

Subject: REMOTE START CAUSES HVAC1 OR IGN1 FUSE TO BLOW - INSTALL LOAD REDUCTION RELAY SERVICE HARNESS	Bulletin No: 01-046/08
	Last Issued: 10/1/2008

APPLICABLE MODEL(S)/VINS

2007-2008 CX-7

2007-2008 CX-9

DESCRIPTION

Some vehicles equipped with accessory remote start may experience an inoperative wiper/washers and/or the HVAC system after starting the vehicle using the remote start feature. After the customer enters the vehicle and manually turns the ignition switch to the ON position, the wiper/washers and the HVAC system will be operational.

The cause may be the wipers were left in the ON or AUTO position during an overnight freeze. The wipers will freeze to the windshield and cause an electrical overload as the wipers attempt to operate after starting the vehicle using the remote start feature. The HVAC1 fuse and/or the IGN1 fuse located in the remote start module will blow to protect the system during the electrical overload causing the wiper/washers and/or the HVAC system to be inoperative.

IMPORTANT:

- Once the customer enters the vehicle and manually turns the ignition switch to the ON position, the wiper/washers and the HVAC system will be operational. The fault is contained in the remote start module and does not effect normal operation of the wiper/washers and the HVAC system once the ignition is turned on. After the ignition is turned on, the wiper/washers and the HVAC system are powered as designed through the vehicles electrical system.

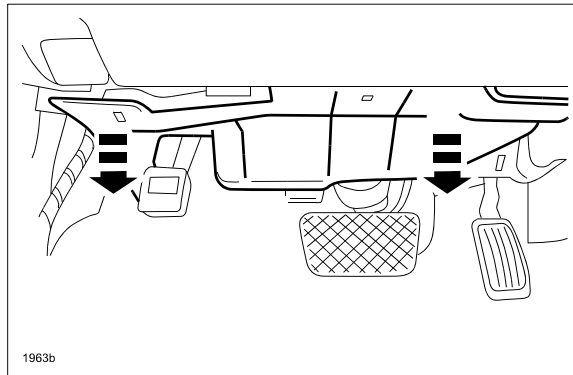
Customers having this concern should have their vehicle repaired using the following repair procedure.

REPAIR PROCEDURE

NOTE:

- Installation instructions are also included with the load reduction relay harness kit.
1. Verify customer concern.
 2. Record customer radio station presets.
 3. Disconnect negative battery cable.

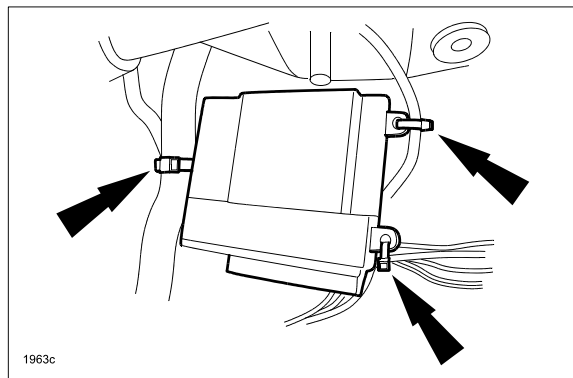
4. Remove the driver-side dashboard under cover. Refer to appropriate Workshop Manual section 09-17 DASHBOARD UNDER COVER REMOVAL / INSTALLATION - DRIVER SIDE.



5. Check the remote start module for blown HVAC1 or IGN1 fuse.

NOTE:

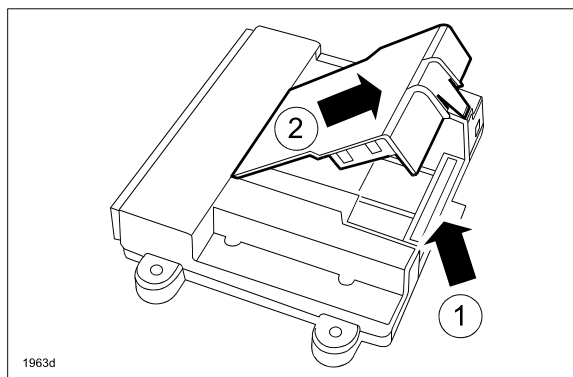
- To access the remote start module, it may be necessary to cut the 3 tie-straps.
- a. Locate the remote start module mounted high up above the driver-side kick panel.



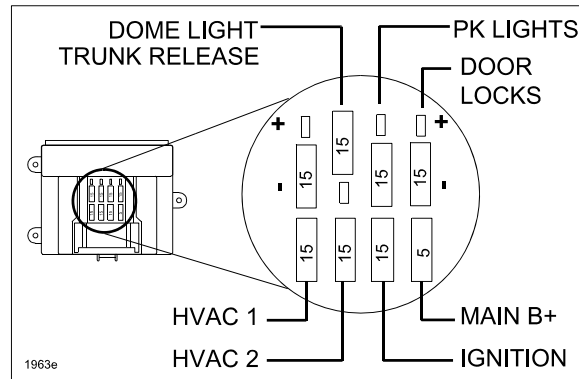
- b. Remove the DNA cover by lifting the rear of the cover upward, and sliding away from the module.

CAUTION:

- Use care not to bend the terminals when removing and installing the DNA cover.



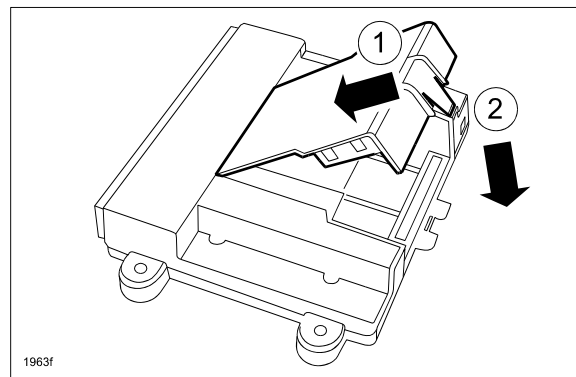
c. Visually inspect the HVAC1 and IGN1 fuses. Replace if necessary.



d. Install the DNA cover.

CAUTION:

- Use care not to bend the terminals when removing and installing the DNA cover.

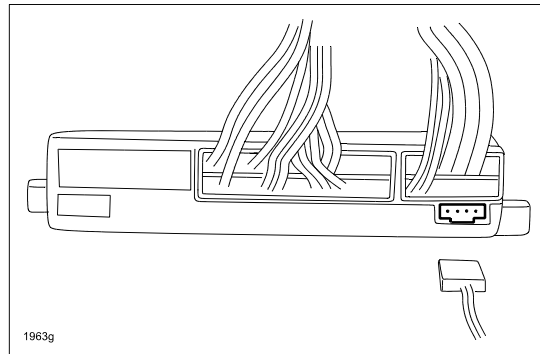


6. Install the load reduction relay harness.

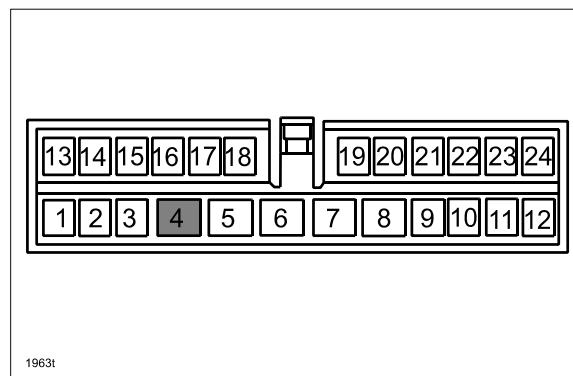
- a. Unplug the 10-pin and 24-pin connectors from the remote start module by pressing the center lock tab down on each connector and pulling outward.

NOTE:

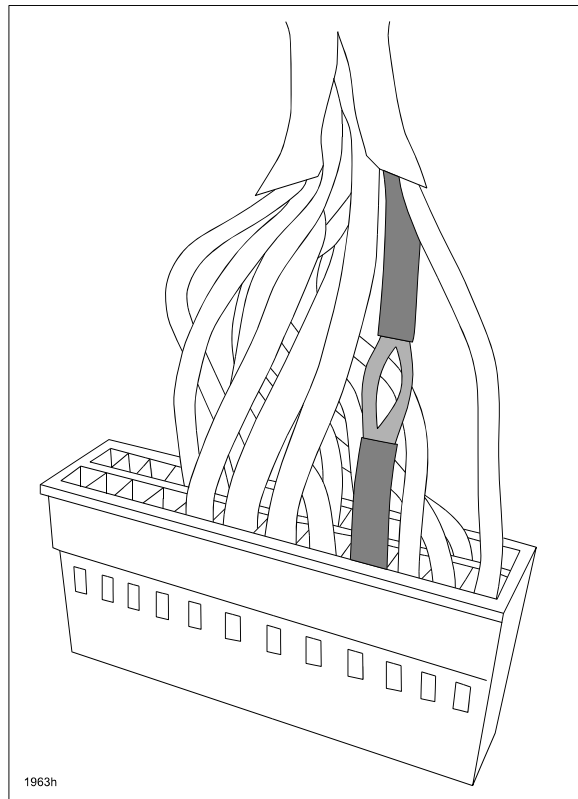
- Removal of the 4-pin immobilizer harness connector may ease in the removal of the 10-pin connector.



- b. Carefully cut back 1-2" of the electrical tape to expose the wiring of the 24-pin connector.
- c. Locate the wire in terminal 4 of the 24-pin connector.
 - CX-7 - Black/Red
 - CX-9 - White/Black

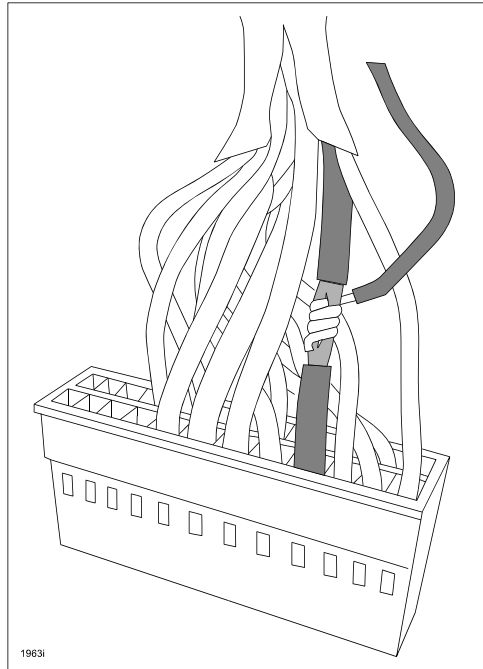


- d. Carefully strip away 3/4" of the sheathing from the wire.
- e. Using a scratch awl tool, pierce the center of the stripped section of the wire and create an eyelet to allow for additional wires as shown.

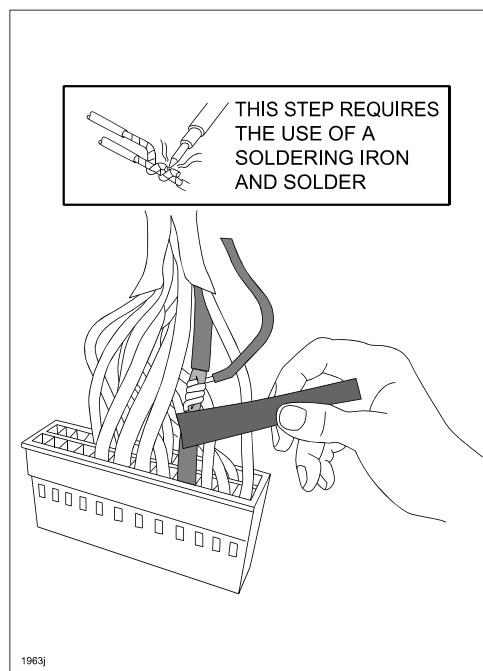


- f. Remove the pre-stripped insulation from the Red/White wire of the load reduction relay harness and insert it through the eyelet made in the Black/Red wire (CX-7) or White/Black wire (CX-9) of the remote start harness.

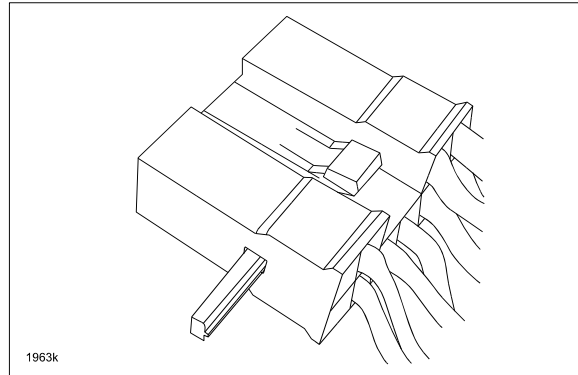
- g. Twist the Red/White wire of the load reduction relay harness around the Black/Red wire (CX-7) or White/Black wire (CX-9) of the remote start harness.



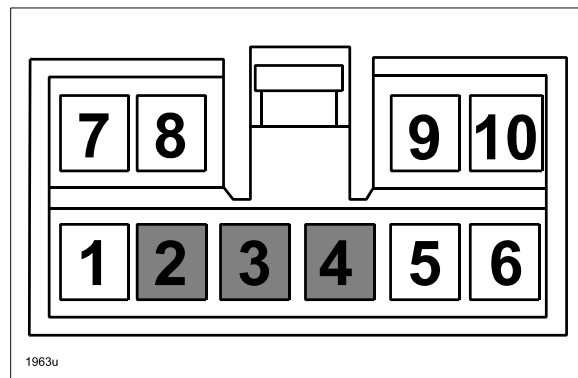
- h. Solder the Red/White wire of the load reduction relay harness to the Black/Red wire (CX-7) or White/Black wire (CX-9) of the remote start harness. Insulate the connection with electrical tape and ensure no bare wires are exposed.



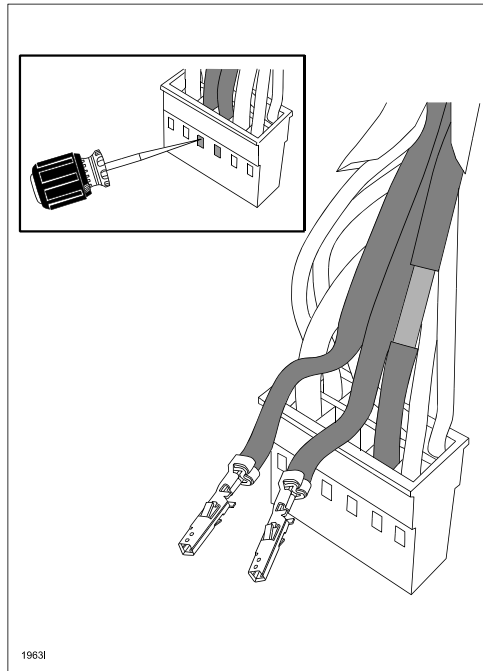
- i. Locate the 10-pin connector. Using a scratch awl tool, carefully push out the secondary lock from the smaller of the two ends until completely removed from the 10-pin connector as shown.



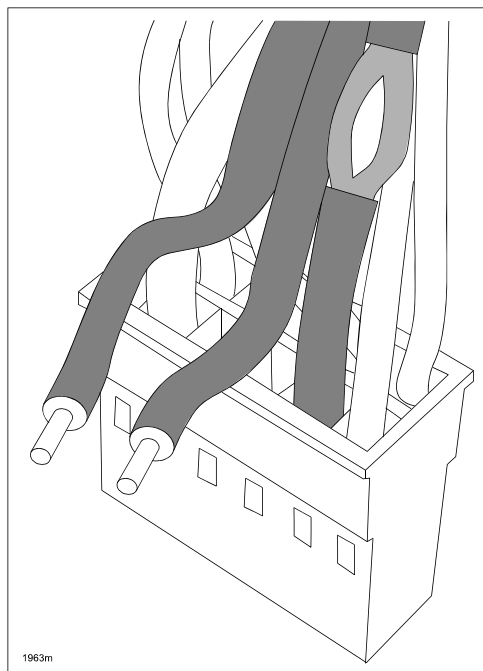
- j. Using a razor knife, carefully cut back 1 - 2" of the electrical tape to expose the wiring of the 10-pin connector.
- k. Locate the following wires in the 10-pin connector.
- CX-7 - Pink/Yellow (Terminal 3) and Gray/Yellow (Terminal 4)
 - CX-9 - Blue (Terminal 3) and Black/Red (Terminal 4)



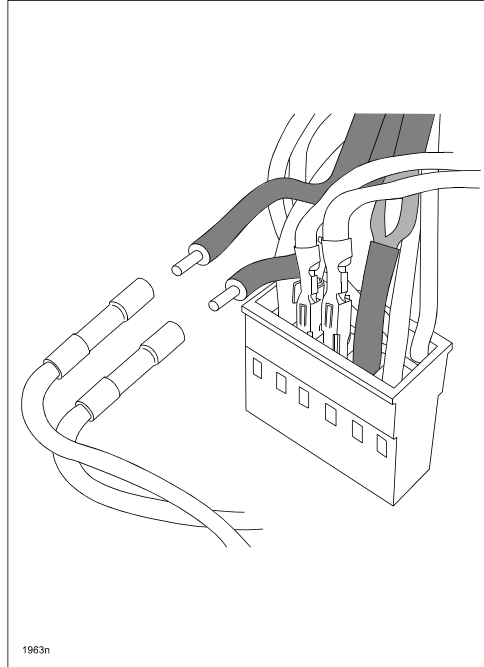
- I. Using a scratch awl tool, carefully bend down the terminal retaining tabs to remove these wires (1, 2) from the 10-pin connector.



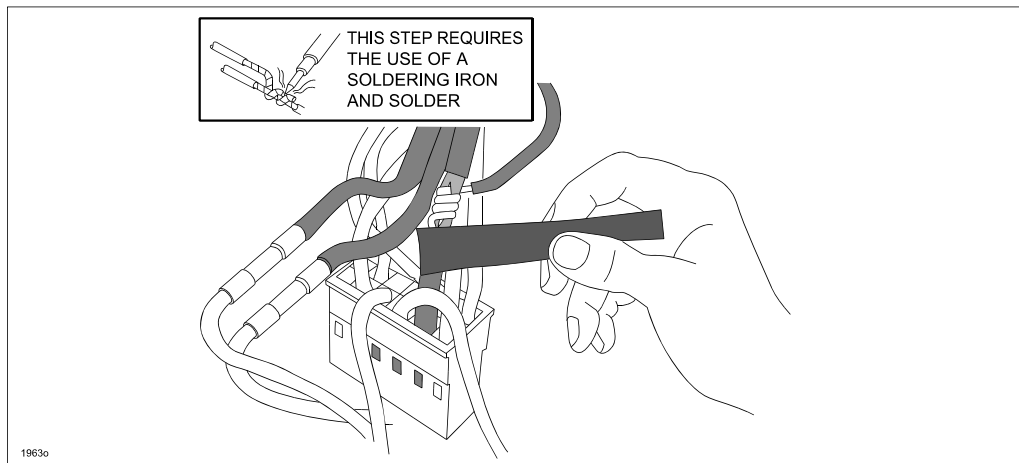
- m. Locate the Red wire in terminal 2 of the 10-pin connector. Carefully strip away 3/4" of the insulation from the Red wire (3).
- n. Using a scratch awl tool, pierce the center of the stripped section of the wire and create an eyelet to allow for additional wires.



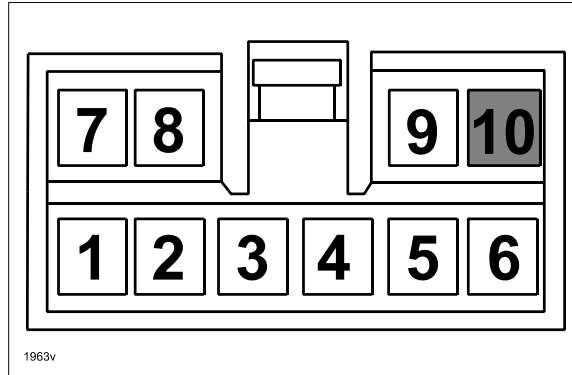
- o. Cut off the terminals from the Pink/Yellow and Gray/Yellow wires (CX-7) or Blue and Black/Red wires (CX-9). Carefully strip away 3/8" of insulation to expose the wire ends (1, 2).
- p. Using wire crimpers, carefully crimp the Pink wire (with butt connector) of the load reduction relay harness to the stripped end of the Gray/Yellow wire (CX-7) or Blue wire (CX-9).



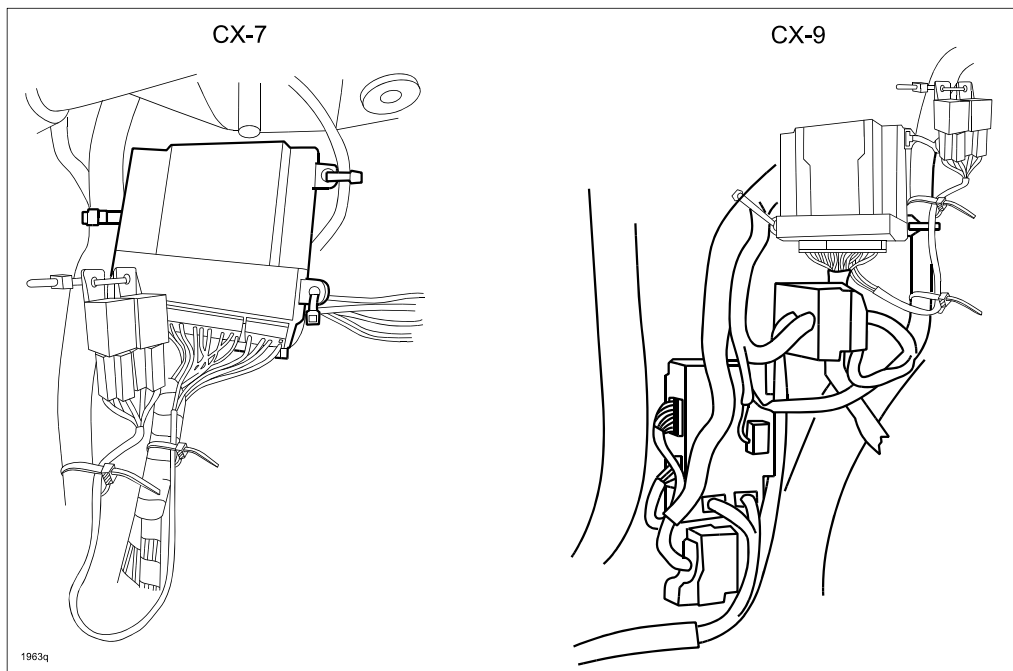
- q. Using wire crimpers, carefully crimp the Orange wire (with butt connector) of the load reduction relay harness to the stripped end of the Pink/Yellow wire (CX-7) or Black/Red wire (CX-9).
- r. Carefully insert the Pink/White wire with terminal from the load reduction relay harness into terminal 3 of the remote start 10-pin harness connector. Ensure the terminal "clicks" in place and is completely seated in the connector.
- s. Carefully insert the Orange/White wire with terminal from the load reduction relay harness into terminal 4 of the remote start 10-pin harness connector. Ensure the terminal "clicks" in place and is completely seated in the connector.
- t. Insert the Red wire of the load reduction relay harness through the eyelet made in the Red wire (terminal 2 of the 10-pin connector) of the remote start harness.



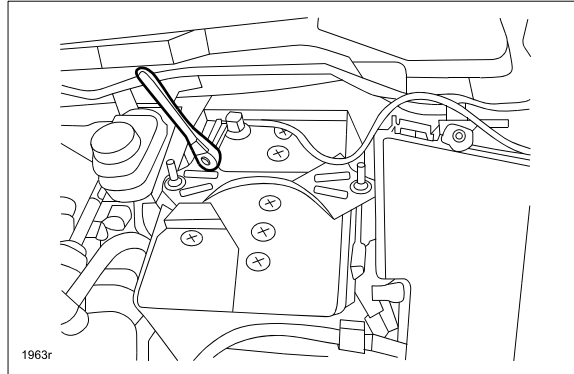
- u. Twist the Red wire of the load reduction relay harness around the Red wire of the remote start harness.
 - v. Solder the Red wire of the load reduction relay harness to the Red wire of the remote start harness. Insulate the connection with electrical tape and ensure no bare wires are exposed.
7. Carefully insert the Blue/Black wire with terminal from the load reduction relay harness into terminal 10 (currently empty) of the remote start 10-pin harness connector.



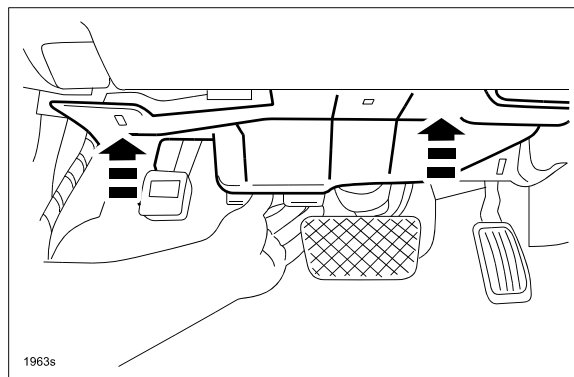
8. Reinstall the secondary lock into the 10-pin harness connector.
9. Install the remote engine start module and load reduction relay harness.
- a. Plug all disconnected connectors into the remote engine start module.
 - b. Locate the large factory wire harness high up under the dashboard - running near the vehicle dash wall as shown.
 - c. Using (3) supplied, long tie straps, secure the remote start control module to the large factory harness.
 - d. Route the load reduction relay harness upward and secure to the large factory harness with (3) supplied, long tie straps.



10. Power-up the system.
 - a. Verify that all connections are secure.
 - b. Turn the ignition switch to RUN position.
 - c. Reconnect the negative battery cable.



- d. Turn the ignition switch to the OFF position.
11. Perform a functional test of the remote engine start system.
 - a. Ensure the key is removed from the ignition switch and the hood is closed. Press the start button on the remote engine start transmitter twice within 3 seconds. The parking lights should flash one time, the horn should beep once, then the vehicle should crank and start. Once started, the parking lights will turn on and stay on signifying the vehicle is running.
 - b. Check the HVAC system to ensure heat and A/C is on and moving air. Adjust fan speed to high, if necessary.
 - c. Start vehicle with ignition key to ensure proper vehicle operation.
12. Install the driver-side dashboard under cover. Refer to appropriate Workshop Manual section 09-17 DASHBOARD UNDER COVER REMOVAL / INSTALLATION - DRIVER SIDE.



13. Input customer radio station presets.
14. Initialize the auto up/down power window features.
15. Verify repair.

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Last Issued: 10/1/2008

PART(S) INFORMATION

Part Number	Description	Qty.	Notes
0000-8F-Z30	Load reduction relay service harness	1	---

WARRANTY INFORMATION

NOTE:

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under Mazda's New Vehicle Limited Warranty term.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	86
Damage Code	9Q
Part Number Main Cause	0000-8F-Z30
Quantity	1
Operation Number / Labor Hours:	YY531XRX / 1.5 Hrs