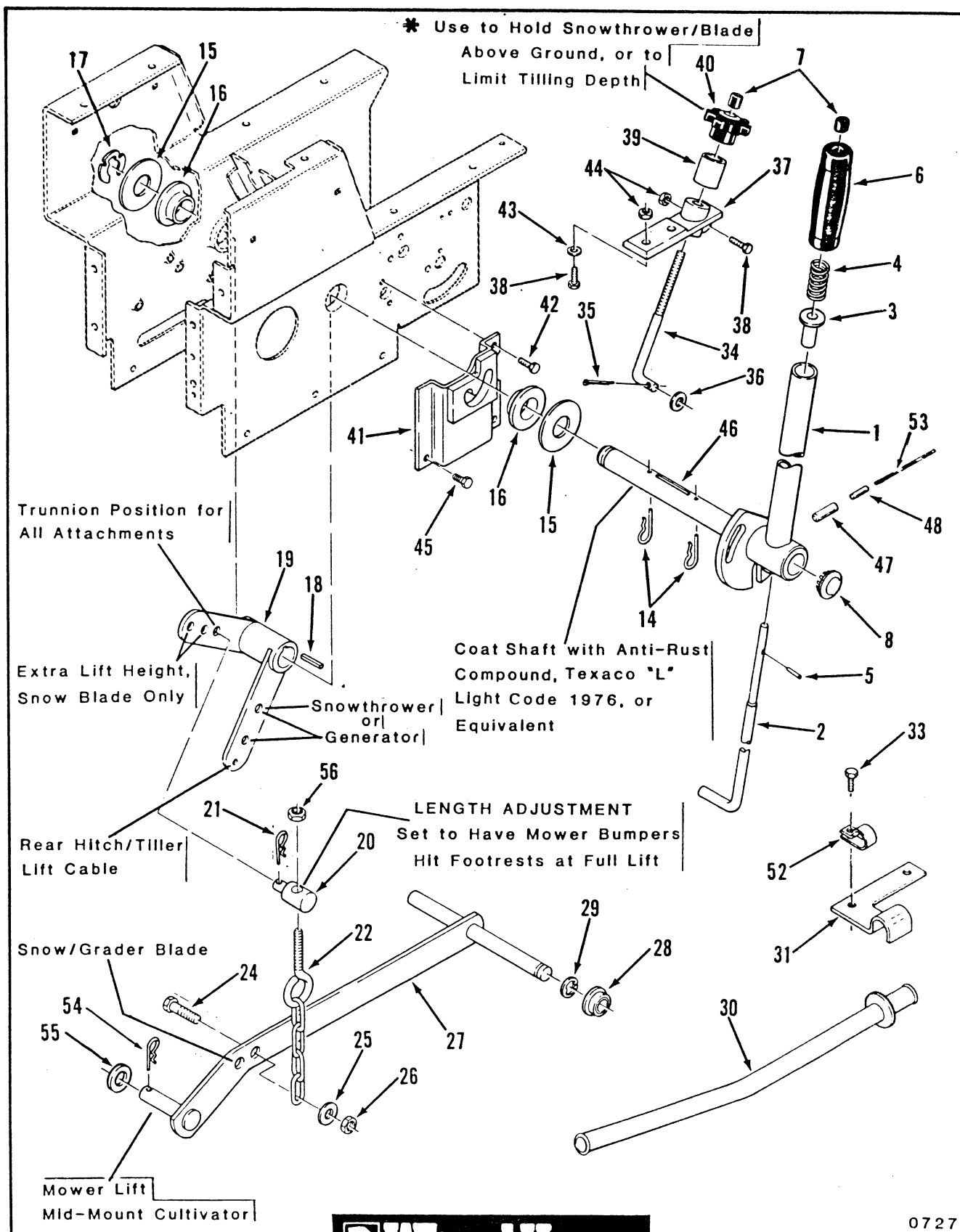
1	106719	Brake Drum.....	1
2	110234	Nylok Bolt 3/8-16 x 3/4.....	1
3	2844	Special Washer.....	1
4	9593	Brake Band.....	1
5	908002	Bolt 1/4-20 x 5/8.....	2
6	920081	Lockwasher 1/4.....	2
7	9598	Back-Up Plate.....	1
8	110902	Pedal-Clutch.....	1
9	110901	Pedal-Brake.....	1
10	1085	Collar.....	2
11	909848	Eslok Set Screw 1/4-20 x 1/4.....	2
12	7896	Bowed Washer.....	1
13	1278	Shim Washer 3/4 x .050.....	X
14	103347	Clutch Rod.....	1
15	932008	Cotter Pin 3/32 x 3/4.....	1
16	110507	Clutch Idler Arm.....	1
17	933190	Spirol Pin 3/16 x 1-1/4.....	1
18	105896	Clutch Rod Arm.....	1
19	920248	Nylon Washer 3/8.....	3
20	932016	Cotter Pin 1/8 x 3/4.....	2
21	3765	Shim Washer 1/2 x .030.....	X
22	101161	Trunnion-Clutch Rod.....	1
23	103543	Bell Crank-Brake Linkage.....	1
24	7879	Bushing.....	2
25	920011	Washer 1/2 SAE.....	1
26	106417	Rod-Bell Crank Pivot.....	1
27	926694	S.T. Bolt 5/16-18 x 5/8.....	1
28	105900	Brake Rod-Rear.....	1
29	105886	Brake Rod-Front.....	1
30	920248	Nylon Washer.....	2
31	932016	Cotter Pin.....	3
32	915663	E.S. Nut 3/8-16.....	1
34	106451	Parking Brake Lever.....	1
35	6820	Grip.....	1
36	102025	Spacer.....	1
37	908037	Bolt 3/8-16 x 1-3/4.....	1
38	920009	Washer 3/8 SAE.....	1
39	102809	Special Nut.....	1
40	107677	Spring-Brake Return.....	1
41	103628	Spring-Parking Brake Return.....	1
42	7451	Idler Pulley.....	1
43	106193	Special Bolt 3/8-16 x 1-1/2.....	1
44	915113	Eslok Nut 3/8-16.....	1
48	108035	Spring-Clutch Return.....	1
49	920225	Special Washer.....	1
50	933267	Spirol Pin 5/32 x 1-1/4.....	1
51	920009	Washer 3/8 SAE.....	1



SECTION 7 - HITCHES AND LIFT LINKAGE

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 7-1 HITCHES			
1	101711	Front Hitch Housing.....	1
2	105859	Latch-Front Hitch.....	1
3	101750	Rod.....	1
4	101751	Rod-Front Hitch Lock.....	1
5	105797	E-Ring.....	8
6	101707	Lock.....	1
7	8616	Spring.....	2
8	105316	Cap-Lock Rod.....	2
9	1644	Drawbar Hitch.....	1
10	105269	Shaft-Drawbar Hitch.....	1
11	979120	Spacer.....	2
12	5618	E-Ring.....	2
13	106634	Hitch Pin.....	1
14	933505	Hairpin Cotter.....	1
15	102644	Mid Hitch Plate.....	2
16	102672	Rod-Mid Hitch Lock.....	1
17	102639	Latch-Mid Hitch.....	1
18	101017	Lock.....	1
19	908034	Bolt 3/8-16 x 1.....	3
20	915113	Eslok Nut 3/8-16.....	5
21	908035	Bolt 3/8-16 x 1-1/4.....	2



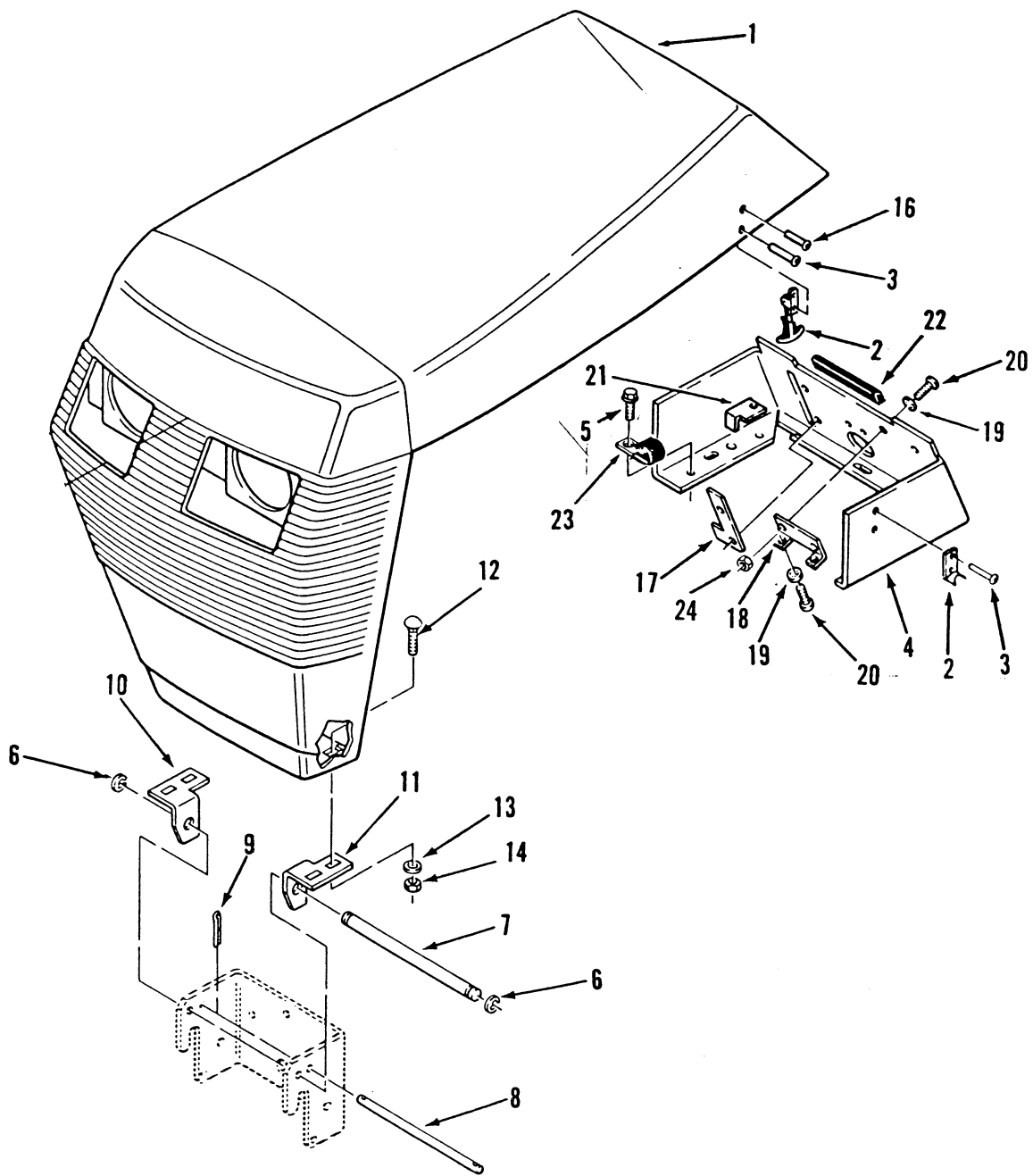
SECTION 7 - HITCHES AND LIFT LINKAGE

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ITEM	PART NUMBER	DESCRIPTION	Quantity
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Figure 7-2
MANUAL LIFT LINKAGE

1	108563	Lift Lever (Includes Items 46, 47, 48).....	1
2	106257	Latch Rod.....	1
3	8130	Spring Retainer.....	1
4	3624	Spring.....	1
5	933148	Spirol Pin 1/8 x 1/2.....	1
6	6542	Grip-Lift Lever.....	1
7	105316	Rod Cap.....	1
8	4944	Plug Button.....	1
14	933507	Hairpin Cotter.....	2
15	920017	Washer 1 in. SAE.....	3
16	106269	Bushing.....	2
17	106414	Retainer.....	1
18	1121	Key 1/4 Sq. x 1-3/16.....	1
19	106218	Bellcrank.....	1
20	6739	Trunnion.....	1
21	933504	Hairpin Cotter.....	1
22	106522	Lift Chain.....	1
24	908019	Bolt 5/16-18 x 1.....	1
25	920008	Washer 5/16.....	1
26	915112	Eslok Nut 5/16-18.....	1
27	113445	Lift Bar.....	1
28	6229	Bearing.....	1
29	5701	E-Ring.....	1
30	105845	Tube-Rear Lift Cable.....	1
31	108903	Clamp-Tube.....	1
33	908034	Eslok Bolt 3/8-16 X 1.....	2
34	110653	Rod-Height Control Optimal.....	1
35	932016	Cotter Pin 1/8 x 3/4 Optimal.....	1
36	920040	Washer 7/16 US Optimal.....	1
37	106345	Height Control Casting Optimal.....	1
38	908019	Bolt 5/16-18 X 1 Optimal.....	3
39	106258	Sleeve 414,16.....	1
40	5280	Knob-Height Control 414,416.....	1
41	106411	Latch Bracket.....	1
42	926694	S.T. Bolt 5/16-18 x 5/8.....	1
43	920008	Washer 5/16 SAE 414,416.....	2
44	915112	Eslok Nut 5/16-18 414,416.....	3
45	926696	S.T. Bolt 5/16-18 x 7/8.....	2
46	108565	Shaft.....	1
47	933268	Spirol Pin.....	1
48	933230	Roll Pin.....	1
52	8830	Clamp.....	1
53	111154	Lock Wire.....	1
54	933505	Hairpin Cotter.....	1
55	920011	Washer 1/2 SAE.....	1
56	915663	E.S. Nut 3/8-16.....	1



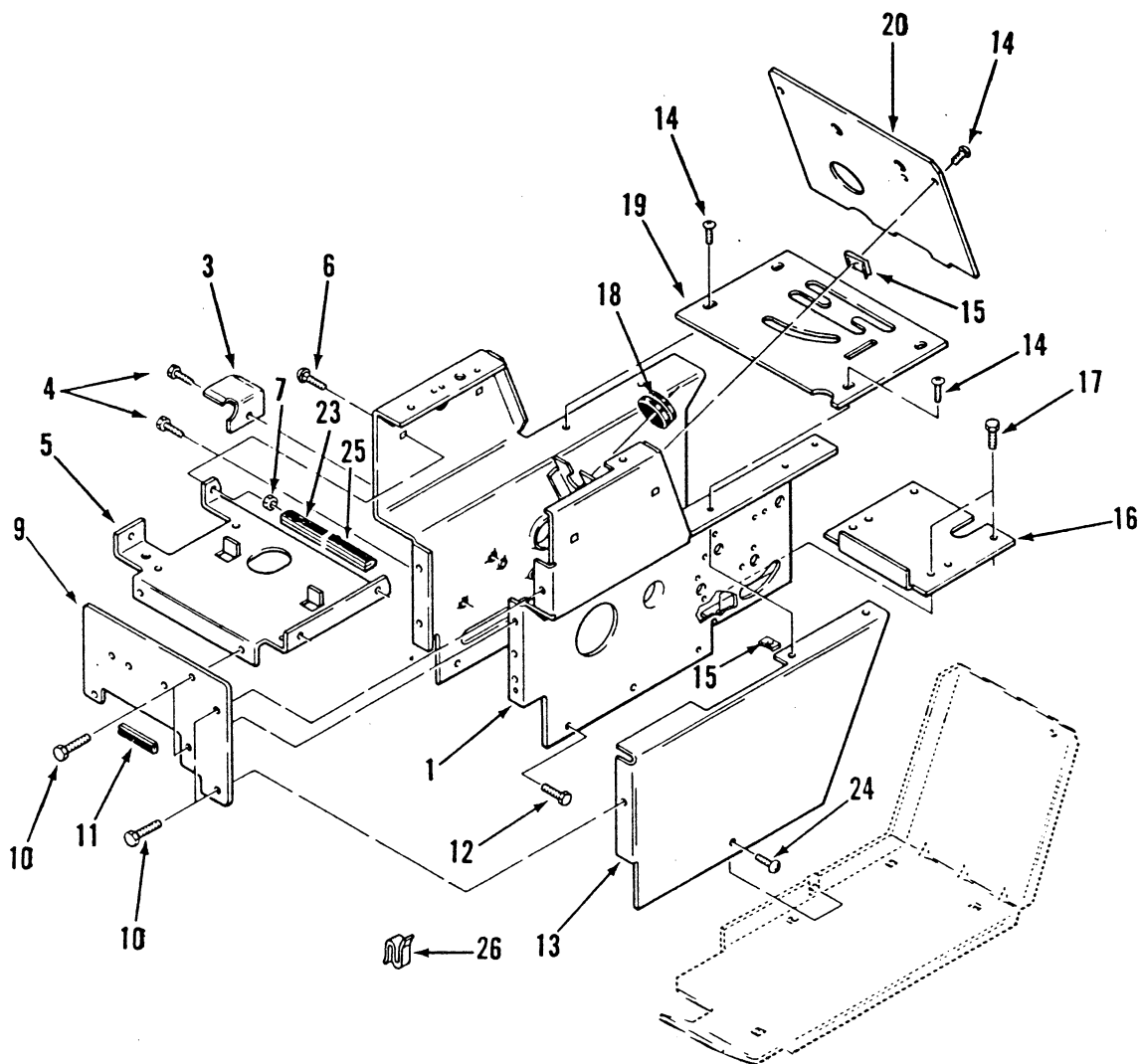
SECTION 8 - SHEET METAL AND COVERS

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ITEM	PART NUMBER	DESCRIPTION	Quantity
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Figure 8-1
SHEET METAL AND COVERS

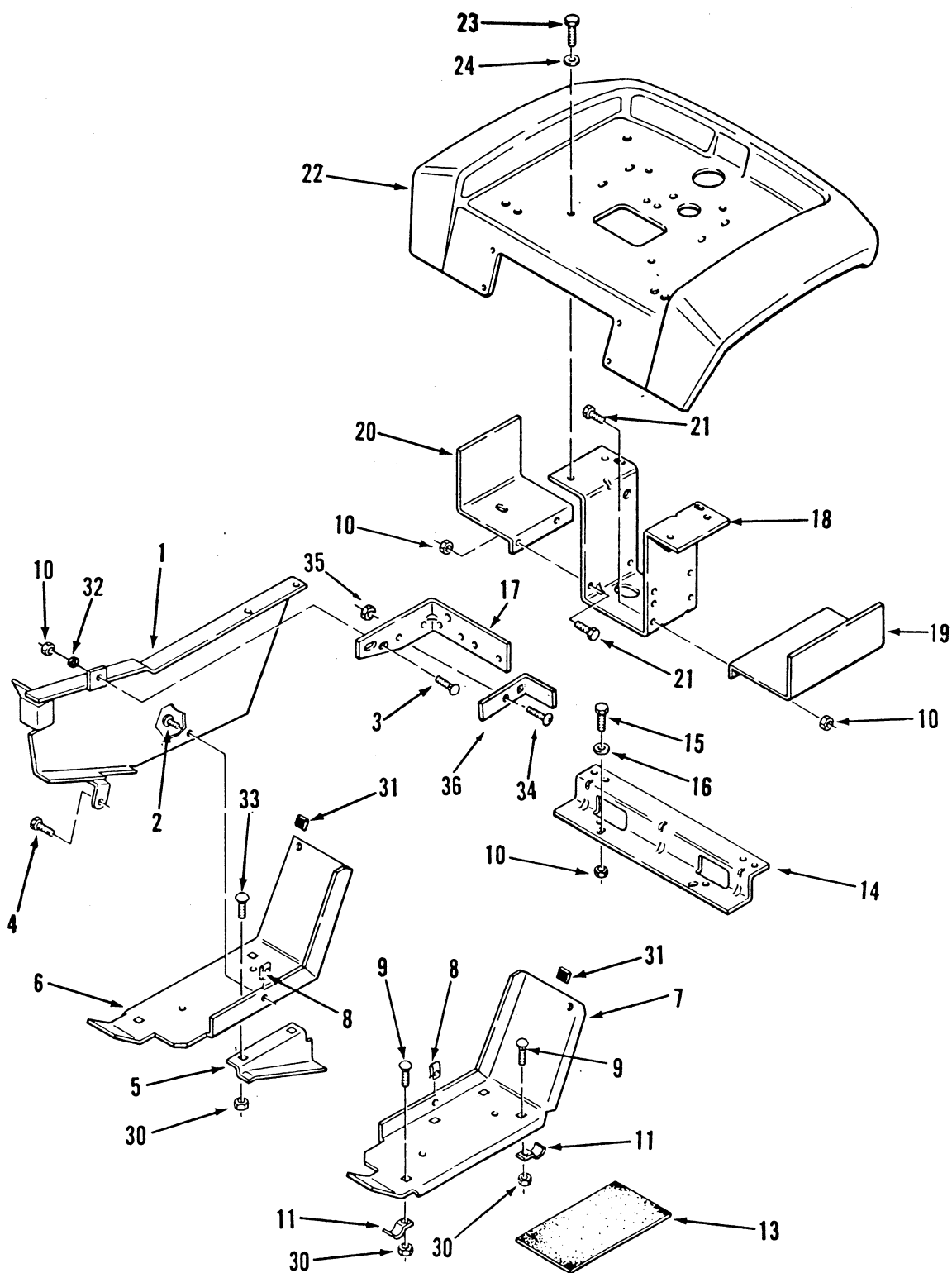
1	112358	Hood.....	1
2	106825	Hood Latch (includes 109236 Handle Ass'y & 109237 Latch Keeper).....	2
3	923785	Pop Rivet 1/8 x .294.....	4
4	111271	Console 312, 414, 416.....	1
5	926694	Washer Hd. S.T. Bolt 5/16-18 x 5/8.....	3
6	105797	E-Ring.....	2
7	101710	Pivot Rod.....	1
8	101850	Hood Stop Rod.....	1
9	932000	Cotter Pin 1/16 x 1/2.....	2
10	109145	Bracket RH.....	1
11	109146	Bracket LH.....	1
12	900015	Carriage Bolt 1/4-20 x 3/4.....	4
13	920007	Washer 1/4 SAE.....	4
14	915111	Eslok Nut 1/4-20.....	4
16	923784	Pop Rivet 1/8 x .232.....	2
17	111182	Throttle Stop.....	1
18	112506	Bracket.....	1
19	920150	Internal Tooth Lockwasher nr. 6.....	4
20	9107622	Screw nr. 6-32 x 3/8 Black.....	4
21	112415	PTO Stop.....	1
22	111757	Console Edging.....	1
23	111392	J-Clip.....	1
24	915960	Nut nr. 6-32.....	4



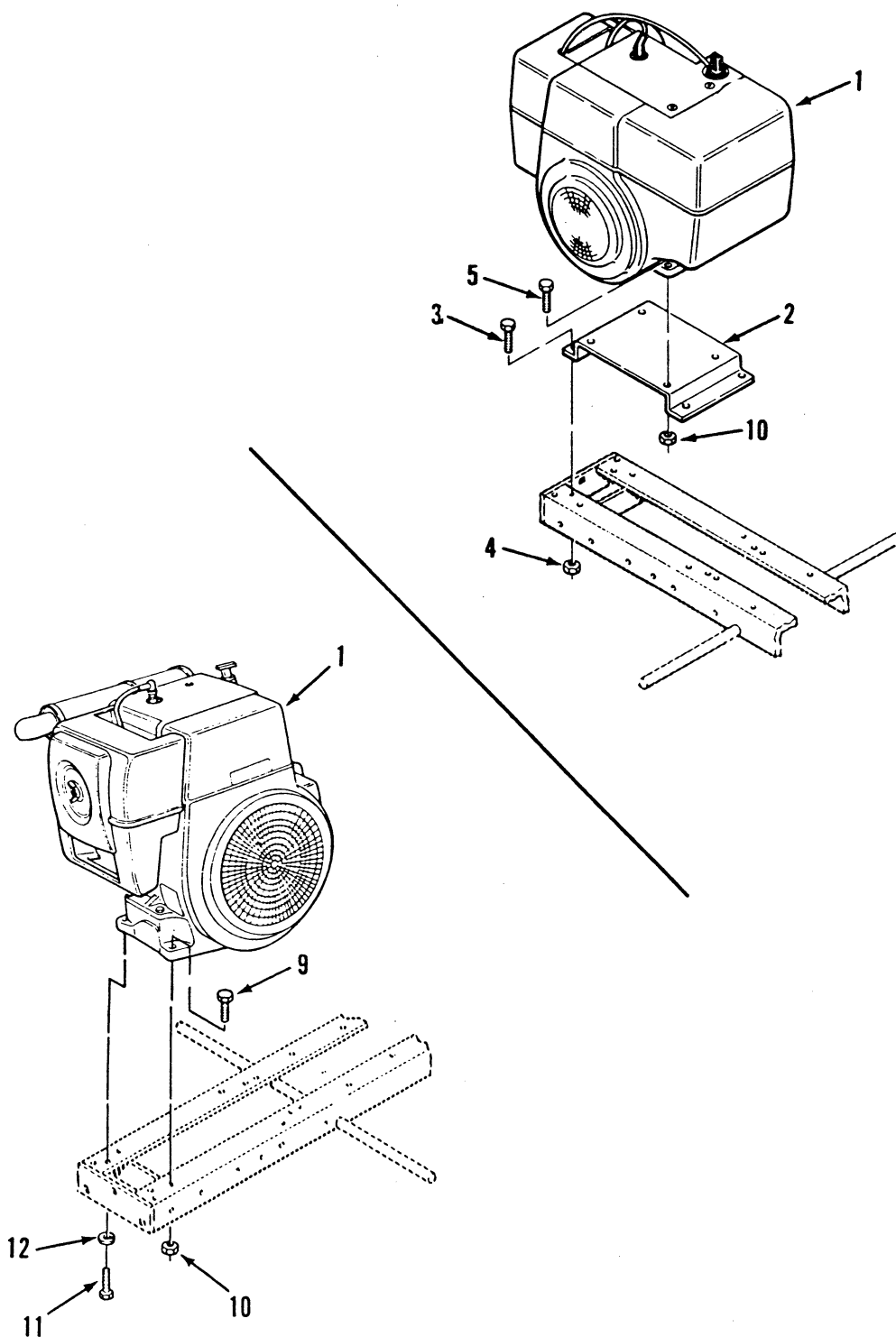
ITEM	PART NUMBER	DESCRIPTION	Quantity
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Figure 8-2
SHEET METAL AND COVERS

1	109765	Hoodstand.....	1
3	106261	Belt Bracket.....	1
4	926694	S.T. Bolt 5/16-18 x 5/8.....	1
5	110094	Battery Support Bracket.....	1
6	900035	Carriage Bolt 5/16-18 x 1/2.....	4
7	915112	Eslok Nut 5/16-18.....	4
9	106342	Front Plate.....	1
10	926694	S.T. Bolt 5/16-18 x 5/8.....	6
11	106454	Edge Trim.....	1
12	926694	S.T. Bolt 5/16-18 x 5/8.....	4
	926696	S.T. Bolt 5/16-18 x 7/8.....	2
13	109323	Side Cover LH.....	1
14	9108372	Screw 1/4-20 x 5/8 Black.....	6
15	107069	Speed Nut.....	6
16	106250	Dust Cover.....	1
17	926694	S.T. Bolt 5/16-18 x 5/8.....	4
18	104248	Grommet.....	1
19	111387	Shift Cover Plate.....	1
20	111033	Hoodstand Plate.....	1
23	110142	Edge Trim.....	1
24	910837	Screw 1/4-20 x 5/8.....	1
25	106454	Edge Trim.....	1
26	3023	Clip.....	1



ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 8-3 SHEET METAL AND COVERS			
1	107975	Belt Guard.....	1
2	910837	Screw 1/4-20 x 5/8.....	2
3	900037	Carriage Bolt 5/16-18 x 3/4.....	1
4	926694	S.T. Bolt 5/16-18 x 5/8.....	1
5	106352	Lower Belt Guard.....	1
6	106222	Foot Rest RH.....	1
7	106223	Foot Rest LH.....	1
8	107069	Speed Nut.....	2
9	900037	Carriage Bolt 5/16-18 x 5/8.....	6
10	915112	Eslok Nut 5/16-18.....	7
11	7456	Clamp.....	4
13	110636	Footrest Pad.....	2
14	107951	Fender Bracket-Front.....	1
15	908017	Bolt 5/16-18 x 3/4.....	2
16	920008	Washer 5/16 SAE.....	2
17	108823	Support Bracket-Belt Guard - 312-8 Only.....	1
	109554	Support Bracket-Belt Guard - 316-8 Only.....	1
18	108897	Fender Support Bracket.....	1
19	108464	Fuel Tank Support LH.....	1
20	106236	Fuel Tank Support RH.....	1
21	908016	Bolt 5/16-18 x 5/8.....	4
22	110960	Fender.....	1
23	926694	S.T. Bolt 5/16-18 x 5/8.....	4
24	920008	Washer 5/16 SAE.....	4
30	915662	Eslok Nut 5/16-18.....	6
31	518211	Bumper.....	2
32	108457	Push Nut.....	1
33	900214	Carriage Bolt 5/16-18 x 3/4.....	2
34	913112	Machine Screw nr. 10-24 x 5/8 - 312-8 Only.....	2
35	915740	E.S. Nut nr. 10-24 - 312-8 Only.....	2
36	111535	Fuse Holder - 312-8 Only.....	1

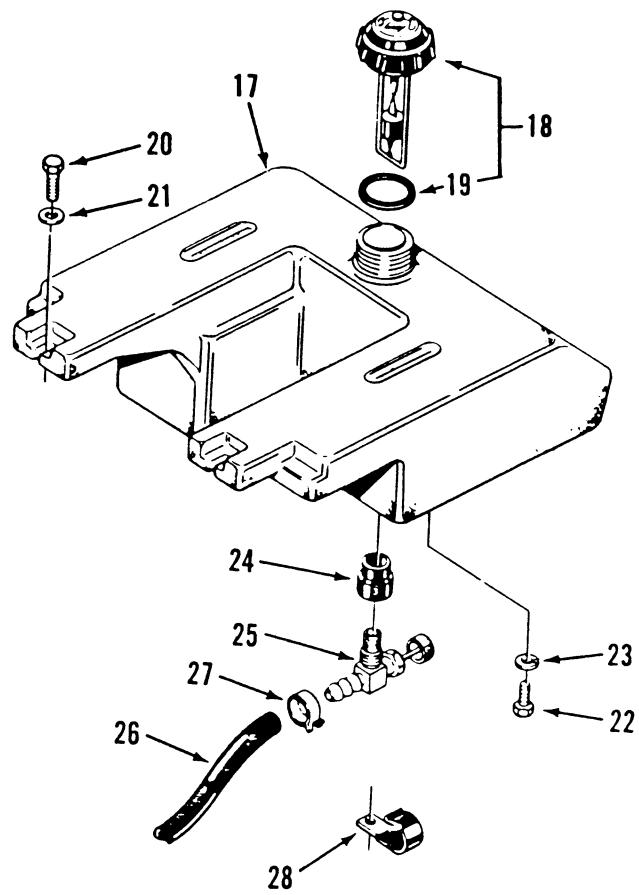


REFER TO KOHLER MANUALS FOR ADDITIONAL SERVICE & ADJUSTMENT PROCEDURES

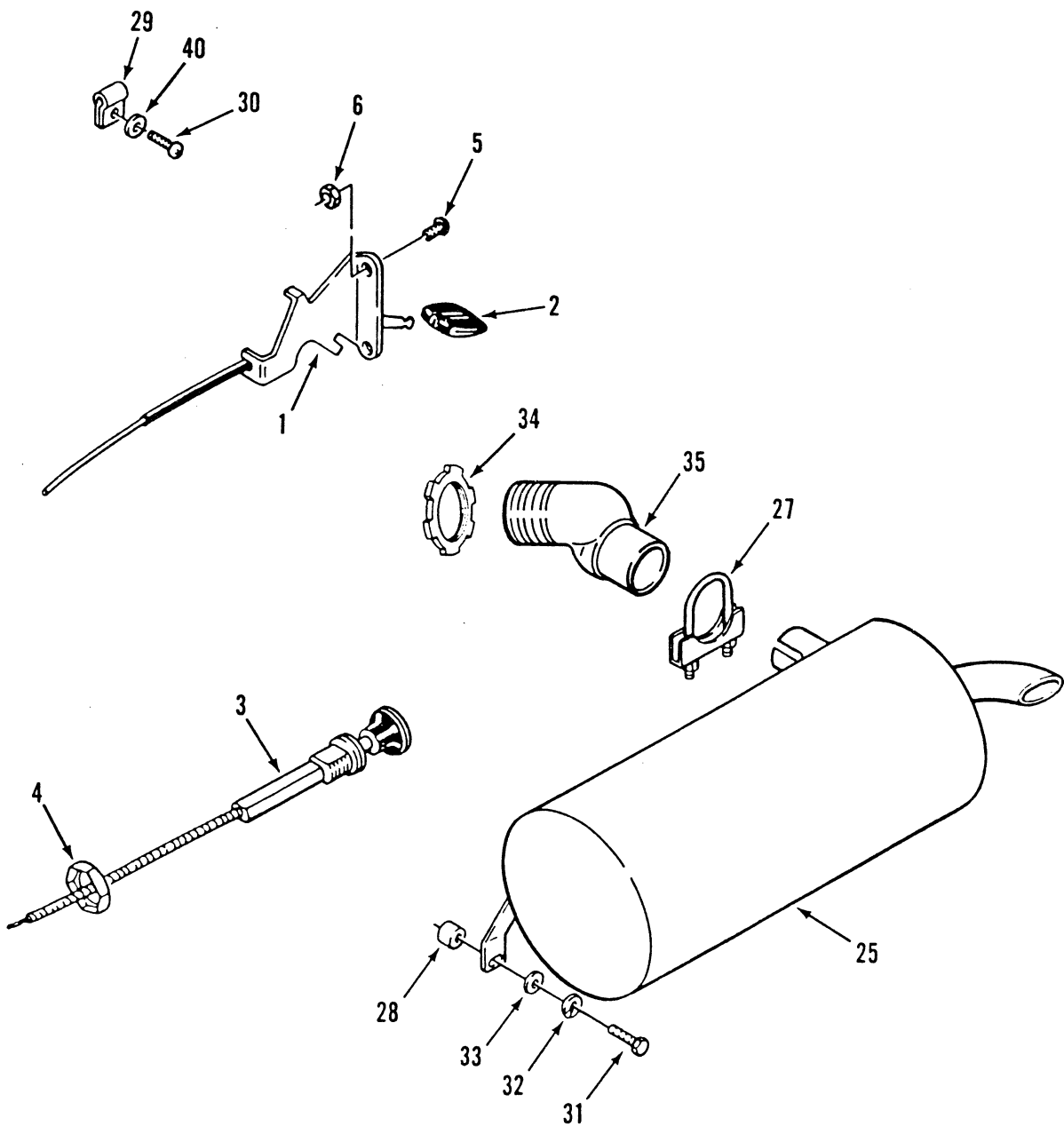


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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 9-1 ENGINES			
1	113489	Engine 16HP - Onan P-216-316-8 Only.....	X
	114160	Engine 12HP - Kohler M-12-S 312-8 Only.....	X
2	113875	Engine Plate 316-8 Only.....	1
3	908036	Bolt 3/8-16 X 1 1/2 - 316-8 Only.....	4
4	915663	Nut 3/8-16 E.S. 316-8 Only.....	4
5	908035	Bolt 3/8-16 x 1 1/4 316-8 Only.....	4
9	908036	Bolt 3/8-16 x 1 1/2 312-8 Only.....	2
10	915663	Nut 3/8-16 E.S. 312-8 Only.....	2
11	908034	Bolt 3/8-16 x 1 312-8 Only.....	2
12	920083	Lockwasher 3/8.....	X
	114213	Relay mounting Plate 316-8 Only(Not Illustrated).....	1
	908034	Bolt 3/8-16 x 1 - 316-8 Only(Not Illustrated).....	1
	915663	Nut 3/8-16 E.S. 316-8 Only(Not Illustrated).....	1



ITEM	WHEEL PART	HORSE NUMBER	VENDOR NUMBER	PART	DESCRIPTION	Quantity
Figure 10-1						
FUEL SYSTEMS - 312-8						
17	106234		-----		Fuel Tank.....	1
18	106945		-----		Fuel Cap & Gauge (includes	
					item 19).....	1
19	106931		-----		Rubber Seal.....	1
20	926697		-----		S.T. Bolt 5/16-18 x 1.....	2
21	920039		-----		Washer 3/8.....	2
22	908016		-----		Bolt 5/16-18 x 5/8.....	3
23	920082		-----		Lockwasher 5/16.....	1
24	104047		-----		Rubber Bushing.....	1
25	104048		-----		Fuel Shut-Off Valve.....	1
26	110894		-----		Fuel Line 62 in.....	1
27	108898		-----		Corbin Clamp.....	2
28	950154		-----		Hose Clamp 1/2 in. (1.3 cm) Dia.....	2
	105490		-----		Clamp 1 in. (2.5 cm) Diameter.....	1



SECTION 10 - THROTTLE, CHOKE & EXHAUST

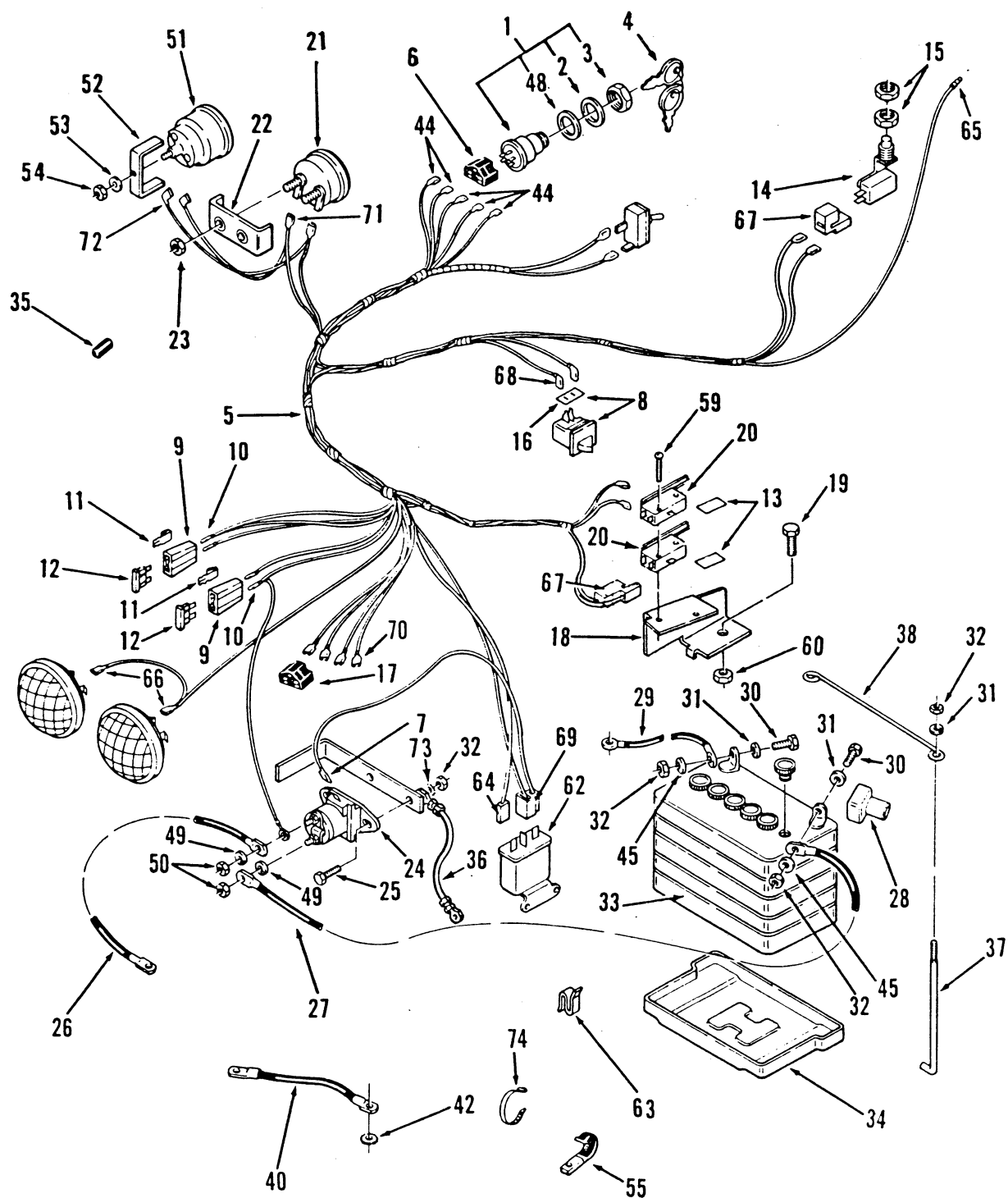
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ITEM	PART NUMBER	DESCRIPTION	Quantity
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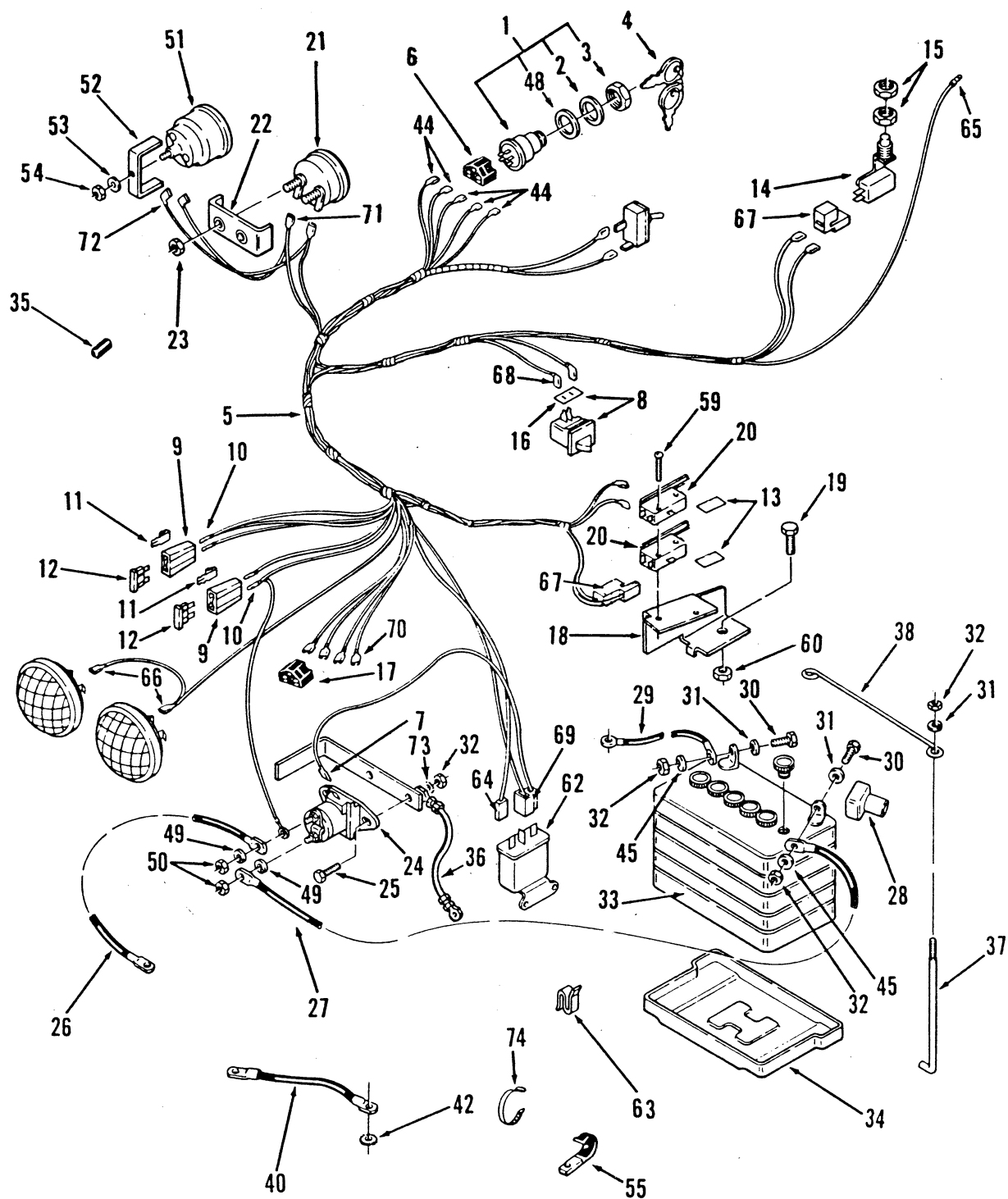
Figure 10-2

THROTTLE, CHOKE & EXHAUST - 312-8

1	112199	Throttle Control 312-8 Only.....	1
	113856	Throttle Control 316-8 Only.....	1
2	108917	Knob-Throttle Control.....	1
3	112214	Choke Control 312-8 Only.....	1
	113857	Choke Control 316-8 Only.....	1
4	109530	Palnut.....	1
5	9107922	Screw nr. 10-24 X 1/2 Black.....	2
6	915740	Lock Nut nr. 10-24.....	2
25	112213	Muffler 312.....	1
27	106858	Clamp 312.....	1
28	6876	Spacer 312.....	1
29	KH10344	Cable Clamp 312 (vendor nr. 48 154 01).....	1
30	KH10610	Hex Wash. Hd. Screw 1/4-20 x 7/16 (vendor nr. X-67-83).....	1
31	908020	Bolt 5/16-18 x 1-1/4 - 312.....	1
32	920082	Lock Washer 5/16 - 312.....	1
33	920008	Washer 5/16 - 312.....	1
34	KH10535	Locknut 312 (vendor nr. AC-1536).....	1
35	KH10278	Elbow 312 (vendor nr. 45 054 01).....	1
40	KH10570	Washer 1/4 312 (vendor nr. X-25-72).....	1



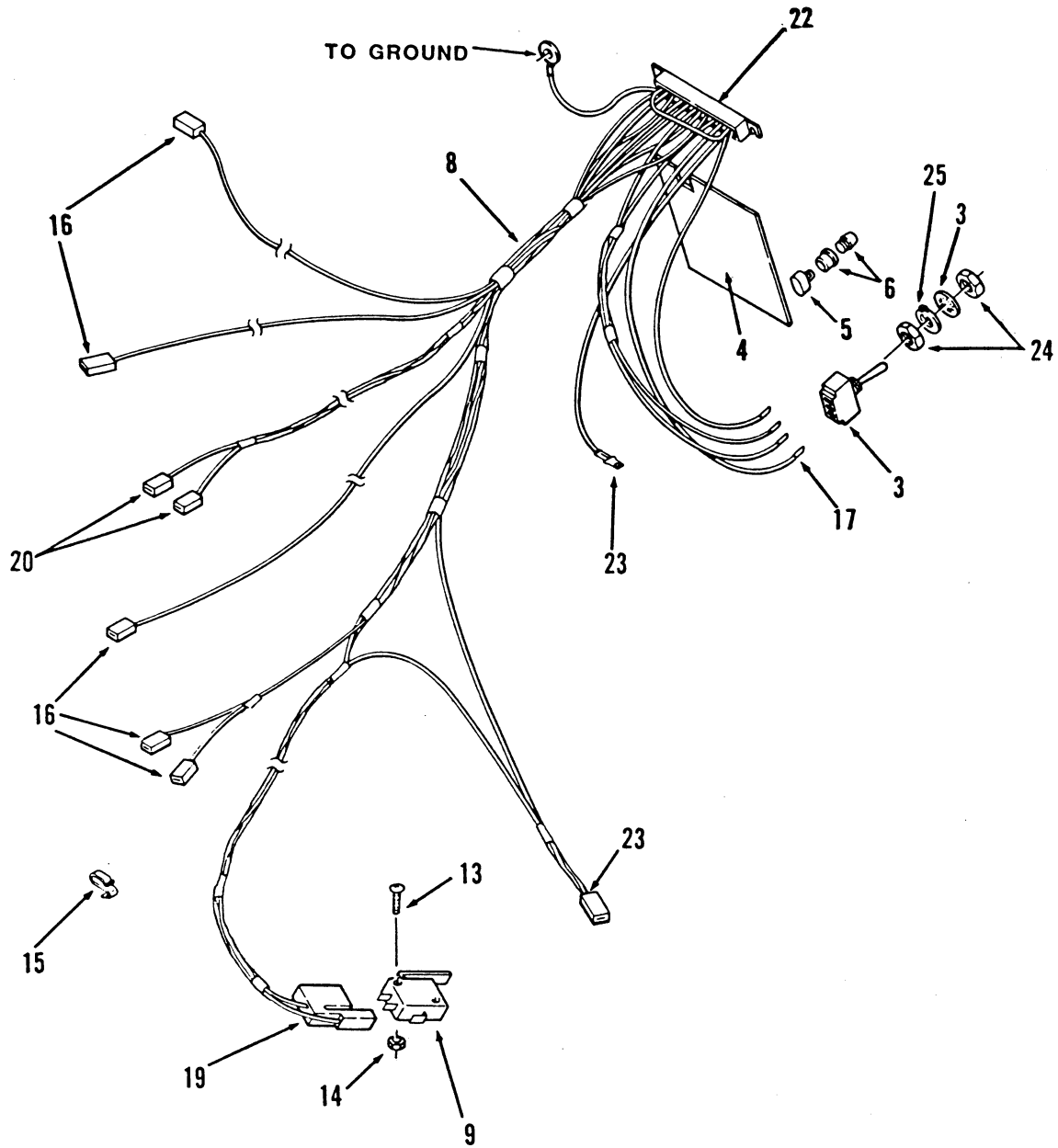
ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 11-1 ELECTRICAL SYSTEM			
1	111216	Ignition Switch (W/101884 & 920160) - 316-8 Only.....	1
	111215	Ignition Switch (W/101884 & 920160) - 317-8 Only.....	1
2	920160	Internal Tooth Lockwasher 5/8.....	1
3	101884	Special Nut.....	1
4	111220	Ignition Key - Set of 2.....	1
	111214	Padded Ignition Key - Set of 2.....	1
5	114114	Wiring Harness Assembly 312.....	1
	114290	Wiring Harness Assembly 316.....	1
6	105302	Connector Body - Ignition Switch - Part of 5.....	1
7	518105	Terminal - Part of 5.....	1
8	110970	Clutch/Brake Interlock Switch w/ item 16.....	1
9	109117	Single Fuse Body - Part of 5.....	1
10	108895	One-Way Terminal - Part of 5.....	1
11	109445	Fuse Body Clip - Part of 5.....	1
12	109355	Fuse 15 Amp - ATO or ATC.....	1
	109102	Fuse 25 Amp - ATO or ATC.....	1
13	111642	Switch Insulator Barrier.....	2
14	114240	Seat Switch.....	1
15	105805	Nut 15/32-32.....	2
16	110502	Dirt Shield.....	1
17	112185	Connector Body - Part of 5.....	1
18	111488	Switch Support.....	1
19	926671	S.T. Bolt 1/4-20 x 1/2.....	1
20	111332	PTO Interlock Switch.....	2
21	110741	Voltmeter(w/109650)(Not on All units).....	1
22	109650	Back Clamp-Voltmeter.....	1
23	5924	Nut nr. 10-32 E.S.....	2
24	111674	Solenoid.....	1
25	960152	Whizlock Bolt 1/4-20 x 5/8.....	2
26	111069	Cable - Solenoid To Starter Single Cylinder.....	1
27	111074	Cable - Battery (+) To Solenoid.....	1
28	109553	Terminal Cover.....	1
29	111069	Cable - Battery (-) To Ground.....	1
30	908003	Bolt 1/4-20 x 3/4.....	2
31	920007	Washer 1/4 SAE.....	4
32	915111	Eslok Nut 1/4-20.....	6
33	105842	Battery 316-8 Only.....	1
	104962	Battery 312-8 Only.....	1
34	110298	Battery Tray.....	1
35	6820	Hourmeter Terminal Cover.....	1
	100489	Hourmeter Terminal Cover.....	1
36	112842	Ground Wire.....	1



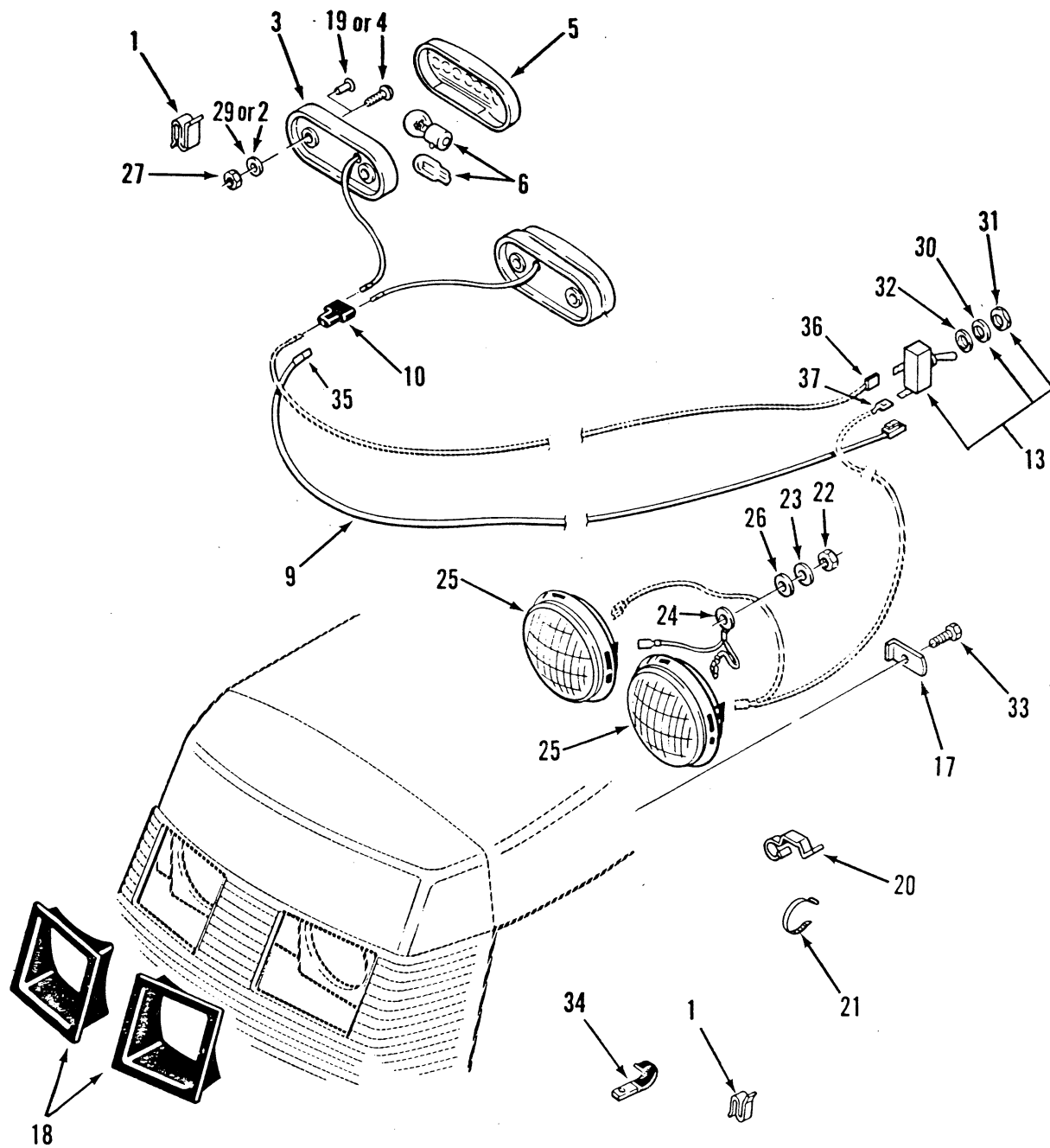
SECTION 11 - ELECTRICAL SYSTEM

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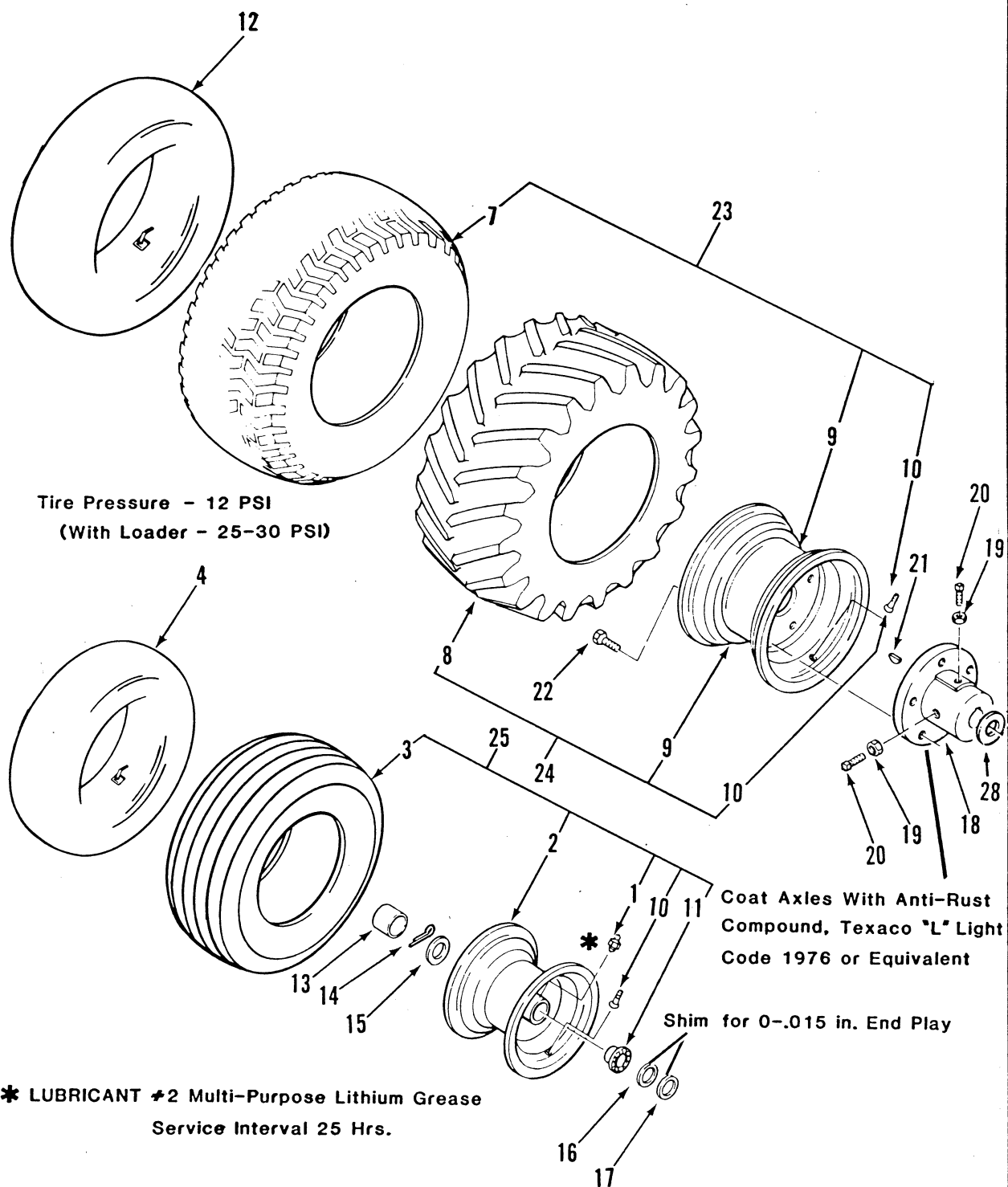
ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 11-1 ELECTRICAL SYSTEM (CONTINUED)			
37	109547	Hook - Battery Hold Down.....	2
38	113010	Battery Hold Down.....	1
40	109910	Ground Hood to Frame - 312-8 Only.....	1
	113925	Ground Wire 316-8 Only.....	1
42	920155	Internal Tooth Lockwasher 5/16.....	1
44	102651	Female Terminal 1/4 - Part of 5.....	8
45	920081	Lockwasher 1/4.....	4
48	920262	Special Washer.....	1
49	920081	Lockwasher 1/4.....	2
50	915234	Jam Nut 1/4-20.....	2
51	110853	Hourmeter Complete (includes items 52, 53 & 54) (Not on All units).....	1
52	108768	Steel Clamp.....	1
53	920120	Lockwasher.....	1
54	915538	Hex Nut.....	1
55	8830	Clip.....	X
59	910478	Screw nr. 4-40 x 1 1/4.....	2
60	915732	E.S. Nut nr. 4-40.....	2
62	106833	Relay 312.....	1
63	519337	Cable Clip.....	1
64	518105	Terminal - Part of 5.....	X
65	6921	Shur Plug Terminal - Part of 5.....	1
67	111498	Connector - Part of 5.....	2
68	518077	Terminal - Part of 5.....	2
69	110459	Connector 312 - Part of 5.....	1
70	105312	Connector - Part of 5.....	4
71	105306	Terminal - Part of 5.....	1
72	518246	Terminal - Part of 5.....	1
73	920122	External Tooth Lockwasher.....	1
74	100571	Cable Tie.....	X
	114052	Headlight Wire Harness (Not Illustrated).....	1



ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 11-2 ELECTRICAL SYSTEM			
3	111353	Test Switch.....	1
4	110999	P.C. Board w/lights 312-8 Only.....	1
	111000	P.C. Board w/lights - 316-8 Only.....	1
5	111331	Indicator Light.....	5
6	111343	Indicator Lens & Bushing Assy.....	5
8	112216	Wiring Harness - 312-8 Only.....	1
	113139	Wiring Harness - 316-8 Only.....	1
9	111332	Parking Brake Switch.....	1
13	910948	Screw nr. 4-40 x 3/4.....	2
14	915732	E.S. Hex Nut nr. 4-40.....	2
15	519337	Clip.....	1
16	520198	Piggy-Back Connector.....	2
17	111485	Fully Insulated (Part of 8).....	4
19	111498	3 Terminal Connector (Part of 8).....	1
20	520197	Piggy-Back Connector (Part of 8).....	1
22	111374	Molex Connector (Part of 8).....	1
23	113131	Male Terminal (Part of 8).....	1
24	111359	Hex Nut.....	2
25	111360	Indexed Washer.....	1

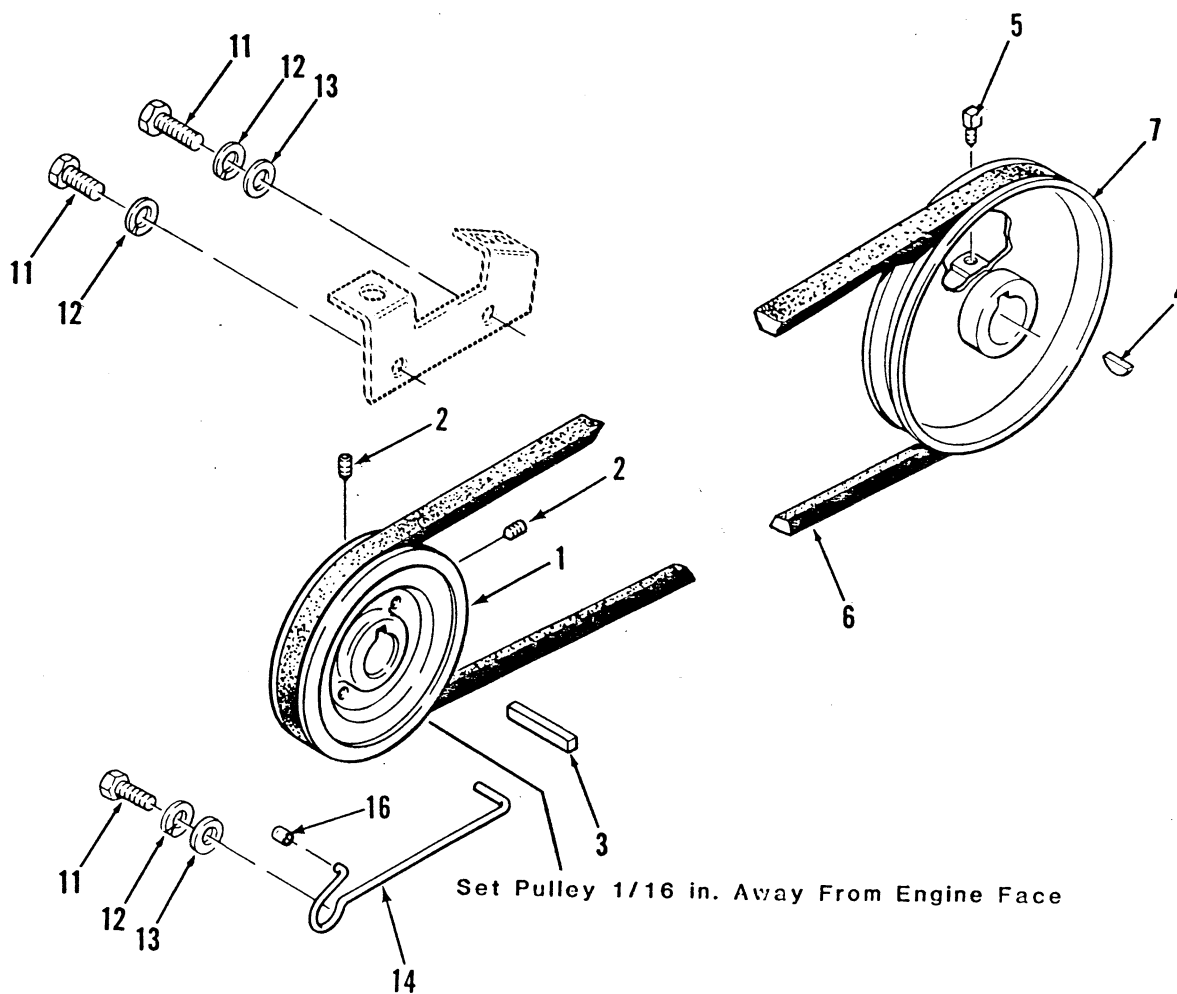


ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 11-3 ELECTRICAL SYSTEM			
1	3023	Clip-Small.....	X
2	920079	Lockwasher nr. 10 (Optional).....	4
3	105202	Taillight Base W/Bulb 312, 416.....	2
4	910808	Screw nr. 10-32 x 5/8 (Optional).....	4
5	112564	Taillight Lens 312, 416.....	2
6	8043	Light Bulb - Metal Base (Auto nr. 1895).....	2
	109045	Light Bulb - All Glass (Auto nr. 194).....	2
9	110854	Tail Light Wire 312 Only.....	1
10	7618	Connector 3-Wire.....	1
13	102138	Light Switch.....	1
17	109459	Clamp.....	2
18	109080	Retainer - Headlight Pair.....	1
19	923795	Poprivet 3/16 x .402 Aluminum (Production).....	4
20	8519	Clip-Large.....	X
21	100571	Cable Tie.....	X
22	915112	Nut 5/16-18.....	1
23	920155	Lockwasher 5/16.....	1
24	108130	Headlight Ground Wire.....	1
25	110792	Headlight Halogen.....	2
	102881	Headlight.....	2
26	920008	Washer 5/16 SAE.....	1
27	915551	Nut nr. 10-32 (Optional).....	4
29	920004	Washer nr. 8 (Use With Poprivet-Production).....	4
30	102950	Lockring.....	1
31	8786	Nut.....	1
32	920259	Special Washer.....	1
33	926671	Bolt Hex 1/4-20 x 1/2 ST.....	2
34	8830	Clip.....	1
35	6921	Sur-Plug.....	1
36	518105	Terminal.....	1
37	518104	Terminal.....	1



ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 13-1 WHEELS AND TIRES			
1	109500	Grease Fitting.....	2
2	110693	Front Wheel (includes Item 1, 10, 11).....	2
3	8119	Frt Tire 15x6.00-6 Turf Trd.....	2
4	100079	Tube - Service Only.....	2
7	111517	Rear Tire 22x9.00-12 Turf Tread.....	2
8	7607	Rear Tire 23x8.50-12 Cleat.....	2
9	111516	Rear Wheel 12x7.....	2
10	5108	Valve Stem.....	2
11	110513	Ball Bearing.....	4
12	7007	Rear Tube.....	2
	100291	Tube Cleat Tires.....	2
13	109154	Hubcap.....	2
14	932026	Cotter Pin 5/32x 1 1/4.....	2
15	109114	Special Hub Cap Washer.....	2
16	1278	Shim Washer .050.....	X
17	5210	Shim Washer .015.....	X
18	105762	Hub Rear Wheel 1" I.D.	2
19	915236	Jam Nut 3/8-16.....	4
20	909554	Set Screw 3/8-16x1.....	4
21	937097	Woodruff Key 1/4x1.....	2
22	1004	Lug Bolt.....	10
23	111518	Rear Wheel & Tire Assy.....	2
24	110934	RH Cleat Wheel & Tire Assy.....	1
	110933	LH Cleat Wheel & Tire Assy.....	1
25	110692	Front Wheel & Tire Assy.....	2

REFER TO SECTION 18 FOR ADJUSTMENTS

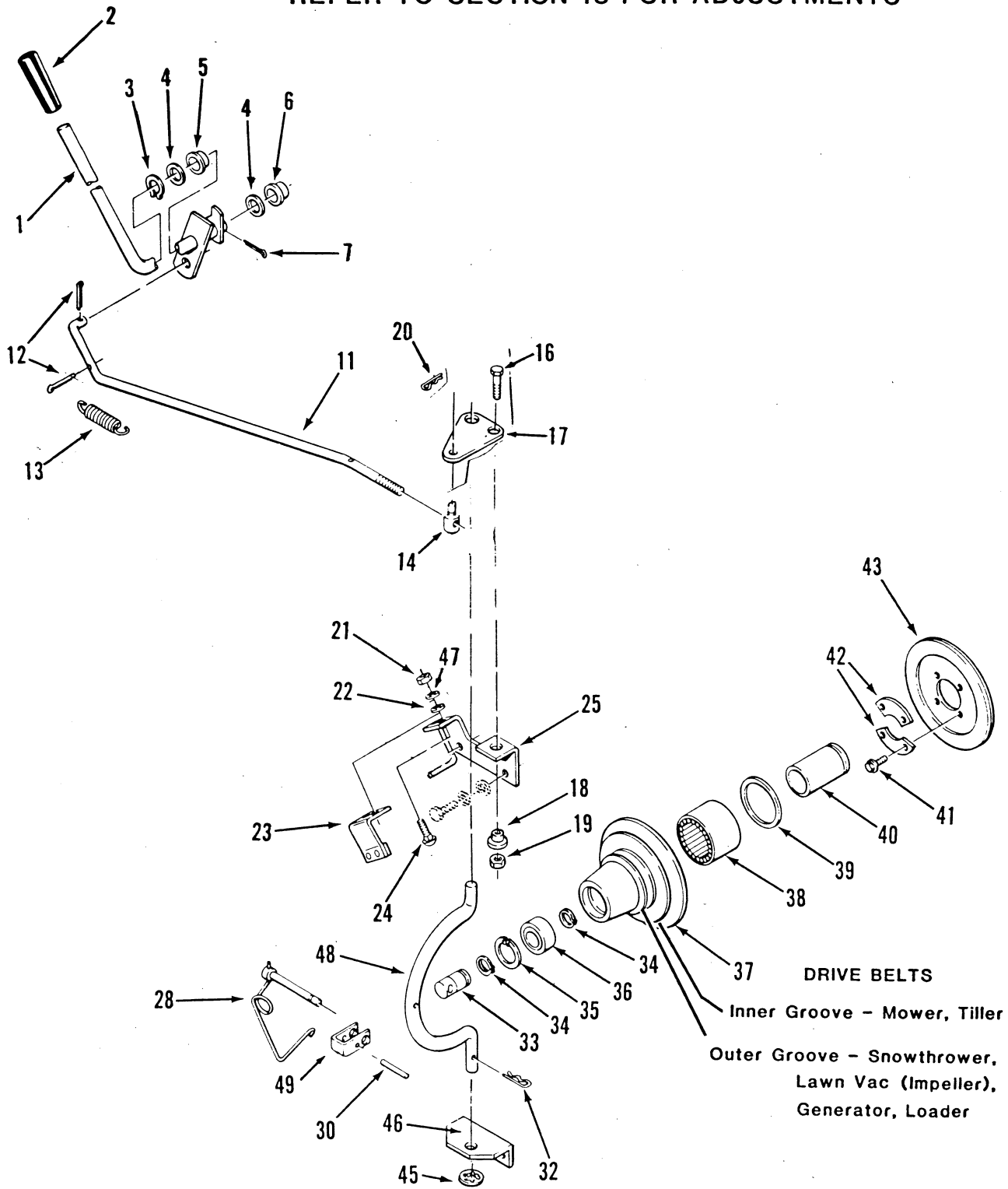


ITEM	PART NUMBER	DESCRIPTION	Quantity
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Figure 14-1
DRIVE BELT AND PULLEYS

1	7466	Engine Drive Pulley.....	1
2	909862	Set Screw 5/16-18 x 5/16.....	2
3	105453	Key 1/4 x 1/4 x 3/4.....	1
4	937221	Hi-Pro Key 5/32 x 5/8.....	1
5	909540	Set Screw 5/16-18 x 1/2 Nylok.....	2
6	7473	Drive Belt.....	1
7	106165	Transmission Drive Pulley.....	1
11	908047	Bolt 7/16-14 x 1 1/4.....	3
12	920084	Lockwasher 7/16.....	3
13	920010	Washer 7/16 SAE.....	3
14	113855	Belt Guide - Bottom - 316-8 Only.....	1
	111242	Belt Guide - Bottom - 312-8 Only.....	1
16	112841	Cap.....	1

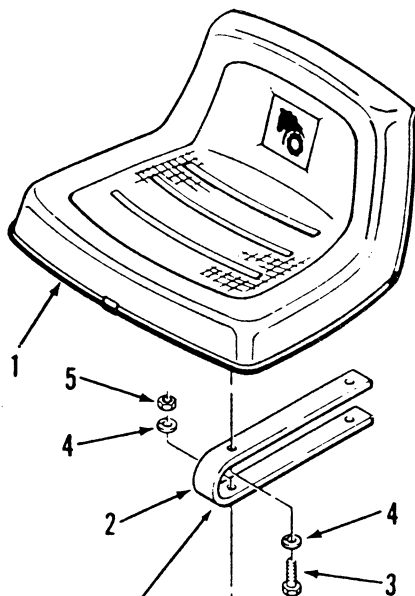
REFER TO SECTION 18 FOR ADJUSTMENTS



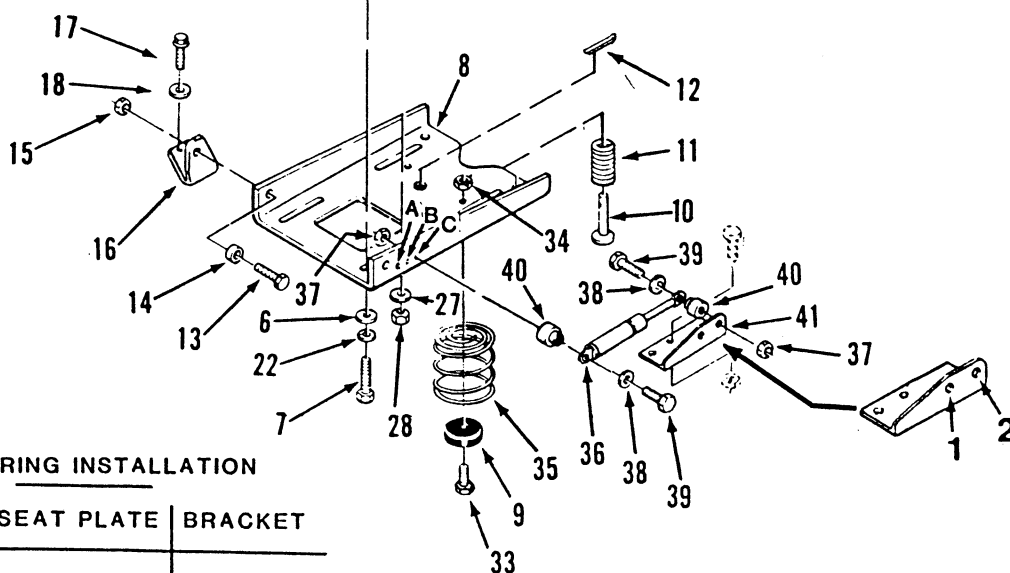
SECTION 14 - DRIVE BELT, PULLEYS AND PTO CLUTCH

41

ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 14-2 PTO CLUTCH AND CONTROL			
1	111234	PTO Clutch Lever.....	1
2	9038	Grip.....	1
3	106649	Grip Ring.....	1
4	3765	Shim Washer.....	2
5	5666	Nyliner Bushing.....	1
6	5983	Bushing.....	1
7	932016	Cotter Pin 1/8 x 3/4.....	1
11	111052	PTO Clutch Rod.....	1
12	932016	Cotter Pin 1/8 x 3/4.....	2
13	103125	Spring.....	1
14	110656	Trunnion.....	1
16	908034	Bolt 3/8-16 x 1.....	1
17	110669	PTO Plate.....	1
18	104859	Spacer.....	1
19	915113	Eslok Nut 3/8-16.....	1
20	933505	Hairpin Cotter.....	1
21	915234	Jam Nut 1/4-20.....	2
22	920007	Washer 1/4 SAE.....	2
23	110665	PTO Brake Assembly.....	1
24	900015	Carriage Bolt 1/4-20 x 3/4.....	2
25	113853	Engine Bracket - 316-8 Only.....	1
	111240	Engine Bracket - 312-8 Only.....	1
28	111314	Locking Pin.....	1
30	933274	Spirol Pin 5/32 x 1 3/8.....	1
32	933506	Hairpin Cotter.....	1
33	102872	Stub Shaft.....	1
34	936125	Snap Ring 3/4 External.....	2
35	936032	Snap Ring 1 3/4 Internal.....	1
36	109842	Ball Bearing.....	1
37	103478	Pulley Housing.....	1
38	106769	Needle Bearing.....	1
39	6663	Seal.....	1
40	6658	Bearing Race.....	1
41	908002	Nylok Bolt 1/4-20 x 5/8.....	4
42	6659	Retainer.....	2
43	111238	Clutch Plate & Facing.....	1
45	106695	Push-On Ring.....	1
46	102870	Rod Support Housing.....	1
47	920081	Lock Washer 1/4.....	1
48	113108	PTO Housing Rod - 312-8 Only.....	1
	113876	PTO Housing Rod - 316-8 Only.....	1
49	113107	Clevis.....	1



SHORT SIDE OF SPRING DOWN



GAS SPRING INSTALLATION

MODEL	SEAT PLATE	BRACKET
312	B	1

ITEM	PART NUMBER	DESCRIPTION	Quantity
		Figure 15-1 SEAT	
1	109342	Seat.....	1
2	110920	Seat Spring.....	2
3	908017	Bolt 5/8-18 x 3/4.....	4
4	920082	Lockwasher 5/16.....	8
5	915112	Nut 5/16-18.....	4
6	920008	Washer 5/16 SAE.....	4
7	908018	Bolt 5/16-18 x 7/8.....	4
8	112478	Seat Pivot Plate.....	1
9	108889	Bumper.....	2
10	106449	Pin.....	1
11	114267	Spring.....	1
12	932008	Cotter Pin 3/32 x 3/4.....	1
13	908018	Bolt 5/16-18 x 7/8.....	2
14	105503	Bushing.....	2
15	915112	Eslok Nut 5/16-18.....	2
16	112744	Pivot Bracket RH.....	1
	112745	Pivot Bracket LH.....	1
17	913464	S.T. Bolt 5/16-18 x 7/8.....	4
18	920008	Washer 5/16 SAE.....	4
30	923784	Poprivet 1/8 x .232.....	1
31	111654	Switch Spring.....	1
33	908019	Bolt 5/16-18 x 1.....	2
34	915662	E.S. Nut 5/16-18.....	2
35	114496	Seat Lifter Spring - Black.....	2
36	114343	Gas Spring.....	1
37	915111	Eslok Nut 1/4-20.....	2
38	920007	Washer 1/4 SAE.....	2
39	908006	Bolt 1/4-20 x 1/-1/4.....	2
40	114344	Spacer.....	2
41	114131	Gas Spring Bracket.....	1

DO NOT OPERATE WITH
BATTERY DISCONNECTED.
DAMAGE TO ELECTRICAL
SYSTEM WILL RESULT.

24

11

Uni-Drive
C. H. / HANSON

25

17

2

000-0

Wheel Horse



30



29

4



31

32



Wheel Horse

000-0

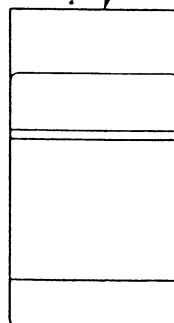
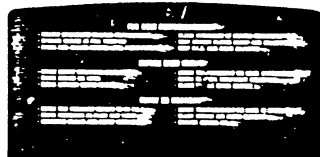
Tach-a-matic

20

16

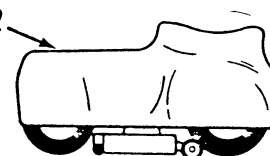
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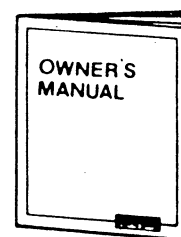
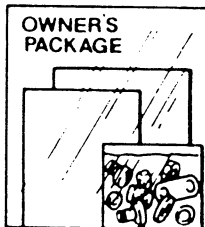


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22



13



12



15

21

5



14

9



8-SPEED

18

Wheel Horse

Wheel Horse

ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 15-2 DECALS			
1	110728	Decal-Hood RH 312 Only.....	X
	113878	Decal-Hood RH 316 Only.....	X
2	110729	Decal-Hood LH 312 Only.....	X
	113879	Decal-Hood LH 316 Only.....	X
4	111510	Decal-Parking Brake.....	1
5	111960	Decal-PTO Clutch.....	1
9	110629	Decal-Rear Fender.....	1
11	110626	Decal-Hood Front.....	1
12	810473R1	Owners Manual-Tractor.....	X
13	807181	Loose Parts Package 312.....	X
	807176	Loose Parts Package 316.....	X
14	111501	Decal-Switch Plate.....	1
15	111260	Decal-Lower Dash Throttle - 316-8 Only.....	1
	112198	Decal-Lower Dash Throttle - 312-8 Only.....	1
16	111194	Decal Rear Hood.....	1
17	111534	Decal-Hi-Low Shift.....	1
18	110718	Decal-8-Speed.....	2
19	110738	Decal-Automatic.....	2
20	106722	Decal-Tach-o-matic.....	1
21	112168	Decal-Lift.....	1
22	110831	Vinyl Tractor Cover.....	X
23	111193	Decal-Maintenance.....	1
24	111926	Decal-Electrical System.....	1
25	104955	Decal-Unidrive.....	1
26	114296	Decal-Seat Lifter.....	1
29	112678	Decal-Danger.....	1
30	112679	Decal-Danger.....	1
31	112403	VIN Tag Overlay.....	1
32	KH10191	Decal-Air Cleaner/Lub. (vendor nr. 41 113 02).....	1
	111345	Decal-Europa (Not Illustrated).....	2