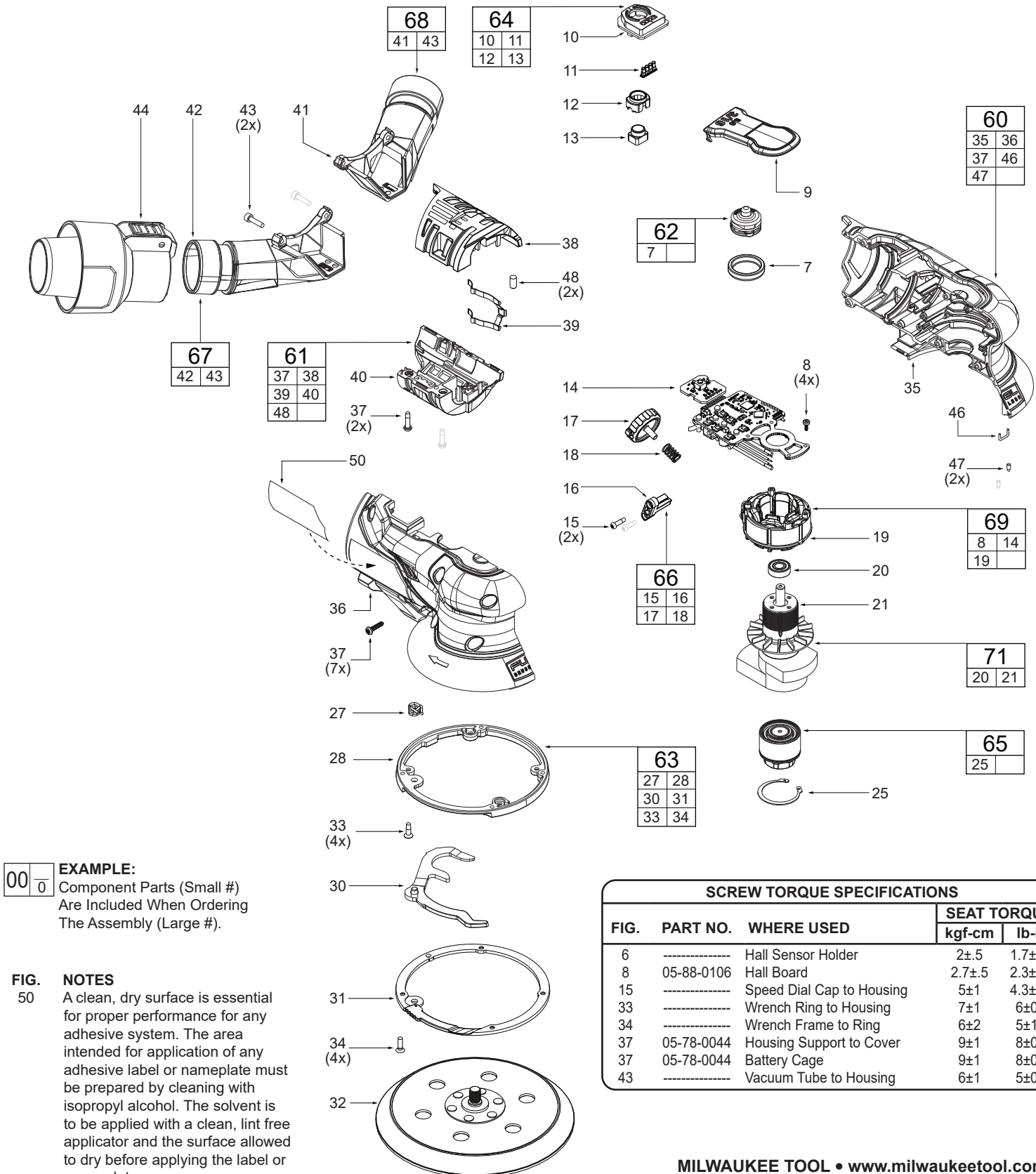




SERVICE PARTS LIST

BULLETIN NO.
54-38-2700

| SPECIFY CATALOG NO. AND SERIAL NO. WHEN ORDERING PARTS | | REVISED BULLETIN | DATE |
|--|-----------------|----------------------------------|----------|
| M12 FUEL™ 6" Random Orbital SANDER (3/16") | | | May 2025 |
| CATALOG NO. 2585-20 | SERIAL NO. P16A | WIRING INSTRUCTION See Page 3 | |



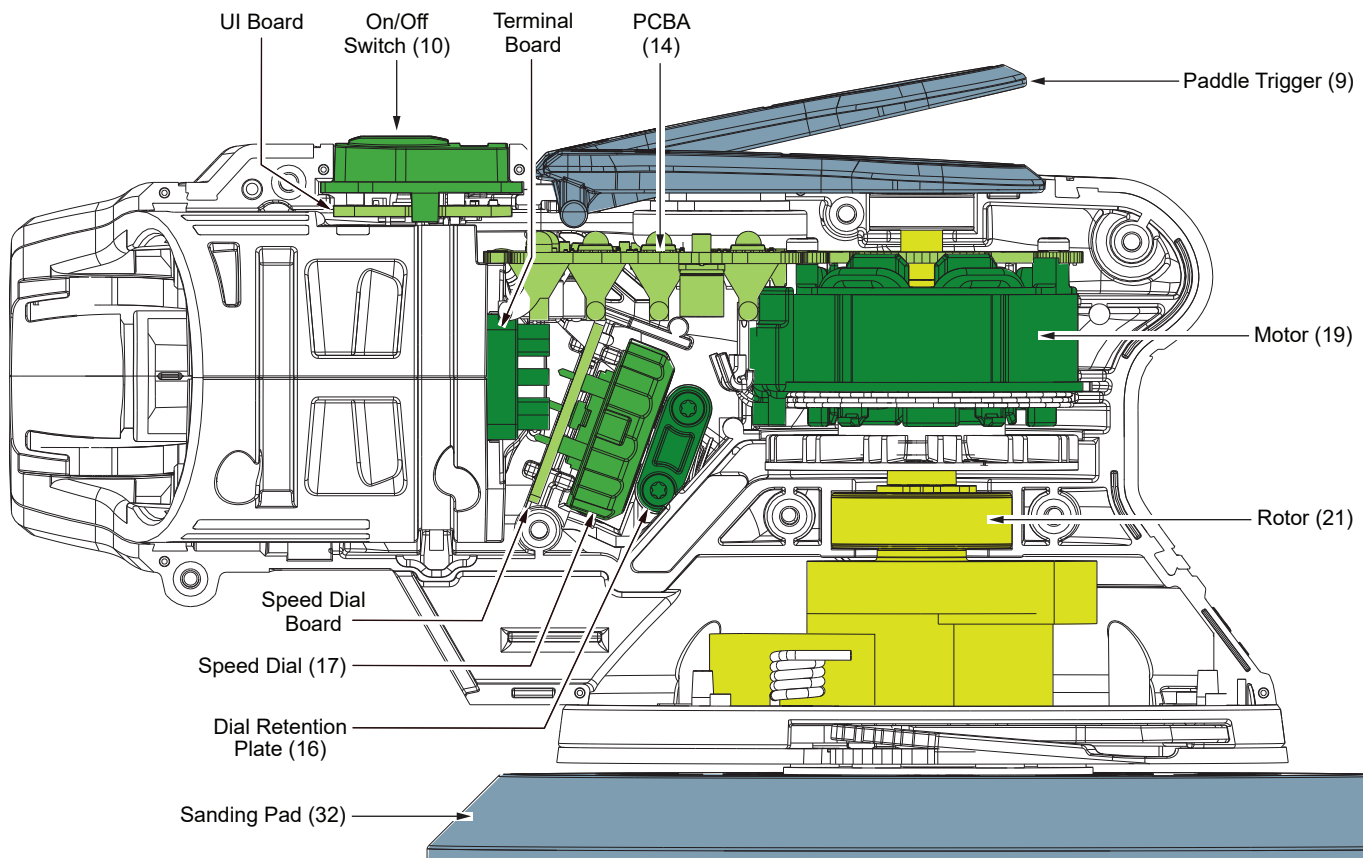
EXAMPLE:
Component Parts (Small #)
Are Included When Ordering
The Assembly (Large #).

FIG. 50 NOTES
A clean, dry surface is essential for proper performance for any adhesive system. The area intended for application of any adhesive label or nameplate must be prepared by cleaning with isopropyl alcohol. The solvent is to be applied with a clean, lint free applicator and the surface allowed to dry before applying the label or name plate.

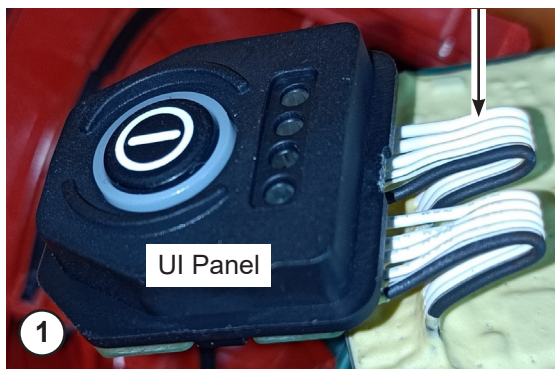
| SCREW TORQUE SPECIFICATIONS | | | | |
|-----------------------------|------------|---------------------------|-------------|---------|
| FIG. | PART NO. | WHERE USED | SEAT TORQUE | |
| | | | kgf-cm | lb-in |
| 6 | ----- | Hall Sensor Holder | 2±.5 | 1.7±0.4 |
| 8 | 05-88-0106 | Hall Board | 2.7±.5 | 2.3±0.4 |
| 15 | ----- | Speed Dial Cap to Housing | 5±1 | 4.3±0.8 |
| 33 | ----- | Wrench Ring to Housing | 7±1 | 6±0.8 |
| 34 | ----- | Wrench Frame to Ring | 6±2 | 5±1.7 |
| 37 | 05-78-0044 | Housing Support to Cover | 9±1 | 8±0.8 |
| 37 | 05-78-0044 | Battery Cage | 9±1 | 8±0.8 |
| 43 | ----- | Vacuum Tube to Housing | 6±1 | 5±0.8 |

SERVICE BILL OF MATERIAL (BOM) LISTING

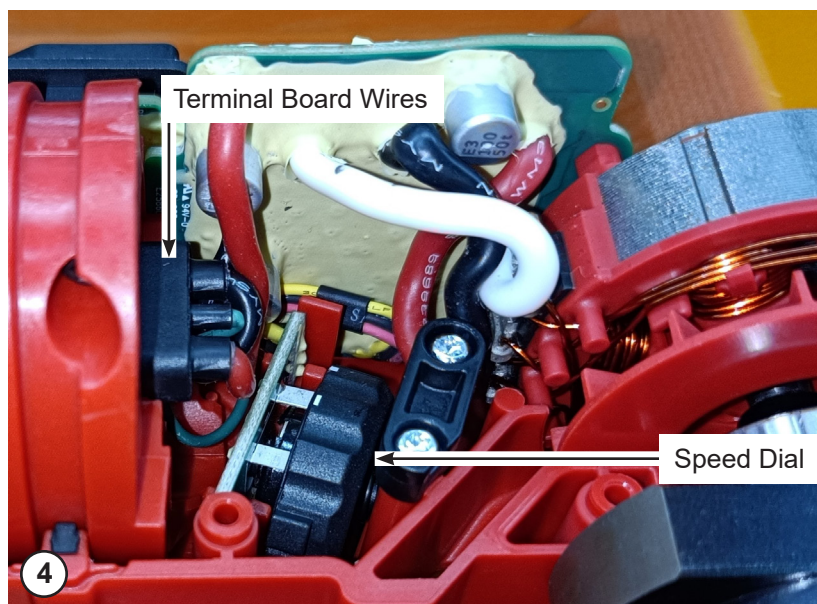
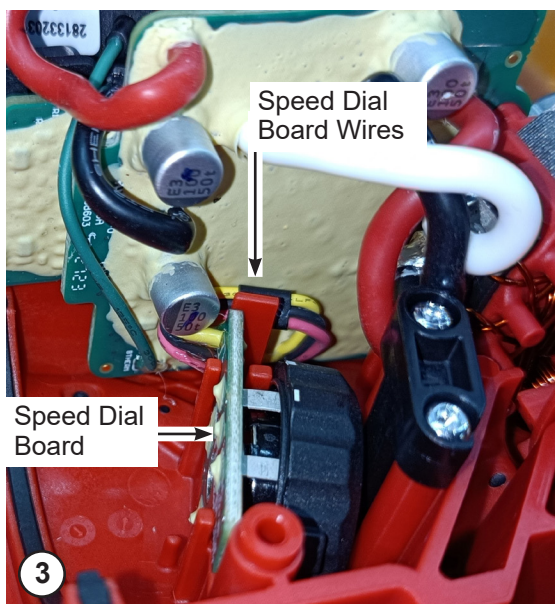
| FIG. | PART NO. | DESCRIPTION OF PART | NO. REQ. | FIG. | PART NO. | DESCRIPTION OF PART | NO. REQ. |
|------|------------|--|----------|------|------------|--------------------------------------|----------|
| 2 | ----- | Hall Sensor Spring | (1) | 34 | 06-82-0209 | M3 x 10mm Flat Hd. Phillips B Screw | (4) |
| 3 | ----- | Hall Sensor Holder | (1) | 35 | ----- | Handle Support | (1) |
| 4 | ----- | Hall Sensor Magnet | (1) | 36 | ----- | Handle Cover | (1) |
| 5 | ----- | Cover Half of Spring Retention | (1) | 37 | 05-78-0044 | M3 x 12mm Pan Hd. Torx Taptite Screw | (9) |
| 6 | ----- | M2 x 7.8mm ST Screw | (3) | 38 | ----- | Battery Support | (1) |
| 7 | ----- | Sealing Foam | (1) | 39 | 42-70-0480 | Spring Clip | (1) |
| 8 | 05-88-0106 | M2 x 5.5mm Pan Head Torx T-8 Screw | (4) | 40 | ----- | Battery Cover | (1) |
| 9 | 31-92-0043 | Paddle Trigger for 3/16" Paddle | (1) | 41 | ----- | Left Hand Vacuum Port | (1) |
| 10 | ----- | UI Bezel | (1) | 42 | ----- | Right Hand Vacuum Port | (1) |
| 11 | ----- | Light Pipe | (1) | 43 | ----- | M3 x 12mm Cap Hd. Hexagon M Screw | (2) |
| 12 | ----- | Power Mode Lense | (1) | 44 | 43-76-0059 | Vacuum Adaptor | (1) |
| 13 | ----- | UI Power Bottom | (1) | 46 | 42-70-0080 | Wire Clip | (1) |
| 14 | ----- | PCBA for the 3/16" version | (1) | 47 | 45-30-0047 | Rubber Slug | (2) |
| 15 | ----- | M2.6 x 10mm Torx T-8 Taptite Screw | (2) | 48 | 45-30-0100 | Rubber Slug, OD5 x 9 | (2) |
| 16 | ----- | Dial Retention Plate | (1) | 50 | 12-20-0644 | Service Nameplate | (1) |
| 17 | ----- | Speed Dial | (1) | 60 | 14-46-0133 | Handles Kit | (1) |
| 18 | 40-50-0200 | 7 x 11mm Spring | (1) | 61 | 14-46-0184 | Battery Support Kit | (1) |
| 19 | ----- | Motor Field, 12V-DC BL45 | (1) | 62 | 14-46-0187 | Sensor Trigger Assembly | (1) |
| 20 | 02-04-0071 | Deep Groove Ball Bearing | (1) | 63 | 14-46-0319 | Quick Change Mech Kit | (1) |
| 21 | ----- | Rotor | (1) | 64 | 14-46-0261 | UI Bottom Kit | (1) |
| 23 | ----- | Rubber Gasket | (1) | 65 | 14-46-0299 | Retention Assembly | (1) |
| 24 | ----- | BP Attachment Nut | (1) | 66 | 14-46-0269 | Speed Dial Kit | (1) |
| 25 | ----- | Internal Inverted Retaining Ring | (1) | 67 | 14-46-0323 | Right Hand Vacuum Port Kit | (1) |
| 26 | ----- | Quick Change Hinge | (1) | 68 | 14-46-0324 | Left Hand Vacuum Port Kit | (1) |
| 27 | ----- | Torsion Spring | (1) | 69 | 14-46-0199 | PCBA / Motor Assembly for 3/16" | (1) |
| 28 | ----- | Quick Change Mechanism Ring | (1) | 71 | 14-46-0293 | Rotor Assembly for 3/16" | (1) |
| 30 | ----- | Quick Change Wrench | (1) | 80 | 49-36-2584 | 6" Hook & Loop Backing Pad - Firm | (1) |
| 31 | ----- | Quick Change Frame Ring | (1) | | | - Accessory (Not Shown) | |
| 32 | ----- | 6" Pad for 3/16" Orbit Sander | (1) | 81 | 49-36-2586 | 6" PSA Pressure & Sensitive Adhesive | (1) |
| 33 | ----- | M3 x Flat Head Torx T-10 Taptite Screw | (4) | | | - Firm - Accessory (Not Shown) | |



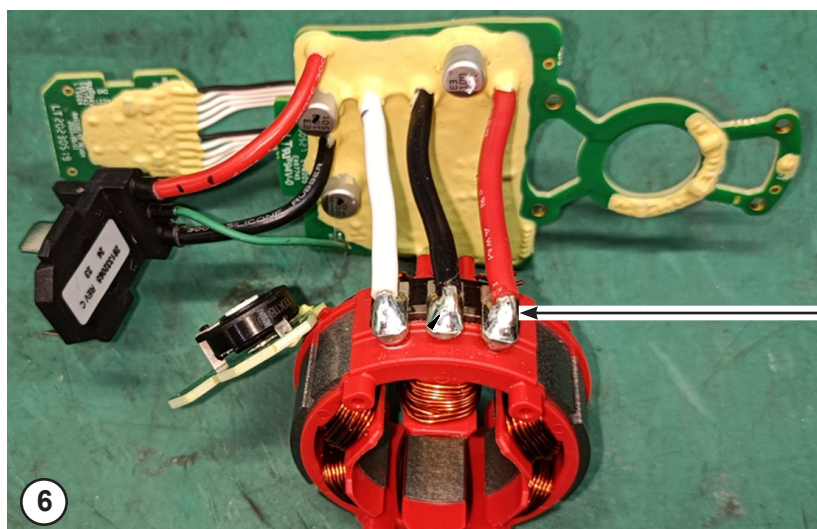
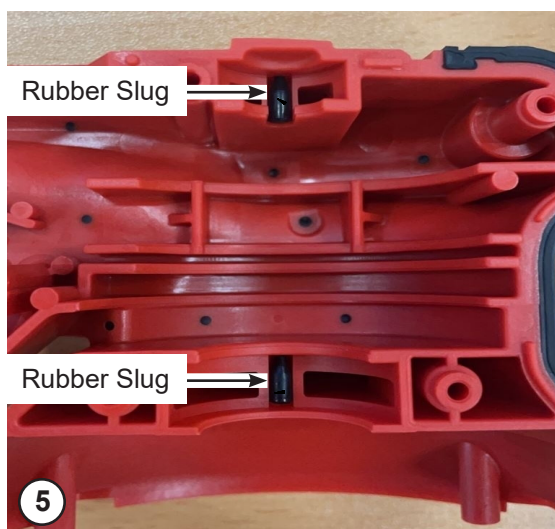
WIRING



- The UI Wires should be folded (Fig. 1) first and then routed inside the Housing (Fig. 2)



- The Speed Dial Board Wires **should be routed behind the rib** (Fig. 3)
- The 3 Terminal Board Wires should be routed to **avoid them being above the Speed Dial**. (Fig. 4)
There should be no wires above the Speed Dial.



- The Rubber Slugs (47) **should be assembled in the SAME direction**. (Fig. 5)
- Solder phase wires to stator (Fig. 6)