

899399 N

Parts & Service Manual

E1-12K802/R1-12K01	312-8	8-SPEED
B1-16O802/R1-16O801	316-8	8-SPEED



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. When an (X) appears in the quantity (Qty) column use only if applicable, or as required to meet tolerances.

2. To locate parts

When function, use or location is known :

Refer to the List of Illustrations to locate the proper illustration.

3. Service aids

Special notes recorded on illustrations :

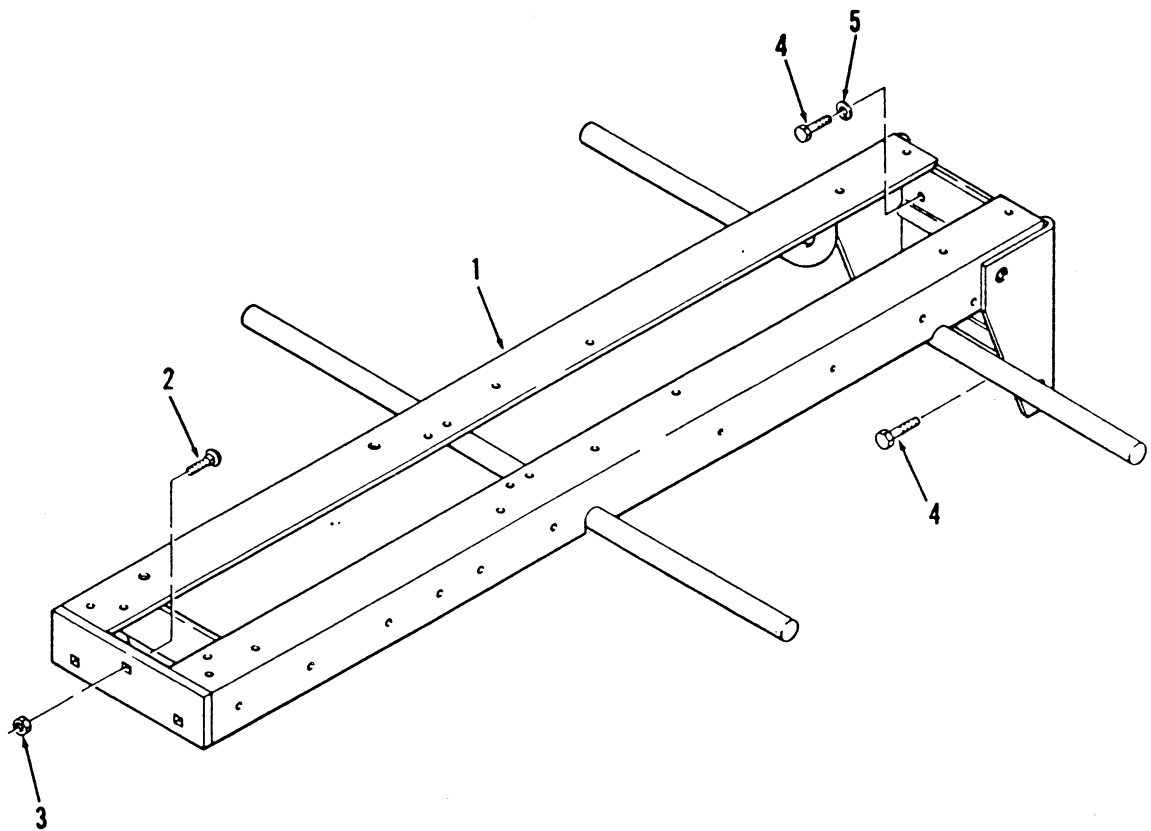
Refer to available owner & repair manuals and service bulletins for detailed information.

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SECTION 1 — FRAME



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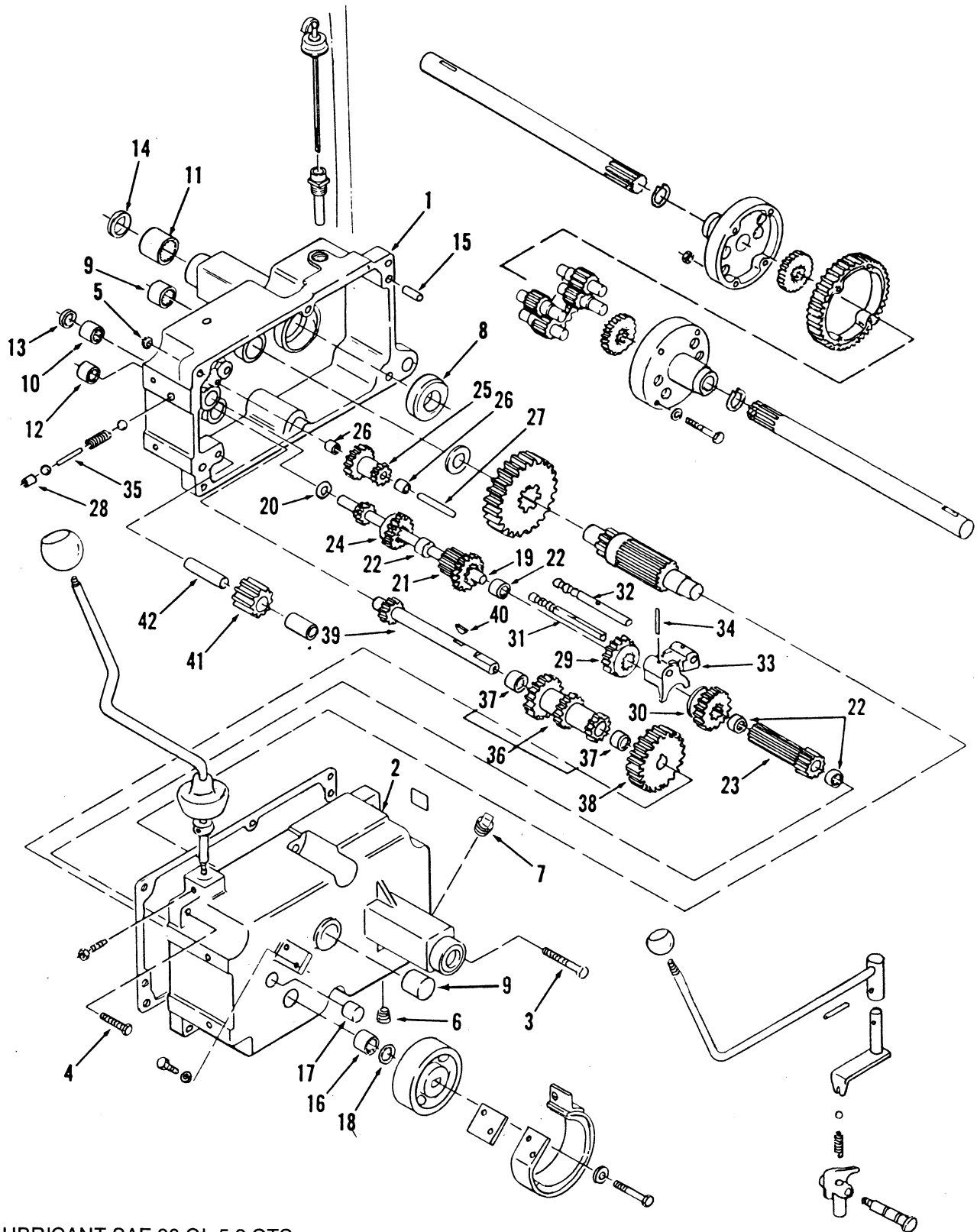
Figure 1-1 Frame

SECTION 1 - FRAME

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 1-1			
FRAME			
1	110648	Frame	1
2	900064	Carriage Bolt 3/8-16 x 1 1/4	3
3	915663	Nut 3/8-16 E.S.	3
4	908032	Bolt 3/8-16 x 3/4	4
5	920083	Lockwasher 3/8	4

SECTION 2 - 8-SPEED TRANSMISSION



LUBRICANT SAE 90 GL-5 2 QTS.
No Periodic Change Req'd.



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Figure 2-1 Mechanical Transmission - 8 - Speed

SECTION 2 - 8-SPEED TRANSMISSION

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ITEM	PART NUMBER	DESCRIPTION	Quantity
		Figure 2 - 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	908044	Bolt 3/8-16 x 4	1
4	908039	Bolt 3/8-16 x 2 1/4	5
5	915663	Nut 3/8-16 E.S	6
6	943460	Allen Hd. Pipe Plug 1/4	1
7	943420	Sq. Hd. Pipe Plug 3/8	1
8	111199	Ball Brg. 40 mm 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 2 - 8 SPEED TRANSMISSION

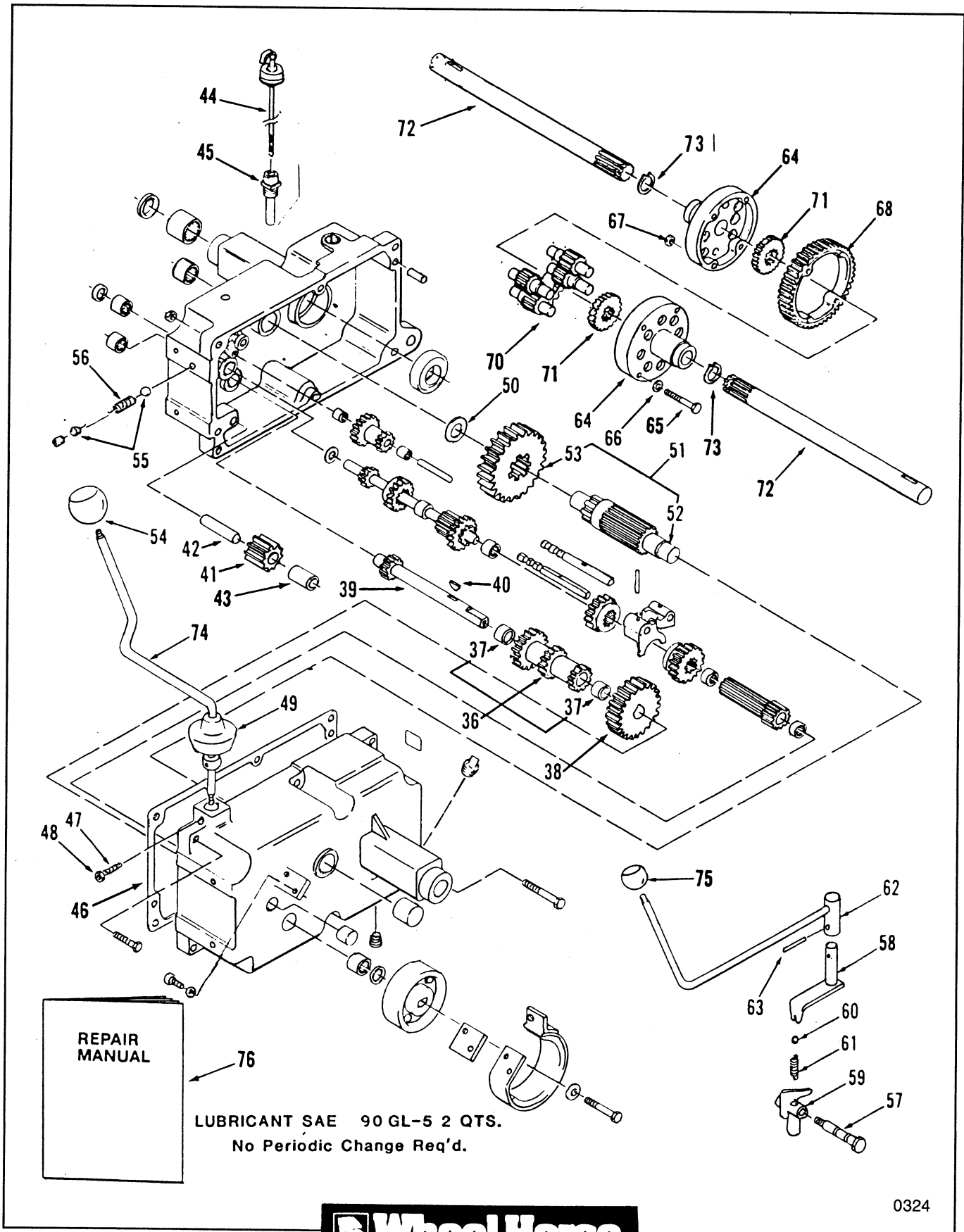


Figure 2-2 Mechanical Transmission - 8 - Speed

SECTION 2 - 8-SPEED TRANSMISSION

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 2-2 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	116636	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

SECTION 3 - FRONT AXLE AND STEERING

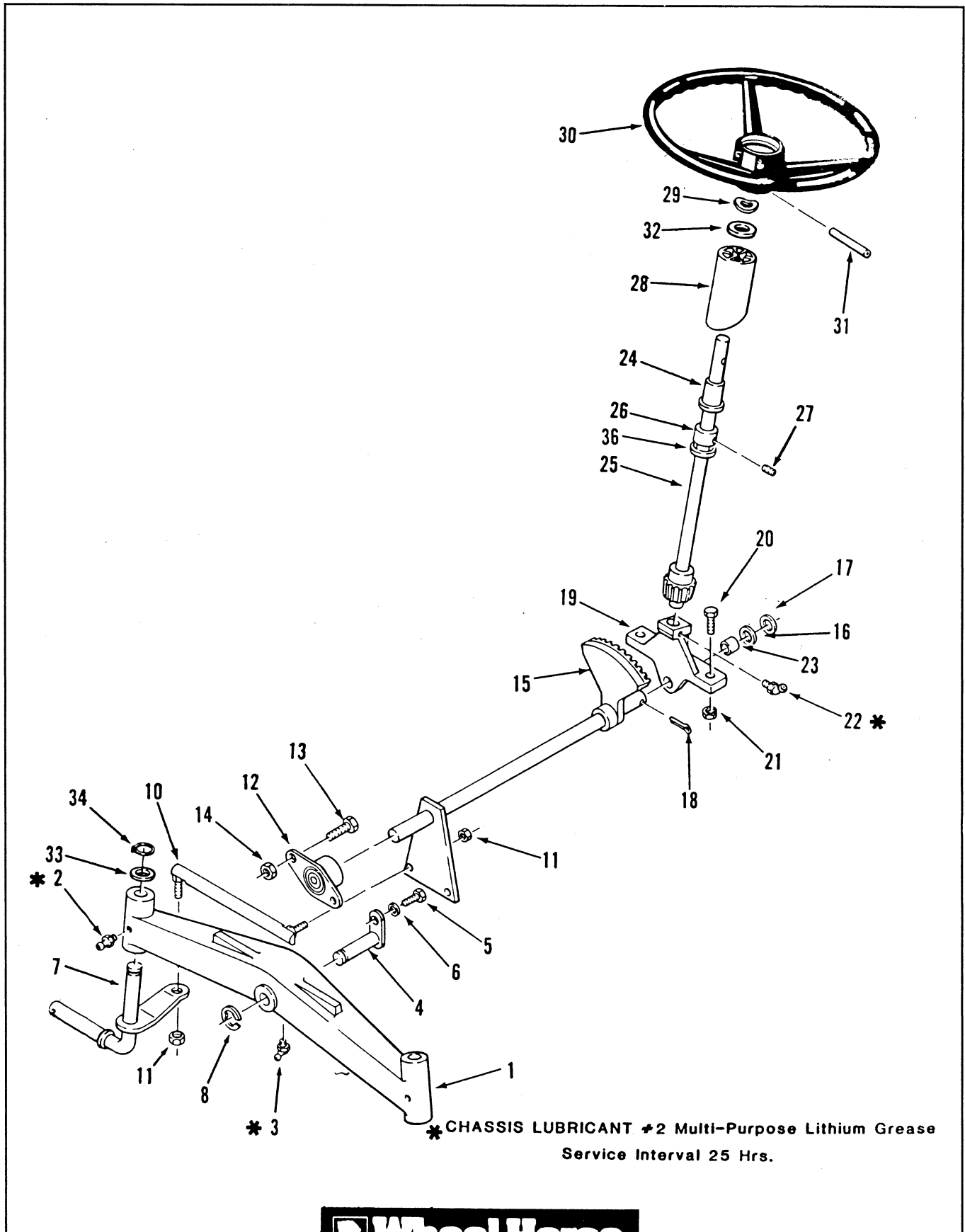


Figure 3 - 1 Front Axle and Steering

SECTION 3 - FRONT AXLE AND STEERING

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 3-1 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	915693	Nut 3/8-24 E.S.	4
12	6472	Flanged Bearing	1
13	908034	R.H. 3/8-16 x 1	2
14	915663	Nut 3/8-16 E.S.	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	908037	Bolt 3/8-16 x 1 3/4	2
21	915663	Nut 3/8-16 E.S.	2
22	1481	Grease Fitting 45 Degree	1
23	6397	Bearing-Lower Steering Shaft	1
24	109189	Bearing-Upper Steering Shaft	1
25	106177	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	113989	Steering Wheel 15" 316-8	1
	113987	Steering Wheel 13" 312-8	1
31	933221	Spirol Pin 1/4 x 2	1
32	109262	Special Washer	X
33	1278	Washer	2
	5210	Shim Washer	2
34	104822	Retaining Ring	2
36	111646	Grip Ring	1

SECTION 4 - CLUTCH, BRAKE AND MOTION CONTROL LINKAGE

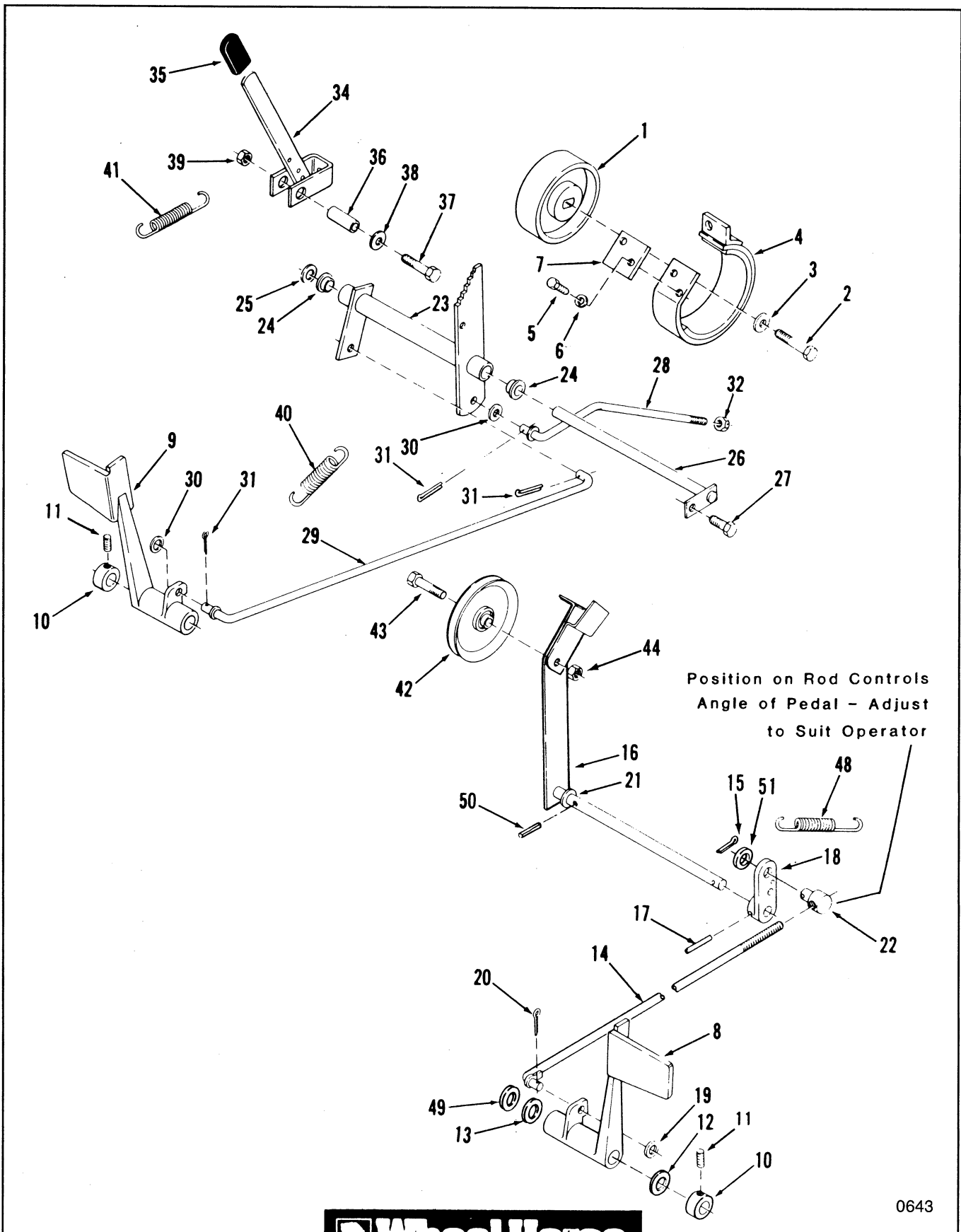


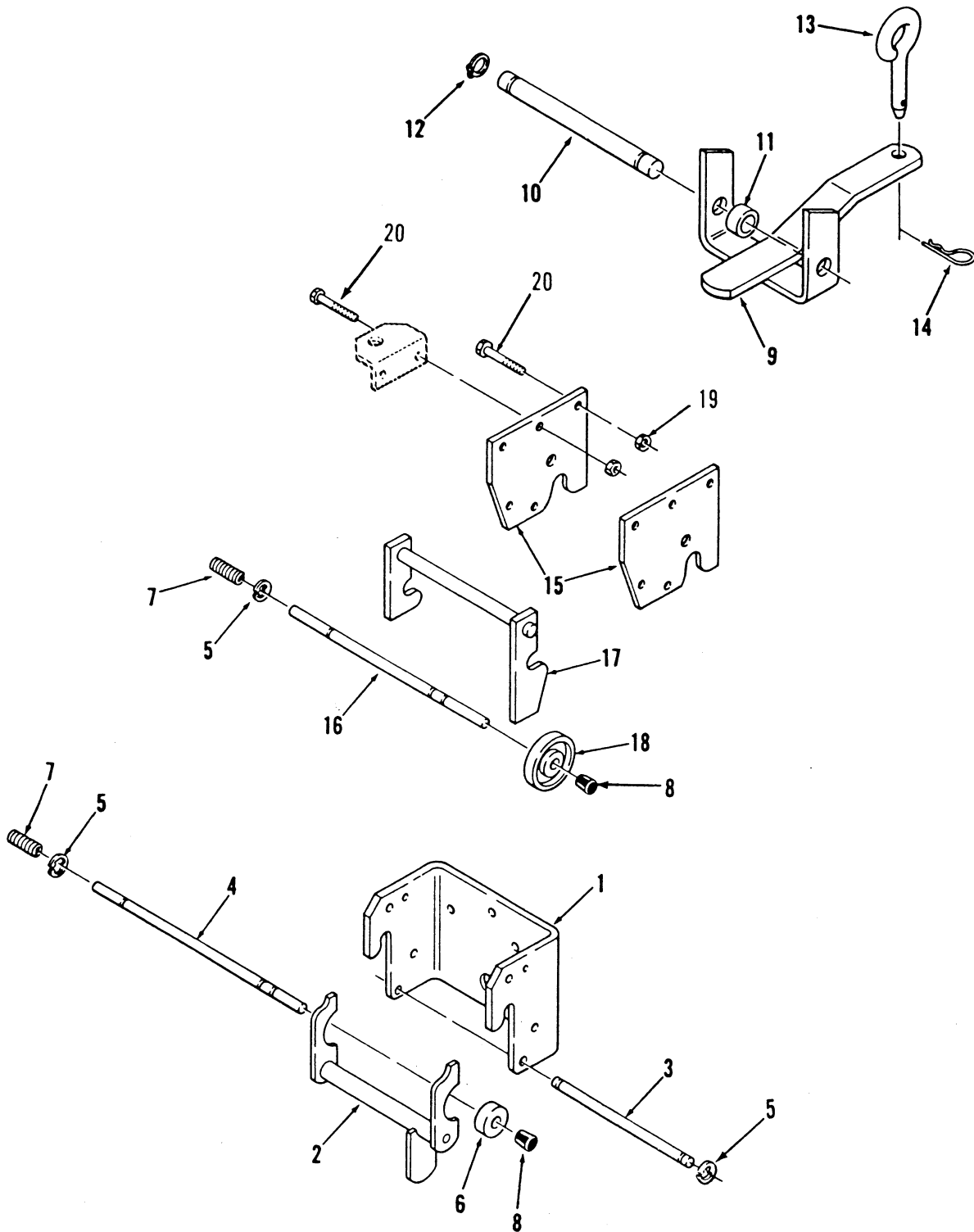
Figure 4-1 Clutch, Brake and Speed Control Linkage

SECTION 4 - CLUTCH, BRAKE AND MOTION CONTROL LINKAGE

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 4-1 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	114814	Pedal-Clutch	1
9	114813	Pedal-Brake	1
	1030	Grease Fitting-Brake Clutch Pedal	2
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 5 - HITCHES AND LIFT LINKAGE



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Figure 5 - 1 Hitches

SECTION 5 - HITCHES AND LIFT LINKAGE

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 5-1 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	915113	Eslok Nut 3/8-16	5
20	908035	Bolt 3/8-16 x 1-1/4	5

SECTION 5 - HITCHES AND LIFT LINKAGE

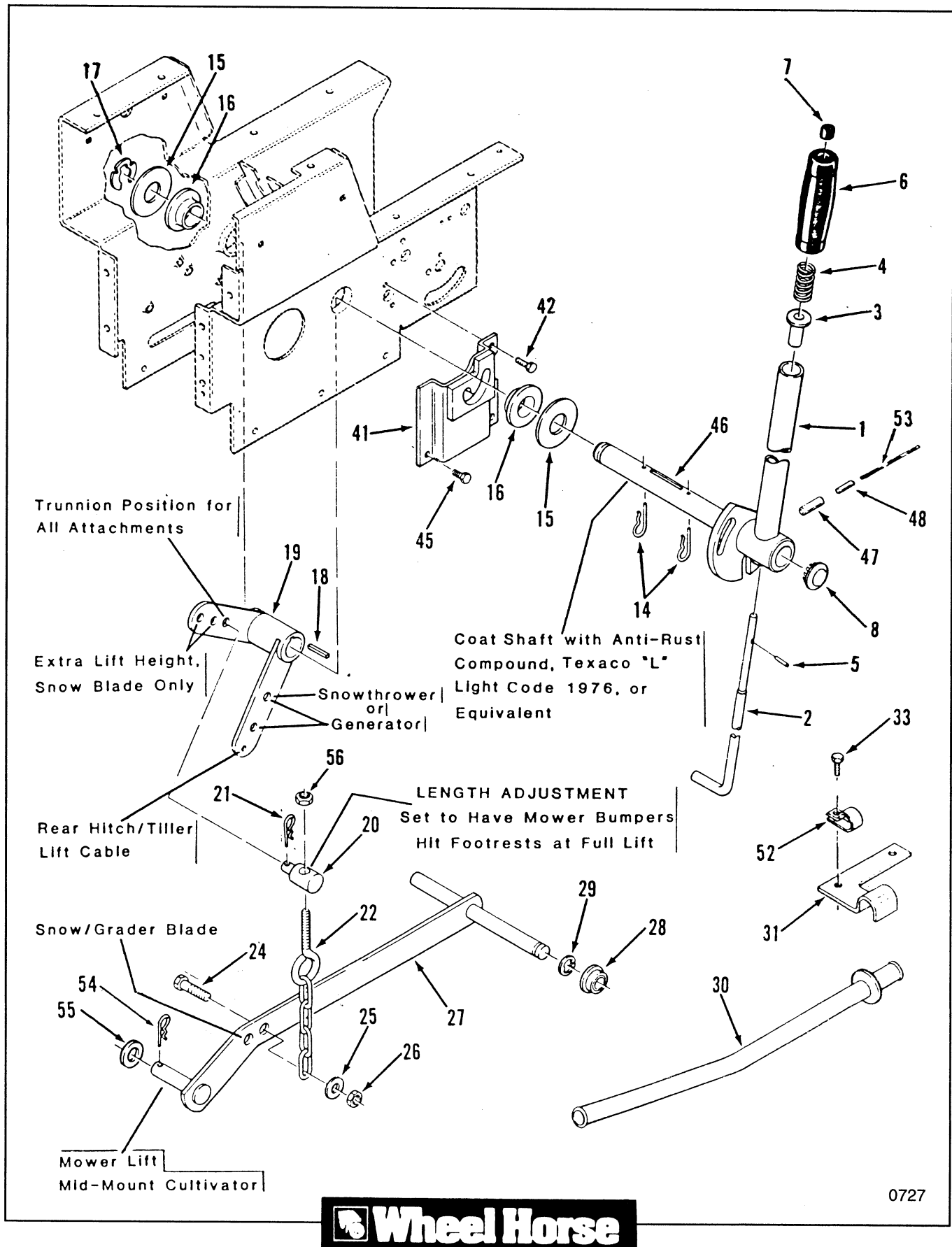


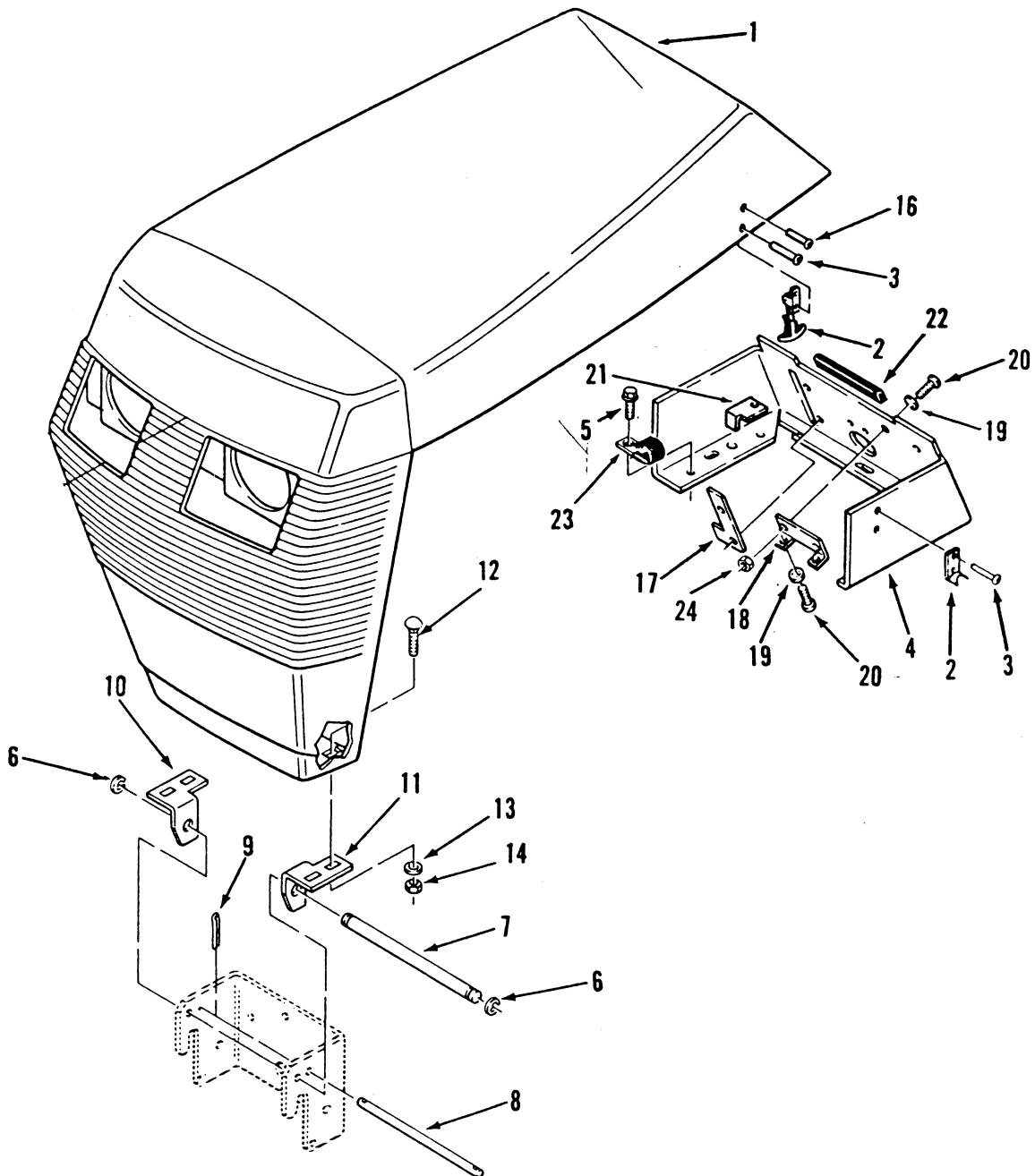
Figure 5 - 2 Manual Lift Linkage

SECTION 5 - HITCHES AND LIFT LINKAGE

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 5-2 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	908020	Bolt 5/16-18 x 1 1/4	1
25	920008	Washer 5/16	1
26	915662	Nut 5/16-18 E.S.	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
41	106411	Latch Bracket	1
42	926694	S.T. Bolt 5/16-18 x 5/8	1
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 6 - SHEET METAL AND COVERS



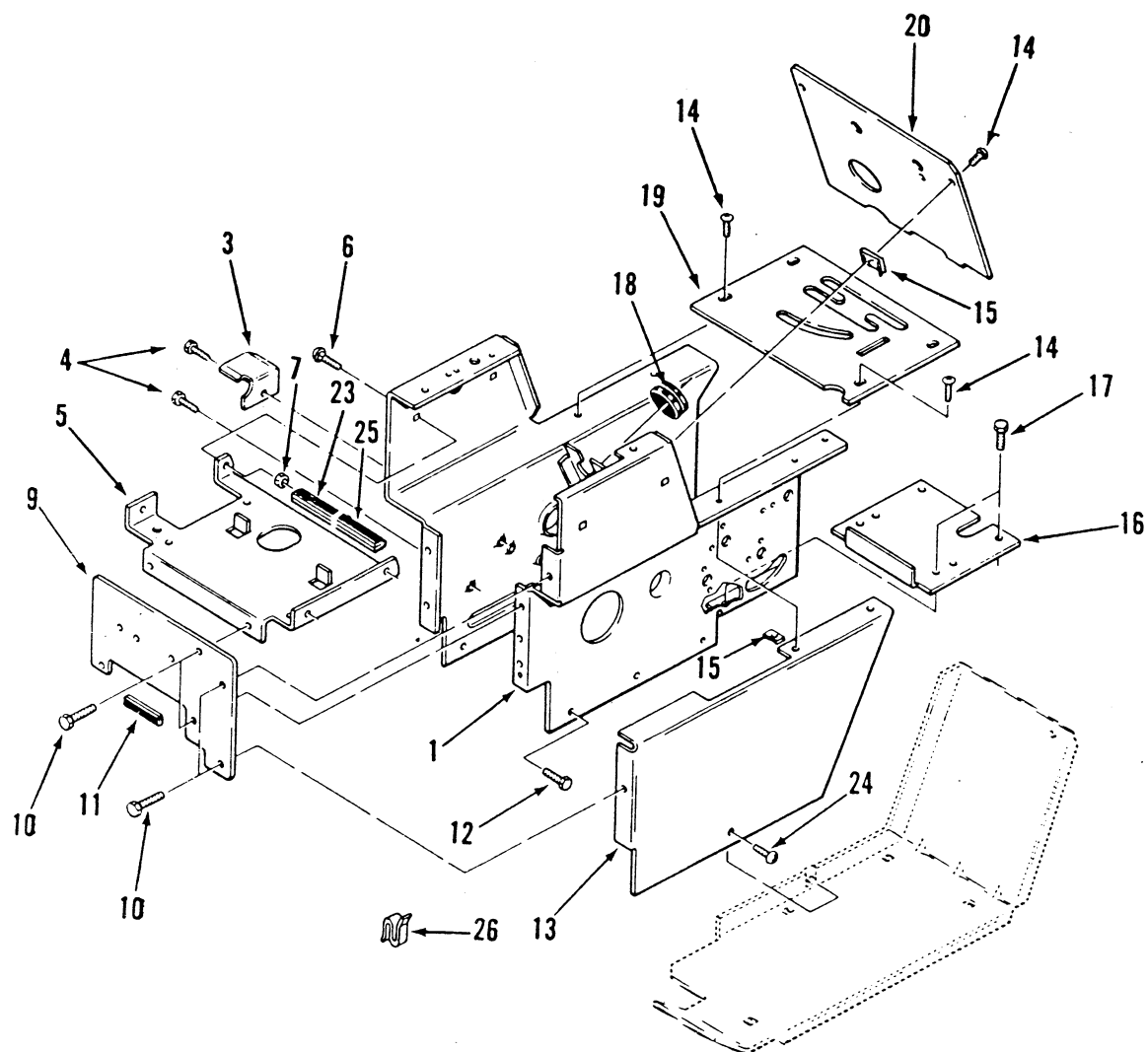
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Figure 6 - 1 Sheet Metal and Covers

SECTION 6 - SHEET METAL AND COVERS

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 6-1			
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	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	915661	Nut 1/4-20 E.S.	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



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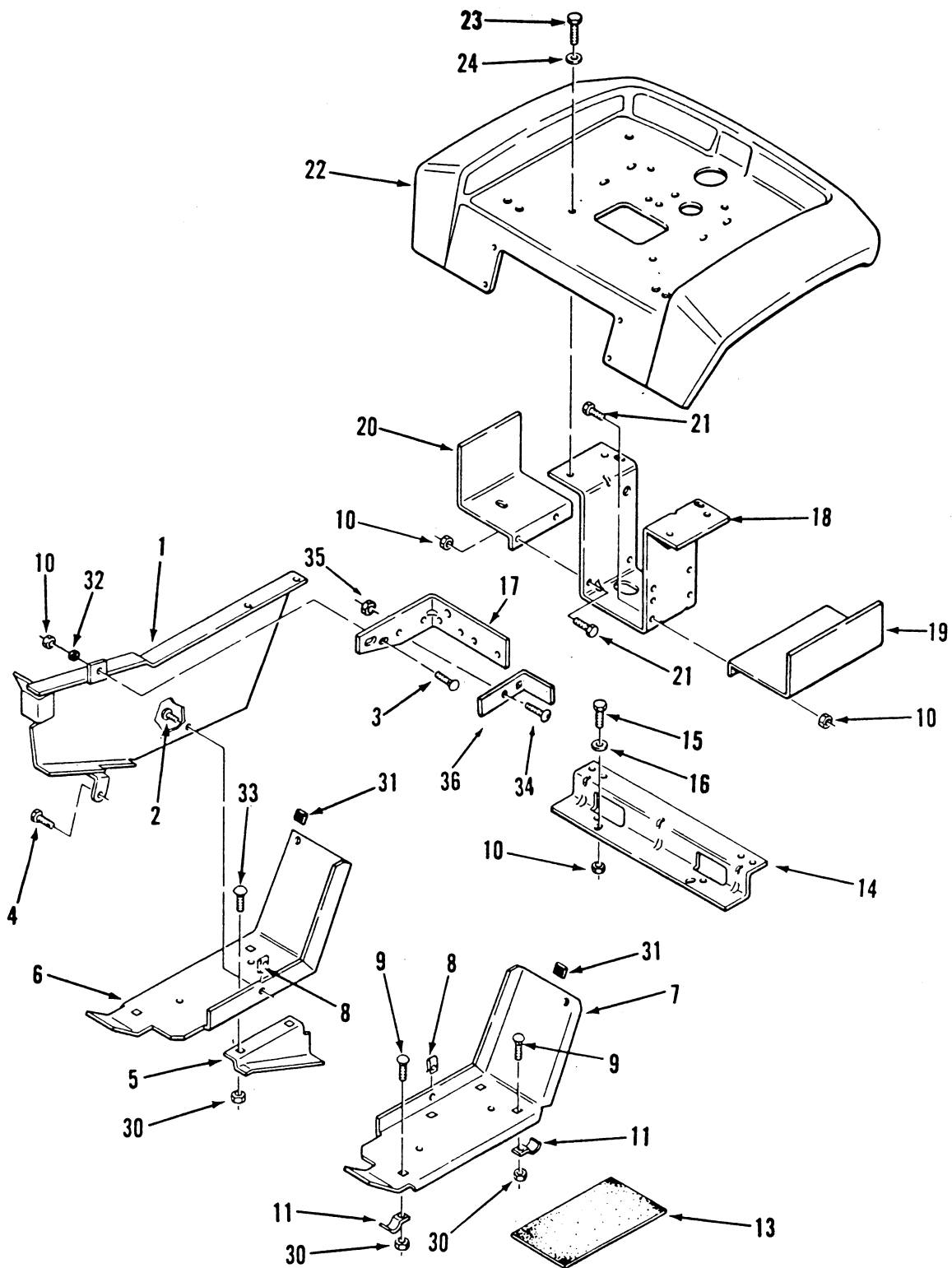
Figure 6-2 Sheet Metal and Covers

SECTION 6 - SHEET METAL AND COVERS

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 6-2			
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	106772	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	106772	Edge Trim	1
26	3023	Clip	1

SECTION 6 - SHEET METAL AND COVERS



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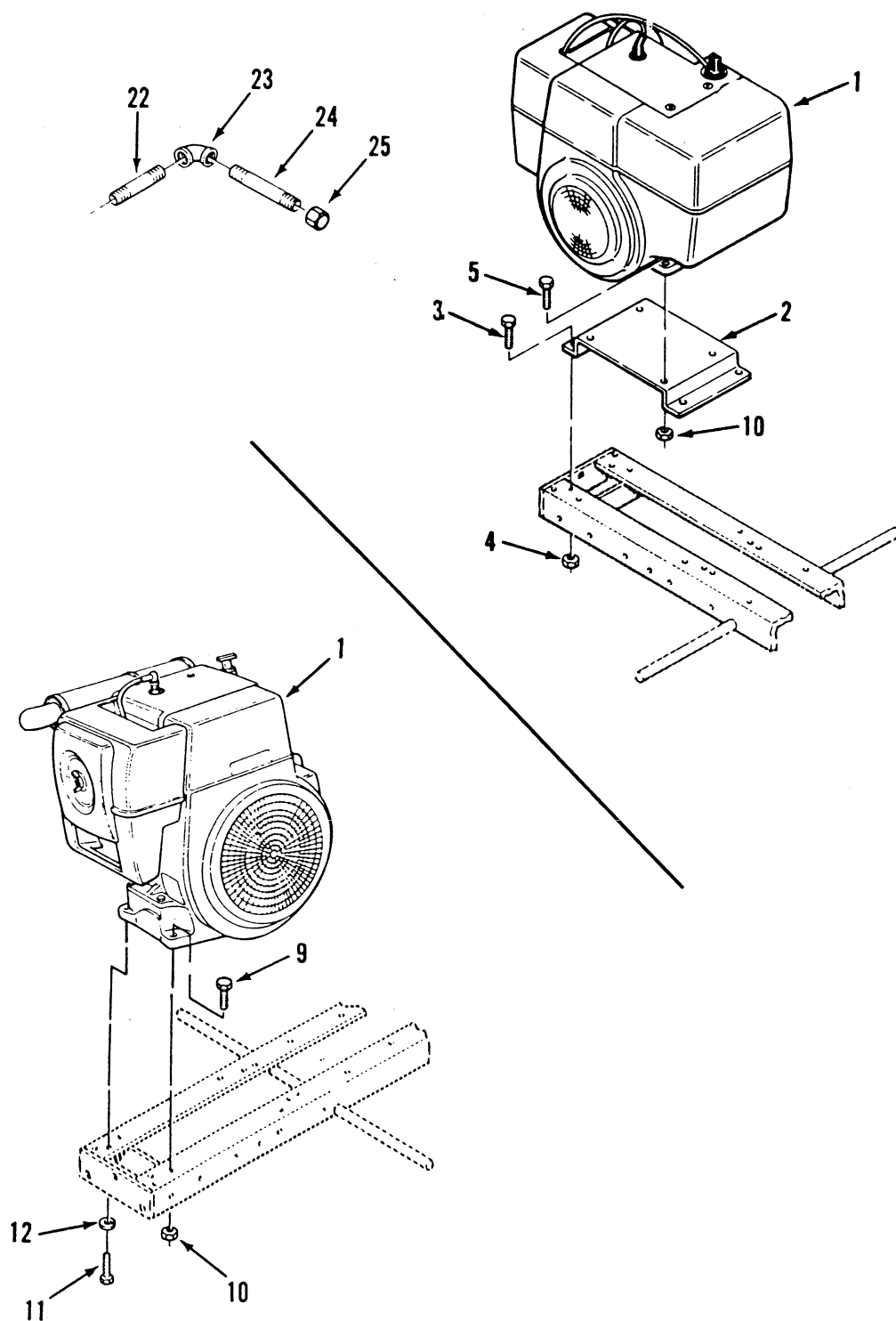
Figure 6 - 3 Sheet Metal and Covers

SECTION 6 - SHEET METAL AND COVERS

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 6-3 SHEET METAL AND COVERS			
1	107619	Belt Guard 316-8	1
	107975	Belt Guard 312-8	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	915662	Nut 5/16-18 E.S.	7
11	7456	Clamp	4
13	110636	Footrest Pad	2
14	107951	Fender Bracket-Front	1
15	908019	Bolt 5/16-18 x 1	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	908017	Bolt 5/16-18 x 3/4	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

SECTION 7 - ENGINES



REFER TO KOHLER MANUALS FOR ADDITIONAL SERVICE & ADJUSTMENT PROCEDURES



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Figure 7 - 1 Engines

SECTION 7 - ENGINES

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 7-1 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
	920009	Washer 3/8 SAE	X
4	915113	Nut 3/8-16 316-8	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
	114893	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
22	114636	Pipe 3/8 x 3 316-8	1
23	114764	Elbow 90 degrees 316-8	1
24	114763	Pipe 3/8 x 4 316-8	1
25	5224	Cap 316-8	1
	111357	d-Clip 316-8 (not illustrated)	1
	920082	Lockwasher 5/6 316-8 (not illustrated)	4

SECTION 7 - KOHLER ENGINE AIR INTAKE

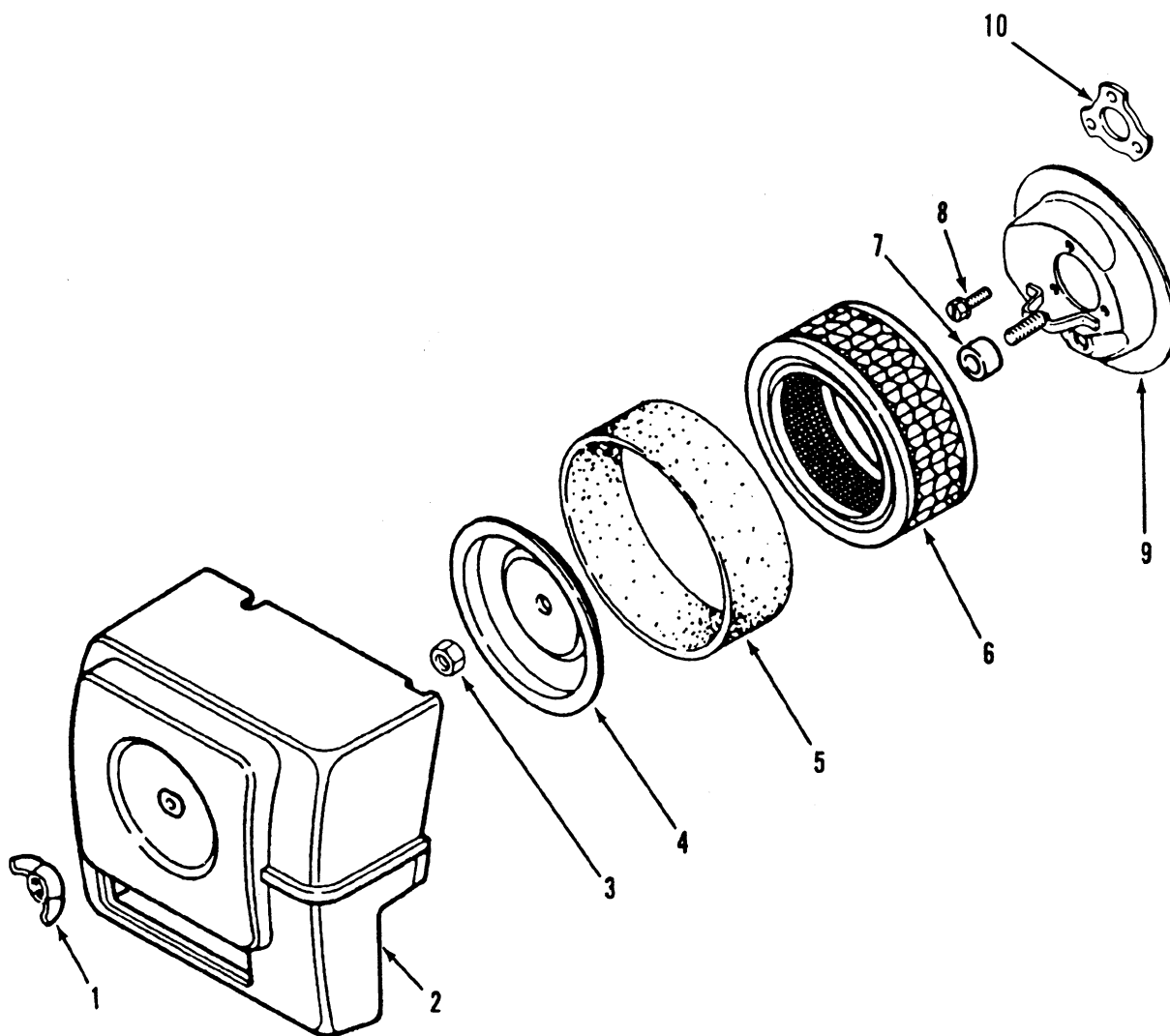


Figure 7-2 Kohler Air Intake

SECTION 7 - KOHLER ENGINE AIR INTAKE

25

ITEM	WHEEL HORSE PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-2				
KOHLER AIR INTAKE				
1	KH10576	X-176-7	Wing Nut 1/4-20	1
2	KH10299	47 096 10	Air Cleaner Cover	1
3	KH10189	47 100 04	Jam Nut	1
4	KH10412	52 082 04	Air Cleaner Element Cover	1
5	KH10235	45 083 01	Precleaner Element	1
6	KH10236	45 083 02	Element	1
7	KH10034	231032	Seal	1
8	KH10609	X-67-65	Slt'd. Washer Hd. Screw 10/32 x 11/32	3
9	KH10297	47 094 20	Air Cleaner Base	1
10	KH10271	47 041 05	Air Horn Gasket	1

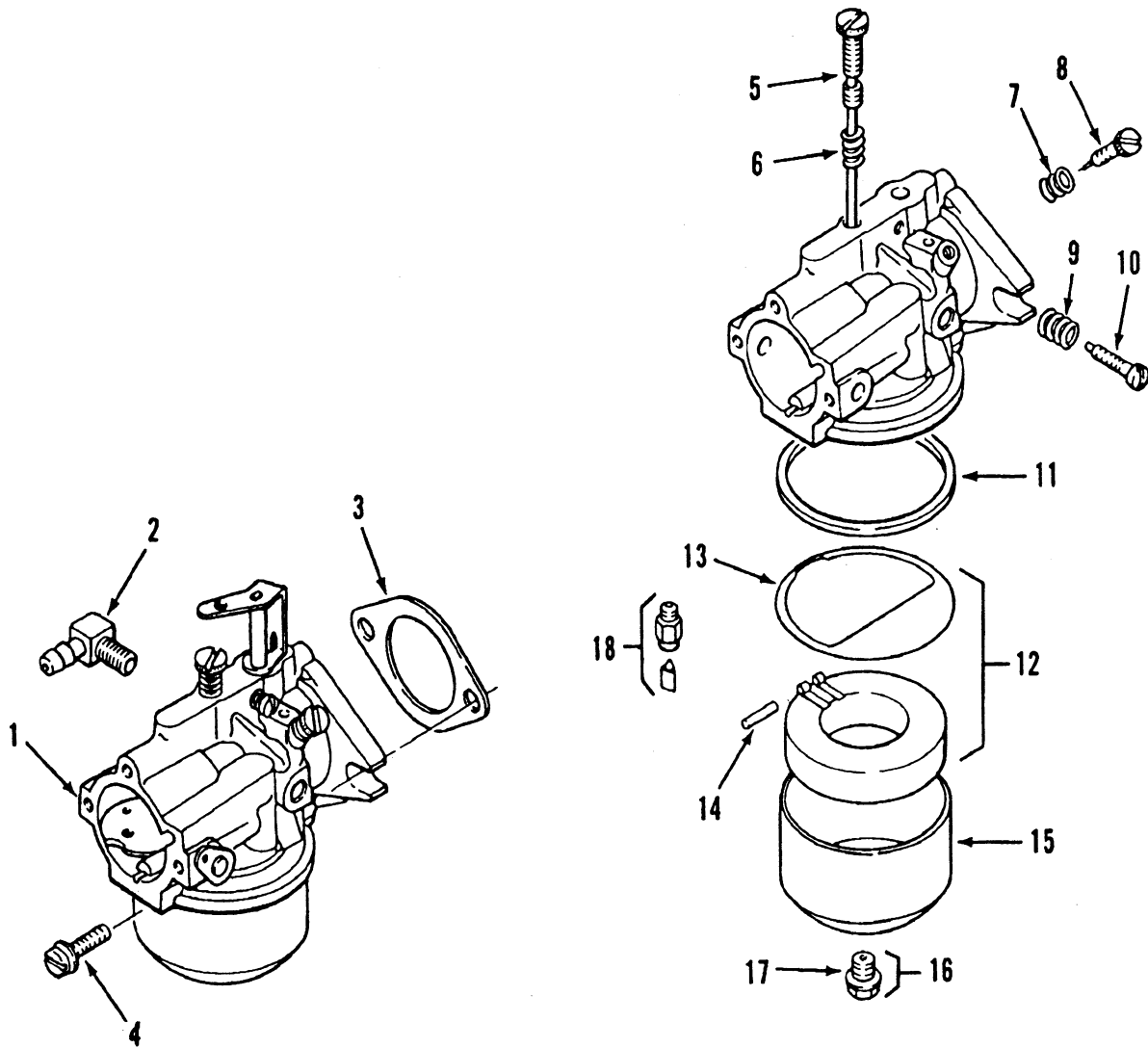


Figure 7-3 Carburetors

SECTION 7 - KOHLER ENGINE CARBURETORS

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WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-3 KOHLER CARBURETORS				
1	KH10276	47 053 62	Carburetor Assembly (Includes 5 thru 8), 312	1
2	KH10123	25 155 0290	90 Degree Hose Connector	1
3	KH10274	47 049 01	Carburetor Gasket	1
4	KH10625	X-770-1	Slotted Hd. Screw 5/16-18 x 1	2
5	KH10068	235415	Main Fuel Adj. Needle 312	1
6	KH10005	200383	Main Fuel Spring	1
7	KH10004	200380	Idle Fuel Spring	1
8	KH10050	235006	Idle Fuel Adj. Needle, 312	1
9	KH10039	232555	Idle Speed Spring	1
10	KH10040	232556	Idle Speed Adj. Screw	1
*11	KH10002	200375	Bowl Gasket	1
12	KH10141	25 757 03	Float Kit (Includes Item 13)	1
*13	KH10092	25 041 02	Bowl Baffle Gasket	1
*14	KH10003	200376	Float Hinge Pin	1
15	KH10069	235448	Fuel Bowl	1
16	KH10300	47 100 06	Fuel Bowl Retainer Screw (Includes Item 17)	1
*17	KH10001	200372	Bowl Retainer Screw Gasket	1
*18	-----	-----	Needle and Seat - Available Only In Carburetor Repair Kit	
Not Illustrated				
	KH10139	25 757 01	Carburetor Repair Kit	X
	KH10358	25 757 05	Choke & Throttle Repair Kit	X

* Included in Carburetor Repair Kit

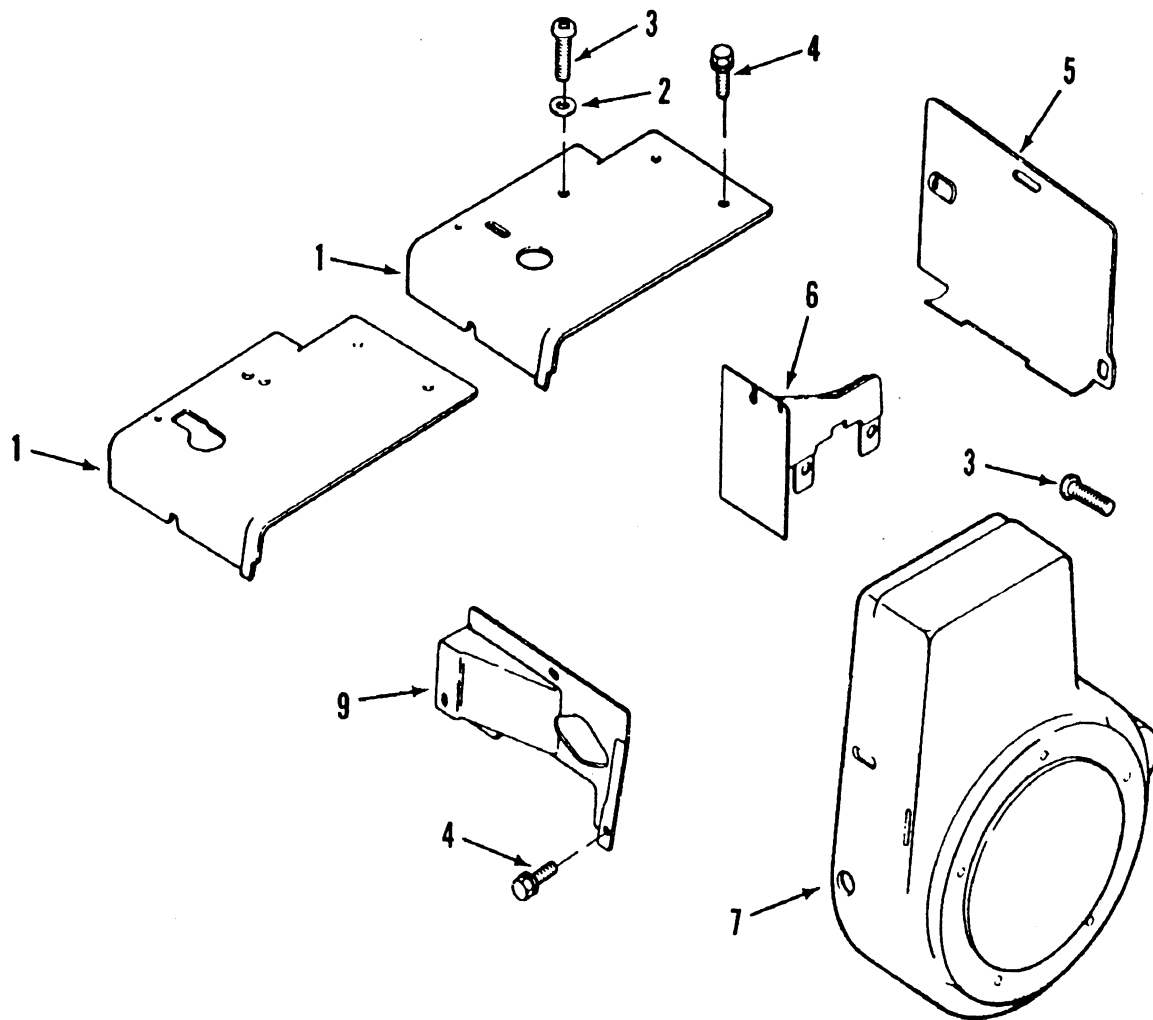
SECTION 7 - KOHLER ENGINE Baffles & SHROUDS

Figure 7-4 Baffles & Shrouds

SECTION 7 - KOHLER ENGINE BAFFLES & SHROUDS

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ITEM	WHEEL HORSE PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-4 KOHLER BAFFLES & SHROUDS				
1	KH10231	45 063 08	Head Baffle 312	1
2	KH10567	X-25-53	Plain Washer 1/4	1
3	KH10289	47 086 08	Pozidriv T.H. Screw 1/4-20 x 5/8	3
4	KH10413	52 086 11	Hex. Washer Hd. Screw	6
5	KH10172	47 063 10	Cylinder Baffle	1
6	KH10280	47 063 07	Inner Baffle	1
7	KH10265	47 027 42	Blower Housing	1
9	KH10279	47 063 06	Side Air Baffle	1

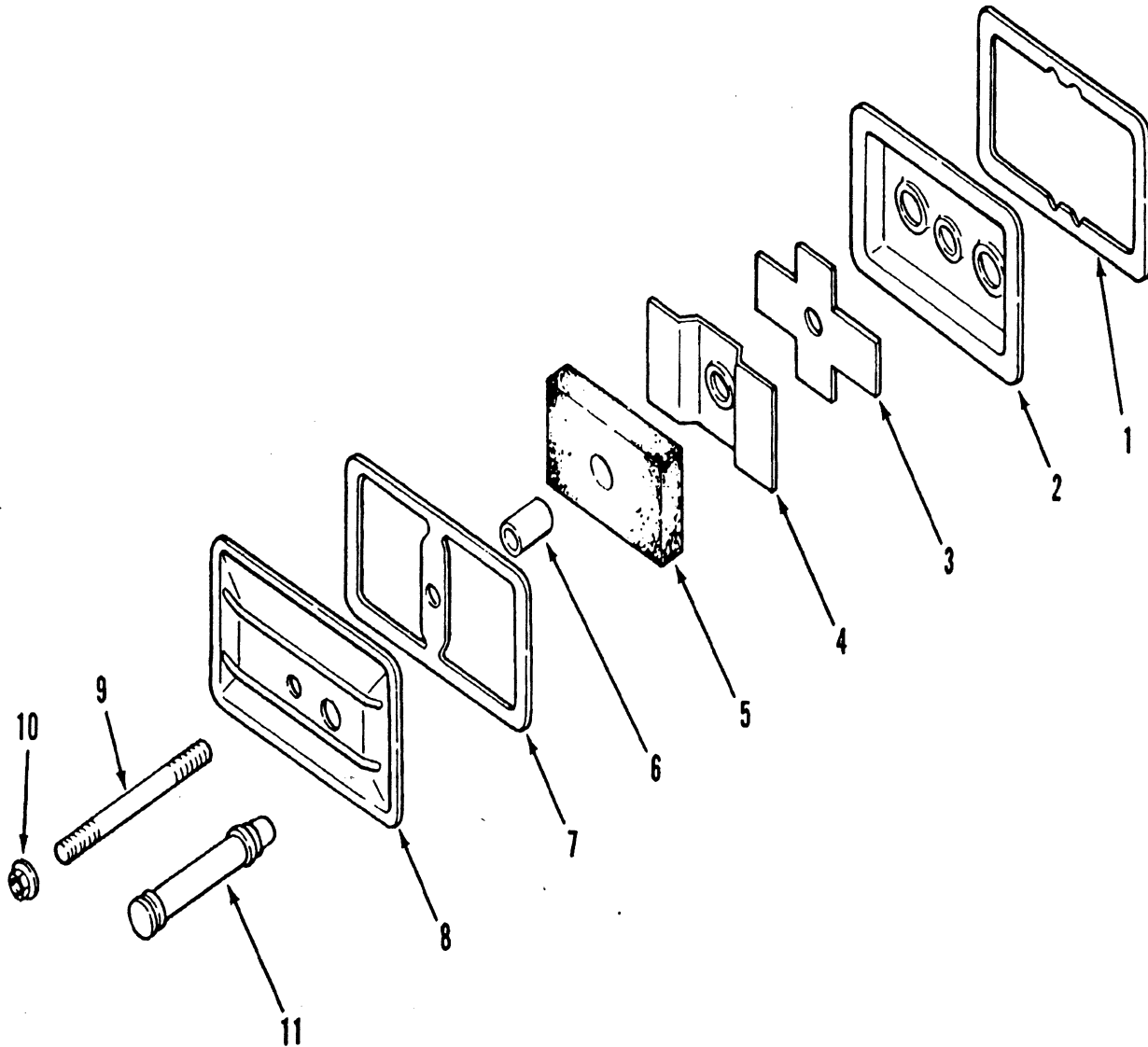
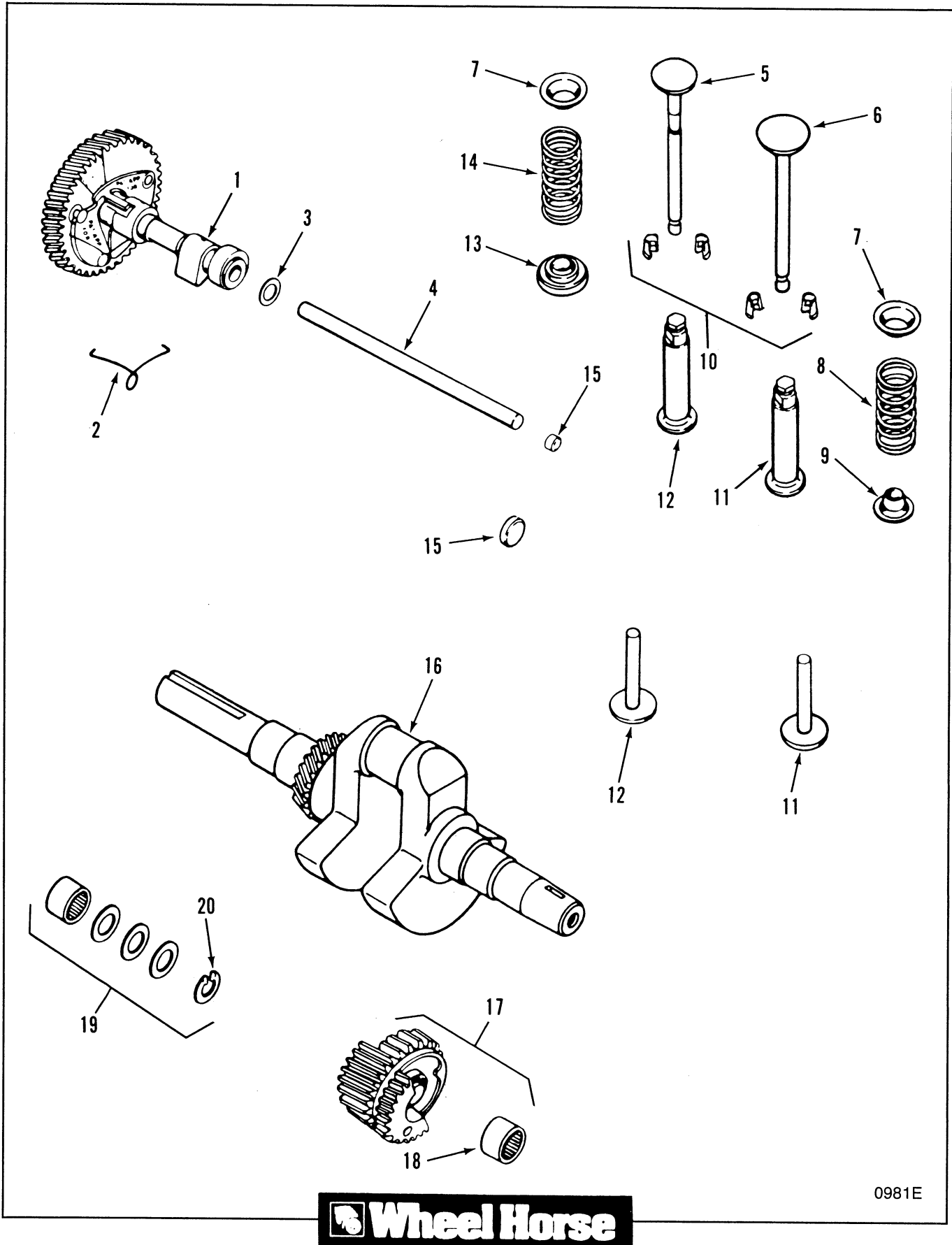
SECTION 7 - KOHLER ENGINE BREATHER & VENT

Figure 7-5 Breather & Vent

SECTION 7 - KOHLER ENGINE BREATHER & VENT

31

WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-5 KOHLER BREATHER & VENT				
1	KH10058	235048	Breather Plate Gasket	1
2	KH10072	235631	Breather Plate	1
3	KH10057	235047	Breather Reed	1
4	KH10143	270146	Breather Baffle	1
5	KH10275	47 050 01	Breather Filter	1
6	KH10034	231032	Breather Seal	1
7	KH10149	275144	Valve Cover Gasket	1
8	KH10298	47 096 01	Valve Cover	1
9	KH10150	27d5220	Valve Cover Stud 1/4-20 x 3-1/4	1
10	KH10629	X-799-1	Palnut 1/4-20	1
11	KH10309	47 326 03	Breather Hose 3-11/32	1



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Figure 7-6 Camshaft, Crankshaft & Valves

SECTION 7 - KOHLER ENGINE CAMSHAFT, CRANKSHAFT & VALVES

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WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-6 KÖHLER CAMSHAFT, CRANKSHAFT & VALVES				
1	KH10359	47 010 11	Camshaft Assy (Includes Item 2)	1
2	KH10292	47 089 01	Actuating Spring	1
3	KH10147	275066	Camshaft Spacer .005	X
	KH10148	275067	Camshaft Spacer .010	X
4	KH10310	47 380 09	Camshaft Pin	1
5	KH10074	235838	Exhaust Valve, 312	1
6	KH10052	235008	Intake Valve, 312	1
7	KH10054	235011	Upper Spring Retainer	2
8	KH10053	235010	Intake Valve Spring 312	1
9	KH10018	230011	Spring Retainer, 312	1
10	KH10221	41 755 10	Retainer Kit	2
11	KH10539	D-235327	Intake Valve Tappet	1
12	KH10539	D-235327	Exhaust Valve Tappet	1
13	KH10496	52 413 01	Valve Rotator	2
14	KH10062	235168	Exhaust Valve Spring 312,	1
15	KH10617	X-702-3	Cup Plug 1/2 O.D.	1
16	KH10655	47 142 16	Crankshaft Kit 3-25/32 x 1-1/8 (Includes Flywheel Hdwr.) 312	1
17	KH10228	45 043 03	Gear Assembly (Includes Item 18) 312,	2
18	KH10267	47 030 01	Needle Bearing 312,	2
19	KH10322	47 755 01	Spacer Kit (Includes Item 20) 312,	2
20	KH10574	X-269-34	Retainer 312,	1

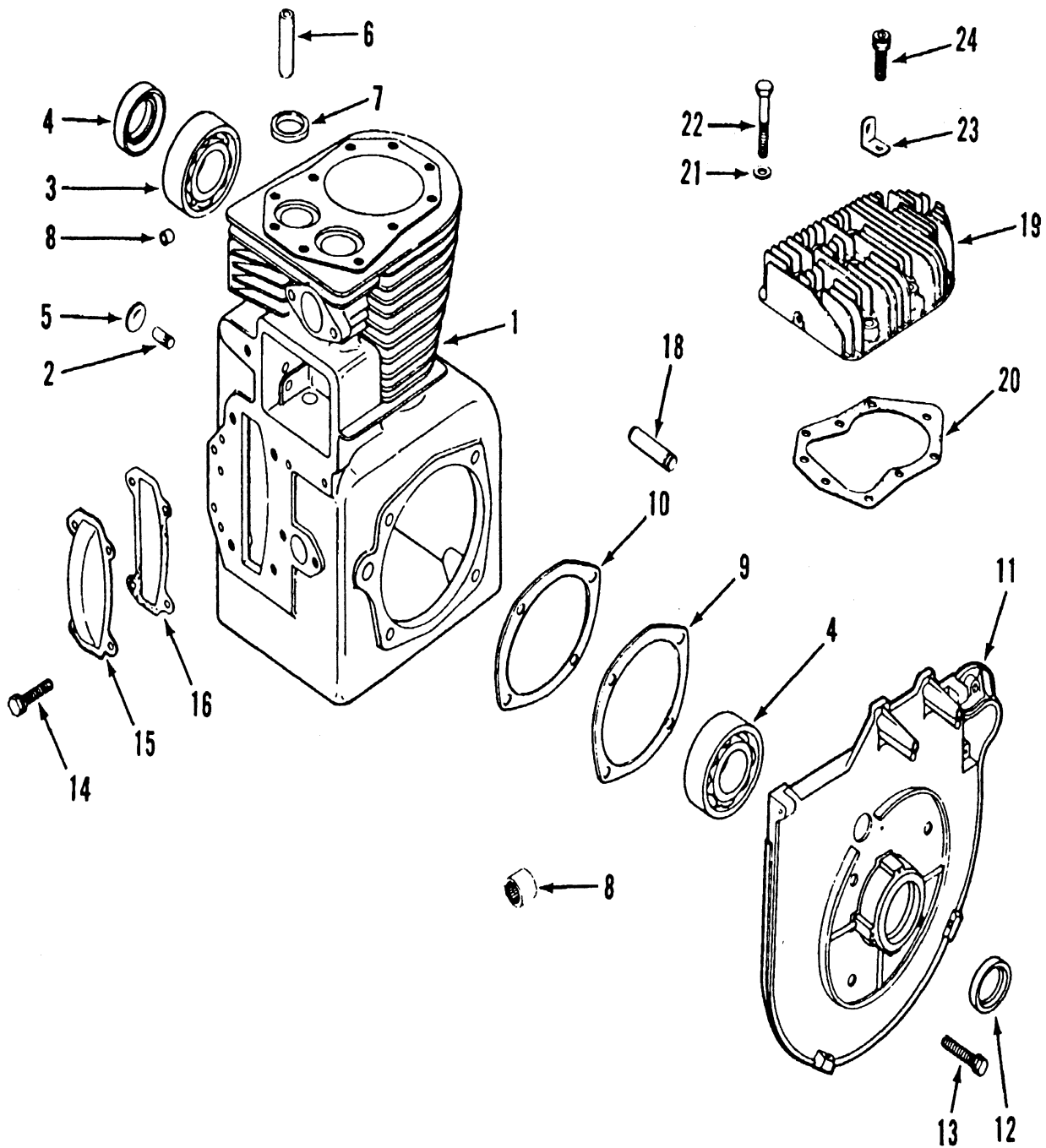


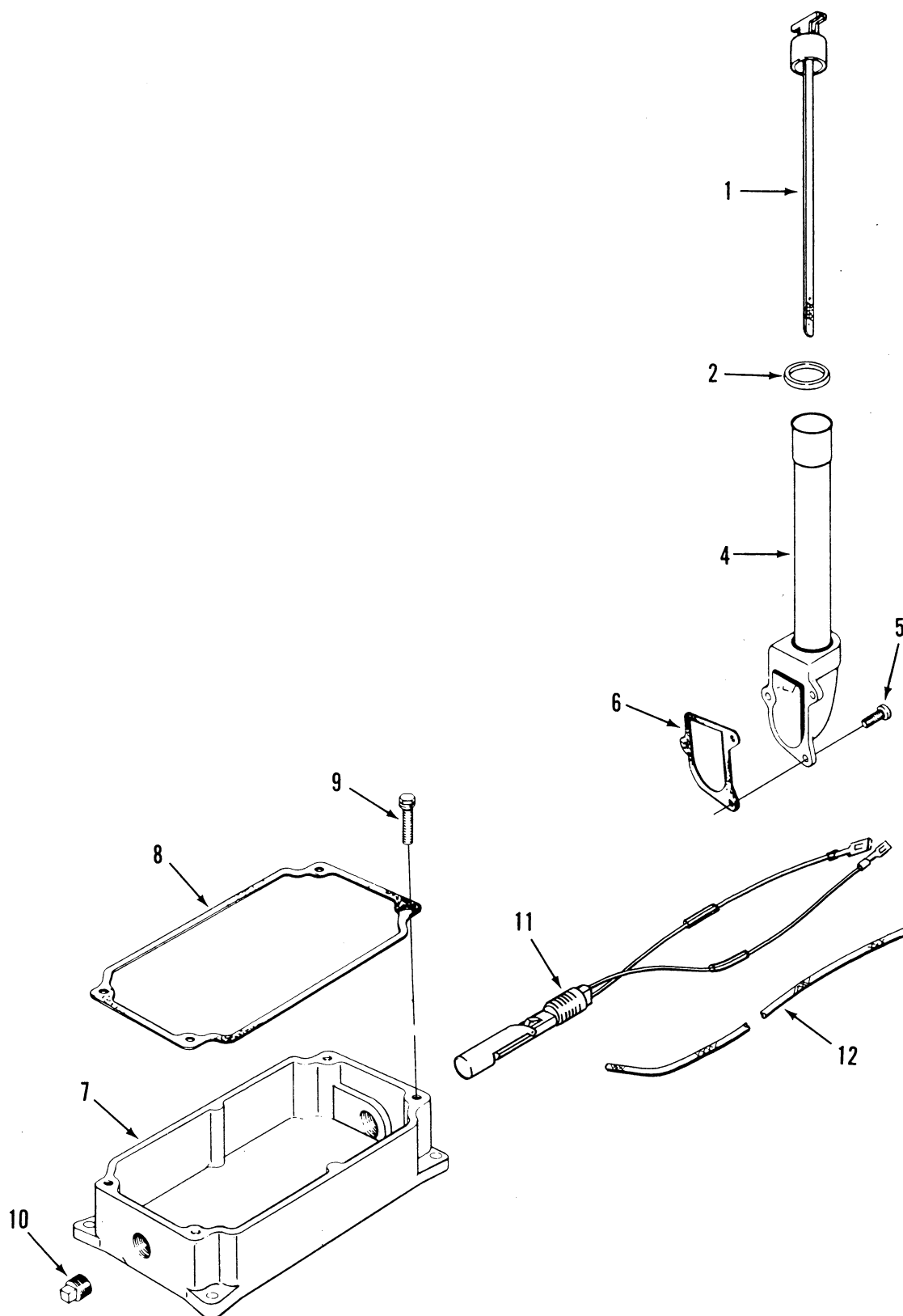
Figure 7-7 Crankcase & Cylinder Head

SECTION 7 - KOHLER ENGINE CRANKCASE & CYLINDER HEAD

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WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-7 KOHLER CRANKCASE & CYLINDER HEAD				
1	KH10317	47 522 95	Cylinder Block - Service With Short Block (Includes Crankshaft) 312	X
	KH10327	47 782 33	Miniblock (Less Crankshaft) 312	X
2	KH10061	235125-S	Governor Gear Shaft	1
3	KH10067	235376	Ball Bearing	2
4	KH10269	47 032 07	Rear Oil Seal	1
5	KH10562	X-230-11	Expansion Plug	1
6	KH10015	230007-S	Valve Guide	2
7	KH10028	230170	Exhaust Valve Insert, 312	1
8	KH10049	234866	Governor Cross Shaft Bearing	1
9	KH10272	47 041 09	Bearing Plate Gasket	1
10	KH10311	47 422 05	Shim Gasket	X
11	KH10306	47 146 07	Bearing Plate	1
12	KH10268	47 032 06	Front Oil Seal	1
13	KH10549	X-159-2	H.C. Sems Screw 3/8-16 x 1	4
14	KH10545	X-132-6	H.C. Sems Screw 1/4-20 x 1/2	4
15	KH10661	23d5026	Camshaft Cover	1
16	KH10055	235025	Camshaft Cover Gasket	1
18	KH10081	236559	Balance Gear Shaft 312,	1
19	KH10261	47 015 06	Cylinder Head	1
20	KH10273	47 041 10	Head Gasket	1
21	KH10145	270889	Plain Washer 8/86	9
22	KH10144	270158	H.C. Screw 3/8-16 x 1-1/2	8
23	KH10312	47 445 02	Lifting Strap	1
24	KH10290	47 086 17	Hex. Hd. Screw 3/8-16 x	1

SECTION 7 - KOHLER ENGINE OIL PAN & DIPSTICK



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Figure 7-8 Oil Pan & Dipstick

SECTION 7 - KOHLER ENGINE OIL PAN & DIPSTICK

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WHEEL HORSE ITEM PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-8 KOHLER OIL PAN & DIPSTICK			
1 KH10270	47 038 27	Dipstick 15-3/8	1
2 KH10201	41 152 01	O-ring	1
4 KH10266	47 029 06	Oil Fill Adapter	1
5 KH10541	X-131-2	F.H. Sems Screw # 10-24 x 1/2	3
6 KH10088	237064	Adapter Gasket	1
7 KH10248	45 199 05	Oil Pan	1
8 KH10059	235057	Oil Pan Gasket	1
9 KH10550	X-159-3	H.C. Sems Screw 3/8-16 x 1 1/4	4
10 KH10620	X-75-10	Sq. Hd. Plug 3/8 NPTF	4
11 KH10138	25 704 01	Float Switch Kit (Includes Items 12 & Decal)	1
12 KH10134	25 431 02	Sleeving	1
Not Illustrated			
KH10119	25 113 05	Float Switch Decal	1
KH10345	48 155 01	Female Connector (5-Contact)	1
KH10325	47 755 27	Gasket Set w/Seals	X
KH10258	47 004 02	Gasket Set w/o Seals	X

SECTION 7 - KOHLER ENGINE PISTON & RINGS

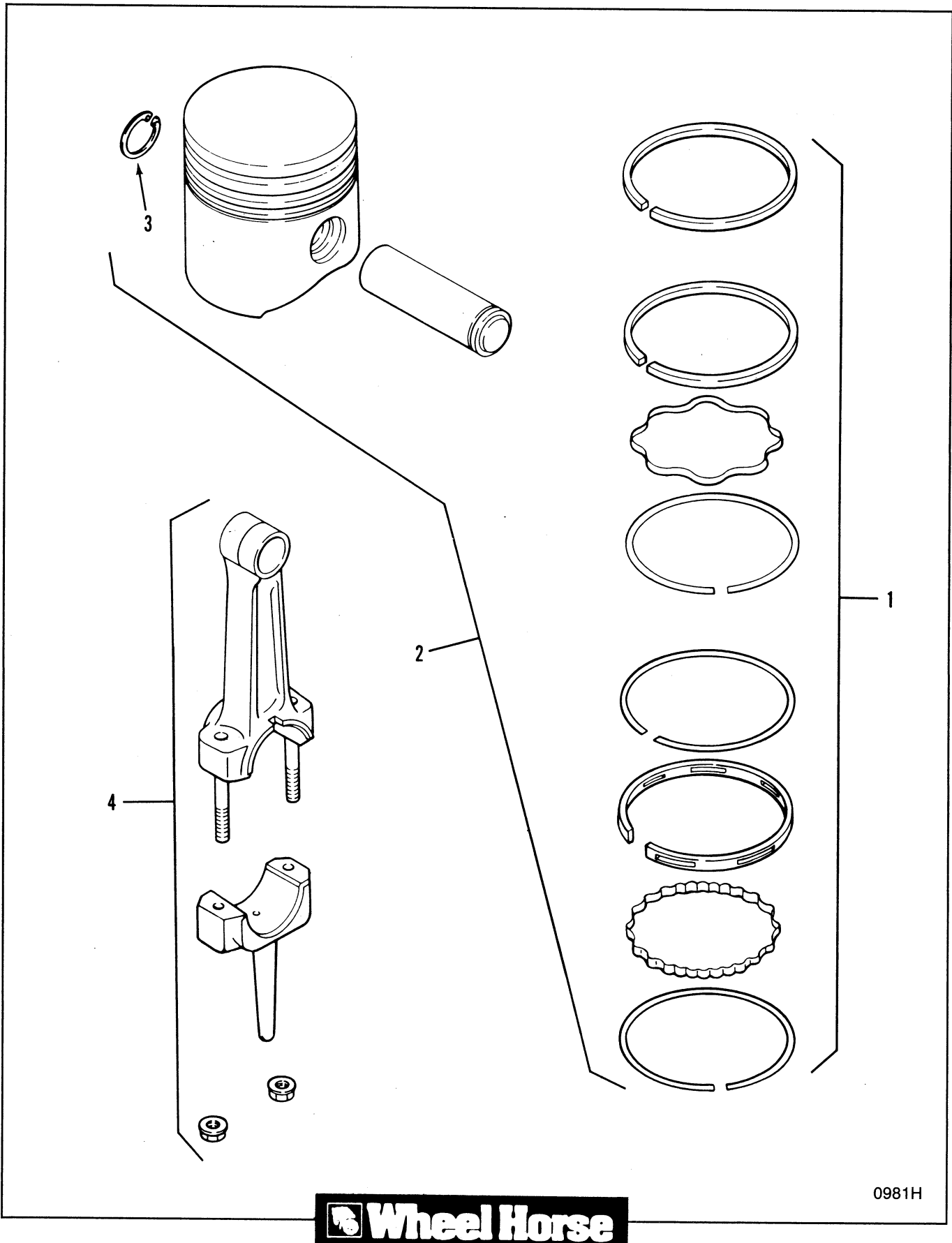


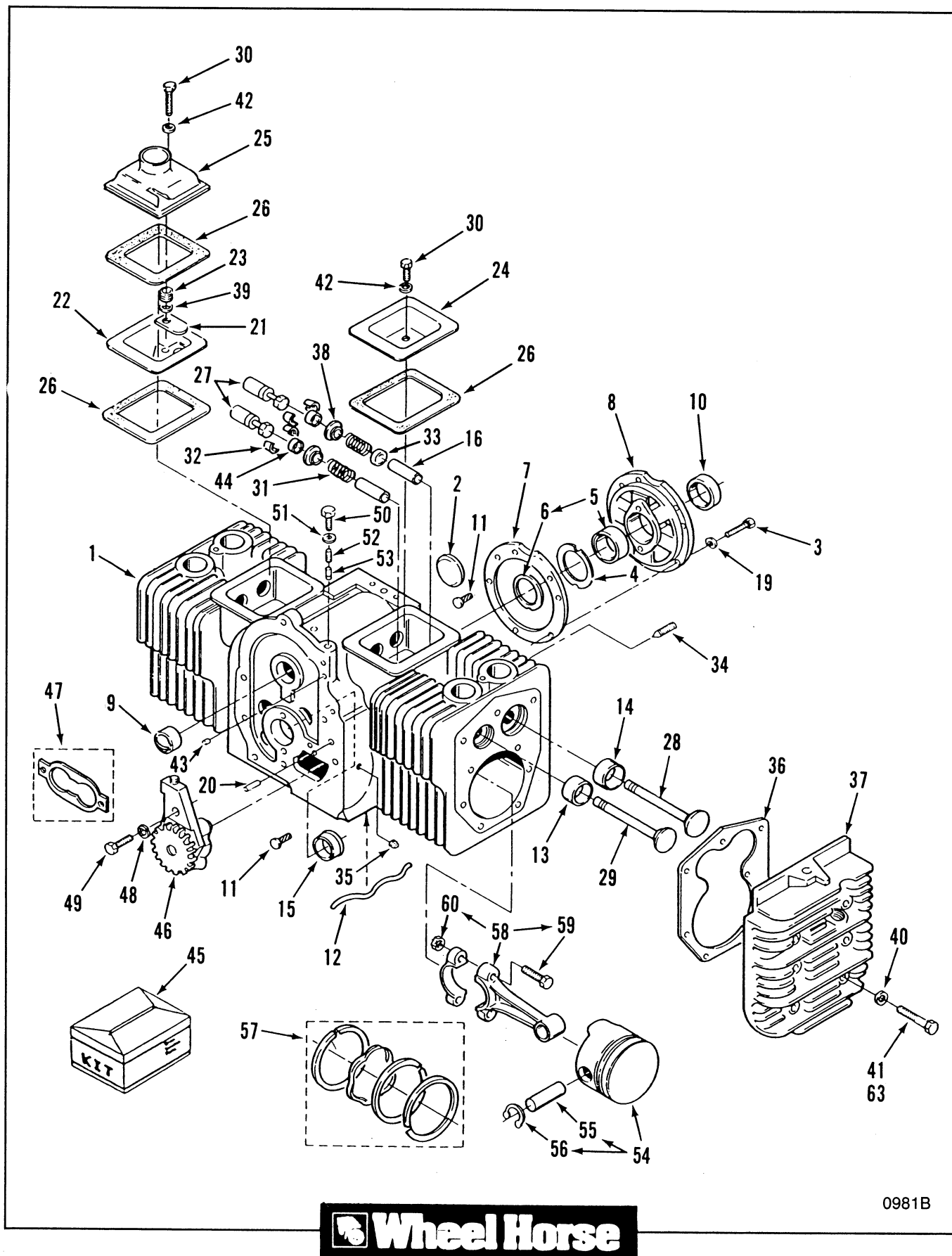
Figure 7-9 Piston & Rings

SECTION 7 - KOHLER ENGINE PISTON & RINGS

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ITEM	WHEEL HORSE PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-9 KOHLER PISTON & RINGS				
1	KH10075	235889	Ring Set Std. & .003 312	1
	KH10076	235890	Ring Set .010 312	1
	KH10077	235891	Ring Set .020 312	1
	KH10078	235892	Ring Set .030 312	1
2	KH10334	47 874 06	Piston w/Ring Set Std. 312	1
	KH10335	47 874 07	Piston w/Ring Set .003 312	1
	KH10336	47 874 08	Piston w/Ring Set .010 312	1
	KH10337	47 874 09	Piston w/Ring Set .020 312	1
	KH10338	47 874 10	Piston w/Ring Set .030 312	1
3	KH10262	47 018 01	Piston Pin Retainer	2
4	KH10283	47 067 09	Connecting Rod Std. 312	1
	KH10284	47 067 10	Connecting Rod .010 312	1

SECTION 7 - ONAN ENGINE CYLINDER BLOCK



SECTION 7 - ONAN ENGINE CYLINDER BLOCK

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WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-10 ONAN ENGINE CYLINDER BLOCK				
1	NN10072	110-3419-01	Short Block	1
2	NN10338	517-0048-01	Plug	1
3	NN10442	800-0051	Bolt 3/8-16 x 1-1/4	5
4	NN10023	104-0776	Shim 0.005"	X
5	NN10009	101-0450	Crankshaft Rear Brg - Standard	1
	NN10010	101-0450-02	Crankshaft Rear Brg - .002" Under	1
	NN10011	101-0450-10	Crankshaft Rear Brg - .010" Under	1
	NN10012	101-0450-20	Crankshaft Rear Brg - .020" Under	1
	NN10013	101-0450-30	Crankshaft Rear Brg - .030" Under	1
6	NN10022	104-0575	Thrust Washer	2
7	NN10002	101-0415	Gasket	1
8	NN10008	101-0439-01	Bearing Plate	1
9	NN10001	101-0405	Camshaft Brg	2
10	NN10321	509-0041	Oil Seal	1
11	NN10334	516-0072	Stop Pin	4
12	NN10139	120-0735	Oil Tube	1
13	NN10054	110-1824	Exhaust Seat Insert - Standard	2
	NN10055	110-1824-02	Exhaust Seat Insert - .002" Oversize	2
	NN10056	110-1824-05	Exhaust Seat Insert - .005" Oversize	2
	NN10057	110-1824-10	Exhaust Seat Insert - .010" Oversize	2
	NN10085	110-1824-25	Exhaust Seat Insert - .025" Oversize	2
14	NN10035	110-0197	Intake Seat Insert - Standard	2
	NN10036	110-0197-02	Intake Seat Insert - .002" Oversize	2
	NN10037	110-0197-05	Intake Seat Insert - .005" Oversize	2
	NN10038	110-0197-10	Intake Seat Insert - .010" Oversize	2
	NN10039	110-0197-25	Intake Seat Insert - .025" Oversize	2
15	NN10003	101-0432	Front Crankshaft Brg - Standard	1
	NN10004	101-0432-02	Front Crankshaft Brg - .002" Under	1
	NN10005	101-0432-10	Front Crankshaft Brg - .010" Under	1
	NN10006	101-0432-20	Front Crankshaft Brg - .020" Under	1
	NN10007	101-0432-30	Front Crankshaft Brg - .030" Under	1
16	NN10084	110-3527	Exhaust Valve Guide	2
	NN10083	110-3526	Intake Valve Guide	2
19	NN10421	850-0050	Spring Washer 3/8	5
20	NN10336	516-0141	Pin	2
21	NN10154	123-1175	Valve Reed	1
22	NN10152	123-1173	Baffle	1
23	NN10153	123-1174	Spring	1
24	NN10059	110-1879-01	RH Valve Cover	1
25	NN10066	110-2274-01	LH Valve Cover	1
26	NN10060	110-1921	Gasket	3
27	NN10129	115-0006	Tappet - Standard	4
	NN10130	115-0006-02	Tappet .002" Oversize	4
	NN10131	115-0006-05	Tappet .004" Oversize	4
28	NN10075	110-3479	Intake Valve	2
29	NN10076	110-3480	Exhaust Valve	2
30	NN10370	800-0010	Bolt 1/4-20 x 1-3/4	2
31	NN10077	110-3485	Valve Spring	4
32	NN10082	110-3511	Spring Lock	8
33	NN10326	509-0210	Intake Valve Seal	2

SECTION 7 - ONAN ENGINE CYLINDER BLOCK

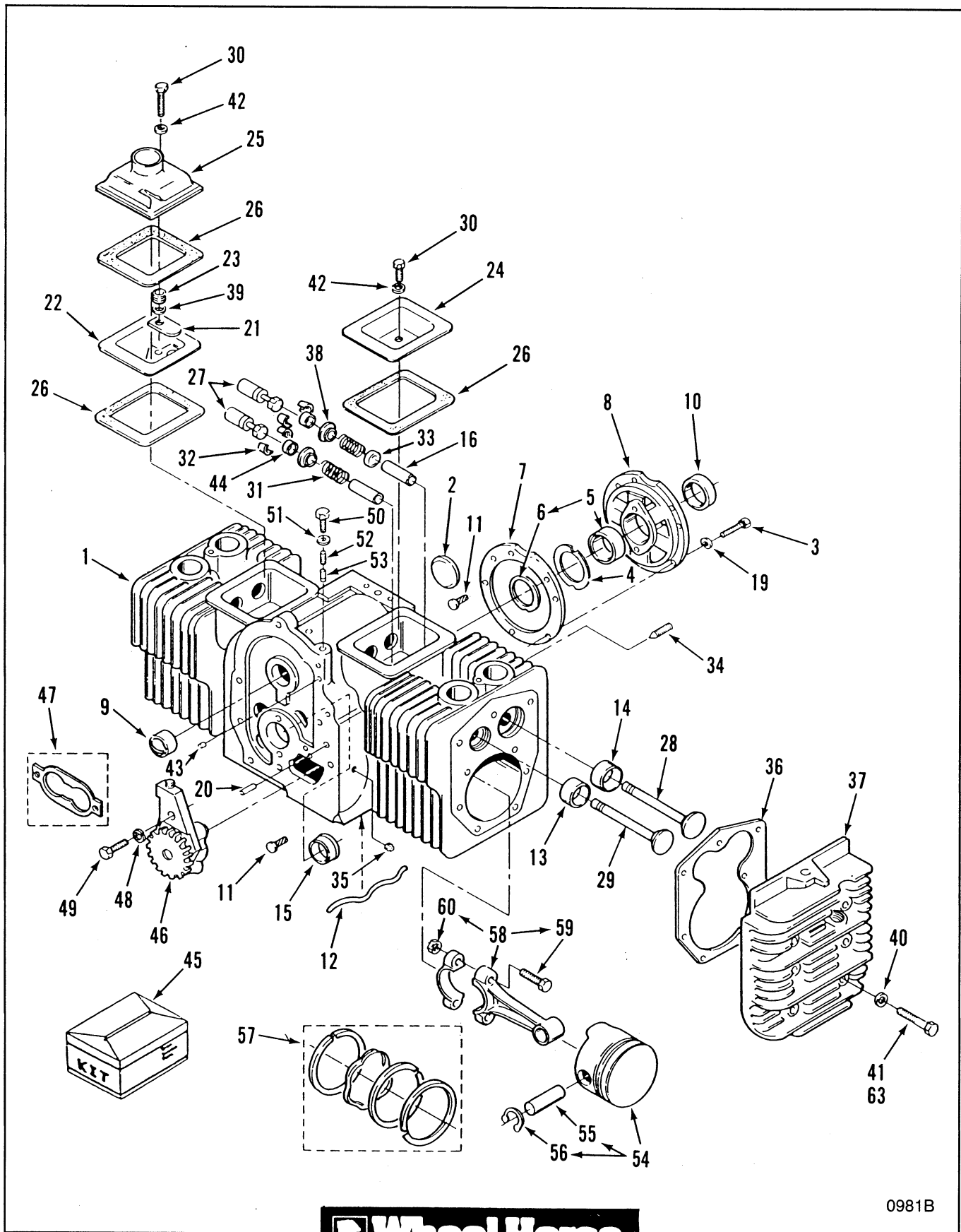
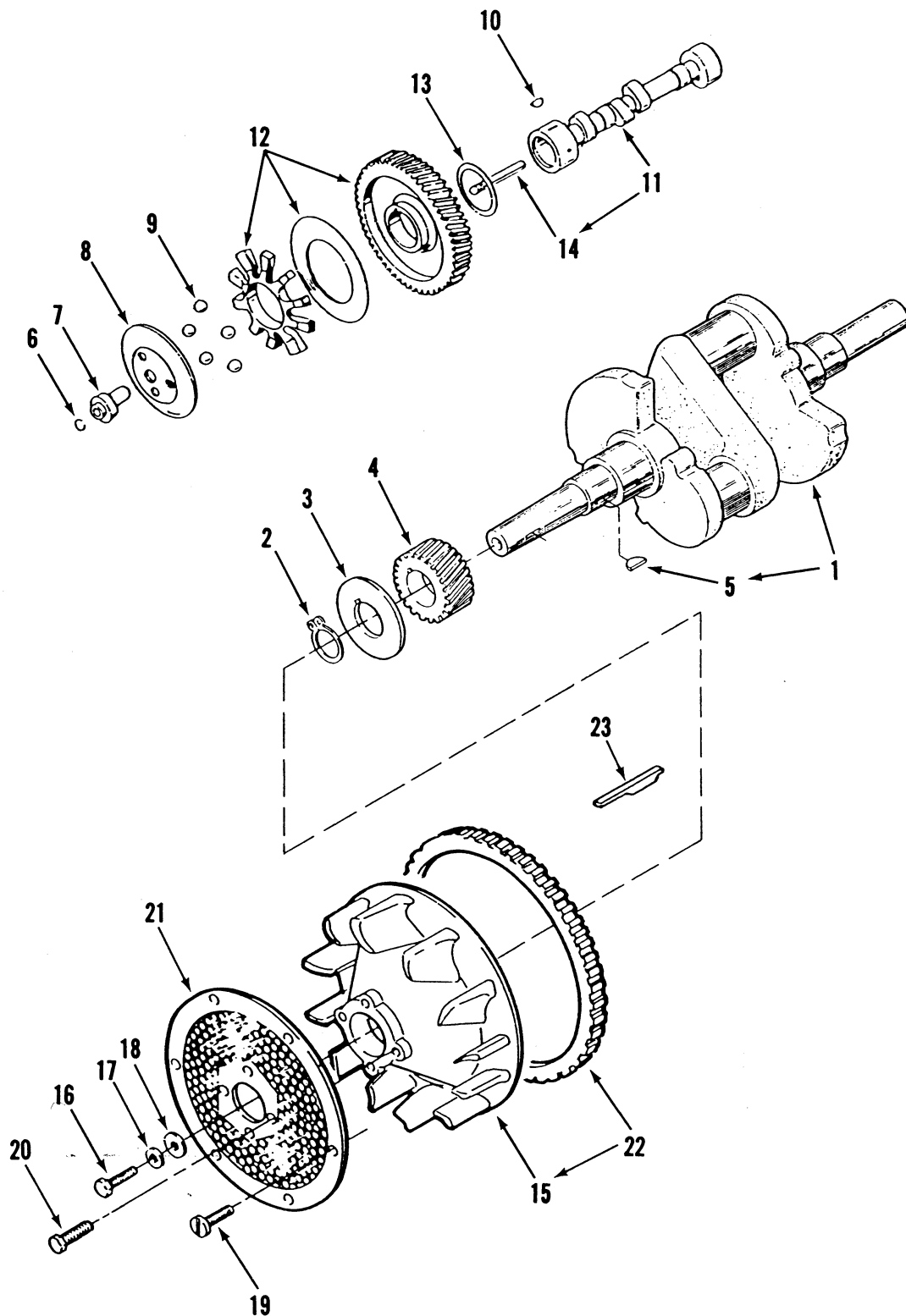


Figure 7-10 Engine Cylinder Block

SECTION 7 - ONAN ENGINE CYLINDER BLOCK

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WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-10 ONAN ENGINE CYLINDER BLOCK (CONT'D)				
34	NN10385	803-0071	Screw 3/8-16 x 5/8	2
35	NN10307	505-0057	Pipe Plug	1
36	NN10070	110-3181	Cylinder Head Gasket	2
37	NN10080	110-3509	Right Cylinder Head	1
	NN10079	110-3508	Left Cylinder Head	1
38	NN10078	110-3487	Retaining Washer	4
39	NN10356	526-0018	Flat Washer 1/4	1
40	NN10363	526-0122	Flat Washer 1/4	18
41	NN10381	800-0471	Special Bolt 2" long	10
42	NN10359	526-0063	Flat Copper Washer 1/4	2
43	NN10339	517-0067	Plug	1
44	NN10081	110-3510	Valve Cap	4
45	NN10257	168-0182	Complete Engine Gasket Kit	1
	NN10258	168-0183	Valve Grind/Carbon Removal	1
46	NN10136	120-0491	Oil Pump-Complete	1
47	NN10134	120-0161	Oil Pump-Gasket Kit	1
48	NN10419	850-0040	Spring Washer	2
49	NN10369	800-0007	Bolt 1/4-20 x 1	2
50	NN10383	801-0049	Bolt 3/8-24 x 7/8	1
51	NN10361	526-0066	Flat Copper Washer 3/8	1
52	NN10133	120-0140	Spring	1
53	NN10135	120-0398	Plunger	1
54	NN10088	112-0186	Piston Pin & Retaining Rings - STD	2
	NN10089	112-0186-05	Piston Pin & Retaining Rings - .005"	2
	NN10090	112-0186-10	Piston Pin & Retaining Rings - .010"	2
	NN10091	112-0186-20	Piston Pin & Retaining Rings - .020"	2
	NN10092	112-0186-30	Piston Pin & Retaining Rings - .030"	2
	NN10093	112-0186-40	Piston Pin & Retaining Rings - .040"	2
55	NN10100	112-0229	Piston Pin	2
56	NN10345	518-0311	Retaining Ring	4
57	NN10101	113-0189	Piston Ring Set-Standard	2
	NN10102	113-0189-05	Piston Ring Set .005" Oversize	2
	NN10103	113-0189-10	Piston Ring Set .010" Oversize	2
	NN10104	113-0189-20	Piston Ring Set .020" Oversize	2
	NN10105	113-0189-30	Piston Ring Set .030" Oversize	2
	NN10106	113-0189-40	Piston Ring Set .040" Oversize	2
58	NN10125	114-0300	Rod w/Bolts & Nuts - STD	2
	NN10126	114-0300-10	Rod w/Bolts & Nuts - .010"	2
	NN10127	114-0300-20	Rod w/Bolts & Nuts - .020"	2
	NN10128	114-0300-30	Rod w/Bolts & Nuts - .030"	2
59	NN10120	114-0240	Special Rod Bolt	4
60	NN10428	870-0302	Crown Lock Nut	4
63	NN10382	800-0572	Special Bolt 2.375" Long	8

SECTION 7 - ONAN CRANKSHAFT, CAMSHAFT & FLYWHEEL

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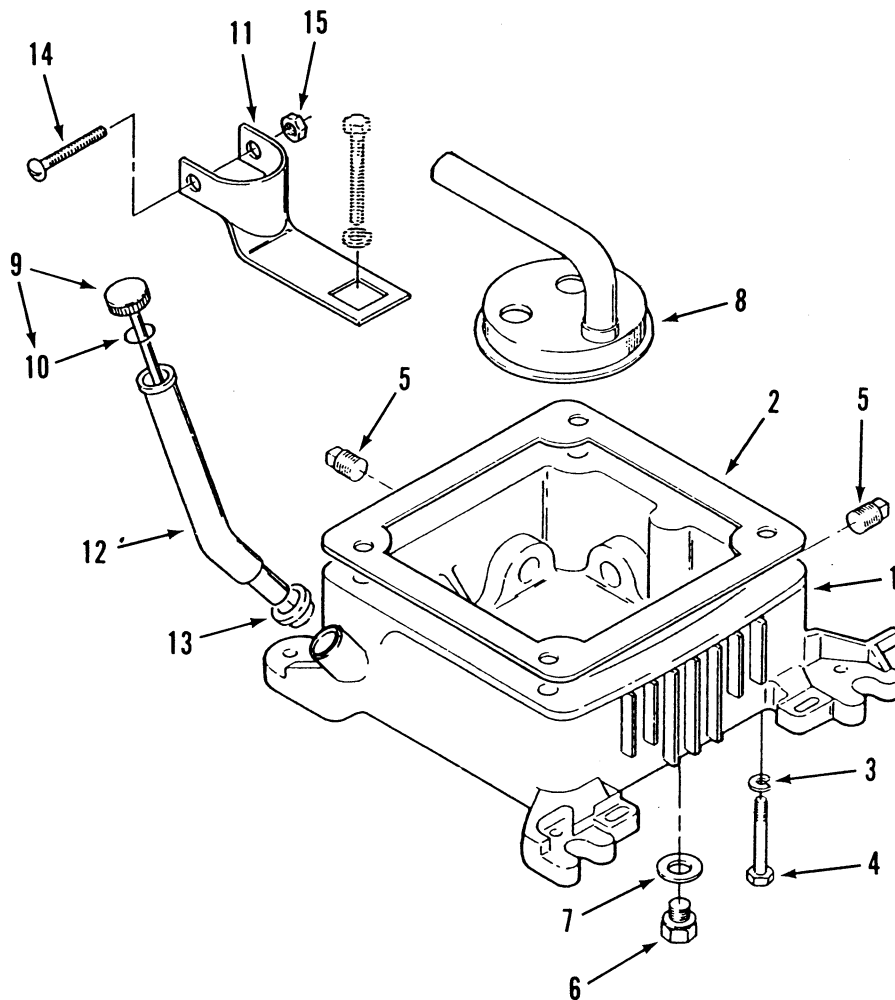


Figure 7-11 Onan Crankshaft, Camshaft & Flywheel

SECTION 7 - ONAN CRANKSHAFT, CAMSHAFT & FLYWHEEL

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WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-11 ONAN CRANKSHAFT, CAMSHAFT, FLYWHEEL				
1	NN10025	104-1328	Crankshaft	1
2	NN10343	518-0014	Retaining Ring	1
3	NN10439	104-0043	Special Washer	1
4	NN10438	104-0032	Crankshaft Gear	1
5	NN10330	515-0001	Gear Key	1
6	NN10215	150-0078	Retaining Ring	1
7	NN10221	150-1519	Governor Cup Hub	1
8	NN10222	150-1520	Governor Cup	1
9	NN10328	510-0015	Governor Ball	1
10	NN10330	515-0001	Woodruff Key	1
11	NN10032	105-0637	Camshaft (Includes item 13)	1
12	NN10029	105-0332	Camshaft Gear (Includes Gear, Spacer and Plate)	1
13	NN10030	105-0541	Special Thrust Washer	1
14	NN10214	150-0075	Center Pin	1
15	NN10171	134-4633	Flywheel (Includes Ring Gear)	1
16	NN10021	104-0170	Special Hex Hd Cap Screw	1
17	NN10422	850-0055	Spring Lockwasher 7/16	1
18	NN10335	526-0017	Flat Washer 7/16	1
19	NN10409	815-0687	Flange Lock Hd. Screw # 10-24 x 3/8	6
20	NN10416	821-0014	Hex Hd Locking Cap Screw 5/16-18 x 1/2	4
21	NN10168	134-4553-01	Air Inlet Screen	1
22	NN10024	104-0779	Ring Gear	1
23	NN10332	515-0284	Flywheel Key	1

SECTION 7 - ONAN OIL BASE FILL TUBE AND BRACKET

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Figure 7-12 Onan Oil Base Fill Tube and Bracket

SECTION 7 - ONAN OIL BASE FILL TUBE AND BRACKET

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WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-12				
ONAN OIL BASE FILL TUBE AND BRACKET				
1	NN10018	102-1325	Oil Base (Includes All Plugs and Plug Gasket)	1
2	NN10016	102-1200	Oil Base Gasket	1
3	NN10421	850-0050	Spring Lockwasher 3/8	4
4	NN10379	800-0061	Cap Screw 3/8-16 x 3-3/4	4
5	NN10308	505-0110	Sq. Hd. Plug 3/8	2
6	NN10015	102-0938	Special Hex Hd. Plug	1
7	NN10014	102-0743	Hex Hd. Plug Gasket	1
8	NN10138	120-0713	Oil Pump Intake Cup	1
9	NN10159	123-1637	Oil Fill Cap and Indicator (Includes "O" Ring)	1
10	NN10323	509-0142	Oil Fill Cap Oil Ring	1
11	NN10162	123-1742-01	Fill Tube Bracket	1
12	NN10161	123-1685-02	Oil Fill Tube-Chrome 15-3/4" Lg	1
13	NN10325	509-0209	Oil Fill Tube Seal	1
14	NN10407	815-0576	Pan Hd. Screw # 10 x 1-1/4	1
15	NN10431	870-0410	Speed Nut	1

SECTION 7 - ONAN OIL FILTER

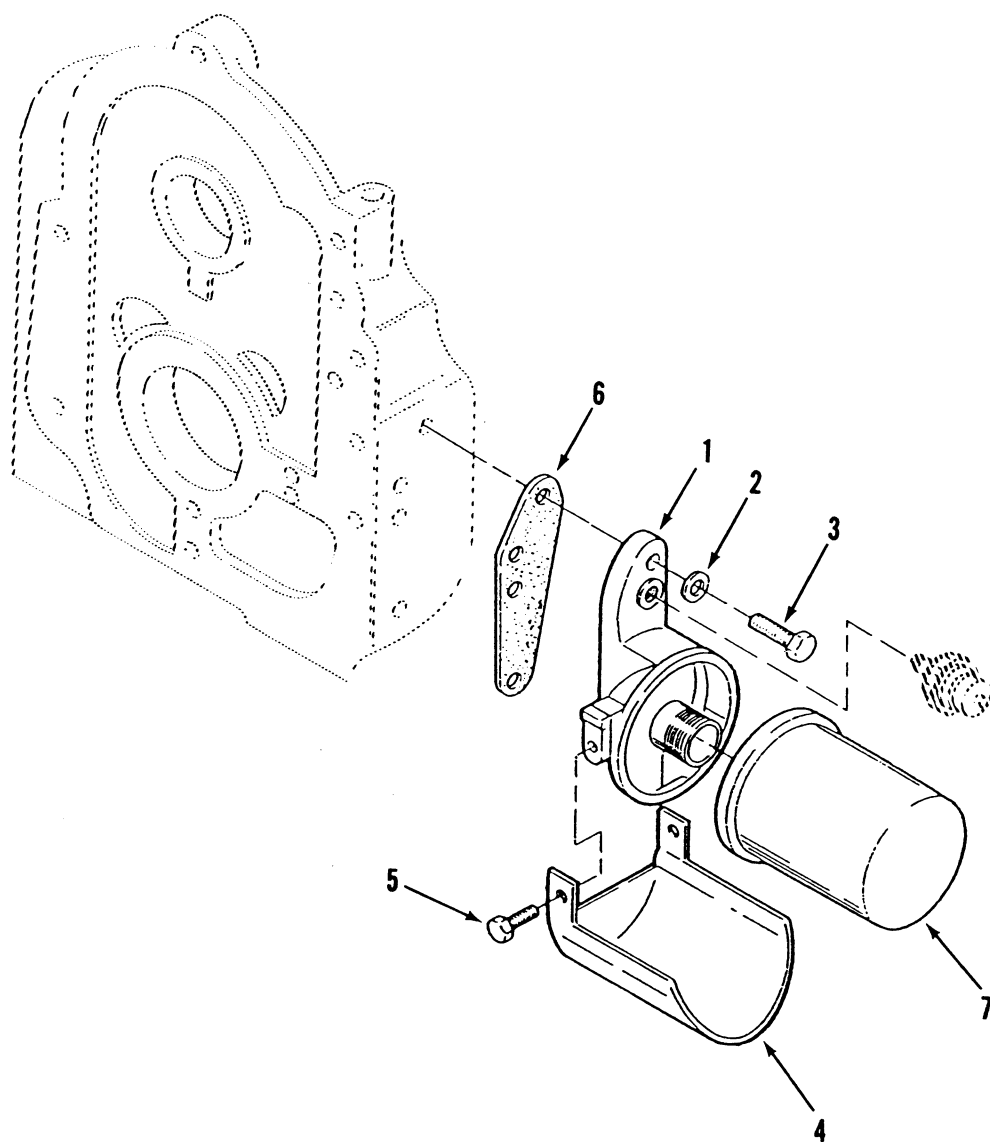


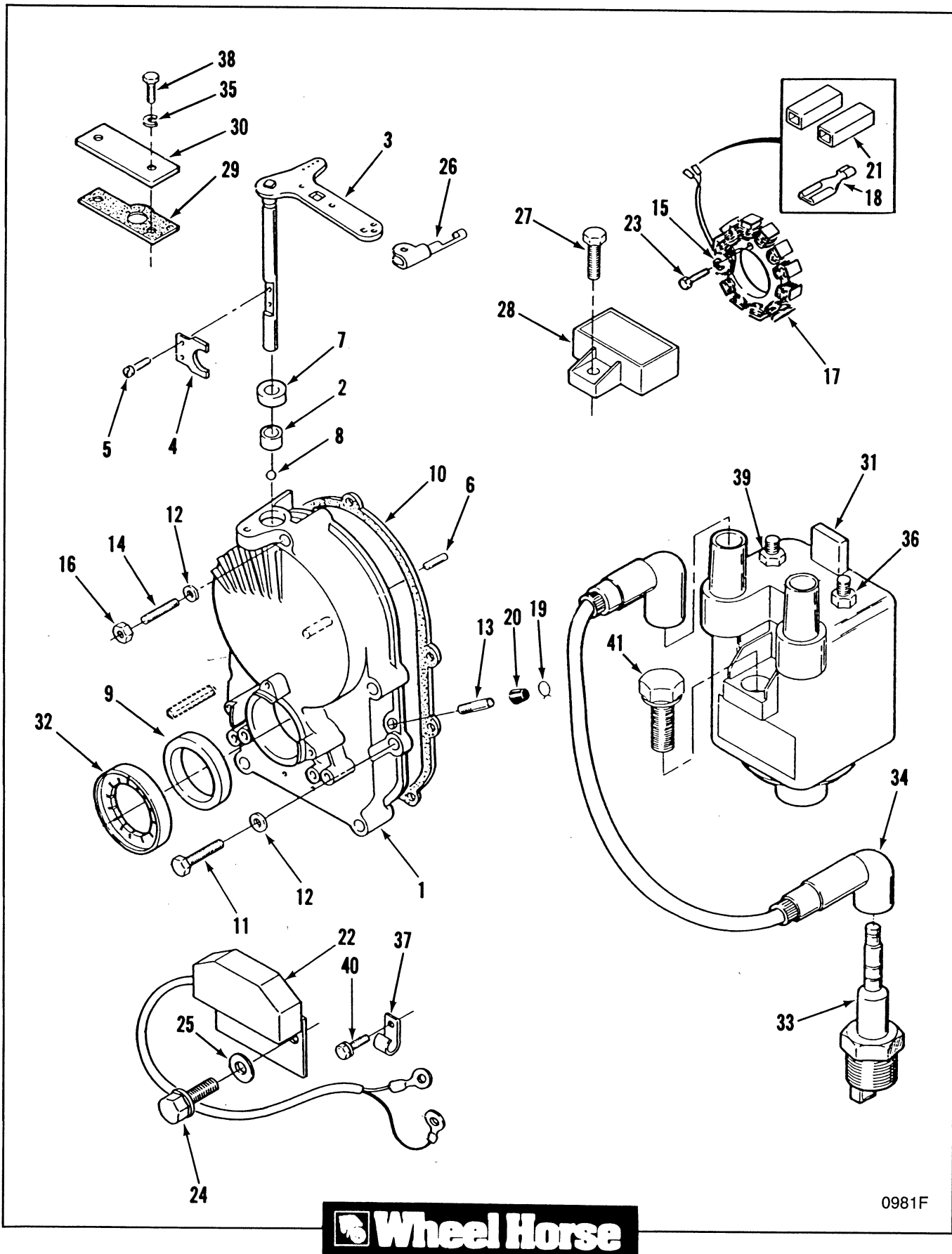
Figure 7-13 Onan Oil Filter

SECTION 7 - ONAN OIL FILTER

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WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-13 ONAN OIL FILTER				
1	NN10141	122-0320	Oil Filter Adapter	1
2	NN10360	526-0065	Flat Copper Washer 5/16	2
3	NN10373	800-0028	Hex Hd. Cap Screw 5/16-18 x 1	2
4	NN10146	122-0360-02	Oil Filter Drain	1
5	NN10391	815-0194	Hex Hd. Cap Screw # 10-32 x 3/8	2
6	NN10463	122-0375	Oil Filter Adapter Gasket	1
7	NN10147	122-0645	Oil Filter	1
	Not Illustrated			
	114498		Oil Filter Wrench	1

SECTION 7 - ONAN GEARCASE AND IGNITION CONTROLS



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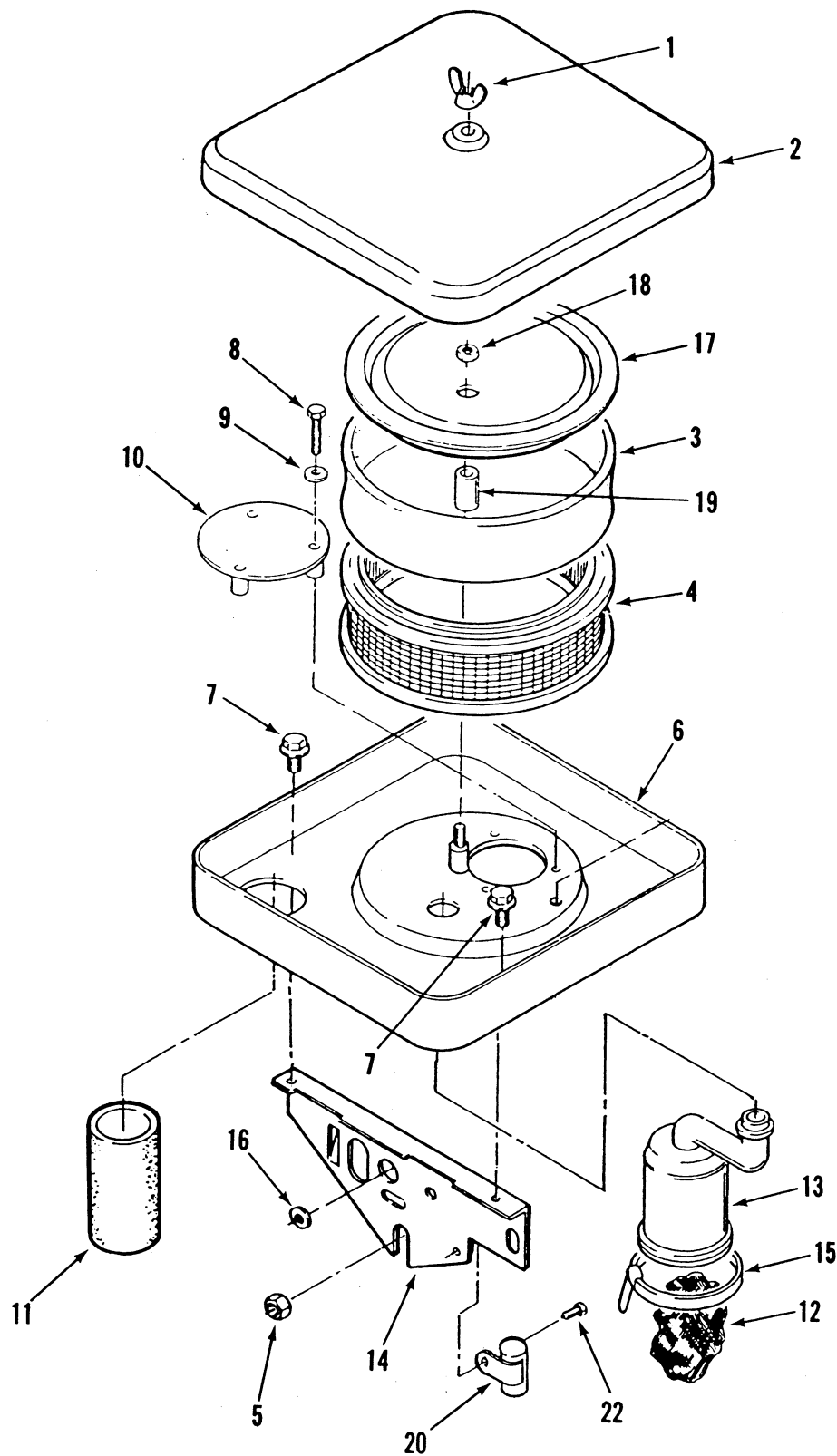
Figure 7-14 Onan Gearcase and Ignition Controls

SECTION 7 - ONAN GEARCASE AND IGNITION CONTROLS

51

WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-14 ONAN GEARCASE AND IGNITION CONTROLS				
1	NN10020	103-0791	Gearcase Kit (Includes Items 2 thru 9, 13, 19 & 20)	1
2	NN10329	510-0105	Governor Shaft Bearing	1
3	NN10220	150-1470-01	Governor Shaft and Arm-Chromed	1
4	NN10216	150-1187	Governor Shaft Yoke	1
5	NN10388	815-0046	Pan Hd. Mach. Screw # 8-32 x 3/8	1
6	NN10335	516-0130	Governor Cup Stop Dowel Pin	1
7	NN10310	509-0008	Governor Shaft Oil Seal	1
8	NN10327	510-0014	Governor Shaft Ball Bearing	1
9	NN10320	509-0040	Crankshaft Oil Seal	1
10	NN10019	103-0408	Gearcase Mounting Gasket	1
11	NN10374	114-0022	Hex Hd. Cap Screw 5/16-18 x 1-3/4	4
12	NN10360	526-0065	Flat Copper Washer 5/16	5
13	NN10210	149-1299	Vacuum Port Tube	1
14	NN10352	520-0933	Gear Cover Stud	1
15	NN10418	850-0030	Lockwasher # 10	3
16	NN10426	862-0015	Nut 5/6-18	1
17	NN10259	191-1256	Stator w/Terminals	1
18	NN10290	332-2423	Stator Leads Terminal	3
19	NN10301	503-0301	Vacuum Port Clamp	1
20	NN10211	149-1321	Vacuum Port Cap	1
21	NN10280	323-1257	Terminal Connector Body Kit (Includes Terminals)	1
22	NN10444	166-0785	Ignition Control	1
23	NN10389	815-0172	Self-Lock Hex Hd. Mach. Screw # 10-32x1	3
24	NN10394	815-0340	Hex Washer Hd. Screw # 10-32 x 3/8	2
25	NN10424	854-0010	Lockwasher IT # 10	2
26	NN10346	518-0406	Retaining Clip	1
27	NN10414	821-0008	Hex Washer Hd. Cap Screw 1/4-20 x 5/16	1
28	NN10261	191-1748	Voltage Regulator-20 amp	1
29	NN10243	160-1150	Plate Gasket	1
30	NN10244	160-1345-01	Ignition Plunger Cover	1
31	NN10245	166-0761	Battery Ignition Coil w/Nuts	1
32	NN10247	166-0767	Ignition Rotor	1
33	NN10252	167-0263	Spark Plug	2
34	NN10253	167-1615-01	Spark Plug Cable-9" Long	1
	NN10254	167-1615-04	Spark Plug Cable-18.5" Long	1
35	NN10419	850-0040	Lockwasher 1/4	2
36	NN10248	166-0770	Hex Flange Nut	1
37	NN10348	518-0515	Wire Clip	1
38	NN10368	800-0004	Hex Hd. Cap Screw 1/4-20 x 5/8	1
39	NN10249	166-0771	Hex Flange Nut	1
40	NN10396	815-0389	Hex Washer Hd. Screw 1/4-20 x 1	1
41	NN10408	815-0650	Hex Washer Hd. Screw 1/4-20 x 1	2

SECTION 7 - ONAN AIR CLEANER



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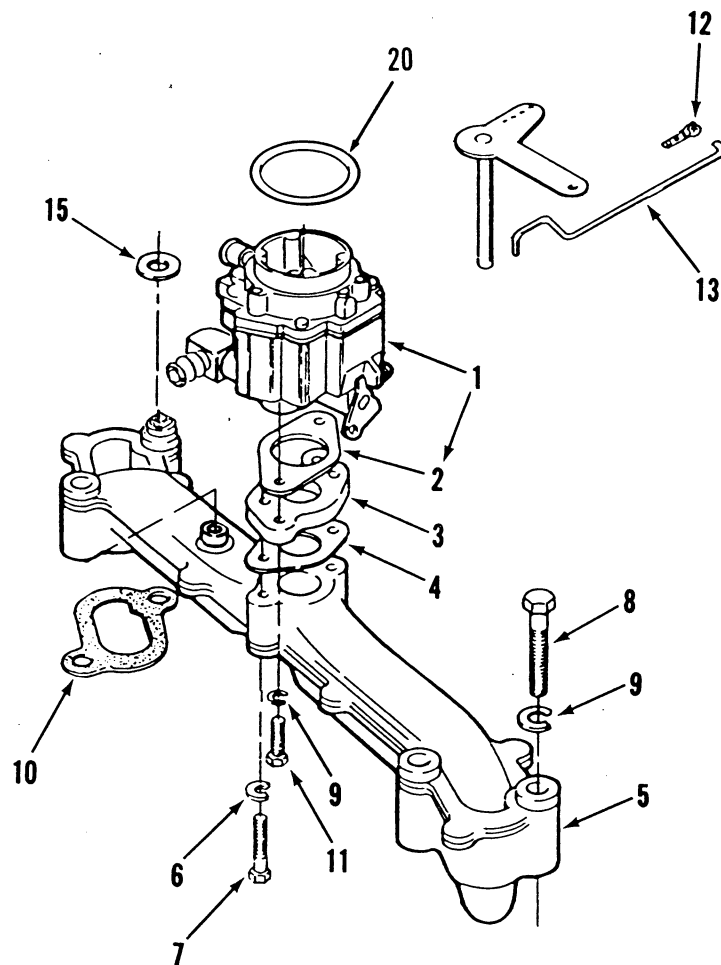
Figure 7-15 Onan Air Cleaner

SECTION 7 - ONAN AIR CLEANER

53

WHEEL HORSE ITEM PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-15 ONAN AIR CLEANER			
1	NN10427	865-0020 Wing Nut 1/4-20	1
2	NN10185	140-2005-01 Air Cleaner Cover	1
3	NN10176	140-1496 Air Cleaner Foam Element	1
4	NN10175	140-1228 Air Cleaner Element	1
5	NN10430	870-0399 Hex Washer Hd. Flange Nut 5/16-18	1
6	NN10184	140-2004-01 Air Cleaner Housing	1
7	NN10406	815-0575 Hex Washer Hd. ST Screw 1/4-20 x 3/8	2
8	NN10398	815-0470 Hex. Hd. Mach. Screw # 10-32 x 1-1/2	3
9	NN10365	526-0234 Flat Washer # 10	3
10	NN10193	145-0521 Air Deflector Plate	1
11	NN10187	140-2025 Air Intake Tube	1
12	NN10156	123-1417 Breather Tube Filter	1
13	NN10157	123-1429 Crankcase Breather	1
14	NN10186	140-2017-01 Air Cleaner Support	1
15	NN10304	503-1138 Breather Tube Clamp	1
16	NN10309	508-0021 Rubber Grommet - 3/4" Hole	1
17	NN10177	140-1692 Element Cover	1
18	NN10429	870-0365 Hex Nut 1/4-20	1
19	NN10272	301-0458 Air Cleaner Stud Spacer	1
20	NN10276	312-0256 Capacitor (300 VD)	1
21	NN10390	815-0178 Hex Washer Hd. Screw # 10-32 x 5/8	1

SECTION 7 - ONAN INTAKE MANIFOLD

**Wheel Horse**

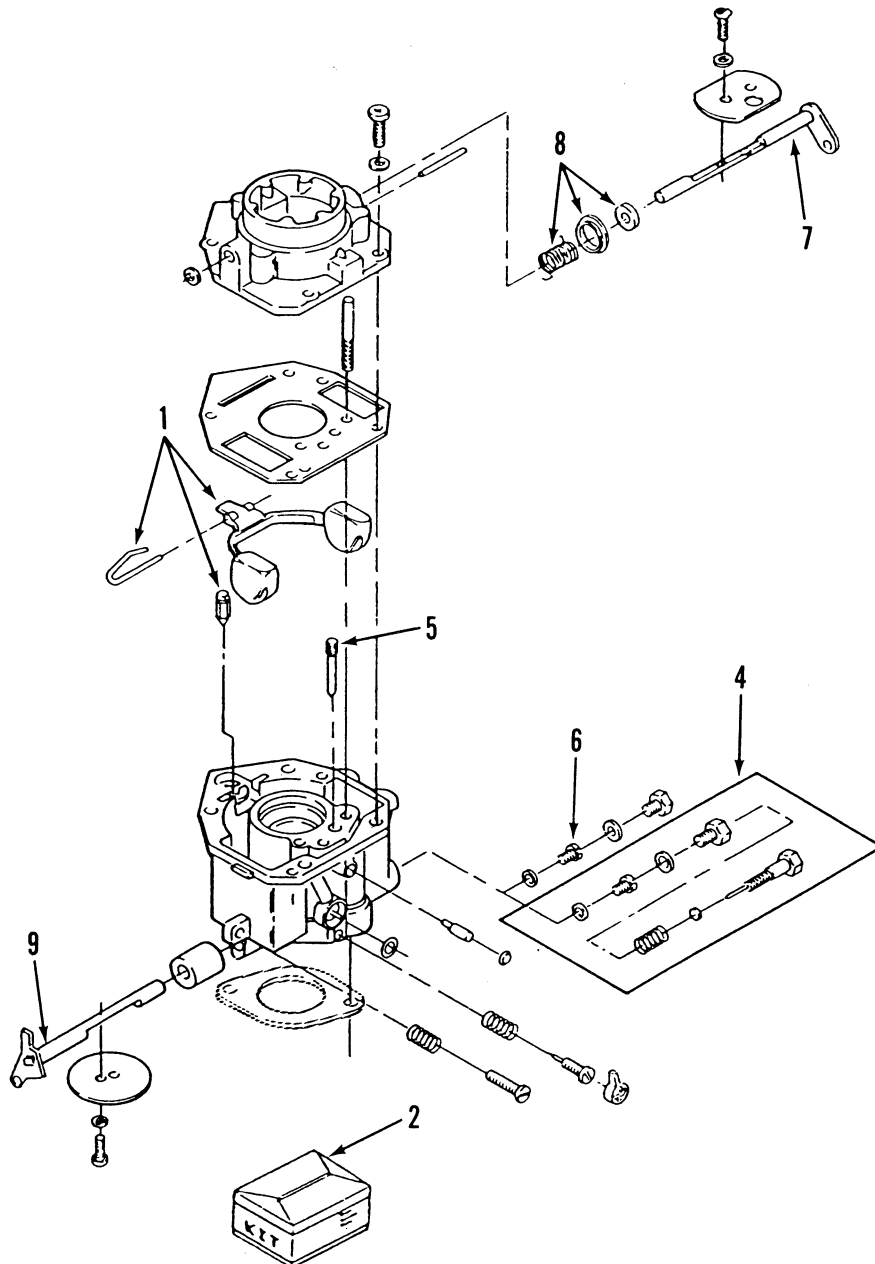
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Figure 7-16 Onan Intake Manifold

SECTION 7 - ONAN INTAKE MANIFOLD

55

WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-16 ONAN INTAKE MANIFOLD				
1	NN10203	146-0428	Carburetor (Includes Mounting Gasket, Elbow and "O" Ring) see section 7-17 for complete carburetor breakdown	1
2	NN10235	154-0733	Carb to Adapter Gasket	1
3	NN10239	154-1977-01	Carburetor Adapter	1
4	NN10192	145-0438	Adapter to Manifold Gasket	1
5	NN10242	154-2339	Intake Manifold	1
6	NN10419	850-0040	Spring Lockwasher 1/4	2
7	NN10372	800-0023	Hex Hd. Cap Screw 1/4-20 x 1-3/8	2
8	NN10375	800-0033	Hex. Hd. Cap Screw	4
9	NN10420	850-0045	Spring Lockwasher 5/16	6
10	NN10236	154-1446	Manifold to Block Gasket	2
11	NN10373	800-0028	Hex Hd. Cap Screw 5/16-18 x 1	2
12	NN10342	518-0004	Retaining Clip Rod to Carb	1
13	NN10227	150-1924	Governor Control Rod	1
15	NN10362	526-0113	Flat Washer 5/16	1

SECTION 7 - ONAN CARBURETOR COMPONENTS

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Figure 7-17 Onan Carburetor Components

SECTION 7 - ONAN CARBURETOR COMPONENTS

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WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 7-17 ONAN CARBURETOR COMPONENTS				
1	NN10209	146-0437	Float Kit (Includes Float, Pin and Valve)	X
2	NN10206	146-0432	Repair Kit (Includes Screw and Plug Package, Gasket Package, Float Valve, Idle Adjustment Needle and Spring, Mounting Gaskets, Idle Limit Cap)	X
4	NN10197	146-0327	Variable Jet Kit-Optional (High Altitude Application Includes Power Jet and Gasket, Retainer, Power Needle Spring, Power Needle and Power Plug Gasket)	X
5	NN10201	146-0425	Idle Jet	1
6	NN10199	146-0396	Power Jet	1
7	NN10207	146-0433	Choke Shaft Kit (Includes Choke Valve, Valve Set Screw and Air Filter)	1
8	NN10208	146-0435	Choke Lever Kit (Includes Choke Lever Ring, Choke Spring and Choke Collar)	1
9	NN10200	146-0324	Throttle Shaft Kit (Includes Valve Set Screw, Air Filter and Throttle Valve)	1

SECTION 8 - KOHLER ENGINE STARTER

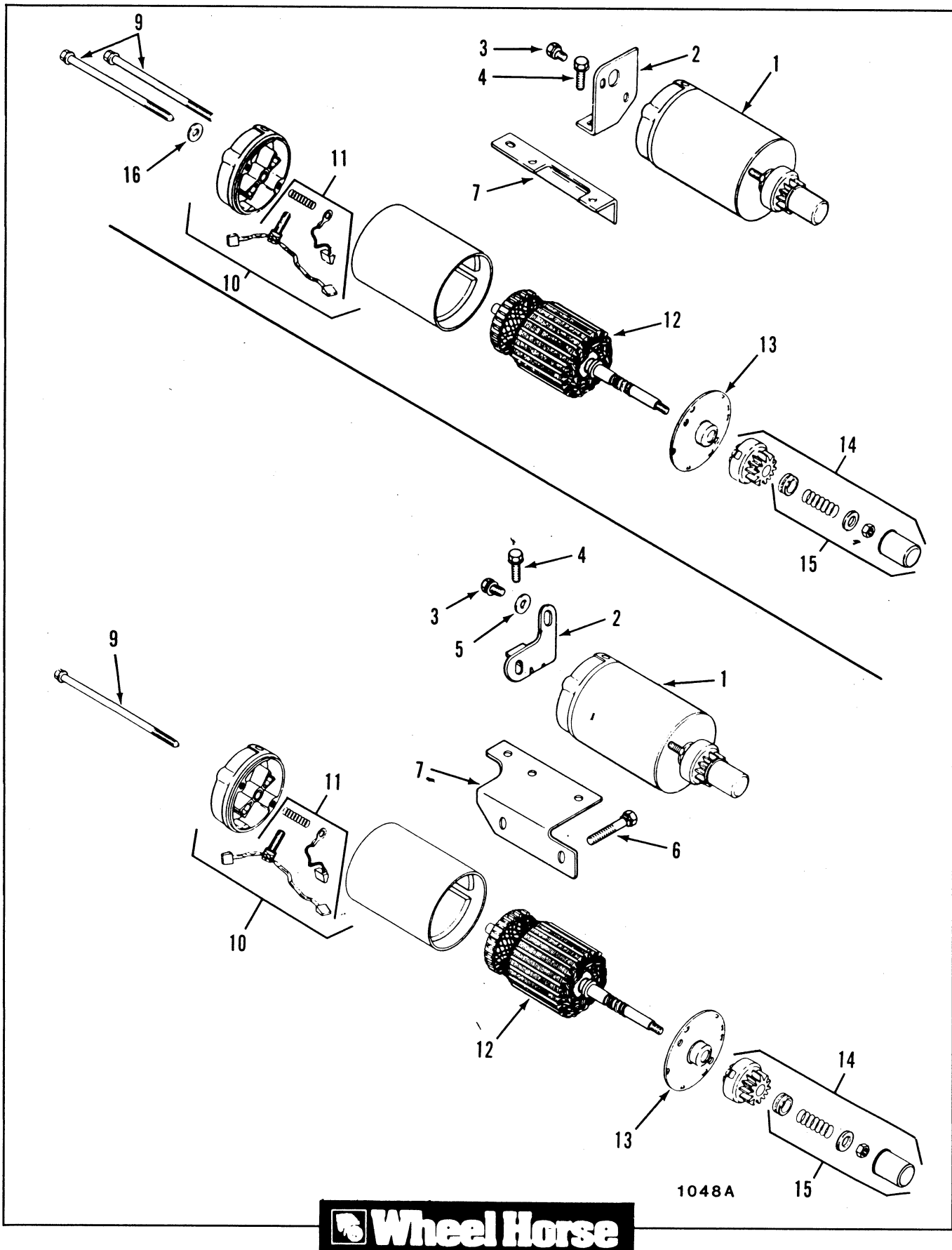


Figure 8-1 Starter

SECTION 8 - KOHLER ENGINE STARTER

59

WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 8-1				
KOHLER STARTER				
1	KH10187	41 098 04	Starter Assembly (Includes Items 9 thru 15)	1
2	KH10244	45 126 17	Starter Tail Brace	1
3	KH10607	X-67-62	Hex Washer Hd. Screw 1/4-20 x 3/4	1
4	KH10610	X-67-83	Hex Washer Hd. Screw 1/4-20 x 3/8	1
6	KH10549	X-159-2	H.C. Sems Screw 3/8-16 x 1	2
7	KH10304	47 126 29	Starter Bracket	1
9	KH10181	41 086 19	Thru Bolt 1/4-20 x 5-1/16	2
10	KH10210	41 227 04	Commutator End Cap Assembly (Includes Item 11)	1
11	KH10515	52 755 15	Brush Kit	1
12	KH10247	45 170 02	Armature	1
13	KH10209	41 227 03	Drive End Cap	1
14	KH10323	47 755 07	Drive Kit (Includes Item 15)	1
15	KH10324	47 755 13	Drive Parts Kit	1
Not Illustrated				
	KH10135	25 450 03	Caution Tag	1

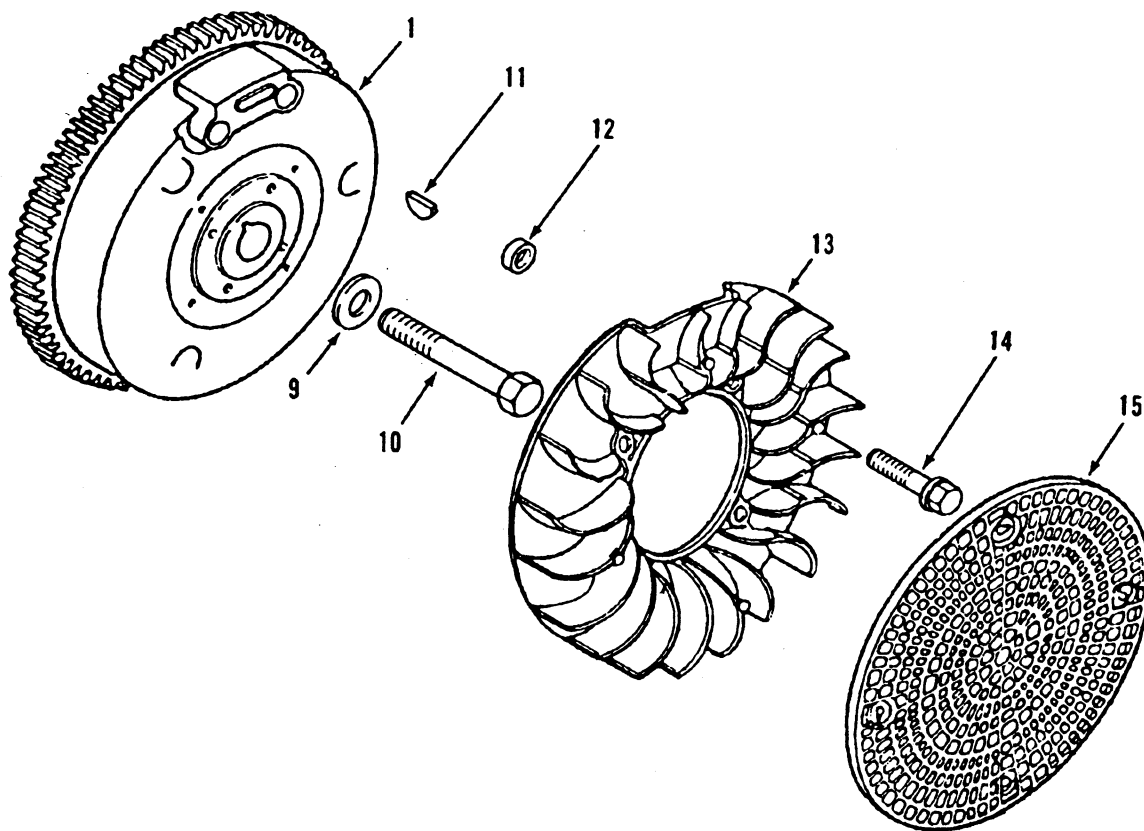
**Wheel Horse**

Figure 8-2 Flywheel

SECTION 8 - KOHLER ENGINE FLYWHEEL

61

WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 8-2 KOHLER FLYWHEEL				
1	KH10263	47 025 53	Flywheel 312	1
9	KH10436	52 114 02	Plain Washer 13/32 ID, 1-3/8 OD	1
10	KH10098	25 086 04	Hex. Mach. Screw 3/8-24 x 1-1/8	1
11	KH10588	X-46-3	Woodruff Key 3/16 x 1	1
12	KH10112	25 112 04	Spacer 17/64 ID, 3/8 OD 15/64 Lg	4
13	KH10124	25 157 01	Fan	1
14	KH10107	25 086 21	Hex. Washer Hd. Screw 1/4-20 x 5/8	4
15	KH10126	25 162 01	Grass Screen	1

SECTION 8 - KOHLER ENGINE FUEL SYSTEM

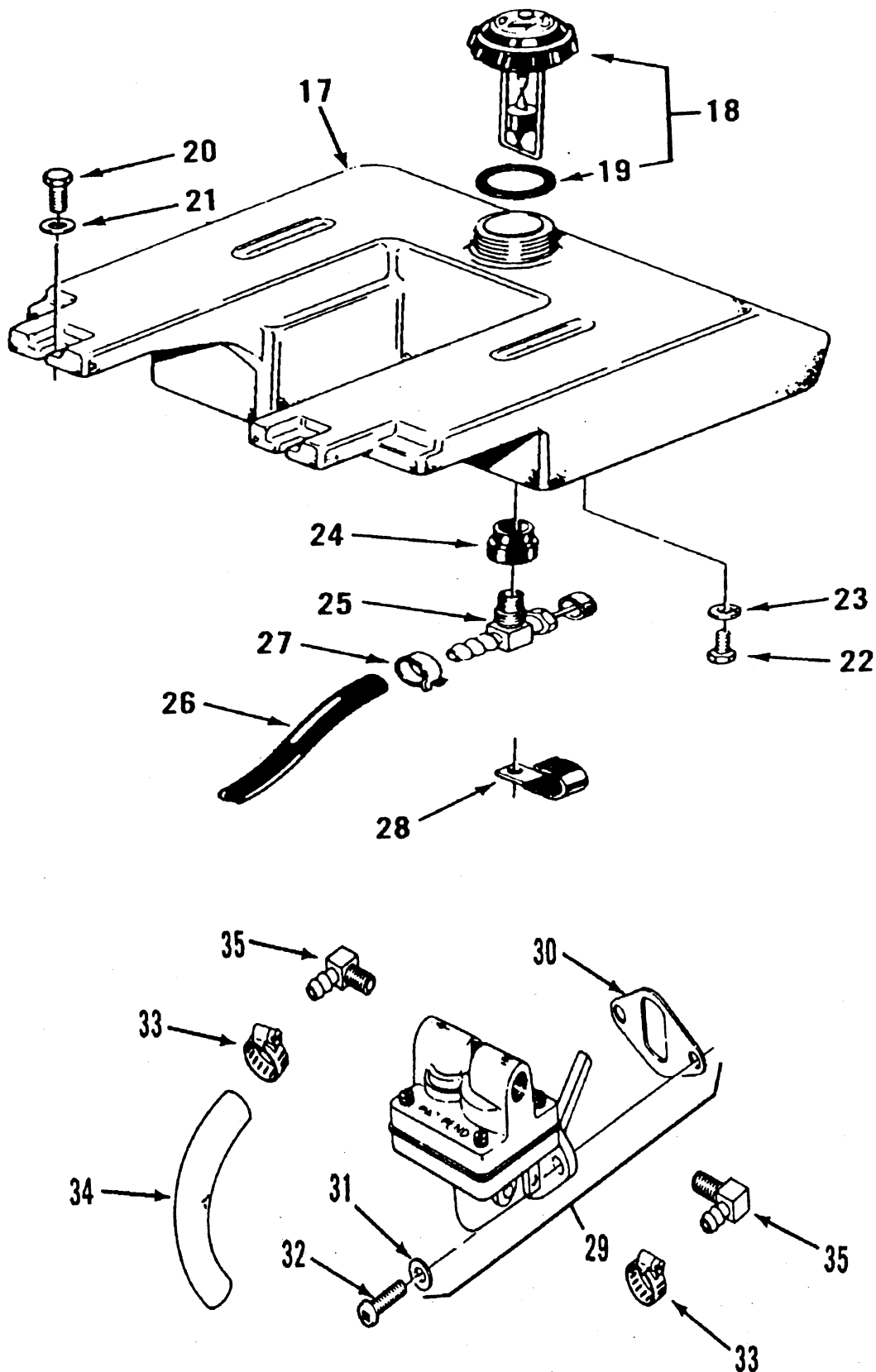


Figure 8-3 Fuel Systems

SECTION 8 - KOHLER ENGINE FUEL SYSTEM

63

WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 8-3 KOHLER FUEL SYSTEM				
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	103787	-----	Fuel Line 62"	1
27	108898	-----	Corbin Clamp	2
28	950154	-----	Hose Clamp 1/2" (1.3 cm) Diameter	2
	105490	-----	Clamp 1" (2.5 cm) Diameter	1
29	KH10319	47 559 04	Fuel Pump Assy (Includes items 30 & 31)	1
30	KH10095	25 041 05	Fuel Pump Gasket	1
31	KH10549	X-25-63	Plain Washer 1/4	2
32	KH10552	X-174-2	Pozidriv. F.H. Sems Screw 1/4-20 x 3/4	2
33	KH10586	X-426-9	Hose Clamp	2
34	KH10130	25 353 01	Fuel Line 1/4 I.D. x 5-1/2" Lg	1
35	KH10123	25 155 02	Hose Connector 90 Degree (For 1/4 I.D. Rubber Hose)	2

SECTION 8 - KOHLER ENGINE GOVERNOR LINKAGE

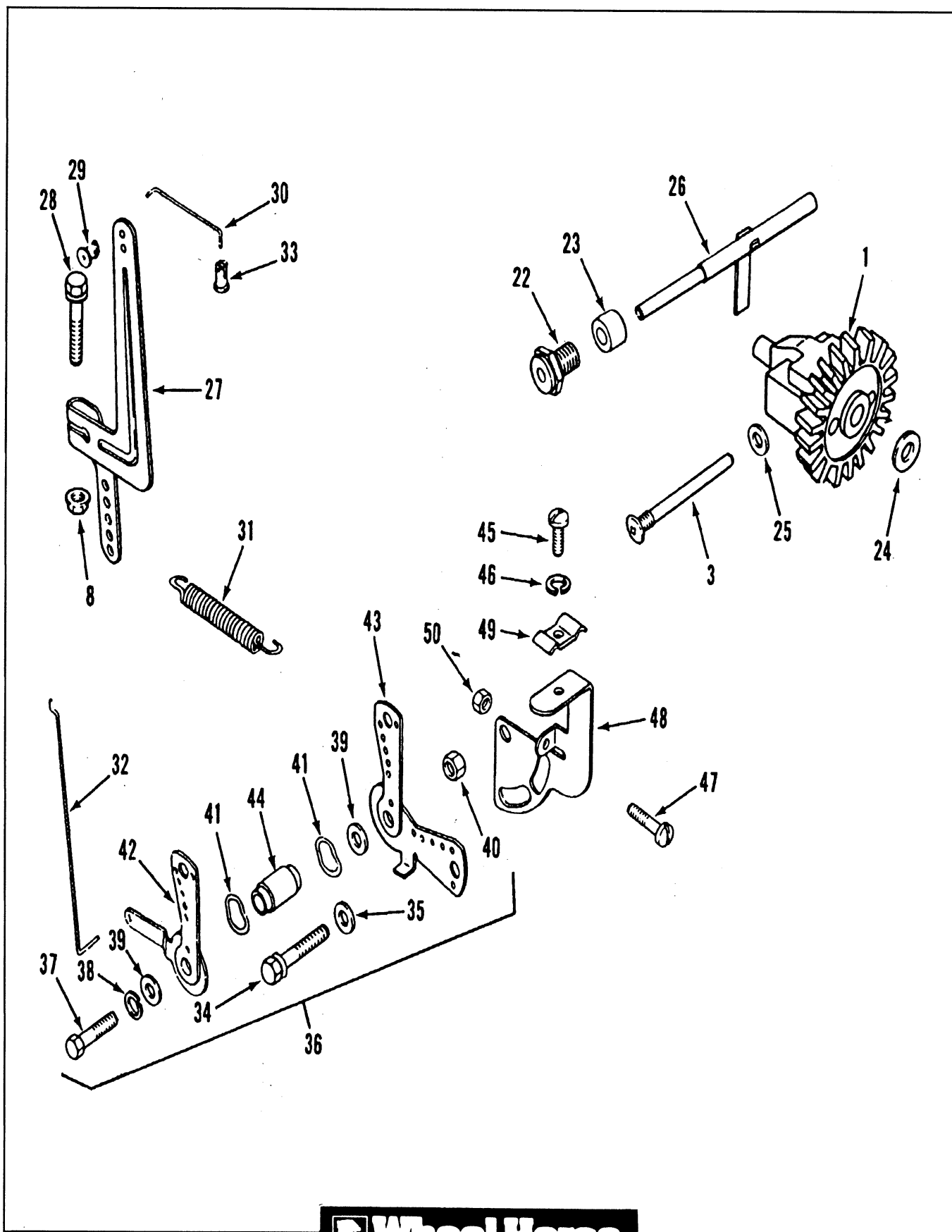


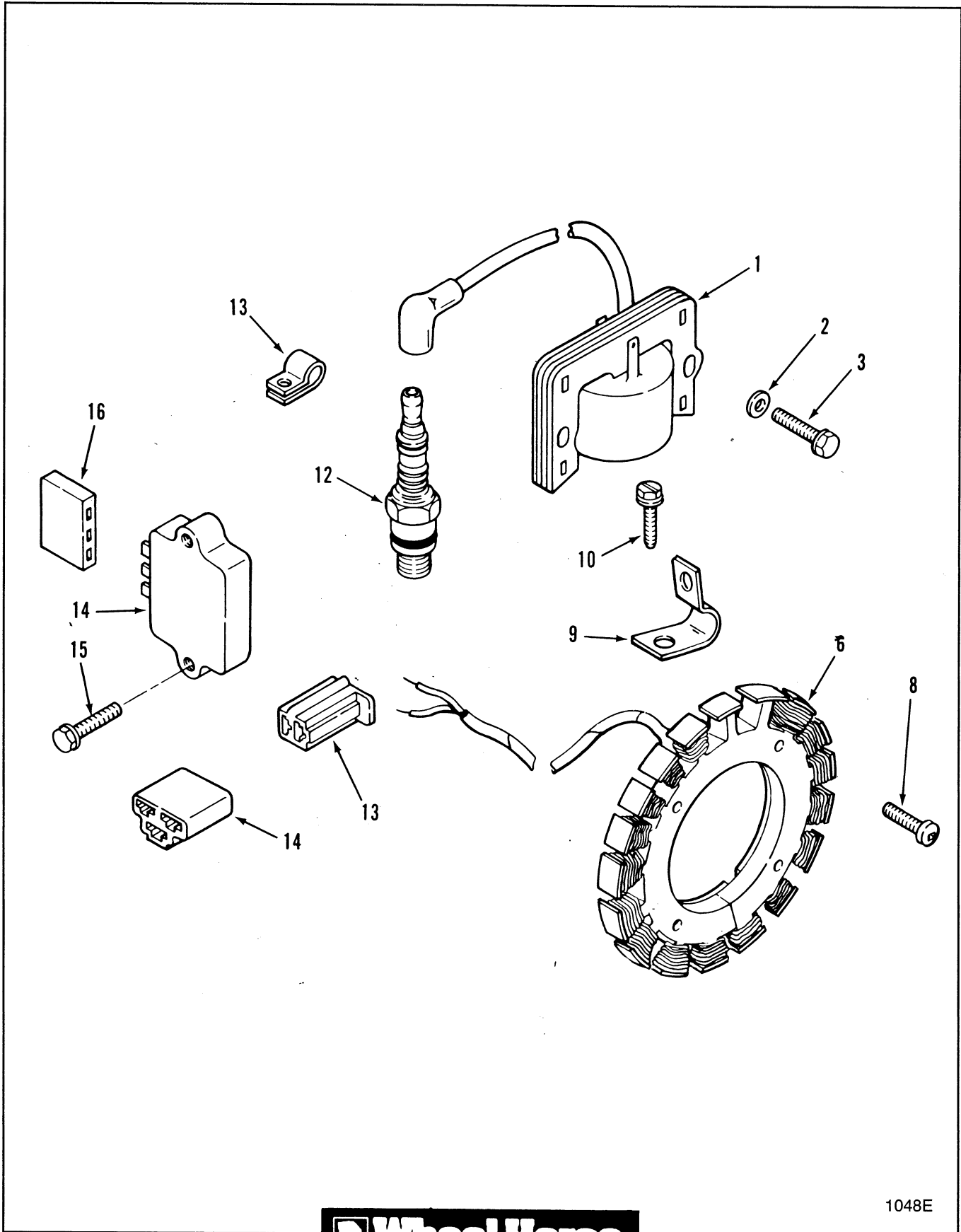
Figure 8-4 Governor Linkage

SECTION 8 - KOHLER ENGINE GOVERNOR LINKAGE

65

WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 8-4 KOHLER GOVERNOR LINKAGE				
1	KH10660	A-235743-S	Governor Gear Kit (Includes 24)	1
3	KH10035	231355	Governor Stop Pin	1
8	KH10629	X-799-1	Palnut 1/4-20	1
22	KH10070	235476	Governor Shaft Bushing	1
23	KH10585	X-400-80	Spacer	1
24	KH10087	237022	Thrust Washer	1
25	KH10138	25 468 01	Plain Washer	1
26	KH10538	A-235256-S	Governor Cross Shaft Kit	1
27	KH10295	47 090 20	Governor Lever	1
28	KH10626	X-776-1	H.C. Sems Screw 1/4-20 x 1/2	1
29	KH10668	47 158 06	White Bushing	1
30	KH10288	47 079 05	Governor Linkage (Governor to Carb.)	1
31	KH10296	47 091 01	Governor Spring (Governor to Carb.)	1
32	KH10287	47 079 01	Choke Linkage (Carb. to Choke Shaft)	1
33	KH10125	25 158 07	Yellow Bushing	1
34	KH10545	X-1320-6	H.C. Sems Screw 1/4-20 x 1/2	1
35	KH10570	X-25-72	Plain Washer 1/4	1
36	KH10291	47 087 03	Choke Lever Assembly (Includes Items 37 thru 44)	1
37	KH10600	X-5-26	H.C. Screw 1/4-20 x 1-1/2	1
38	KH10556	X-20-1	Lockwasher 1/4	1
39	KH10549	X-25-63	Plain Washer 1/4	1
40	KH10624	X-76-2	Hex. Nut 1/4-20	1
41	KH10152	275690	Wave Washer	2
42	KH10293	47 090 07	Choke Control Lever	1
43	KH10294	47 090 08	Throttle Control Lever	1
44	KH10302	47 112 02	Spacer 23/64 O D , 13/16 Lg	1
45	KH10551	X-15-5	F.H.M. Screw # 10-24 x 1/2	1
46	KH10555	X-19-1	Lockwasher # 10	1
47	KH10040	232556	Screw	1
48	KH10303	47 126 09	Clutch Control Bracket	1
49	KH10308	47 237 02	Clamp	1
50	KH10619	X-72-4	Hex Nut # 8-32	1

SECTION 8 - KOHLER ENGINE IGNITION SYSTEM



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Figure 8-5 Ignition System

SECTION 8 - KOHLER ENGINE IGNITION SYSTEM

67

WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 8-5 KOHLER IGNITION SYSTEM				
1	KH10320	47 584 01	Ignition Module (Before Serial # 1715900013)	1
	KH10321	47 584 02	Ignition Module (After Serial # 1715900003)	1
2	KH10572	X-25-79	Plain Washer # 10	2
3	KH10548	X-156-1	H.C. Sems Screw # 10-24 x 7/8	2
6	KH10091	237878	Stator Kit 15 amp (Includes Item # 8)	1
8	KH10627	X-778-1	Pozidriv. Pan Hd. Screw # 10-24 x 3/4	4
9	KH10618	X-728-1	Lead Clip	1
10	KH10606	X-67-49	Hex. Washer Hd. Screw # 8-32 x 3/8	1
12	KH10056	235041-S	Spark Plug	1
13	KH10010	210281	Hi-Tension Clip	1
14	KH10215	41 503 05	Regulator-Rectifier	2
15	KH10543	X-132-4	H.C. Sems Screw 1/4-20 x 1	2
16	KH10082	236602	Female Connector (3 Contact)	1
Not Illustrated				
	KH10315	47 518 43	Lead-White w/Diode, Svc. Replacement Lead For Leads. w/Diode (5'') All Before Serial # 1715900013	1
	KH10314	47 518 37	Lead-White, Module to Connector (15'') After, Serial # 1715900003)	1
	KH10313	47 518 36	Lead-Violet, Regulator-Rectifier to Connector (23'')	1

SECTION 8 - THROTTLE, CHOKE & EXHAUST SYSTEM

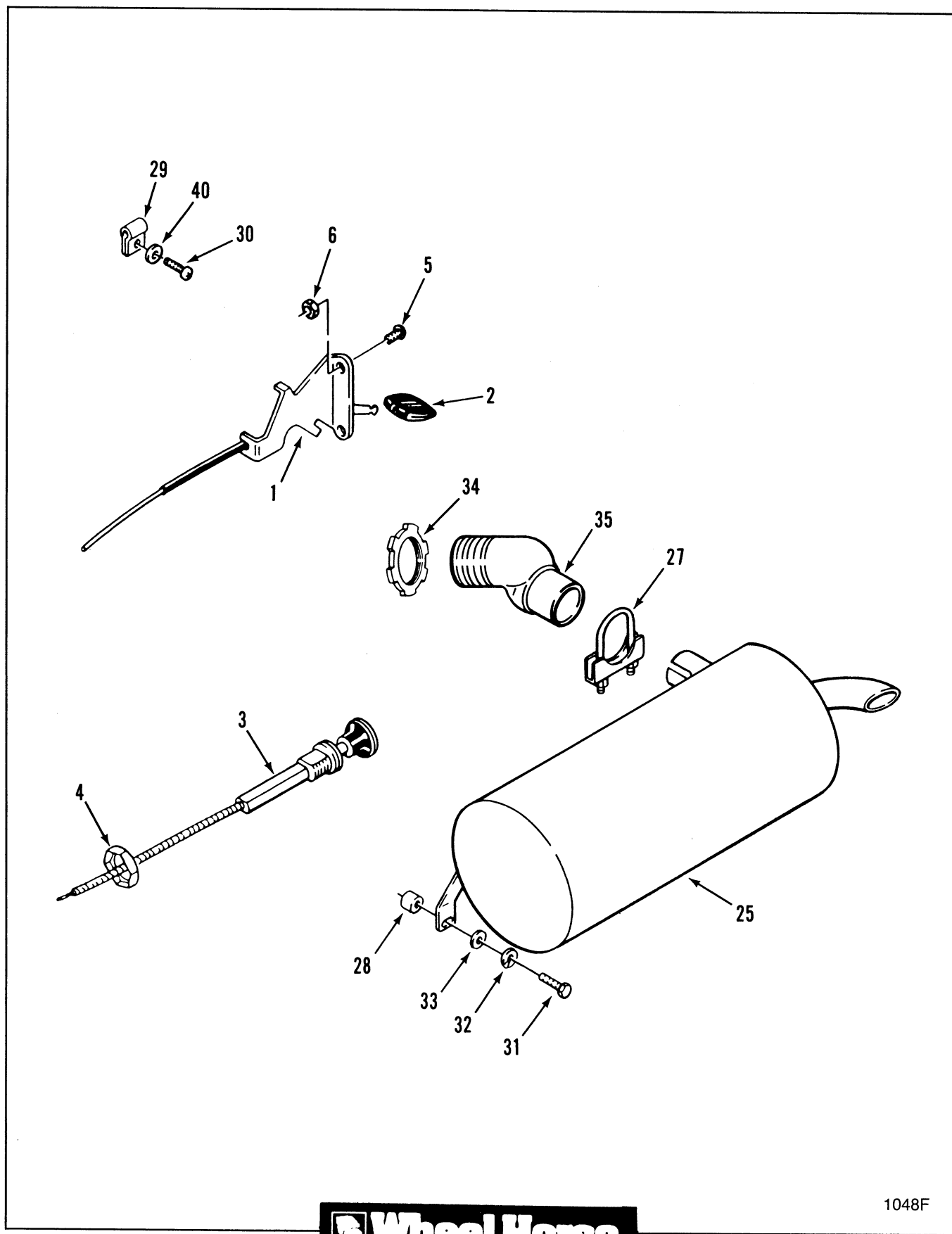


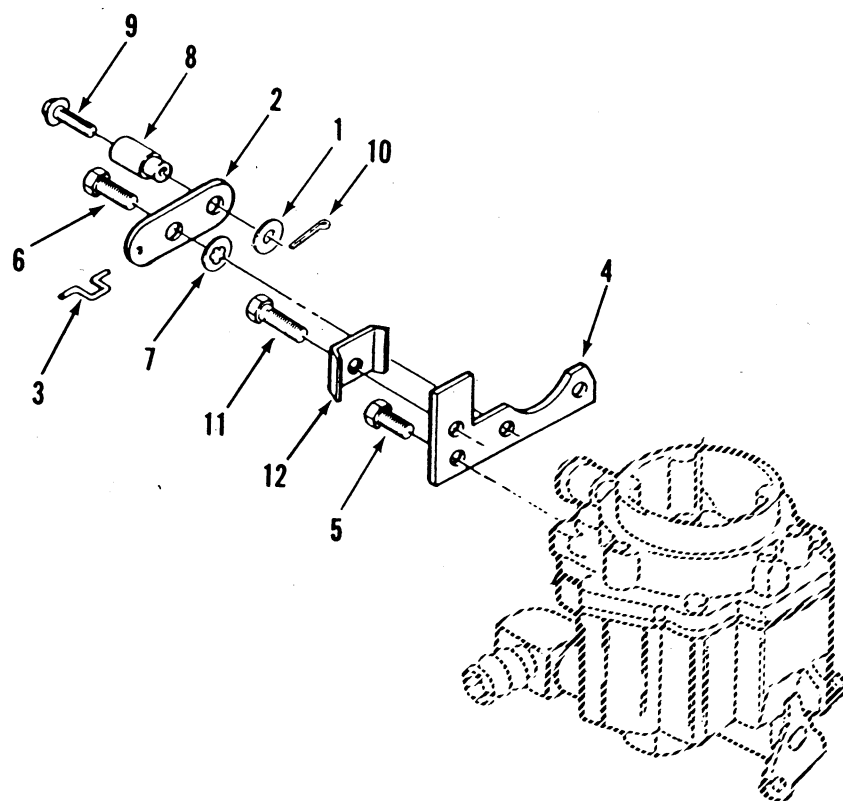
Figure 8-6 Throttle, Choke & Exhaust

SECTION 8 - THROTTLE, CHOKE & EXHAUST

69

ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 8-6			
THROTTLE CHOKE & EXHAUST			
1	112199	Throttle Control 312	1
	115392	Throttle Control 316	1
2	108917	Knob-Throttle Control	1
3	112214	Choke Control 312	1
	114951	Choke Control 316	1
4	109530	Palnut	1
5	9107922	Screw # 10-24 x 1/2 Black	2
6	915740	Lock Nut # 10-24	2
25	112213	Muffler 312	1
27	106858	Clamp 312	1
28	6876	Spacer 312	1
29	KH10344	Cable Clamp 312 (vendor # 48 154 01)	1
30	KH10610	Hex Washer Hd Screw 1/4-20 x 7/16, 312, (vendor # X-67-83)	1
31	908020	Bolt 5/16-18 x 1-1/, 312	1
32	920082	Lock Washer 5/16, 312	1
33	920008	washer 5/16, 312	1
34	KH10535	Locknut 312 (vendor # AC-1536)	1
35	KH10278	Elbow 312 (vendor # 45 054 01)	1
40	KH10570	Washer 1/4, 312 (vendor # X-25-72)	1

SECTION 8 - ONAN CHOKE LINKAGE



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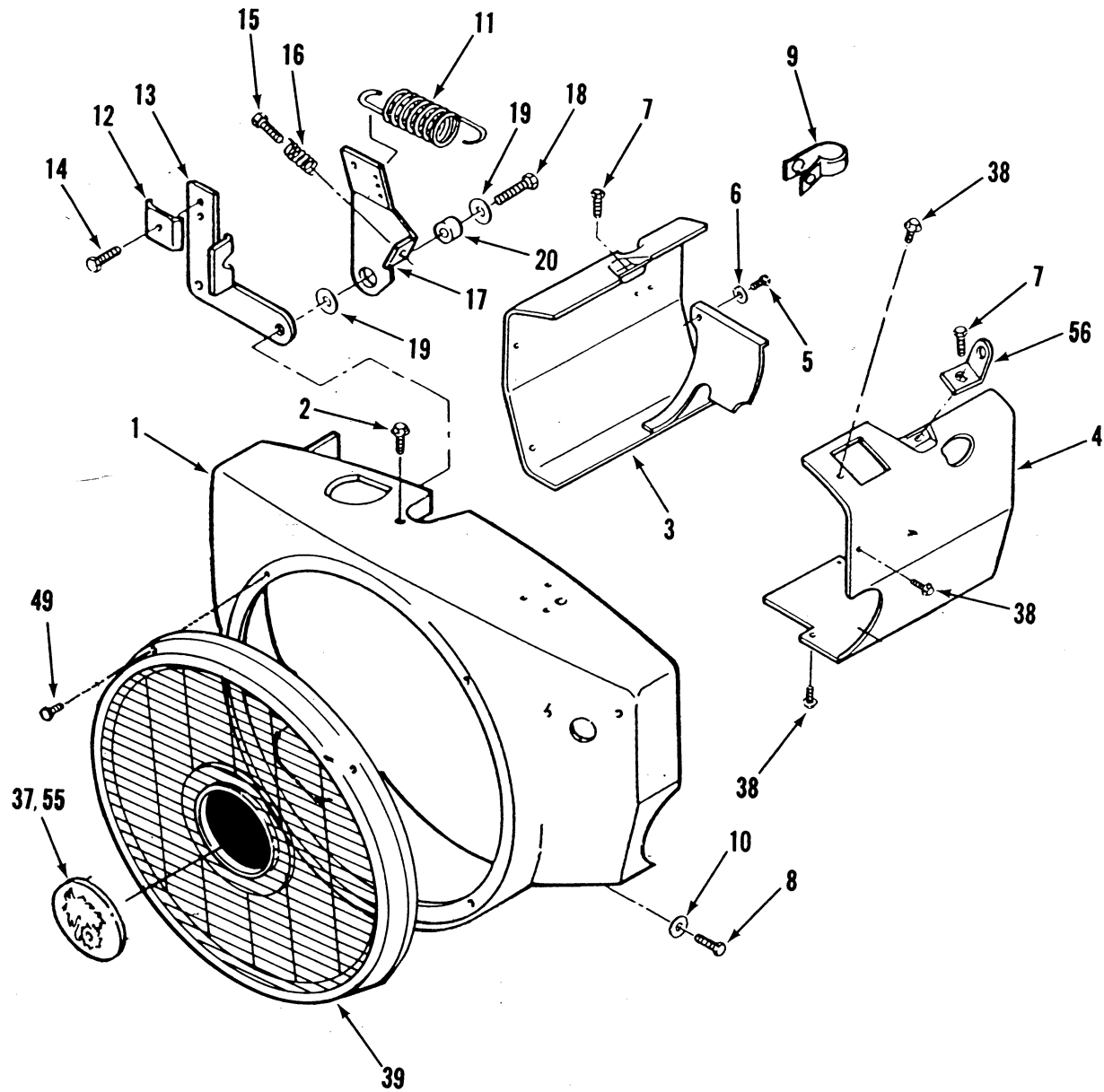
Figure 8-7 Onan Choke Linkage

SECTION 8 - ONAN CHOKE LINKAGE

71

WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 8-7 ONAN CHOKE LINKAGE				
1	NN10364	526-0140	Flat Washer # 10	2
2	NN10233	153-0523	Choke Lever	1
3	NN10231	153-0500	Choke Link	1
4	NN10234	153-0524	Choke Cable Bracket	1
5	NN10412	821-0004	Washer Hd. Cap Screw # 10-32 x 1-1/4	1
6	NN10400	815-0480	Shoulder Screw # 10-32 x .34	1
7	NN10424	854-0010	Lockwasher IT # 10	1
8	NN10230	152-0155	Choke Lever Swivel	1
9	NN10410	815-0693	Machine Screw # 8-32 x .375	1
10	NN10333	516-0059	Cotter Pin	1
11	NN10395	815-0359	Washer Hd. ST Screw # 10-32 x 7/8	1
12	NN10440	153-0593	Choke Cable Clip	1

SECTION 8 - ONAN BLOWER HOUSING AND GOVERNOR



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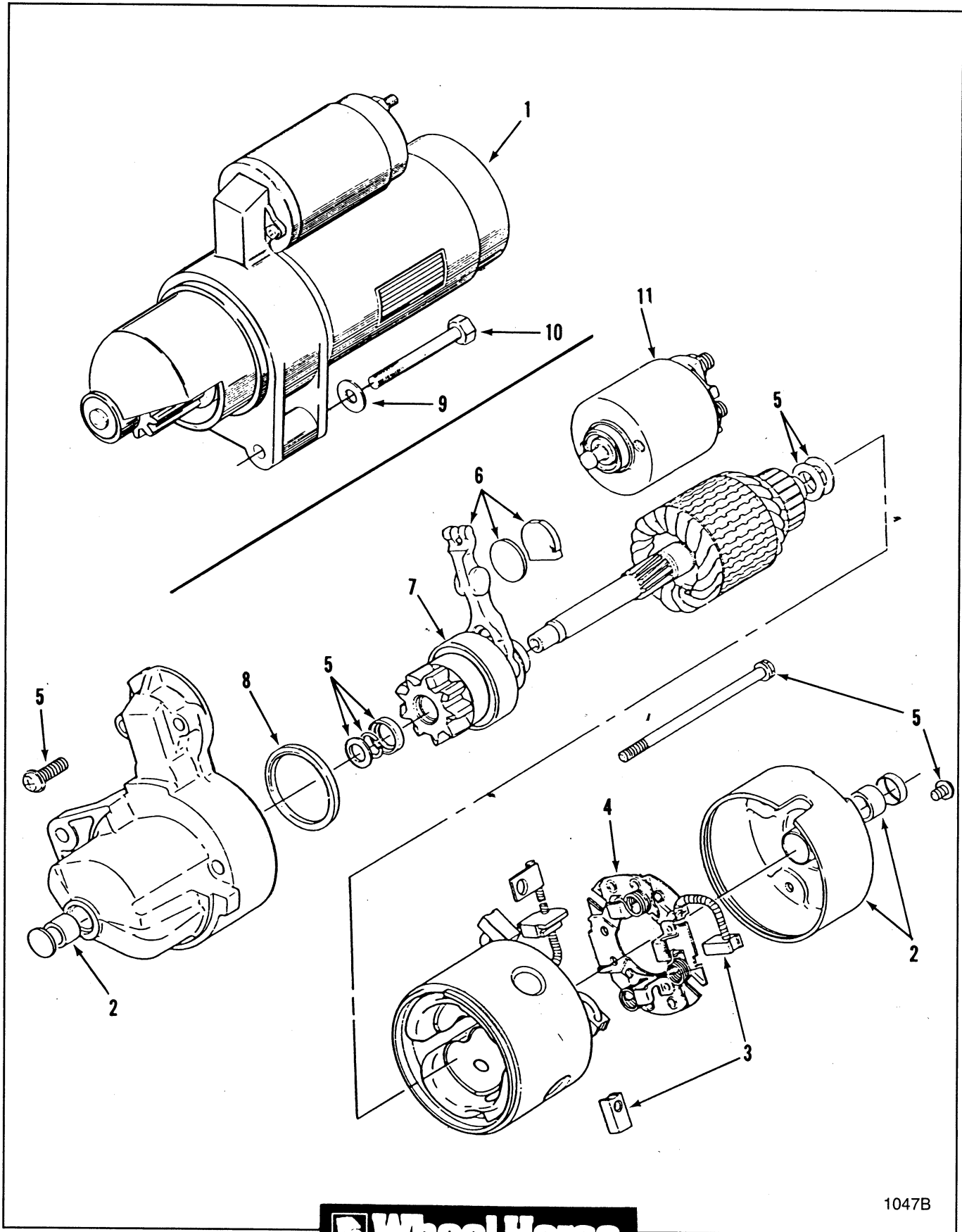
Figure 8-8 Onan Blower Housing and Governor

SECTION 8 - ONAN BLOWER HOUSING AND GOVERNOR

73

WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 8-8 ONAN BLOWER HOUSING AND GOVERNOR				
1	NN10173	134-4654-01	Blower Housing	1
2	NN10392	815-0261	Washer Hd. ST Screw 1/4-20 x 7/16	1
3	NN10170	134-4615-01	Cylinder Air Housing	1
4	NN10169	134-4614-01	Cylinder Air Housing	1
5	NN10393	815-0290	Washer Hd. ST Screw 1/4-20 x 5/8	2
6	NN10357	526-0021	Flat Washer 1/4	2
7	NN10417	821-0016	Washer Hd. Screw 5/16-18 x 3/4	2
8	NN10393	815-0290	Washer Hd. ST Screw 1/4-20 x 5/8	4
9	NN10289	332-2319	Alt. Leads Wire Clamp	1
10	NN10356	526-0018	Flat Washer 1/4	1
11	NN10217	150-1214	Governor Spring-5 Ball	1
12	NN10440	153-0593	Cable Clamp	1
13	NN10225	150-1725	Cable bracket	1
14	NN10395	815-0359	ST Screw # 10-32 x 1/2	1
15	NN10410	815-0510	ST Screw # 6-32 x 5/8	1
16	NN10219	150-1398	Idle Setting Spring	1
17	NN10223	150-1576	Governor Control Arm w/o Swivel	1
18	NN10397	815-0436	Washer Hd. Cap Screw 1/4-20 x 1/2	2
19	NN10357	526-0021	Flat Washer 1/4	1
20	NN10218	150-1269	Control Arm Bushing	1
37	NN10340	517-0136	Black Nylon Bushing	1
38	NN10414	821-0008	Washer Hd. Cap Screw 1/4-20 x 5/16	4
39	NN10174	134-4689	Stationary Guard	1
49	NN10406	815-0575	Washer Hd. Screw 1/4-20 x 3/8	4
55	NN10435	99-2389	Nameplate Logo	1
56	NN10296	403-1523-01	Lifting Bracket	2

SECTION 8 - ONAN STARTER



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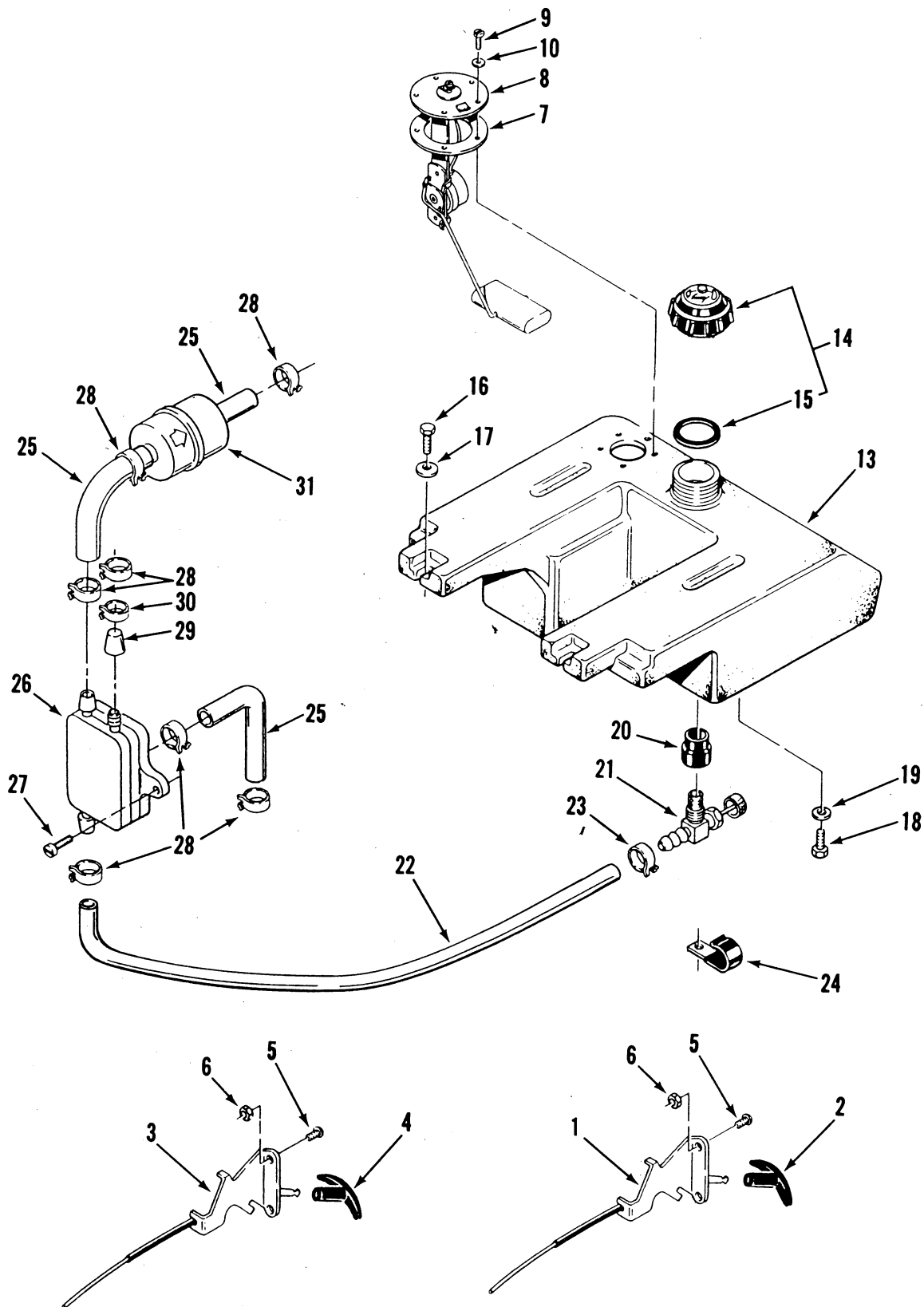


Figure 8-9 Onan Starter

SECTION 8 - ONAN STARTER

75

WHEEL HORSE ITEM	PART NO.	VENDOR PART NUMBER	DESCRIPTION	Quantity
Figure 8-9 ONAN STARTER				
1	NN10268	191-1808-04	Starter, Complete-See Components Below	1
2	NN10262	191-1762	Bushing Kit (Includes Frt Bushing and Rear Cap w/Bushing)	1
3	NN10263	191-1763	Starter Brush Kit (Includes Positive Brush (2) and Negative Brush w/Pigtail) ..	1
4	NN10264	191-1764	Starter Brush Holder (Includes Brush Holder w/Negative Brush)	1
5	NN10265	191-1765	Starter Hdwr Kit (Includes Solenoid Screws (2), Brush Holder Screws (2), Thru Bolts (2), Armature Shims (2), Pinion Stop Collar, and Pinion Retaining Ring)	1
6	NN10266	191-1766	Starter Shift Lever Kit (Includes Shift Lever, Wear Plate and Rubber Plug)	1
7	NN10270	191-1810	Starter Clutch (Includes Pinion Gear w/Clutch)	1
8	NN10271	191-1811	Dust Seal	1
9	NN10363	526-0122	Flat Washer 5/16	2
10	NN10376	800-0039	Cap Screw 5/16-18 x 3-1/2	2
11	NN10269	191-1809	Starter Solenoid Kit (Includes Solenoid, Spring and Plunger)	1

SECTION 8 - ONAN THROTTLE CHOKE AND FUEL CONTROLS

1047C



Figure 8-10 Onan Throttle Choke and Fuel Controls

SECTION 8 - ONAN THROTTLE CHOKE AND FUEL CONTROLS

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 8-10 ONAN THROTTLE CHOKE AND FUEL CONTROL			
1	114026	Throttle Control	1
2	108509	Knob-Throttle Control	1
3	114027	Choke Control	1
4	108510	Knob-Throttle Control	1
5	9107922	Screw # 10-24 x 1/2	4
6	915740	Lock Nut # 10-24	4
7	113372	Gasket	1
8	113358	Fuel Level Sender	1
9	910807	Screw # 10-32 x 1/2	5
10	920079	Lockwasher # 10	5
13	114012	Fuel Tank (Includes items 20 & 21)	1
14	113926	Fuel Cap (Includes item 15)	1
15	106931	Rubber Seal	1
16	926697	ST Bolt 5/16-18 x 1	2
17	920039	Washer 3/8	2
18	908016	Bolt 5/16-18 x 5/8	3
19	920082	Lockwasher 5/6	2
20	104047	Rubber Bushing	1
21	104048	Fuel Shut-Off Valve	1
22	2739	Fuel Line 53 in	1
23	108898	Corbin Clamp	2
24	950154	Hose Clamp 1/2 in (13 cm) Diameter	2
	105490	Clamp 1 in. (2.5 cm) Diameter	1
25	NN10302	Fuel Line 12in. (Vendor # 503-0707)	2
26	NN10212	Fuel Pump (Vendor # 149-1982)	1
27	NN10403	ST Pan Hd. Screw # 10-24 x 5/8 (Vendor # 815-0555)	2
28	NN10303	Hose Clamp 1/2 (Vendor # 503-0731)	6
29	NN10211	Fuel Fitting Cap (Vendor # 149-1321)	1
30	NN10301	Hose Clamp 7/16 (Vendor # 503-0301)	1
31	NN10213	Fuel Filter (Vendor # 149-2005)	1

SECTION 9 - ELECTRICAL SYSTEM

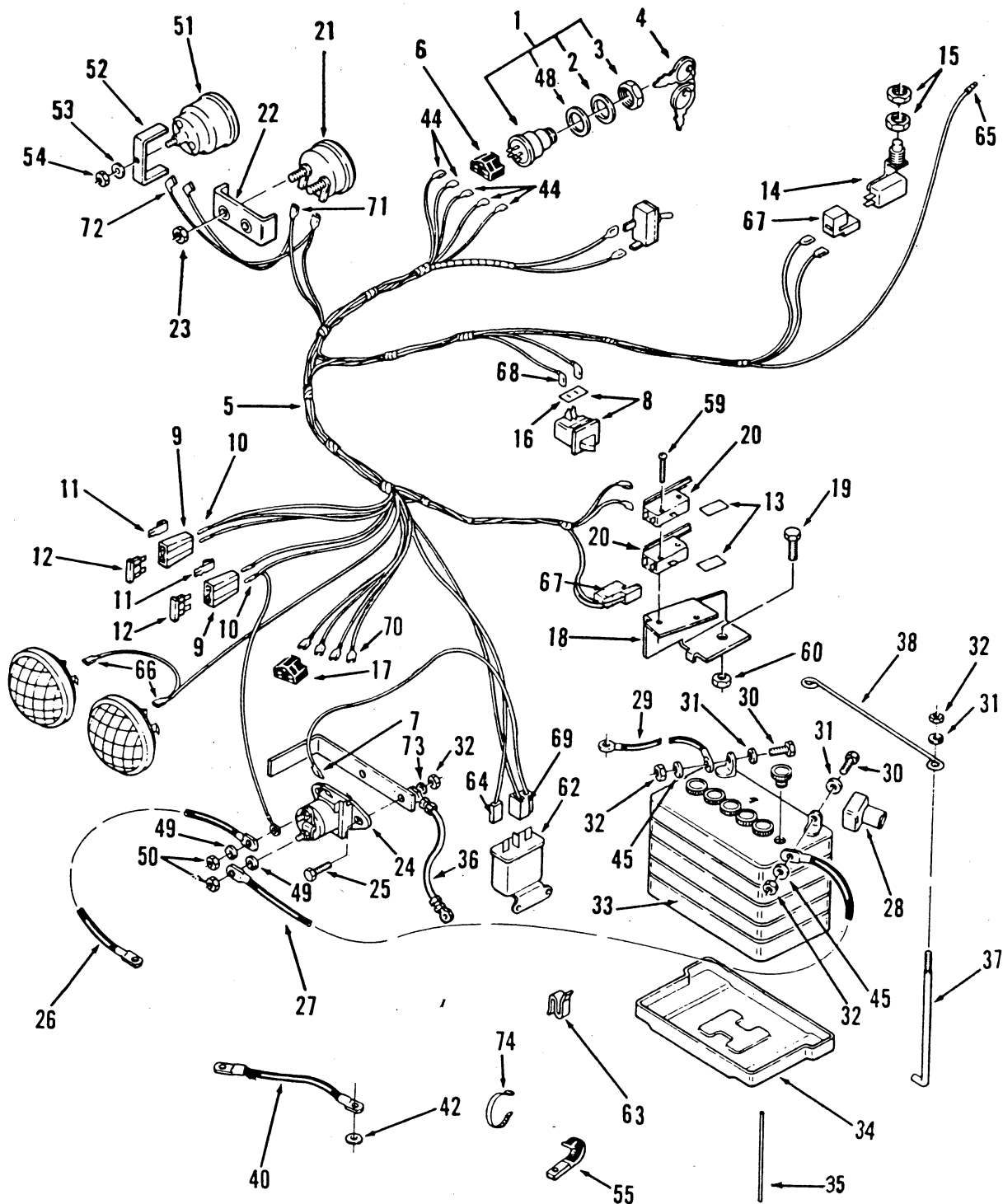


Figure 9-1 Electrical System

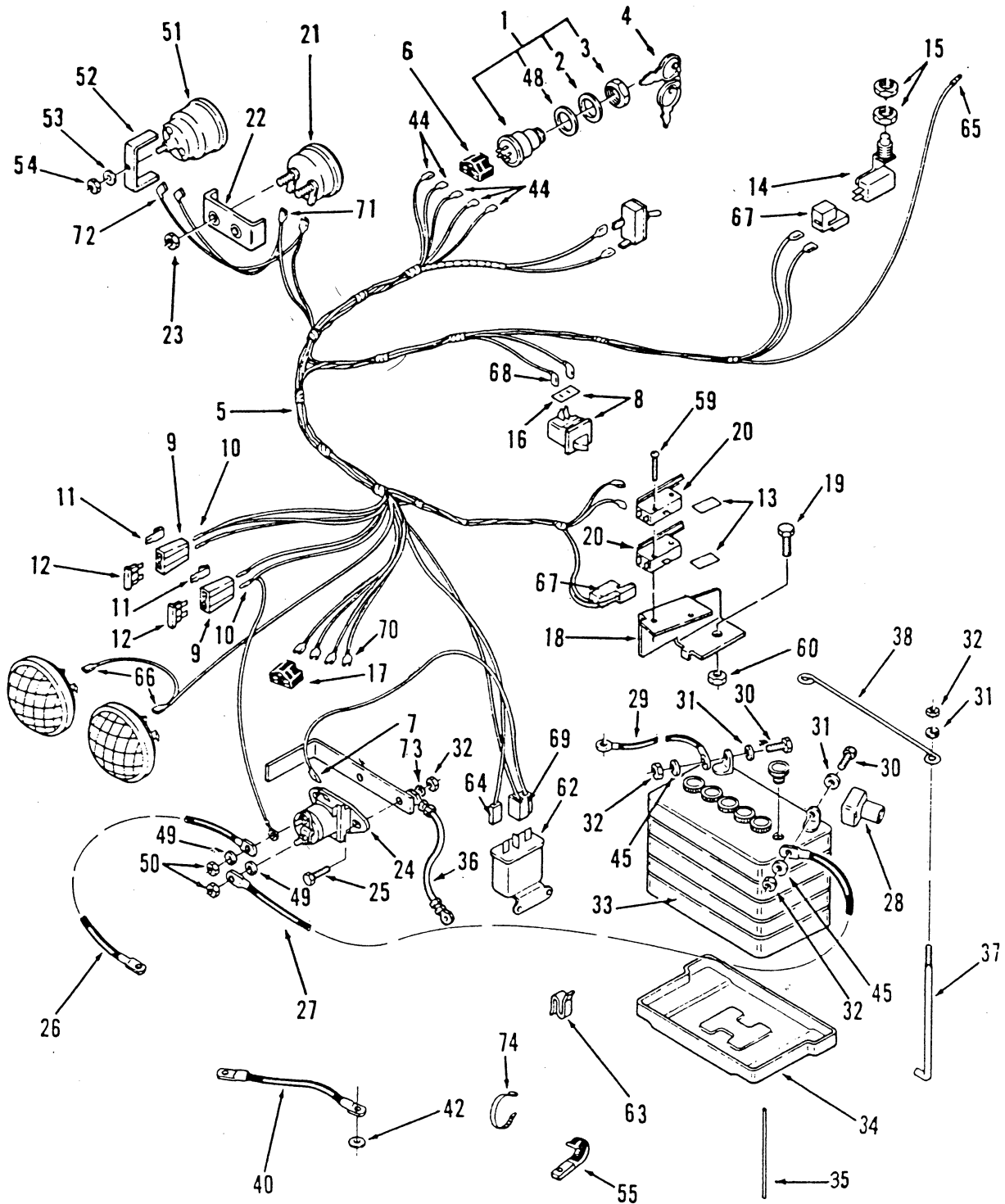
SECTION 9 - ELECTRICAL SYSTEM

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 9-1 ELECTRICAL SYSTEM			
1	111216	Ignition Switch (W/101884 & 920160) - 316-8 Only	1
	111215	Ignition Switch (W/101884 & 920160) - 312-8 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	114731	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	103480	Clutch/Brake Interlock Switch	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	115411	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	110167	Solenoid	1
25	926671	Whizlock Bolt 1/4-20 x 1/2	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	106948	Battery Tray	1
35	114720	Battery Drain Tube	1
	*114210	Wire w/3/8 1/4 ring terminals	1
	*114211	Wire-6" w/1/4 ring terminal and female terminal	1
	*114212	Wire-6" w/5/16 1/4 ring terminal	1
36	112842	Ground Wire	1

* Parts for model 316-8 only - not illustrated

SECTION 9 - ELECTRICAL SYSTEM



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Figure 9 - 1 Electrical System

SECTION 9 - ELECTRICAL SYSTEM

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 9-1			
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
	114820	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	920007	Washer 1/4 SAE	2
50	915661	Nut 1/4-20	2
51	113469	Hourmeter Complete (includes items 52, 53 & 54) (Not on All units)	1
52	114017	Steel Clamp	1
53	920120	Lockwasher	1
54	915962	Keps Nut	2
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	Shut 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

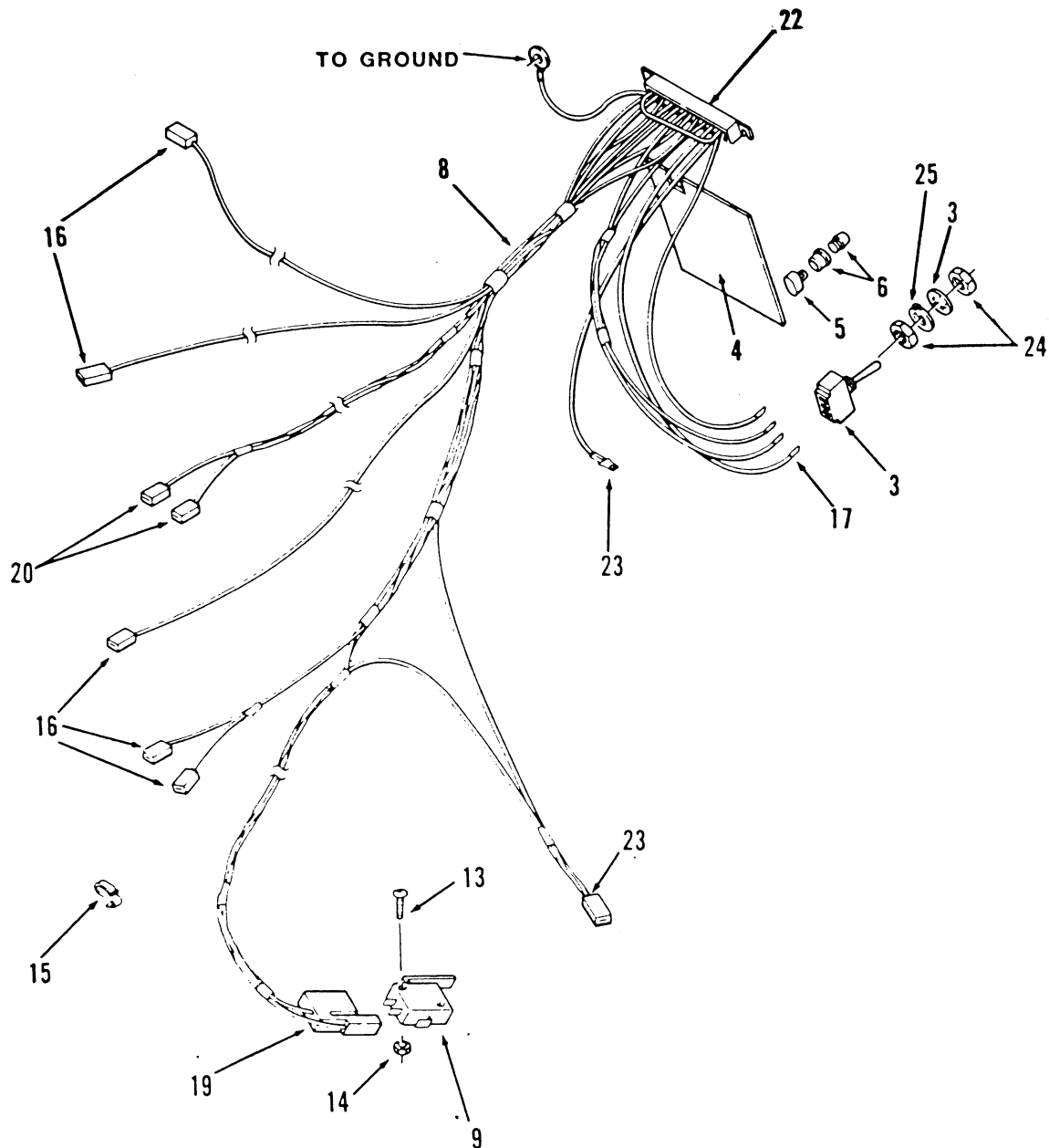


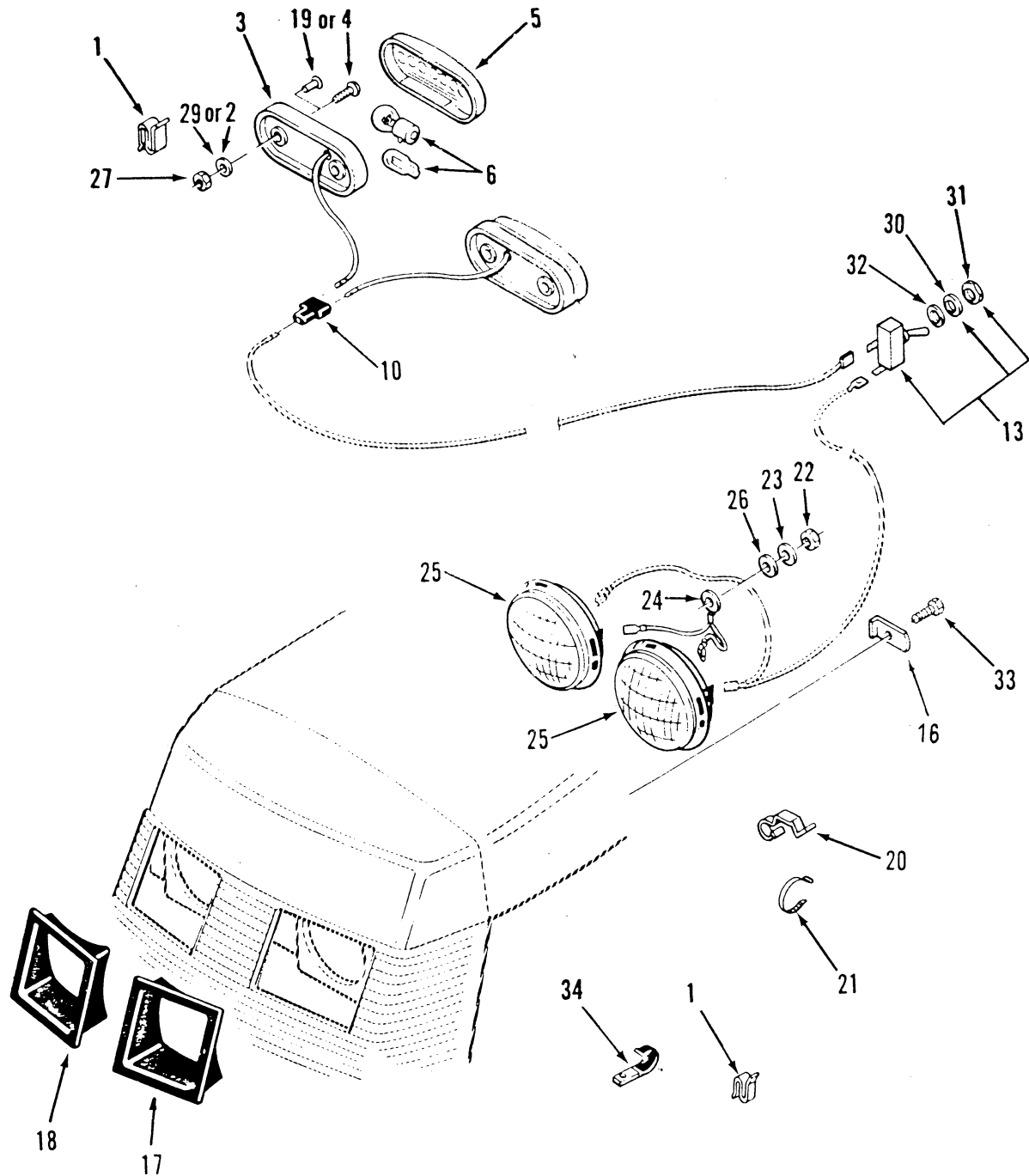
Figure 9-2 Electrical System

SECTION 9 - ELECTRICAL SYSTEM

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 9-2			
ELECTRICAL SYSTEM			
3	111353	Test Switch	1
4	114825	P.C. Board w/Lights	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

SECTION 9 - ELECTRICAL SYSTEM



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Figure 9-3 Electrical System

SECTION 9 - ELECTRICAL SYSTEM

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 9-3			
ELECTRICAL SYSTEM			
1	3023	Clip-Small	X
2	920079	Lockwasher nr. 10 (Optional)	4
3	105202	Taillight Base W/Bulb	2
4	910808	Screw nr. 10-32 x 5/8 (Optional)	4
5	112564	Taillight Lens	2
6	8043	Light Bulb - Metal Base (Auto nr. 1895)	2
	109045	Light Bulb - All Glass (Auto nr. 194)	2
10	7618	Connector 3-Wire	1
13	102138	Light Switch	1
16	109459	Clamp	2
17	109495	L.H. Headlight Bezel	1
18	109494	R.H. Headlight Bezel	1
19	923795	Poprivet 3/16 x .402 Aluminium (Production)	4
20	8519	Clip-Large	X
21	100571	Cable Tie	X
22	915662	Nut 5/16-18 E.S.	1
23	920155	Lockwasher 5/16	1
24	108130	Headlight Ground Wire	1
25	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

SECTION 10 - WHEELS AND TIRES

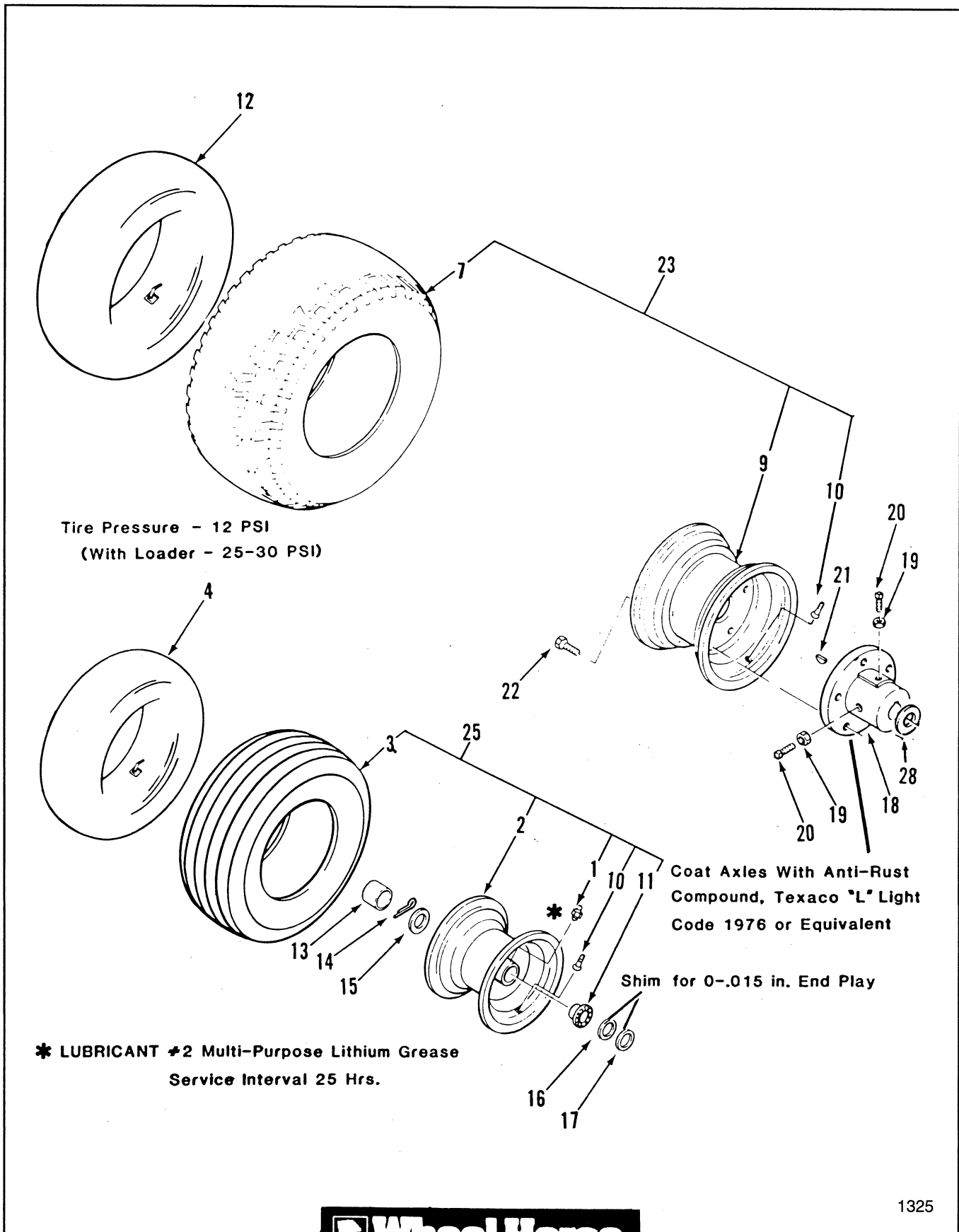
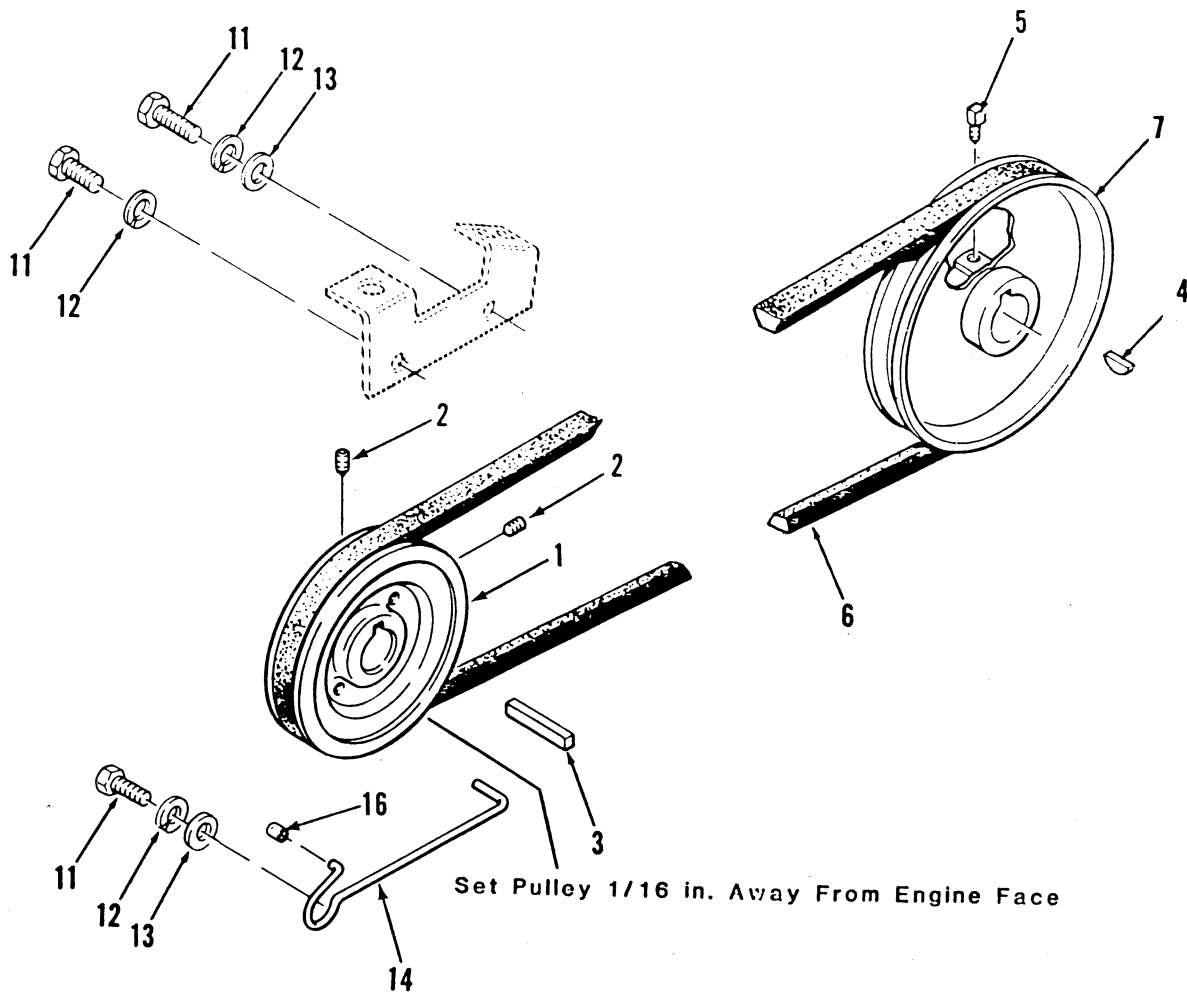


Figure 10 - 1 Wheels and Tires

SECTION 10 -WHEELS AND TIRES

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 10-1 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
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 5/32 x 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
25	110692	Front Wheel & Tire Assy	2

SECTION 11 - DRIVE BELT, PULLEYS AND PTO CLUTCH

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Figure 11 - 1 Drive Belt and Pulleys

SECTION 11 - DRIVE BELT, PULLEYS AND PTO CLUTCH

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 11-1			
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 312-8	1
	107939	Drive belt 316-8	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

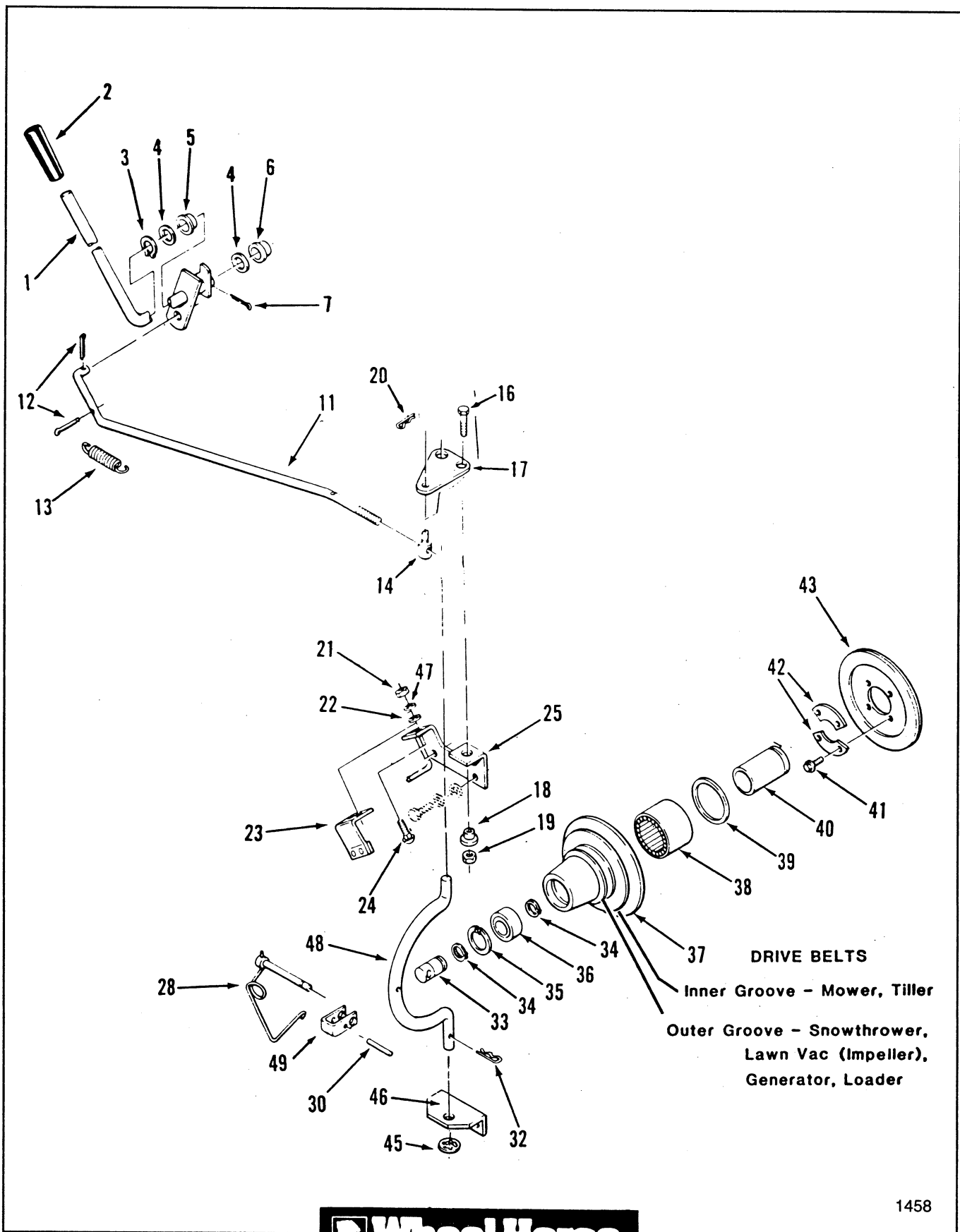


Figure 11-2 PTO Clutch and Control

SECTION 11 - DRIVE BELT, PULLEYS AND PTO CLUTCH

91

ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 11-2			
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	2
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	915663	Nut 3/8-16 E.S.	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	114881	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

SECTION 12 - SEAT AND DECALS

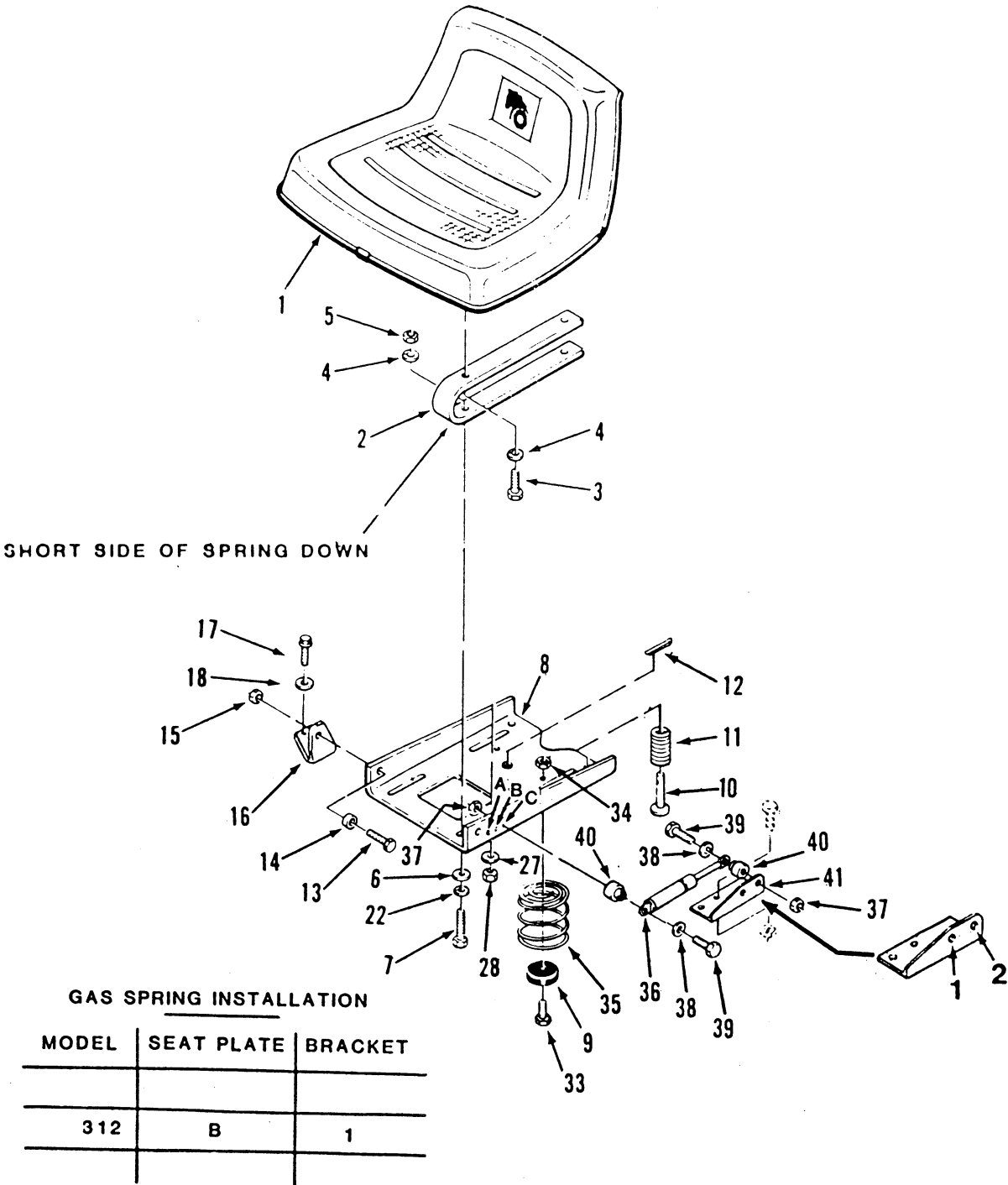


Figure 12 - 1 Seat

SECTION 12 - SEAT AND DECALS

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 12-1			
SEAT			
1	113986	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	915662	Nut 5/16-18 E.S.	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
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	915661	Nut 1/4-20 E.S.	2
38	920007	Washer 1/4 SAE	2
39	908006	Bolt 1/4-20 x 1-1/4	2
40	114344	Spacer	2
41	114345	Gas Spring Bracket	1

SECTION 12 - SEAT AND DECALS

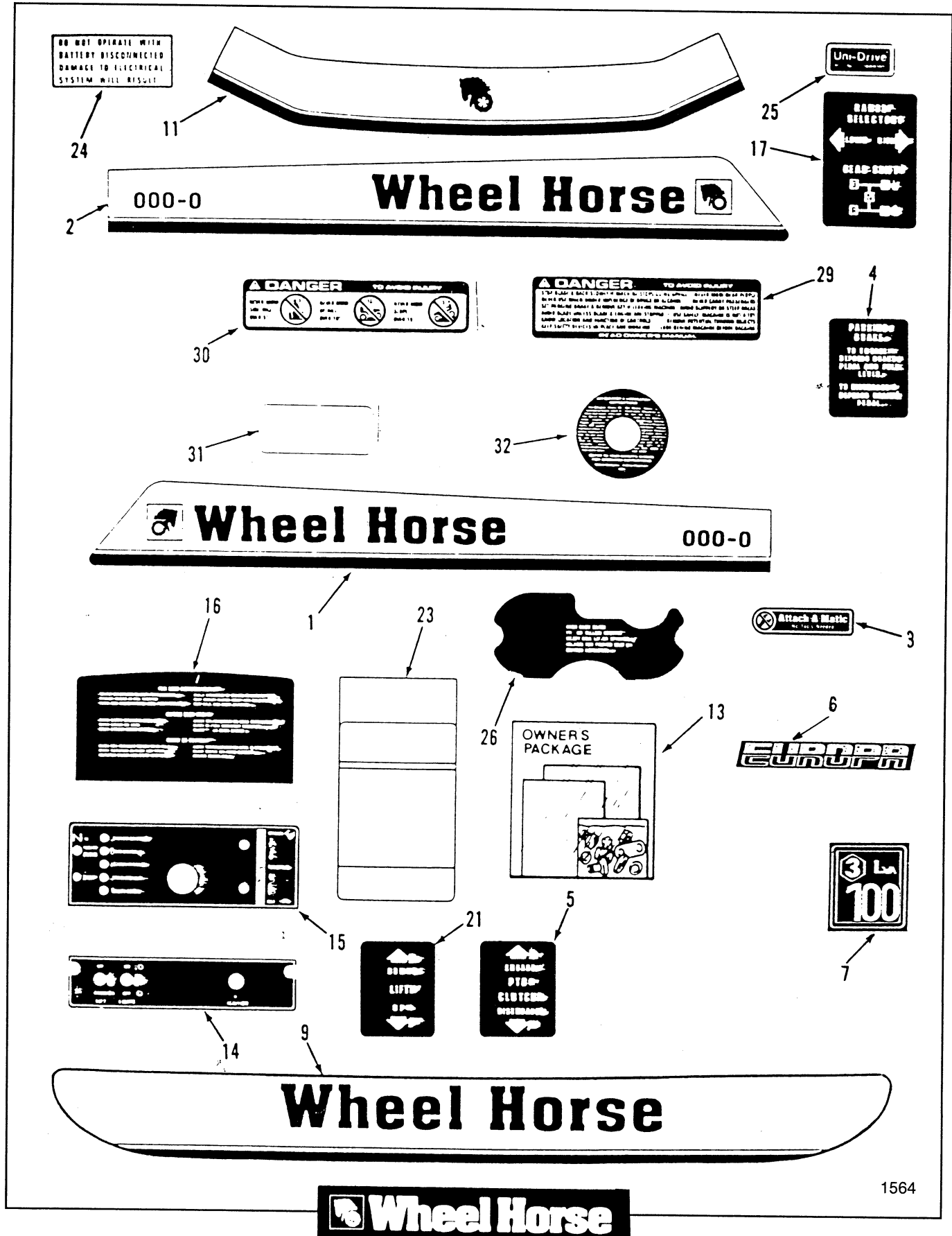


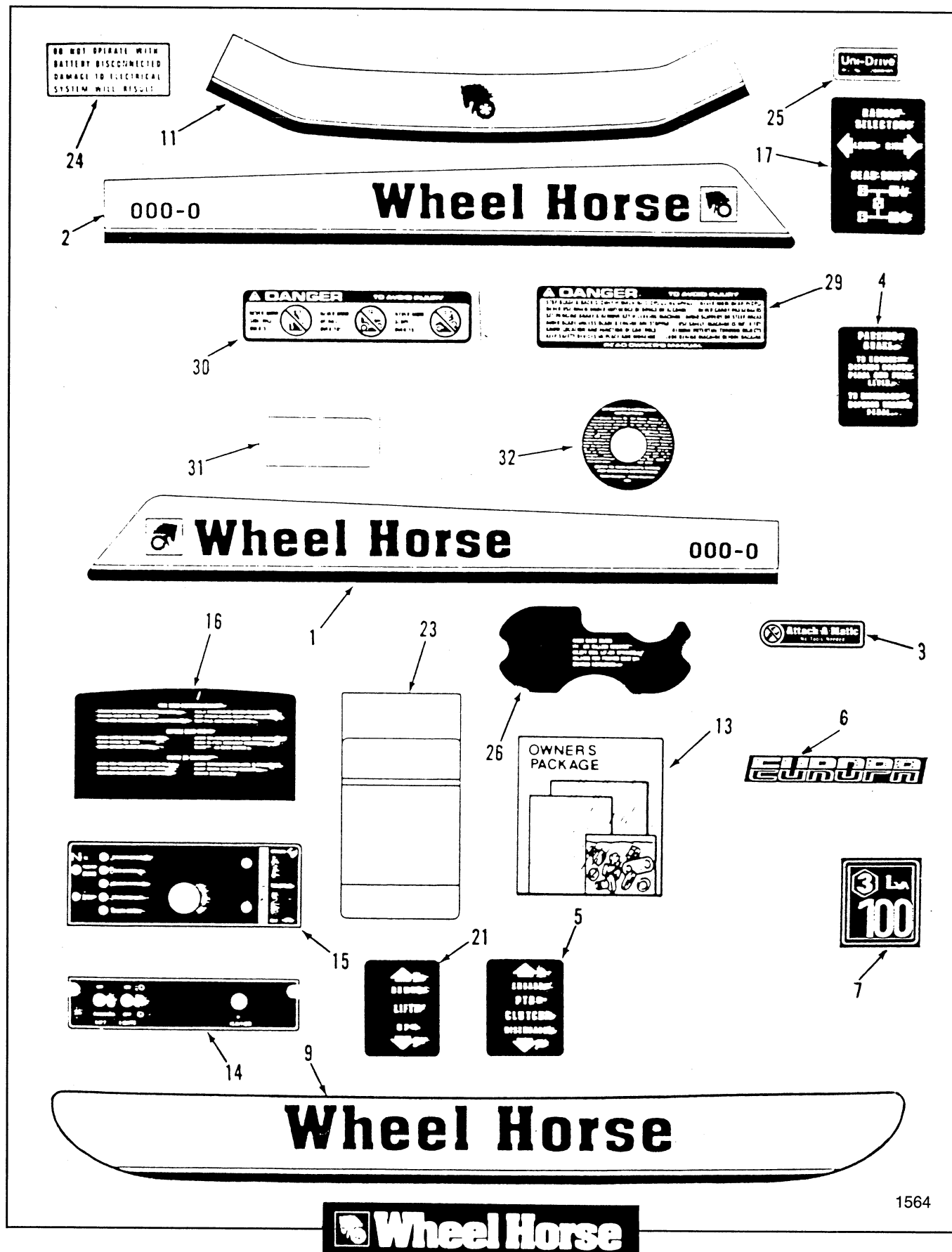
Figure 12 - 2 Decals

SECTION 12 - SET AND DECALS

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 12-2 DECALS			
1	115000	Decal-Hood RH 312	X
	116632	Decal-Hood RH TORO 312	X
	115036	Decal-Hood RH 316	X
	116682	Decal-Hood RH TORO 316	X
2	115001	Decal-Hood LH 312	X
	116633	Decal-Hood LH TORO 312	X
	115037	Decal-Hood LH 316	X
	116683	Decal-Hood LH TORO 316	X
3	115197	Decal-Attach-a-Matic	1
	88160	Decal-Attach-a-Matic German	1
	88161	Decal-Attach-a-Matic French	1
	88162	Decal-Attach-a-Matic Dutch	1
4	111510	Decal-Parking Brake	1
	88278	Decal-Parking Brake German	1
	88279	Decal-Parking Brake French	1
	88280	Decal-Parking Brake Dutch	1
5	111960	Decal-PTO Clutch	1
	88081	Decal-PTO Clutch Symbol	1
6	111342	Decal-Europa	2
7	114621	Decal-Europe Noise	1
9	114925	Decal-Rear Fender	1
	116549	Decal-Rear Fender TORO	1
11	114926	Decal-Hood Front	1
	116546	Decal-Hood Front TORO	1
13	807204	Loose Parts Package 312	X
	807206	Loose Parts Package 316	X
14	111501	Decal-Switch Plate	1
	88145	Decal-Switch Plate Symbol	1
15	111260	Decal-Lower Dash Throttle - 316	1
	88260	Decal-Lower Dash Throttle 316 German	1
	88261	Decal-Lower Dash Throttle 316 French	1
	88262	Decal-Lower Dash Throttle 316 Dutch	1
	112198	Decal-Lower Dash Throttle 312	1
	88148	Decal-Lower Dash Throttle 312 German	1
	88149	Decal-Lower Dash Throttle 312 French	1
	88150	Decal-Lower Dash Throttle 312 Dutch	1
16	114929	Decal Rear Hood	1
	88159	Decal Rear Hood German	1
	88079	Decal Rear Hood French	1
	88080	Decal Rear Hood Dutch	1
17	111534	Decal-Hi-Low Shift	1
	88157	Decal-Hi-Low-Shift Symbol	1
21	112168	Decal-Lift	1
	88067	Decal-Lift German	1
	88066	Decal-Lift French	1
	88068	Decal-Lift Dutch	1

SECTION 12 - SEAT AND DECALS



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Figure 12 - 2 Decals

SECTION 12 - SET AND DECALS

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ITEM	PART NUMBER	DESCRIPTION	Quantity
Figure 12-2			
DECALS (CONTD)			
23	115398	Decal-Maintenance	1
	88064	Decal-Maintenance German	1
	88063	Decal-Maintenance French	1
	88065	Decal-Maintenance Dutch	1
24	111926	Decal-Electrical System	1
	88121	Decal-Electrical System German	1
	88122	Decal-Electrical System French	1
	88123	Decal-Electrical System Dutch	1
25	104955	Decal-Uni-Drive	1
26	114296	Decal-Seat Lifter	1
	88087	Decal-Seat Lifter German	1
	88088	Decal-Seat Lifter French	1
	88089	Decal-Seat Lifter Dutch	1
29	112678	Decal-Danger	1
	88154	Decal-Danger German	1
	88155	Decal-Danger French	1
	88156	Decal-Danger Dutch	1
30	112679	Decal-Danger	1
	88163	Decal-Danger German	1
	88164	Decal-Danger French	1
	88165	Decal-Danger Dutch	1
31	112403	VIN Tag Overlay	1
32	KH10191	Decal-Air Cleaner/Lub. (vendor nr. 41 113 02)	1

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Wheel Horse