



INSTRUCTION SHEET K6855685AB **WJ Blend Door Repair kit**

The Automatic Zone Control blend door pivot shaft may fracture. As a result the blend air doors may not respond to the climate control settings.

This service kit provides repair method that does not require removal of the Heating Ventilation and Air Conditioning (HVAC) unit and discharge/recharging the air conditioning system on all repairs. Basic tools are used and the repair can be done with out special training.

A cut is made into the HVAC housing to gain access to the blend air doors. This service kit contains the necessary parts for the repair.

NOTE: Pictures shown are for Left Hand Drive Vehicles and may be mirrored for Right Hand Drive vehicles. Left Hand and Right Hand Drive vehicles require different kit. Two kits are available.

Kit Contents:

- (1) Door, Blend (Metal)
- (2) Door, Blend (Plastic)
- (2) Spindle ~ (1) spare
- (2) Patch, Seal
- (1) Grease packet

Tools Required:

- 3" Philips Screw Driver (#2)
- Shop Vacuum Cleaner
- Drill and Drill Bits (1/8 in bit)
- 8" slip joint pliers
- Grease Pencil or a White Crayon
- Grease and Wax Remover
- Small Knife

Alternative Cutting Tools:

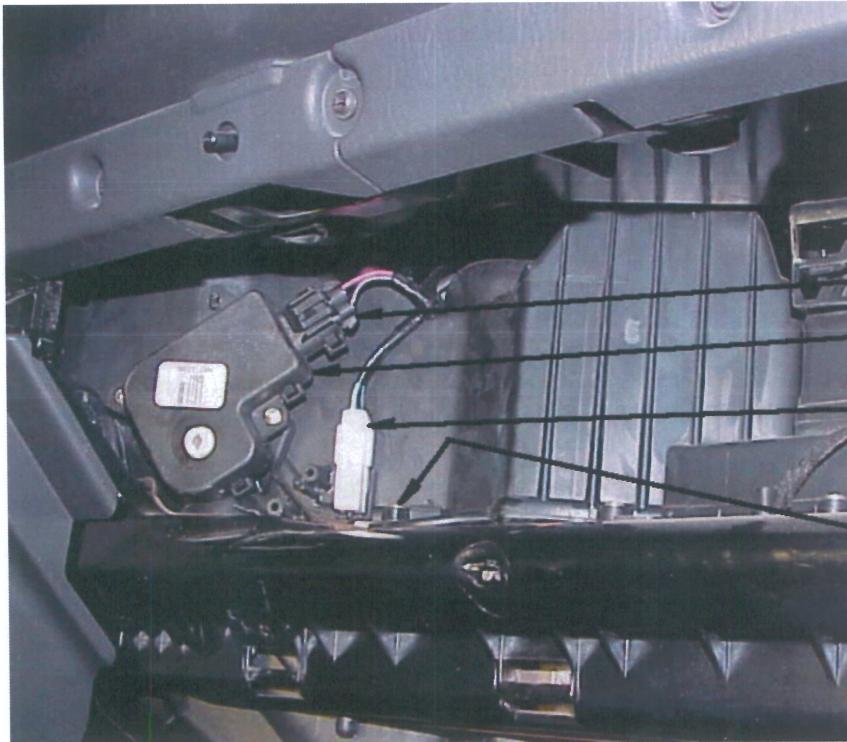
- 1/8 in diameter: Sabercut bit
- Two flute round end-mill
- Die Grinder or Roto-Zip tool

Symptom:

The driver or passenger blend air door is inoperative for vehicles equipped with the Automatic Zone Control system. There is a loss of air flow control with the system control settings.

Service Procedure:

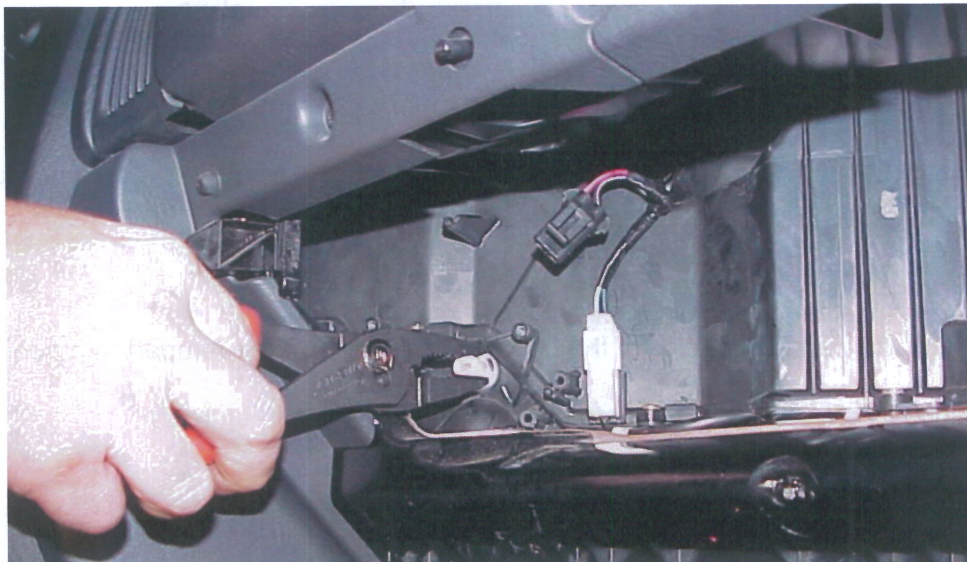
1. Remove the glove box door from the instrument panel.
2. Unplug the wiring harness wire from the blend door motor and the temperature sensor (Figure 1).
3. Remove and save the blend door motor and mounting screws (Figure 2).



- Motor Wire Harness
- Blend Door Motor
- Temperature Sensor Harness
- Retaining Screw or Clip

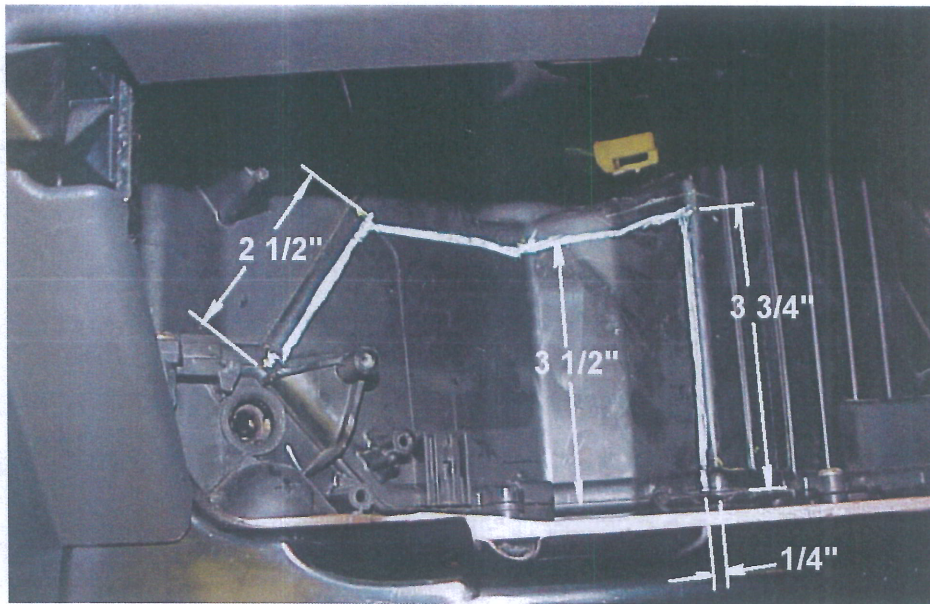
(Figure 1. Glove Box Access Area)

4. Remove and save the retaining screw or clip shown in Figure 1.
NOTE: Some vehicles may be equipped with a screw while others will have a clip.
5. Remove the spindle with pliers & discard shown in Figure 2. (Wiggle side to side and pull)



(Figure 2. Remove the Spindle)

6. Mark the areas to be cut with a grease pencil to the dimensions shown in Figure 3.

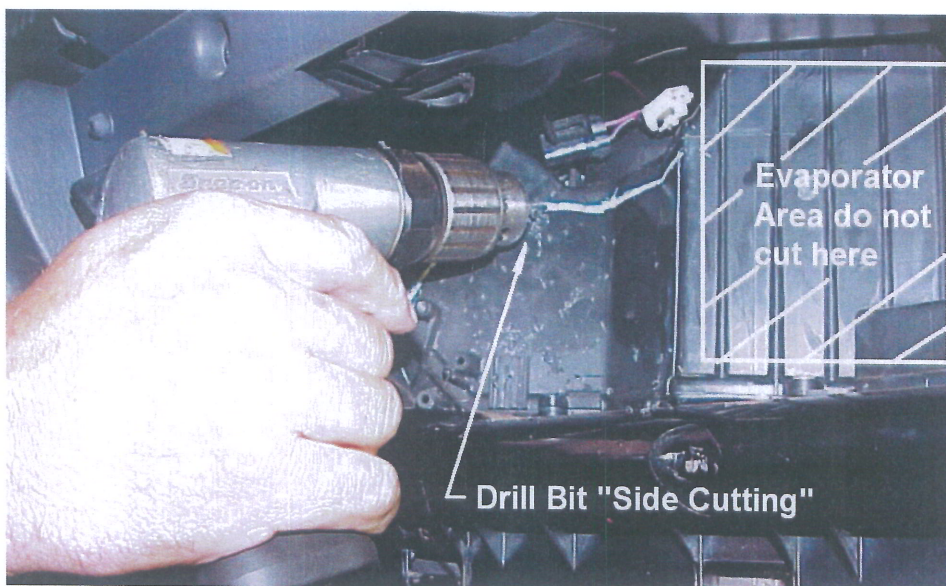


(Figure 3. Marked Housing)

7. Using a Drill with a 1/8 inch drill bit; chuck the drill with 1/2" inch of the bit exposed.
Alternative cutting tools include: 1/8 in diameter: Sabercut bit or ball end-mill.
8. Cut along the three lines marked in Figure 3 to make an access panel. Allow the tool to do the cutting and do not force it. Wear a dust mask and safety glasses for protection.

CAUTION: Do not make a cut in the evaporator area shown in Figure 4.

NOTE: Save the removed access panel.

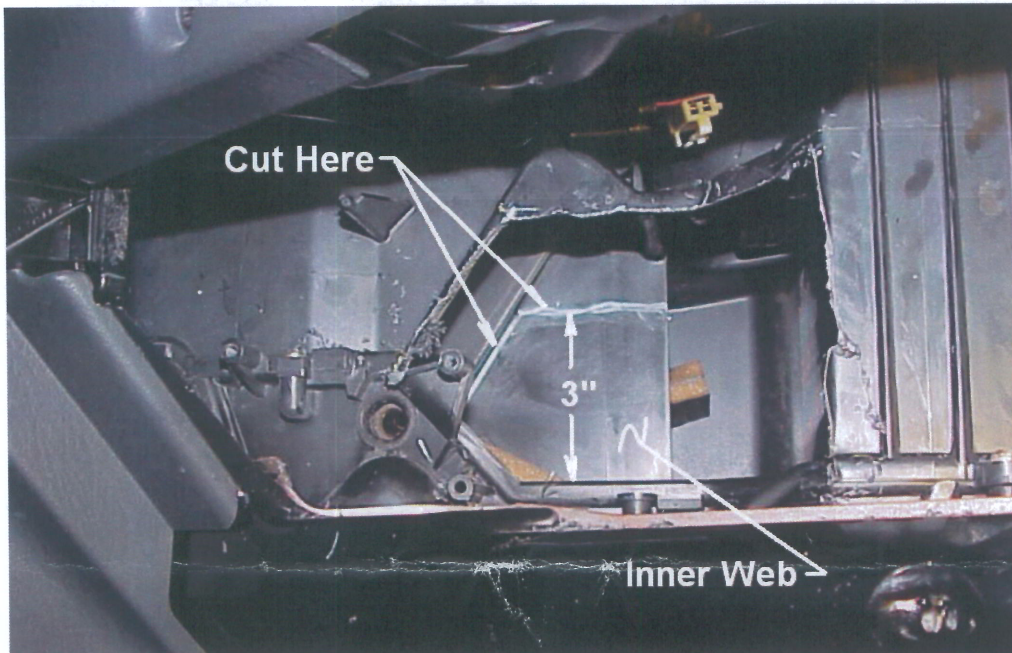


(Figure 4. Pneumatic Drill shown with a 1/8 in Drill Bit)



9. Remove and discard the original outer blend air door.
10. Mark and cut the inner web in the two places marked in Figure 5. Discard the inner web.

NOTE: There will not be any noticeable change in performance with air flow when the inner web is removed.



(Figure 5. Inner Web Cut Locations)

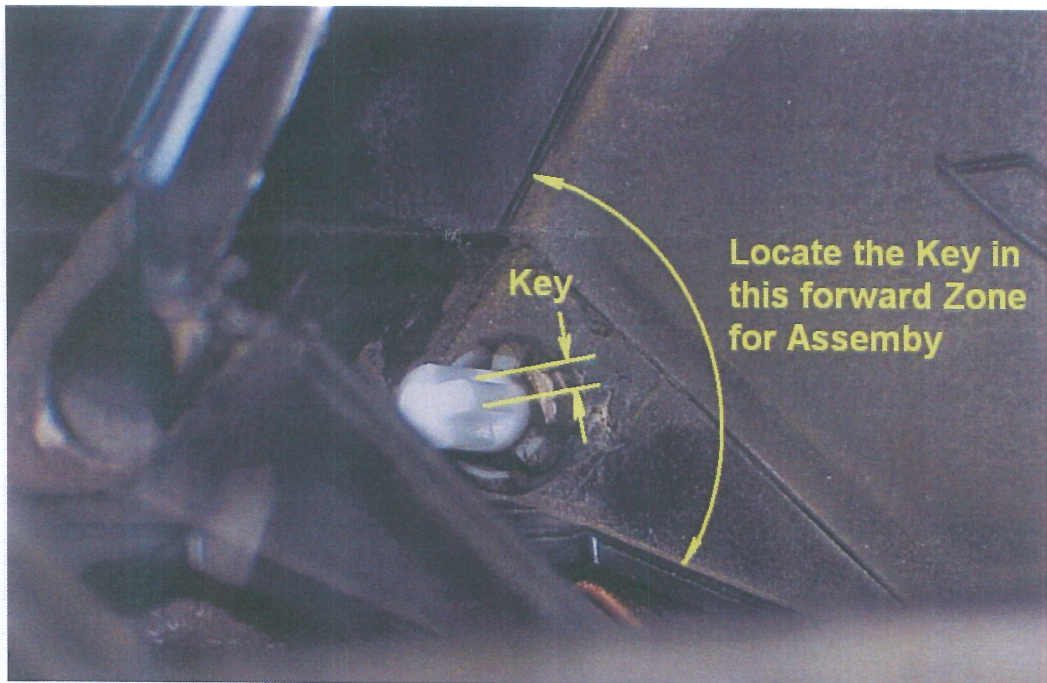
11. Remove and discard the original inner blend air door.
12. Trim and clean all edges on the inner web, new access cover and access hole opening.
13. With a shop vacuum cleaner; clean up all the debris from inside the HVAC housing after the cutting is complete.



(Figure 6. Cutting & Cleaning Complete)

14. Use the following procedure to confirm the inner blend door motor function and inner spindle location. The inner spindle key has to be in the proper position for the new inner door to assemble (Figure 7).
 - a. Plug in the outer blend door motor previously removed (**Both motors have to be plugged in**).
 - b. Turn the ignition key to the "Run" position.
 - c. Turn the passenger climate control temperature knob up with the system in the defrost setting.
 - d. Locate the key on the inner spindle in the forward position (Figure 7) and turn the ignition key to the "OFF" position. Once complete go to step 15.

NOTE: If either motor will not rotate; disconnect the negative battery terminal for 15 seconds and re-connect it to re-set the Automatic Zone Control system. Use an assistant to disconnect the negative battery terminal when the Key is in position. The inner spindle motor is powered directly from the battery circuit.



(Figure 7. Inner Spindle Key shown In Forward Location)

NOTE: If the inner spindle or far side blend air door motor is broken; the I.P. / HVAC must be removed from the vehicle.

- a. Remove the Instrument panel. Refer to section 23. BODY/INSTRUMENT PANEL ASSEMBLY – REMOVAL and INSTALATION PROCEDURES

NOTE: Do not disassemble the IP/HVAC once removed.

- b. Replace the far spindle with the spare supplied in the kit.
- c. Replace the passenger blend air door motor as a separate service part.

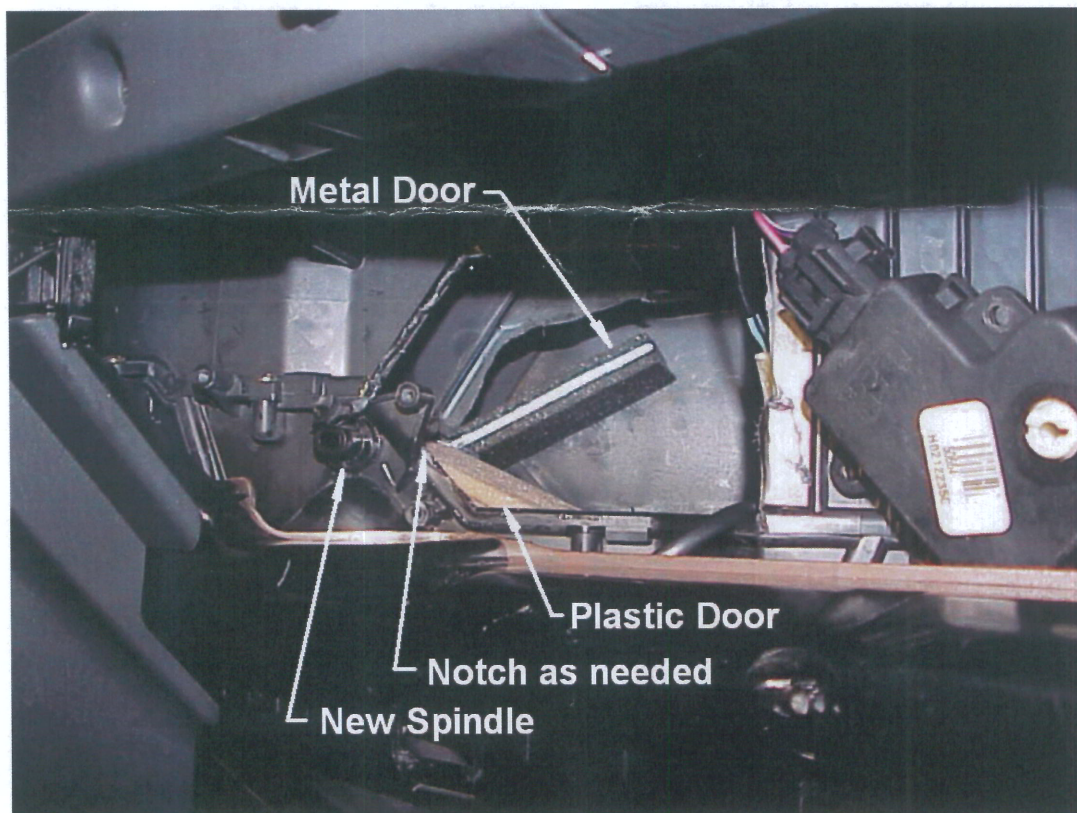


d. Install the IP / HVAC and complete the installation of this service kit.

15. Using the supplied grease, apply small dots of grease to the new blend door pivots and the spindle hole in the housing.
16. **Install the new aluminum blend air door in the back position onto the spindle.** Confirm that the inner web edge has clearance for the metal door to assemble. Trim as required (Figure 8).

NOTE: The aluminum blend air door is always installed in the back position for both Left Hand & Right Hand Drive vehicles. The new plastic door with air dam rib is always located in the front position.

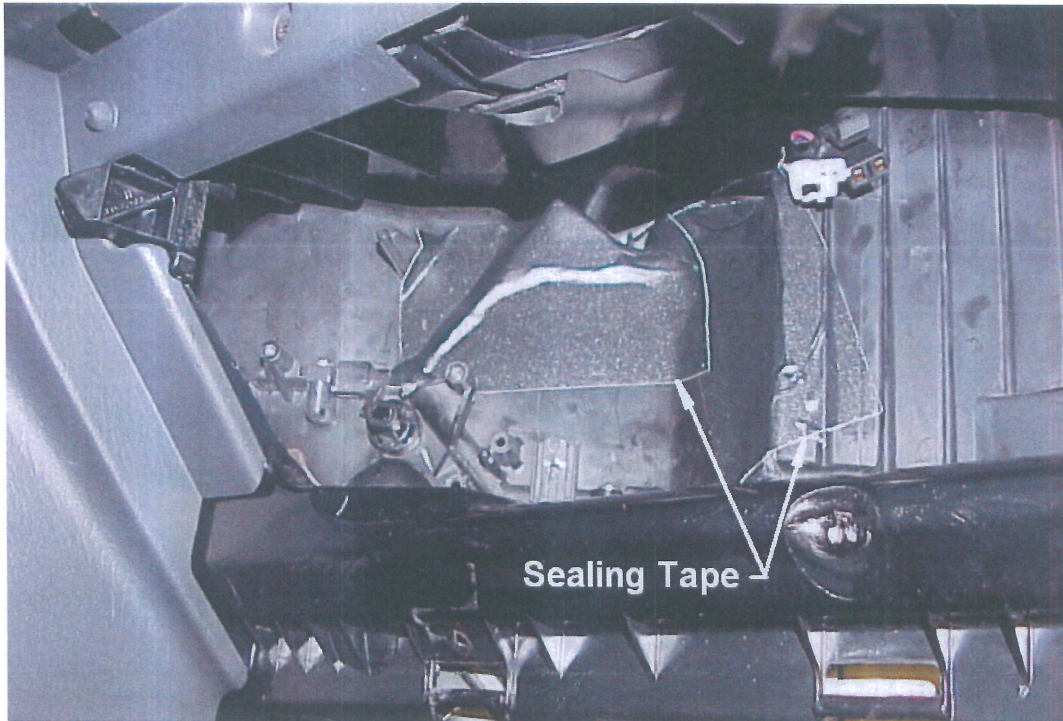
17. Install the new plastic blend air door in the front position. The air dam rib will always face downward (Figure 8).
18. Install the new spindle. The outer door can be actuated by hand. The inner metal door is held in position by the motor (Figure 8).



(Figure 8. New Blend Air Doors and Spindle Assembled with Motor Plugged In)

19. Clean the access panel and area around the access hole in the HVAC with an alcohol wipe or a wax and grease remover.
20. Install the new plastic access panel and attachment screw or clip. Tighten the screw to 2.2 N·m/ 20 in. lbs.

21. Peel and stick the sealing tape over the three open access door edges. Overlap the joints to form an air tight seal (Figure 9).

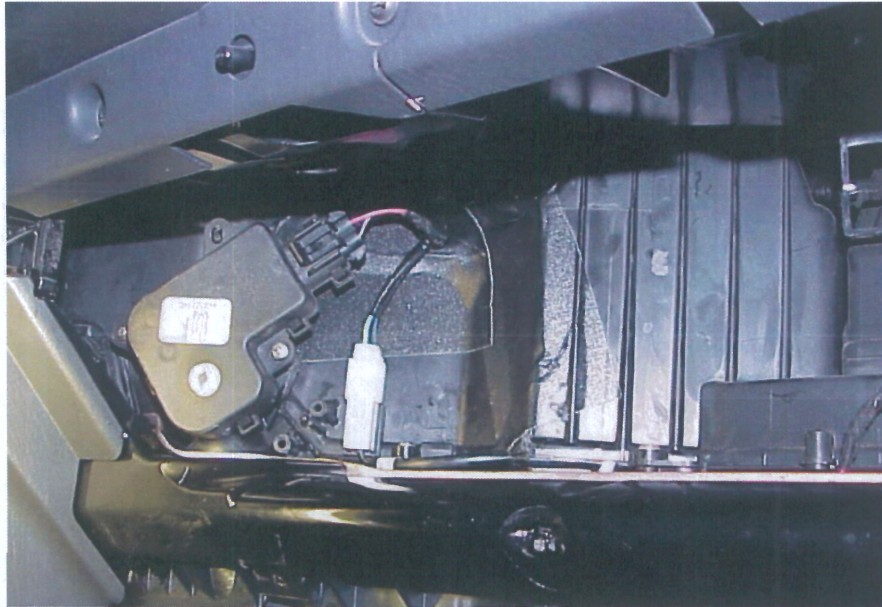


(Figure 9. Sealing Tape Located Over Access Panel Edges)

22. Connect the temperature sensor harness (Figure 10).
23. Install the blend door motor, harness and attachment screws. Tighten the screw to 2.2 N·m/ 20 in. lbs. You may have to rotate the spindle by hand to align it with the motor shaft (Figure 10).

NOTE: If the motor screw holes do not align with the housing when motor shaft is engaged to the spindle, use the following procedure:

- a. Turn the ignition key to the "Run" position.
- b. Turn the Personal Climate Control Knob until the motor holes align with the housing.



(Figure 10. Blend Door Motor, Temperature Sensor Harness and Motor Harness Installed)

24. Re-set the Automatic Zone Control system; **disconnect the negative battery terminal for 15 seconds and re-connect it.**
25. Test and verify that all system mode settings function. The system should recalibrate and function normally after step 24. There will no longer be any active codes or fault codes.
26. Install the Glove Box Door.
27. With a shop vacuum; clean up all the remaining debris in the vehicle's interior.
28. Reset the radio clock to the correct time.