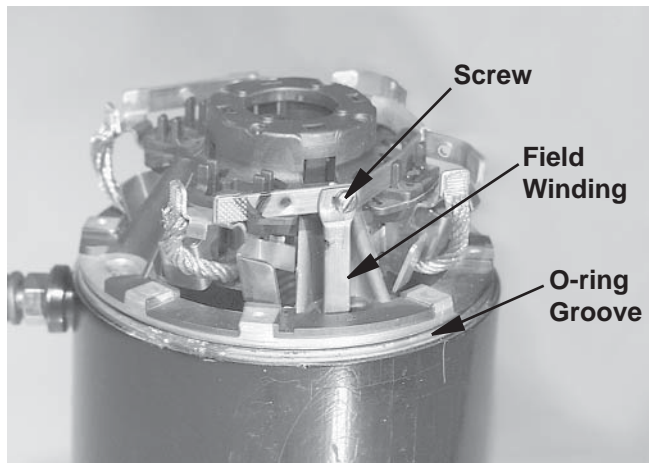


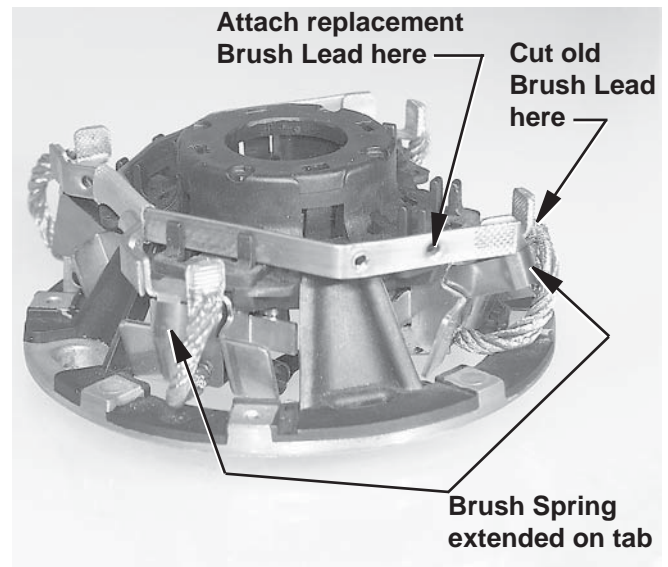
## Installation Instructions

1. Lower blade, turn control OFF, disconnect electrical connections and detach the snowplow from the vehicle following instructions in the Owner's Manual.
2. Remove battery cables. Loosen motor thru-bolts and remove end cap with bolts.
3. Remove motor housing and armature together from flange or valve block. Remove thrust washer from drive end of armature.
4. Remove large O-ring from groove between brush carriage and motor housing.

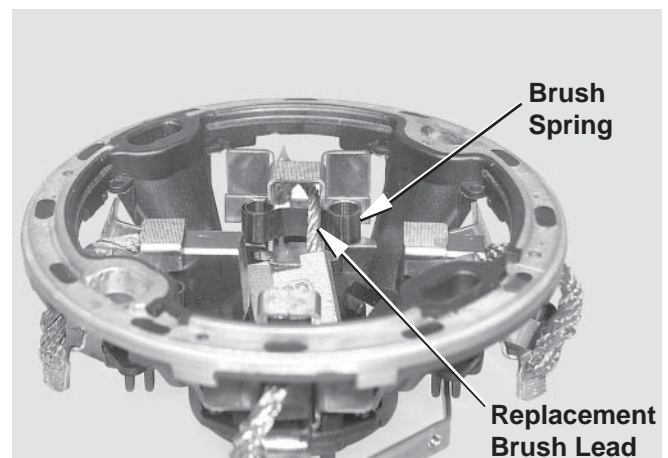


5. Scribe a line across the base of brush carriage onto motor housing to serve as match marks for reassembly.
6. Place motor on its side and carefully push on armature shaft and ball bearing to release bearing from brush carriage retaining tabs.
7. Remove armature from motor housing, allowing brushes to snap inward. The brush springs are not retained and may fall out.
8. Remove the two screws attaching field windings to bus bars on brush carriage. Note position of screws in field windings.

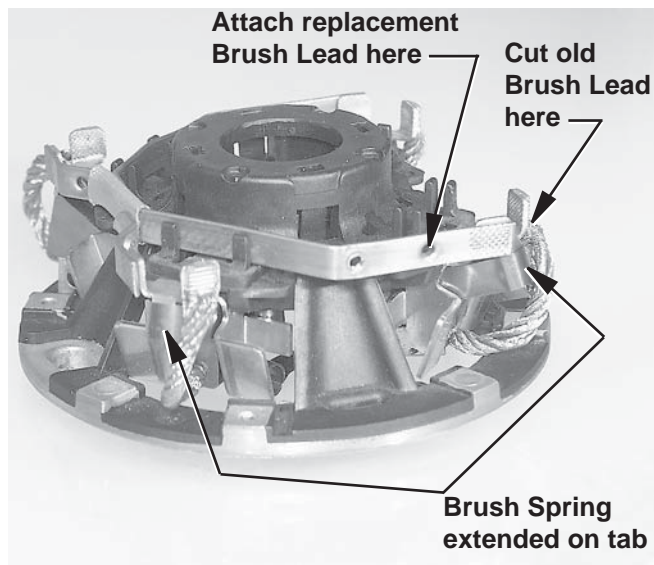
9. Remove brush carriage from motor housing. Turn brush carriage upside down and note position of coil springs and brush leads. Cut brush leads off at tabs on brush retainers and discard brushes and coil springs.



10. Place a new coil spring into position on one of the retainers with the straight section inward. Insert replacement brush lead through retainer from the inside on the motor housing side (bottom) of spring.



11. Push brush and spring through retainer to the outside, extending spring until it can be pushed off the brush onto the tab on the outside of the brush retainer. With spring held in the extended position on the tab, carefully push brush back into retainer so brush surface is flush with inside edge of retainer.



12. Repeat Step 11 for the other three brushes, leaving brush leads unattached. Handle brush carriage gently so springs stay extended on tabs.
13. Align match marks made earlier and carefully reinstall brush carriage over field windings onto motor housing and secure with screws removed in Step 8. Make sure brush carriage sits flush on motor housing.
14. Reinstall armature so bearing snaps into brush carriage. Push brush springs off retainer tabs to tension brushes against armature. Make sure brushes are square and free to slide in retainers.
15. Using screws from brush kit, attach brush leads to nearest pre-punched hole in brush bus bar. Make sure brush leads do not contact any non-insulated surfaces of the brush carriage.
16. Reinstall O-ring and end cap with thru-bolts. Reinstall thrust washer on drive end of armature and reassemble motor to flange or valve block. Tighten thru-bolts to 55–65 in-lb. Attach battery cables and tighten nuts to 50–60 in-lb.

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