



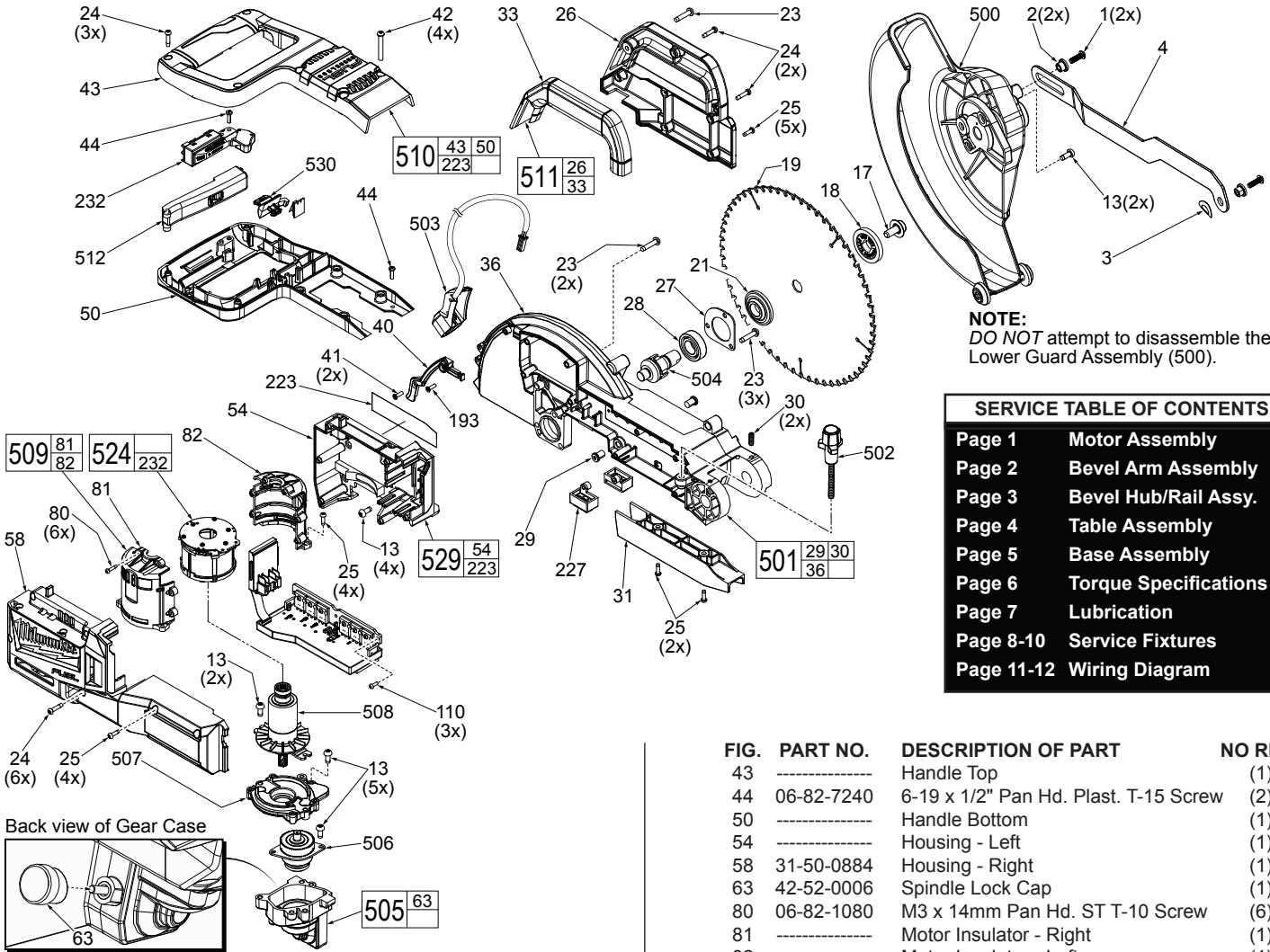
SERVICE PARTS LIST

MOTOR ASSEMBLY

BULLETIN NO.
54-40-2730

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
M18™ FUEL™ 10" MITER SAW			Nov. 2016
CATALOG NO.	2734-20	SERIAL NUMBER	H17A
WIRING INSTRUCTION			

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



NOTE:
DO NOT attempt to disassemble the
Lower Guard Assembly (500).

SERVICE TABLE OF CONTENTS	
Page 1	Motor Assembly
Page 2	Bevel Arm Assembly
Page 3	Bevel Hub/Rail Assy.
Page 4	Table Assembly
Page 5	Base Assembly
Page 6	Torque Specifications
Page 7	Lubrication
Page 8-10	Service Fixtures
Page 11-12	Wiring Diagram

FIG.	PART NO.	DESCRIPTION OF PART	NO REQ.
1	05-81-0156	M5 x 16mm Pan Hd. T-25 Mach. Screw	(2)
2	42-40-0936	Bushing	(2)
3	40-50-3946	Wave Washer	(1)
4	44-14-0017	Guard Link Arm	(1)
13	05-74-1030	M5 x 12mm Pan Hd. Tapt. T-25 Screw	(13)
17	45-04-0410	LH Blade Screw-6mm Hex Socket	(1)
18	43-34-0810	Outer Flange	(1)
19	-----	10" Blade	(1)
21	43-34-0815	Inner Flange	(1)
23	06-82-0028	M5 x 23mm Pan Hd. Tapt. T-25 Screw	(6)
24	06-82-0033	M4 x 18mm Pan Hd. ST T-20 Screw	(11)
25	05-78-0011	M3.5 x 12mm Pan Hd. Tapt. T-20 Screw	(15)
26	-----	Carrying Handle Side Plate	(1)
27	44-66-0031	Bearing Retaining Plate	(1)
28	02-04-1700	Ball Bearing	(1)
29	43-56-0810	M8 x 11mm T-25 Blade Deflector	(2)
30	05-89-0526	M5 x 16mm Set Screw with Nylok	(2)
31	43-56-0815	Chip Deflector	(1)
33	-----	Carrying Handle Cover	(1)
36	-----	Motor Arm	(1)
40	31-15-0014	LED Lead Cover	(1)
41	06-82-0034	M3.5 x 12mm Flat Hd. T-15 Screw	(2)
42	06-82-0042	M5 x 35mm Pan Hd. PT T-20 Screw	(4)

FIG.	PART NO.	DESCRIPTION OF PART	NO REQ.
43	-----	Handle Top	(1)
44	06-82-7240	6-19 x 1/2" Pan Hd. Plast. T-15 Screw	(2)
50	-----	Handle Bottom	(1)
54	-----	Housing - Left	(1)
58	31-50-0884	Housing - Right	(1)
63	42-52-0006	Spindle Lock Cap	(1)
80	06-82-1080	M3 x 14mm Pan Hd. ST T-10 Screw	(6)
81	-----	Motor Insulator - Right	(1)
82	-----	Motor Insulator - Left	(1)
110	05-81-0035	M3 x 8mm Pan Hd. T-10 Mach. Screw	(3)
193	05-74-0740	M3.5 x 8mm Pan Hd. T-15 Mach. Screw	(1)
223	12-20-0082	Service Nameplate	(1)
227	44-06-0023	Cover Block	(2)
232	23-66-0036	On-Off Switch	(1)
500	14-32-0245	Lower Guard Assembly	(1)
501	14-38-0543	Motor Arm Assembly	(1)
502	14-46-0058	Dado Screw Assembly	(1)
503	14-46-0059	Shadow Line Assembly	(1)
504	38-50-0016	Spindle Assembly	(1)
505	14-30-0024	Gearcase Assembly	(1)
506	14-29-0058	Intermediate Gear Assembly	(1)
507	14-13-0065	Diaphragm Assy. with Needle Bearing & Pins	(1)
508	16-07-0033	Rotor Assembly	(1)
509	31-50-0041	Motor Insulator Assembly	(1)
510	31-44-0098	Main Handle Kit	(1)
511	31-44-0099	Carrying Handle Kit	(1)
512	31-92-0215	Trigger Paddle	(1)
524	14-20-0058	Electronics Assembly	(1)
529	14-38-0544	Left Housing Kit with Label	(1)
530	31-01-0006	LED Button Assembly	(1)



SERVICE PARTS LIST

BEVEL ARM ASSEMBLY

BULLETIN NO.

54-40-2730

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
M18™ FUEL™ 10" MITER SAW			Nov. 2016
CATALOG NO.	2734-20	SERIAL NUMBER	H17A
WIRING INSTRUCTION			

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

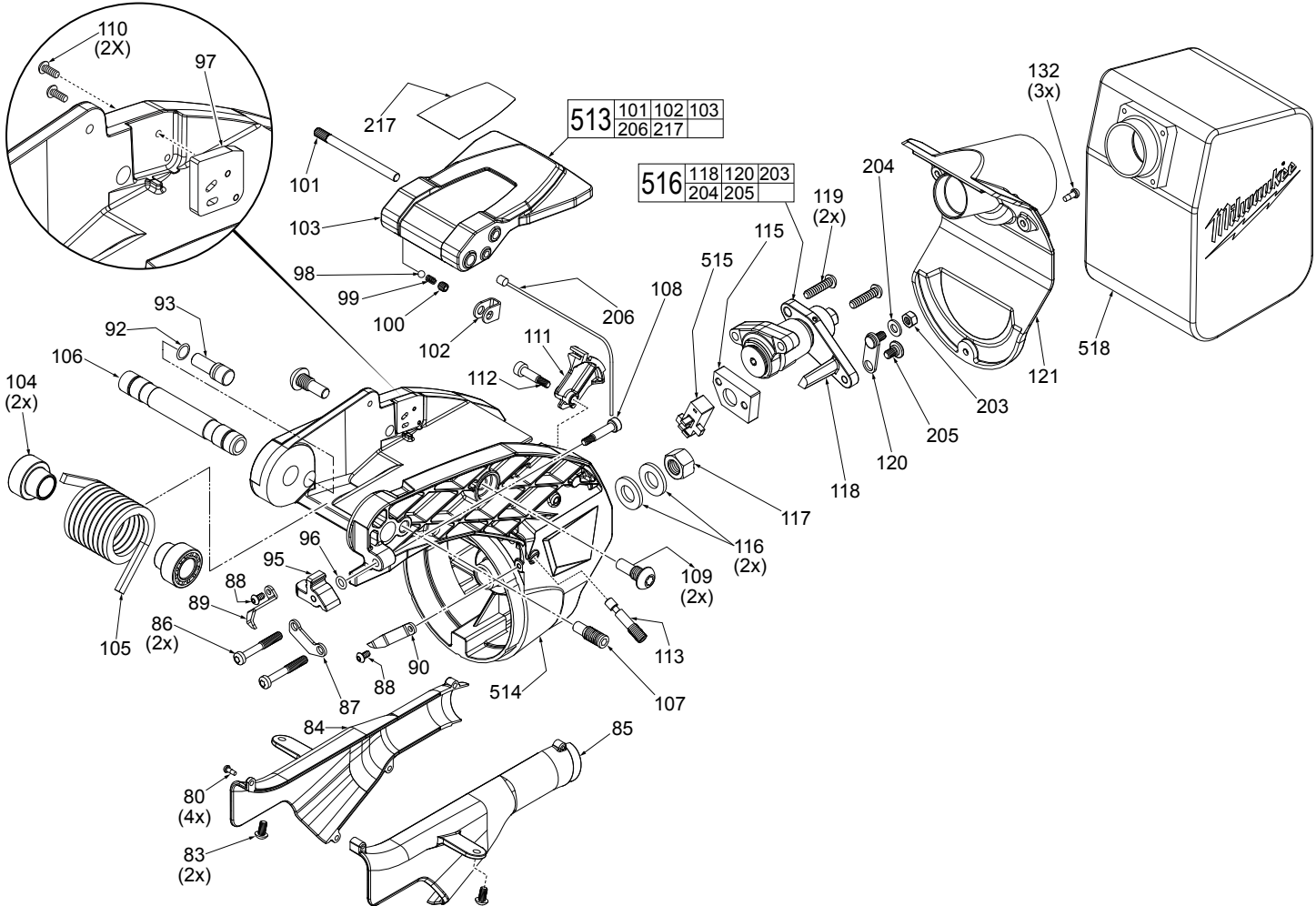


FIG.	PART NO.	DESCRIPTION OF PART	NO REQ.	FIG.	PART NO.	DESCRIPTION OF PART	NO REQ.
80	06-82-1080	M3 x 14mm Pan Hd. ST T-10 Screw	(4)	108	06-87-0020	Dado Stop Screw	(1)
83	05-81-0201	M5 x 10mm Pan Hd. T-25 Mach. Screw	(2)	109	05-77-0035	Handle Pivot Bolt	(2)
84	31-15-0018	Dust Chute - Left	(1)	110	05-81-0035	M3 x 8mm Pan Hd. T-10 Mach. Screw	(2)
85	31-15-0019	Dust Chute - Right	(1)	111	43-56-0335	Cable Guide	(1)
86	05-81-0139	M6 x 40mm Pan Hd. T-25 Screw	(2)	112	06-82-0037	M6 x 16mm Shoulder Screw	(1)
87	42-92-0059	Detent Mount Cover	(1)	113	45-04-0026	Detent Mount Adjustment Screw	(1)
88	06-82-0043	M4 x 8mm Pan Hd. T-20 Screw	(2)	115	42-68-0049	Detent Clamp Block	(1)
89	44-72-0030	Bevel Pointer - Left	(1)	116	45-88-1671	M12 Washer	(2)
90	44-72-0035	Bevel Scale Pointer - Right	(1)	117	05-59-0140	M12 Hex Nut	(1)
92	34-40-0251	O-Ring	(1)	118	14-04-0095	Brake Assembly	(1)
93	44-60-0003	Down Lock Pin	(1)	119	06-82-0038	M6 x 25mm Pan Hd. T-25 Mach. Screw	(2)
95	45-52-0040	Dado Stop	(1)	120	44-14-0145	Cable Brake Link Assembly	(1)
96	34-40-0056	O-Ring	(1)	121	31-15-0021	Rear Cover	(1)
97	44-66-0071	Handle Detent Plate	(1)	132	05-78-0746	M4 x 10mm Pan Hd. ST T-20 Screw	(3)
98	02-02-1300	Handle Detent Ball	(1)	203	05-55-0016	M6 Hex Nut	(1)
99	40-50-3941	Handle Detent Spring	(1)	204	45-88-0089	M6 Washer	(1)
100	05-86-0656	Set Screw	(1)	205	06-82-0067	M5 x 10mm Pan Hd. Hex Shoulder Scr.	(1)
101	06-65-0021	Handle Dowel Pin	(1)	206	23-94-0004	Brake Cable	(1)
102	45-98-0040	Cable Yoke	(1)	217	10-20-2236	Bevel Lock Label	(1)
103	-----	Bevel Handle	(1)	513	14-34-0026	Bevel Handle Assembly	(1)
104	42-40-0192	Pivot Spring Bushing	(2)	514	14-29-0059	Bevel Arm Assembly	(1)
105	40-50-0193	Axle Spring	(1)	515	14-67-0245	Bevel Detent Locator Assembly	(1)
106	42-12-0220	Bevel Axle	(1)	516	14-04-0025	Bevel Brake Assembly	(1)
107	05-89-0521	Screw Stop	(1)	518	42-16-0575	Dust Bag Assembly	(1)



SERVICE PARTS LIST

BEVEL HUB / RAIL ASSEMBLY

BULLETIN NO.

54-40-2730

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS		REVISED BULLETIN	DATE
M18™ FUEL™ 10" MITER SAW			Nov. 2016
CATALOG NO.	2734-20	SERIAL NUMBER	H17A
WIRING INSTRUCTION			

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

**Use this hole ONLY
to make Brake adjustments!**
Insert a 5mm ball end hex key through hole in bevel scale
area and engage pad adjuster on brake. Do not use a
standard hex key for this adjustment procedure.

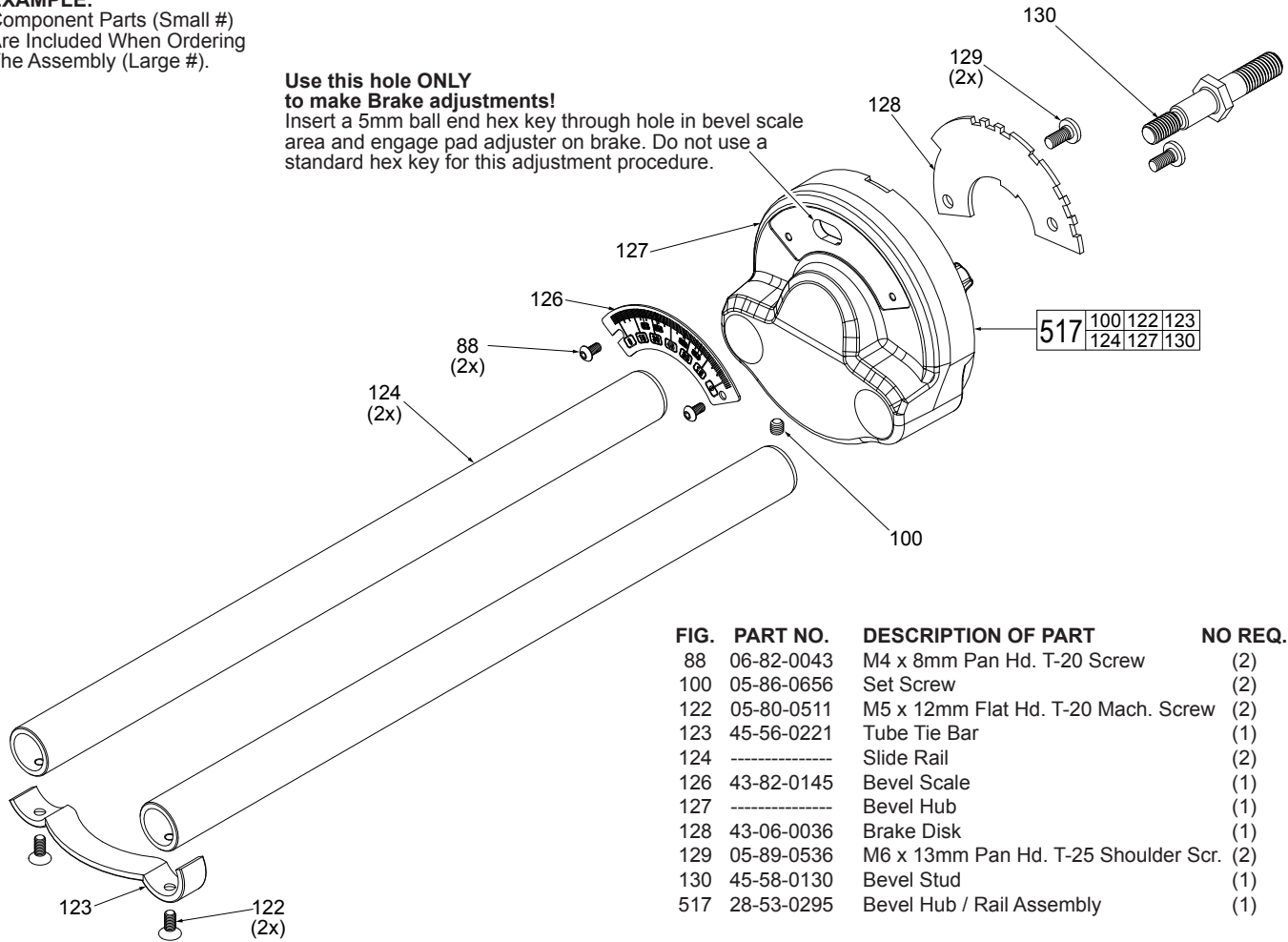


FIG.	PART NO.	DESCRIPTION OF PART	NO REQ.
	88	06-82-0043 M4 x 8mm Pan Hd. T-20 Screw	(2)
	100	05-86-0656 Set Screw	(2)
	122	05-80-0511 M5 x 12mm Flat Hd. T-20 Mach. Screw	(2)
	123	45-56-0221 Tube Tie Bar	(1)
	124	Slide Rail	(2)
	126	43-82-0145 Bevel Scale	(1)
	127	Bevel Hub	(1)
	128	43-06-0036 Brake Disk	(1)
	129	05-89-0536 M6 x 13mm Pan Hd. T-25 Shoulder Scr.	(2)
	130	45-58-0130 Bevel Stud	(1)
	517	28-53-0295 Bevel Hub / Rail Assembly	(1)



SERVICE PARTS LIST

BULLETIN NO.

54-40-2730

TABLE ASSEMBLY

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS

REVISED BULLETIN

DATE

M18™ FUEL™ 10" MITER SAW

Nov. 2016

CATALOG NO. 2734-20

SERIAL NUMBER

H17A

WIRING INSTRUCTION

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

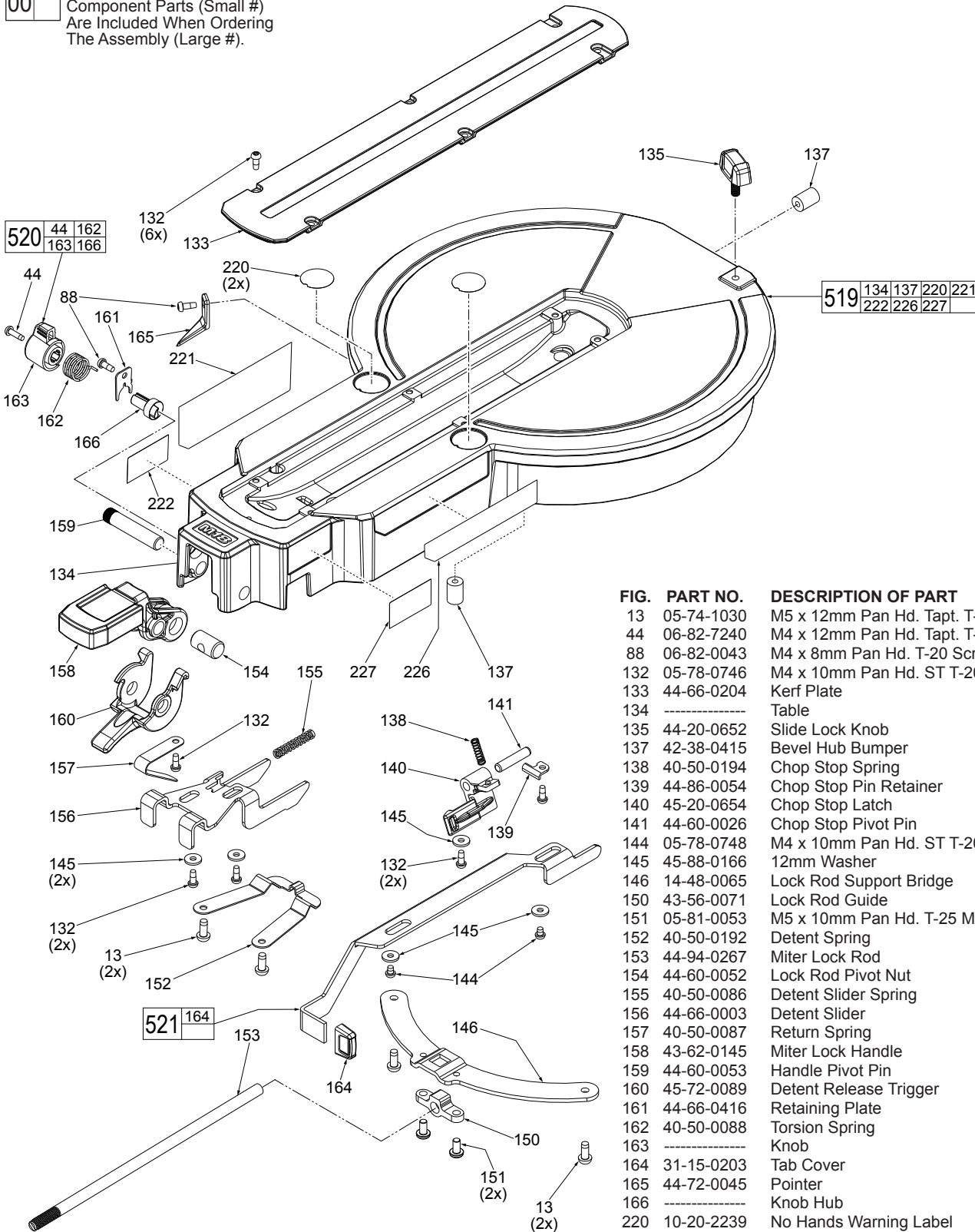


FIG.	PART NO.	DESCRIPTION OF PART	NO REQ.
	13	05-74-1030 M5 x 12mm Pan Hd. Tapt. T-25 Screw	(4)
	44	06-82-7240 M4 x 12mm Pan Hd. Tapt. T-20 Screw	(1)
	88	06-82-0043 M4 x 8mm Pan Hd. T-20 Screw	(2)
	132	05-78-0746 M4 x 10mm Pan Hd. ST T-20 Screw	(11)
	133	44-66-0204 Kerf Plate	(1)
	134	----- Table	(1)
	135	44-20-0652 Slide Lock Knob	(1)
	137	42-38-0415 Bevel Hub Bumper	(2)
	138	40-50-0194 Chop Stop Spring	(1)
	139	44-86-0054 Chop Stop Pin Retainer	(1)
	140	45-20-0654 Chop Stop Latch	(1)
	141	44-60-0026 Chop Stop Pivot Pin	(1)
	144	05-78-0748 M4 x 10mm Pan Hd. ST T-20 Screw	(2)
	145	45-88-0166 12mm Washer	(5)
	146	14-48-0065 Lock Rod Support Bridge	(1)
	150	43-56-0071 Lock Rod Guide	(1)
	151	05-81-0053 M5 x 10mm Pan Hd. T-25 Mach. Screw	(2)
	152	40-50-0192 Detent Spring	(1)
	153	44-94-0267 Miter Lock Rod	(1)
	154	44-60-0052 Lock Rod Pivot Nut	(1)
	155	40-50-0086 Detent Slider Spring	(1)
	156	44-66-0003 Detent Slider	(1)
	157	40-50-0087 Return Spring	(1)
	158	43-62-0145 Miter Lock Handle	(1)
	159	44-60-0053 Handle Pivot Pin	(1)
	160	45-72-0089 Detent Release Trigger	(1)
	161	44-66-0416 Retaining Plate	(1)
	162	40-50-0088 Torsion Spring	(1)
	163	----- Knob	(1)
	164	31-15-0203 Tab Cover	(1)
	165	44-72-0045 Pointer	(1)
	166	----- Knob Hub	(1)
	220	10-20-2239 No Hands Warning Label	(2)
	221	10-20-2241 Slide Warning Label	(1)
	222	10-20-2242 Tighten Adjustments Warning Label	(1)
	226	10-20-2243 Miter Detent Override Label	(1)
	227	10-20-2244 Chop Lock Label	(1)
	519	28-06-1065 Table Assembly	(1)
	520	44-20-0236 Miter Override Lock Assembly	(1)
	521	14-48-0092 Chop Stop Slider Assembly	(1)

SCREW TORQUE SPECIFICATIONS

FIG.	PART NO.	DESCRIPTION OF FASTENER	WHERE USED	SEAT TORQUE	
				(KG/CM)	(IN/LBS)
MOTOR ARM ASSEMBLY					
13	05-74-1030	M5 x 12mm Pan Hd. Taptite T-25 Screw	Intermediate Gear Assembly	80-90	69-78
13	05-74-1030	M5 x 12mm Pan Hd. Taptite T-25 Screw	Diaphragm Assembly	80-90	69-78
13	05-74-1030	M5 x 12mm Pan Hd. Taptite T-25 Screw	Rotor Assembly	80-90	69-78
17	45-04-0410	LH Blade Screw - 6mm Hex Socket	Outer/Inner Flanges/Spindle Assembly	149.5	130
23	06-82-0028	M5 x 23mm Pan Hd. Taptite T-25 Screw	Bearing Retaining Plate/Gear Case Assy.	80-100	69-86
25	05-78-0011	M3.5 x 12mm Pan Hd. Taptite T-20 Screw	Motor Insulator Halves	20-25	17-21
80	06-82-1080	M3 x 14mm Pan Hd. ST T-10 Screw	Motor Insulator - Right	10-15	8-13
BEVEL HUB / RAIL ASSEMBLY, BEVEL ARM ASSEMBLY					
86	05-81-0139	M6 x 40mm Pan Hd. T-25 Screw	Detent Mount Cover	120-130	104-112
100	05-86-0656	Set Screw	Bevel Handle	Adjustment for detent	
113	45-04-0026	Detent Mount Adjustment Screw	Bevel Arm Assembly	Adjustment for detent	
117	05-59-0140	M12 Hex Nut	Bevel Stud	Adjust for assembly	
TABLE ASSEMBLY					
149	45-08-0470	7/8" Table Bolt	Bottom of Table Assembly	600-640	520-555
BASE ASSEMBLY					
167	05-89-0531	M5 x 13mm Pan Hd. T-25 Shoulder Screw	Detent Plate	80-100	69-86
179	05-86-0600	M12 x 18mm T-25 Set Screw	Fixed Fence	Adjust per fence	

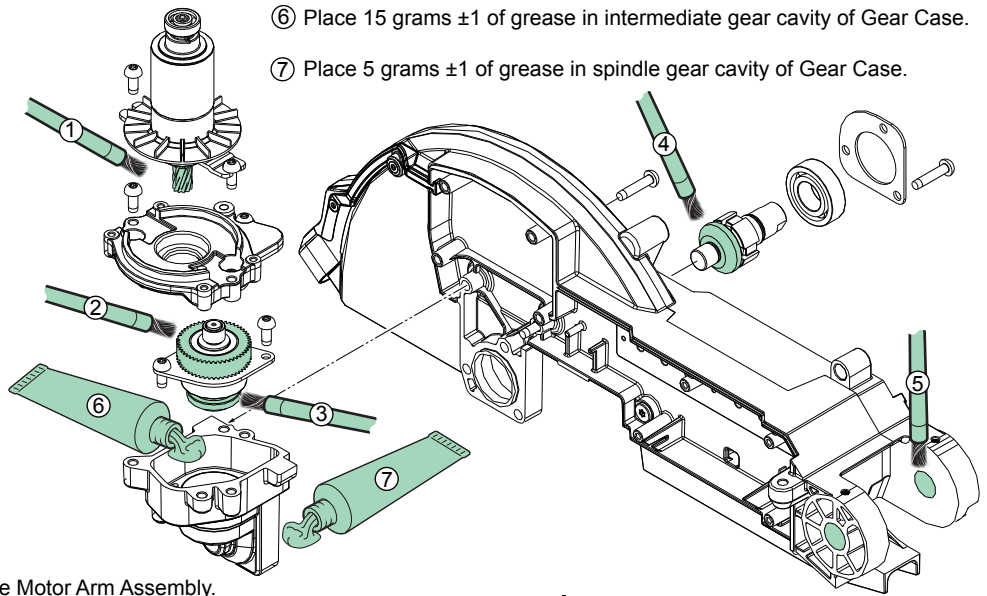
LUBRICATION NOTES:

Type 'Y' Grease

No. 49-08-5270, 6oz. tube

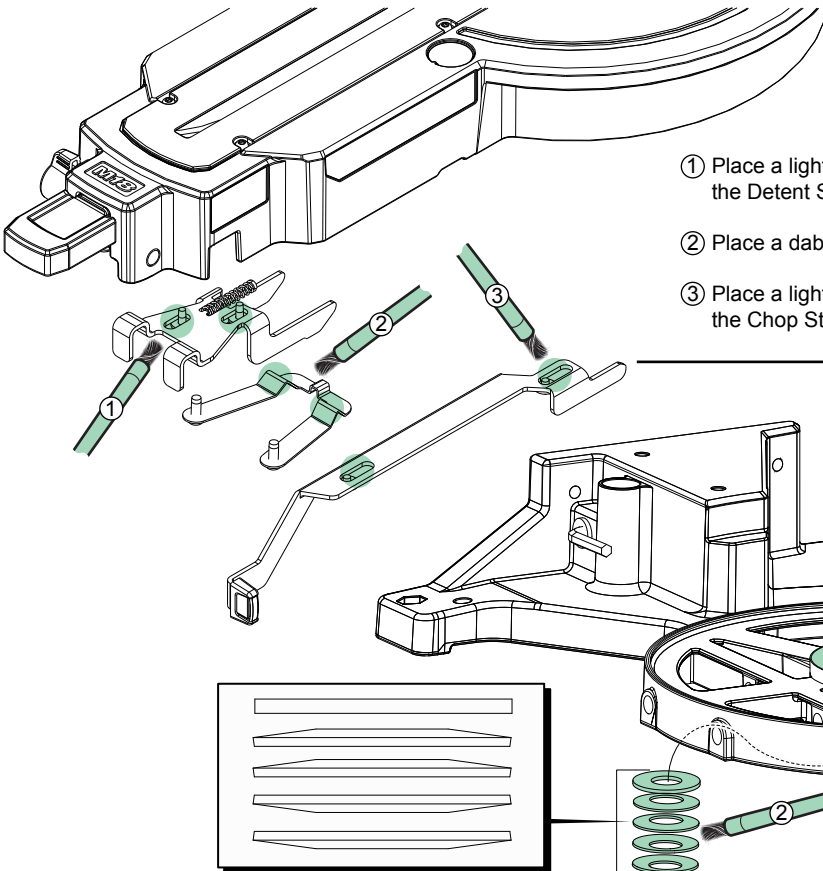
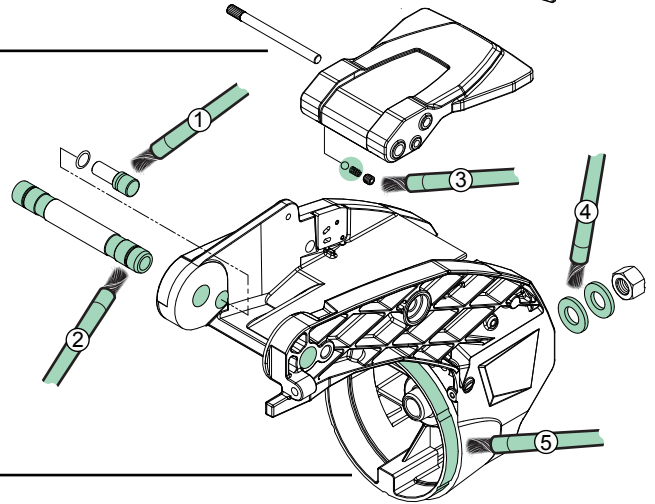
When servicing the gears or the Gear Case, 90-95% of the old grease must be removed prior to new grease being added. Clean gear assemblies with a clean, dry cloth.

- ① Place a heavy layer of grease to the pinion teeth of the Rotor Assembly.
- ② Place a heavy layer of grease to the gear teeth of the 1st gear of the Intermediate Gear Assembly.
- ③ Place a heavy layer of grease to the teeth of the bevel pinion of the Intermediate Gear Assembly.
- ④ Place a heavy layer of grease to the teeth of the bevel gear of the Spindle Assembly.
- ⑤ Lightly coat inside axle bores at the rear of the Motor Arm Assembly.



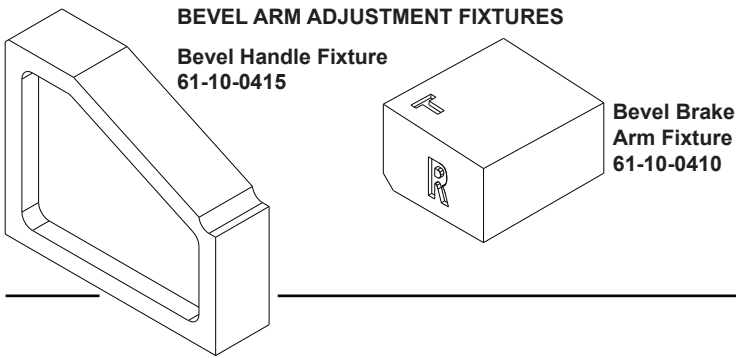
- ⑥ Place 15 grams ± 1 of grease in intermediate gear cavity of Gear Case.
- ⑦ Place 5 grams ± 1 of grease in spindle gear cavity of Gear Case.

- ① Lightly coat the back end of the Down Lock Pin and the corresponding cavity in the Bevel Arm Assembly with grease.
- ② Place a thin coat of grease to the surface of the Bevel Axle, being sure to get grease into the outer grooves. Lightly coat the corresponding cavities in the Bevel Arm Assembly.
- ③ Place a dab of grease to detent ball and spring of the Bevel Handle Assembly.
- ④ Coat Washers with a light film of grease. Rounded edges of washers must face each other.
- ⑤ Brush a light film of grease to the outside surface on the Bevel Arm Assembly that contacts with the Bevel Hub.

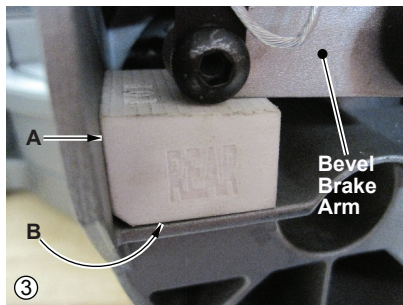
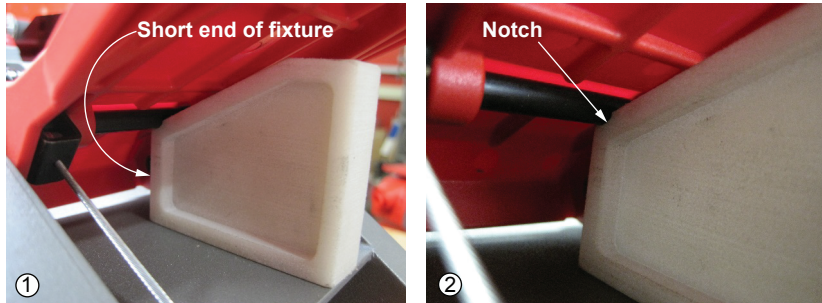


- ① Place a light coat of grease to the two slotted areas (both sides of the part) on the Detent Slider.
- ② Place a dab of grease to the two raised catch tabs on the Detent Spring.
- ③ Place a light coat of grease to the two slotted areas (both sides of the part) on the Chop Stop Slider Assembly.

- ① Brush a heavy coat of grease to the center surface of Base as shown.
- ② Coat the Thick Washer and the four Bevel Spring Washers with grease. Orient the parts as shown in the detail.



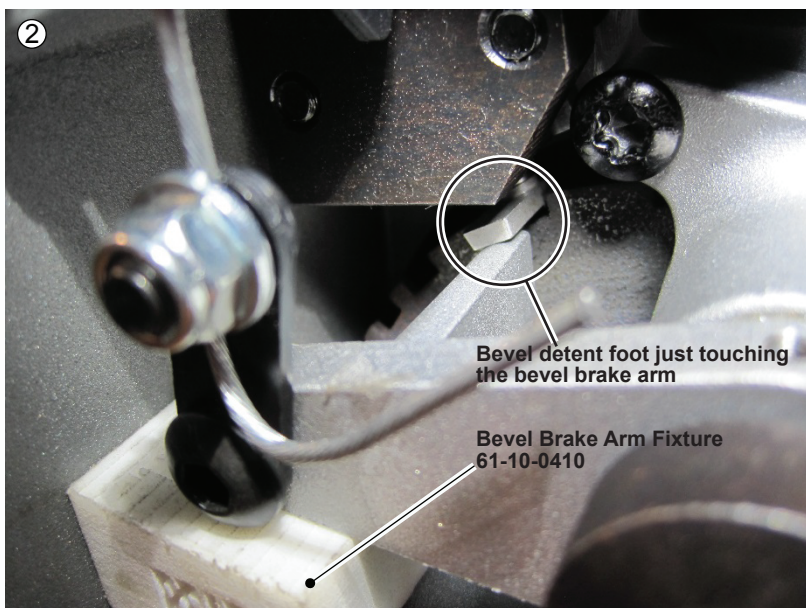
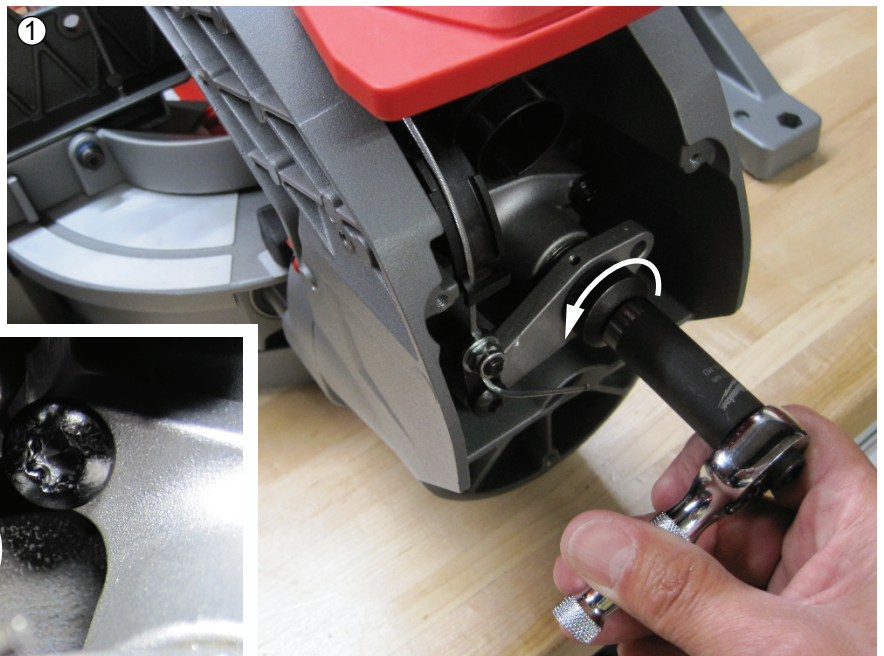
Two Service Fixtures are required to set the Bevel Brake



1. Short end with notch is used to support the bevel handle to set brake cable adjustment.
2. Short end notch catches under black steel pin to support handle. Handle will be in detent position.
3. Fixture seats against the side 'A' of bevel arm. Fixture also seats on wall 'B' of bevel arm to support bevel brake arm during cable adjustment.

1. Loosen brake cam nut to allow cable length to be set.
2. With fixture 61-10-0410 in place, the bevel brake arm should "just" touch the bevel detent foot when it is seated in the 0° notch.

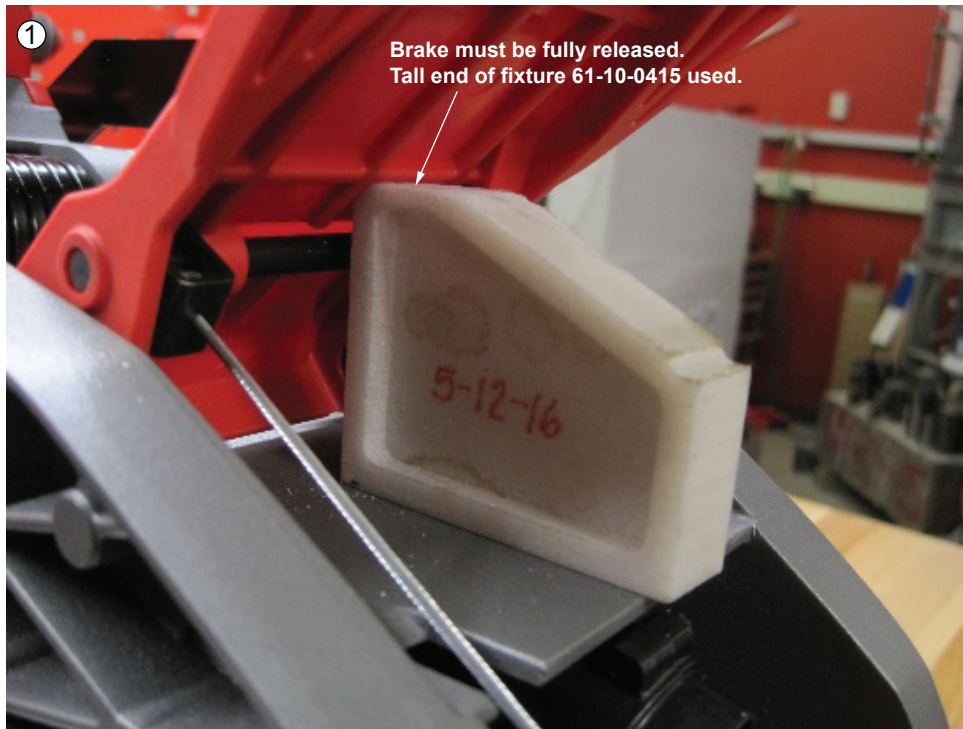
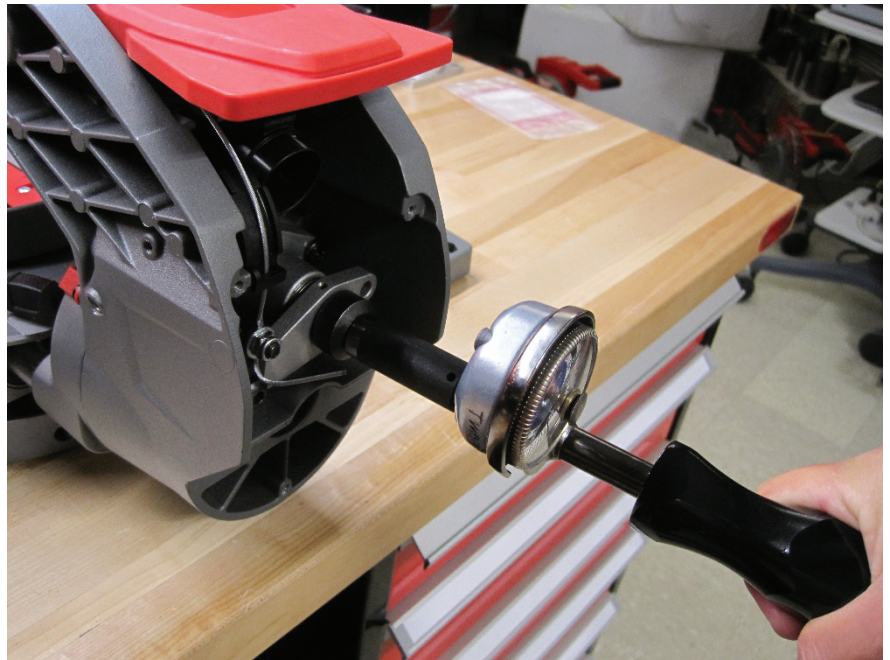
Remove all slack in the brake cable and tighten cable nut to 40-50 kg/cm (34-43 in-lbs).



Proper Adjustment of Brake Cam Nut:

After brake cable is adjusted and clamped, brake cam nut is to be torqued to 23-28.8 kgf.cm (20-25 in.lb.).

Brake is to be in the fully activated (holding) position.



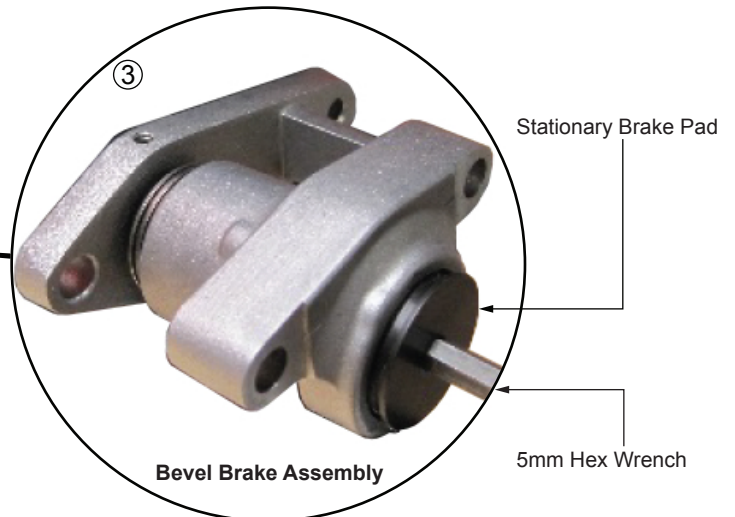
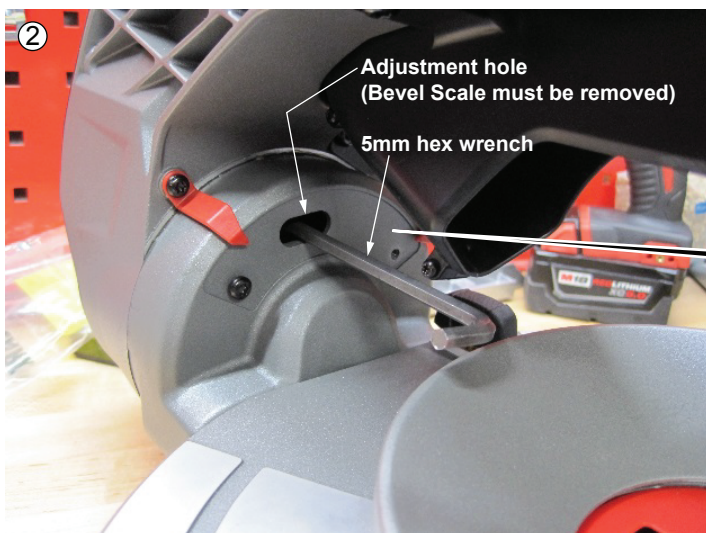
Adjustment of Brake Assembly Stationary Brake Pad:

Stationary brake pad needs to be adjusted to compensate for position tolerances in bevel hub and brake parts.

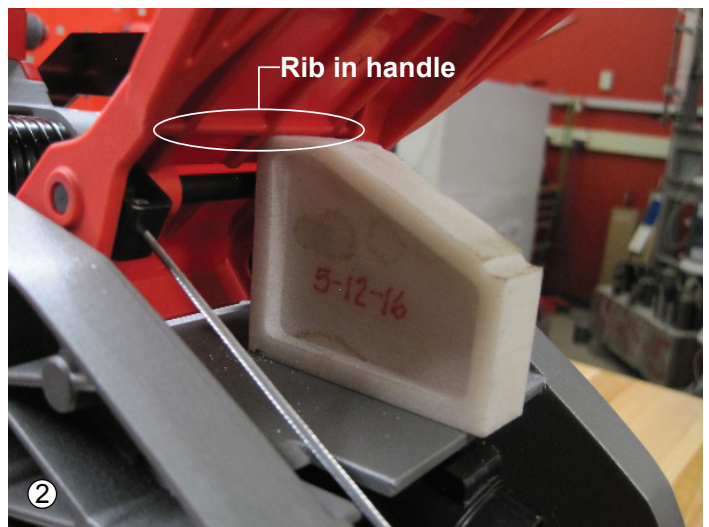
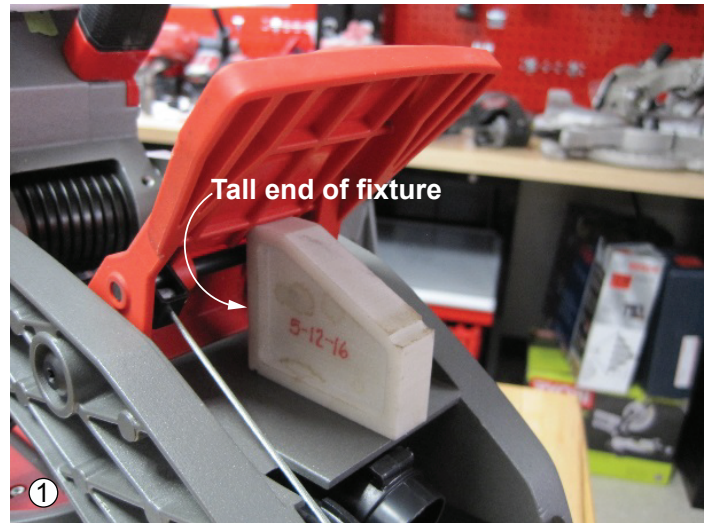
1. Tall end of fixture 61-10-0415 slips under rib in handle and sits on bevel arm top wall to prevent handle movement.
2. With brake fully released, place a 5mm hex wrench through adjustment hole on bevel hub and into hex drive in stationary brake pad.

Run brake pad down until it touches the brake disc, then back off 1/8 of a turn (45° of wrench turn).

3. Detail of what is being adjusted inside of the bevel arm/bevel hub.



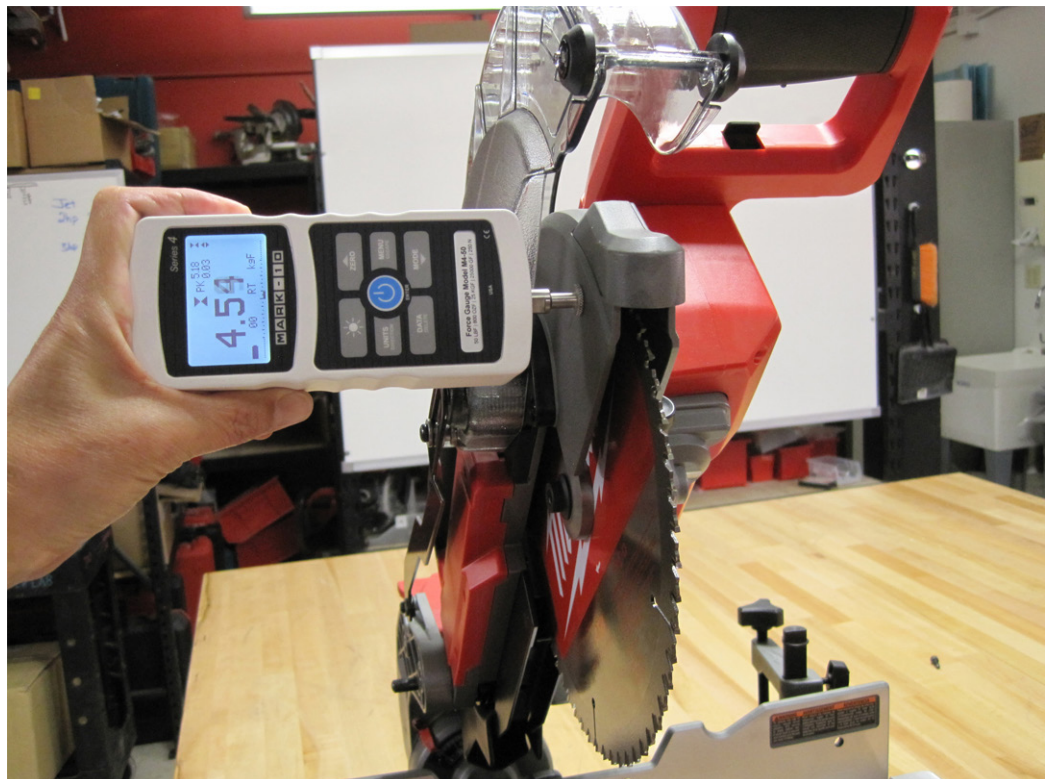
One Service Fixture is required to check bevel free force

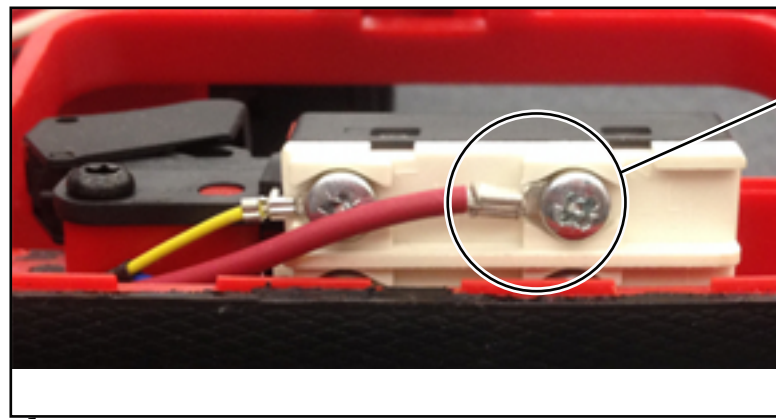


Bevel Handle Fixture Use:
Bevel Free Force (when checked after brake cable is adjusted).

1. Tall end of fixture 61-10-0415 used to support bevel handle to check bevel free force.
2. Tall end slips under rib in handle and sits on bevel arm top wall to prevent handle movement.

10

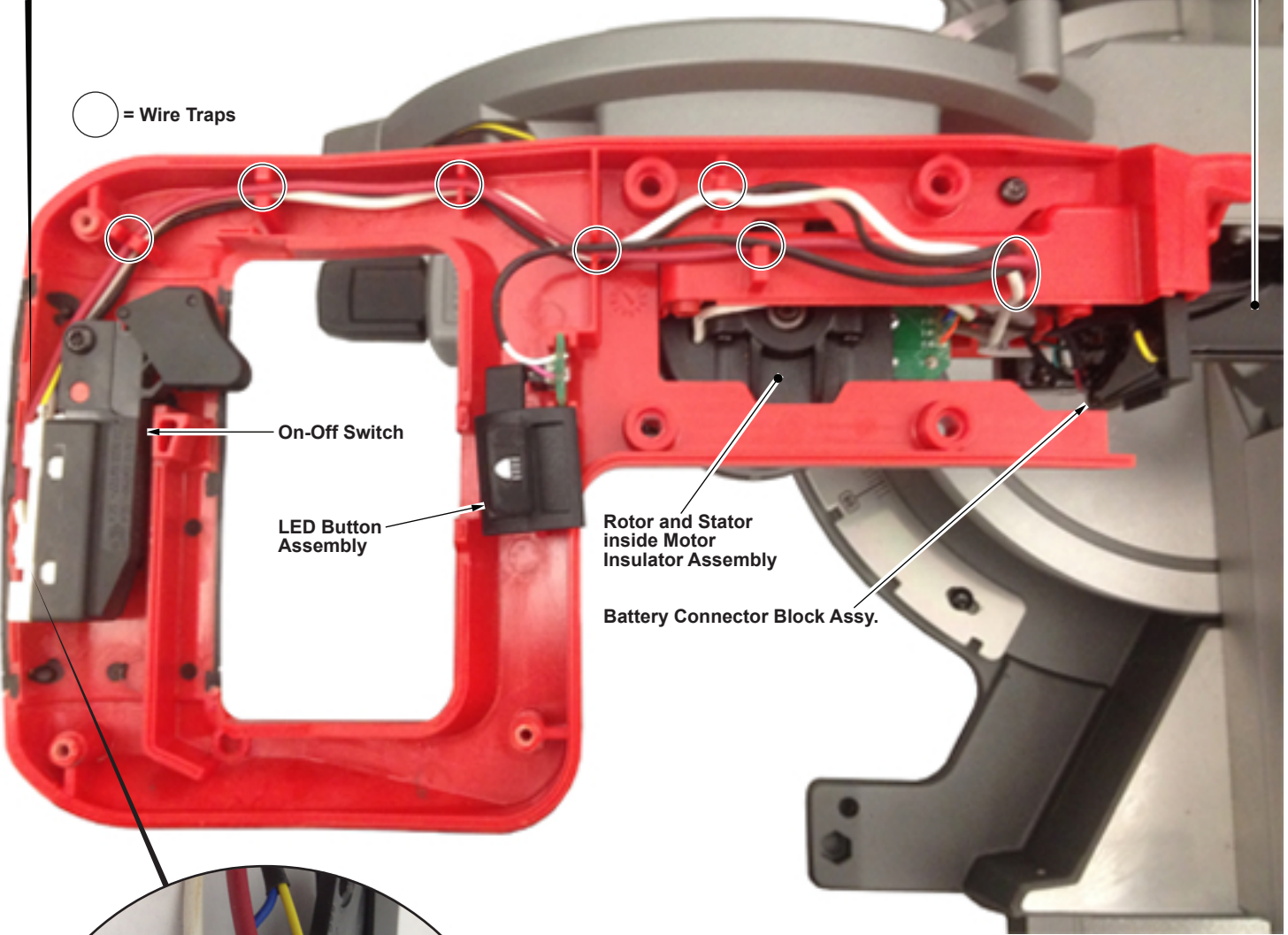




On-Off Switch detail

Note:

The orientation of the ring terminals is barrel side out. Screw torque is 11-13 kg-cm (9-12 in-lbs).



○ = Wire Traps

PCBA

On-Off Switch

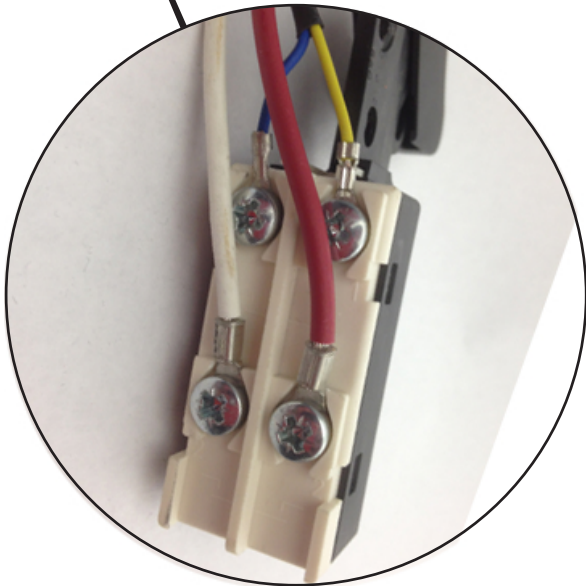
LED Button Assembly

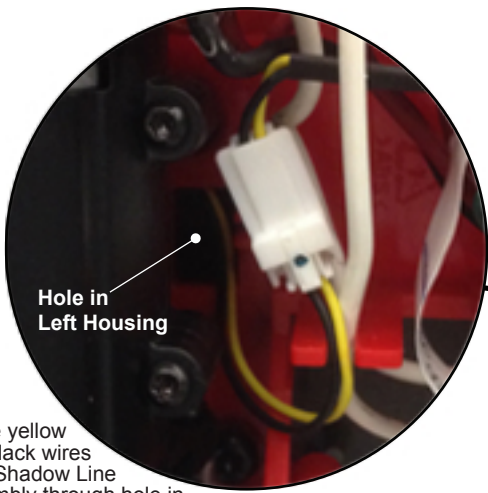
Rotor and Stator inside Motor Insulator Assembly

Battery Connector Block Assy.

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

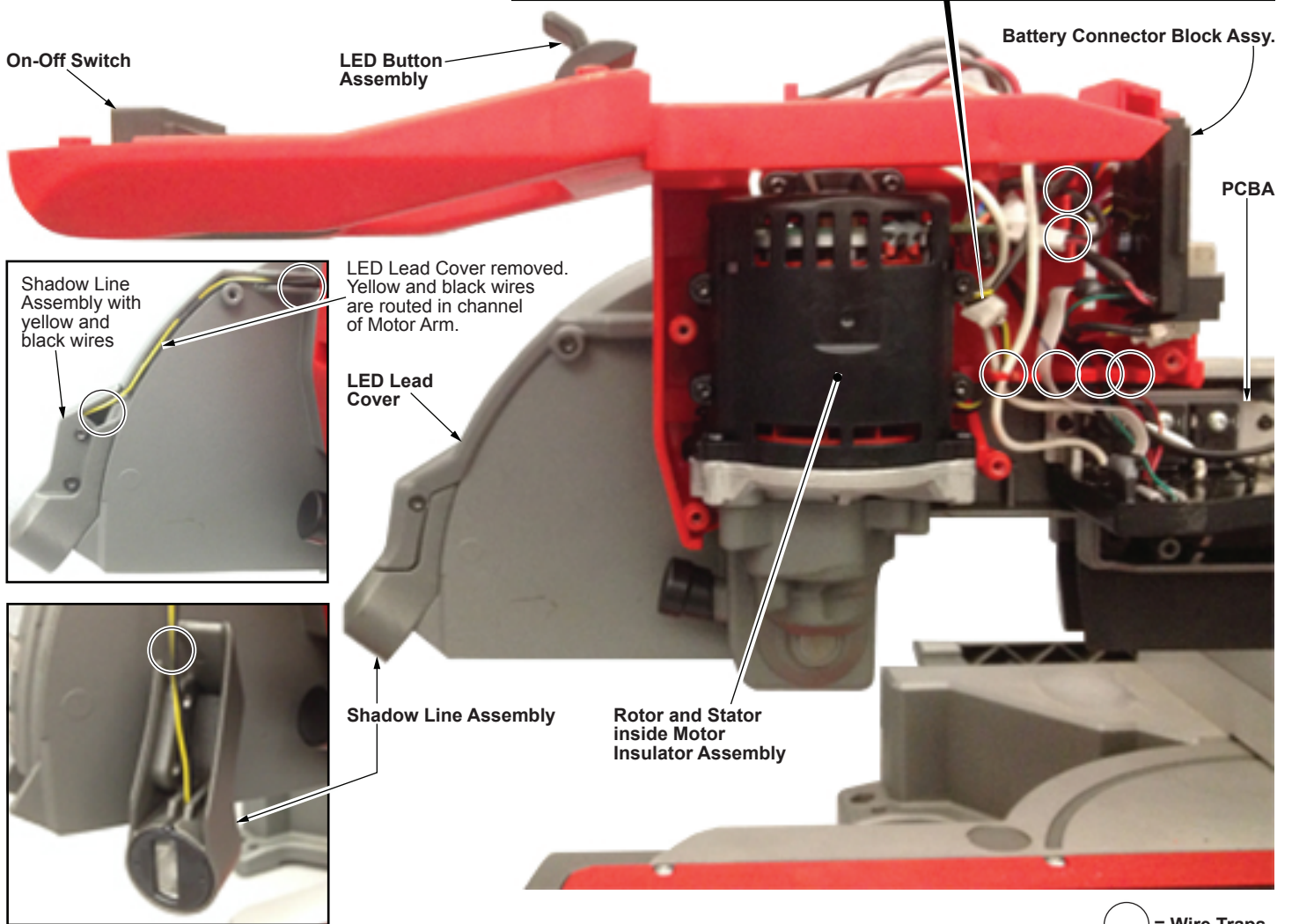
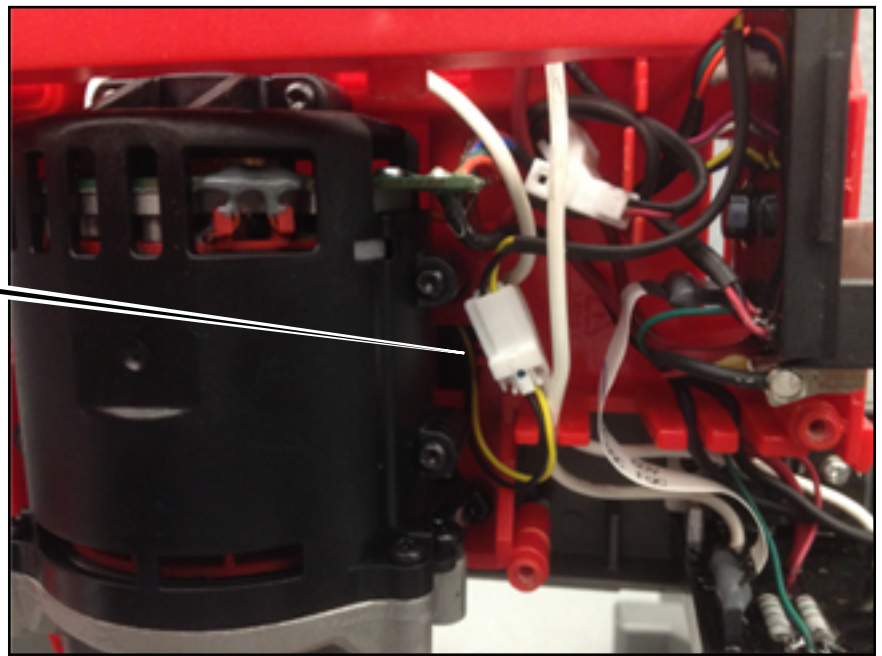
BE CAREFUL AND AVOID PINCHING WIRES BETWEEN THE HANDLE HALVES WHEN ASSEMBLING.





Hole in Left Housing

Route yellow and black wires from Shadow Line Assembly through hole in Left Housing. Join male connector to the female connector of the yellow and black PCBA wires. Place yellow/black wires in wire trap and secure behind the thick white wire.



Battery Connector Block Assy.

On-Off Switch

LED Button Assembly

PCBA

Shadow Line Assembly with yellow and black wires

LED Lead Cover removed. Yellow and black wires are routed in channel of Motor Arm.

LED Lead Cover

Shadow Line Assembly

Rotor and Stator inside Motor Insulator Assembly

12

○ = Wire Traps

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 THE HANDLE HALVES WHEN ASSEMBLING.