



SERVICE PARTS LIST

BULLETIN NO.
54-06-2928

SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS

1/2" PISTOL GRIP DRILL

CATALOG NO. 0300-20

STARTING
SERIAL NO.

070D

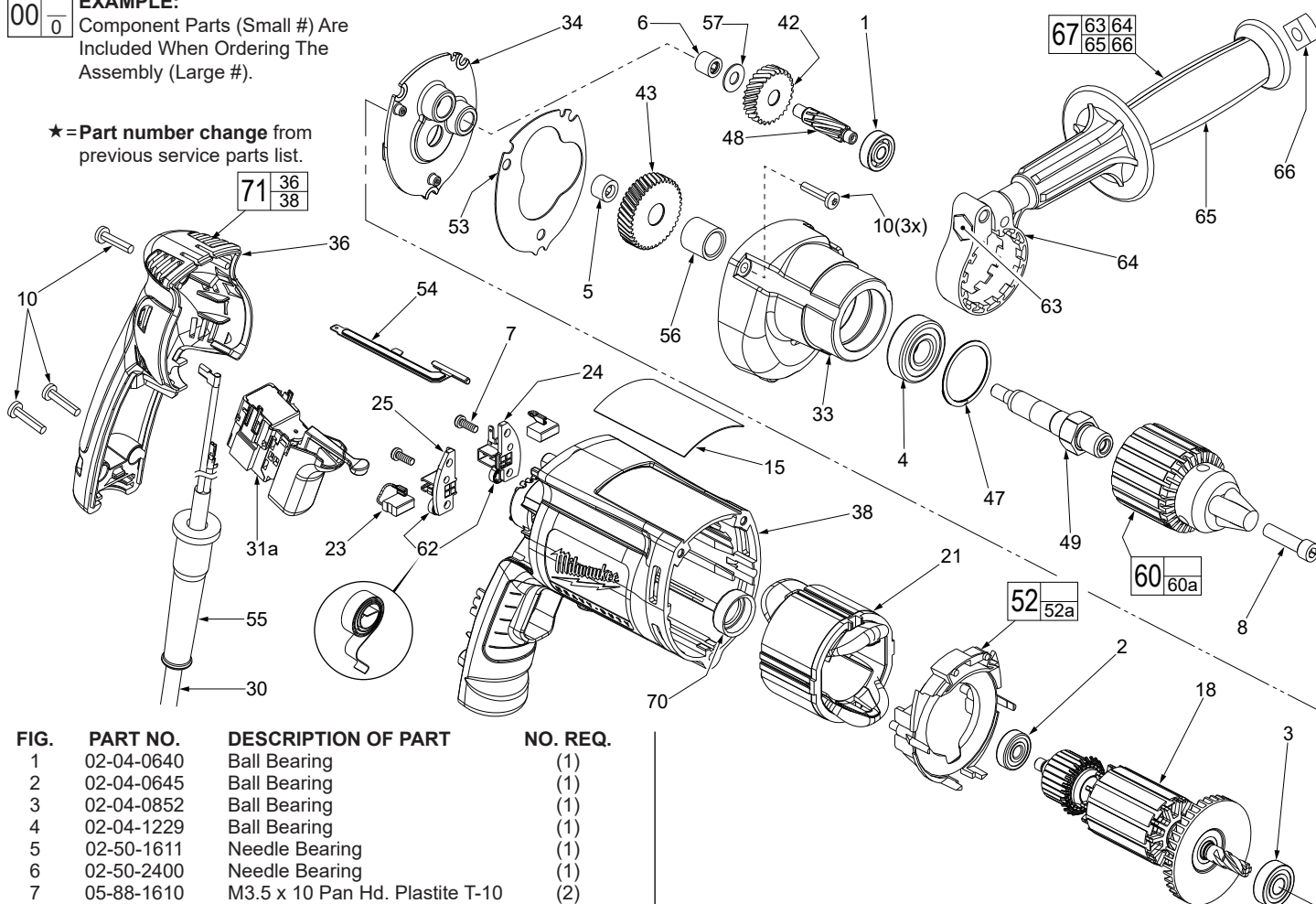
REVISED BULLETIN
54-06-2927

DATE
Aug. 2022

WIRING INSTRUCTION
See Pages 2 & 3

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

★ = Part number change from
previous service parts list.



| FIG. | PART NO. | DESCRIPTION OF PART | NO. REQ. |
|------|------------|--------------------------------------|----------|
| 1 | 02-04-0640 | Ball Bearing | (1) |
| 2 | 02-04-0645 | Ball Bearing | (1) |
| 3 | 02-04-0852 | Ball Bearing | (1) |
| 4 | 02-04-1229 | Ball Bearing | (1) |
| 5 | 02-50-1611 | Needle Bearing | (1) |
| 6 | 02-50-2400 | Needle Bearing | (1) |
| 7 | 05-88-1610 | M3.5 x 10 Pan Hd. Plastite T-10 | (2) |
| 8 | 06-75-3150 | 1/4-20 x 1 L.H. Thread Slit. Screw | (1) |
| 10 | 06-82-7275 | 7-18 x 3/4 Slotted Plastite T-20 | (6) |
| 15 | 12-99-2565 | Service Nameplate | (1) |
| 18 | 16-10-2210 | Armature | (1) |
| 21 | 18-07-7220 | Field | (1) |
| 23 | 22-18-1310 | Brush Assembly | (2) |
| 24 | 22-20-0090 | Left Brush Holder | (1) |
| 25 | 22-20-0095 | Right Brush Holder | (1) |
| 30 | 22-64-1130 | Cord Set | (1) |
| 31a | 23-66-2605 | Switch (Defond) See page 2 wiring | (1) |
| 31b | 23-66-2585 | Switch (Marquardt) See page 3 wiring | (1) |
| 33 | 28-14-2390 | Gearcase | (1) |
| 34 | 28-28-2320 | Diaphragm | (1) |
| 36 | ----- | Handle Halve | (1) |
| ★ 38 | ----- | Motor Housing | (1) |
| 42 | 32-40-0100 | Intermediate Gear | (1) |
| 43 | 32-75-0100 | Spindle Gear | (1) |
| 47 | 34-80-2300 | Retaining Ring | (1) |
| 48 | 36-66-0100 | Intermediate Shaft | (1) |
| 49 | 38-50-5735 | Spindle | (1) |
| 52 | 42-14-0450 | Baffle Assembly | (1) |
| 52a | 45-30-0030 | Slug (Not shown) | (2) |
| 53 | 43-44-0985 | Gasket | (1) |
| 54 | 44-60-1700 | Ground Pin | (1) |
| 55 | 44-76-0210 | Cord Protector | (1) |
| 56 | 45-36-1095 | Spindle Spacer | (1) |
| 57 | 45-88-7990 | Thrust Washer | (1) |
| 60 | 48-66-1355 | 1/2" Chuck | (1) |
| 60a | 48-66-3280 | Chuck Key (Not Shown) | (1) |
| 62 | 23-52-1610 | Brush Spring | (2) |
| 63 | 06-75-2850 | 3/8-16 x 5-1/2" Hex Cap Screw | (1) |
| 64 | 42-68-0800 | Side Handle Clamp | (1) |
| 65 | 43-62-0845 | Side Handle | (1) |

| FIG. | PART NO. | DESCRIPTION OF PART | NO. REQ. |
|------|------------|--|----------|
| 66 | 06-54-0325 | 3/8-16 Square Nut | (1) |
| 67 | 49-15-0265 | Side Handle Assembly | (1) |
| ★ 70 | 43-86-0125 | Bearing Cup | (1) |
| | 23-94-0490 | White Leadwire Assy. (See pages 2 & 3) | (1) |
| | 23-94-0495 | Red Leadwire Assy. (See pages 2 & 3) | (1) |
| | 48-66-4040 | Chuck Key Holder (Not Shown) | (1) |
| | 31-53-0205 | Lock Button Plug (Not Shown) | (1) |
| 71 | 31-15-2010 | Handle/Motor Housing Kit | (1) |

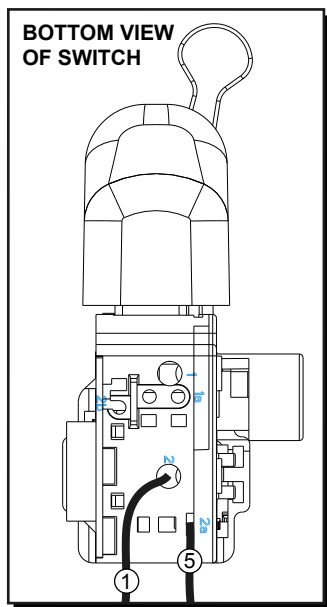
LUBRICATION (Type "Y" Grease, No. 49-08-5270)

- Place 5 gm. (.02 oz.) of grease on top of the inserted intermediate ball bearing (1) and on the intermediate pinion (48).

- After inserting all gearing, place 13 gm. (.46 oz.) of grease at the armature pinion location in the gearcase (33) and fill to the top of the intermediate gear (42). Grease must contact at least 25% of the intermediate gear teeth.

Before assembly, lightly coat all press fit areas with lightweight spindle oil.

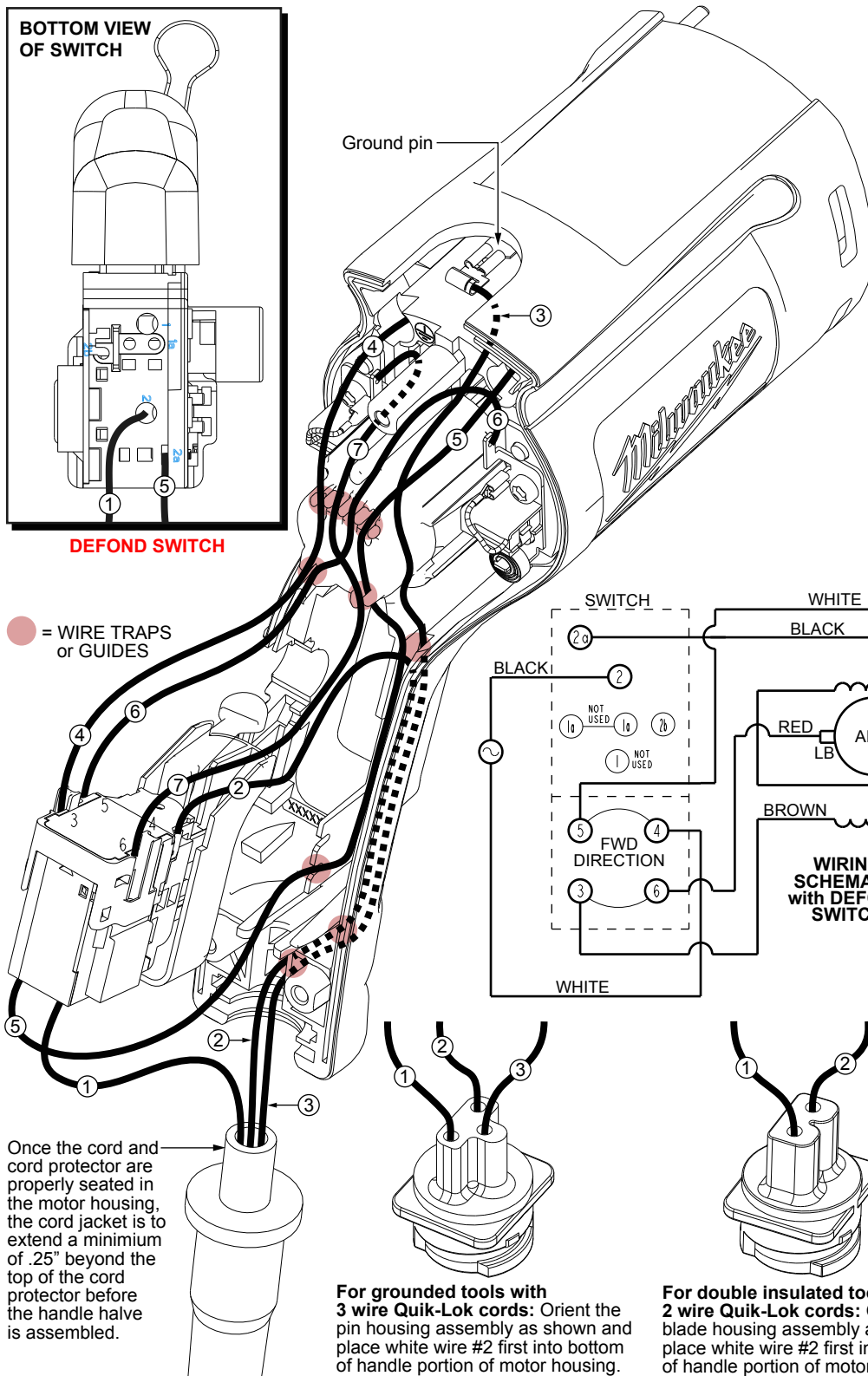
- FIG. NOTES:**
- 4,43 Support the output ball bearing inside the gearcase before pressing off the spindle gear.
- 5,6 Needle bearings to be pressed flush to .010 under flush from the end which has the vendors identification.



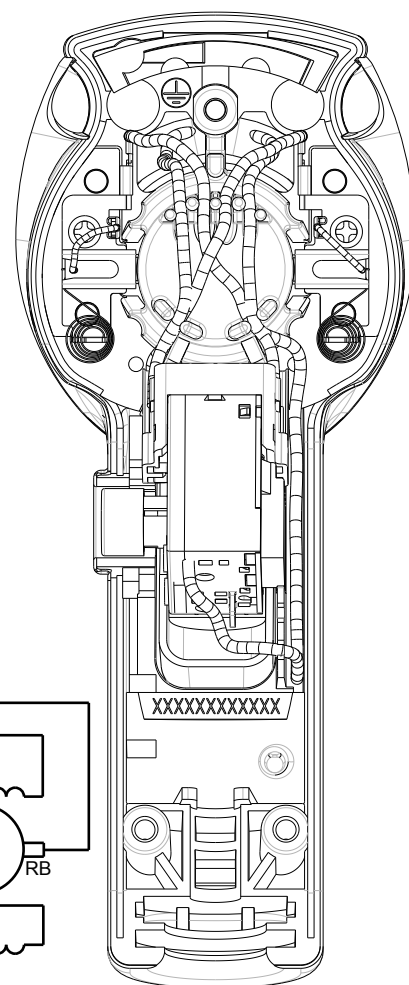
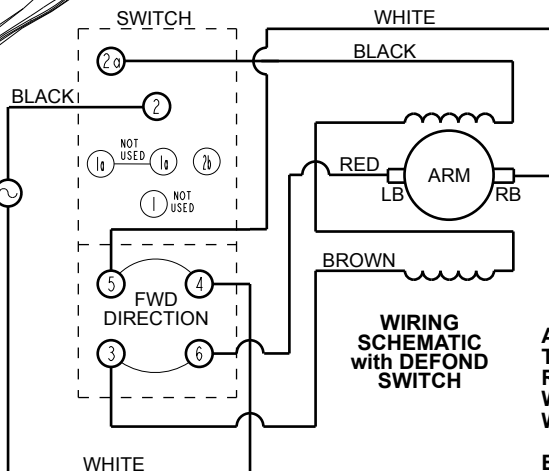
BOTTOM VIEW OF SWITCH

DEFOND SWITCH

● = WIRE TRAPS or GUIDES



Once the cord and cord protector are properly seated in the motor housing, the cord jacket is to extend a minimum of .25" beyond the top of the cord protector before the handle half is assembled.



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.

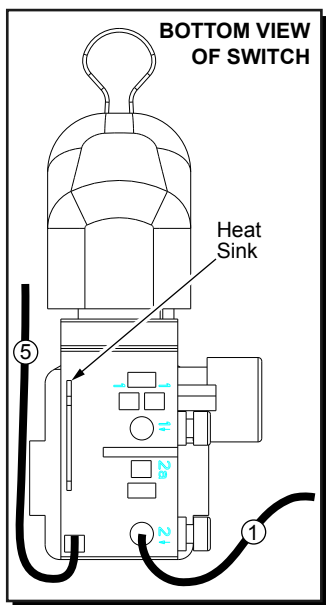
FOR DOUBLE INSULATED TOOLS DISREGARD GREEN GROUND WIRE #3 AND GROUND PIN.

For grounded tools with 3 wire Quik-Lok cords: Orient the pin housing assembly as shown and place white wire #2 first into bottom of handle portion of motor housing.

For double insulated tools with 2 wire Quik-Lok cords: Orient the blade housing assembly as shown and place white wire #2 first into the bottom of handle portion of motor housing.

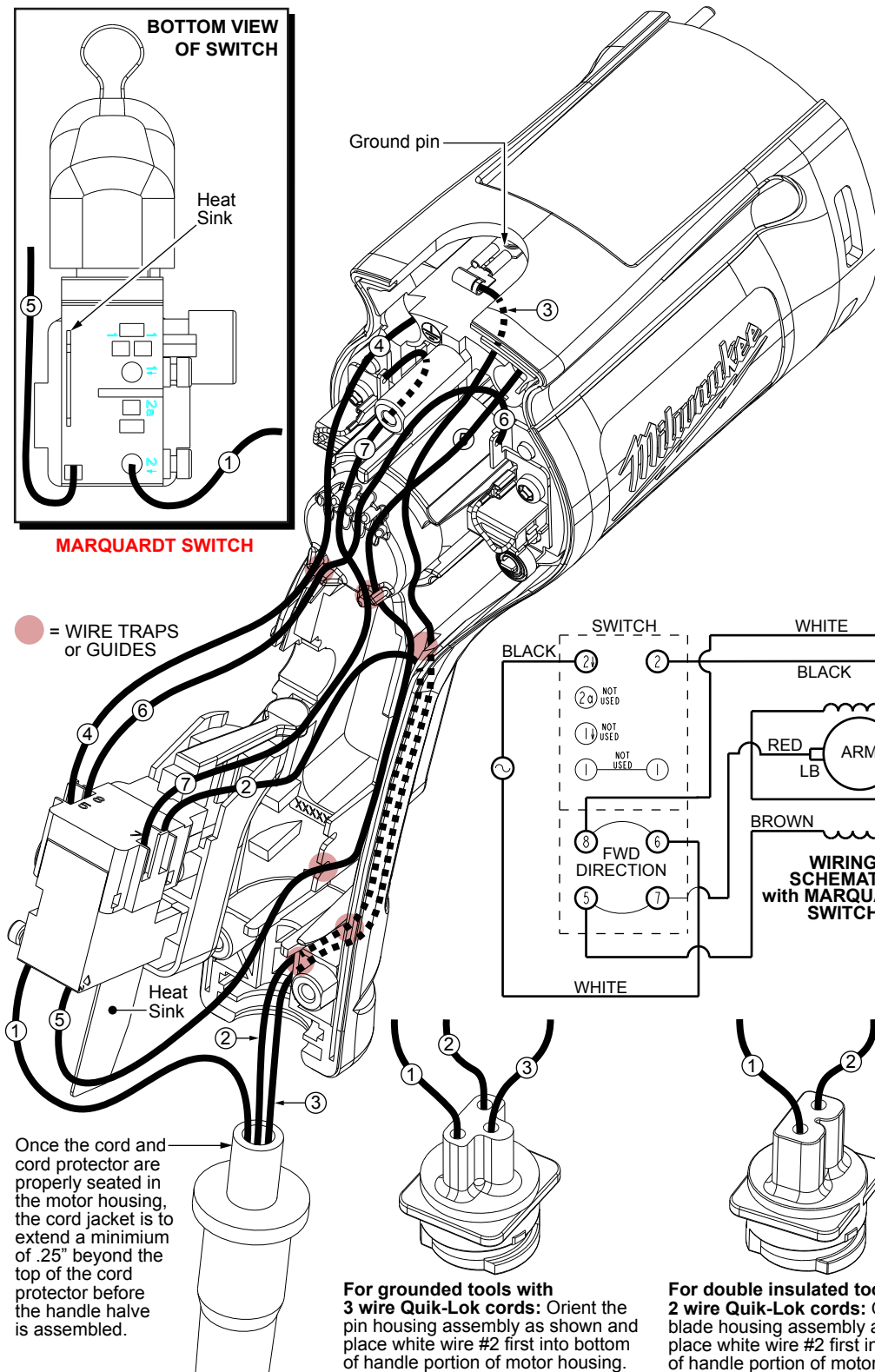
WIRING SPECIFICATIONS

| Wire No. | Wire Color | Origin or Gauge | Length | Terminals, Connectors and 1 or 2 End Wire Preparation |
|----------|------------|-----------------|--------|--|
| 1 | Black | * | ----- | *Component of cord set, pin hsg. assy. or blade hsg. assy. Connect to #2 on switch bottom. |
| 2 | White | * | ----- | *Component of cord set, pin hsg. assy. or blade hsg. assy. Connect to #4 on switch top. |
| 3 | Green | * | ----- | *Component of cord set, pin hsg. assy. or blade hsg. assy. Connect to male tab on ground terminal. |
| 4 | Brown | Field | ----- | Component of field. Connect to #3 on switch top. |
| 5 | Black | Field | ----- | Component of field. Connect to #2a on switch bottom. |
| 6 | White | 23-94-0490 | ----- | Leadwire assembly. Connect to right brush holder and #5 on switch top. |
| 7 | Red | 23-94-0495 | ----- | Leadwire assembly. Connect to left brush holder and #6 on switch top. |

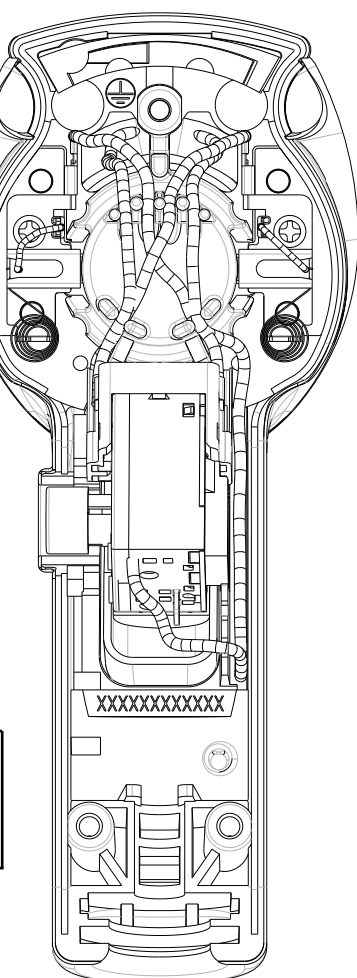
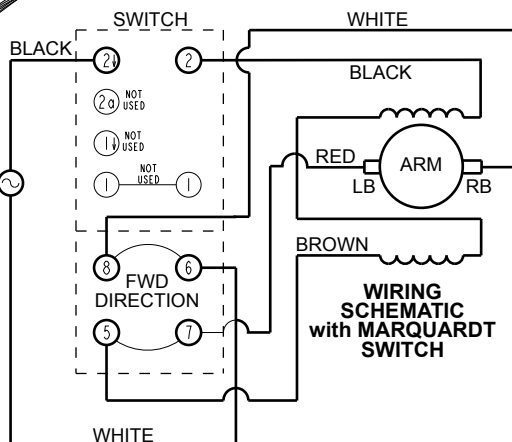


MARQUARDT SWITCH

● = WIRE TRAPS or GUIDES



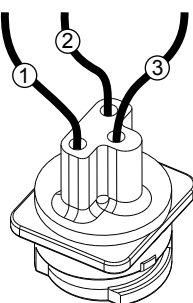
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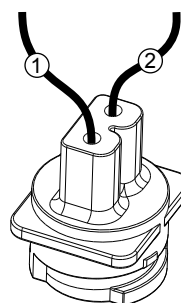
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|----------|------------|-----------------|--------|--|
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| 2 | White | * | ----- | *Component of cord set, pin hsg. assy. or blade hsg. assy. Connect to #6 on switch top. |
| 3 | Green | * | ----- | *Component of cord set, pin hsg. assy. or blade hsg. assy. Connect to male tab on ground terminal. |
| 4 | Brown | Field | ----- | Component of field. Connect to #5 on switch top. |
| 5 | Black | Field | ----- | Component of field. Connect to #2 on switch bottom. |
| 6 | White | 23-94-0490 | ----- | Leadwire assembly. Connect to right brush holder and #8 on switch top. |
| 7 | Red | 23-94-0495 | ----- | Leadwire assembly. Connect to left brush holder and #7 on switch top. |