

# GENUINE GRACO PARTS & ACCESSORIES

## Motor Brush Repair Kit 248186



For McMillan Electric motors (only) as used on  
Ultra 595 sprayers

### INFORMATION ENCLOSED

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For detailed instructions and warnings, see sprayer manual.

1. Relieve pressure. Unplug sprayer!
2. Fig. 1. Remove both inspection covers (A).
3. Fig. 2. Push in spring clip (F) and release hook (G) from brush holder (B). Pull out spring clip.
4. Remove brush lead terminal (E) from blade connector. Remove brush (C).
5. Inspect commutator for excessive pitting, burning or gouging. A black color on commutator is normal. Have commutator resurfaced by a qualified motor repair shop if brushes seem to wear too fast or arc excessively. See Step 10, also.
6. Repeat for other side.
7. Fig. 2. Place new brush (C) in holder (B) so shunt wire (D) is oriented as shown in Fig. 3.
8. Hold spring clip (F) with a needle-nose plier, slide spring clip into brush holder until hook latches over end of holder. Pull on spring clip to be sure it stays in place. Fig. 3. Connect brush lead terminal (E) to blade connector.
9. Repeat for other side.
10. **Test brushes.** Remove pump connecting rod pin. With sprayer OFF, turn pressure control knob fully counterclockwise to minimum pressure. Plug in sprayer. Turn sprayer ON. Slowly increase pressure until motor is at full speed. Inspect brush and commutator contact area for excessive arcing. Arcs must not "trail" or circle around commutator surface.
11. Install brush inspection covers and gaskets.
12. **Break in brushes.** Operate sprayer for 1 hour with no load. Install pump connecting rod pin.

### ⚠ WARNING

Do not touch brushes, leads, springs or brush holders while sprayer is plugged in to reduce risk of electric shock and serious injury.

