

STARTER (Cont'd)

Field Coils

- Broken or burned insulation
- Electrical continuity **A**.
- Brush connections

Drive Gear

- Worn teeth
- Tooth engagement (Drive gear must engage ring gear by 1/2 the depth of ring gear teeth).

Replacing the Brushes

Cut the two wires at the connection post. Make a groove in the top of the post just deep enough for the new brush wire. Solder the brush wire into the groove.

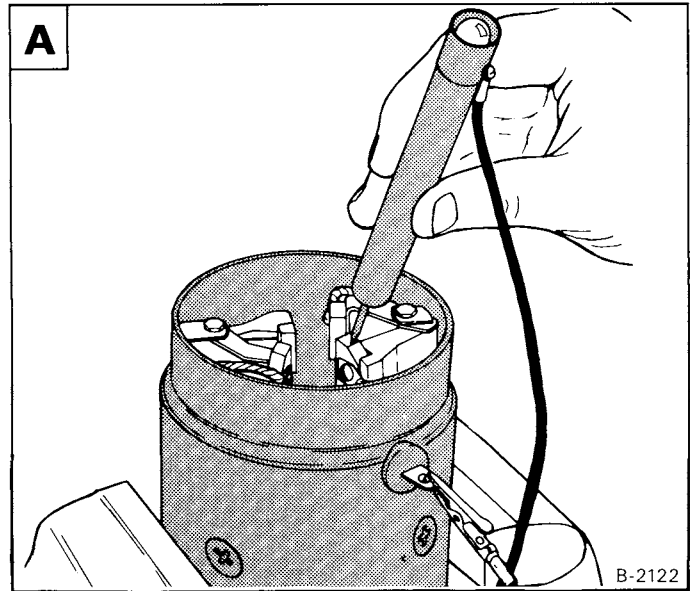
Cut the other brush wires about 1/4" (6,5 mm) from the field coil. Solder the new brush wires to the ends of the wires to the ends of the wires from the field coil wires. Insulate the solder connection.

Assembly: Reverse the order of disassembly.

Put a small amount of grease on the splines of the armature.

Put a small amount of grease on the bushing.

Add or remove shims at the drive end of the armature to adjust the end play.



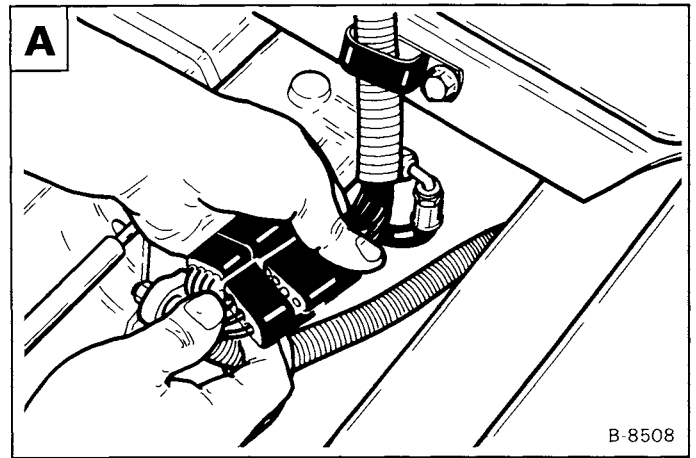
OPERATOR CAB HARNESS

Removal and Installation

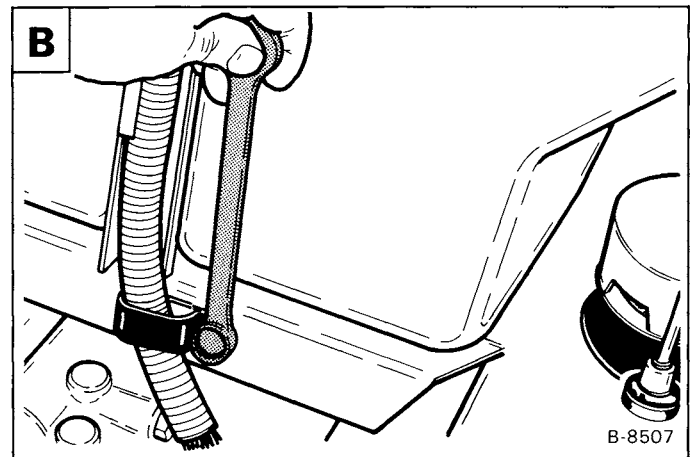
Open the rear door. Turn the master switch to the "OFF" position.

Raise the operator cab (See Page 1-5 for the correct procedure).

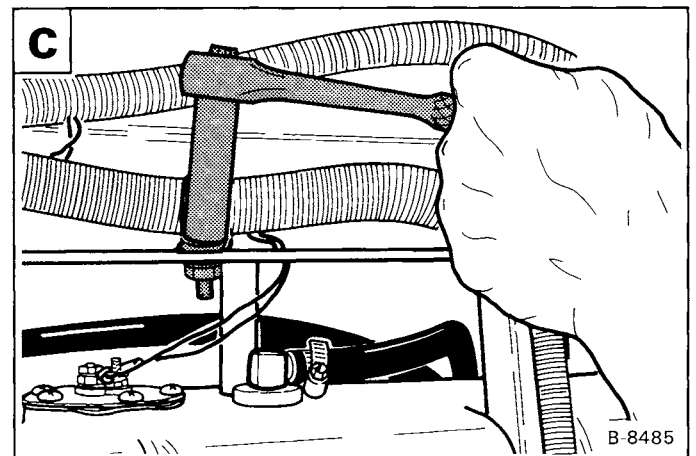
Disconnect the wire harness at the chassis harness **A**.



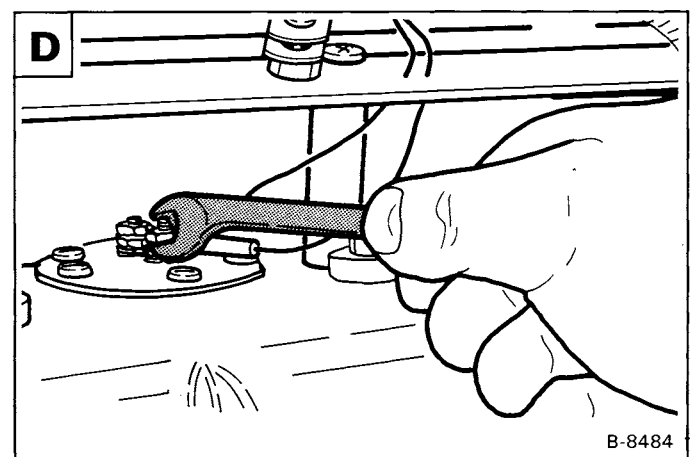
Remove the harness clamp at the bottom of the fuel tank **B**.



Remove the harness clamp at the top of the fuel tank **C**.



Disconnect the wires at the fuel sender switch **D**.

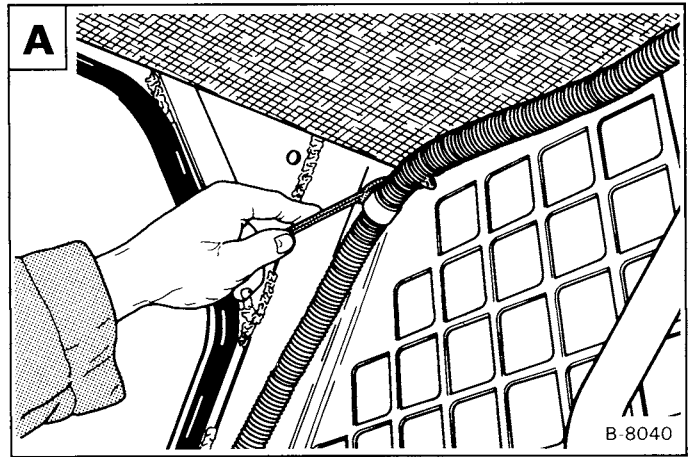


OPERATOR CAB HARNESS (Cont'd)

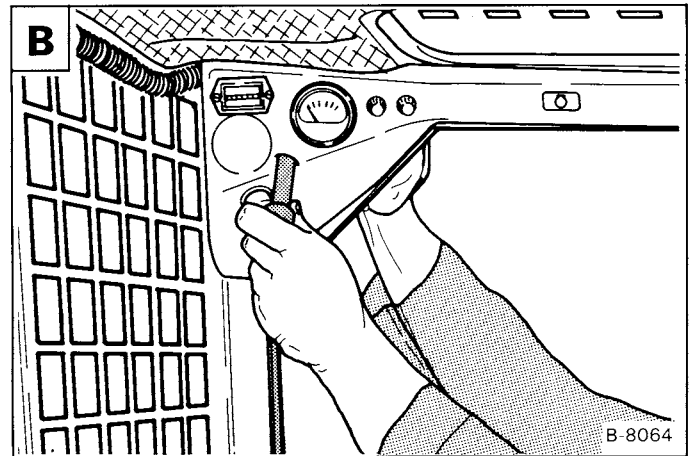
Lower the operator cab.

Remove the harness clamps along the side of the operator cab **A**.

Remove the front lights from their mounting. Disconnect the wires from the lights.



Remove the instrument panel bolts **B**.



Pull the instrument panel down **C**.

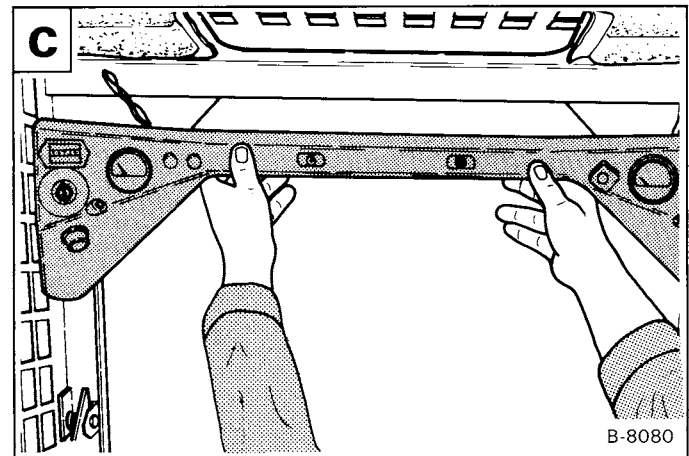
Remove the wires for the front lights from the rubber grommets.

Put the instrument panel on a work bench.

Disconnect a wire from the instrument in the panel, find the wire in the new wiring harness and connect it to the same location.

NOTE: Also see the Operator Cab Harness Diagram at the front of the Electrical Section.

When installing the new operator cab harness, make sure all the electrical connections are clean and tight.



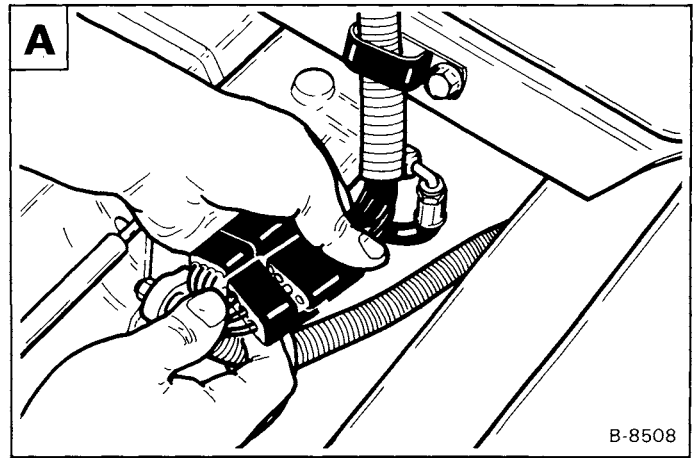
CHASSIS HARNESS

Removal and Installation

Open the rear door. Turn the master switch to the "OFF" position.

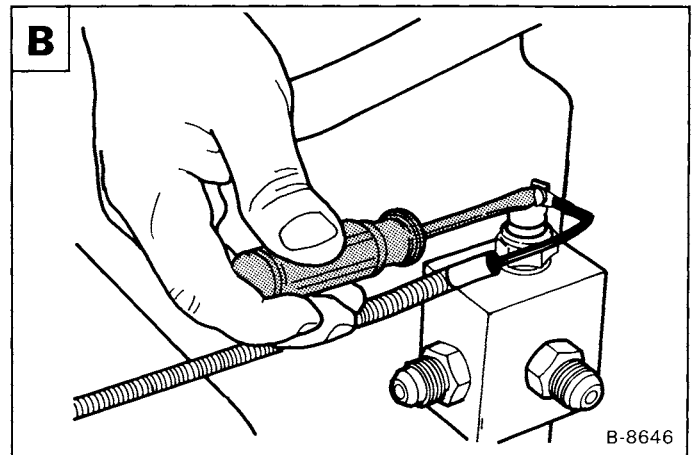
Raise the operator cab (See Page 1–5 for the correct procedure).

Disconnect the wire harness at the operator cab harness connectors **A**.

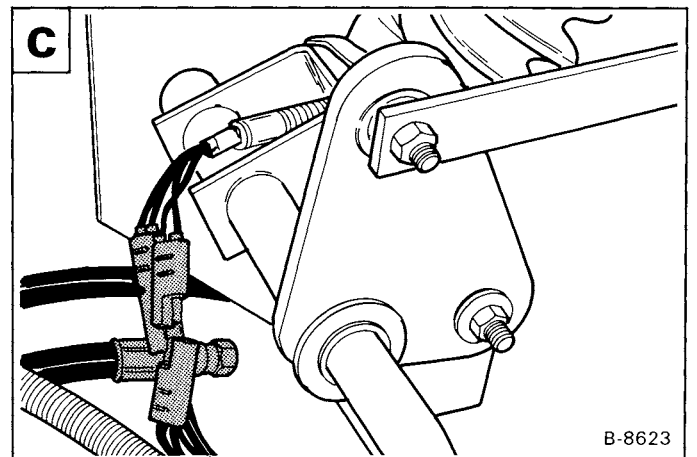


Disconnect the wire at the hydraulic reservoir port block **B**.

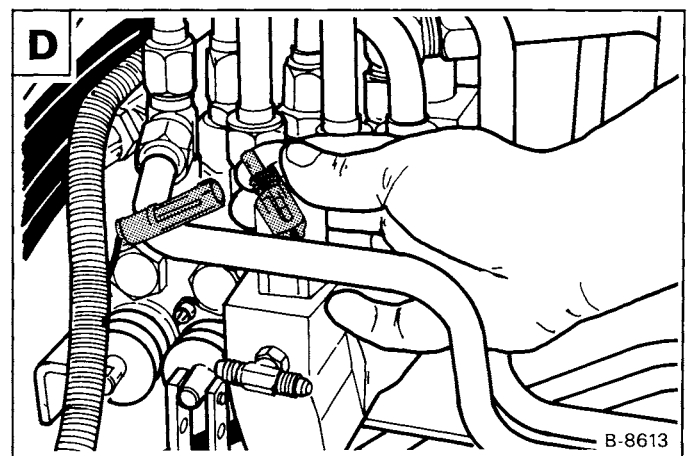
Disconnect the wire at the temperature sender at the hydrostatic pump.



Disconnect the harness at the steering lever harness connectors (both sides) **C**.

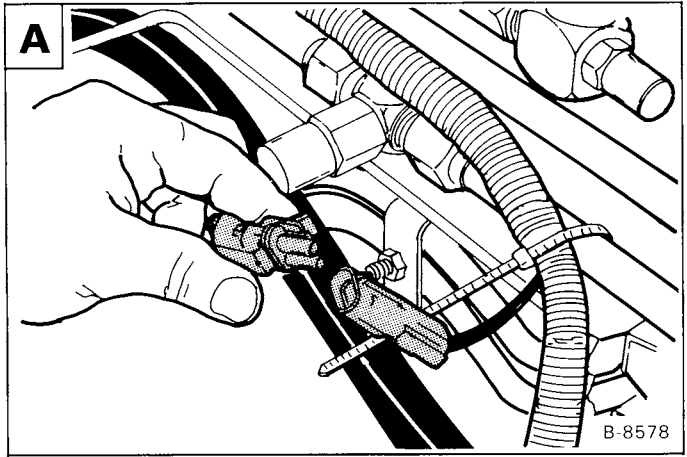


Disconnect the front and rear connectors at the front hydraulic control valve **D**.

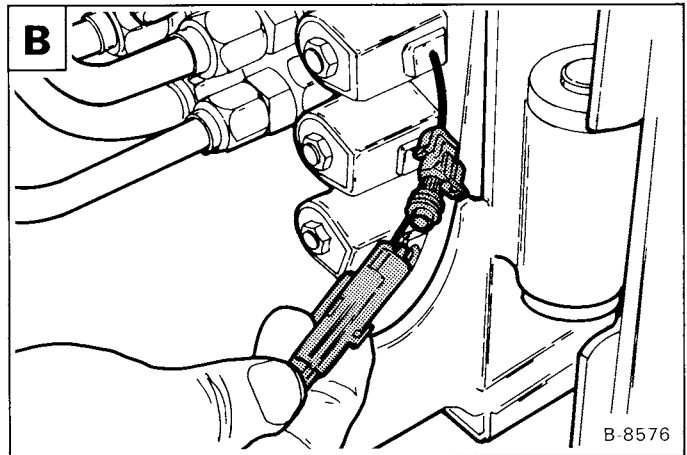


CHASSIS HARNESS (Cont'd)

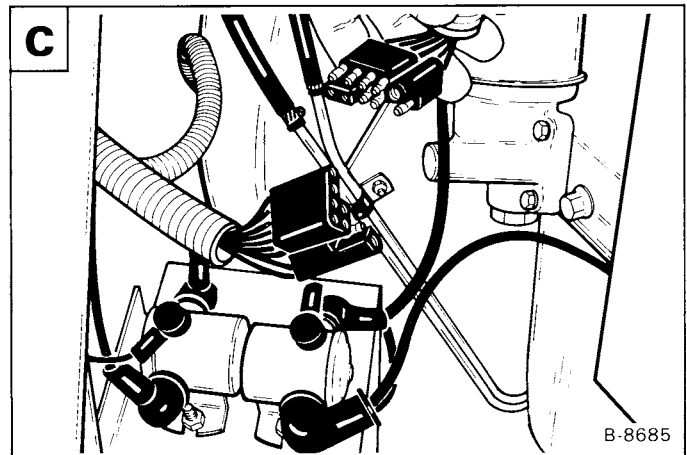
Disconnect the connector at the 2000 PSI switch **A**.



Disconnect all the connectors at the solenoids on the rear control valve **B**.



Disconnect the engine and chassis harness connectors, located behind the coolant recovery tank **C**.

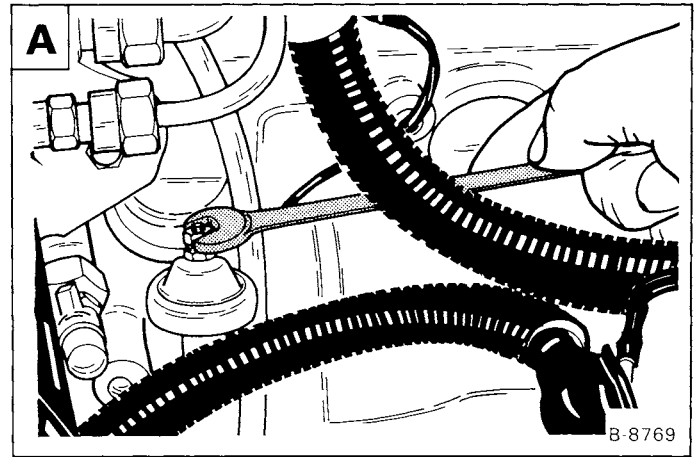


ENGINE HARNESS

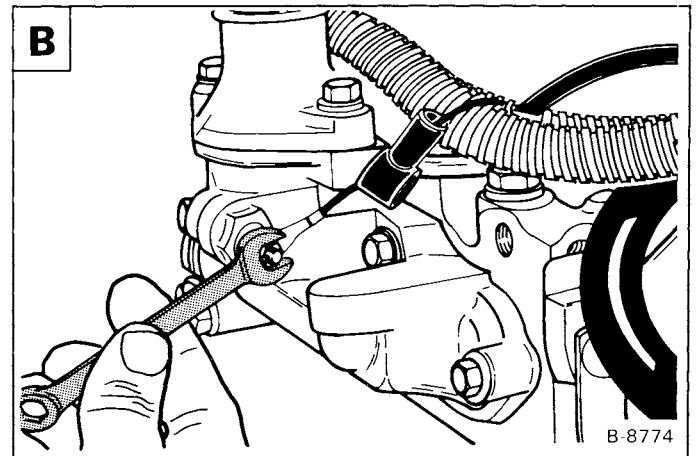
Removal and Installation

Open the rear door. Turn the master switch to the "OFF" position.

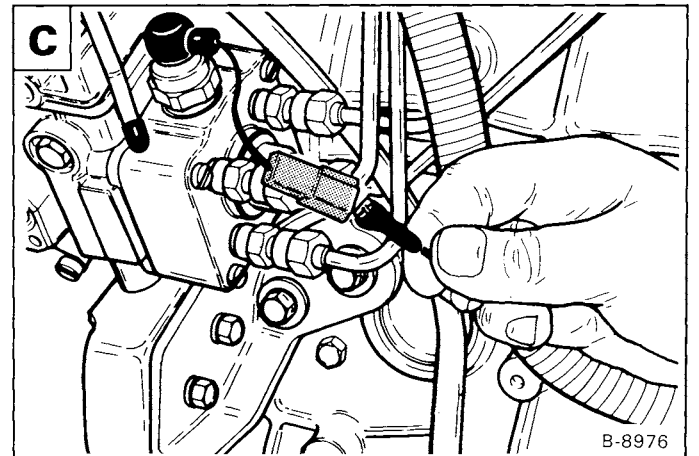
Disconnect the wire at oil pressure sending switch **A**.



Disconnect the wire at the temperature sending switch **B**.



Disconnect the fuel shut-off wire **C**.



Disconnect all the wires at the alternator **D**.

