Replacement Instructions

This kit contains a new wiring harness with a larger-sized connector assembly than what it may be replacing. Remove front cover of control unit.

If gray field connector is attached to the housing with a clip:



Figure I — Gray Field Connector Attached to Housing with Clip



If gray field connector is secured with wire ties only:



Figure 2 — Gray Field Connector Secured with Wire Ties Only



These instructions should be used in place of harness replacement instructions in 700 Series Service Manual SM7

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If the gray field connector is attached with clip...

- 1. Disconnect existing wiring harness terminals:
 - a. Slide existing field connector holder from clip.

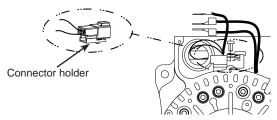


Figure 3 — Disconnecting Field Connector

- Remove black and white wires from female end and discard parts of female end of connector. Do not remove pins from ends of black and white wires.
- Disconnect internal B+ connection, saving hardware for reassembly.
- d. Disconnect two green wires from housing.
 Save hardware for reassembly.
- e. Disconnect existing wiring harness from thermal switch (see Figure 4):
 - 1) Cut brown wire from existing harness to thermal switch, leaving enough length from thermal switch for reassembly, and strip 1/4 inch of insulation.
 - 2) Leave other brown wire to thermal switch as-is for reassembly.

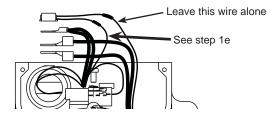


Figure 4 — Thermal Switch Wiring

- 2. Remove existing wiring harness from housing, taking the grommet out as well. Discard harness and grommet.
- 3. Install wiring harness into notch in plate, making sure grommet is securely wedged in notch.
- 4. Reconnect green ground wire and green wire in housing, Torque screw and lockwasher to 3.4 Nm/45 lb. in.
- 5. Re-assemble gray field connector:
 - a. Assemble new female connector end onto black and white wires of new harness as shown in Figure 5.

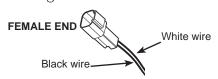


Figure 5 — Field Coil Connector Assembly

- b. Slide assembled connector onto clip and make sure it is secure.
- c. Use new male end provided in kit only if needed.
- 6. Using splice and sleeves from kit: crimp, solder, and insulate brown wire from new harness to existing brown wire from thermal switch.
- 7. Reassemble internal B+ connection and hardware as shown in Figure 6.

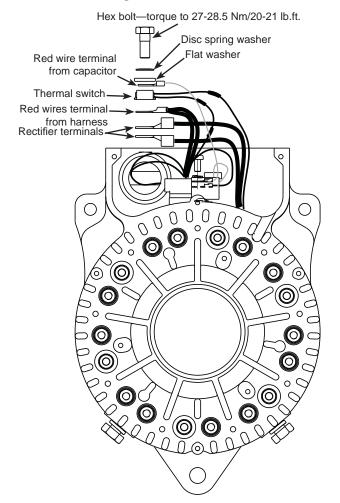


Figure 6 — Internal B+ Stacking Order

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If the gray field connector is secured with wire ties only...

- 1. Clip wire ties inside control unit.
- 2. Disconnect existing wiring harness terminals:
 - a. Remove black and white wires from female end and discard parts of female end of connector. Do not remove pins from ends of black and white wires.
 - c. Disconnect internal B+ connection, saving hardware for reassembly.
 - d. Disconnect green ground wire from housing. Save hardware for reassembly.
 - e. Cut red wire from diode trio in housing and use sleeving to insulate. It will not need to be reattached to new harness. See Figure 7.
 - f. Disconnect existing wiring harness from thermal switch (see Figure 7):
 - 1) Cut brown wire from existing harness to thermal switch, leaving enough length from thermal switch for reassembly, and strip 1/4 inch of insulation.
 - 2) Leave other brown wire to thermal switch as-is for reassembly.

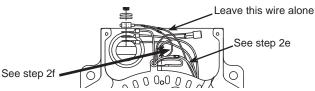


Figure 7 — Existing Harness Wiring

- 3. Remove existing wiring harness from housing, taking the grommet out as well. Discard harness and grommet.
- 4. Install wiring harness into notch in plate, making sure grommet is securely wedged in notch.
- 5. Reconnect green ground wire in housing, Torque screw and lockwasher to 3.4 Nm/ 45 lb. in.
- 6. Re-assemble new gray field connector:
 - a. Assemble new female connector end onto black and white wires of new harness as shown in Figure 8.
 - Save new male end of gray field coil connector provided in kit to replace existing male end of connector connecting field coil leads from shell.

- 7. Using splice and sleeves from kit: crimp, solder, and insulate brown wire from new harness to existing brown wire from thermal switch.
- 8. Reassemble internal B+ connection and hardware as shown in Figure 9.
- 9. Attach new wire ties to firmly secure connector and other wires inside control unit.

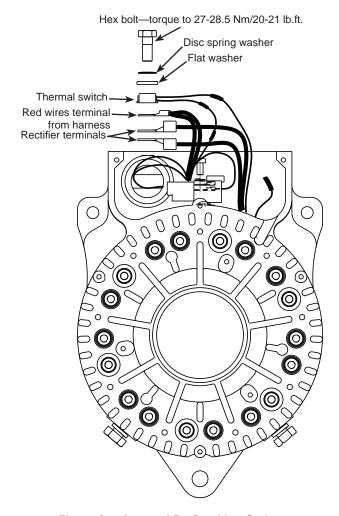


Figure 9 — Internal B+ Stacking Order

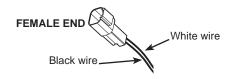


Figure 8 — Field Coil Connector Assembly

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