



SERVICE PARTS LIST

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
9" GRINDER			Aug. 2007
CATALOG NO.	6086-20	SERIAL NUMBER	991A
		WIRING INSTRUCTION 58-01-1370	

EXAMPLE:
 Component Parts (Small #)
 Are Included When Ordering
 The Assembly (Large #).

RECALL NOTICE!
 See back page for important safety information.

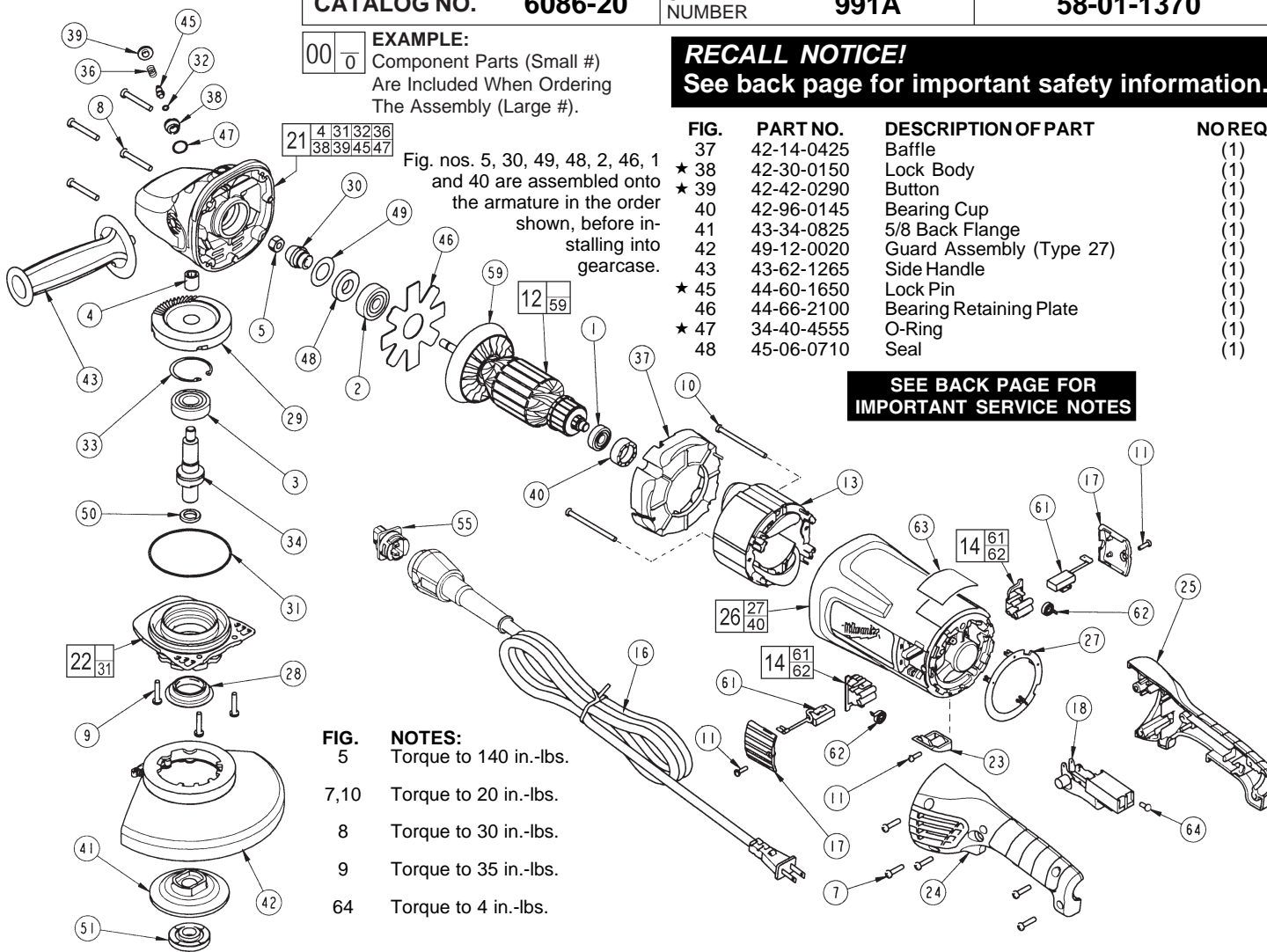


Fig. nos. 5, 30, 49, 48, 2, 46, 1 and 40 are assembled onto the armature in the order shown, before installing into gearcase.

FIG.	PART NO.	DESCRIPTION OF PART	NOREQ.
37	42-14-0425	Baffle	(1)
★ 38	42-30-0150	Lock Body	(1)
★ 39	42-42-0290	Button	(1)
40	42-96-0145	Bearing Cup	(1)
41	43-34-0825	5/8 Back Flange	(1)
42	49-12-0020	Guard Assembly (Type 27)	(1)
43	43-62-1265	Side Handle	(1)
★ 45	44-60-1650	Lock Pin	(1)
46	44-66-2100	Bearing Retaining Plate	(1)
★ 47	34-40-4555	O-Ring	(1)
48	45-06-0710	Seal	(1)

SEE BACK PAGE FOR IMPORTANT SERVICE NOTES

- FIG. NOTES:**
- 5 Torque to 140 in.-lbs.
 - 7,10 Torque to 20 in.-lbs.
 - 8 Torque to 30 in.-lbs.
 - 9 Torque to 35 in.-lbs.
 - 64 Torque to 4 in.-lbs.

FIG.	PART NO.	DESCRIPTION OF PART	NOREQ.
1	02-04-1675	Ball Bearing	(1)
2	02-04-1680	Ball Bearing	(1)
3	02-04-1745	Ball Bearing	(1)
4	02-50-2429	Needle Bearing	(1)
5	06-55-2455	Hex Nut	(1)
7	06-82-0055	8-16 Torx Plastite Screw T-20	(5)
8	06-82-0060	10-14 Torx Plastite Screw T-25	(4)
9	06-82-0065	10-32 x 1 Pan Hd. Taptite T-25 Screw	(3)
10	06-82-0070	8-16 Torx Plastite Screw T-15	(2)
11	06-82-7240	6-19 x 1/2 Slit. Pan Hd. Plast. T-15	(3)
12	16-70-0132	Armature Assembly	(1)
13	18-70-1130	Field	(1)
14	22-20-0120	Brush Holder Assembly	(2)
16	48-76-5110	Quik-Lok Cord Set	(1)
17	23-44-0255	Brush Cover	(2)
18	23-66-2720	Switch	(1)
21	28-14-1131	Gearcase Assembly	(1)
22	28-53-0151	Spindle Hub Assembly	(1)
23	31-15-0166	Cover	(1)
24	31-44-0840	Left Hand Handle Half	(1)
25	31-44-0835	Right Hand Handle Half	(1)
26	31-50-1751	Motor Housing Assembly	(1)
27	31-53-0160	Plug	(1)
28	31-55-0150	Bearing Shield	(1)
29	32-05-1505	Gear	(1)
30	32-60-1505	Pinion Gear	(1)
31	34-40-0505	O-Ring	(1)
★ 32	34-40-4300	O-Ring	(1)
33	34-80-2960	Retaining Ring	(1)
34	38-50-2500	Spindle Shaft	(1)
★ 36	40-50-1550	Compression Spring	(1)

FIG.	PART NO.	DESCRIPTION OF PART	NOREQ.
49	45-88-7880	Shim Washer	(1)
50	45-88-8466	5/8-11 Spindle Washer	(1)
51	49-05-0051	Flange Nut	(1)
55	22-56-0900	Blade Housing Assembly	(1)
59	22-84-0540	Fan Assembly	(1)
61	22-18-0126	Carbon Brush Assembly	(2)
62	-----	Brush Spring	(2)
63	12-99-5006	Nameplate Blank	(1)
64	05-78-0305	Switch Screw	(4)
	23-94-2650	Leadwire Assembly	(1)
	23-94-2655	Leadwire Assembly	(1)
	49-96-7205	Spanner Wrench	(1)

FIG. LUBRICATION:
 21 1.25 oz. (35 grams) of Type "Y" grease, No. 49-08-5270 in main gear cavity of gearcase.

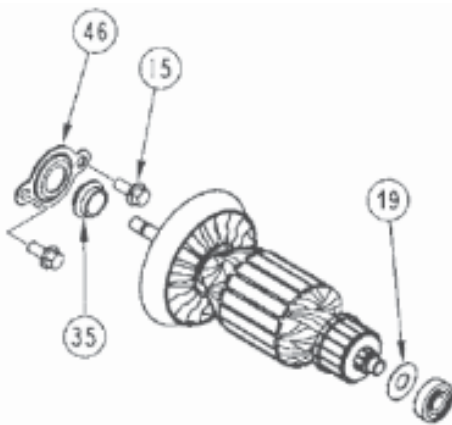
29,30 "Y" grease must be applied to all gear teeth.

31,32 Lightly coat o-rings with "Y" grease prior to installation.

FIG. NOTES:
 4,21 Press needle bearing flush ±.02 to gearcase boss face.

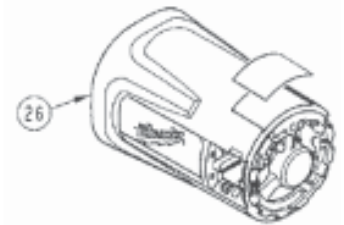
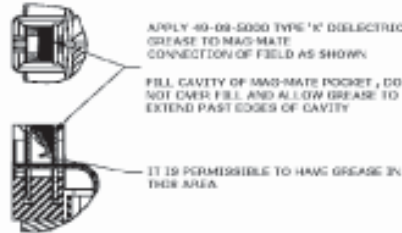
33 Bevel side of retaining ring away from bearing face.

1,40 Seat bearing cup completely onto ball bearing.



31-50-1752 Motor Housing Kit incorporates changes to the shielding of the armature pinion and commutator ball bearings along with the retaining of the pinion ball bearing into the gearcase assembly of 7"/ 9" 15Amp Sander / Grinders - 6080-20, 6081-20, 6082-20, 6086-20, 6088-20 and 6089-20.

Additionally, a change has been made to the motor housing and wiring of the tool. The ATF field coil is now 'hard-wired' with four [4] new leadwire assemblies, see **Wiring Instruction 58-01-1371**. Add 'X' Grease, 49-08-5000 to mag-mate field terminals as need.



Caution! Do Not overfill the cavity, excess grease can cause a build up of dust / dirt and result in a possible 'shorting-out' or burning at the connection.

Motor Housing Kit consist of:	Discarded Parts:	Model Affected
2ea 06-75-0510 ¼-20 Hex Screw* item 15		All
1ea 45-06-0830 Bearing Seal item 19		All
1ea 31-50-1785 Motor Housing item 26	31-50-1751 Motor Housing	All
1ea 31-53-0160 Plug**	31-53-0160 Plug*	All
1ea 31-55-0290 Dust Shield item 35		All
1ea 44-86-0040 Bearing Retainer ^A item 46	44-66-2100 Bearing Ret Plate	All
1ea 23-94-9300 LeadWire Assembly	23-94-2650 LeadWire Assy	All
1ea 23-94-9305 LeadWire Assembly	23-94-2655 LeadWire Assy	All
1ea 23-94-9310 LeadWire Assembly		All
1ea 23-94-9315 LeadWire Assembly		All
	42-96-0145 Bearing Cup	All

^A Service Note - 'check for slip fit' - mounting of 02-04-1680 Ball Bearing to the armature shaft may require removal of a 0.0001" - 0.0002" from the O.D. of the armature pinion end ball bearing journal - it is recommended to use emery cloth and armature lathe to lightly sand, for a few seconds, removing the material necessary for the pinion shaft to be a 'slip fit through the pinion ball bearing' as it is being held in place in the GearCase by the 44-86-0040 Bearing Retainer.

* Torque 06-75-0510 to 65-75 in-lbs.

** running change, part modified without part number change - two wire traps added - part must have a total of 4 wire traps

ITEMS NOT INCLUDED IN KIT: MUST BE ORDERED AS NEEDED

1ea 22-56-1050 Blade Hsg Assembly***	22-56-0900 Blade Hsg Assy	6086-20, 6089-20
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*** 6086-20 & 6089-20 will also require changing out of the Quik-Lok™ Cord Blade Housing Assembly.

1ea 28-14-1131 GearCase Assembly****	28-14-1131 GearCase Assy	All, prior to 2003
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**** required for early version Gear Case Assembly, manufactured prior to 2003, without screw bosses to accept the 06-75-0510 ¼-20 Hex Head Screws

Stamp or etch an 'R' in the tool's nameplate next to the catalog number after installation of the 'current production' service replacement parts listed above.



RECALL NOTICE!

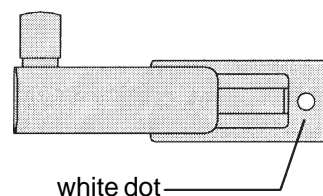
Milwaukee is providing a **no-charge** warranty service to all owners of **6086-20, 6088-20 and 6089-20 7"/9" Grinders**. We are taking this action because under certain circumstances the **'lock-on' Trigger Switch** can stick in the 'ON' position, which poses a risk of injury or property damage.

All **6086-20, 6088-20 and 6089-20 7"/9" Grinders** within the serial number ranges shown are affected.

Nameplate Catalog Number	Serial Number Range	
6086-20	991AXXXXXXXXXX	All Serial Numbers
	991BXXXXXXXXXX	All Serial Numbers
6088-20	994AXXXXXXXXXX	All Serial Numbers
	994BXXXXXXXXXX	All Serial Numbers
6089-20	992AXXXXXXXXXX	All Serial Numbers

For operator safety a **6086-20, 6088-20 or 6089-20 7"/9" Grinder** within the listed serial number ranges should be returned to the nearest **factory** Service/Sales Support Branch or Milwaukee Authorized Service Station for a no-charge warranty replacement of the trigger switch.

The original equipment switch (23-66-2710 / 23-66-2720) should be replaced with a new re-worked 23-66-2720. Reworked switches will have a white dot (indelible paint) applied to the location at the base of the switch (see illustration).



If the nameplate has an **'X'** stamped into the tool's nameplate, next to the serial number, the tool has been repaired and the defective switch has already been replaced.

If you need assistance in locating the service facility nearest you or have questions please call 1.800.729.3878 (1.800.SAWDUST).

Important Note! The 6088-20 Grinder contains a store security 'sensormatic' label. It is found on the left-hand handle half. This 'sensormatic' may shift and cause the trigger to stay 'ON'. When servicing the 6088-20, remove and discard the 'sensormatic' label.

