







Assembly of external Spindle components:

6. Install Washer 10m and Spring 10n onto spindle. Lubricate and install the Clutch Gear 10p and Clutch Plate 10q onto the Spindle. Be sure to orient the part as shown and position with the three notches on the back of the plate over the holes in the spindle.

Place C-Ring 10s onto Spindle. (C-Ring 10s has a thicker cross section than C-Ring 10t.) With the aid of a snap ring pliers, work the C-Ring past the first spindle groove down to the other parts assembled onto spindle.

7. Place Spindle Service Fixture 61-30-0290 over the assembled parts and the Spindle. Position so the fixture rests on Clutch Plate 10q. Be sure the three notches are not covered. Place the fixture and spindle assembly in an arbor press and carefully compress the Clutch Spring enough to expose the three holes in the Spindle. As an aid, put a dab of grease on your finger to pick up and place the three Steel Balls 10r into the three small holes on the Spindle just above Clutch Plate. Ensure the notches in the Clutch Plate are aligned with the Steel Balls.

While compressed (a), use a screwdriver (b) to work C-Ring 10s into the Spindle groove. Ensure the Steel Balls are in place and slowly retract the arbor press. The Clutch Plate should slide over the Steel Balls until it is in contact with the C-Ring.

Place C-Ring 10t onto Spindle. With the aid of a snap ring pliers, work the C-Ring into the first spindle groove and snap into place.



Assembly of external Spindle components:

- Install Washer 10m and Spring 10n onto spindle. Lubricate and install the Clutch Gear 10p onto the Spindle 10a. Be sure to orient the part as shown with the three flats on the Clutch Gear centered over the holes in the spindle.
- 9. Place Spindle Service Fixture 61-30-0290 over the assembled parts and the Spindle. Position so the fixture rests on the Clutch Gear 10p. Be sure the three holes on the Spindle are not covered. Place the fixture and spindle assembly in an arbor press and carefully compress the Clutch Spring enough to expose the three holes in the Spindle.

As an aid, put a dab of grease on your finger to pick up and place the three steel balls 10r into the three small holes on the Spindle just above the Clutch Gear.

Remove the Spindle from the arbor press.

10. Lubricate and install the Clutch Plate 10q onto the Spindle. Be sure to orient the part such that three inside notches on the plate cover the Steel Balls in the Spindle. Place the C-Ring 10s onto the Spindle. (NOTE: C-Ring 10s has a thicker cross-section than C-Ring 10t). With the aid of a snap ring pliers, work the C-Ring past the first spindle groove, down to the other parts assembled onto the spindle.

Place Spindle Service Fixture 61-30-0290 over the assembled parts and the Spindle. Place the fixture and spindle assembly in an arbor press and carefully compress the Clutch Spring enough to expose the C-Ring groove in the Spindle.

While compressed, use a flat blade screwdriver to work C-Ring 10s into the spindle groove. Ensure that the Steel Balls are still in the spindle. Slowly retract the arbor press. The Clutch Plate should slide over the Steel Balls until it is in contact with the C-Ring.

With the aid of a snap ring pliers, work C-Ring 10t into top groove of Spindle.





WIRING SPECIFICATIONS				
Wire No.	Wire Color	Origin or Gauge	Length	Terminals, Connectors and 1 or 2 End Wire Preparation
1	White			Component of cord set. Connect to '2 ψ ' position on bottom of switch.
2	Black			Component of cord set. Connect to '1 ψ ' position on bottom of switch.
3	Blue	23-94-0037		Connect to position '7' on right side of switch and the right brush holder.
4	Yellow			From top left field coil to position '6' on right side of switch.
5	Black			From bottom right field coil to position '5' on left side of switch.
6	Red	23-94-0033		Connect to position '8' on switch and the left brush holder.
7	White			From bottom left field coil to position '1' on bottom of switch.
8	Black			From top right field coil to '2' on bottom of switch.
				BULK LEAD WIRE - BULLETIN 58-01-0003