

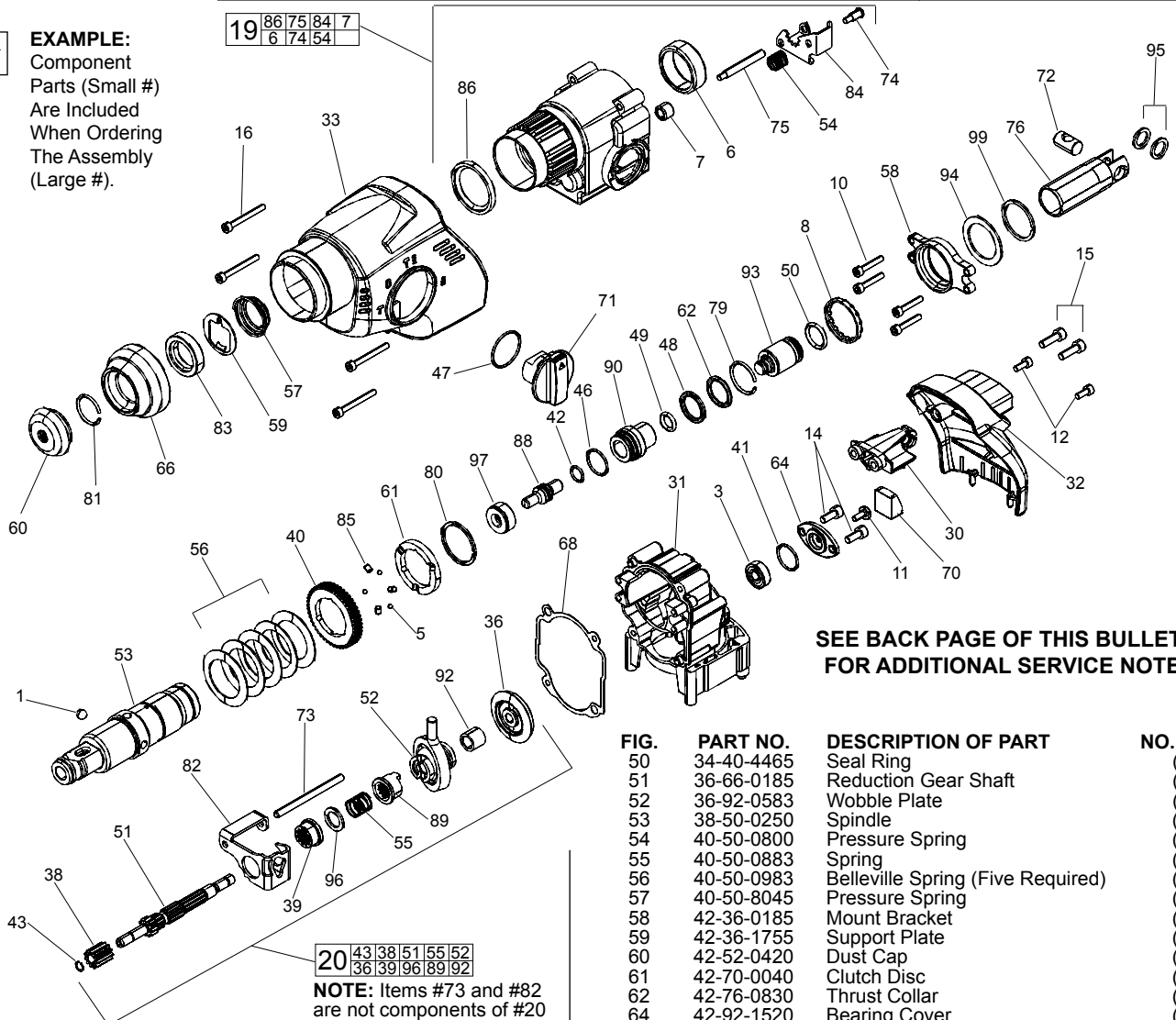


SERVICE PARTS LIST

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
18 Volt Rotary Hammer			Feb. 2008
CATALOG NO.	0856-20	STARTING SERIAL NO.	B42A
			WIRING INSTRUCTION SEE REVERSE SIDE

00 0

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



SEE BACK PAGE OF THIS BULLETIN FOR ADDITIONAL SERVICE NOTES

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	02-02-0275	Ball	(1)
3	02-04-0056	Ball Bearing	(1)
5	02-04-0683	Ball	(3)
6	02-50-0050	Needle Bearing	(1)
7	02-50-2183	Needle Bearing	(1)
8	02-80-0210	Spindle Bearing	(1)
10	05-74-0215	Screw	(4)
11	05-74-0220	Screw	(1)
12	05-74-0225	Screw	(2)
14	05-74-0460	Screw	(2)
15	05-74-0470	Screw	(2)
16	05-74-0685	Screw	(4)
19	14-50-0100	Gear Box Assembly	(1)
20	14-73-0305	Wobble Shaft Assembly	(1)
30	31-10-0150	Handle Mount	(1)
31	31-15-0756	Crankcase	(1)
32	31-15-0760	Gearbox Cover	(1)
33	31-40-0185	Gear Box Housing Cover	(1)
36	32-05-0500	Bevel Gear	(1)
38	32-60-0140	Gear	(1)
39	32-60-0145	Intern. Gear	(1)
40	32-75-0060	Spindle Gear	(1)
41	34-40-0083	O-Ring	(1)
42	34-40-0130	O-Ring	(1)
43	34-40-0430	Spring Ring	(1)
46	34-40-0445	O-Ring	(1)
47	34-40-1025	O-Ring	(1)
48	34-40-1305	O-Ring	(1)
49	34-40-4451	O-Ring	(1)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
50	34-40-4465	Seal Ring	(1)
51	36-66-0185	Reduction Gear Shaft	(1)
52	36-92-0583	Wobble Plate	(1)
53	38-50-0250	Spindle	(1)
54	40-50-0800	Pressure Spring	(1)
55	40-50-0883	Spring	(1)
56	40-50-0983	Belleville Spring (Five Required)	(5)
57	40-50-8045	Pressure Spring	(1)
58	42-36-0185	Mount Bracket	(1)
59	42-36-1755	Support Plate	(1)
60	42-52-0420	Dust Cap	(1)
61	42-70-0040	Clutch Disc	(1)
62	42-76-0830	Thrust Collar	(1)
64	42-92-1520	Bearing Cover	(1)
66	42-96-0210	Sleeve	(1)
68	43-44-0875	Seal	(1)
70	43-84-0443	Felt	(1)
71	44-10-0670	Shift Lever	(1)
72	44-60-0483	Wrist Pin	(1)
73	44-60-0756	Pin	(1)
74	44-60-1105	Spring Guide pin	(1)
75	44-60-1110	Guide Pin	(1)
76	44-62-0186	Cylinder	(1)
79	44-90-0183	Spring Ring	(1)
80	44-90-0350	Spring Ring	(1)
81	44-90-0375	Spring Ring	(1)
82	44-90-0500	Shift Ring	(1)
83	44-90-0830	Holding Ring	(1)
84	44-90-0832	Locking Plate	(1)
85	44-96-0183	Roller	(3)
86	45-06-0090	Seal Ring	(1)
88	45-08-0480	Striker	(1)
89	45-22-0610	Coupling Sleeve	(1)
90	45-22-0705	Sleeve	(1)
92	45-36-1700	Spacer	(1)
93	45-56-0076	Ram	(1)
94	45-88-0176	Washer	(1)
95	45-88-0283	Disc (Set of two)	(1)
96	45-88-1180	Disc	(1)
97	45-88-1770	Stop Washer	(1)
99	45-88-1780	Spring Ring	(1)

WIRING INSTRUCTIONS

SEE BACK PAGE OF THIS BULLETIN FOR ADDITIONAL SERVICE NOTES

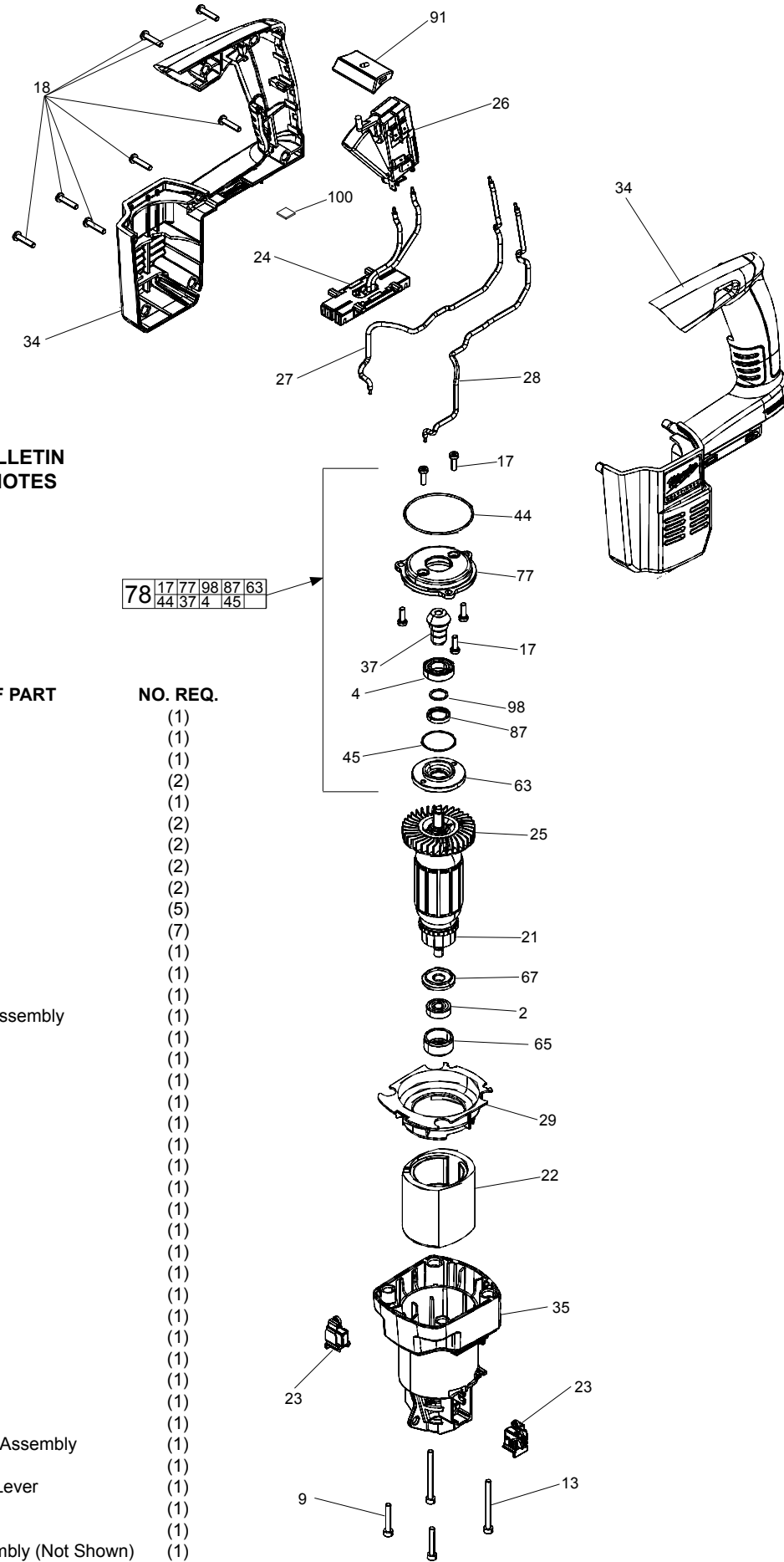
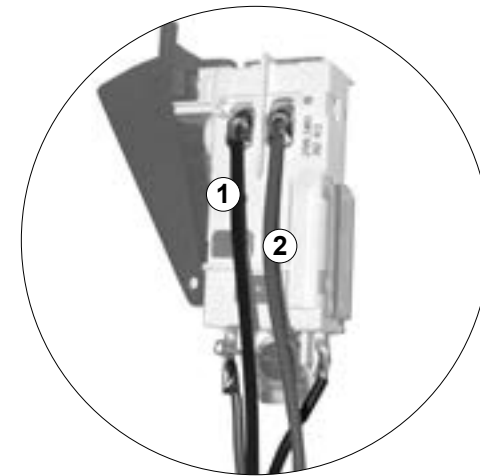
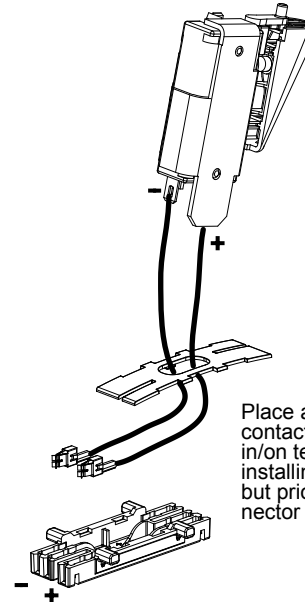


FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
2	02-04-0056	Ball Bearing	(1)
3	02-04-0056	Ball Bearing	(1)
4	02-04-0090	Ball Bearing	(1)
9	05-74-0183	Screw	(2)
11	05-74-0220	Screw	(1)
12	05-74-0225	Screw	(2)
13	05-74-0230	Screw	(2)
14	05-74-0460	Screw	(2)
15	05-74-0470	Screw	(2)
17	05-74-0715	Screw	(5)
18	05-81-0210	Screw	(7)
21	16-07-0190	Armature	(1)
22	18-01-0756	Field	(1)
23	22-18-0690	Carbon Brush Set	(1)
24	22-56-0095	Connector Block Assembly	(1)
25	22-84-0940	Fan	(1)
26	23-66-0400	Switch Board	(1)
27	23-94-0420	Wire	(1)
28	23-94-0425	Wire	(1)
29	31-05-0130	Air Deflector Ring	(1)
30	31-10-0150	Handle Mount	(1)
32	31-15-0760	Gearbox Cover	(1)
34	31-44-0195	Handle Assembly	(1)
35	31-50-0756	Motor Housing	(1)
37	32-60-0105	Pinion	(1)
41	34-40-0083	O-Ring	(1)
44	34-40-0435	O-Ring	(1)
45	34-40-0440	O-Ring	(1)
63	42-92-0165	Bearing Cover	(1)
64	42-92-1520	Bearing Cover	(1)
65	42-96-0205	Rubber Sleeve	(1)
67	43-06-0170	Insulating Disc	(1)
70	43-84-0443	Felt	(1)
77	44-66-0540	Bearing End Plate	(1)
78	44-66-1140	Bearing End Plate Assembly	(1)
87	45-06-0095	Seal Ring	(1)
91	45-24-0225	Forward/Reverse Lever	(1)
98	45-88-1775	Spring Ring	(1)
100	44-52-0095	Rubber Stop	(1)
	14-46-0015	Side Handle Assembly (Not Shown)	(1)
	43-46-0172	Depth Gauge (Not Shown)	(1)
	14-46-0756	Service Kit (Not Shown)	(1)
	12-20-6756	Service Nameplate (Not Shown)	(1)



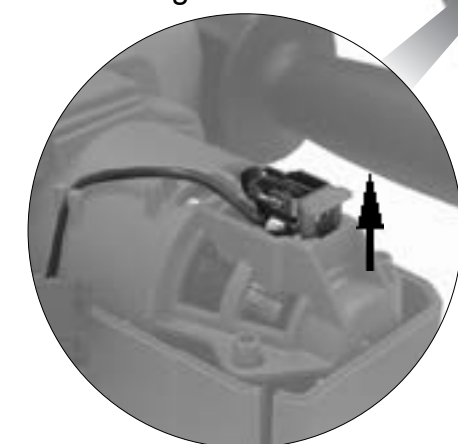
Connect the terminals of leadwire assemblies to the tabs on the bottom of the switch and solder, as shown.



Place a heavy coat of Type "X" contact grease, No. 49-08-5000, in/on terminals of wires after installing into connector block but prior to snapping on the connector block cover.



WARNING! Switch polarity sensitive if wired incorrectly with the terminal block. The switch will be damaged and destroyed.



WIRING SPECIFICATIONS				
Wire No.	Wire Color	Origin or Gauge	Length	Terminals, Connectors and 1 or 2 End Wire Preparation
1	Black	23-94-0410	-----	Strip one end .25 and solder to switch / Strip the other end .18 and solder to brush assy.
2	Red	23-94-0415	-----	Strip one end .25 and solder to switch / Strip the other end .18 and solder to brush assy.

BULK LEAD WIRE - BULLETIN NO. 58-01-0003

SERVICE NOTES

- Disassembly:**
33, 71 When, removing shift lever (71) from gear case cover (33) follow instructions listed on service bulletin. [see fig. 1]
19, 33 Release locking tabs on gearbox cover (33) using two flat bladed screwdrivers when removing from gearbox assembly (19). [see fig. 3]
4, 21, 37 Remove armature pinion (37) from armature (21) using Special Service Fixtures 61-10-0035. Note: Place separator plates 61-10-0011 under ball bearing (4) as illustrated in fig. 5.
40, 53, 56, 80 To remove retaining ring (80) from spindle (53) use service fixture 61-30-0290. Note: Spindle gear / clutch gear (40) must be compressed against Belleville spring washers (56) before retaining ring can be removed. (see fig.8)
21, 23, 35 Remove carbon brushes (23) from motor housing (35) prior to removing armature assembly (21).
Reassembly:
88, 97 Small diameter end of striker (88) must face stop washer (97) in assembly.
53, 97 Chamfer side of stop washer (97) to face front of spindle (53).
31, 5 Raised bosses on mount bracket (58) must face crankcase (31) in assembly.
33, 71 When reinstalling shift lever (71) into gearcase cover (33) follow instructions shown in fig. 2.
9, 10, 11, 12, 13, 14, 15, 16, 17 Apply Blue Loctite ® METCo part # 44-22-0090 to fasteners listed if removed and being reinstalled. New fasteners in service kit will not require additional Loctite®.
81, 83 Taper of holding ring (83) to face spring ring (81) in assembly.
57, 59 Wide portion of conical spring (57) to face plate (59).
36, 51, 92 When reassembling bevel gear (36) onto reduction gear shaft (51) a .001 - .002 clearance must be maintain between bevel gear (36) and spacer (92). [see fig.2]
4, 87 Flared edge of seal (87) to face ball bearing (4) in assembly.
53, 56 Reassemble Belleville Spring washers (56) onto spindle (53) as shown in fig. 7.
21, 25 When replacing a fan (25) on armature assembly (21), refer to illustration shown in fig. 6 for press dimensions.
43, 51 Install a new spring ring retainer (43) if removed from reduction gear shaft (51).

NOTE: CHECK THE CLUTCH TORQUE. CLUTCH MUST SLIP AT 17 TO 26 FT. LBS. AT THE SPINDLE, CHECKED CLOCKWISE AS VIEWED FROM THE FRONT OF THE TOOL. SELECTOR KNOB MUST BE SET TO THE HAMMER ONLY SETTING.

LUBRICATION

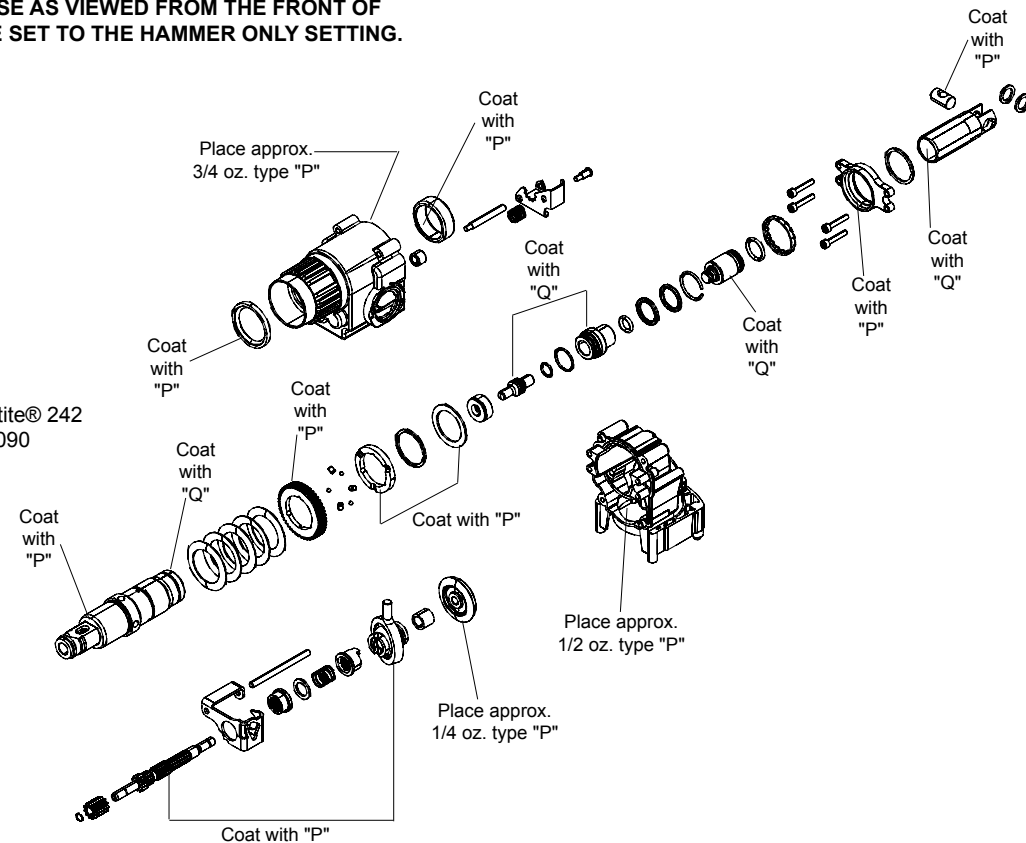
Type "Q" grease, No. 49-08-4255
 Coat with a total of 1/4 oz.

Type "P" grease, No 49-08-5350
 Cover with a total of 1-3/4 oz.
 (1-1/2 oz. to fill, 1/4 oz. to coat)

TORQUE SPECIFICATIONS

Screws in plastic 15 in. lbs.

Screws in metal 22 in. lbs. Use Blue Loctite® 242
 Metco Cat. No. 44-22-0090

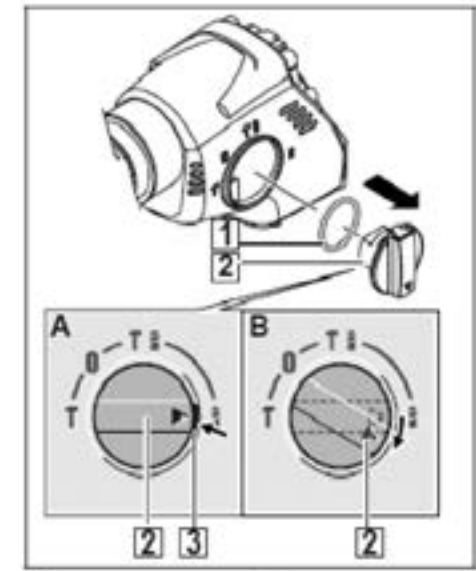


Service Kit 14-46-0756 Contains:

Fig.	Part No.	Desc. Of Part	Qty.
9	05-74-0183	Screw	2
10	05-74-0215	Screw	4
11	05-74-0220	Screw	1
12	05-74-0225	Screw	2
13	05-74-0230	Screw	2
14	05-74-0460	Screw	2
15	05-74-0470	Screw	2
16	05-74-0685	Screw	4
17	05-74-0715	Screw	5
23	22-18-0690	Carbon Brush Set	1
41	34-40-0083	O-Ring	1
42	34-40-0130	O-Ring	1
43	34-40-0430	Spring Ring	1
44	34-40-0435	O-Ring	1
45	34-40-0440	O-Ring	1
46	34-40-0445	O-Ring	1
47	34-40-1025	O-Ring	1
48	34-40-1305	O-Ring	1
49	34-40-4451	O-Ring	1
50	34-40-4465	Seal Ring	1
60	42-52-0420	Dust Cap	1
62	42-76-0830	Thrust Collar	1
65	42-96-0205	Rubber Sleeve	1
66	42-96-0210	Sleeve	1
68	43-44-0875	Seal	1
70	43-84-0443	Felt	1
79	44-90-0183	Spring Ring	1
80	44-90-0350	Spring Ring	1
86	45-06-0090	Seal Ring	1
87	45-06-0095	Seal Ring	1
98	45-88-1775	Spring Ring	1
99	45-88-1780	Spring Ring	1
	49-08-5350	Type "P" Grease	1
	49-08-4255	Type "Q" Grease	1

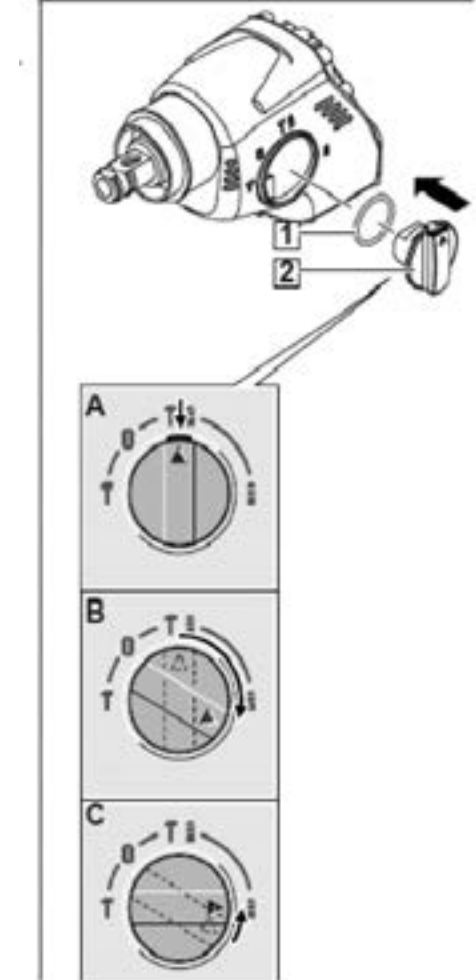
Removing the shift lever

- 1 Bring the shift lever (2) into the Drill-Only position (Illustration A).
- 2 Press in and hold the locking device (3) (Illustration A) and turn the shift lever past the drill icon (Illustration B) until the shift lever (2) can be pulled from the housing.
- 3 Remove the O-ring (1).



Installing the shift lever

- 1 Lightly grease the O-ring (1) and install it into the Shift Lever (2).
- 2 Position the triangle located on the shift lever to the Hammer / Drill icon and insert it into the gearcase (Illustration A). Press the locking device and turn clockwise (Illustration B) until the shift lever (2) engages audibly. After that, turn it back to the required position (C) and release the locking device.



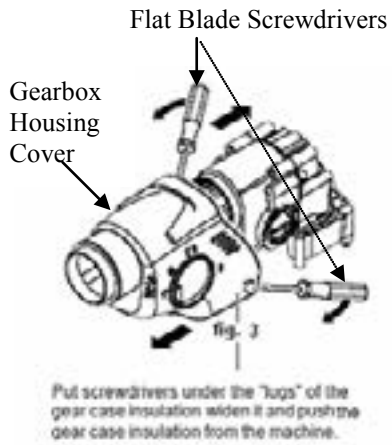


fig. 3

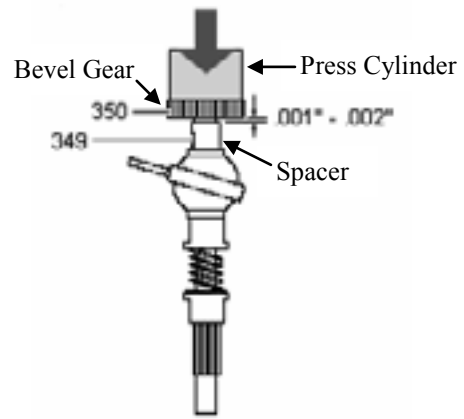


fig. 4

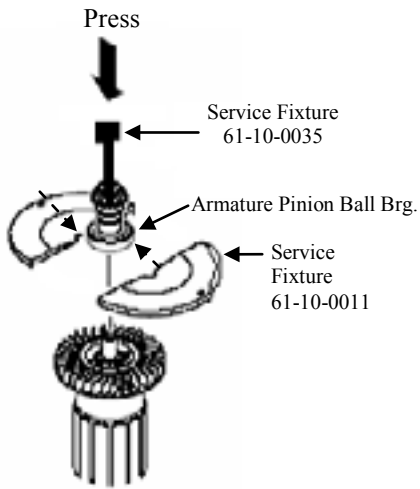


fig. 5

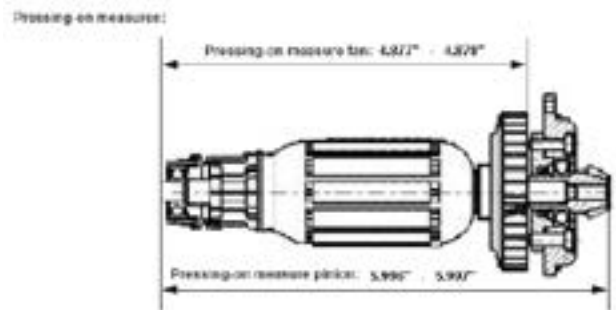


fig. 6

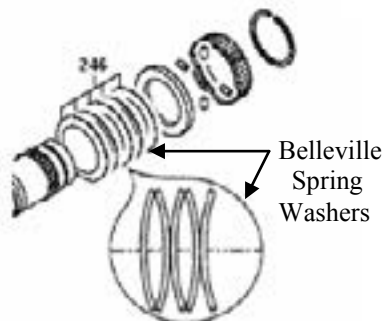


fig. 7

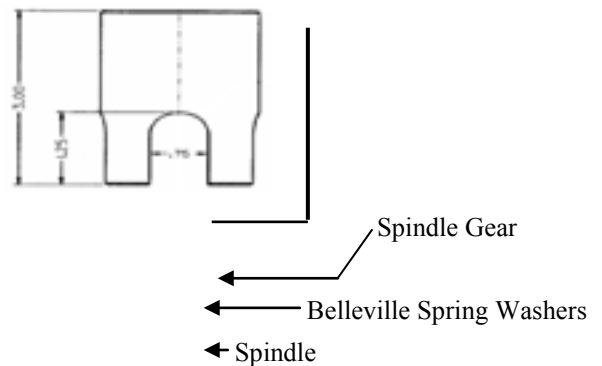


fig. 8