SERVICE PARTS LIST

BULLETIN NO. 54-38-1741

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS

4.5" & 5" RAT-TAIL ANGLE GRINDERS

CAT. NO.	6122-31 4.5" 6122-31A 5"	STARTING SERIAL NUMBER	B66B

REVISED BULLETIN	DATE
54-38-1740	Sept. 2018

WIRING INSTRUCTION **See Page 3**

00 | 0 **EXAMPLE:** Component Parts (Small #) Are Included When Ordering The Assembly (Large #).

***LUBRICATION NOTE:** When servicing the Gears (25 & 46) or the Gearcase (15), 90-95% of the old grease must be removed prior to new grease being added.

Rubber Slug (45) is to be placed in a cavity by the bearing bore in the back of Motor Housing (44).

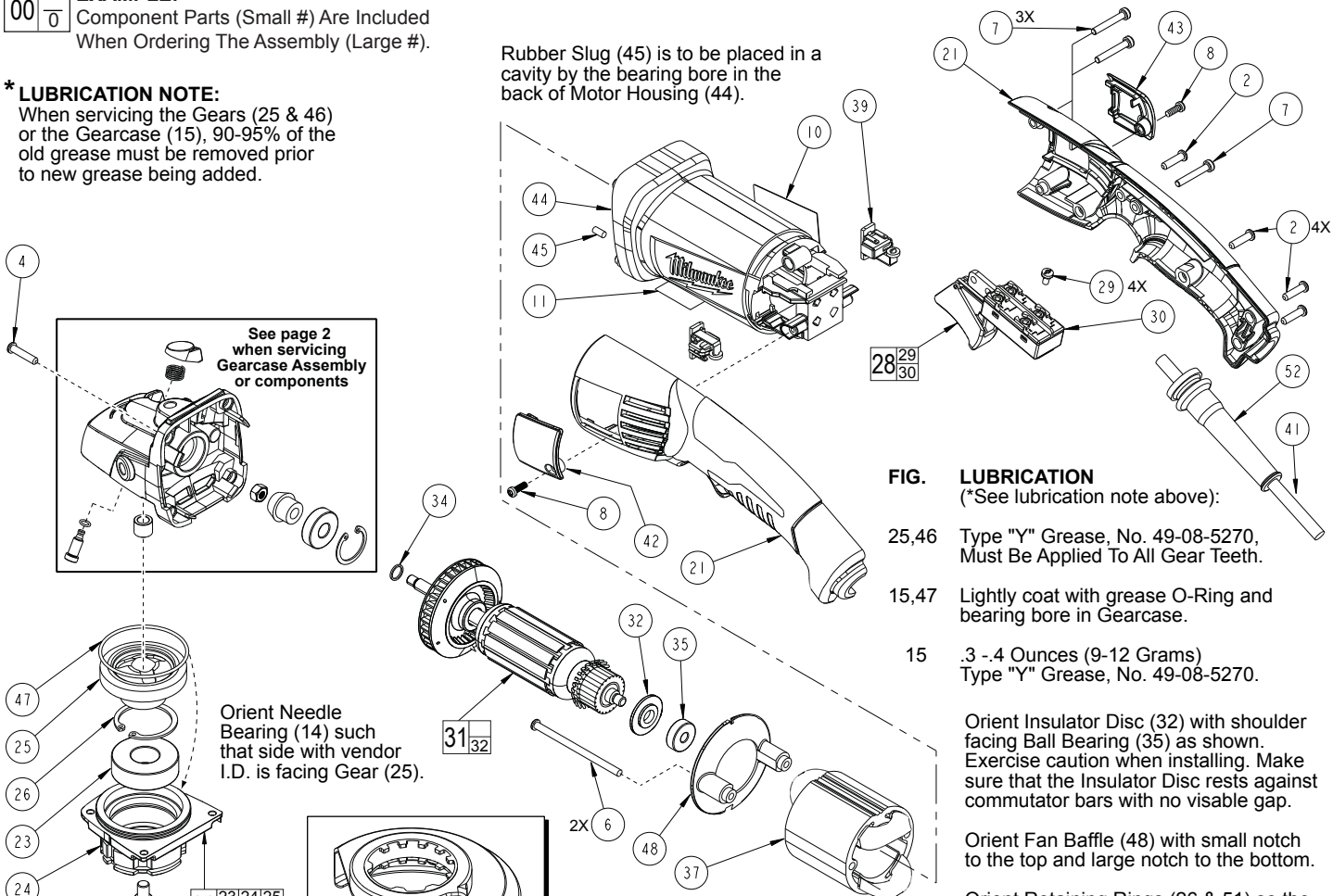


FIG.	LUBRICATION (*See lubrication note above):
25,46	Type "Y" Grease, No. 49-08-5270, Must Be Applied To All Gear Teeth.
15,47	Lightly coat with grease O-Ring and bearing bore in Gearcase.
15	.3 -.4 Ounces (9-12 Grams) Type "Y" Grease, No. 49-08-5270.

Orient Insulator Disc (32) with shoulder facing Ball Bearing (35) as shown. Exercise caution when installing. Make sure that the Insulator Disc rests against commutator bars with no visable gap.

Orient Fan Baffle (48) with small notch to the top and large notch to the bottom.

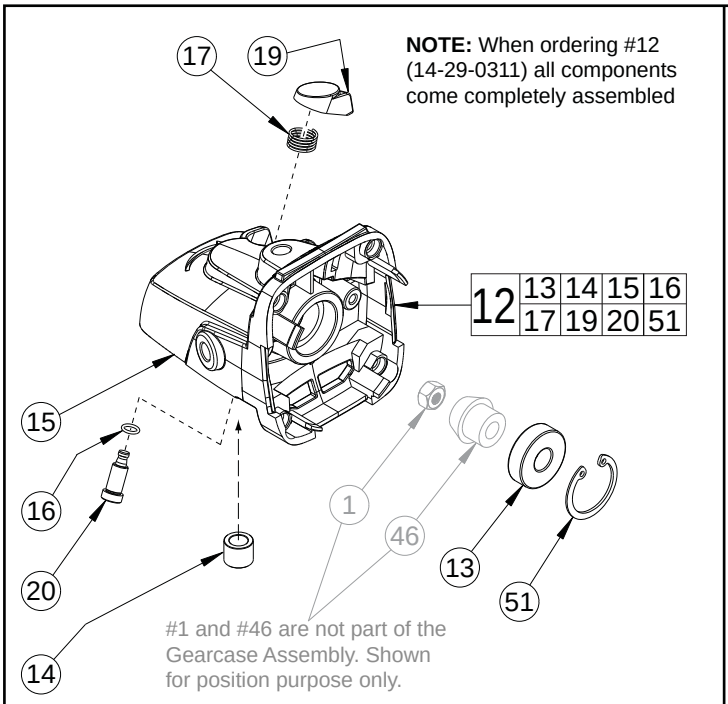
Orient Retaining Rings (26 & 51) so the bevel side faces away from Ball Bearings (13 & 23).

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
2	05-88-1200	M4 x 16 Pan Hd. T-20 Screw	(4)
3	05-88-1210	M4 x 14 Pan Hd. T-20 Screw	(4)
4	05-88-1250	M4 x 20 Pan Hd. T-20 Screw	(4)
6	05-88-1290	M4 x 76 Pan Hd. T-20 Screw	(2)
7	05-88-1650	M4 x 25 Pan Hd. T-20 Screw	(3)
8	05-88-1610	M3.5 x 10 Pan Hd. T-10 Screw	(2)
9	05-90-0225	M4 Lock Washer (See page 2)	(4 or 6)
10	12-20-6116	Service Nameplate	(1)
11	10-15-1230	Warning Label	(1)
21	14-34-0780	Rear Handle Assembly	(1)
22	14-73-0410	Spindle/Hub Assembly	(1)
23	02-04-1150	Ball Bearing	(1)
24	28-53-0410	Lower Gearcase Hub	(1)
25	32-05-1310	Bevel Gear	(1)
26	34-80-2275	Retaining Ring	(1)
27	38-50-1280	Spindle	(1)
28	14-78-0525	Switch Assembly	(1)
29	05-78-0305	M4 x 10 Pan Hd. Slt. T-15 Screw	(4)
30	23-66-2685	Switch	(1)
31	16-10-7020	Service Armature Assembly	(1)

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
32	43-86-0010	Insulation Disc	(1)
34	45-88-0406	Washer	(1)
35	02-04-2110	Ball Bearing	(1)
37	18-07-2330	Service Field	(1)
39	22-22-1560	Carbon Brush Assembly	(2)
41	22-64-2020	Cord	(1)
42	31-15-1550	Brush Cover - Left	(1)
43	31-15-1555	Brush Cover - Right	(1)
44	31-50-2600	Motor Housing	(1)
45	31-53-0240	Rubber Slug	(1)
47	34-40-0180	O-Ring	(1)
48	42-14-0025	Fan Baffle	(1)
49	43-34-0036	Inner Disk Flange	(1)
50	44-40-0035	Outer Flange Nut	(1)
51	34-80-1001	Retaining Ring	(1)
52	44-76-0210	Strain Relief	(1)
60	43-54-1070	4.5" T27 Guard Assembly (Standard)	(1)
	43-54-1075	5" T27 Guard Assy. (u/o 6122-31A) (Standard)	(1)
61	43-54-1090	4.5" T1 Guard Assembly (Optional)	(1)
	43-54-1095	5" T1 Guard Assy. (u/o 6122-31A) (Optional)	(1)
	42-62-0100	Side Handle (Not Shown)	(1)
	49-96-7215	Spanner Wrench (Not Shown)	(1)

MILWAUKEE ELECTRIC TOOL CORPORATION
13135 W. Lisbon Road, Brookfield, WI 53005

Drwg. 3



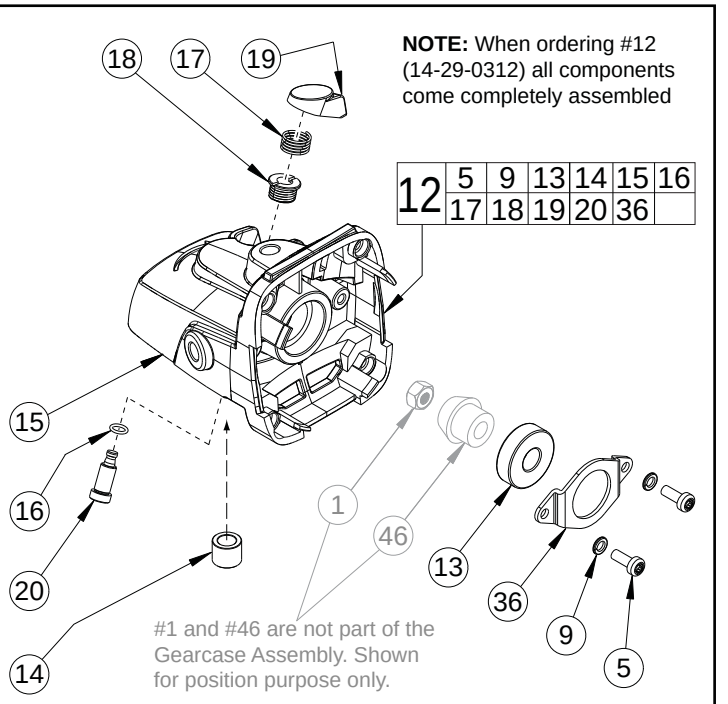
NOTE: When ordering #12 (14-29-0311) all components come completely assembled

#1 and #46 are not part of the Gearcase Assembly. Shown for position purpose only.

#12 14-29-0311 GEARCASE ASSEMBLY

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	05-55-0620	M5 Armature Hex Nut	(1)
12	14-29-0311	Gearcase Assembly	(1)
13	02-04-0620	Ball Bearing	(1)
14	02-50-0025	Needle Bearing	(1)
15	----------	Gearcase	(1)
16	34-40-0450	O-Ring	(1)
17	40-50-1330	Compression Spring	(1)
19	42-42-0590	Spindle Lock Button	(1)
20	42-60-1660	Spindle Lock Pin	(1)
46	32-60-1310	Bevel Pinion	(1)
51	34-80-1001	Retaining Ring	(1)

FIG.	NOTE:
1	Torque Armature Nut (1) to 47 in/lbs, 55 kg/cm.
14	Orient the Needle Bearing (14) such that the side with the vendor I.D. is facing the Gear (25).
20,25	Functionally check Spindle Lock mechanism. Spindle Lock Pin (20) must return briskly when released from engagement in Gear (25), reference illustration on first page.



NOTE: When ordering #12 (14-29-0312) all components come completely assembled

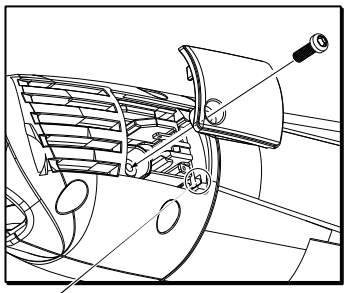
#1 and #46 are not part of the Gearcase Assembly. Shown for position purpose only.

#12 14-29-0312 GEARCASE ASSEMBLY

FIG.	PART NO.	DESCRIPTION OF PART	NO. REQ.
1	05-55-0620	M5 Armature Hex Nut	(1)
5	05-88-1280	M4 x 10 Pan Hd. T-20 Screw	(2)
9	05-90-0225	M4 Lock Washer (2 of 6)	(6)
12	14-29-0312	Gearcase Assembly	(1)
13	02-04-0620	Ball Bearing	(1)
14	02-50-0025	Needle Bearing	(1)
15	----------	Gearcase	(1)
16	34-40-0450	O-Ring	(1)
17	40-50-1330	Compression Spring	(1)
18	42-42-0580	Spindle Lock Tube	(1)
19	42-42-0590	Spindle Lock Button	(1)
20	42-60-1660	Spindle Lock Pin	(1)
36	44-66-0450	Bearing Retainer	(1)
46	32-60-1310	Bevel Pinion	(1)

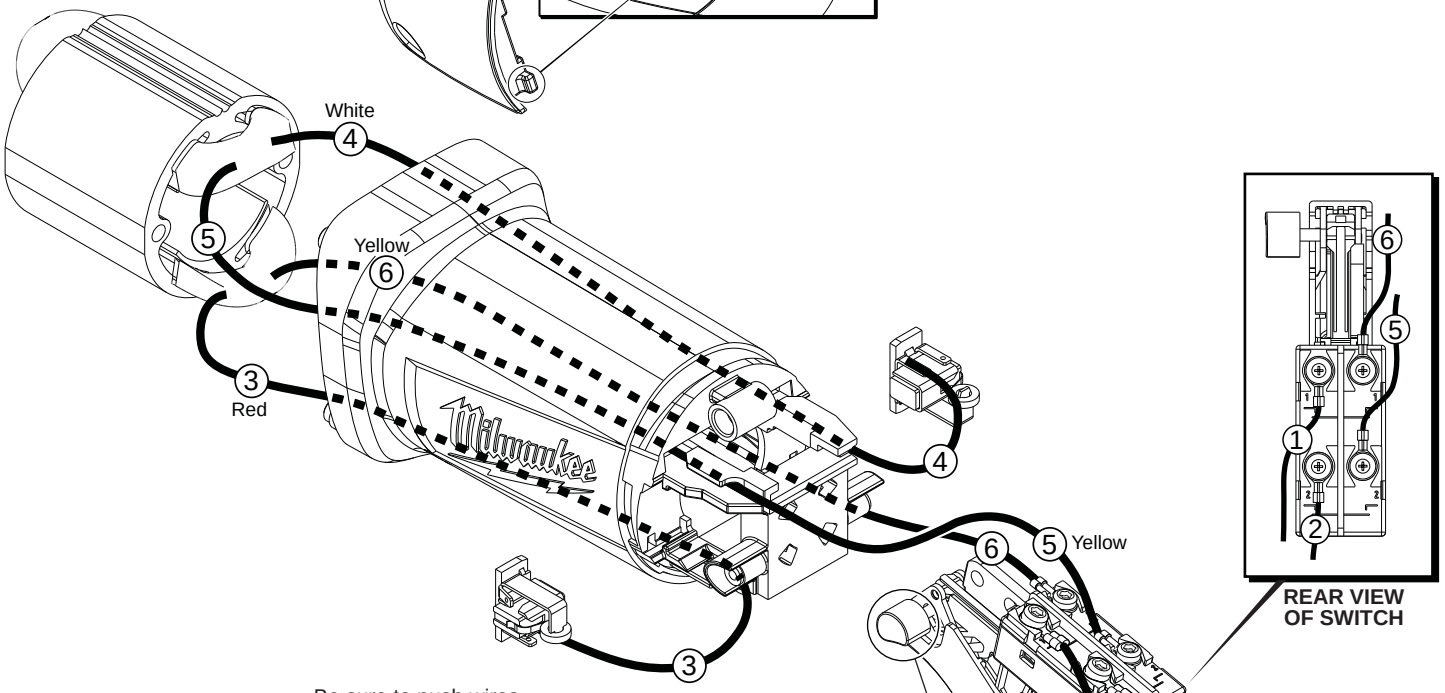
FIG.	NOTE:
1	Torque Armature Nut (1) to 47 in/lbs, 55 kg/cm.
9	There are 2 Lock Washers (9) that are utilized in the 14-29-0312 Gearcase Assembly (12). There are 4 Lock Washers used to help secure the Lower Gearcase Hub (24). There is a total quantity of 6. Reference illustration above and on page 1.
14	Orient the Needle Bearing (14) such that the side with the vendor I.D. is facing the Gear (25).
18	When replacining Spindle Lock Tube (18), apply a few drops of thread locking sealant to outside threads prior to installation. Torque Spindle Lock Tube to 12 in/lbs, 14 kg/cm.
20,25	Functionally check Spindle Lock mechanism. Spindle Lock Pin (20) must return briskly when released from engagement in Gear (25), reference illustration on first page.

Right Brush Cover (43) has to be taken off in order to remove Right Rear Handle of tool for servicing. Brush Covers fit tightly in the Motor Housing. Do not try and pry the Brush Covers open around the exterior of part. Brush Covers have tabs that lock into notches of the Motor Housing (44) and work like hinges. Once Screw (8) is removed, insert a small pin or eqivalent into the screw hole to aid in lifting Brush Cover. To reinstall Brush Covers, insert tabs into Motor Housing notches and snap down into place. Secure with Screw.

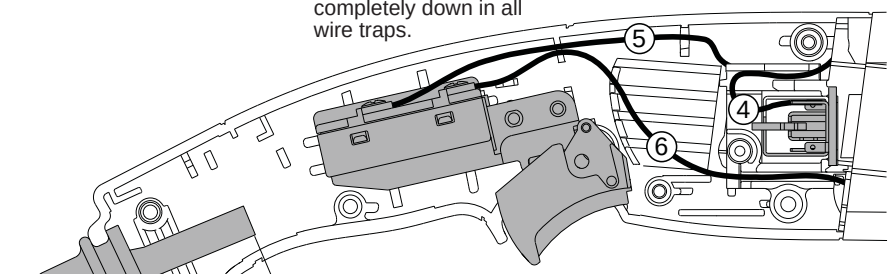


AS AN AID TO REASSEMBLY, TAKE NOTICE OF WIRE ROUTING AND POSITION IN WIRE GUIDES AND TRAPS WHILE DISMANTLING TOOL.

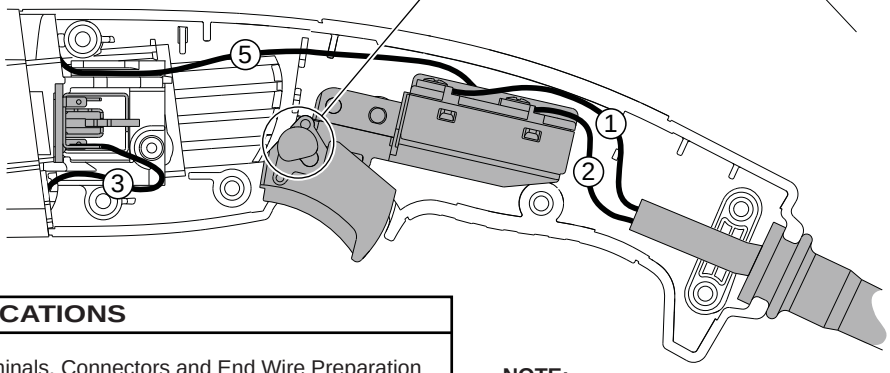
BE CAREFUL AND AVOID PINCHING WIRES BETWEEN HANDLE HALVES WHEN ASSEMBLING.



Be sure to push wires completely down in all wire traps.



Illustrations are shown with a switch that has the 'lock-off feature. Please disregard.



Cord jacket is to extend 1/4" min. beyond the cord clamp area.

WIRING SPECIFICATIONS

Wire No.	Wire Color	Origin or Part No.	Gauge	Length	Terminals, Connectors and End Wire Preparation
1	Black	22-64-2020	--	--	Component of Cord Set.
2	White	22-64-2020	--	--	Component of Cord Set.
3	Red	18-07-2330	--	--	Component of Service Field.
4	White	18-07-2330	--	--	Component of Service Field.
5	Yellow	18-07-2330	--	--	Component of Service Field.
6	Yellow	18-07-2330	--	--	Component of Service Field.

BULK LEAD WIRE - BULLETIN 58-01-0003

NOTE:
All leads must be held to ± 1/16".
All lead lengths are before stripping.

TERMINAL DESCRIPTION		
Code	Part No.	Qnty.
CONNECTOR DESCRIPTION		