



# SERVICE PARTS LIST

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN 54-38-1600	DATE Aug. 2007
<b>9" GRINDER</b>			
CATALOG NO.	<b>6086-20</b>	SERIAL NUMBER	<b>991B</b>
		WIRING INSTRUCTION <b>58-01-1370</b>	

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

**RECALL NOTICE!**  
 See back page for important safety information.

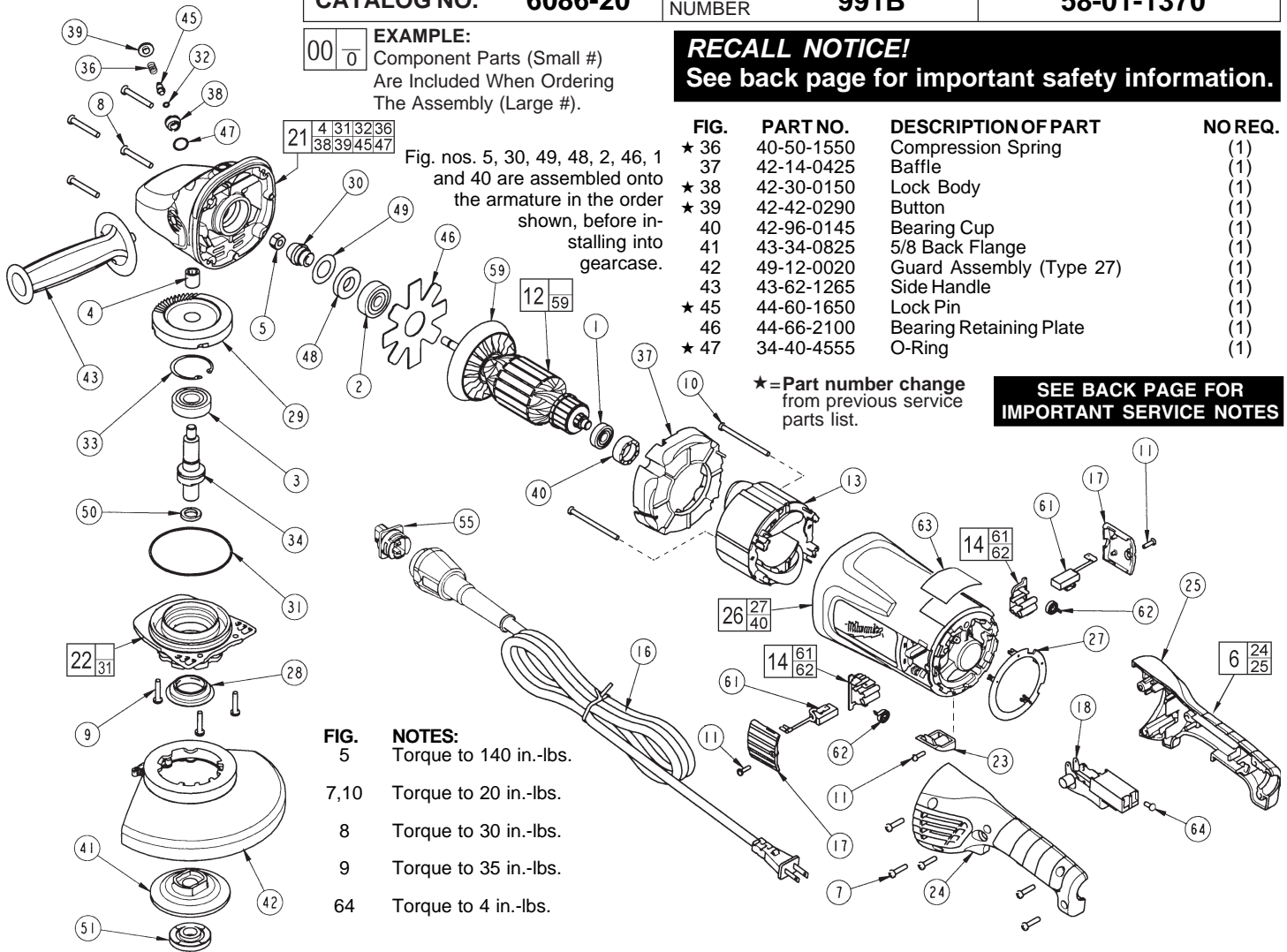


Fig. nos. 5, 30, 49, 48, 2, 46, 1 and 40 are assembled onto the armature in the order shown, before installing into gearcase.

FIG.	PART NO.	DESCRIPTION OF PART	NOREQ.
★ 36	40-50-1550	Compression Spring	(1)
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)

★ = Part number change from previous service parts list.

**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.

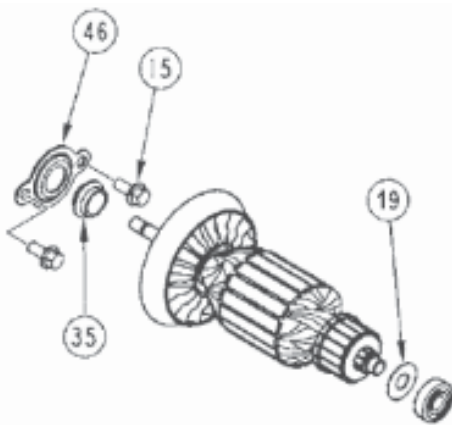
FIG.	PART NO.	DESCRIPTION OF PART	NOREQ.
1	02-04-1675	Ball Bearing	(1)
2	02-04-1680	Ball Bearing	(1)
3	02-04-1745	Ball Bearing	(1)
4	02-50-2429	Needle Bearing	(1)
5	06-55-2455	Hex Nut	(1)
★ 7	14-34-0570	Handle Kit	(1)
8	06-82-0055	8-16 Torx Plastite Screw T-20	(5)
8	06-82-0060	10-14 Torx Plastite Screw 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	-----	Left Hand Handle Halve	(1)
★ 25	-----	Right Hand Handle Halve	(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)

FIG.	PART NO.	DESCRIPTION OF PART	NOREQ.
48	45-06-0710	Seal	(1)
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.

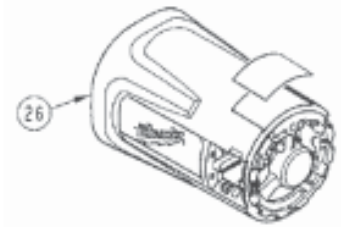
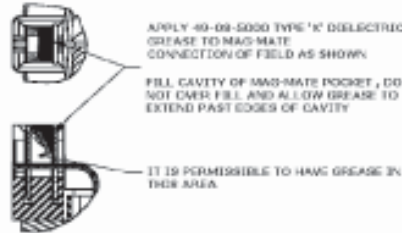
29,30 "Y" grease must be applied to all gear teeth.  
 31,32 Lightly coat o-rings with "Y" grease prior to installation.

**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 <b>06-75-0510</b> ¼-20 Hex Screw* <i>item 15</i>		All
1ea <b>45-06-0830</b> Bearing Seal <i>item 19</i>		All
1ea <b>31-50-1785</b> Motor Housing <i>item 26</i>	31-50-1751 Motor Housing	All
1ea <b>31-53-0160</b> Plug**	31-53-0160 Plug*	All
1ea <b>31-55-0290</b> Dust Shield <i>item 35</i>		All
1ea <b>44-86-0040</b> Bearing Retainer <sup>A</sup> <i>item 46</i>	44-66-2100 Bearing Ret Plate	All
1ea <b>23-94-9300</b> LeadWire Assembly	23-94-2650 LeadWire Assy	All
1ea <b>23-94-9305</b> LeadWire Assembly	23-94-2655 LeadWire Assy	All
1ea <b>23-94-9310</b> LeadWire Assembly		All
1ea <b>23-94-9315</b> LeadWire Assembly		All
	42-96-0145 Bearing Cup	All

<sup>A</sup> 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 <b>22-56-1050</b> 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 <b>28-14-1131</b> 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!

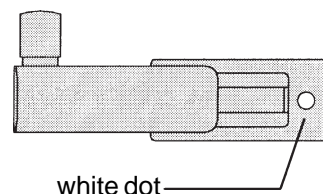
Milwaukee is providing a **no-charge** warranty service to all owners of **6086-20, 6088-20 and 6089-20 7"/9" Grinders**. We are taking this action because under certain circumstances the **'lock-on' Trigger Switch** can stick in the 'ON' position, which poses a risk of injury or property damage.

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

Nameplate <b>Catalog Number</b>	Serial Number Range	
<b>6086-20</b>	<b>991A</b> XXXXXXXXXX	<b>All Serial Numbers</b>
	<b>991B</b> XXXXXXXXXX	<b>All Serial Numbers</b>
<b>6088-20</b>	<b>994A</b> XXXXXXXXXX	<b>All Serial Numbers</b>
	<b>994B</b> XXXXXXXXXX	<b>All Serial Numbers</b>
<b>6089-20</b>	<b>992A</b> XXXXXXXXXX	<b>All Serial Numbers</b>

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.

