## Milliulkee. Spe

## **SERVICE PARTS LIST**

BULLETIN NO. 55-46-2440

DATE

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS

STEEL HAWG™ METAL BORING SYSTEM

**CATALOG NO. 4240-2** 

STARTING SERIAL NO.

751-1001

May '91
WIRING INSTRUCTION

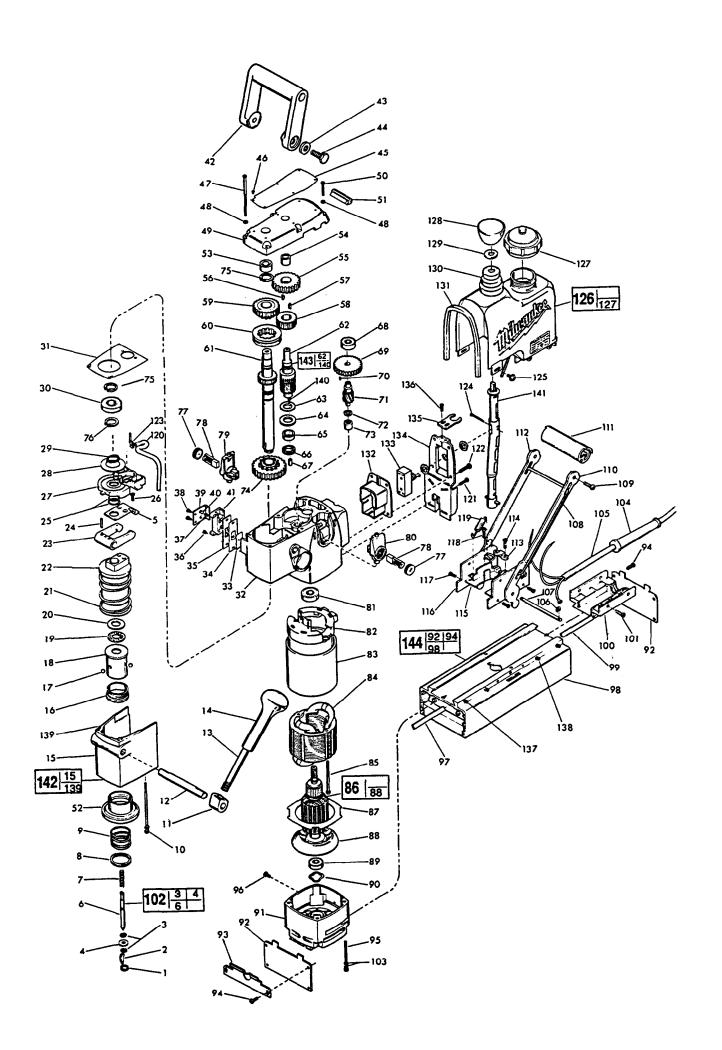
REVISED BULLETIN

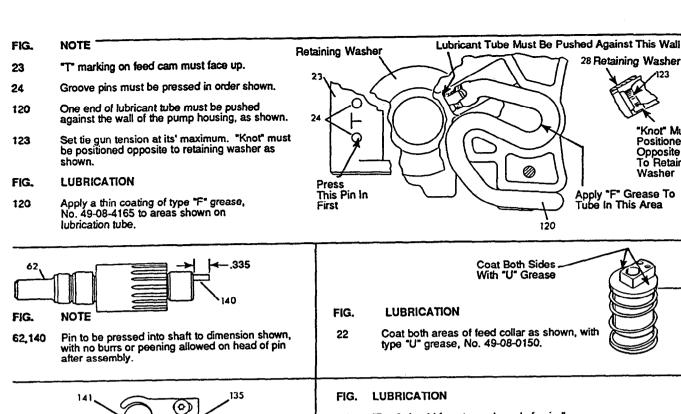
58-01-0512

00 0

Component Parts ( Small #)
Are included When Ordering
The Assembly (Large #).

FIG.	PART NO.	DESCRIPTION OF PART N	IO. REQ.	FIG.	PART NO.	DESCRIPTION OF PART NO. RI	EQ.
1	44-86-0420	Cutter Key Retainer	(1)	75	34-60-1290	Retaining Ring (2	2)
	43-96-0150	Cutter Key	<b>}i</b> }	76	34-60-2410	Retaining Ring (1)	)
2 3	34-60-2420	Retaining Ring	(2)	77 78	23-44-0220	Brush Cap Screw (2 Carbon Brush Assembly (2 Right Brush Holder Assembly (1 Left Brush Holder Assembly (1 Ball Bearing (1	2)
Ă	45-88-8030	Ejector Pin Washer	ों ।	78	22-18-0715	Carbon Brush Assembly (2)	2)
4 5 6	44-66-0790	Shut Off Plate	iii l	79	22-22-1350	Right Brush Holder Assembly (1)	)
ĕ	44-60-0750	Ejector Pin	}i{	80	22-22-1355	Left Brush Holder Assembly (1	)
7	40-50-8130	Ejector Spring	iii l	81	02-04-1050	Ball Bearing (1	)
8	34-60-2440	Retaining Ring	₹i\$ 1	82	31-55-0180	Coil Shield (1 Field Insulating Sleeve (1	)
9	40-50-8025	Release Spring	735	83	23-16-1455	Field Insulating Sleeve (1	)
10	06-82-9662	8-32 x 4.062 Sems Pan Torx Screw	(2)	R.A	18-56-0230	240 Volt Field (1	•
11	42-90-0220	Feed Handle Coupling	75	85	06-82-7375	8-16x2-1/2" Pan Plast. Torx (2)	2)
12	45-08-0230	Feed Shaft	(1)	86	16-56-0230	8-16x2-1/2" Pan Plast. Torx (2 240 Volt Armature (1 Baffle (1	)
13	43-62-0980	Feed Handle	iii l	85 86 87	42-14-0330	Baffle (1	)
14	43-62-0970	Feed Handle Grip	(1)	88	22-84-0660	Fan Assembly (1)	)
15	28-50-0430	Feed Housing	(1)	88 89 90	02-04-0911	Ball Bearing (1	)
16	44-40-0630	Retaining Nut	(1)	90	45-88-7110	Wavey Spring Washer (1	)
17	02-02-0310	5/16" Steel Ball	(3)	91	28-12-0320	End Cap (1 Base End Cap (2 Tube Protector Plate (1	)
18	42-46-0130	Feed Cage	(1)	92	42-52-0300	Base End Cap (2	?
19	02-80-1300	Needle Thrust Bearing	(1)	93 94 95 96 97	44-66-0800	Tube Protector Plate (1	)
20	45-88-8035	Thrust Washer	(1) i	94	06-82-5316	8-32x1/2" Pan Sit. Tapt. Torx (8 8-32x2-3/8" Pan Hd. Screw (4 8-32x5/16" Sit. Hex Hd. Screw (1	?
21	40-50-8020	Feed Return Spring	(1)	95	06-81-5765	8-32x2-3/8" Pan Hd. Screw (4	}
22	42-76-0415	Feed Collar Assembly	(1)	96	06-95-5200	8-32x5/16" Slt. Hex Hd. Screw (1	?
23	42-50-0220	Feed Cam	(1)	97	43-48-0130	End Cap Gib	2
24	06-65-3620	Groove Pin	(2)	98	28-06-1005	Magnetic Base (1	2
23 24 25 26 27	34-40-4110	O-Ring	(2) (2) (2)	99	43-48-0140	Container Gib (1	{
26	06-81-2575	8-32 x 1/2" Flat Hd. Screw	(2)	100	31-10-0120	Container Mounting Bracket (1 8-16x5/8" Pan Sit. Plast. Torx (4	{
27	31-50-0621	Pump Housing	(3)	101	06-82-7270	8-16X5/8" Pan Sit. Plast. 10/X (4	7
28 29 30	45-88-8025	Retaining Washer	(3)	102	44-60-0755	Container Gib Container Mounting Bracket 8-16x5/8" Pan St. Plast. Torx Ejector Pin Assembly No. 8 Internal Tooth Lock Washer Cord Protector (1	,
29	34-60-2400	Retaining Ring	(1)	103	06-97-2000	No. 8 Internal Toolii Lock Washer (6	?
30	02-04-1700	Ball Bearing	<u> </u>	104	44-76-0050	Cord Protector (1	(
31	45-36-1420	Feed Housing Spacer	533	105	22-64-4520	Cord Set (1 External Retaining Ring (2 Pivot Pin (1	
32	28-50-6285	Motor Housing Assembly	333	106	34-60-0400 44-60-0820	Pivot Pin (1	7
33	44-66-5740	Grease Retaining Plate	- 523	107		Handle Lock (1	(
34	43-44-0840	Shift Gasket	- 522	108	44-20-0240 06-82-7270	8-16x5/8° Pan Sit. Plast. Torx (2	Χ.
35	44-66-5735	Shift Plate	727	109	42-36-1605	8-16x5/8" Pan Slt. Plast. Torx (2 Left Handle Bracket (1	΄ ΄
33 34 35 36 37 38 39	06-81-8400	4-40x1/4" Pan Hd. Sems	(1) (2) (1) (2) (1)	110	31-44-1485	Magnetic Base Handle (1	<b>(</b>
37	40-50-8030	Compression Spring 6-32x3/8° Truss Hd. Taptite	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	111 112	42-36-1600	Right Handle Bracket (1	(
38	06-95-0075 44-66-5555	Shift Lever Plate	) <u>{</u> {	113	31-17-0156	Cord Clamp (1	{
39	02-02-0180		)X	114	06-82-7270	8-16x5/8" Pan Sit. Plast. Torx (2	Κ.
40 41	43-98-0310	3/16" Steel Ball Shift Knob	) <b>;</b> {	115	31-10-0110	Cord Clamp Bracket (1	1
42	31-44-1100	Spade Handle	);(	116	42-36-1590	Base Side Bracket (2	3
42	45-88-0605	Flat Washer	)2	117	06-82-5316	Cord Clamp Bracket (1 Base Side Bracket (2 8-32x1/2" Pan Sit. Tapt. Torx (4 8-32x1/2" Pan Sit. Tapt. Torx (1 Handle Lock Spring (2 Lubricant Tube (1	is
43 44 46	06-75-0500	3/8-16x1" Hex Hd. Screw	(2) (6)	118	06-82-5316	8-32x1/2" Pan Sit. Tapt. Torx (2	ź
46	06-81-8400	4-40x1/4" Pan Hd. Sems	<u>}ē</u> (	119	40-50-8050	Handle Lock Spring (2	2)
A7	06-82-9620	8-32x3-3/4" Fil. Hd. Torx	(2)	120	45-76-0300	Lubricant Tube (1	)
48	06-97-3200	No. 8 Split Ring Lock Washer	(2) (6) (1)	121	06-82-5320	8-32x5/8" Pan Sit. Tapt. Torx (1 10-24x7/8" Pan Tapt. Torx (4 Tie (1	()
49	28-20-1260	Gear Case Cover	}i\$	122	06-82-5574	10-24x7/8" Pan Tapt. Torx (4	l)
50	06-82-0862	8-32 x 1" Fil Hd.Torx	(4)	123	23-78-0100	Tie (1	)
47 48 49 50 51	42-92-0750	Vent Cover	(1)	124	44-60-1070	Cotter Pin (1	)
52	42-76-0400	Release Collar	(1)	125	06-81-4649	10-32x7/16" Pan Hd. Tapt. Screw (2 Container Housing Assembly (1	2)
53 54 55	02-50-4018	Needle Bearing	(1)	126	42-51-0410		()
54	02-50-2750	Needle Bearing	(1)	127	42-52-0350	Container Cap (1	)
55	32-44-1360	2nd Intermediate Gear	(1)	128	43-98-0320	Switch Knob (1	2
56	06-42-0800	Woodruff Key	(1)	129	45-88-5261	Flat Washer	
57	06-42-1200	Woodruff Key	(1)	130	45-12-0450	Plunger Boot (1	2
58	32-60-2350	High Speed Pinion Gear	(1)	131	45-06-0460	Container Seal	
59 60 61	14-08-0170	High Speed Clutch Gear Assembly	(1) (2) (2)	132	31-50-0610	Switch Housing	2
60	44-90-4260	Shifter Ring	(1)	133	23-66-1480	Switch (1	<i>\</i>
61	38-50-5730	Spindle	(1)	134	31-15-0390	Switch Housing Cover (1	1
62	36-66-4440	2nd Intermediate Shaft	(1)	135	42-36-1630	Switch Plunger Bracket (1	()
62 63 64 65 66 67	42-24-0350	Bronze Thrust Bearing	(†) (†) (†)	136	06-82-7409	8-16x1/2" Pan Plast: Torx (2	1
64	45-88-0510	Thrust Bearing Washer	(1)	137	06-83-2670	1/4-20x1/2" Knrl. Set Screw (2	3
65	02-50-4016	Needle Bearing	(1)	138	06-83-2650	1/4-20x3/8" Knrl. Set Screw (2	3
66	45-06-0470	Qil Seal		139	06-65-1527	Roll Pin (2	1
67	42-24-0330	Pump Bearing	(1)	140	06-65-3605	Pump Dowel Pin (1	(
68 69 70	02-04-1020	Ball Bearing	(†) (†) (†)	141	44-70-0215	Switch Plunger Assembly (1	
<b>69</b>	32-42-1350	1st Intermediate Gear	<u> </u>	142	28-50-0435	Feed Housing Asssembly (1 2nd, Intermediate Shaft Assembly (1	K
70	06-42-0400	Woodruff Key	$\Omega$	143	36-66-4445	Dom Mag Bara Accombia (1	7
71 72	36-66-4430	1st Intermediate Shaft	<b>53</b> 5	144	42-20-0610	Perm. Mag. Base Assembly (1 Chain Hook (1	
72	45-88-7100	Washer	(5) (5) (7) (7)	I	43-74-0080	Switch Housing Cover Switch Housing Cover Switch Plunger Bracket 8-16x1/2" Pan Plast: Torx 1/4-20x1/2" Knrl. Set Screw 1/4-20x3/8" Knrl. Set Screw Roll Pin Pump Dowel Pin Switch Plunger Assembly 1 Feed Housing Assembly 2nd. Intermediate Shaft Assembly Perm. Mag. Base Assembly Chain Hook 1 Chain	Κ.
73	02-50-2020	Needle Bearing	\X	l	42-60-0120	Viani ('	•
74	14-08-0180	Low Speed Clutch Gear Assembly	(1)				





## NOTE FIG.

FIG.

135

NOTE

If cutter key retainer is removed during service, discard 1 and replace with new component. DO NOT REUSE. Assemble with tool number 61-20-0055.

Bracket must be positioned against plunger

as shown before screws are tightened.

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- Apply Hernon #423 blue sealant. Keep grease away from threaded holes. IMPORTANT: Check Torque! 10,137
- 12 Flats must face upward as illustrated on parts drawing.
- Tighten securely with tool number 61-20-0050. 16 Note: Left hand thread.
- 33,34. One corner is rounded on all three parts. They must all face with the rounded corners closest toward the "H" 35 engraved into the housing at the top.
- Rubber seal to face inside of casting. 66
- Open end to face gear. 68
- Seal to face fan. 89
- Push one end of lubricant tube 3/8" to 1/2" onto brass tube of lubricant container.
- 133 Mount switch with slot of switch facing towards end cap (Item 91).
- 124,141 Before removing cotter pin, make note of which slot, in switch plunger, the pin has been placed. Reassemble accordingly. Bend pin tabs around plunger.

## **SPECIAL NOTES:**

- 1. Check function of switch / base interlock system.
- 2. After servicing unit, run a tank full of Hawg Wash through to check for proper fluid flow. It should empty in 4-1/2 minutes or less.

- "Bow" should face towards end of spindle. 19
- Coat both sides of these items with type "U" grease, 19.20 No. 49-08-0150, before placing in feed collar.
  - Apply a small amount of type "F" grease, No. 49-08-4165, to both inner grooves before inserting O-rings. Keep grease away from cross hole. 27

"Knot" Must Be

Positioned

To Retaining

22

Opposite

Washer

- Apply 3 Oz. type "J" grease, No. 49-08-4220. 1 oz. into each gear 32 cavity.
- After sliding pump housing onto spindle, coat entire spindle and inside of feed collar with type "F" grease No. 49-08-4165 before the feed housing and it's inside mechanism is assembled. Keep grease out of 22,61 key slot at end of spindle after assembly.
- Apply a thin coat of type "U" grease, No. 49-08-0150, to outside diameters of spindle where items number 59 and 74 fit before assem
- 63,64 Coat both these items with type "J" grease before assembly.
- Coat pin lightly with type "J" grease, No. 49-08-4220, before 140 assembly of item 67.
- Apply 1 oz. type "J" grease, No. 49-08-4220 onto inside of gear case 49

RUN-IN SPECIFICATION								
	RPM-N	O LOAD	AMPS-NO LOAD					
VOLTS	LO	Н	LO	HI				
240	500	1000	4.0-6.0	4.0-6.0				

MANDATORY FASTENERS' TORQUE								
	<u>·</u>				TORQUE IN./LBS.			
1					MIN./MAX.			
FIG. NO	PART NO.	SIZE_	TYPE	DRIVE	SEATING			
95	06-81-5765	8-32	MACHINE	<b>POZIDRIV</b>	23-28			
36/46	06-81-8400	4-40	MACHINE	SLOT	3-6			
94/117/118	06-82-5316	8-32	TAPTITE	T-20	30-40*			
101/109/114	06-82-7270	8-16	PLASTITE	T-20	25-30**			
47	06-82-9620	8-32	MACHINE	T-20	18-23			
10	06-82-9662	8-32	MACHINE	T-20	8-11			
138	06-83-2650	1/4-20	MACHINE	1/8 ALLEN	12-15			
137	06-83-2670	1/4-20	MACHINE	1/8 ALLEN	25-35			
77	23-44-0220	3/4-18	MACHINE	SLOT	9-12			

\* BASE END CAP SCREWS ONLY 23-28 IN.LBS. \*\*CONTAINER MOUNTING BRACKET SCREWS ONLY 15-20 IN/LBS. SWITCH HEX NUT: 14-17 IN.LBS.