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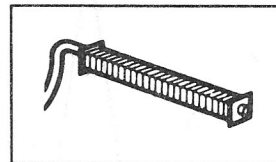
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REVISED EDITION

**AUGUST 1987
ENGLISH EDITION**

**1986 GRAND WAGONEER
J/10 AND J/20 TRUCKS**



HEATING AND AIR CONDITIONING

Attention: Workshop, Parts Department

THIS I.S. NOTE HAS BEEN REVISED AS INDICATED BY THE REVISION BARS:

EVAPORATOR ICING CONDITION

Evaporators on some early production 1986 Grand Wagoneers, J/10 and J/20 trucks may have a problem with the A/C unit putting out extremely cold air for a time, then, gradually warming up until only ambient air is emitted from the air ducts.

Possible Causes

This problem may be the result of evaporator icing. There are two possible causes of this evaporator icing condition:

1. An incorrectly calibrated temperature control module (TCM), and/or,
2. A thermistor probe which has shorted-out.

NOTE: Depending on the heat and humidity, condensation can enter the thermistor probe (thermocouple), causing the thermistor probe to short out and cause the compressor to continue operating. Once the condensation has evaporated, the thermistor probe will usually operate normally again. This normal operation may continue until water re-enters the thermistor probe. Then, the evaporator will ice up again.

Possible Corrections

Service correction involves:

Inspect for a correctly calibrated TCM. This is the first item to check when evaluating for an evaporator icing condition.

If the TCM is not marked with one of the two sets of numbers indicated in the following TCM servicing procedure, then, replace it with a correct unit.

If the TCM is calibrated properly, then replacement of the thermistor probe is necessary.

PROCEDURE

Temperature Control Module Servicing

1. Locate the temperature control module (A). It is mounted just below the steering column, behind the air duct extension (Fig. 1).

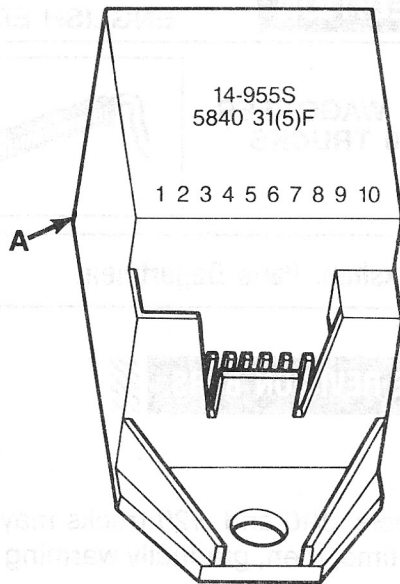


Fig. 1

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2. Remove the temperature control module retaining screw.
3. Lower the temperature control module.

4. Inspect the housing for correct degree marking (B) (Fig. 2).

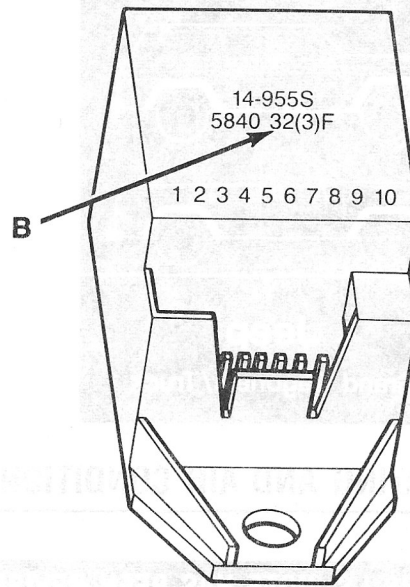


Fig. 2

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The marking on the TCM should read:

31(5)F
or
32(3)F

NOTE: These numbers are to be read:

$31^{\circ}\text{F} \pm 5^{\circ}\text{F}$ ($-1^{\circ}\text{C} \pm 3^{\circ}\text{C}$)
 $32^{\circ}\text{F} \pm 3^{\circ}\text{F}$ ($0^{\circ}\text{C} \pm 2^{\circ}\text{C}$).

5. Replace the temperature control module if it DOES NOT read: 31(5)F or 32(3)F and proceed to Step No. 6.
6. Start the engine.
7. Activate the A/C system.
8. Inspect to verify that the A/C system is operating properly, and that the evaporator icing condition has been eliminated.

Thermistor Probe Servicing

1. Remove the 4WD Selection Switch mounting screws (A) and lower the switch housing (Fig. 3).

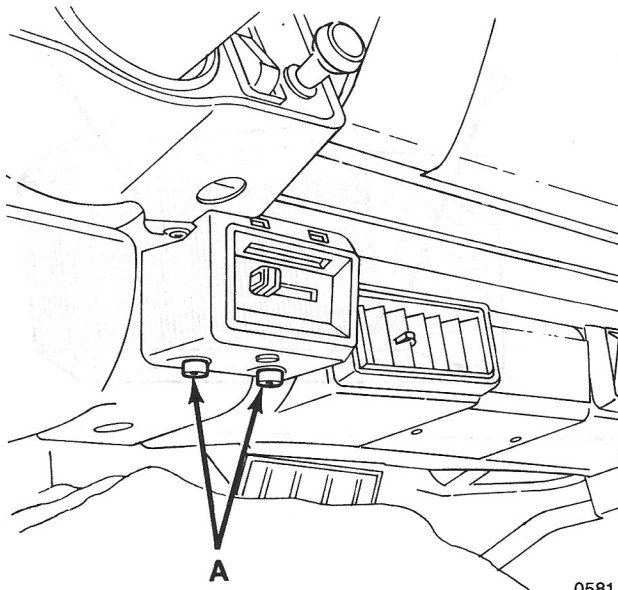


Fig. 3

2. Remove the lower evaporator housing mounting screws (B) (Fig. 4).

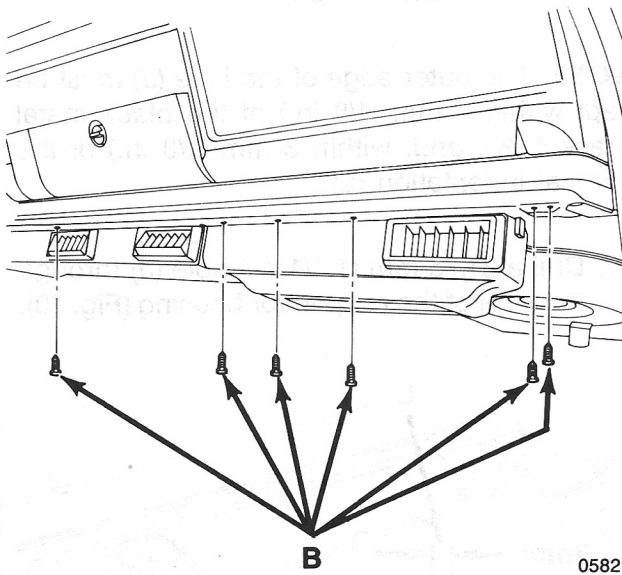


Fig. 4

3. Lower the evaporator housing (C) (Fig. 5).

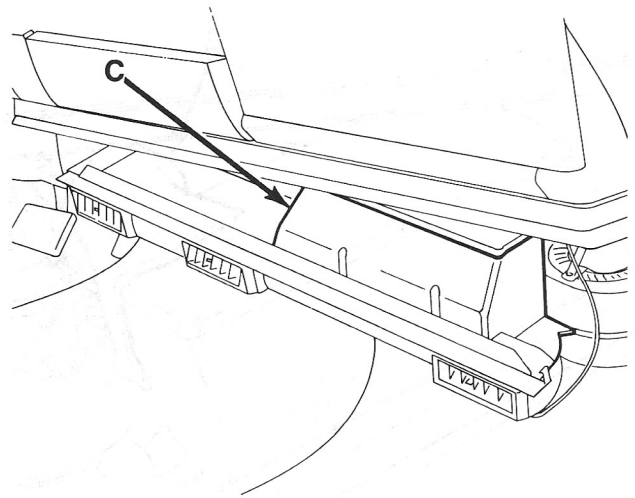


Fig. 5

This will give access to the evaporator housing cover (D) (Fig. 6).

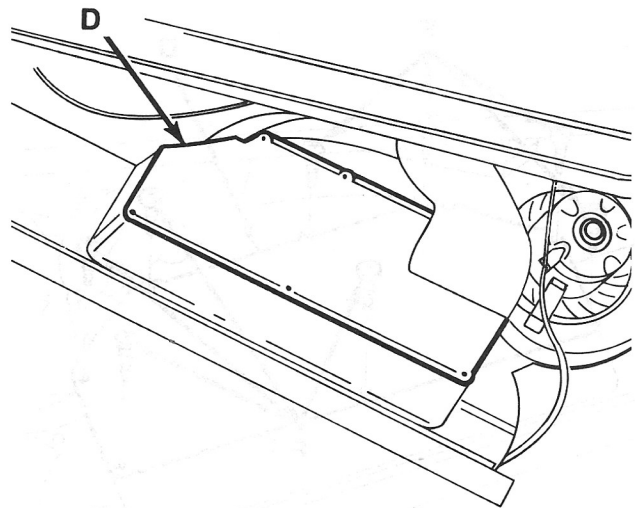


Fig. 6

4. Remove the insulation material (E) (Fig. 7).

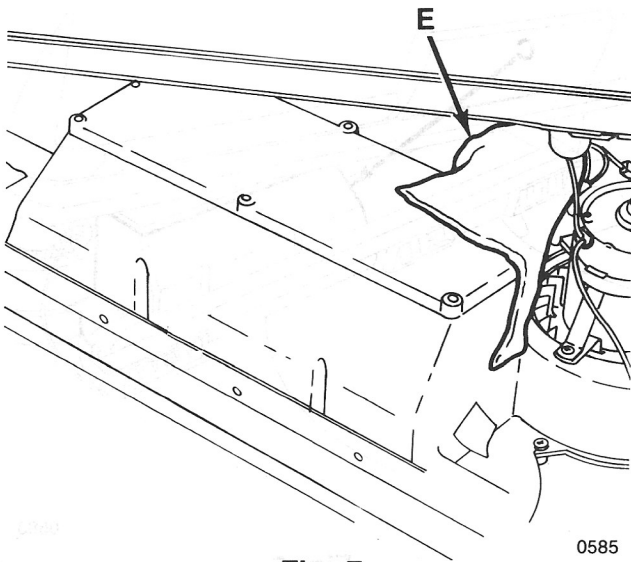


Fig. 7

5. Remove the mounting screws (F) retaining the evaporator housing cover (Fig. 8). Remove the evaporator housing cover (D).

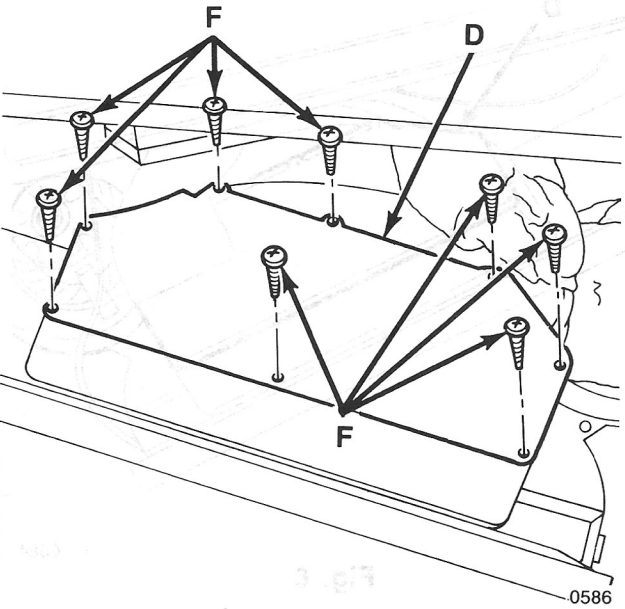


Fig. 8

WARNING: Be sure to perform the following operation with great care. Should the drill bit accidentally penetrate the evaporator core, the freon gas will escape very rapidly. This will discharge the A/C system and may result in personal bodily injury.

6. Place a piece of sheet metal (G) between the evaporator core (H) and the front of the evaporator housing (Fig. 9).

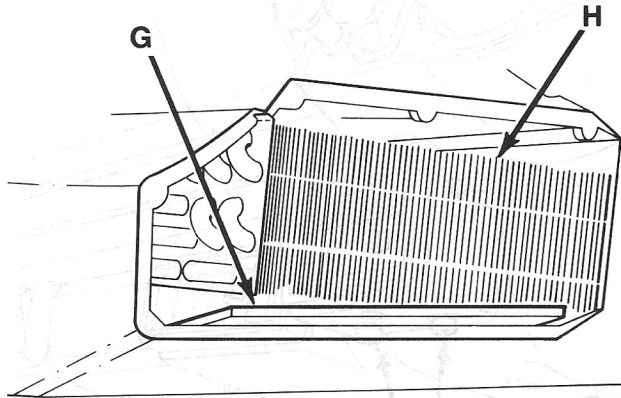


Fig. 9

NOTE: This piece of sheet metal will serve to protect the evaporator core from any accidental damage from the drill bit.

NOTE: The outer edge of the hole (J) must be kept within 3 mm (1/8 in.) of the black metal bracket (K), and, within 3 mm (1/8 in.) of the vertical indentation (L).

7. Drill a 31.75 mm (1 1/4 in.) hole (J) through the front of the evaporator housing (Fig. 10).

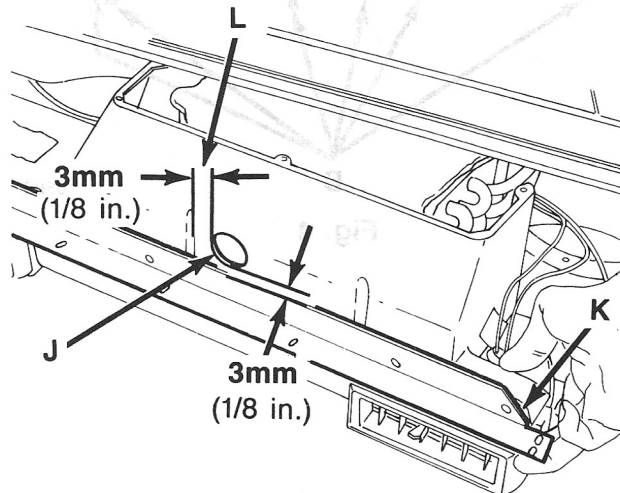


Fig. 10

8. Trim the edges of the hole to protect the thermistor probe from possible damage when it is installed later.

9. Remove the blower motor mounting screws (M) (Fig. 11).

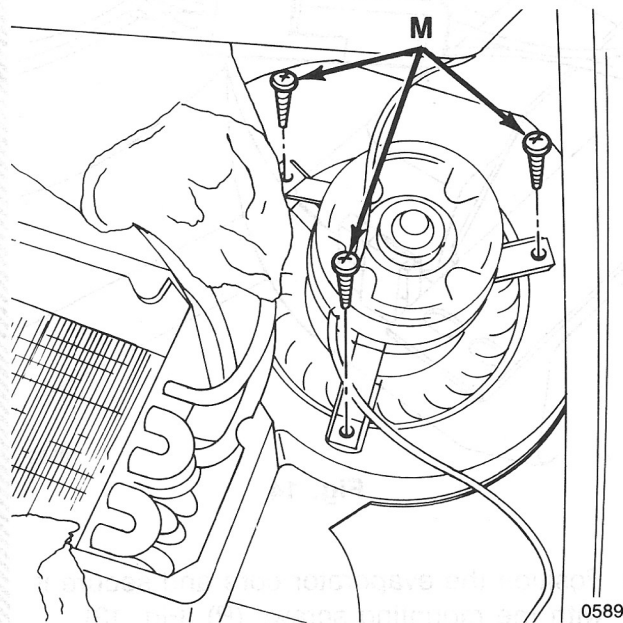


Fig. 11

10. Remove the blower motor (N) (Fig. 12). This will give access to the evaporator mounting screws.

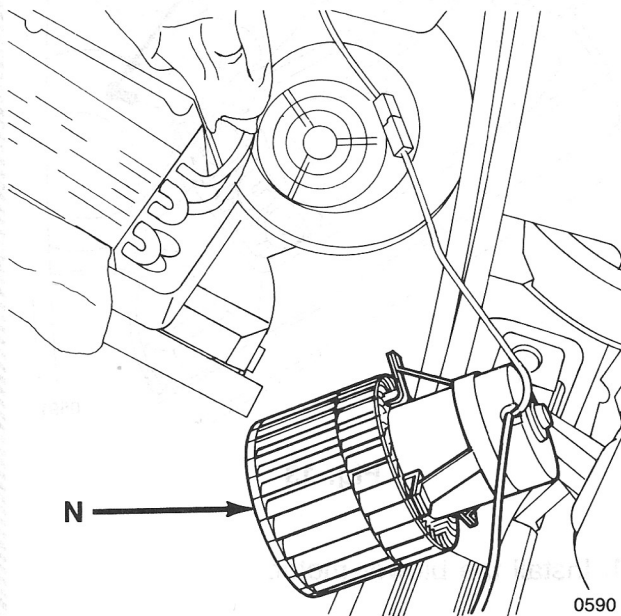


Fig. 12

11. Remove the evaporator core mounting screws (P) (Fig. 13).

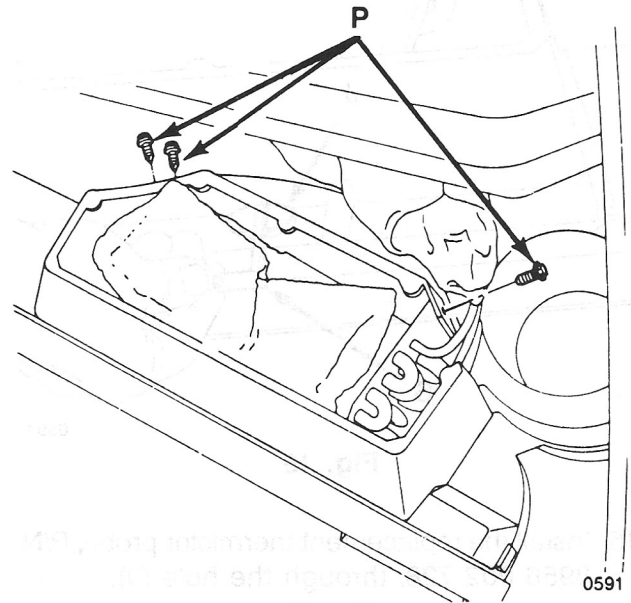


Fig. 13

12. Disconnect the electrical harness connector (R) (Fig. 14).

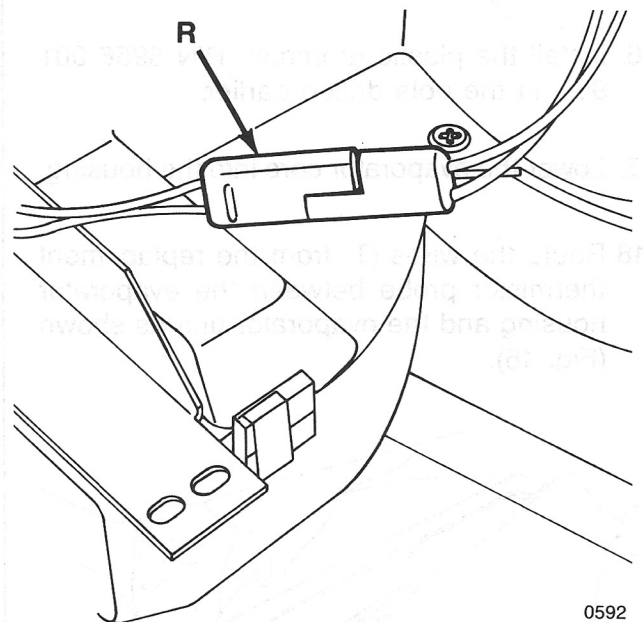
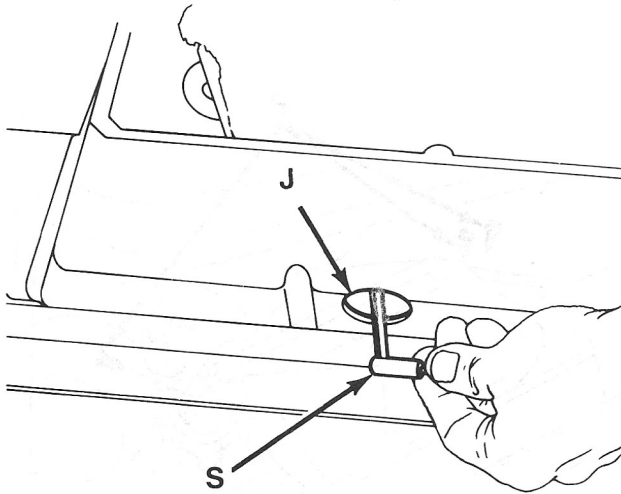


Fig. 14

13. Lift the evaporator core partially out of the evaporator housing to gain access to the thermistor probe.

14. Remove the thermistor probe (S) through the hole (J) which was cut out earlier (Fig. 15).



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Fig. 15

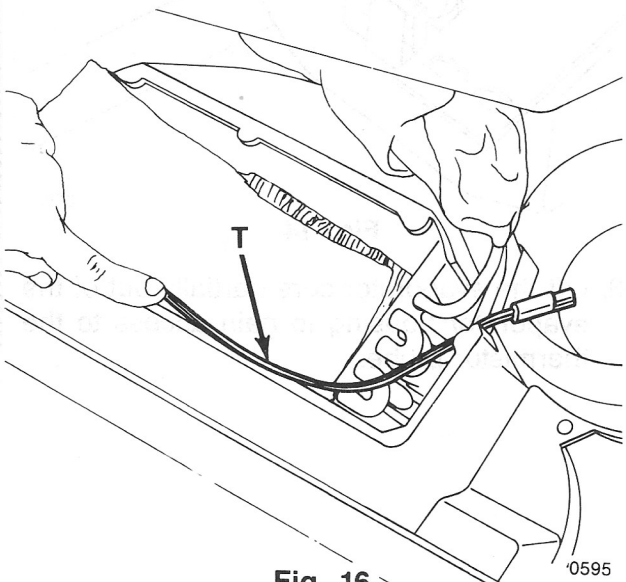
15. Install the replacement thermistor probe, P/N 8956 002 728, through the hole (J).

NOTE: If it is not possible to put the replacement probe into the same hole left by the defective probe, then, be sure to position the replacement thermistor probe into the evaporator housing as low and as far to the left as possible.

16. Install the plastic grommet, P/N 8956 001 959, in the hole drilled earlier.

17. Lower the evaporator core into the housing.

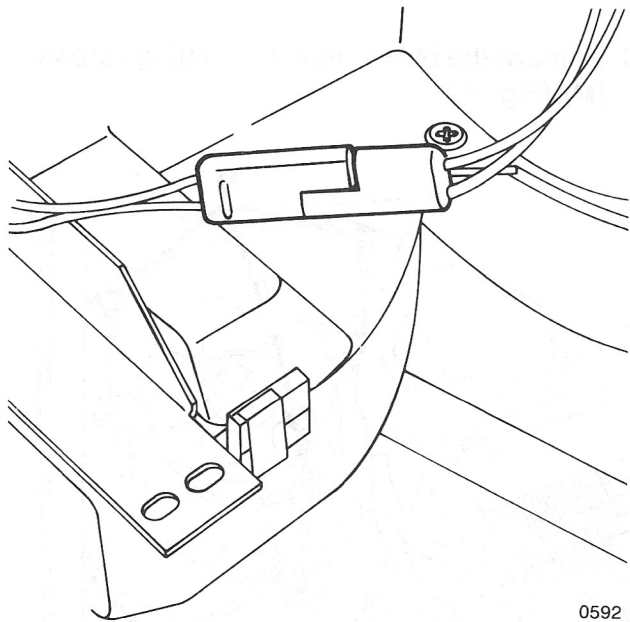
18. Route the wires (T) from the replacement thermistor probe between the evaporator housing and the evaporator unit as shown (Fig. 16).



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Fig. 16

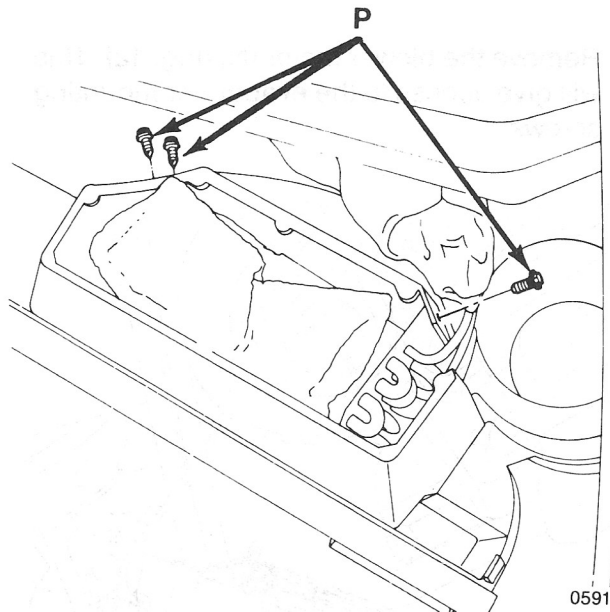
19. Connect the thermistor connector to the electrical harness connector (Fig. 14).



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Fig. 14

20. Position the evaporator core and secure it with the mounting screws (P) (Fig. 13).



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Fig. 13

21. Install the blower motor.
22. Install the evaporator housing cover.
23. Install the insulation.

24. Position the evaporator housing and secure it with the mounting screws.

25. Attach the ground wire (U) with mounting screw (V) (Fig. 17).

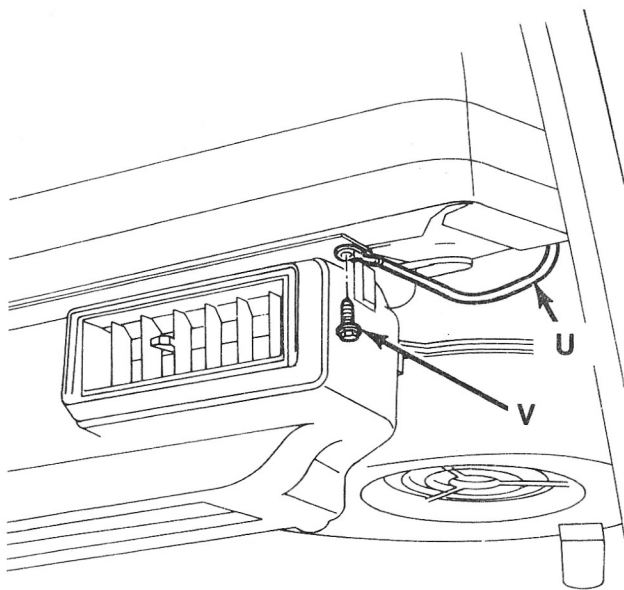


Fig. 17

26. Position the 4WD Selection Switch and secure it with mounting screws.

27. Start the engine.

28. Activate the A/C system.

29. Inspect to verify that the A/C system is operating properly, and, that the evaporator icing condition has been eliminated.

PARTS INFORMATION

DESCRIPTION	QUANTITY	PART NUMBER
TEMPERATURE CONTROL MODULE	1	8956 001 959
THERMISTOR PROBE (Thermo Couple)	1	8956 002 728
PLASTIC GROMMET	1	8956 001 959

SRT/TIC INFORMATION

OPERATION DESCRIPTION	OPERATION NUMBER	TIME	TIC	SUPPLIER CODE
CO. TEMPERATURE CONTROL MODULE — REPLACE (Inc. Inspection)	6726	0.2	6-242	708, 755
CO. THERMISTOR PROBE — REPLACE	0607	0.7	6-242	708, 733

SUPPLIERS: 708 Robert Shaw
755 American Air

FILING INSTRUCTIONS

Record this I.S. Note on page L-28 of M.R. 253 and file it in the binder.

Discard the previous M.R. 253 I.S. Note 12E (Rev.), P/N 8980 001 350.