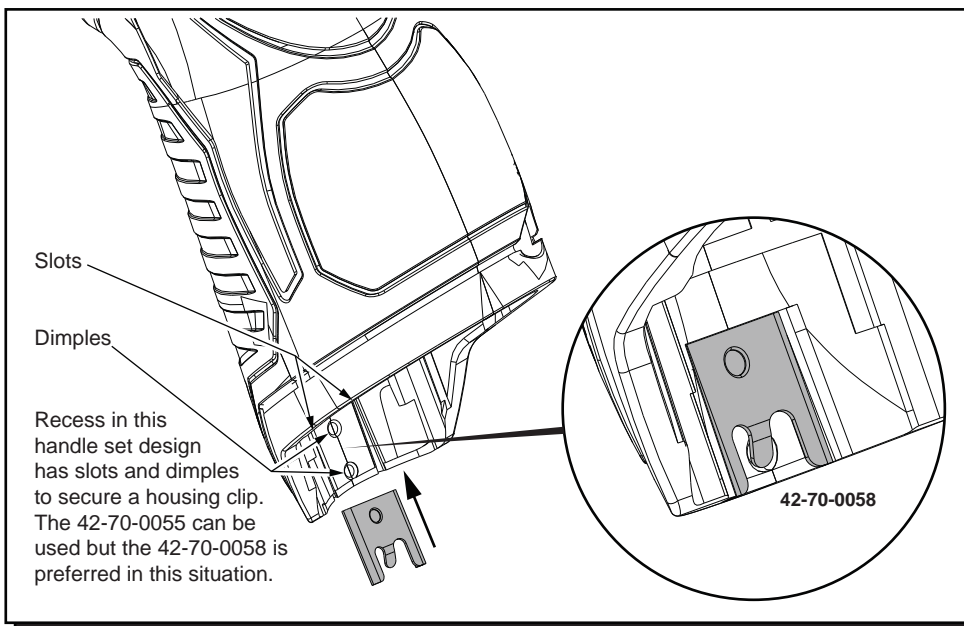
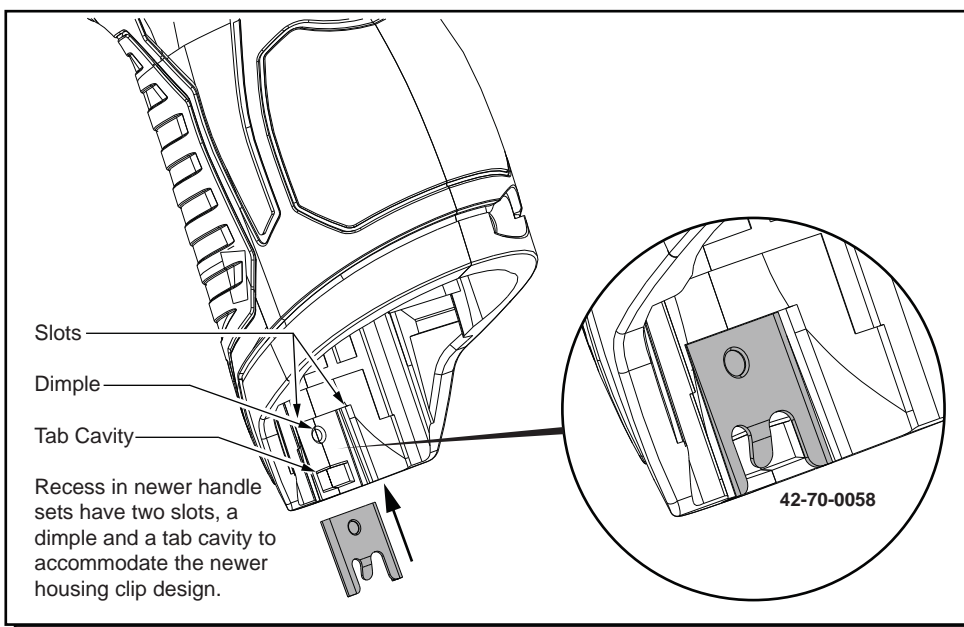


Early M12™ Handle Sets utilize **Housing Connection Clip No. 42-70-0055**. Install this clip design by aligning the side rails of the clip with the two slots in the handle set. Gently push into place with the aid of a small flat blade screwdriver or a similar instrument. Be sure that the clip is properly seated in both slots and that the clip is flush to sub-flush to the end of the handle set. To remove the clip, use the same small flat blade screwdriver or a similar instrument and push the clip out of the handle set. If the clip is loose or will not stay in place, a needle nose pliers can be used to gently bend/pinch the side rails of the clip. If the clip is damaged do not use, replace with a new 42-70-0055 housing clip.



Updated M12™ Handle Sets utilize **Housing Connection Clips No. 42-70-0055 and 42-70-0058. (The 42-70-0058 is a preferred upgrade)**. Install this clip design by aligning the side rails of the clip with the two slots in the handle set. Gently push into place with the aid of a small flat blade screwdriver or a similar instrument. Be sure that the clip is properly seated in both slots and that the tab of the clip snaps down in the round dimpled cavity of the handle set. Be sure that the clip is flush to sub-flush to the end of the handle set. To remove the clip, use the same small flat blade screwdriver or a similar instrument and lift up on the clip tab while pushing the clip out of the handle set. Use a needle nose pliers to gently rebend the clip tab if necessary. If the tab on the clip is damaged during this process and is loose or will not stay in place, replace with a new 42-70-0058 clip.



Newer M12™ Handle Sets utilize **Housing Connection Clip No. 42-70-0058**. Install this clip design by aligning the side rails of the clip with the two slots in the handle set. Gently push into place with the aid of a small flat blade screwdriver or a similar instrument. Be sure that the clip is properly seated in both slots and that the tab of the clip snaps down in the rectangular cavity of the handle set. Be sure that the clip is flush to sub-flush to the end of the handle set. To remove the clip, use the same small flat blade screwdriver or a similar instrument and lift the clip tab out of the cavity while pushing the clip out of the handle set. Use a needle nose pliers to gently rebend the clip tab if necessary. If the tab on the clip is damaged during this process and is loose or will not stay in place, replace with a new 42-70-0058 clip.

**NOTE:** Clutch Yoke #4 is to be the first clutch component installed and the last component removed from the gearcase assembly.

Install side pins of clutch yoke #4 into the pivot sockets of the gearcase.

Insert slide clutch #5 onto clutch yoke with raised driving lugs of the slide clutch oriented as shown. Lugs are to face clutch gear assembly #70.

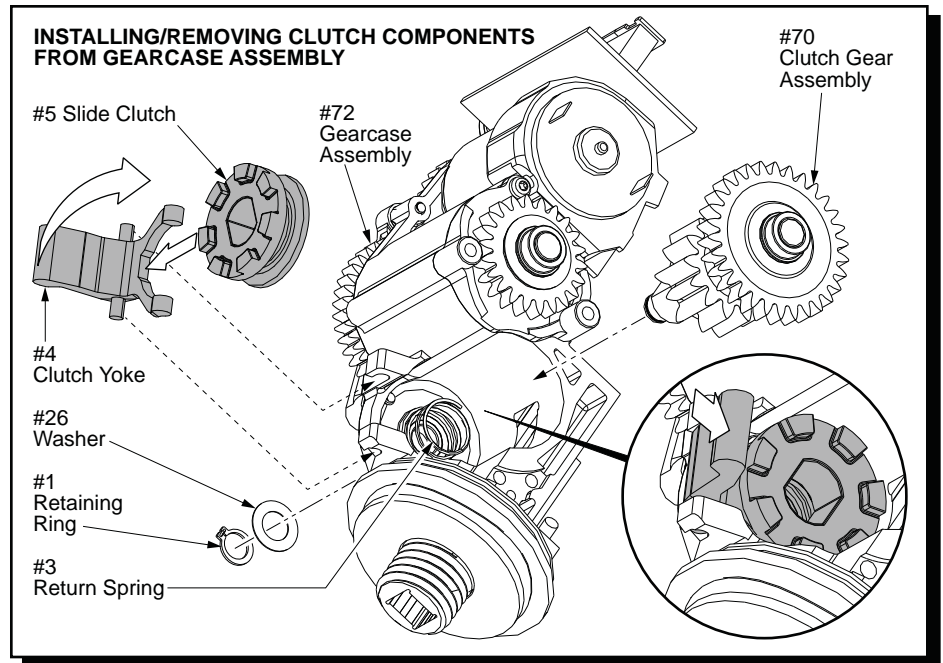
Place the return spring #3 into the recessed pocket of the gearcase.

While holding slide clutch in place on the clutch yoke, gently pivot the two parts into the clutch/gear cavity of gearcase. **NOTE:** the slide clutch may have to be slightly lifted out of place on the yoke during the pivoting process to avoid any interference with the cavity walls.

Be sure return spring is still in place in the recess pocket of gearcase when the clutch yoke and slide clutch are completely pivoted in place.

Press clutch yoke lever to assure proper operation in pocket. If spring comes out of recess, start over.

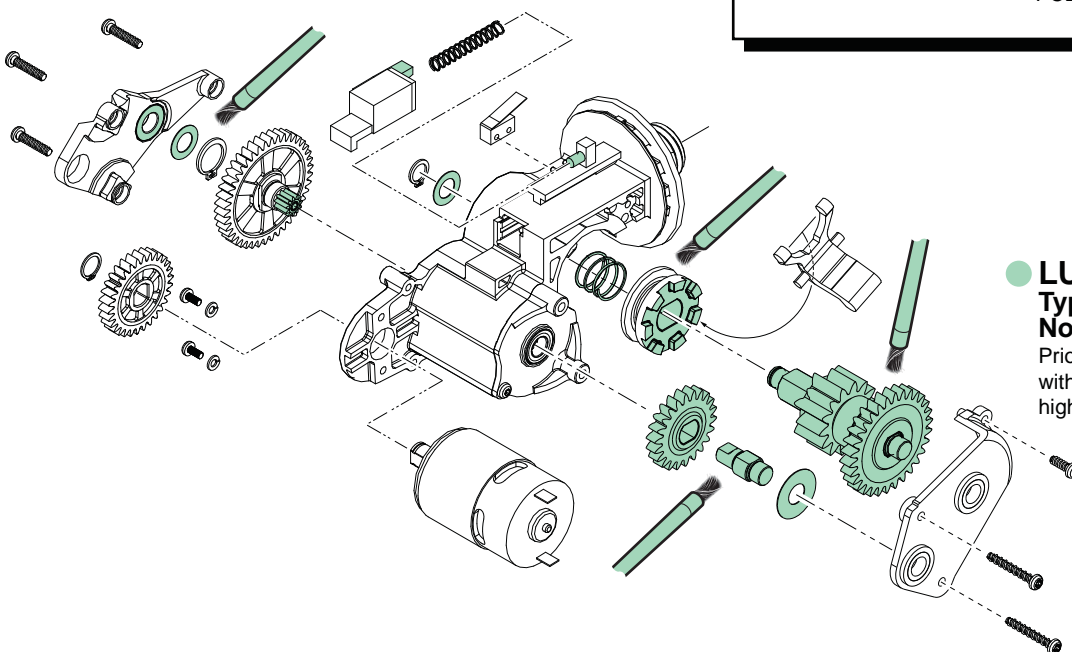
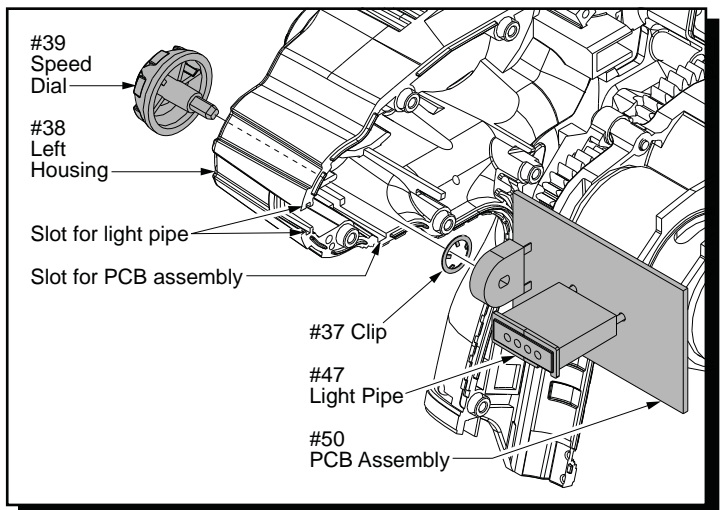
Hold the lever of the clutch yoke completely down to draw in the return spring and slide clutch. Place shaft of the clutch gear assembly #70 through the holes in the slide clutch and gearcase assembly. Secure the clutch gear assembly with washer #26 and retaining ring #1.



Insert speed dial #39 into hole at rear of left housing halve #38. Secure dial with clip #37. Set dial to the '1' position at the arrow in the housing. Speed dial will turn in a counterclockwise direction.

Align board edges of PCB assembly #50 and the face plate edges of the light pipe #47 with the slots in the housing halve.

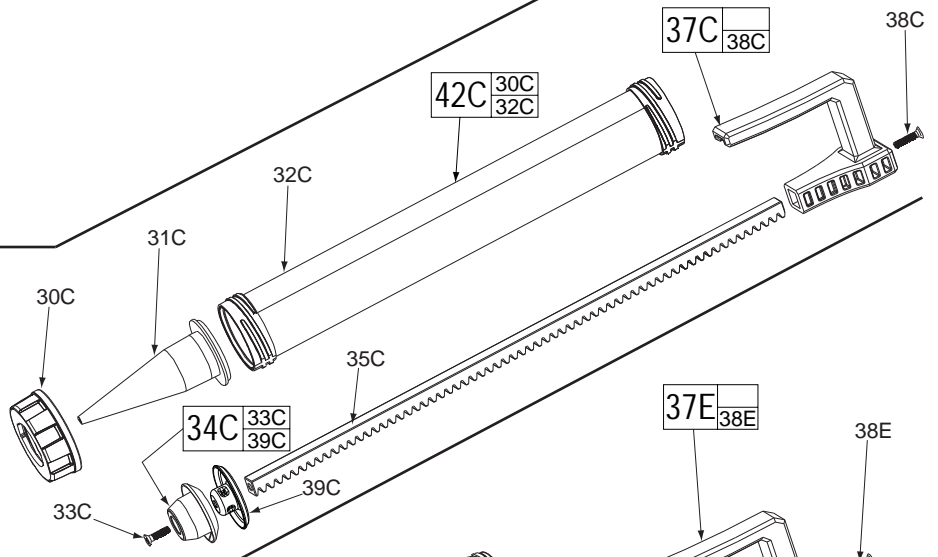
Carefully insert the PCB assembly and light pipe into the slots. Route the blue and black wires from the PCBA (for the EOT switch #74) into the wire trap of handle halve above motor. Align the double flats of the speed dial with the double flats in the hole of the potentiometer. Gently apply pressure to engage shaft of speed dial in hole of potentiometer. Press and fully seat PCBA and light pipe in the handle halve.



**LUBRICATION NOTES:**  
Type 'P' Grease  
No. 49-08-4250, 1.5 oz. / 42g tube  
Prior to reinstalling, clean gear assemblies with a clean, dry cloth. Lightly coat all parts highlighted here with 'P' grease.

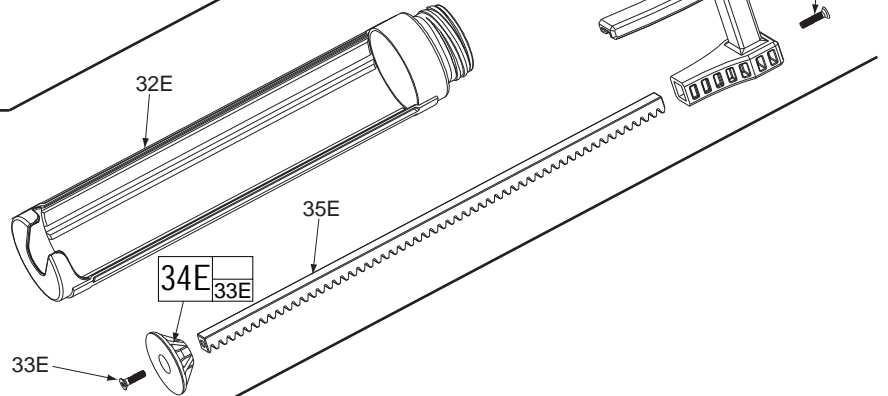
**20 Oz. ALUMINUM SAUSAGE CARTRIDGE KIT**  
**Cat. No. 48-08-0905**

Fig.	Part No.	Description of Part
30C	42-52-0440	Cartridge Cap
31C	31-12-0700	Nozzle - Black
32C	-----	20 oz. Aluminum Barrel
33C	45-04-2015	Plunger Screw
34C	44-70-0375	Sausage Plunger
35C	44-94-0480	Plunger Rod
37C	31-44-3170	Plunger Handle
38C	45-04-2050	Handle Screw
39C	-----	Plunger Back Plate
42C	45-76-0900	20 oz. Aluminum Barrel Assembly



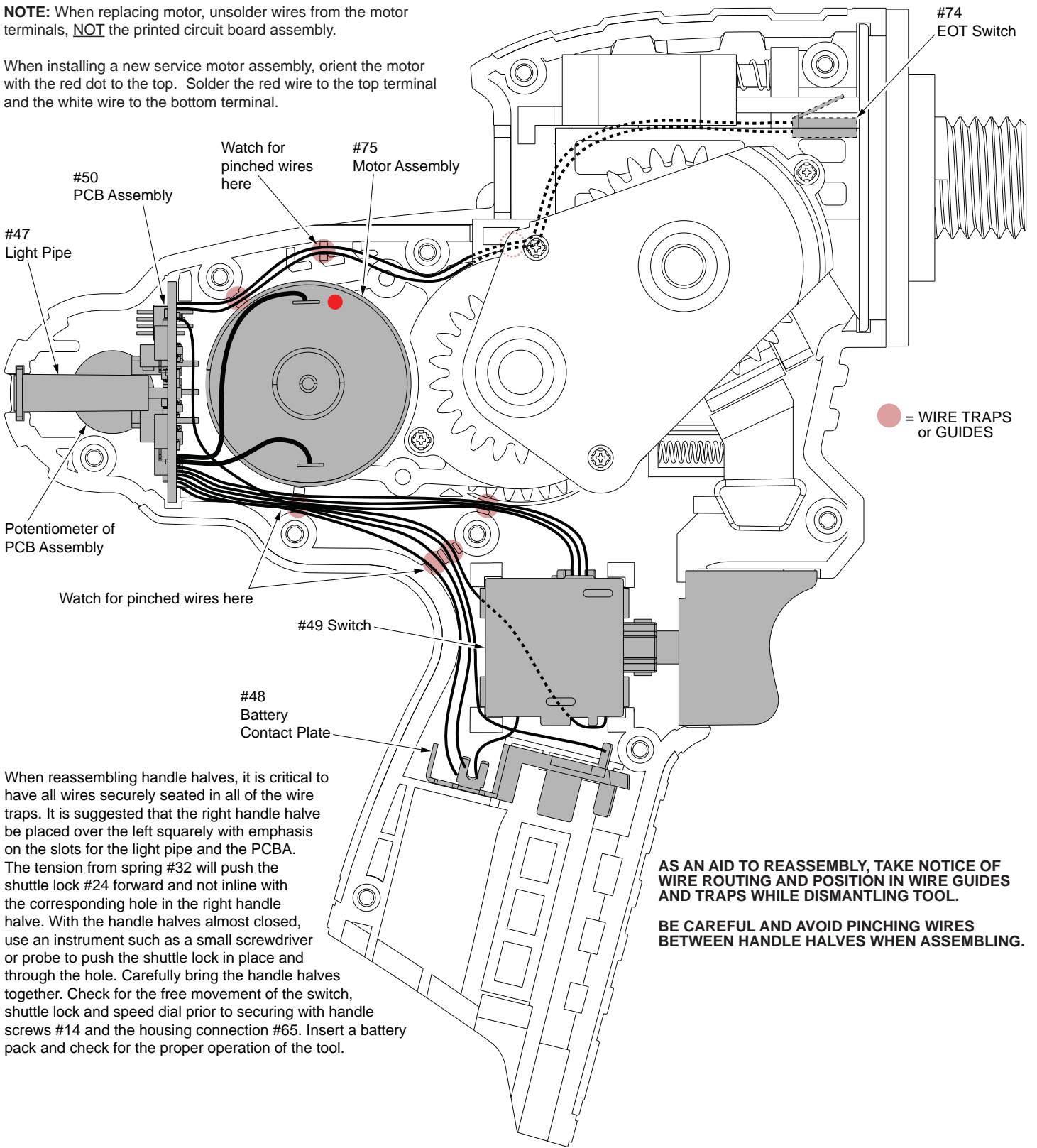
**QUART CARTRIDGE KIT**  
**Cat. No. 48-08-0910**

Fig.	Part No.	Description of Part
32E	31-01-1810	Quart Cartridge Carriage
33E	45-04-2015	Plunger Screw
34E	44-70-0340	Quart Plunger
35E	44-94-0485	Quart Plunger Rod
37E	31-44-3170	Plunger Handle
38E	45-04-2050	Handle Screw



**NOTE:** When replacing motor, unsolder wires from the motor terminals, NOT the printed circuit board assembly.

When installing a new service motor assembly, orient the motor with the red dot to the top. Solder the red wire to the top terminal and the white wire to the bottom terminal.



When reassembling handle halves, it is critical to have all wires securely seated in all of the wire traps. It is suggested that the right handle half be placed over the left squarely with emphasis on the slots for the light pipe and the PCBA. The tension from spring #32 will push the shuttle lock #24 forward and not inline with the corresponding hole in the right handle half. With the handle halves almost closed, use an instrument such as a small screwdriver or probe to push the shuttle lock in place and through the hole. Carefully bring the handle halves together. Check for the free movement of the switch, shuttle lock and speed dial prior to securing with handle screws #14 and the housing connection #65. Insert a battery pack and check for the proper operation of the tool.

**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.**