

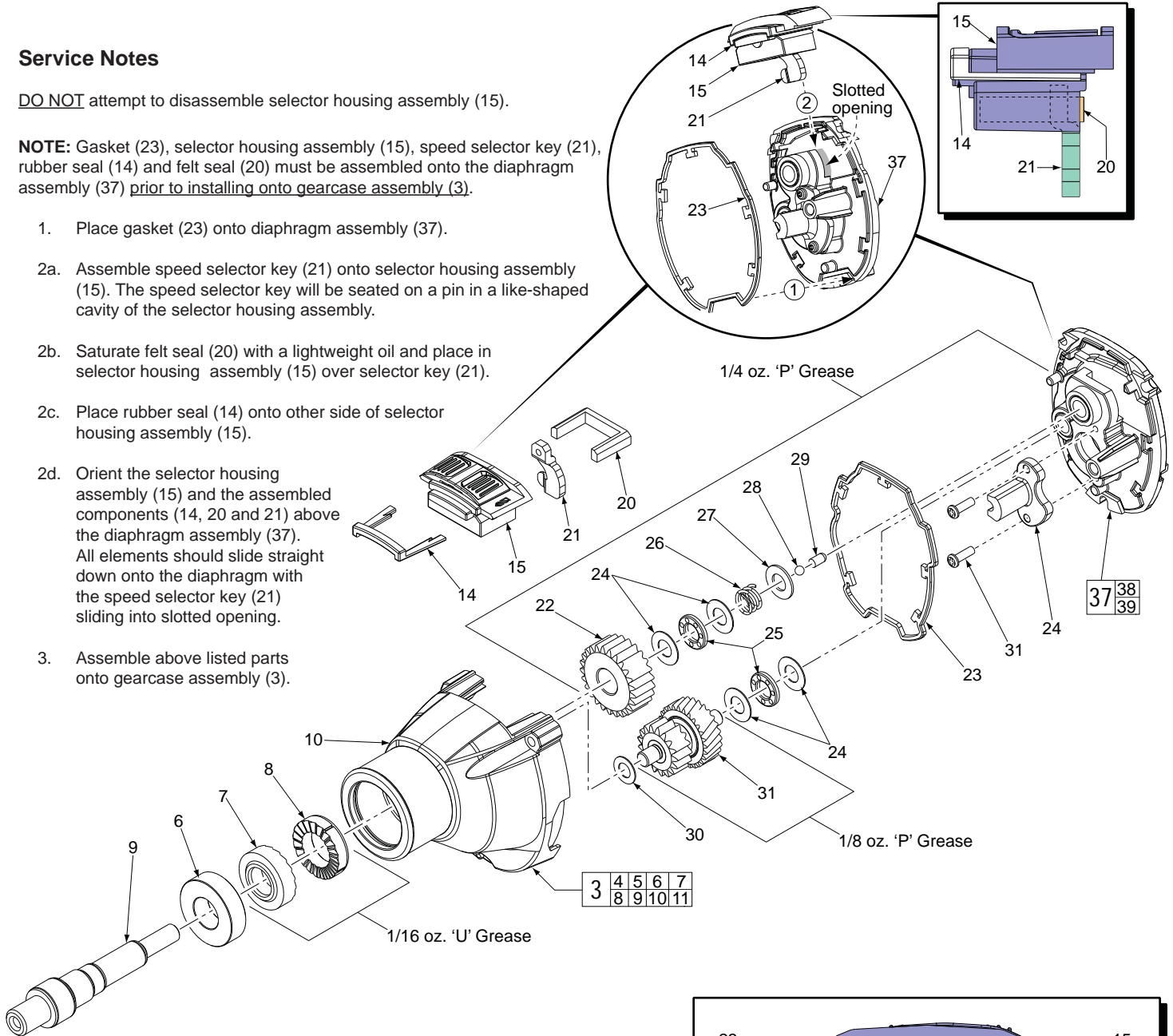


## Service Notes

**DO NOT** attempt to disassemble selector housing assembly (15).

**NOTE:** Gasket (23), selector housing assembly (15), speed selector key (21), rubber seal (14) and felt seal (20) must be assembled onto the diaphragm assembly (37) prior to installing onto gearcase assembly (3).

1. Place gasket (23) onto diaphragm assembly (37).
- 2a. Assemble speed selector key (21) onto selector housing assembly (15). The speed selector key will be seated on a pin in a like-shaped cavity of the selector housing assembly.
- 2b. Saturate felt seal (20) with a lightweight oil and place in selector housing assembly (15) over selector key (21).
- 2c. Place rubber seal (14) onto other side of selector housing assembly (15).
- 2d. Orient the selector housing assembly (15) and the assembled components (14, 20 and 21) above the diaphragm assembly (37). All elements should slide straight down onto the diaphragm with the speed selector key (21) sliding into slotted opening.
3. Assemble above listed parts onto gearcase assembly (3).



## Lubrication Instructions

Type "P" (49-08-4250)  
Type "U" (49-08-0150)

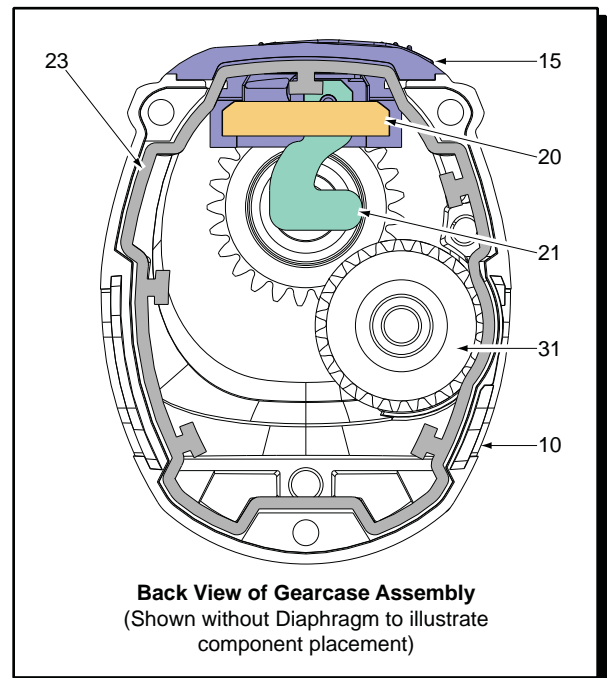
**When servicing, remove 90-95% of the existing grease prior to installing Type 'P' grease. Original grease maybe similar in color but not compatible with 'P'.**

1. Coat ratchets (7, 8) with 1/16 oz. of Type "U" grease, No. 49-08-0150.
2. Place 1/8 oz. of Type "P" grease, No. 49-08-4250, around the gear shaft assembly (31) area of gearcase (10).
3. Lubricate gear assembly (parts 11, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 35, 36, 38 and 39) using 1/4 oz. of Type "P" grease, No. 49-08-4250.

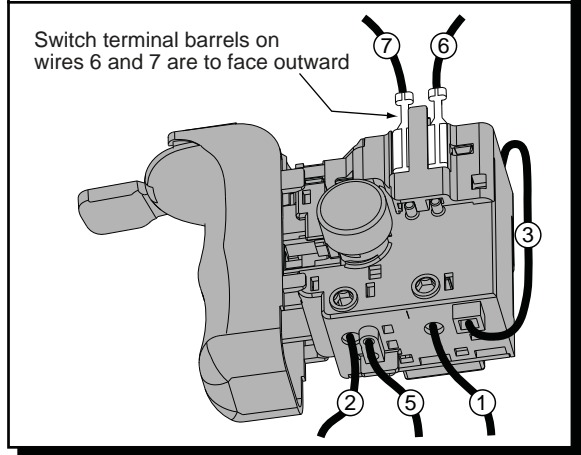
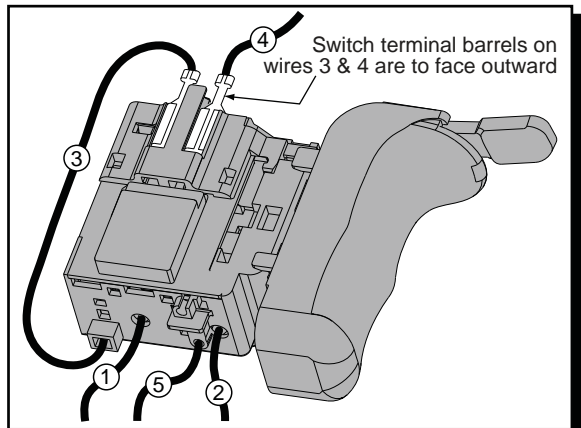
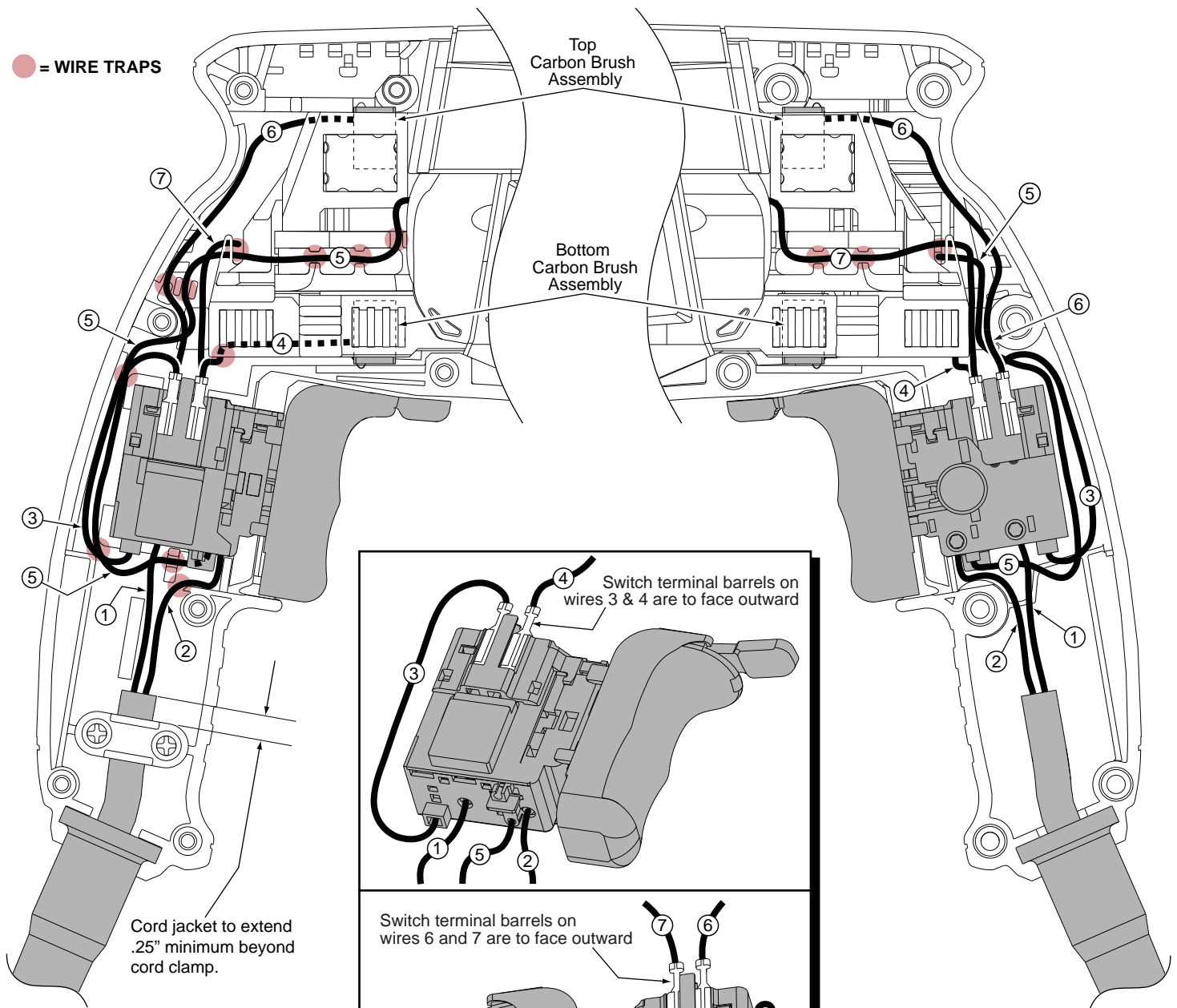
Total amount of lubrication: approximately 1/2 oz.

Saturate felt seal (20) with lightweight oil before assembling onto selector housing assembly (15).

Do not place gear shaft assembly (31) in solvent solution. Wipe off with a clean dry cloth.



● = WIRE TRAPS



**NOTE:** As an aid to reassembly, take note of the wire routings and position of the wires in the wire guides and traps prior to dismantling the tool.

Watch for pinched wires when placing the handle cover back over the housing assembly.

**NOTE:**  
All leads must be held to  $\pm 1/8"$ .  
All lead lengths are before stripping.

**WIRING SPECIFICATIONS**

Wire No.	Wire Color	Origin or Gauge	Length	Terminals, Connectors and 1 or 2 End Wire Preparation
1	Black	Cord	----	Component of cordset. Connect to switch as shown.
2	White	Cord	----	Component of cordset. Connect to switch as shown.
3	Black	23-94-5378	95mm	Jumper - leadwire assembly. Connect to switch as shown.
4	Black	23-94-5377	55mm	Connect to switch and bottom carbon brush assembly as shown.
5	Black	Field	----	Component of field. Connect to switch as shown.
6	White	23-94-5376	90mm	Connect to switch and top carbon brush assembly as shown.
7	Red	Field	----	Component of field. Connect to switch as shown.

TERMINAL DESCRIPTION		
Code	Part No.	Qty.