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CRUISE CONTROL SYSTEM
Article Text
1984 Mazda RX7
For iluvmyrx7.com

Saturday, June 08, 2002 05:03PM

ARTICLE BEGINNING

1984 CRUISE CONTROL SYSTEMS
Mazda

RX7

DESCRIPTION

Main switch is used to turn system on and off. A control switch with "SET (ACCEL)" and "COAST (RESUME)" is used to set desired speed. System will not operate at speeds under 25 MPH. Main switch is located on the right side of dash. Control switch is on right side of steering column.

OPERATION

MAIN SWITCH

Pressing the main switch activates the cruise control.

CONTROL SWITCH

When "SET" switch is pressed and then released, desired speed is set. If switch is continuously pressed, the vehicle will accelerate until switch is released, at which time the new or higher speed will be set.

When "COAST" switch is moved down or rearward, speed will be reduced. When switch is released, the new or lower speed will be set. If cruise control is overridden by means other than the main switch, original speed can be resumed by operating switch forward or up.

TROUBLE SHOOTING

CRUISE CONTROL SYSTEM DOES NOT WORK

Blown fuse. Faulty main switch, control switch, speed sensor or actuator. Malfunction of stop, clutch or inhibitor switch. Bad ground or wiring.

SPEED SETTING CAN'T BE CANCELED

Faulty control unit. Malfunction of clutch, stop or inhibitor switch.

SET SPEED IS NOT HELD

Faulty actuator, control unit or speed sensor. Actuator control cable malfunction.

SYSTEM DOESN'T ENGAGE IMMEDIATELY

Faulty actuator, control switch or unit. Actuator control cable malfunction.

TESTING

Test RX7 system with ACC Checker (49 9200 010). See Fig. 1.

Items (main switch, actuator-VAC, actuator-VENT 2, actuator-VENT 1, clutch/brake switch, combination/inhibitor switch and generator) are verified by check lights on checker.

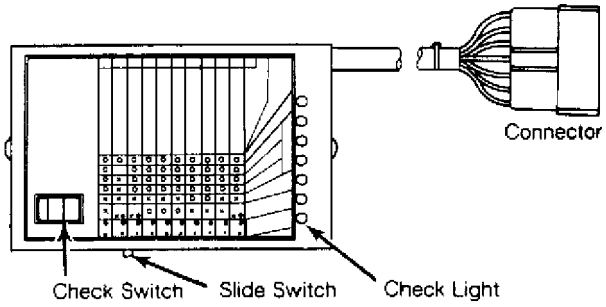

Fig. 1: RX7 Cruise Control Checker

During tests, generator light may be on or off.

Checker also has 2 switches, a check switch and slide switch. Check switch checks actuator operation with the engine running. When this switch is held on with engine running, engine RPM is increased and held to 2000-3000. If RPMs do not come up, adjust free play of actuator inner cable. Free play is .28-.51" (7-13 mm) for 12A engines and .24-.43" (6-11 mm) for 13B engines. Slide switch should be moved to the "H" position before check switch is used.

NOTE: When connecting Checker, turn ignition off. When performing all steps below, main and ignition switch must be on.

1) When testing main switch continuity, all lights except clutch/brake switch and combination/inhibitor switch should be on. If all lights are off, check fuse, connectors, ignition and main switches.

2) To test inhibitor switch continuity, depress brake pedal and shift into "D". See step 1) for correct lighting response. If combination/inhibitor light is on, check wiring and switch.

3) To test brake switch continuity, shift lever to "D" and depress brake pedal. All lights except combination/inhibitor switch should be on. If clutch/brake switch light is off, check this switch and wiring.

4) To test clutch switch continuity, depress clutch pedal. See step 3) for correct lighting response. If clutch/brake switch light is out, check clutch switch and wiring.

5) To test "SET", "COAST" or "RESUME" position of combination switch, shift lever to "D" and turn switch to appropriate position. Clutch/brake switch light should be off. If combination inhibitor switch light is off, check appropriate switch and wiring.

6) Start engine and put shift lever to "N". For automatic transmission, all lights except combination/inhibitor switch should be on. For manual transmission, this light should be off. Test actuator operation by setting slide switch "H". Then turn check switch "ON" and hold.

7) Engine speed should increase to 2000-3000 RPM, and all lights should be out except combination/inhibitor switch (automatic transmissions only. On manual transmission light will be on). VAC light should go from off to on.

8) To check speed sensor output, drive vehicle slowly. All lights except clutch/brake and combination/inhibitor switch should be on. If generator light does not flash, speed sensor or wiring is faulty. If no abnormalities exist when using Checker, replace cruise control unit.

NOTE: After the above tests, check actuator solenoid resistance.

WIRING DIAGRAM

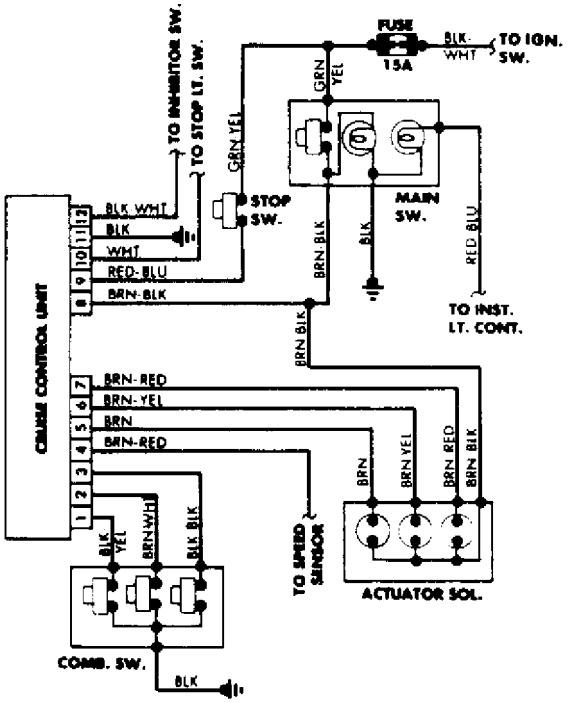

Fig. 2: Mazda RX7 Cruise Control Wiring Diagram

END OF ARTICLE

INSTRUMENT PANEL - STANDARD
Article Text

1984 Mazda RX7
For iluvmyrx7.com

Saturday, June 08, 2002 05:14PM

ARTICLE BEGINNING

Switches & Instrument Panels
MAZDA

DESCRIPTION & OPERATION

All models have a steering column mounted combination switch to control turn signals, headlights and wipers. The instrument cluster contains a speedometer, fuel gauge and water temperature gauge.

Some models also have a tachometer, voltmeter and oil pressure gauge. The fuel and temperature gauges operate on 7 volts, supplied by a cluster-mounted voltage regulator. The sending units are variable-resistance type and have the same resistance values on all models.

TESTING

GAUGES

1) Turn ignition on. If gauge needles do not move at all, check for blown fuse or broken power wire. If both gauges are inoperative, voltage regulator may be the cause. If only one gauge does not work, the gauge, sending unit, or connecting wiring may be at fault.

2) To test temperature gauge, disconnect sending unit wire. Connect a resistor between wire and ground, then check gauge reading. Change resistance and recheck. If gauge readings are as shown in tables, replace sending unit. If not, repair wiring or replace gauge.

3) To test fuel gauge, disconnect wire to sending unit at fuel tank . Connect resistor between positive and negative terminals of the unit. Check gauge reading.

NOTE: Allow 2 minutes for gauge reading to stabilize. It should be within 1 pointer width of line on gauge face. See Fig. 1.

4) If gauge readings are incorrect, replace gauge. If readings are okay, test in-tank sending unit before replacing it. Resistance should measure 1-5 ohms with float raised (RX7) or 3 ohms (Pickup and 626), and 103-117 ohms (RX7) or 110 ohms (Pickup and 626) with float lowered. If not, replace sending unit.

RESISTANCES FOR FUEL GAUGE TESTING

Needle Position	Test Resistor
Full Line	(1) 7 ohms
Half Tank	33 ohms
Empty Line	(2) 95 ohms

(1) - On Pickup and 626, 3 ohms.
(2) - On Pickup and 626, 110 ohms.

RESISTANCES FOR TEMPERATURE GAUGE TESTING

Model	Cold Line	Hot Line
GLC Wagon & 626	233 ohms	16 ohms
RX7	104 ohms	21 ohms

GLC ..... 154 ohms ..... 12 ohms

REMOVAL & INSTALLATION

INSTRUMENT CLUSTER

Removal (GLC)
Disconnect battery ground. Remove steering wheel. Remove meter hood by moving it up and down with hands. Disconnect speedometer cable and remove 4 cluster bolts. Twist upper part of meter and remove, being careful to avoid the pad. Unplug wiring.

Installation
To install, reverse removal procedure.

Removal (626)
Disconnect battery ground. Remove screws, meter cover and hood, illumination light, connector and meter cable and meter. Disconnect speedometer cable. Pull cluster down, and remove.

Installation
To install, reverse removal procedure.

Removal (Pickup)
Disconnect battery ground. Remove steering wheel and column cover. Disconnect speedometer cable. Remove cluster hood and mounting screws. Pull cluster back, unplug wiring and remove cluster.

Installation
To install, reverse removal procedure.

Removal (RX7)
Disconnect battery ground. Remove steering wheel and speedometer cable. Remove column covers, cluster and combination switches. Remove meter hood. Unplug wiring and remove cluster.

Installation
To install, reverse removal procedure.

COMBINATION SWITCH

Removal
Disconnect battery ground. Remove steering wheel. Remove column covers and snap ring at top of column (if equipped). Unplug wiring connectors. Loosen combination switch screw. Remove switch.

Installation
To install, reverse removal procedure.

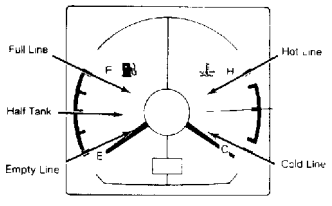

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Fig. 1: Gauge Testing Needle Locations
GLC is shown. Needle should indicate proper reading when test resistor is connected.

WIPER/WASHER SYSTEM
Article Text

1984 Mazda RX7
For iluvmyrx7.com

Saturday, June 08, 2002 05:15PM

ARTICLE BEGINNING

1984 Wiper/Washer Systems
MAZDA

DESCRIPTION

All models have a 2-speed wiper motor, some with intermittent wipe feature. GLC and RX7 models may be equipped with a rear window wiper/washer system. The wiper lever is on the right side of column on all except some 626. A time delay relay is used to control the intermittent cycle on all except RX7 models. On RX7, wipers are timed by the "Control Processing Unit" that also operates a number of other accessories.

OPERATION

The wipers are controlled by a lever on the right side of the steering column. As the lever is moved down, it switches the wipers to intermittent, low speed and high speed. If the lever is pulled toward the steering wheel, the washer sprays.

If the lever is pushed away from the steering wheel, the wipers sweep until it is released. The rear wiper/washer is controlled by a rocker switch on the instrument panel (GLC) or push button (626). The RX7 rear wiper switch is on the console.

TESTING

WIPER MOTOR

626

1) To check wiper motor, connect ammeter between battery and blue terminal. See Fig. 1. For low speed, connect battery voltage to Blue wire terminal and ground the Blue/White terminal. For high speed, ground the Blue/Red terminal. On high speed, no load RPM should be 69-95. On low, it should be 50-60.

2) Difference between high and low RPM should be at least 15 RPM. Current draw should be 3 amps. To check auto stop, ground the Black terminal and connect the lead wire between Blue/White and Blue/Black terminals. Stop the wiper blades in mid stroke.

3) To check rear wiper motor, connect battery voltage to Blue/Red wire and ground the Blue/White wire. Motor should run steadily.

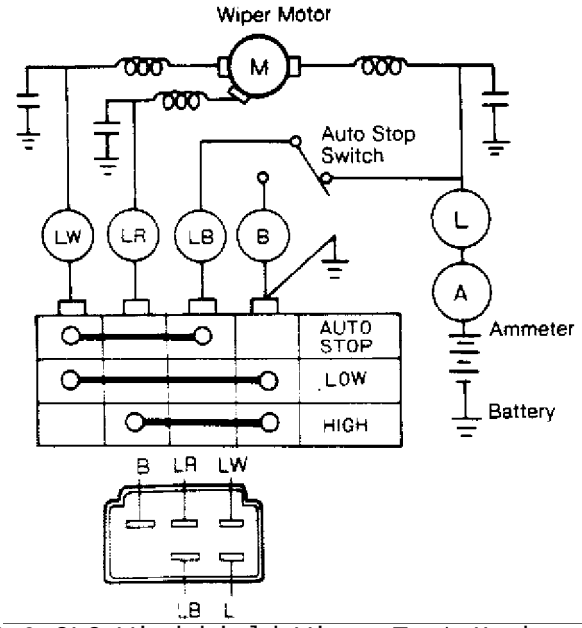

Fig. 1: 626 & GLC Windshield Wiper Test Hookup and Terminal Id
On GLC, B terminal is a separate connector.

RX7

1) To check front circuit, measure voltage between terminal L and ground with ignition on. See Fig. 2. If no voltage, check fuse or repair harness. Check ground between line B and body ground for continuity.

2) To check the front motor, connect the positive lead from the battery to terminal A of motor. See Fig. 2. Connect the negative lead to terminal B. Motor should turn at low speed. Connect the negative to terminal C to check high speed.

3) To check rear circuit, be certain there is voltage to the main line, then check the motor by connecting the positive lead from battery to terminal A of motor. Connect the negative to terminal B and C. Motor should turn. See Fig. 2.

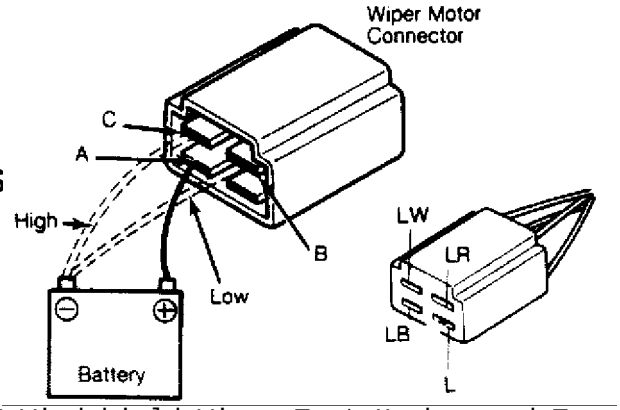

Fig. 2: RX7 Windshield Wiper Test Hookup and Terminal Id

B2000 & B2200

Connect wiper motor, ammeter and battery and check the number of wiping revolutions and amperage. See Fig. 3. On low, the wiping revolution number should be between 42 and 55 RPM; on high between 62 and 85. Amperage in either case should be less than 2.5.

RPM difference between high and low must be more than 15.

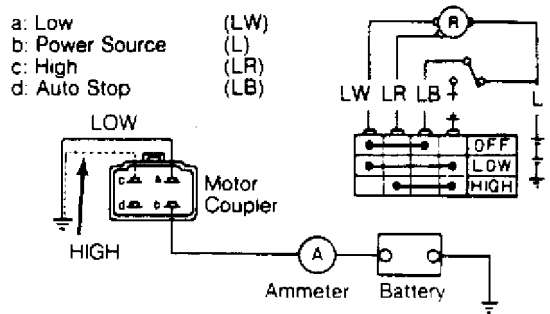

Fig. 3: B2000 & B2200 Windshield Wiper Test Hookup & Terminal Id

GLC

See Fig. 1 for hookup connections. Connect battery voltage to terminal L and ground the LR terminal. This should give low speed wiping revolutions similar to 626. For high speed, ground the LW terminal. To check auto stop, connect jumper between LW and LB, apply power to terminal L and ground terminal B.

REMOVAL & INSTALLATION

NOTE: No removal or installation procedures for RX7 wiper motors are given.

FRONT WIPER MOTOR ASSEMBLY

Removal (GLC & 626)

1) Run wipers until they are in vertical position, then turn ignition off or disconnect battery cable. Remove wiper arms and shaft nuts.

2) Remove cowl grille or access panel. Unplug at motor. Remove mounting bolts and wiper motor.

3) On 626, insert a large screwdriver between the crank arm and linkage and pry to separate it from crank arm.

Installation (GLC & 626)

To install, reverse removal procedure.

REAR WIPER MOTOR ASSEMBLY

Removal (GLC & 626)

Disconnect battery ground. Remove wiper arm and shaft nuts. Remove trim on rear hatch. Remove fasteners and remove wiper hole cover. Disconnect wiring, remove attaching bolts and remove rear wiper motor.

Installation (GLC & 626)

To install, reverse removal procedure.

WIPER SWITCH

Removal (GLC & 626)

Disconnect battery ground. Remove steering wheel. Remove column covers and snap ring at top of column (if equipped). Unplug wiring connectors. Loosen combination switch screw. Remove combination switch.

Installation (GLC & 626)
To install, reverse removal procedure.

WIRING DIAGRAMS

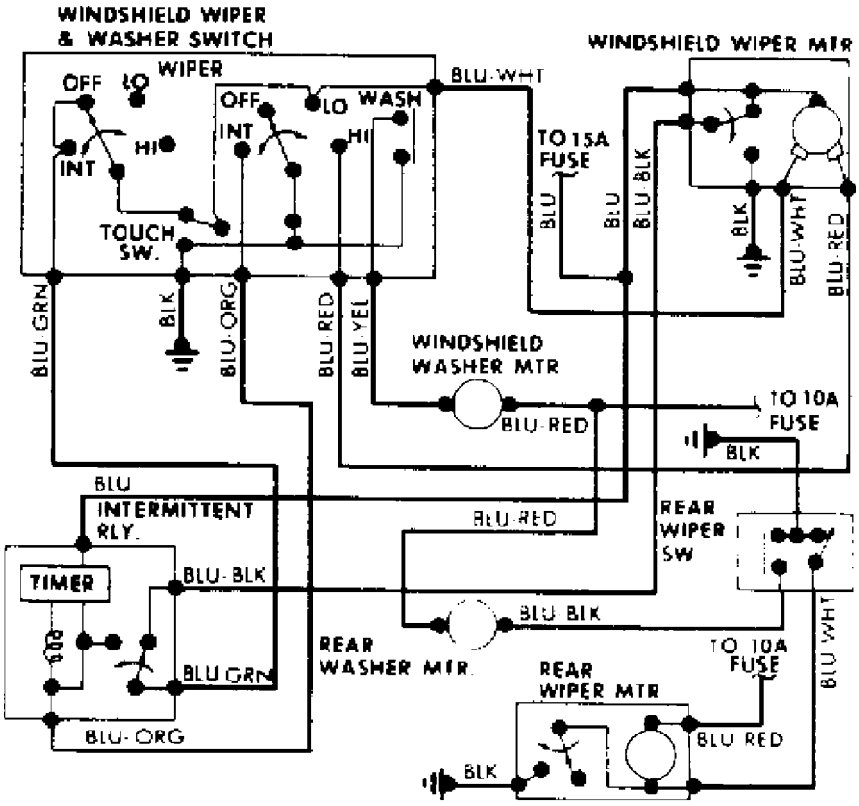

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Fig. 4: GLC Wiring Diagram

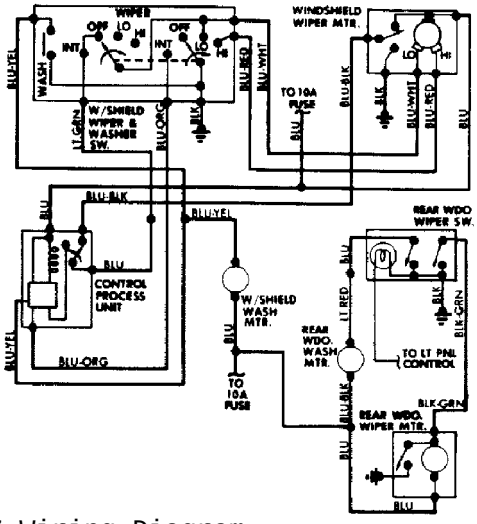

Fig. 5: RX7 Wiring Diagram

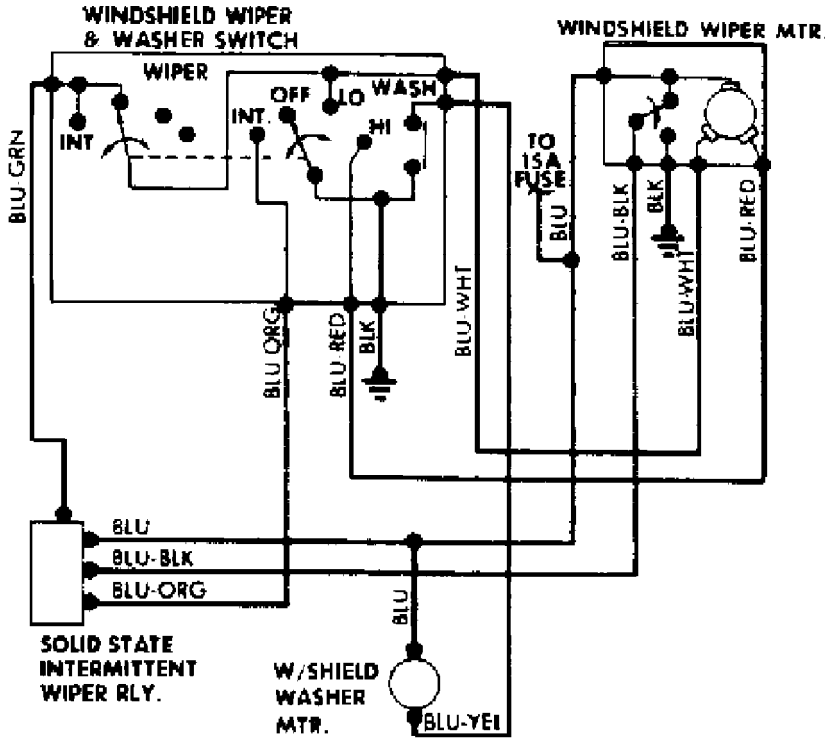

Fig. 6: B2000 and B2200 Wiring Diagram

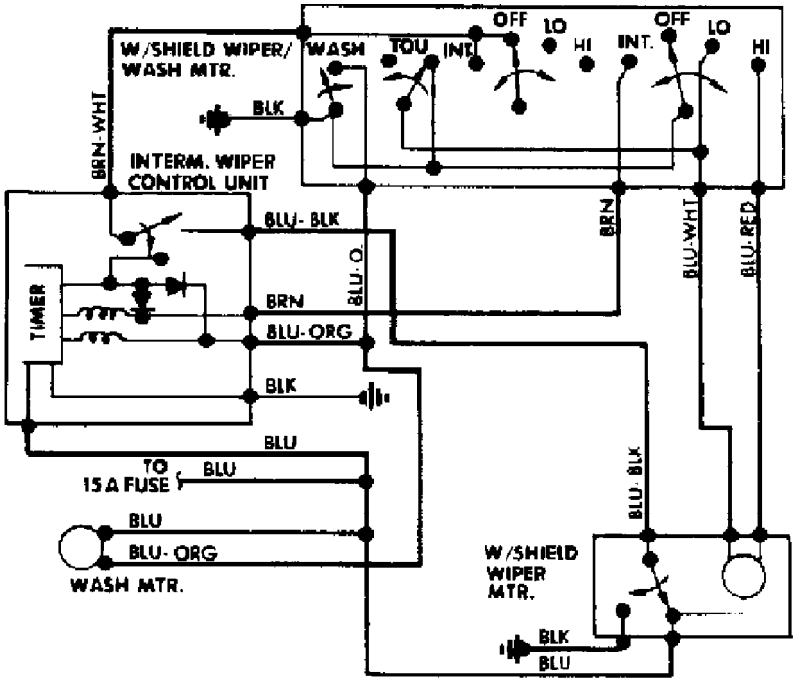

Fig. 7: 626 Front Wiper Wiring Diagram (4-Door Models)

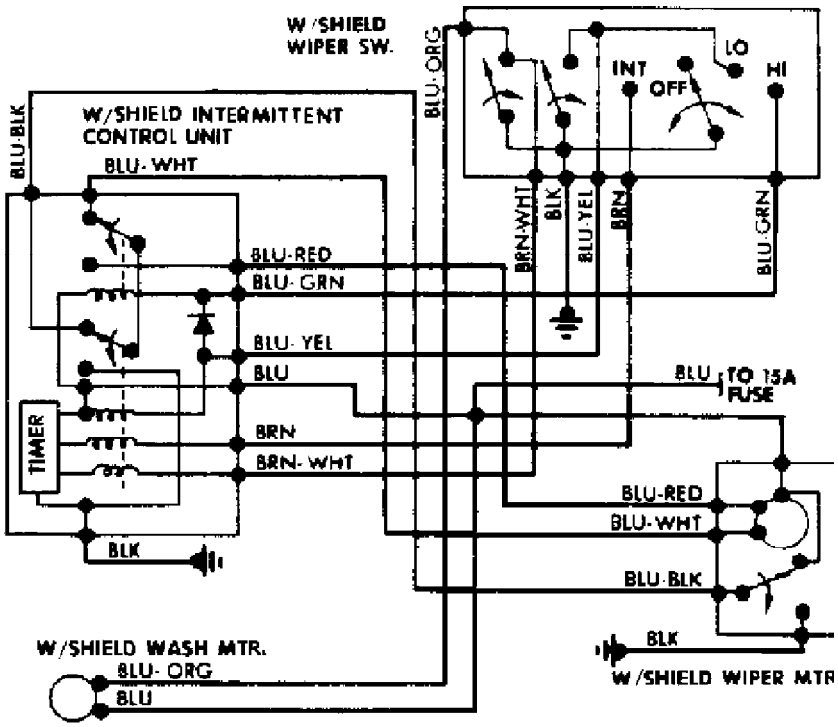

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Fig. 8: 626 Rear Wiper Wiring Diagram (4-Door Models Only)

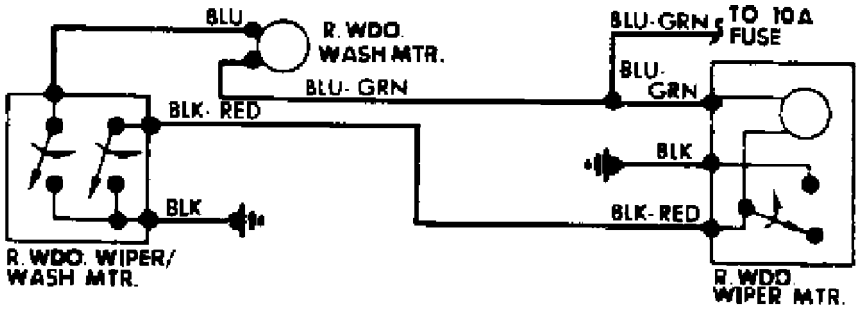

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Fig. 9: 626 Front Wiper Wiring Diagram (2 & 5 Door Models)

END OF ARTICLE

ELECTRICAL COMPONENT LOCATOR
Article Text
1984 Mazda RX7
For iluvmyrx7.com

Saturday, June 08, 2002 05:17PM

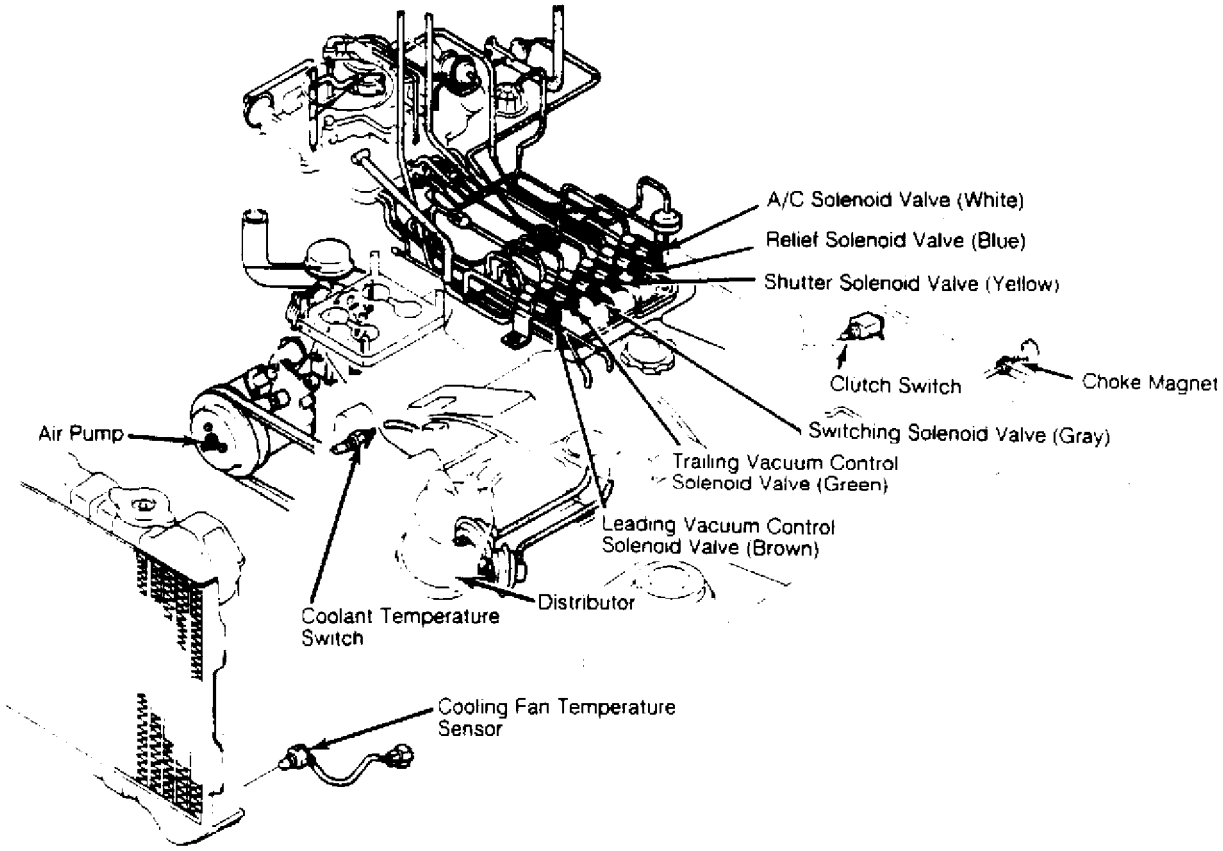
ARTICLE BEGINNING

1984 ELECTRICAL COMPONENTS LOCATIONS
Mazda Electrical Components

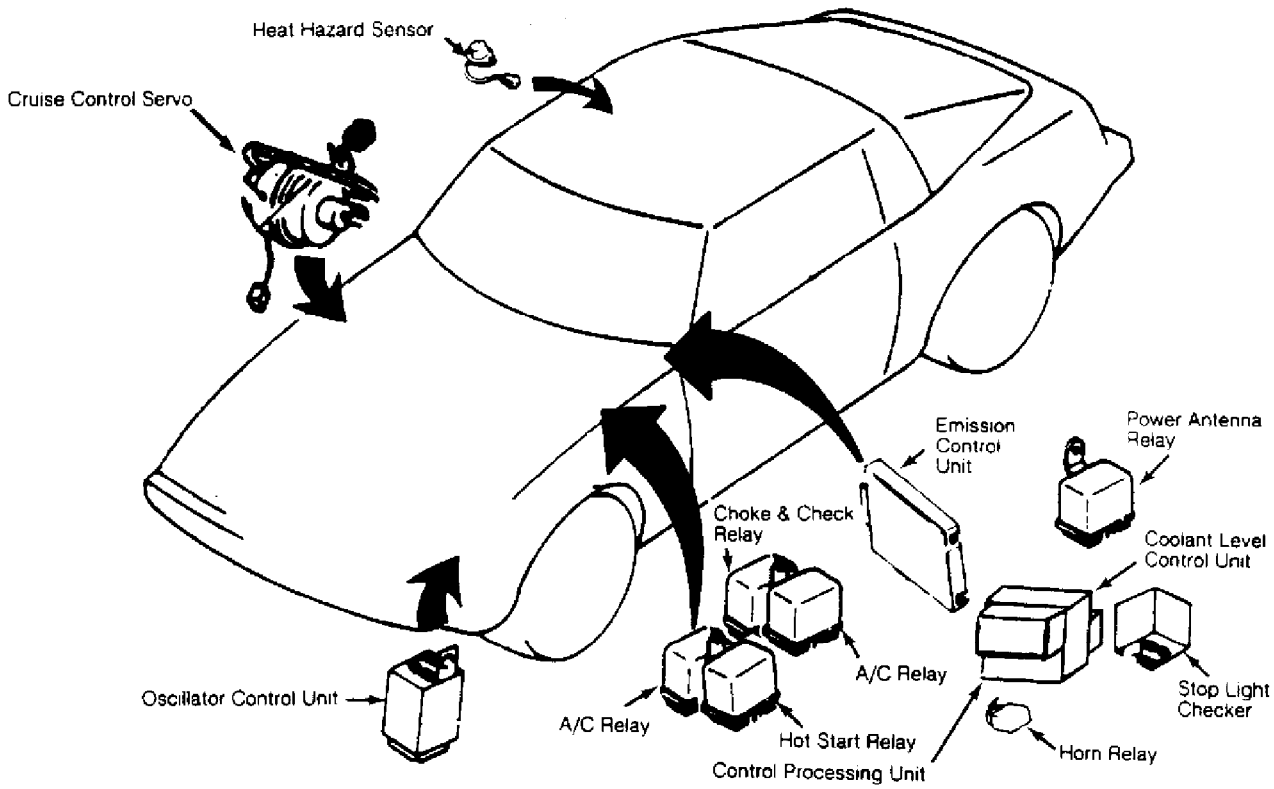
Mazda; RX7

MISCELLANEOUS COMPONENTS

Component	Component Location
A/C-Heater Blower Motor Resistor	On blower housing under right side of instrument panel.



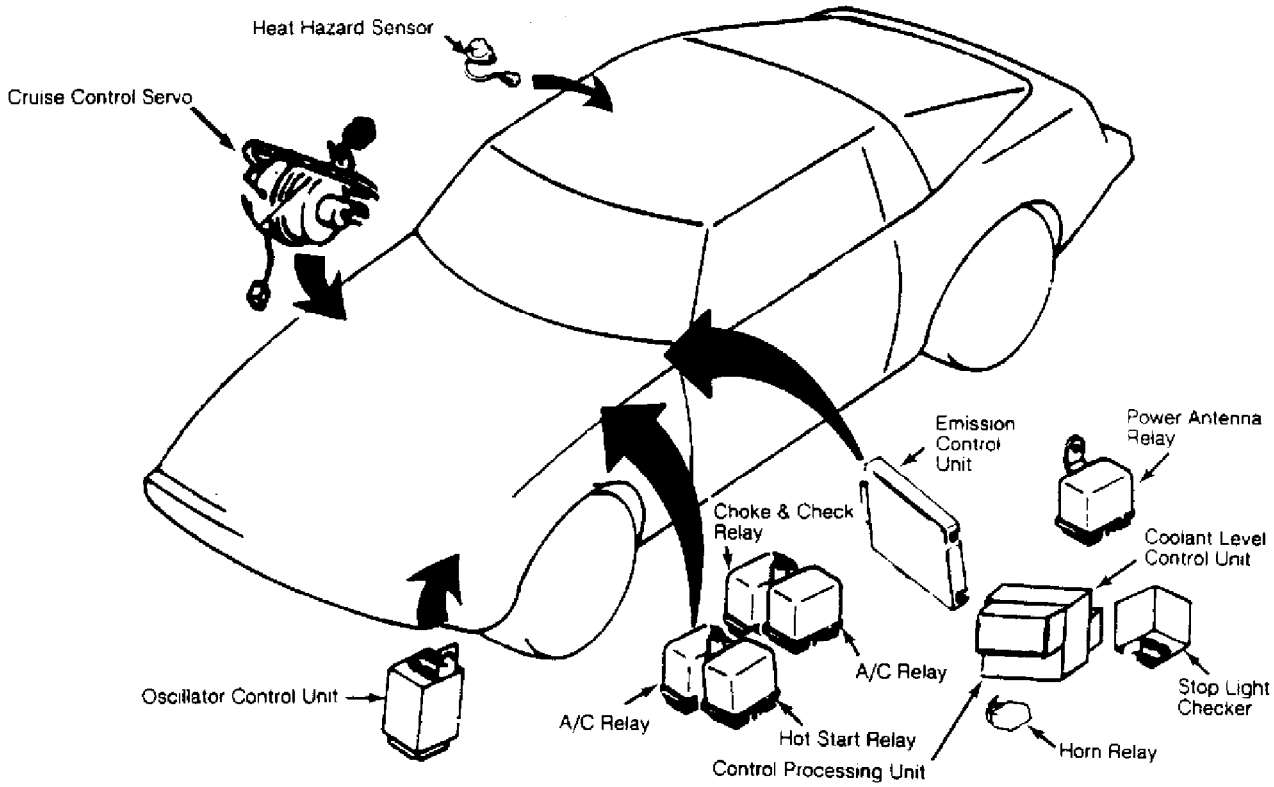
Choke Magnet	In choke switch under instrument panel.



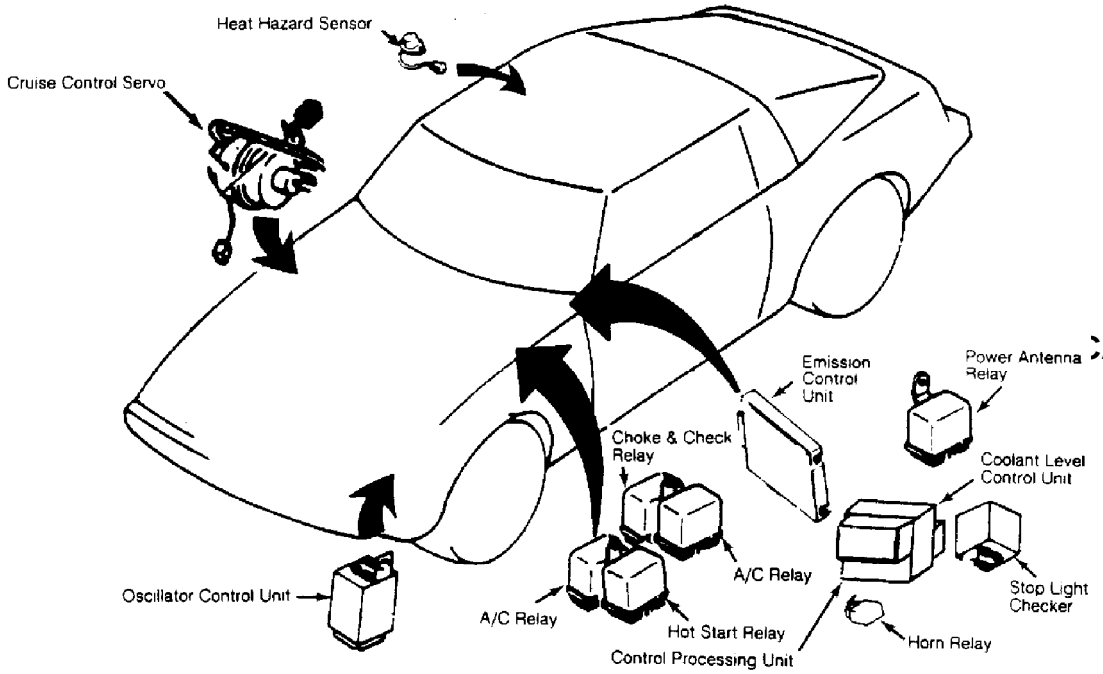
Cruise Control Servo	On right inner fender panel.
Fuse Block	Below left side of instrument panel.
Fusible Links	On left shock tower.
Seat Belt Warning Chime	Behind right side of instrument cluster.

CONTROL UNITS

Component	Component Location



Coolant Level Control Unit	On left kick panel.



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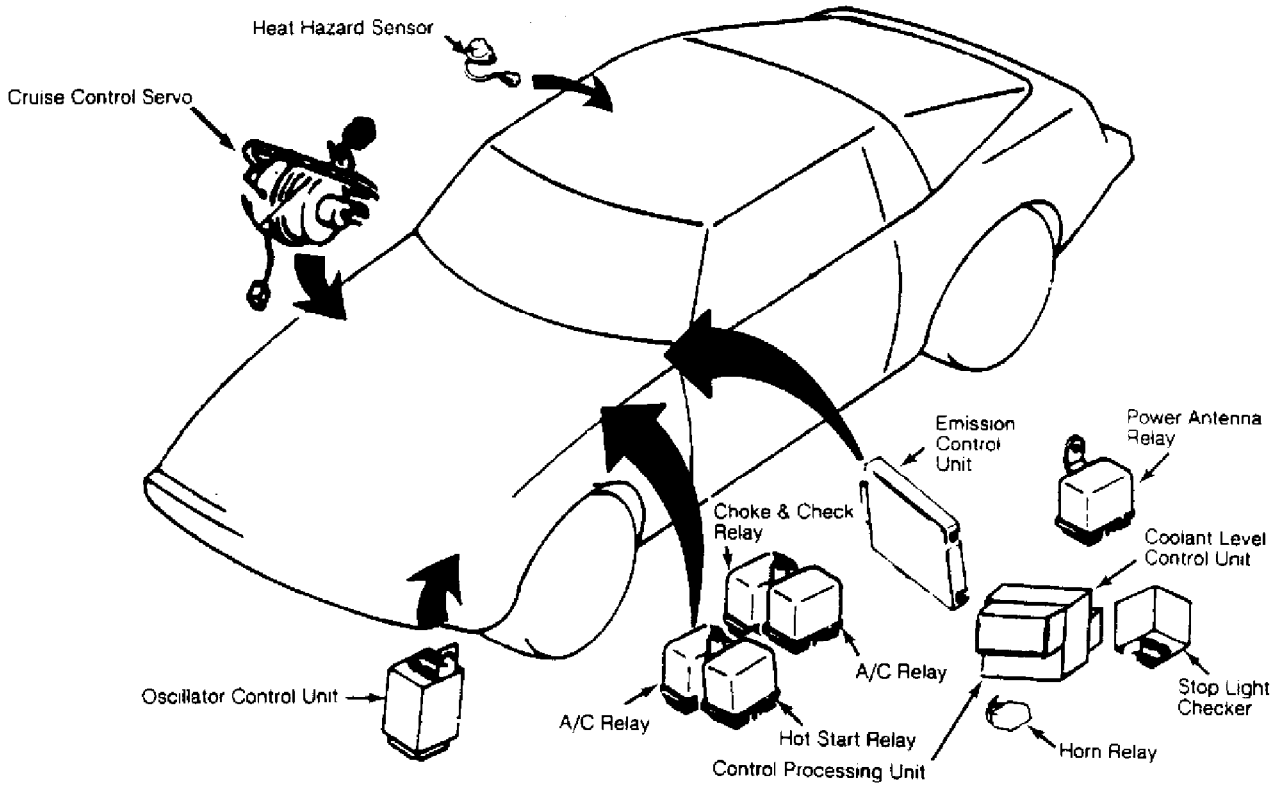
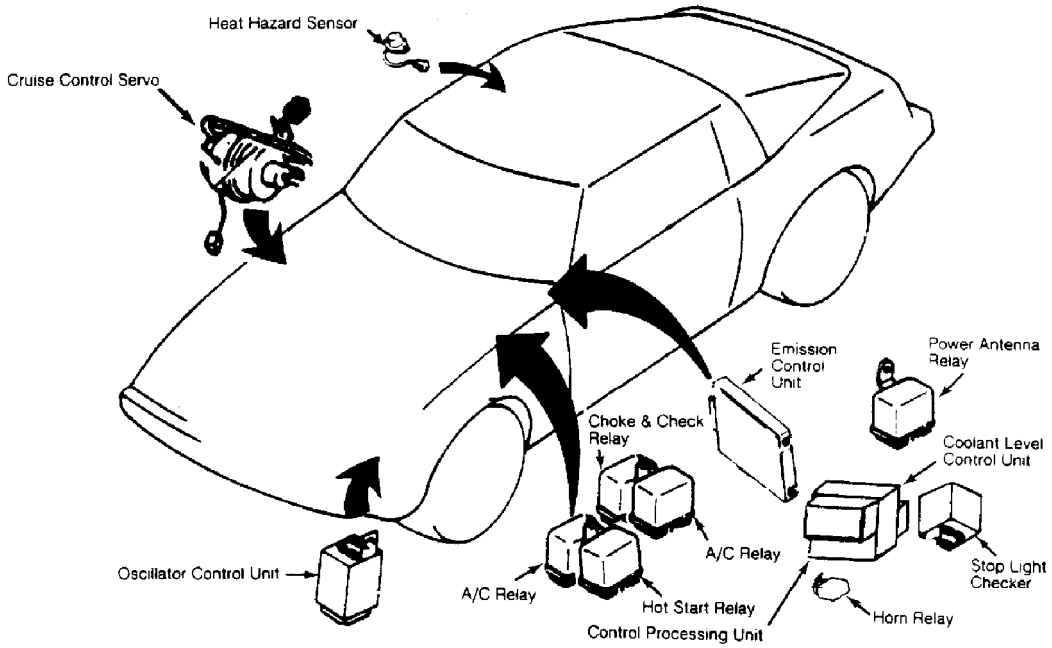
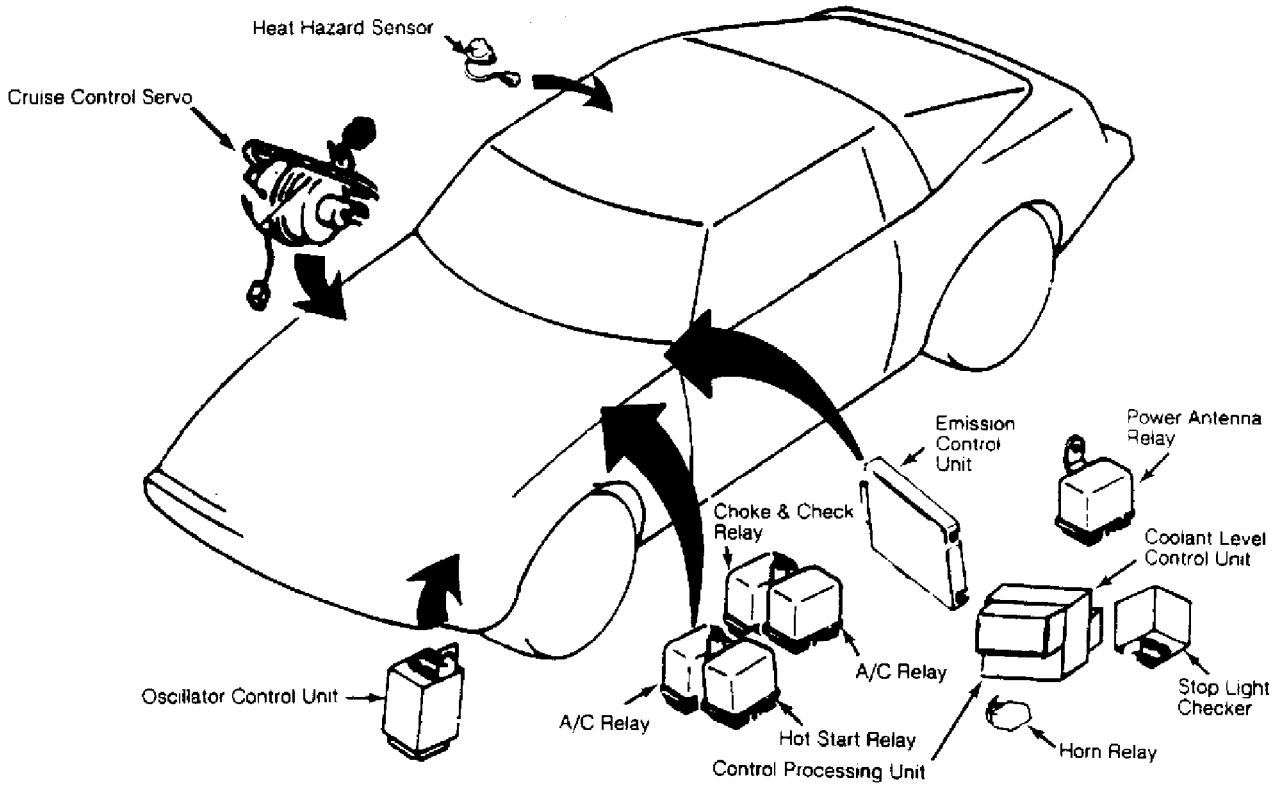
Control Processing Unit	On left kick panel.
Cruise Control Unit	At left side of luggage compartment.



Emission Control Unit — Below right side of instrument panel.



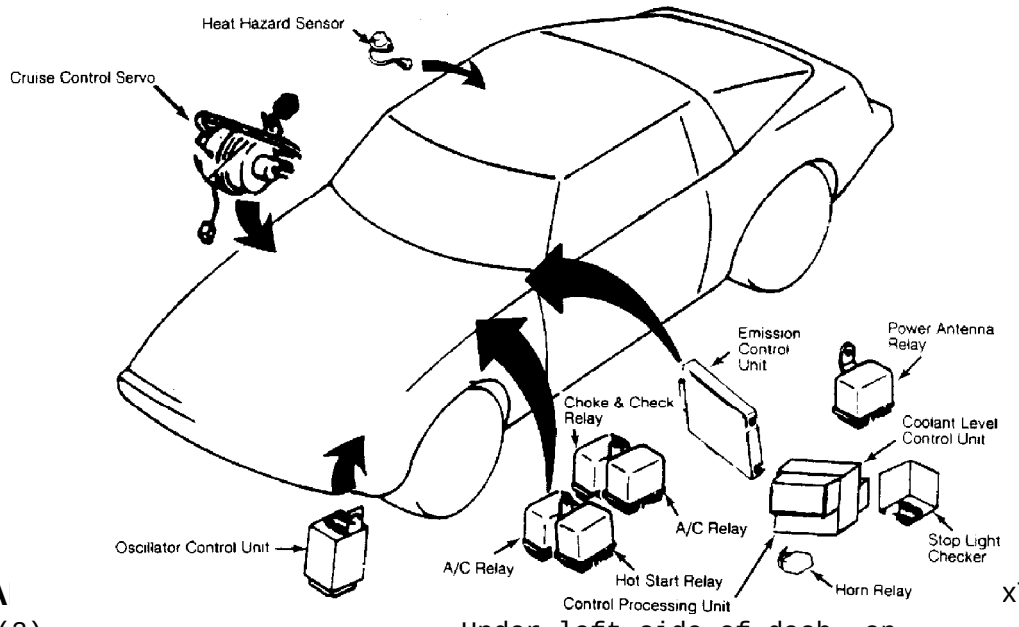
Oscillator Control Unit — At left front corner of engine compartment.



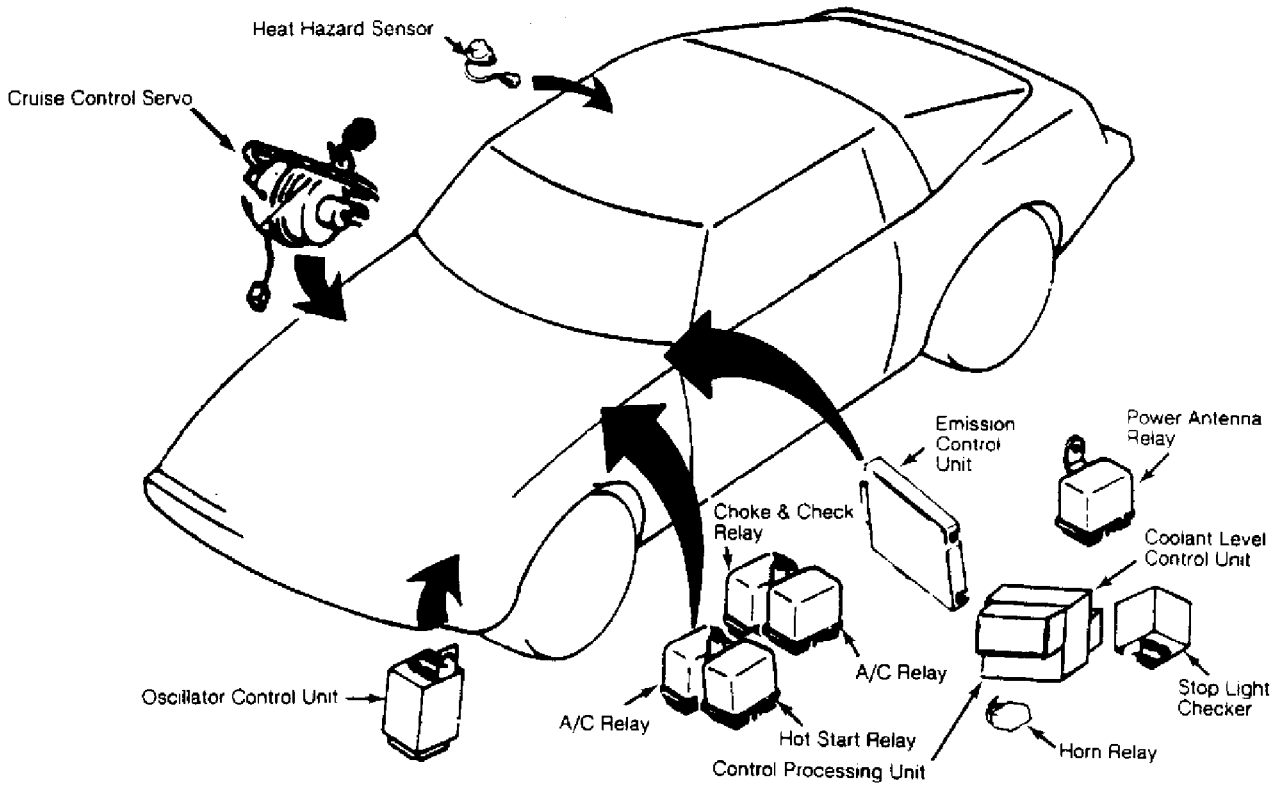
Stop Light Checker	On left kick panel.

RELAYS

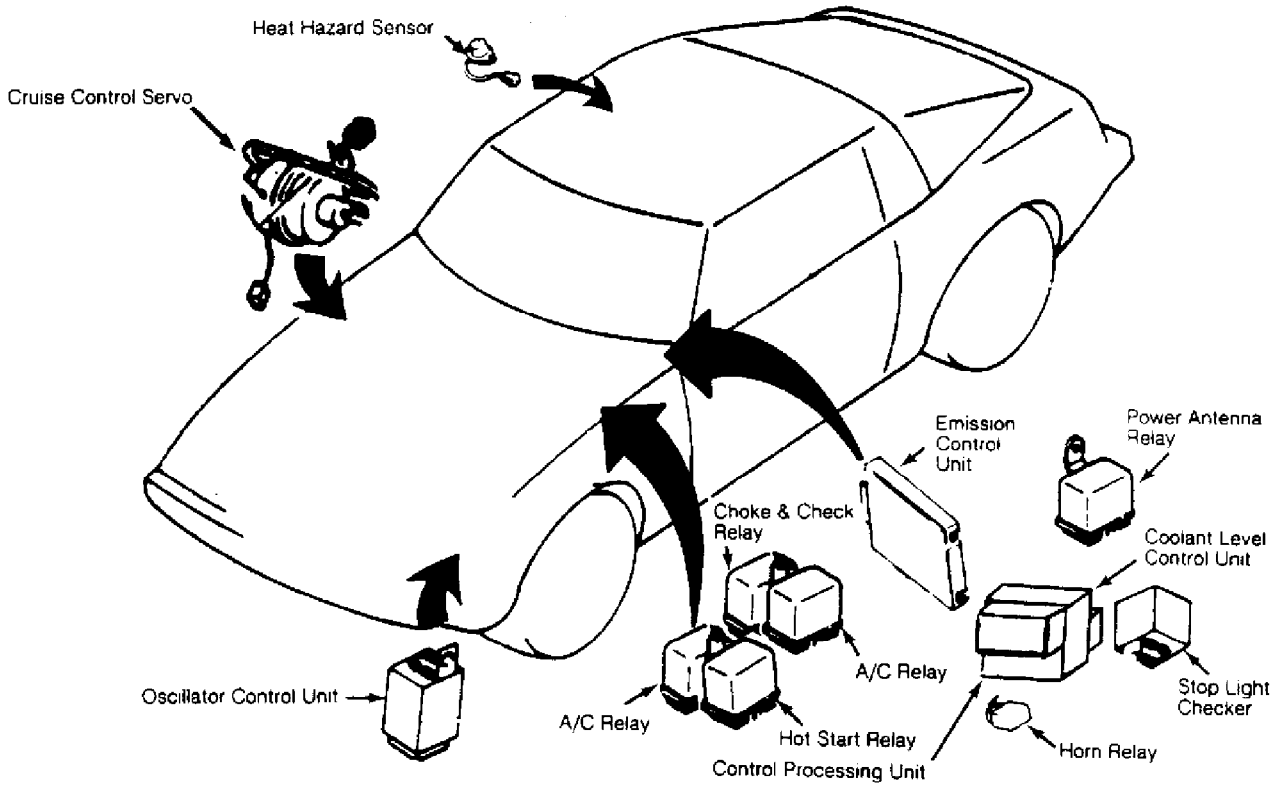
Component	Component Location



A/C Relays (2)	Under left side of dash, on kick panel.



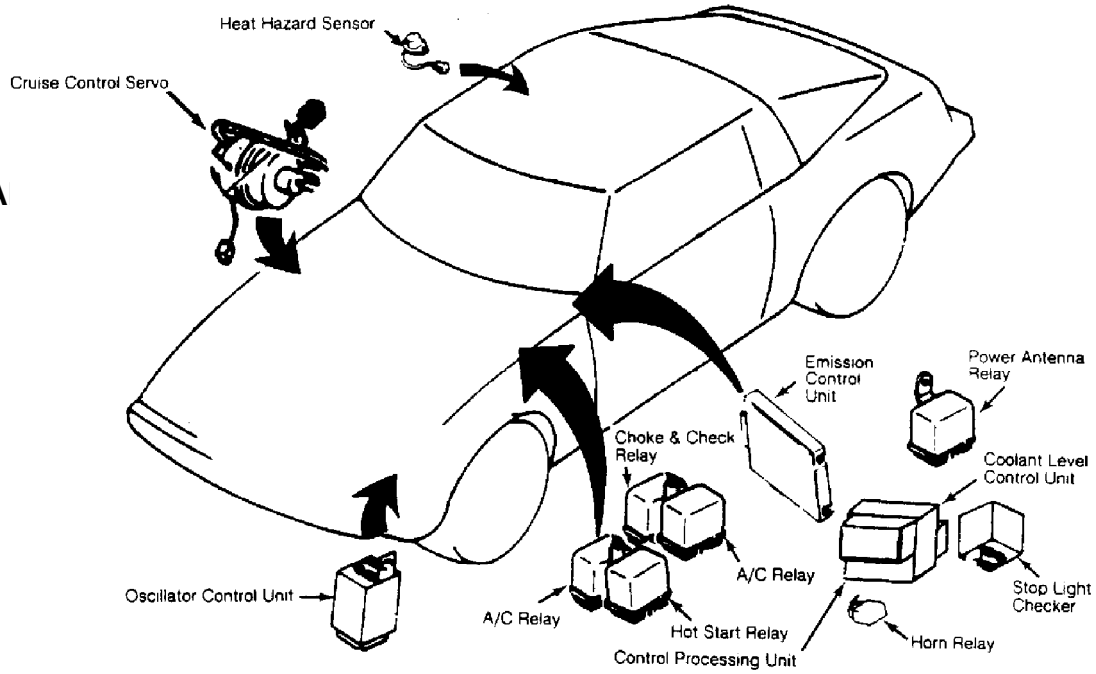
Choke & Check Relay	Under left side of dash, on kick panel.
Cutout Relay	Under left hand side of instrument panel.
Fuel Pump Relay	Under left side of dash, or near steering column.



Horn Relay

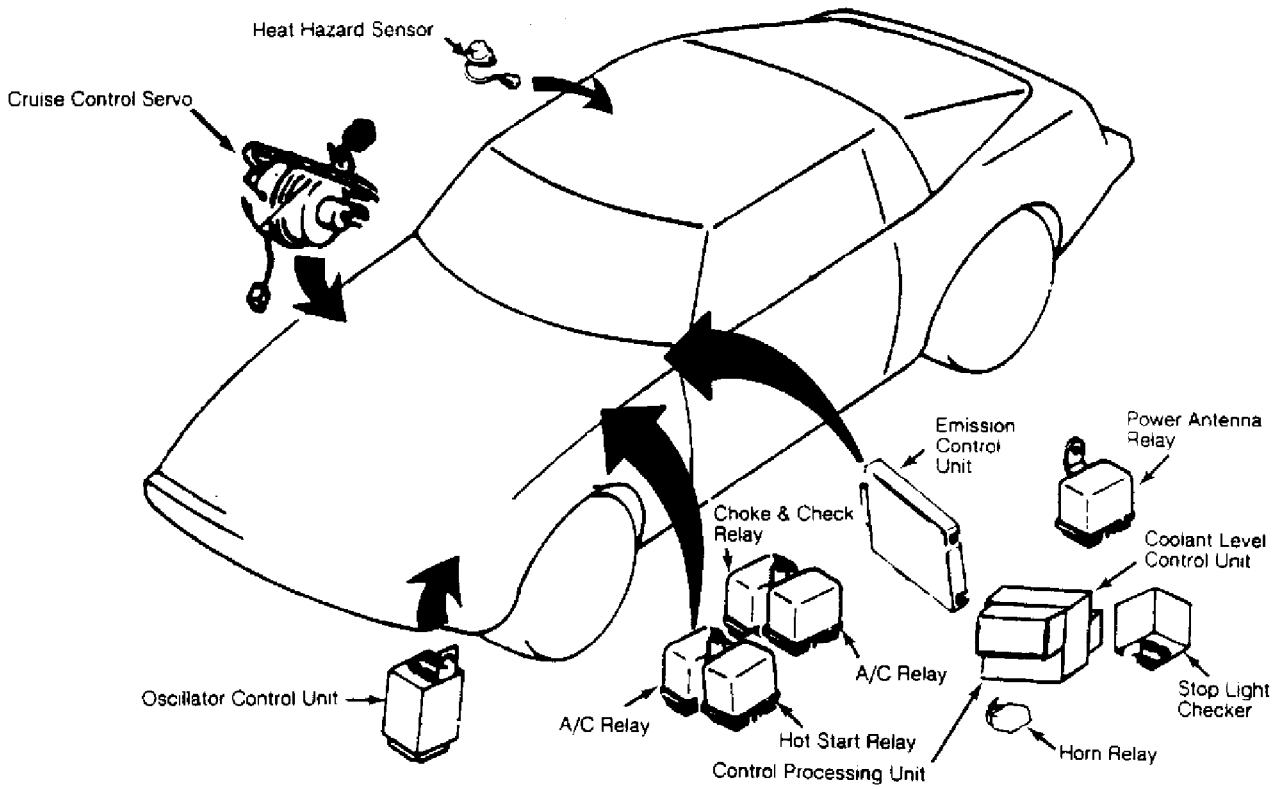
At left kick panel.

ELECTRICA



Hot Start Relay

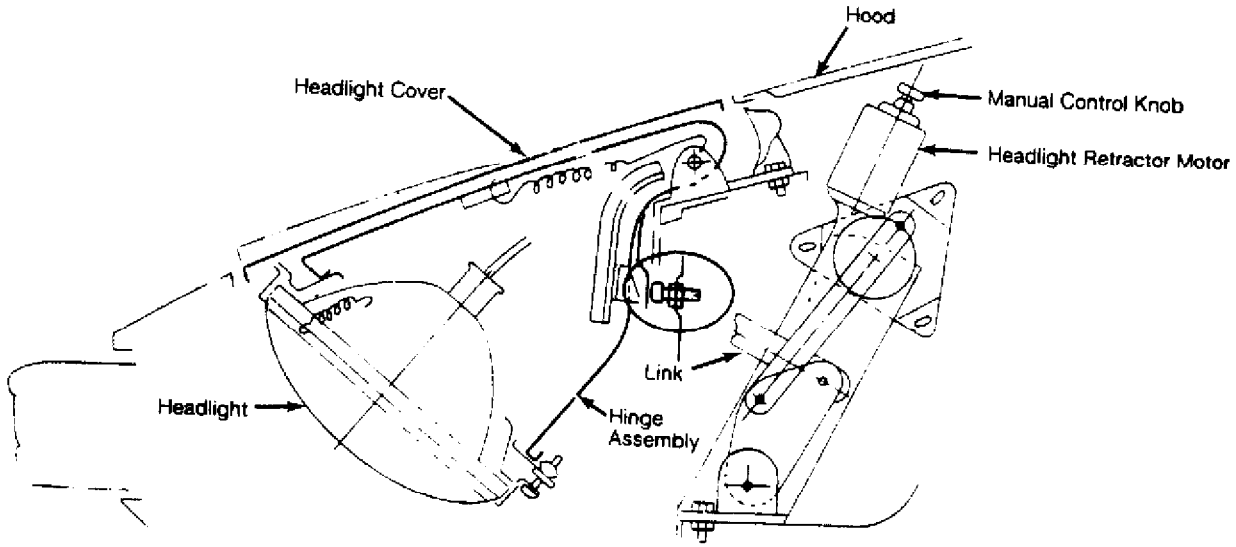
In left rear corner of engine compartment.



Power Antenna Relay	Under left side of instrument panel.

MOTORS

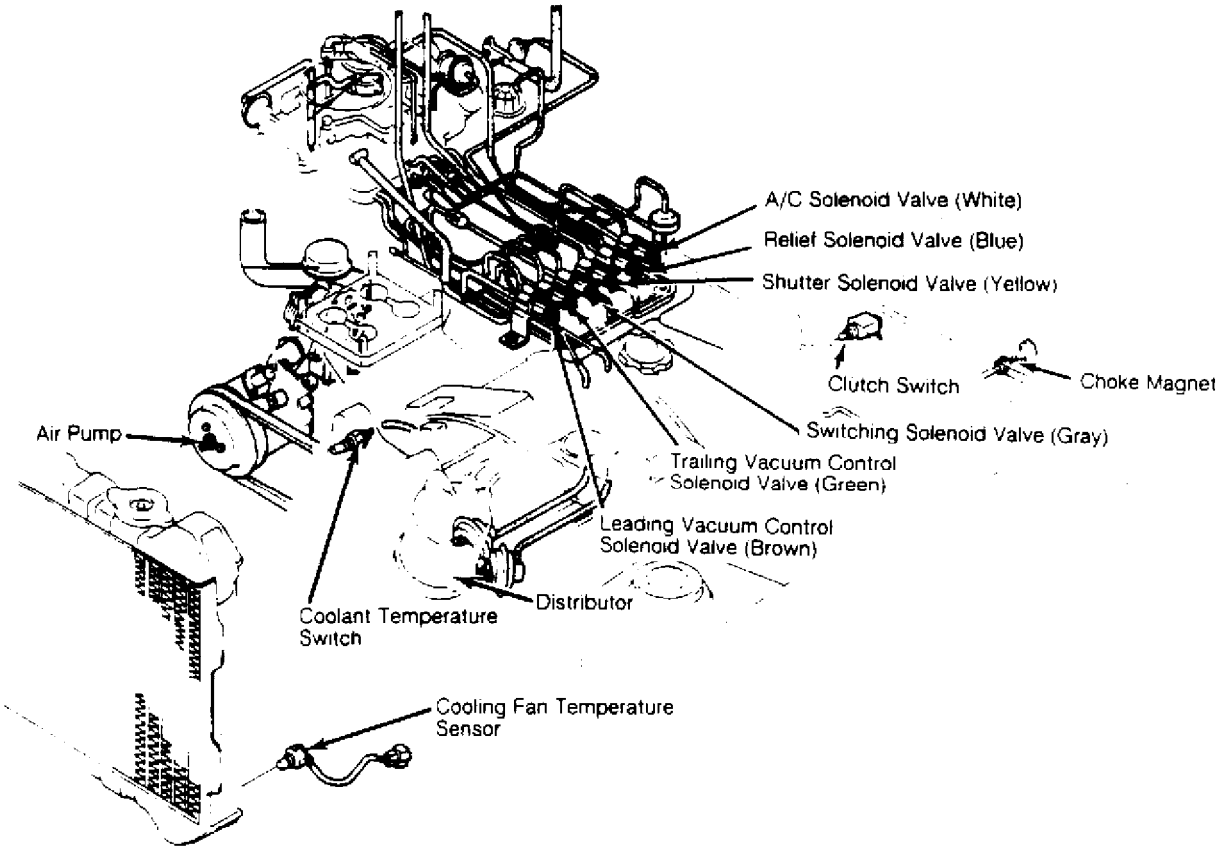
Component	Component Location
A/C-Heater Blower Motor	Under instrument panel in heater box.
Front Washer Motor	On reservoir in center right side of engine compartment.
Front Wiper Motor	Under left side of cowl.
Fuel Pump	Mounted on frame, near fuel tank.
Headlight Washer Motor	In right front corner of engine compartment.
Hot Start Assist Motor	In left rear corner of engine compartment.



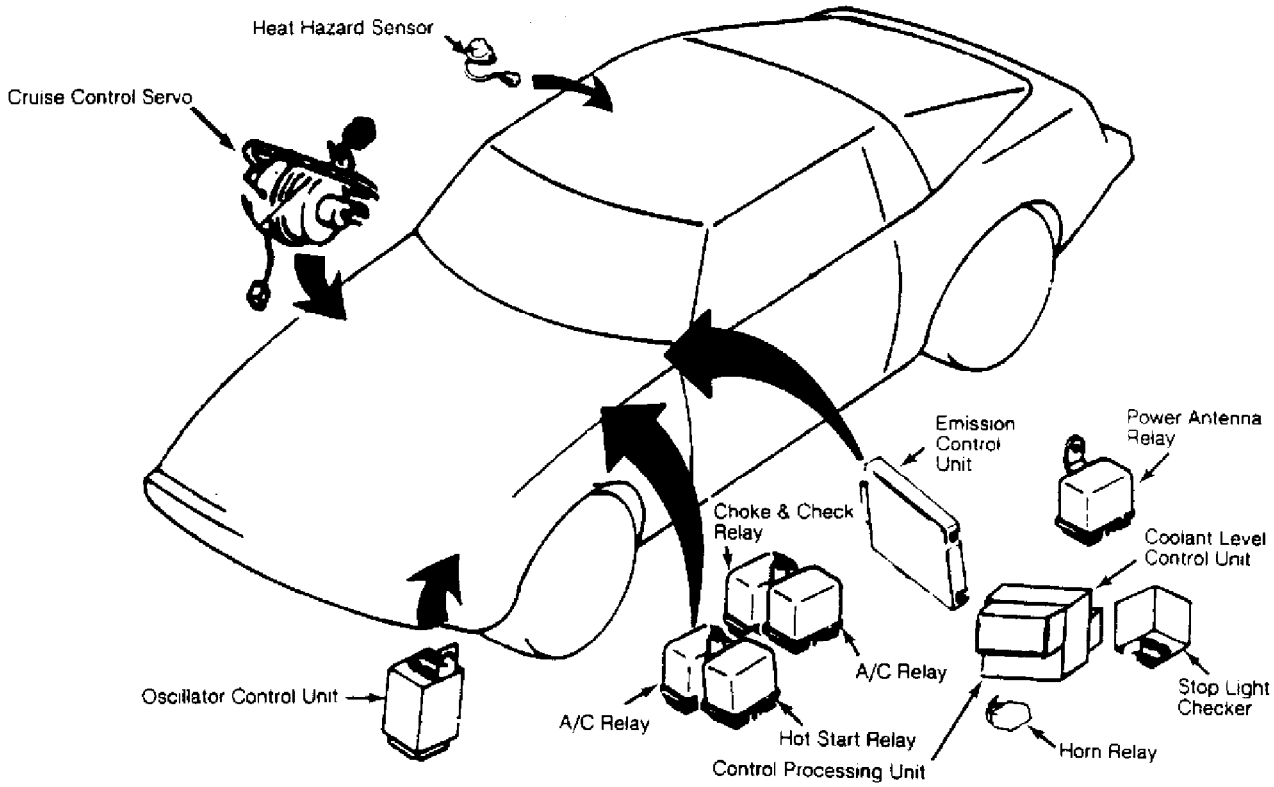
Headlight Retractor Motors	Behind each headlight assembly.
Power Antenna Motor	In right rear corner of luggage compartment.
Rear Washer Motor	In left rear quarter panel.
Rear Wiper Motor	On bottom right side of rear hatch.

SENDING UNITS/SENSORS

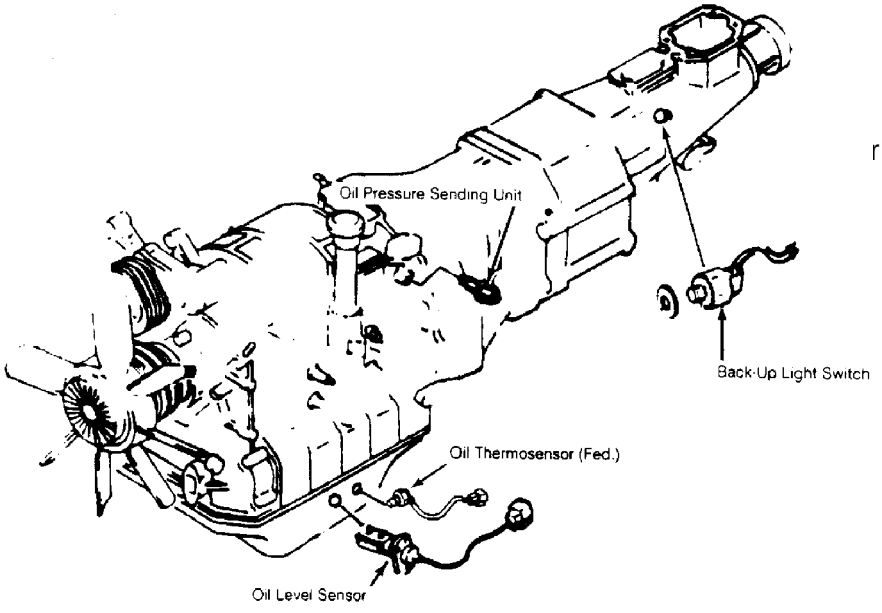
Component	Component Location
Brake Fluid Level Sensor	In brake master cylinder.
Coolant Level Sensor	On top of radiator.



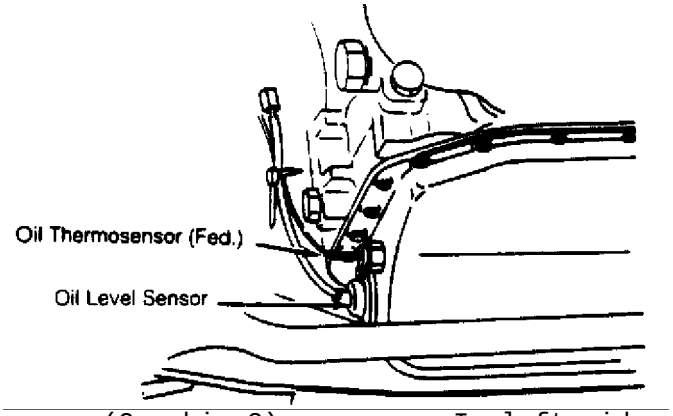
Cooling Fan Temperature Sensor	In lower left side of radiator.
Cruise Control Sensor	On back of speedometer
Fuel Gauge Sending Unit	On left side of fuel tank.



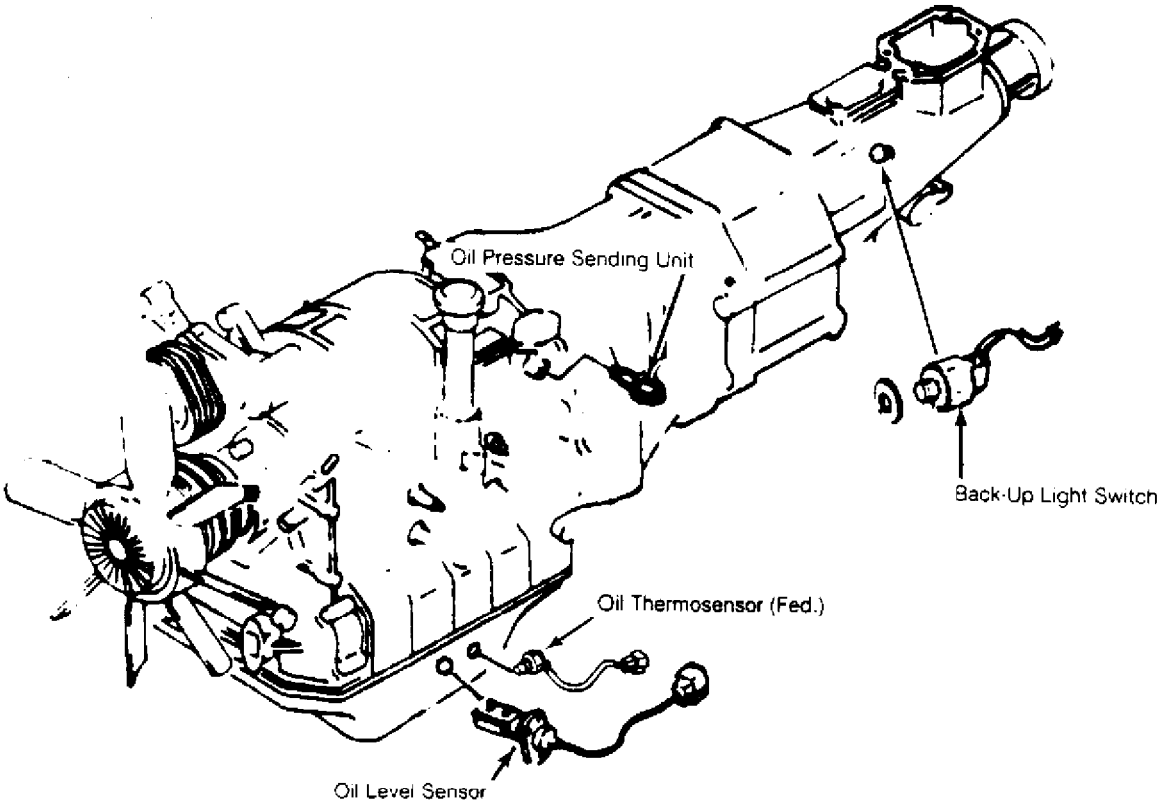
Heat Hazard Sensor Under right side floor mat.



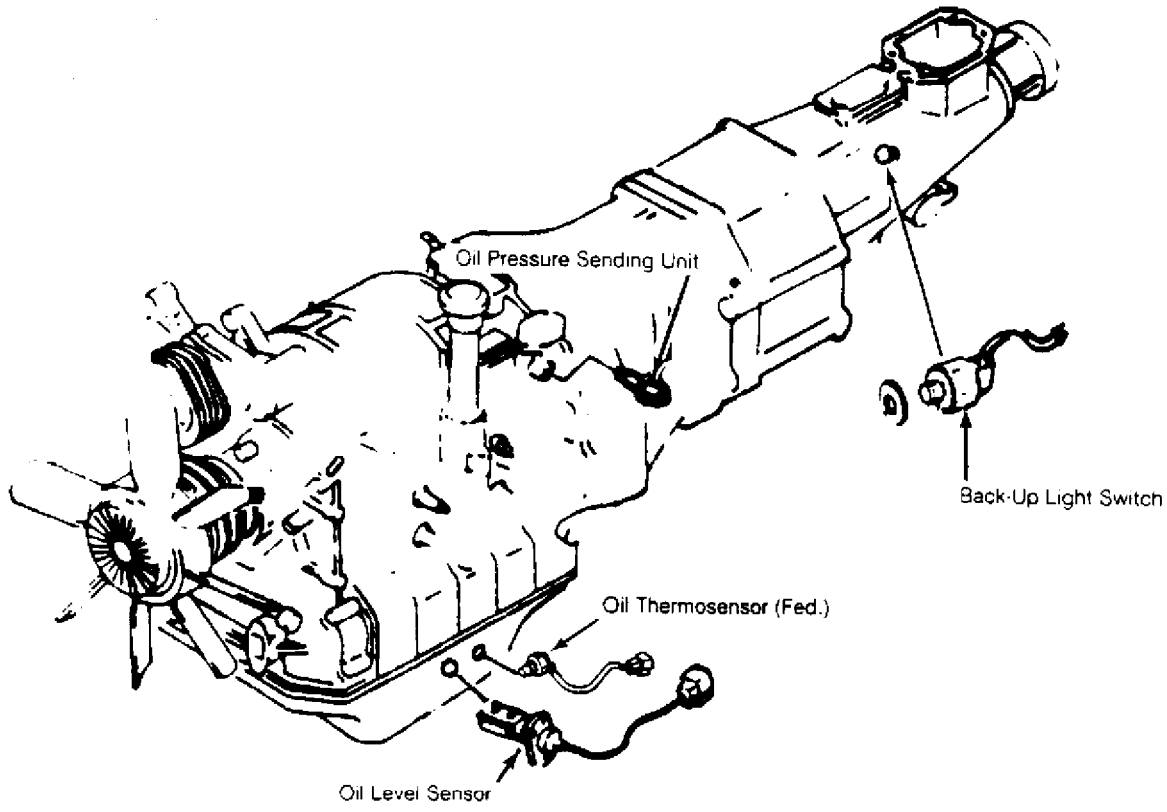
Oil Level Sensor, (Graphic 1) In left side of oil pan.



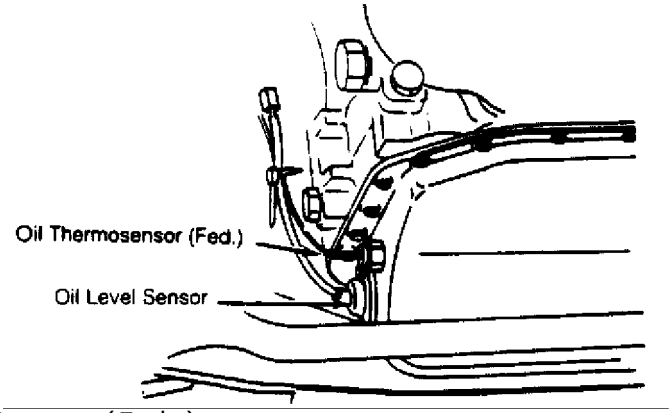
Oil Level Sensor, (Graphic 2)	In left side of oil pan.



Oil Pressure Sending Unit	On rear left side of block below oil filter.



Oil Thermo Sensor (Fed.), (Graphic 1)	In left side of oil pan.

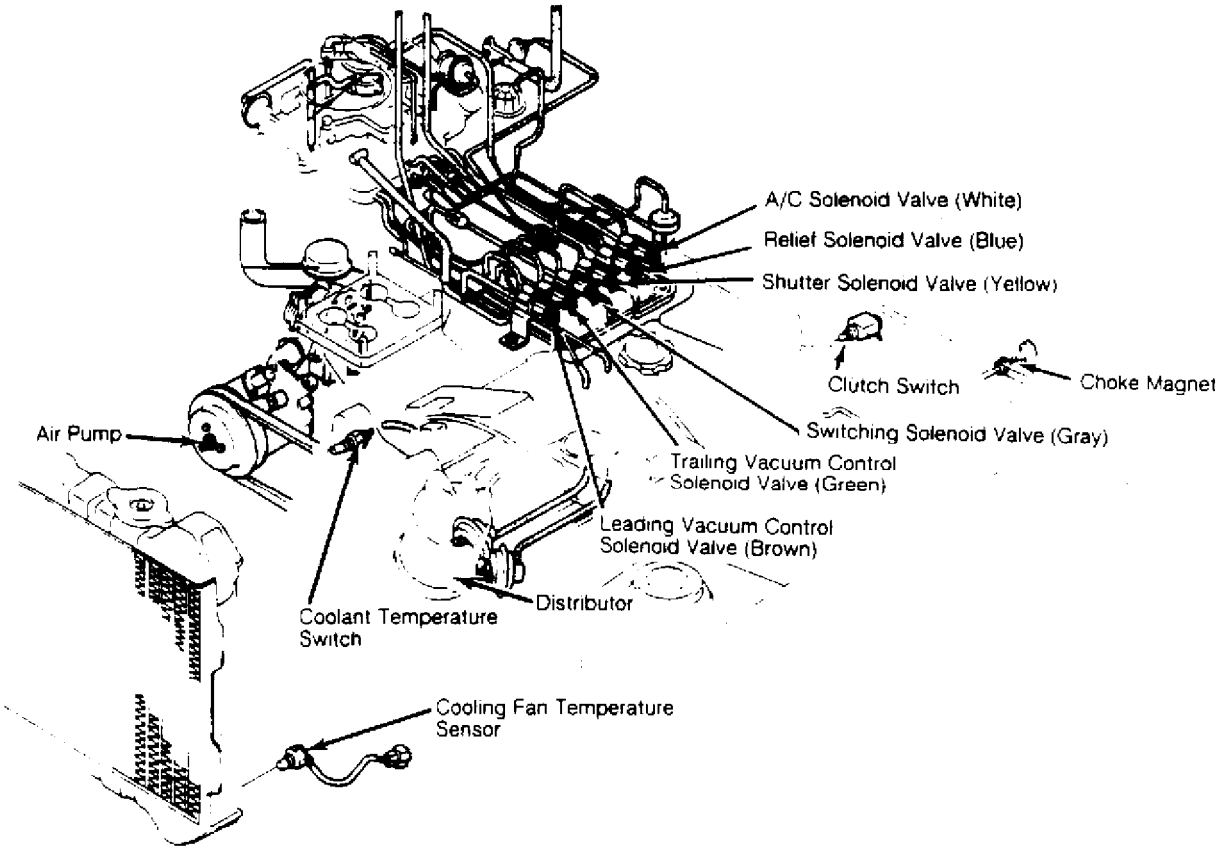


Oil Thermo Sensor (Fed.), (Graphic 2)	In left side of oil pan.

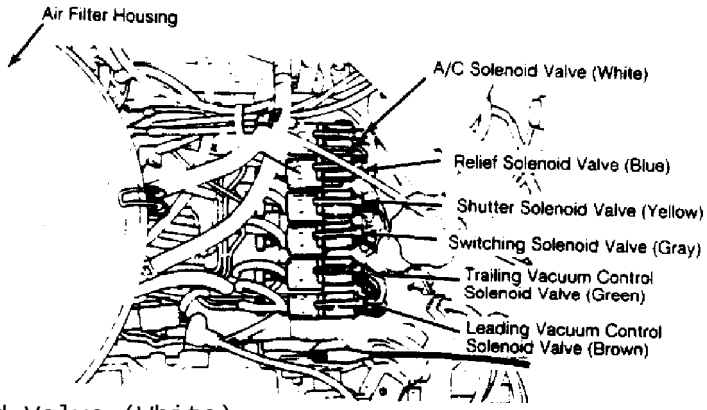
Throttle Sensor	On carburetor throttle linkage.
Washer Fluid Level Sensor	On bottom of washer fluid reservoir.

SOLENOIDS/SOLENOID VALVES

Component	Component Location

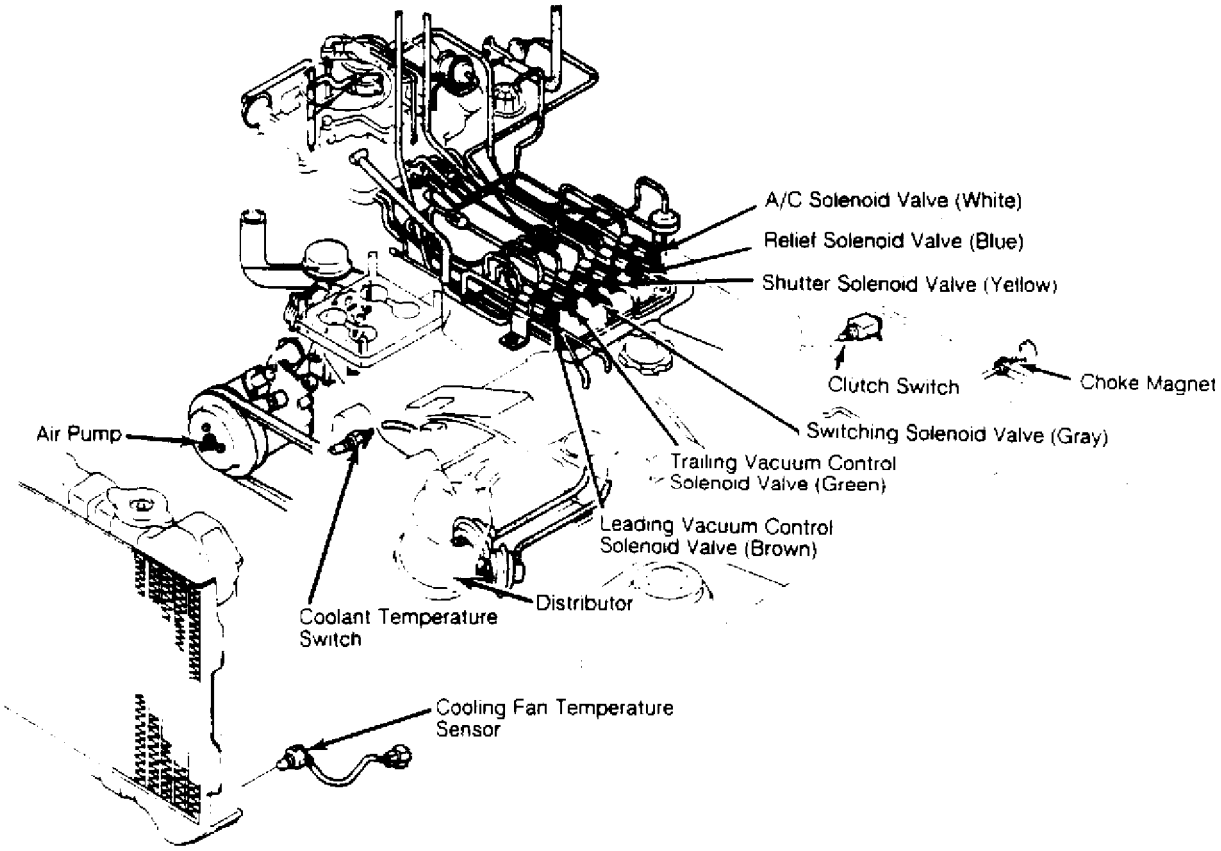


A/C Solenoid Valve (White), (Graphic 1)	In solenoid block on left side of engine.

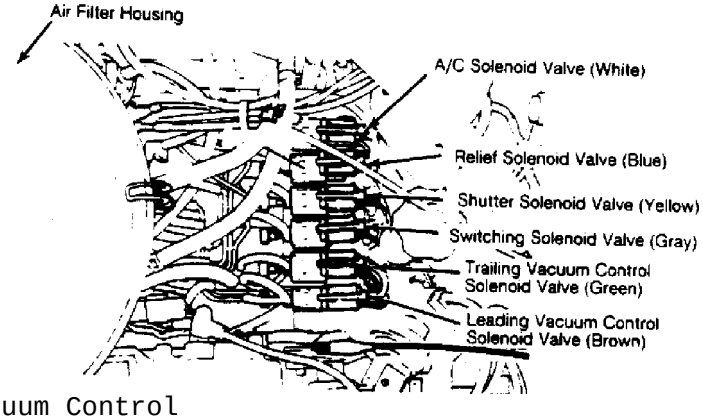


A/C Solenoid Valve (White), (Graphic 2)	In solenoid block on left side of engine.

Downshift Solenoid (A/T)	On left side of transmission case.
Fuel Door Release Solenoid	In left rear quarter panel.

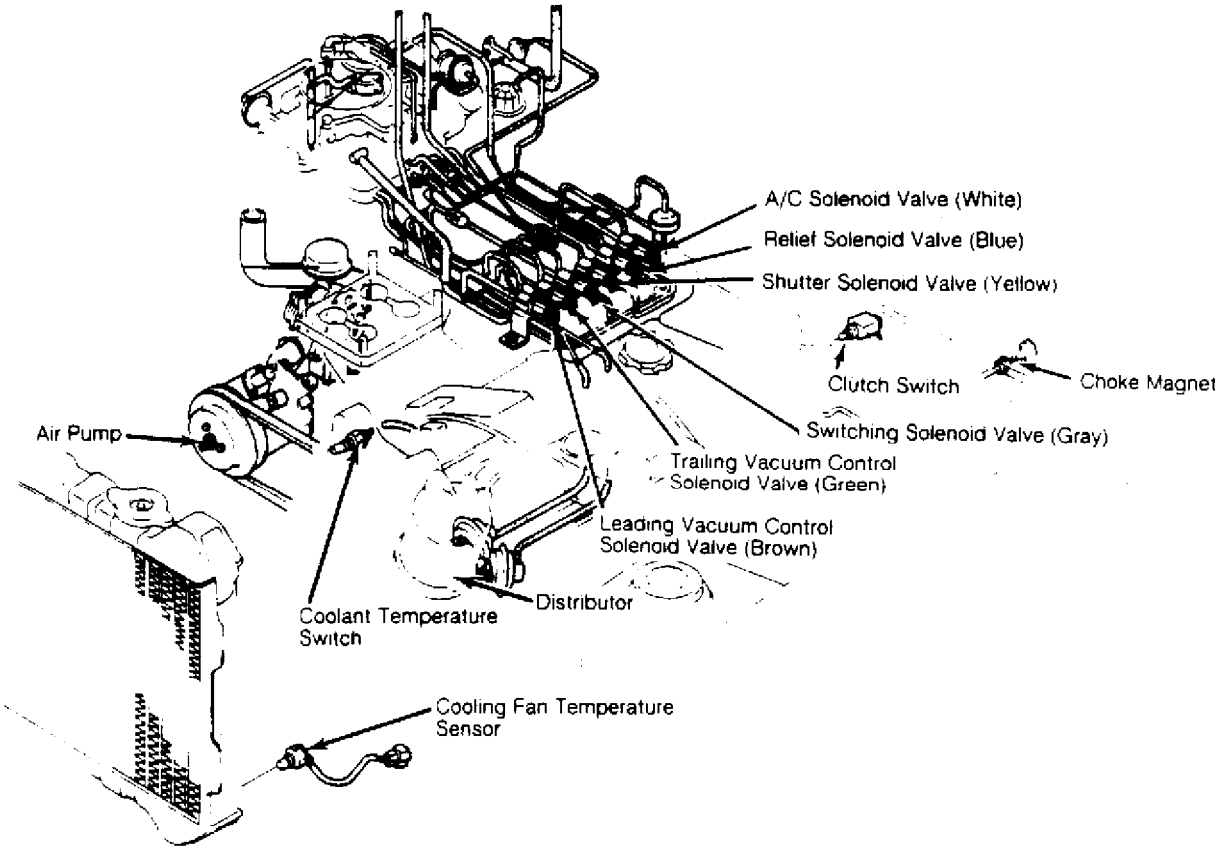


Leading Vacuum Control Solenoid, Valve (Brown), (Graphic 1)	In solenoid block on left side of engine.



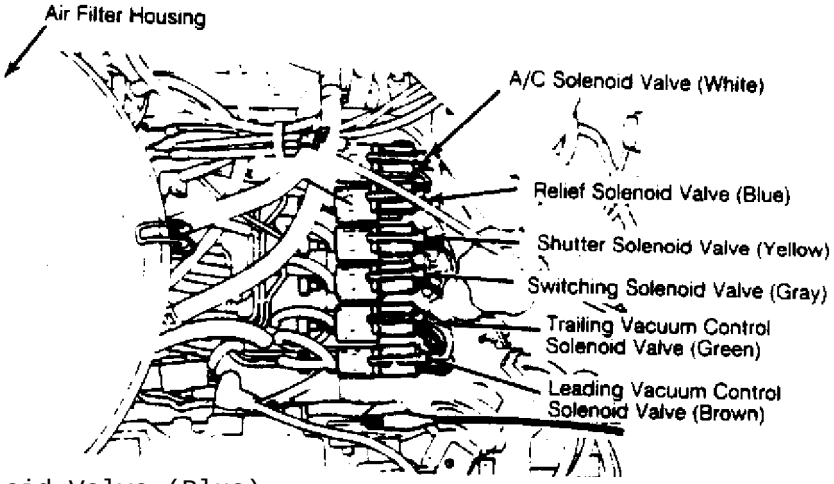
Leading Vacuum Control Solenoid, Valve (Brown), (Graphic 2)	In solenoid block on left side of engine.
Rear Hatch Release Solenoid	In center of rear finis

panel.



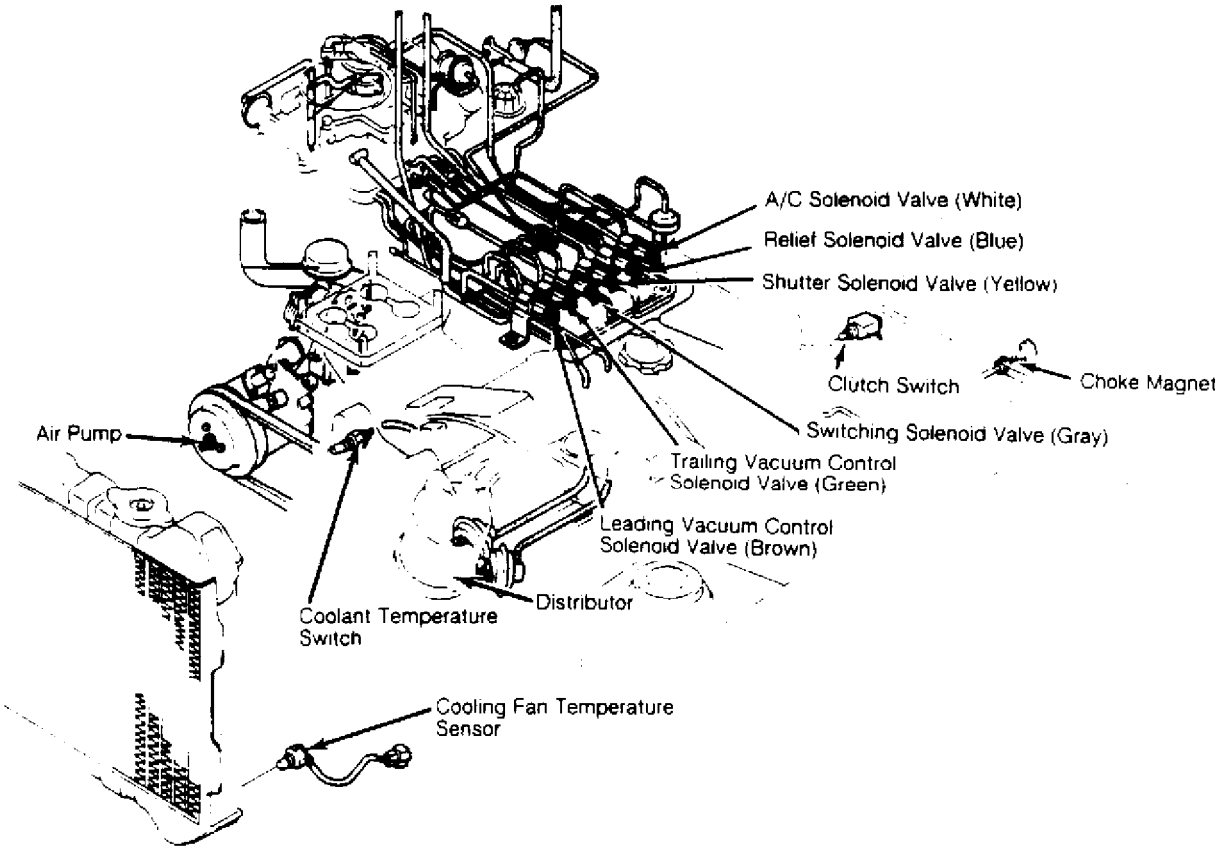
Relief Solenoid Valve (Blue), (Graphic 1)

In solenoid block on left side of engine.



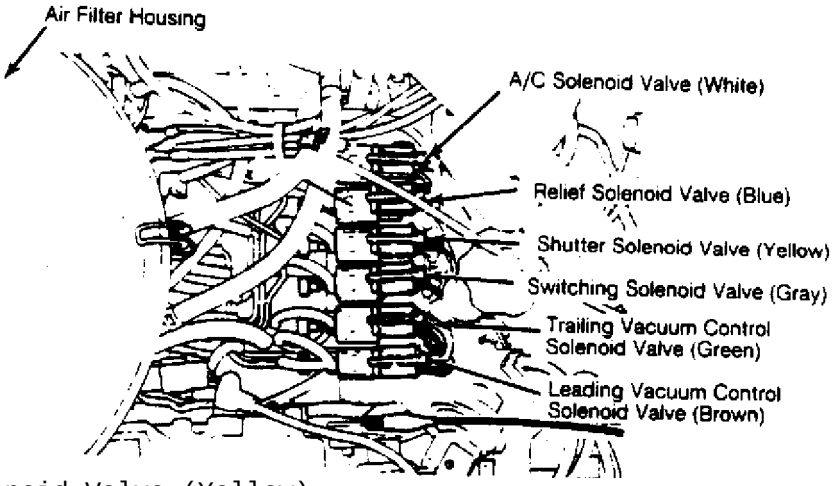
Relief Solenoid Valve (Blue), (Graphic 2)

In solenoid block on left side of engine.



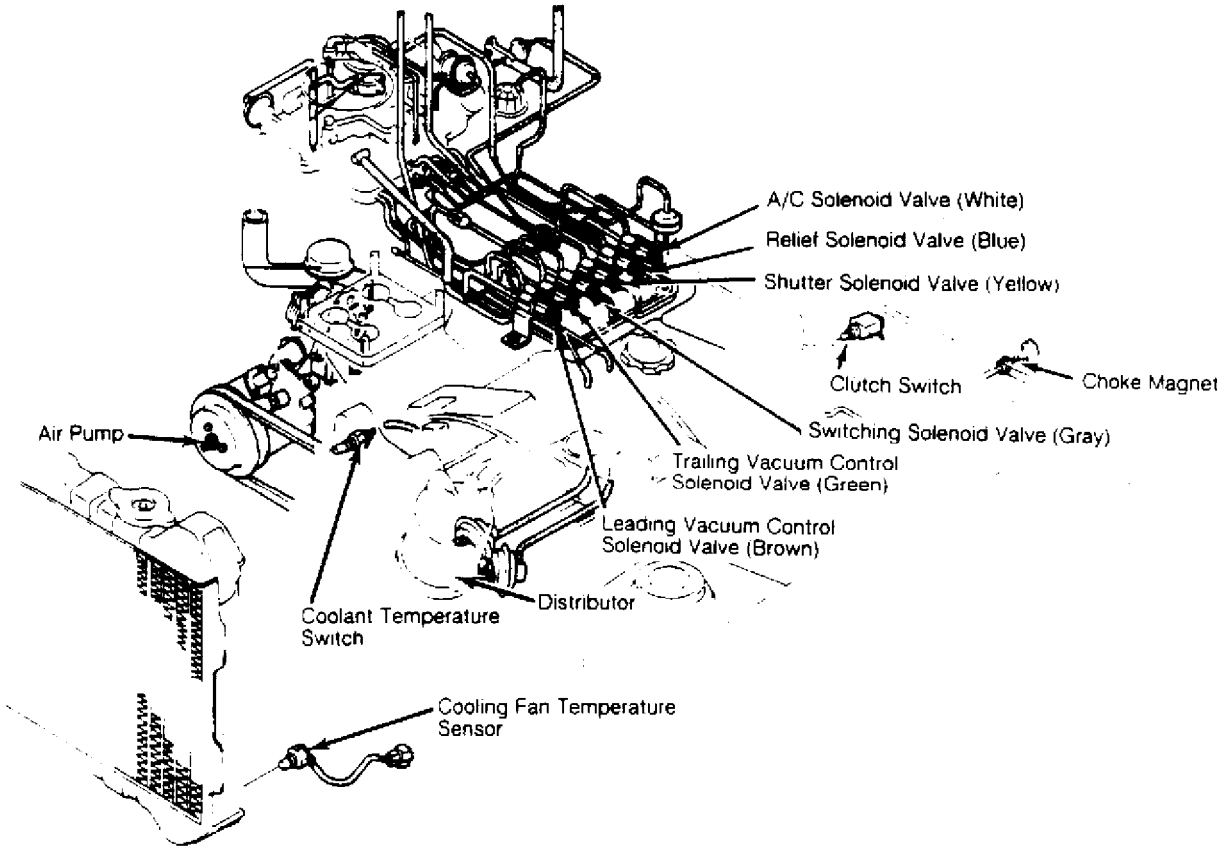
Shutter Solenoid Valve (Yellow), (Graphic 1)

In solenoid block on left side of engine.



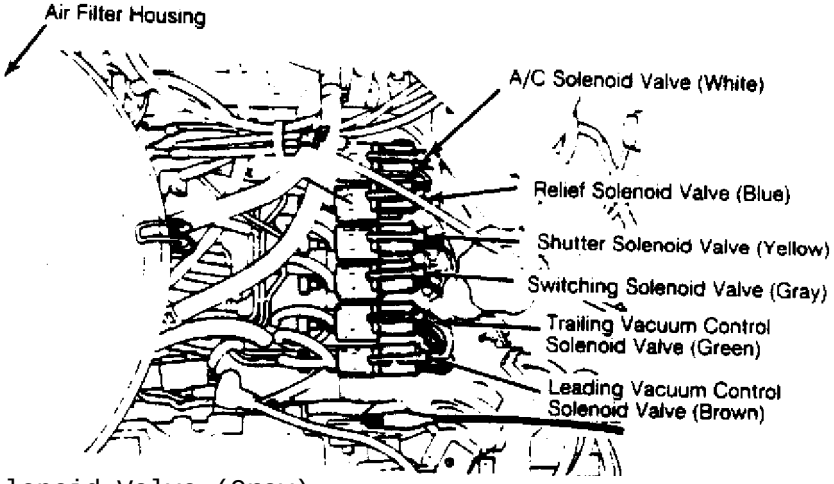
Shutter Solenoid Valve (Yellow), (Graphic 2)

In solenoid block on left side of engine.



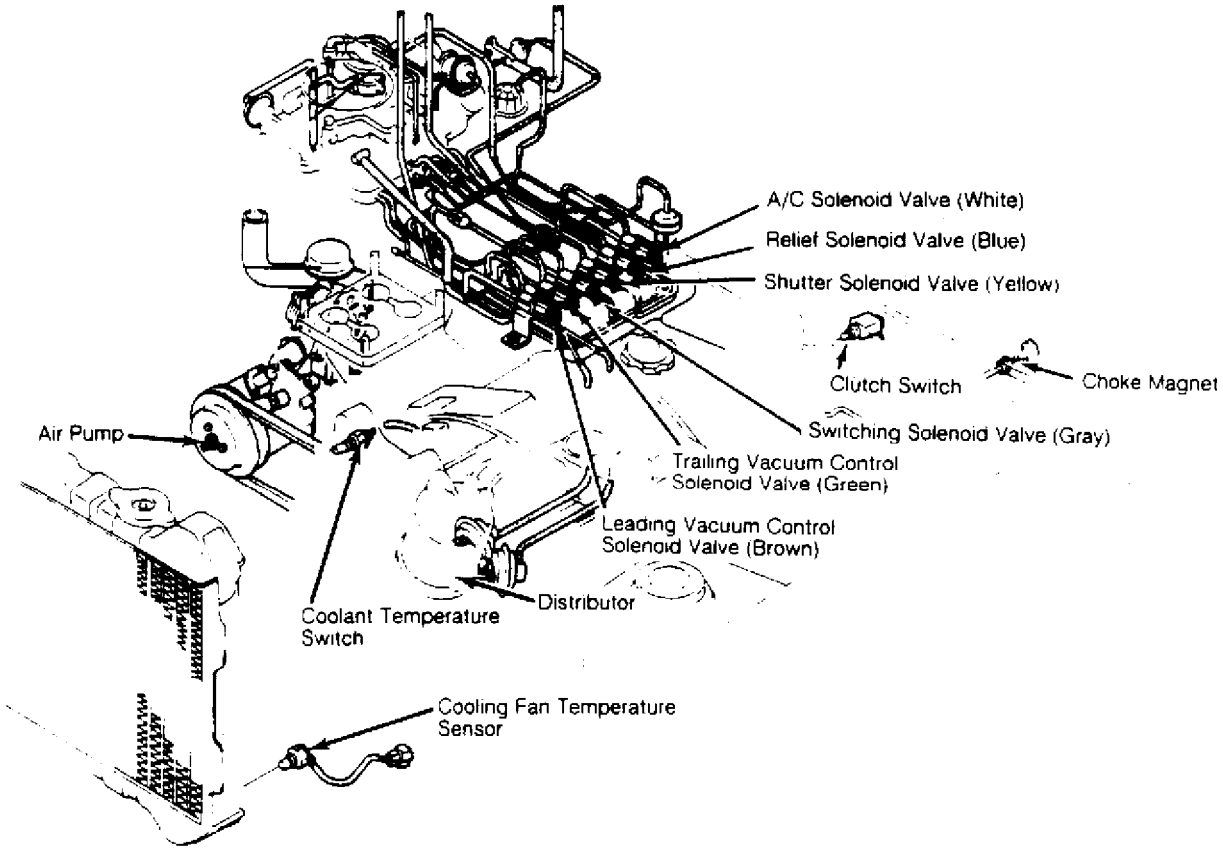
Switching Solenoid Valve (Gray), (Graphic 1)

In solenoid block on left side of engine.



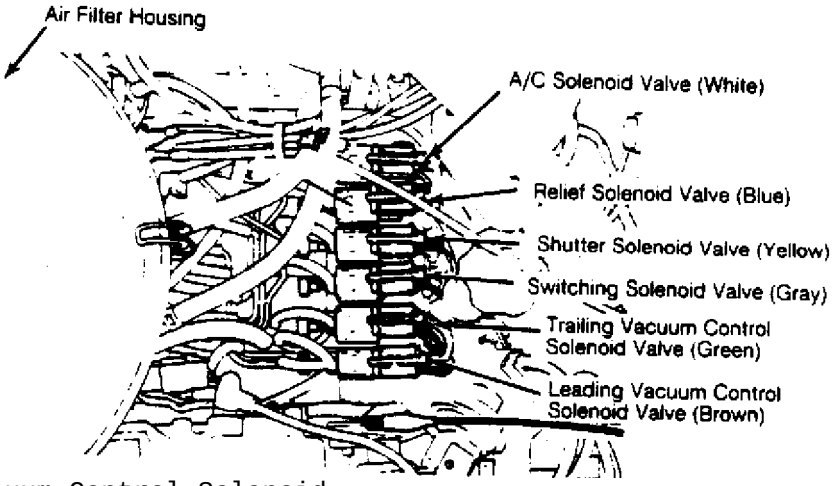
Switching Solenoid Valve (Gray), (Graphic 2)

In solenoid block on left side of engine.



Trailing Vacuum Control Solenoid, (Graphic 1)

In solenoid block on left side of engine.

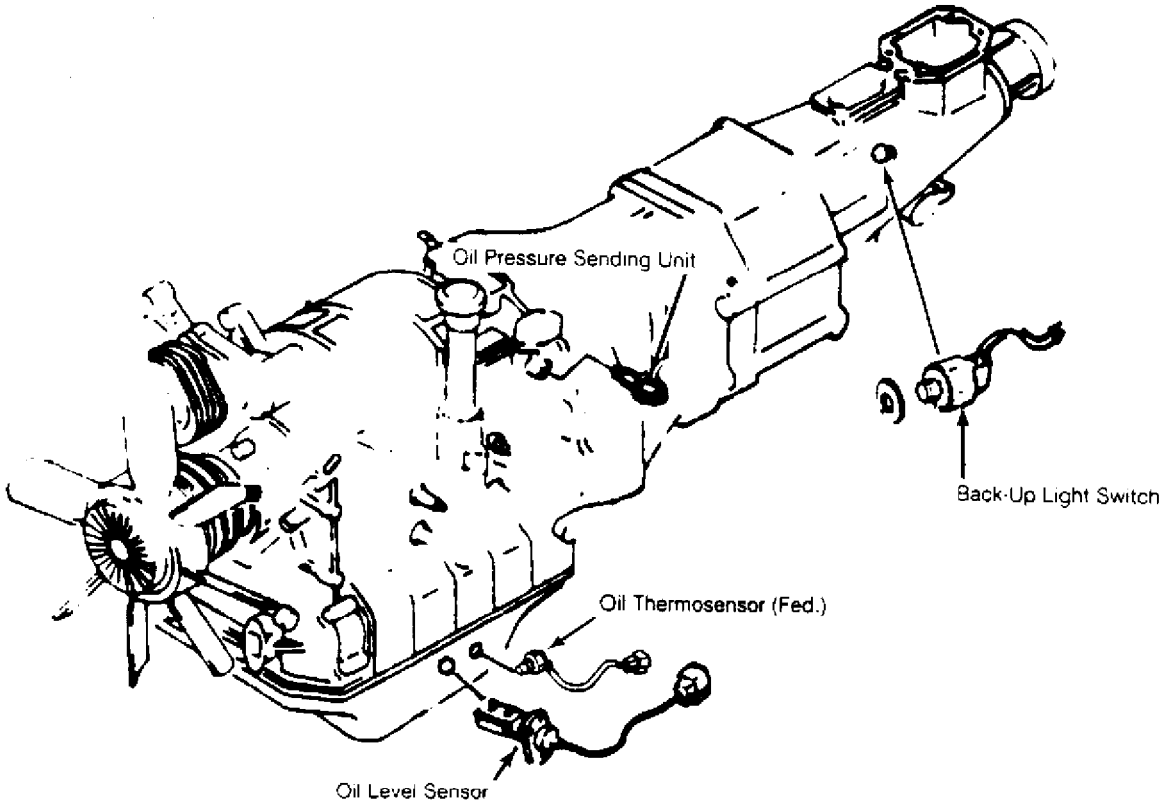


Trailing Vacuum Control Solenoid, (Graphic 2)

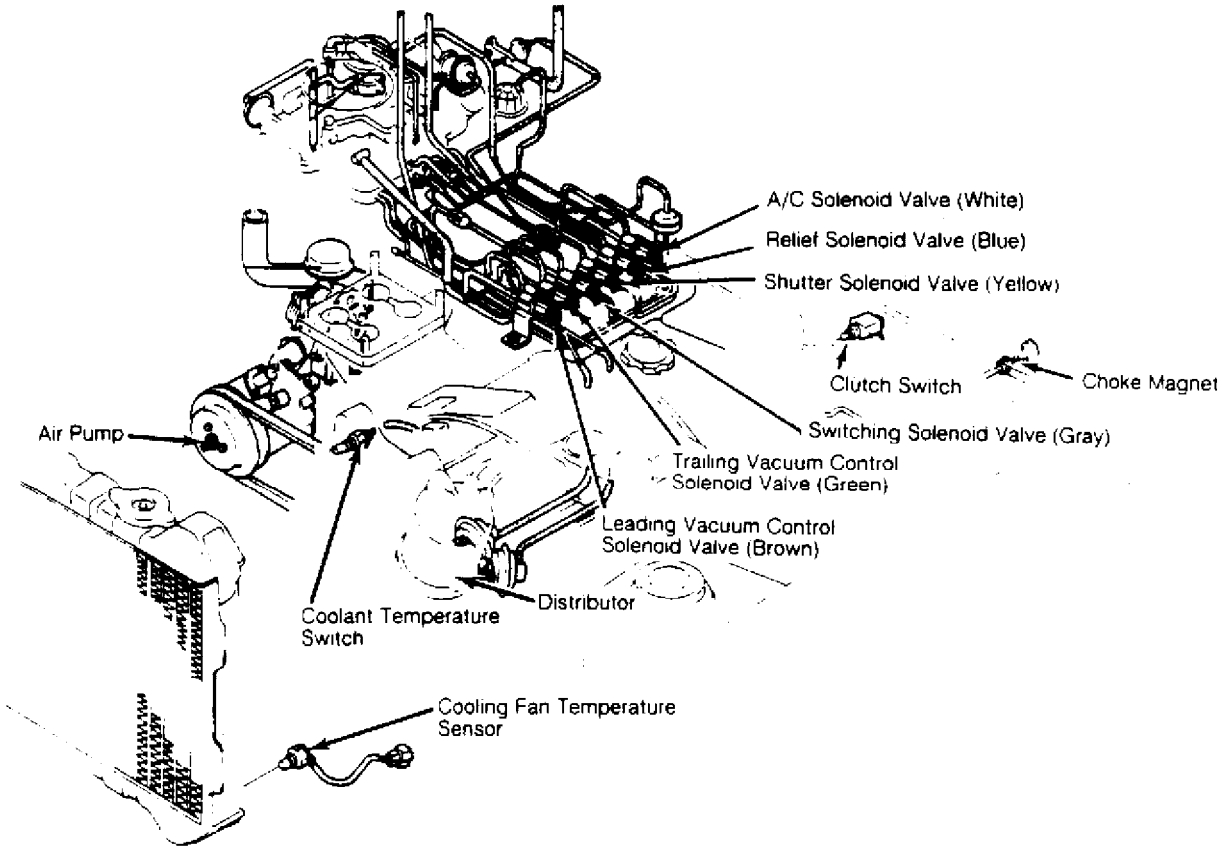
In solenoid block on left side of engine.

SWITCHES

Component	Component Location
A/C Low Pressure Switch	Below right side of instrument panel.



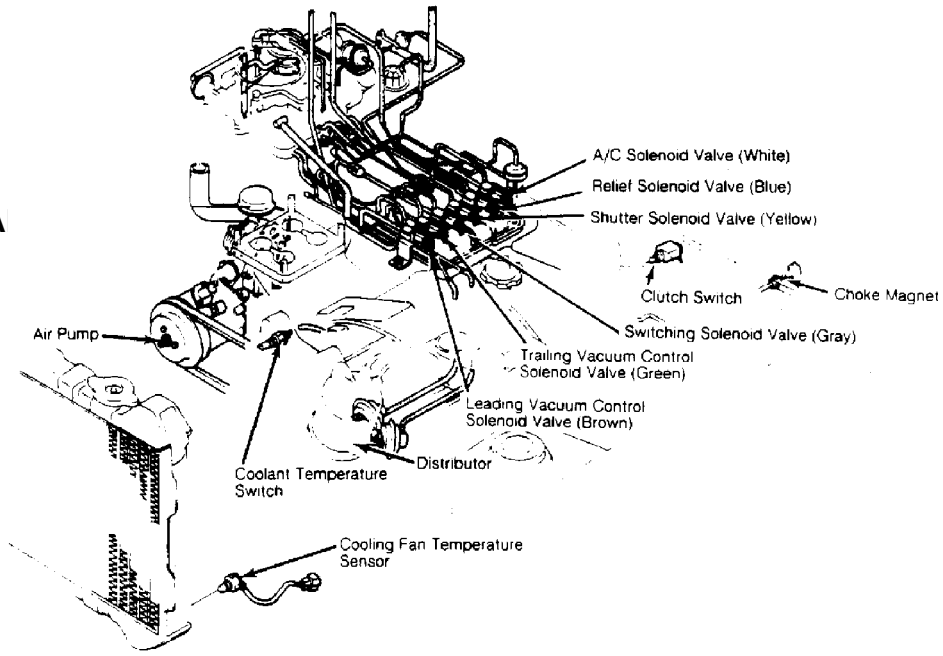
Back-Up Light Switch (M/T)	On left side of transmission case.
Brake/Stop Light Switch	On top of brake pedal bracket.



Clutch Switch

On top of clutch pedal bracket.

ELECTRICA



Coolant Temperature Switch

Mounted in water pump.

Inhibitor Switch (A/T)	On left side of transmission case.
Kickdown Switch	On accelerator pedal bracket.
Parking Brake Switch	On bottom of parking brake lever.

END OF ARTICLE

ALTERNATOR & REGULATOR
Article Text
1984 Mazda RX7
For iluvmyrx7.com

Saturday, June 08, 2002 05:23PM

ARTICLE BEGINNING

1984 Alternators & Regulators
MITSUBISHI ALTERNATORS WITH IC REGULATORS

Mazda

DESCRIPTION

Mitsubishi alternators are conventional 3-phase, self-rectifying type units containing 6 diodes (3 positive and 3 negative) which are used to rectify current. A case-mounted Integrated Circuit (IC) regulator is used on all models.

APPLICATION

Model	Volt/Amps	Part No.
Mazda		
B2000	13.5/50	A00IT23370
B2200	13.5/40	A00IT23479
GLC	12/50	(1) E56318300A
RX7		
12A Engine	12/55	(1) A5T30574
13B Engine	12/60	(1) 2A5T40374
626	12/60	(1) FE0118300R

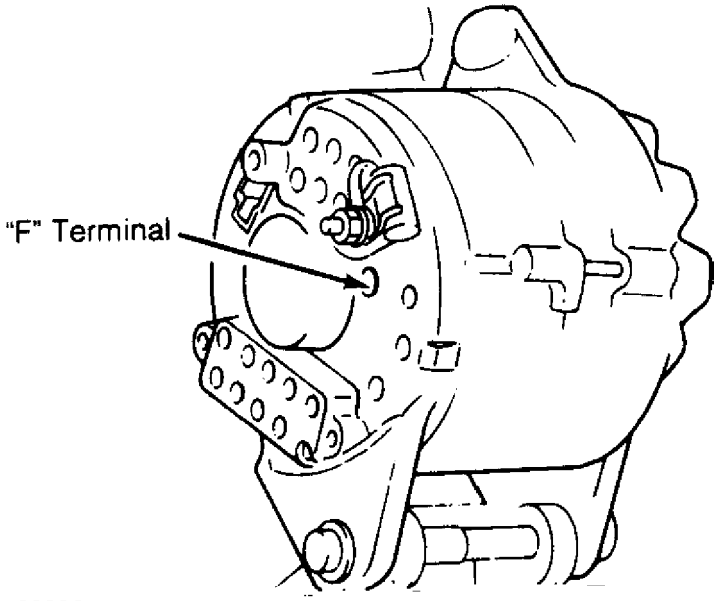
(1) - Vehicle manufacturer's part number.

TESTING

ON VEHICLE TEST

CAUTION: DO NOT short across any alternator terminals or run vehicle with any wires disconnected. Battery must be fully charged for tests to be accurate.

Output Test
1) With ignition switch off, check voltage at "R" terminal and "L" terminal. Reading at both terminals should be 0 volts. If not 0 volts, alternator is defective.
2) Turn ignition switch on but do not start engine. Voltage at "L" should be 1-3 volts. If voltage is 0, alternator and regulator are defective.
3) If voltage at "L" is close to battery voltage with ignition on, short circuit the "F" terminal to rear alternator housing. See Fig. 1.

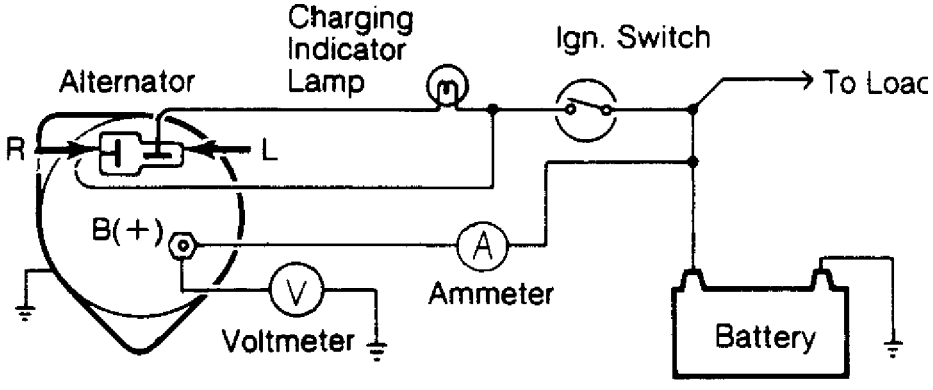


29386

Fig. 1: Alternator "F" Terminal Location
Terminal is located .8" (20 mm) below the hole.

4) Read the voltage at "L" with "F" terminal shorted. If voltage is lower than battery voltage, regulator is defective. If voltage is close to battery voltage, alternator is defective.

5) With ignition switch off and battery ground cable disconnected, connect ammeter between alternator terminal "B" and cable. Connect voltmeter between "B" (+) terminal and ground. See Fig. 2.



29387

Fig. 2: Alternator Output Test Arrangement

6) Start engine and accelerate to 2000-3000 RPM. Turn on all lights and check ammeter for output.

OVERHAUL

DISASSEMBLY

1) After removing through bolts, insert screwdriver between front housing and stator to separate.

2) Hold the rotor in a soft jawed vice. Remove pulley nut, pulley, fan, and spacer. Remove rotor drive end housing by lightly tapping end housing with a soft mallet.

3) To separate stator from diode end housing, unsolder 3 negative diode leads and connections between diodes. Hold the stator lead with a needle nose plier to prevent rectifier from overheating.

4) Remove condenser from the "B" terminal. Unsolder the "L" and "B" terminal from the rectifier assembly. Lift out rectifier assembly and brush holder.

TESTING

Diode Assemblies

1) Check each diode with ohmmeter in forward and reverse direction. If the diode shows large resistance in one direction and small resistance in other direction, diode is normal.

2) If diode shows small resistance in both directions, it is shorted. If large resistance is shown in both directions, diode is open. Heat sink and diodes are replaced as an assembly.

Rotor Field Continuity

Check continuity across field coil slip rings. A reading of 3-4 ohms must be obtained. If there is no continuity, replace rotor.

Rotor Field Coil Ground

Check continuity between individual slip rings and rotor core/shaft. If there is continuity, coil or slip ring is grounded, replace rotor.

Stator Coil Ground

Ensure no continuity exists between stator coil leads and stator core.

Stator Coil Continuity

Check continuity between leads of stator coil. If there is no continuity, replace stator.

Brush Wear Limit

Brushes must be replaced when worn to 1/3 of original length. This limit is indicated by a wear limit line on the side of each brush.

Brush Spring Pressure

Standard tension should be 12-16 oz. (340-453 g). Replace if less than 7 oz. (198 g) or if springs are corroded.

COMPONENT REPLACEMENT

Brushes

To remove brushes from holder, unsolder pigtail from terminal. To replace, solder pigtail to terminal ensure that 1/4" of brush will be located in brush holder.

Diodes

The diodes and rectifier are serviced as an assembly. If any diodes are defective, replace rectifier assembly.

Drive End Bearing

Remove bearing retainer set screws. Press bearing out of front housing.

Rear Bearing

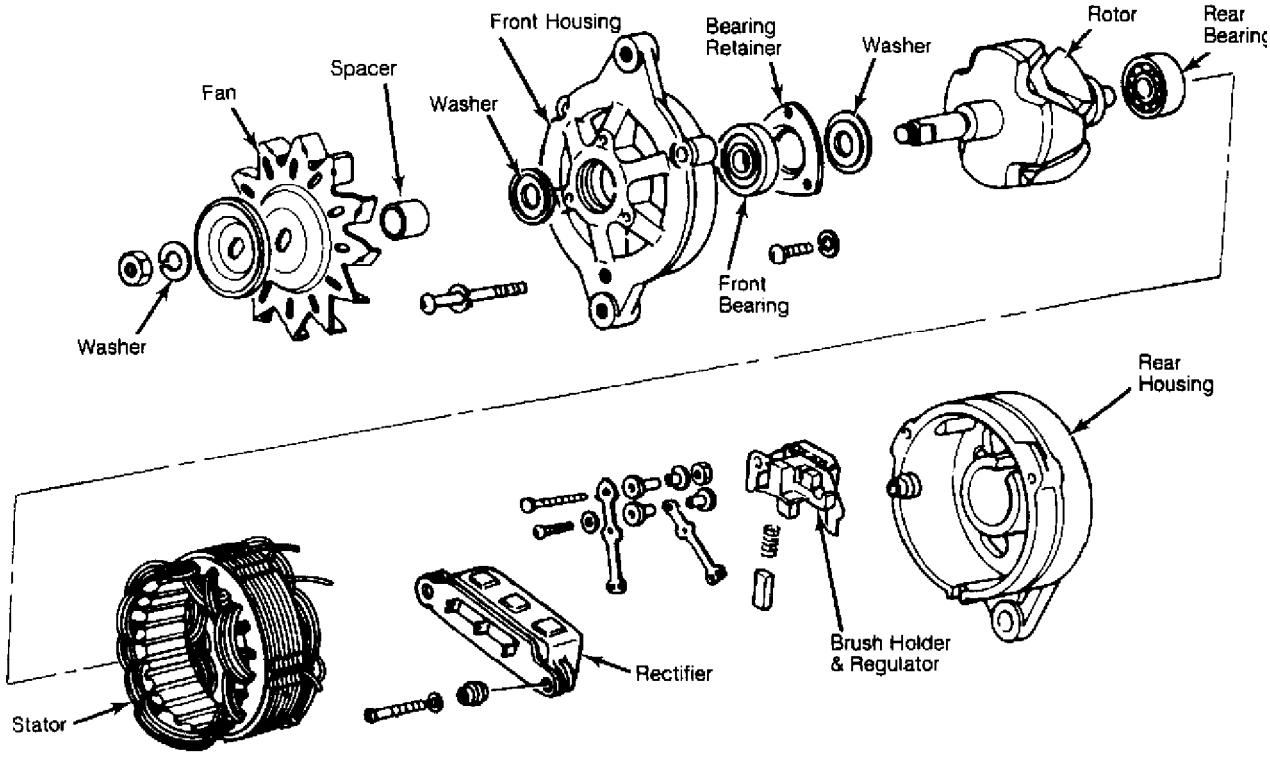
Remove rear bearing from housing assembly using a press or bearing puller.

Voltage Regulator

The voltage regulator and brush holder are combined in one unit. If regulator is found to be defective, replace as an assembly.

REASSEMBLY

Reassemble by reversing disassembly procedures. Soldering of rectifier leads should be done in less than 5 seconds to prevent damage to diodes. When installing the rotor assembly in the rear housing, hold the brushes in position by inserting a stiff piece of wire into the access hole in rear housing.



29389

Fig. 3: Exploded View of Mitsubishi Alternator

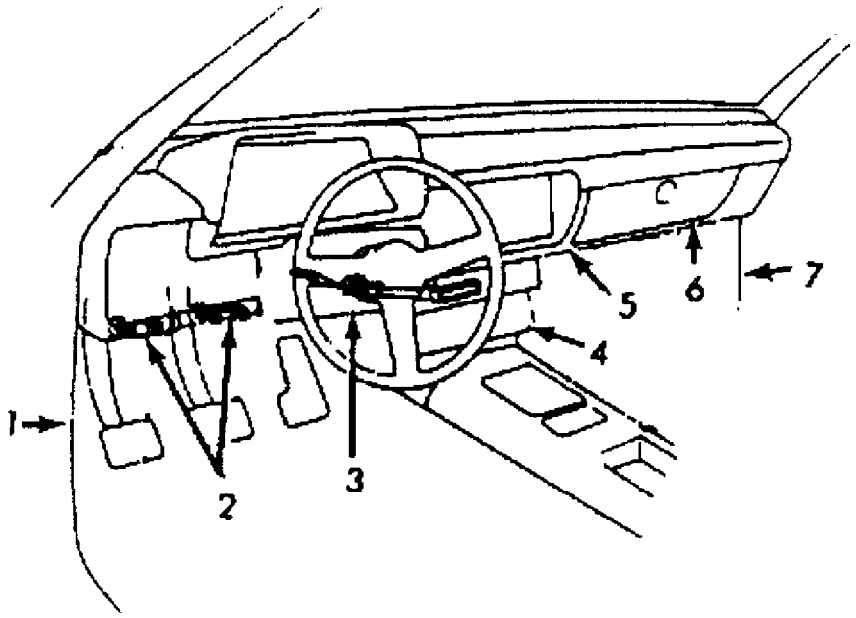
END OF ARTICLE

FUSE & FLASHER LOCATIONS
Article Text
1984 Mazda RX7
For iluvmyrx7.com

Saturday, June 08, 2002 05:25PM

ARTICLE BEGINNING

1984 FUSES & FLASHER LOCATIONS
MAZDA



Locations 1-7 are as shown.

Locations 8-16 are as follows:

8 - Left Front Engine Compartment
9 - Right Front Engine Compartment
10 - Left Rear Engine Compartment
11 - Right Rear Engine Compartment
12 - Left Rear Taillight Area
13 - Right Rear Taillight Area
14 - Under Passenger Seat
15 - Under Rear Seat
16 - Right Side "B" Pillar

29511
Fig. 1: Fuse & Flasher Locations

FUSE BLOCKS, FLASHERS & RELAYS

Manufacturer & Model	Component Location in Fig. 1
Mazda	
GLC	
Fuse Locations	(2)
Flasher Locations	(2)
Relay Locations	
Break Light Check, Choke, Horn, A/C Cut-Out, Cooling Fan	(2)
Wiper/Washer	(2)
Door Lock	(10)

END OF ARTICLE

FUSES & CIRCUIT BREAKERS
Article Text
1984 Mazda RX7
For iluvmyrx7.com

Saturday, June 08, 2002 05:26PM

ARTICLE BEGINNING

Fuses & Circuit Breakers
1983-85 Mazda

RX7

FUSES & CIRCUIT BREAKERS

FUSE PANEL LOCATION

The main fuse block is located at the right rear side of the engine compartment and contains high amperage fuses which protect multiple circuits. Fuse box located above driver's left knee, accessible through a removable cover, contains fuses for individual circuits.

FUSE PANEL & FUSE BLOCK IDENTIFICATION (1983-85)

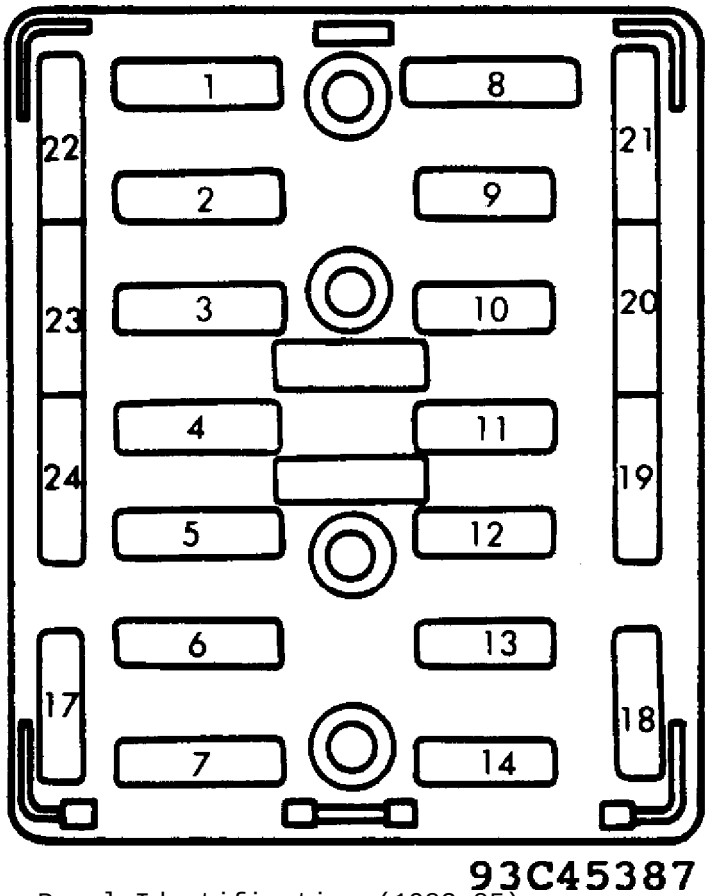


Fig. 1: Fuse Panel Identification (1983-85)
Courtesy of Mazda Motor of America Inc.

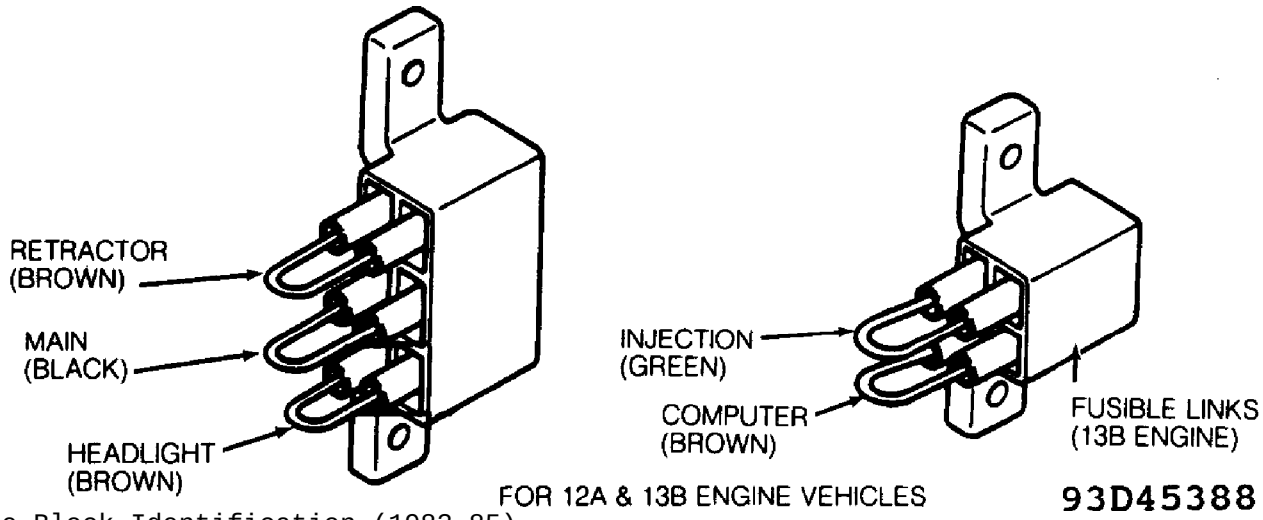


Fig. 2: Fuse Block Identification (1983-85)
Courtesy of Mazda Motor of America Inc.

1 - Empty
2 - 15 Amp
Horn
3 - 15 Amp
Hazard Warning Lights
4 - 10 Amp
Taillights
5 - 20 Amp
Roof Opener
6 - 10 Amp
Cigarette Lighter
7 - 20 Amp
Radio & Antenna
8 - 15 Amp
Gauges & Back-Up Lights
9 - 20 Amp
Engine
10 - 30 Amp
Power Windows
11 - 20 Amp
Heater Blower
12 - 15 Amp
Rear Defogger
13 - 15 Amp
Windshield Wipers
14 - 10 Amp
Rear Wiper
15 - Empty
16 - Empty
17 - Empty
18 - Empty
19 - 15 Amp
Air Conditioning
20 - Empty
21 - Empty
22 - Empty
23 - Empty
24 - Empty

CAUTIONS & WARNINGS

BRAKE PAD WEAR INDICATOR

Indicator will cause a squealing or scraping noise warning that the pads need replacement.

HEADLIGHT RETRACTOR

Never operate headlight retractor when a person's hands, or other objects are on or near the headlights. When working on the headlights always remove the headlight retractor fuse.

AIR BAG SYSTEM

Always remove air bag system fuse when working on any controls associated with the steering wheel or steering column.

END OF ARTICLE

IGNITION SYSTEM
Article Text
1984 Mazda RX7
For iluvmyrx7.com

Saturday, June 08, 2002 05:26PM

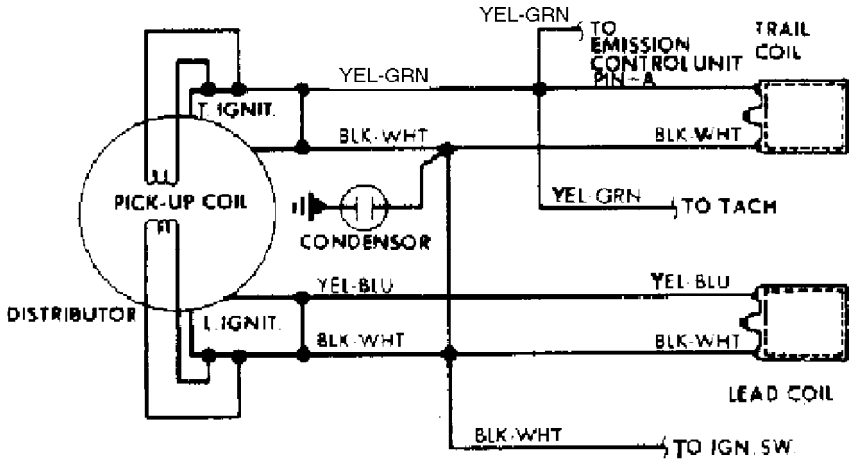
ARTICLE BEGINNING

1984 Distributors & Ignition Systems
MITSUBISHI ELECTRONIC IGNITION - MAZDA ROTARY ENGINE

Mazda RX7

DESCRIPTION

The Mitsubishi electronic ignition system, used on the Mazda RX7 rotary engine, is unique in that it has 2 sets of spark plugs (leading and trailing). There is one set in the front rotor housing and one in the rear rotor housing. See Fig. 1. There are also 2 ignition coils, 2 pick-up coils located in the distributor, and 2 coil-to-distributor high tension wires.



29012
Fig. 1: Schematic of RX7 Ignition System

There are 2 separate ignitors, mounted externally on the distributor housing. One is for the leading side and the other for the trailing side. Other system components include a battery, ignition switch, ignition control switches, (water temperature, altitude, etc.), and various relays.

All models are equipped with an ignition control system and centrifugal advance mechanisms. All models have vacuum control units for both leading and trailing sides.

OPERATION

A reluctor (signal rotor) is mounted on the reluctor (rotor) shaft. It turns inside 2 magnetic pick-up coils, one for the leading side and one for the trailing side. See Fig. 2.

As each tooth of the reluctor approaches and then passes the leading pick-up coil, a signal is generated. It is sent to the leading ignitor, which breaks the primary circuit in the leading ignition coil.

As each tooth passes the leading pick-up coil, the previous passing tooth approaches and becomes aligned with the trailing pick-up coil. This triggers a signal to the trailing ignitor, which breaks the primary circuit in the trailing ignition coil.

Therefore, immediately after the leading spark plug fires, the trailing spark plug also fires, providing more complete and

efficient combustion while reducing HC and CO emissions.

As the primary circuit is broken in the leading and trailing ignition coils, a voltage surge occurs in the secondary circuit of the ignition coils. This high voltage is transmitted through the leading and trailing high tension wires to the distributor, rotor and spark plugs.

An emission control unit is also included in the ignition control system, along with different sensing switches to provide proper timing under varying engine operating conditions.

ADJUSTMENTS

RELUCTOR-TO-
PICK-UP COIL AIR GAP

1) Remove distributor cap and rotor. Turn distributor shaft until the extended tooth of the reluctor (signal rotor) aligns with core of pick-up coil. See Fig. 2.

2) Using a feeler gauge, check for .020-.035" (.5-.9 mm) air gap. If gap is incorrect, replace pick-up coil and bearing assembly or distributor drive shaft, as required.

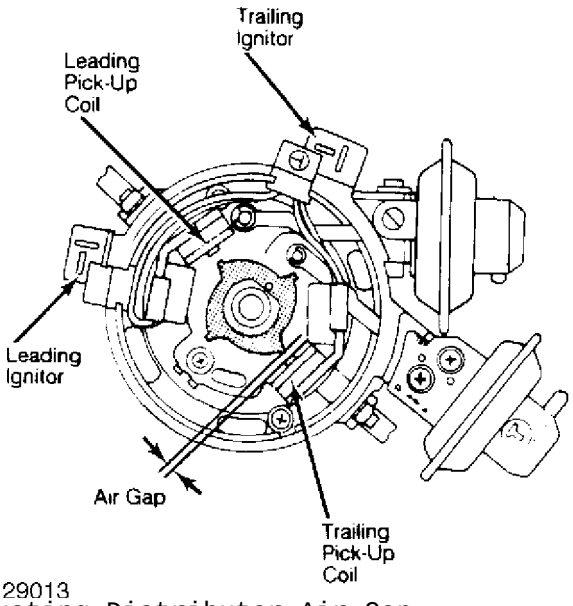


Fig. 2: Adjusting Distributor Air Gap
Check air gap at all teeth and both pick-up coils.

IGNITION TIMING

1) To adjust leading timing, loosen distributor lock nut, and rotate distributor housing until correct timing is obtained. See Fig. 3.

2) To adjust trailing timing, loosen the screws securing the trailing vacuum unit. Move the vacuum unit outward (to advance) or inward (to retard). Retighten screws when correct timing is obtained.

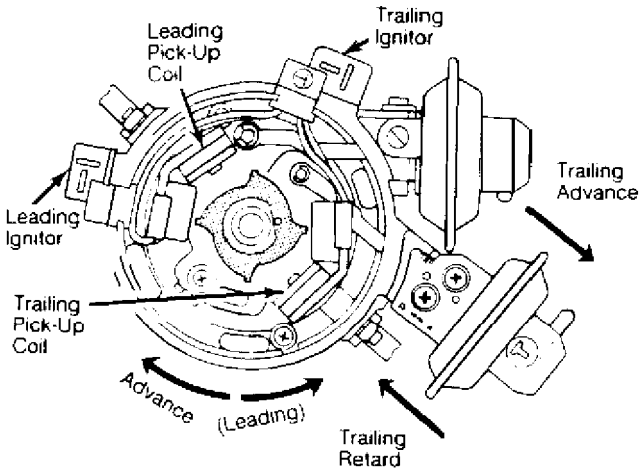


Fig. 3: Adjusting Ignition Timing
Distributor position determines leading timing. Vacuum unit position adjusts trailing timing.

TESTING

HIGH TENSION WIRE

RESISTANCE CHECK

Turn ignition switch "OFF". Connect ohmmeter leads to each end of coil-to-distributor high tension wire. Resistance should not exceed 16,000 ohms (plus or minus 400 ohms) per 39.37" (1 m).

IGNITION COIL RESISTANCE CHECK

Set an ohmmeter in the low scale. With ignition switch turned "OFF", and coil wires disconnected, attach ohmmeter leads to primary terminals of leading coil and then trailing coil. Primary resistance should be 1.22-1.48 ohms for each ignition coil.

PICK-UP COIL RESISTANCE CHECK

1) Set an ohmmeter in the x100 scale. Turn ignition switch "OFF". Disconnect connector between ignitor and distributor. See Fig. 4.

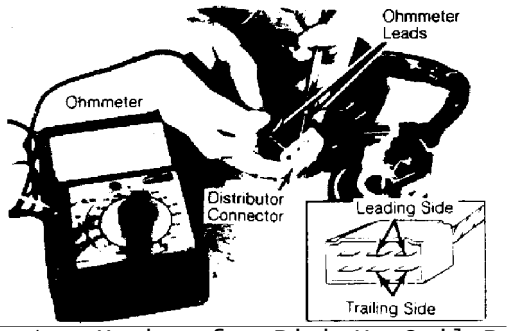


Fig. 4: Ohmmeter Hookup for Pick-Up Coil Resistance Check
Replace pick-up coil & bearing plate if reading is not 600-700 ohms.

2) Connect ohmmeter leads to leading terminals and then to trailing terminals. Resistance should be 600-700 ohms at 68° F (20°

C) for each set of pick-up coils. If not, replace pick-up coil and bearing assembly.

PICK-UP COIL OPERATION CHECK

1) With distributor connector still disconnected, touch ammeter leads to leading terminals and then to trailing terminals.
2) Place a screwdriver against core of pick-up coil being tested. Indicator of meter should move each time screwdriver is taken quickly away from core. If not, replace pick-up coil and bearing assembly.

IGNITOR CHECK

1) Remove ignitor from distributor base. Make a circuit as shown in Fig. 5 using wire and a test bulb. Use a 12 volt bulb of less than 10 watts.

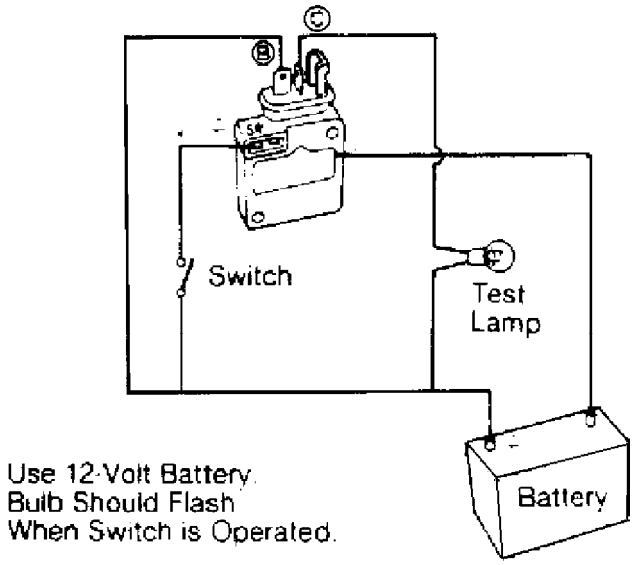


Fig. 5: Test Lamp Hookup for Checking Ignitor Operation
Bulbs should flash when switch is operated.

2) Quickly operate switch "ON " and "OFF", and make sure test lamp flashes. If not, replace ignitor.

OVERHAUL

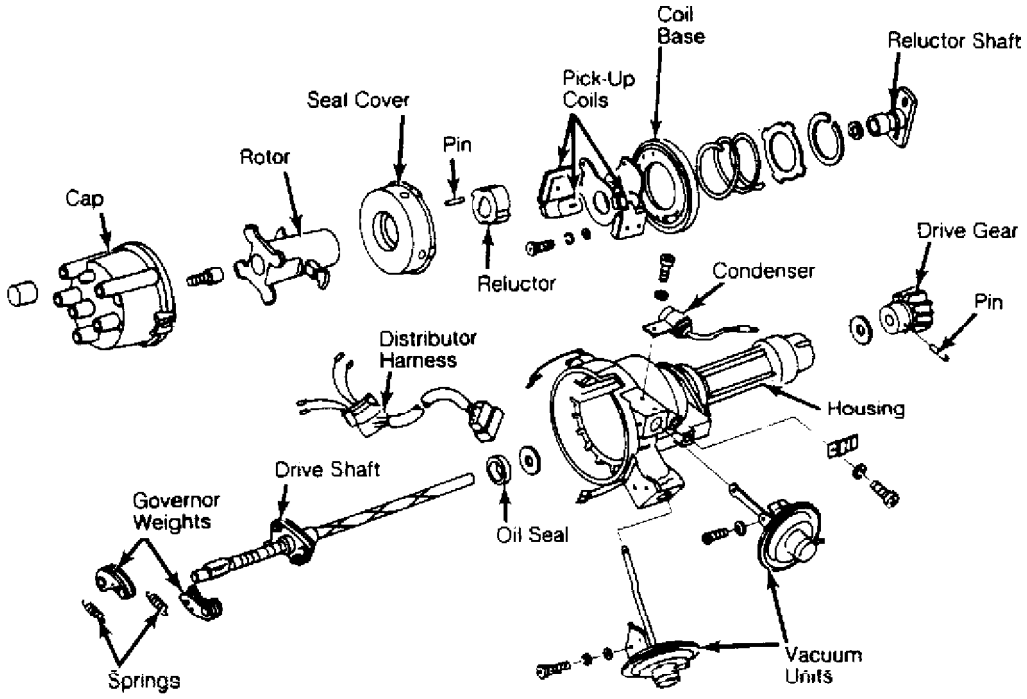
DISASSEMBLY

1) Remove distributor cap, rotor and seal cover. See Fig. 6. Remove ignitors and attaching screws from distributor housing. Remove clips holding vacuum diaphragm links. Remove attaching screws and vacuum control units from distributor housing. Remove condenser.
2) Remove reluctor shaft attaching screw from end of shaft. Remove pick-up coil base bearing attaching screws. Remove reluctor, reluctor shaft, pick-up coils and coil base bearing assembly from top of distributor drive shaft.
3) Remove reluctor from reluctor shaft, using puller. Remove spring pin. Remove governors by removing springs. Drive lock pin out of drive gear, using a small drift. Remove gear and washers. Remove

drive shaft through top of distributor housing.

REASSEMBLY

1) Inspect distributor cap and rotor for cracks, carbon tracks, and burned or corroded terminals.
2) Assemble distributor in reverse order of disassembly, noting the following: Install reluctor shaft onto distributor drive shaft, engaging slots of reluctor shaft and governor pins. Install pick-up coil and coil base bearing assembly and tighten attaching screws. Install reluctor on shaft, driving spring pin in with a punch.



29017

Fig. 6: Disassembled View of RX7 Mitsubishi Distributor

END OF ARTICLE

STARTER - MITSUBISHI
Article Text
1984 Mazda RX7
For iluvmyrx7.com

Saturday, June 08, 2002 05:27PM

ARTICLE BEGINNING

1984 Starters
MITSUBISHI

Mazda - B2000 Pickup, B2200 Pickup, GLC, RX7, 626

DESCRIPTION

Starter is a conventional 12-volt, 4-pole brush-type motor, with either direct or reduction gear drive. The starter-mounted solenoid shifts overrunning clutch and pinion into flywheel when starter is energized.

MITSUBISHI STARTER APPLICATION

Model	Type or Part No.
Mazda	
B2000 Pickup Gasoline	
Man. Trans.	(1) FE05-18-400
Auto. Trans.	(1) FE05-18-400A
B2200 Pickup Diesel	(1) R201-18-400
GLC	(1) E301-18-400
RX7	
Man. Trans.	(1) N221-18-400
Auto. Trans.	(1) N202-18-400A
626	(1) FE05-18-400

(1) - Vehicle manufacturer's part number.

TESTING

STARTER PERFORMANCE TESTS

No Load Tests
Connect starter in series with a 12-volt battery, a voltmeter and a 1000 amp ammeter. Compare readings with STARTER NO LOAD SPECIFICATIONS.

MITSUBISHI STARTER NO LOAD SPECIFICATIONS TABLE (1)

Application	Max. Amps	Min. RPM
Mazda		
B2000 Pickup	53	6800
B2200 Pickup	180	3800
GLC Sedan	53	6800
RX7		
Man. Trans.	60	6500
Auto. Trans.	100	3500
626		
Man. Trans.	60	6500
Auto. Trans.	60	6600

(1) - Applied voltage of 11.5-12 volts.

Load (Lock Torque) Test

Mount starter in a test stand to perform torque measurement test. Follow manufacturer's instructions for test stand operation. With voltage adjusted, ammeter reading and torque should be within specifications.

MITSUBISHI STARTER LOAD TEST SPECIFICATIONS TABLE (1)

Application	Max. Amps	Volts	Torque Ft. Lbs. (N.m)
Mazda			
B2000 Pickup	310	5	5.4 (7.5)
B2200 Pickup	1050	2	21.7 (30.0)
GLC	310	5	5.4 (7.5)
RX7			
Man. Trans.	420	5	6.9 (9.6)
Auto. Trans.	1100	4	22.4 (31.0)
626	310	5	5.4 (7.5)

(1) - Turning speed not specified by manufacturer.

SOLENOID TESTS

NOTE: Make tests with solenoid removed from starter or remove solenoid lead to starter before testing. Ensure solenoid plunger and sleeve are clean and dry before performing tests. Make tests in less than 10 seconds to prevent coil damage.

Pull-In Coil Test

1) Connect jumper between positive post of 12 volt battery and "S" terminal. Connect a second jumper to negative battery terminal and touch "M" (MT) terminal (and between terminal "S" and switch body). See Fig. 1.

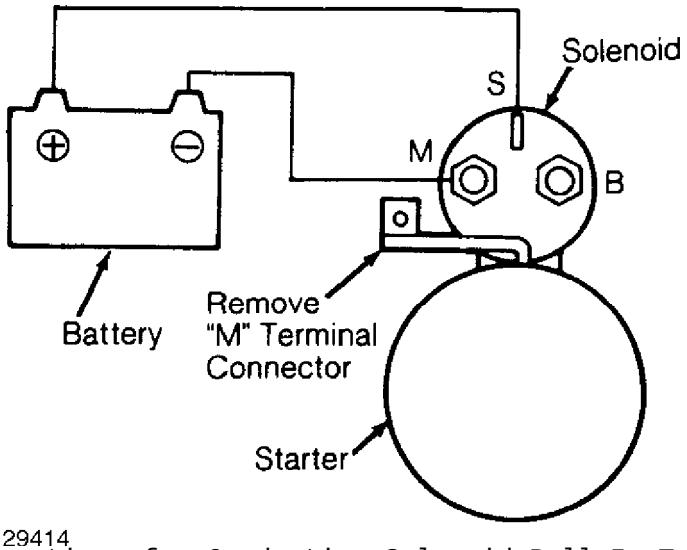
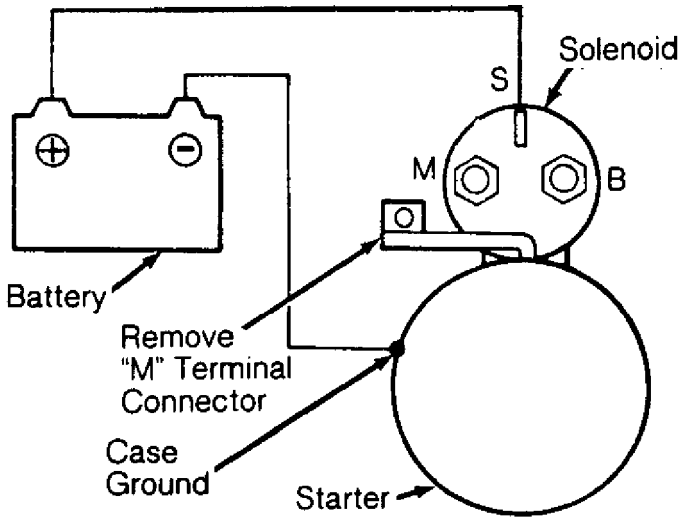


Fig. 1: Connections for Conducting Solenoid Pull-In Test
Remove solenoid-to-starter lead before testing.

2) If pinion moves outward (or plunger is pulled-in), pull-in coil is good. If not, replace magnetic switch.

Hold-In Coil Test

1) Connect a jumper wire between the "M" (MT) terminal and solenoid case. Apply 8 volts to "S" terminal to pull in the plunger. See Fig. 2. Disconnect lead to "M" (MT) terminal.



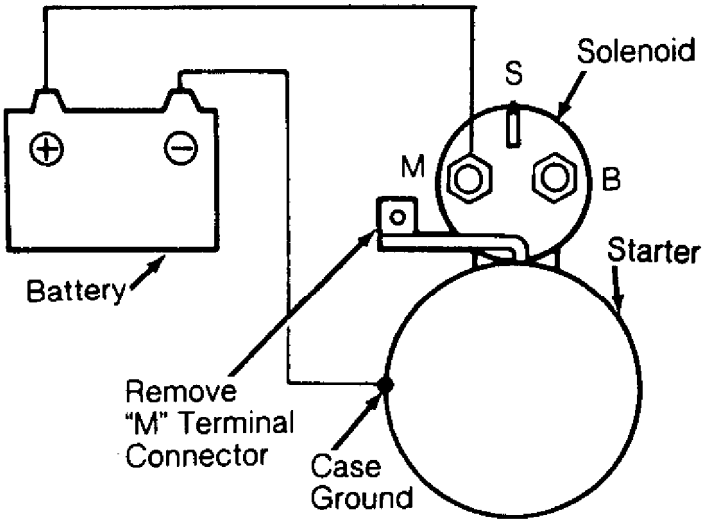
29415

Fig. 2: Connections for Conducting Solenoid Hold-In Test
Make tests in less than 10 seconds to avoid solenoid damage.

2) If pinion remains out (plunger is pulled-in), hold-in coil is good. If not, replace magnetic switch.

Return Test

1) Apply 12 volts between "M" (MT) terminal and the solenoid case. Pull pinion out and release it (push plunger into solenoid body by hand). See Fig. 3.



29416

Fig. 3: Connections for Conducting Return Test
Connect battery to "M" terminal and solenoid case.

2) If the case is short-circuited, the pinion will remain out (plunger will be attracted). If nothing happens, solenoid is good.

REMOVAL & INSTALLATION

1) On all models, remove negative battery cable. If necessary raise vehice on hoist. Remove starter mounting bolts. Remove starter from vehicle.

OVERHAUL

DISASSEMBLY

NOTE: Procedures may vary slightly between conventional and reduction gear starters.

1) Loosen nut securing connecting plate-to-magnetic switch "M" terminal. Remove screws securing magnetic switch and remove switch (solenoid) assembly. Remove through bolts and brush cover assembly. Tap yoke assembly loose with wooden mallet. Remove yoke, armature assembly and pinion shift lever.
2) Remove pinion stop ring from end of armature shaft by pushing stop ring to clutch side. Remove snap ring and overrunning clutch assembly from armature shaft.

CLEANING & INSPECTION

Clean all parts. Do not use grease dissolving solvent on overrunning clutch, armature assembly, solenoid assembly or field coils due to possible damage. Inspect all parts for damage or wear and replace as required.

BENCH TESTS

Brushes & Springs
Check brush spring tension using a spring scale. Check brush contact surface condition and brush length. Check lead clip and wire connections and condition of brush holders. Replace as required. See BRUSH SPRING TENSION and MINUMUM BRUSH LENGTH charts.

BRUSH SPRING TENSION

Application	Ozs. (g)
Mazda	
B2000 & B2200 Pickups	50-62 (1415-1766)
RX7	50-92 (1415-2604)
All Other Models	46-60 (1302-1700)

MINIMUM BRUSH LENGTH

Application	In. (mm)
Mazda	.45 (11.5)

Armature
Check external condition of armature for scoring or other damage. Measure shaft runnout with dial indicator. Replace armature if shaft runnout exceeds .004" (.10 mm).

Commutator

1) Inspect commutator for roughness, grooves, burns or pitting. Sand lightly with 500 grit sandpaper if necessary. Check commutator for out-of-round and mica insulators undercut to a depth of .020-.031" (.50-.80 mm).

2) If necessary, commutator may be turned less than .04" (1.0 mm) from original size and mica undercut. Replace if excessively worn.

Field Coil

1) Check field coil continuity by connecting test probe of circuit tester or an ohmmeter to the field coil positive terminal and brush holder. If circuit is open, replace field coil.

2) Check for grounding of field coils by placing one probe of circuit tester on starter housing and other probe to field coil positive terminal. If little or no resistance, field coil is grounded and must be replaced.

Overrunning Clutch Assembly

1) Inspect pinion assembly and sleeve. Sleeve should slide freely on armature shaft and spline. If damage or resistance is noted, replace assembly.

2) Check pinion and flywheel teeth for excessive rubbing or damaged teeth. Replace as required.

Pinion Gear Clearance

1) The clearance between the pinion gear and pinion stopper collar should be .02-.08" (.51-2.03 mm) on Mitsubishi starters, when solenoid is engaged. Adjust as necessary by changing shims between solenoid and
starter yoke.

2) On Mazda B2200 models, projection distance (starter housing-to-front face of gear) should be .67" (17 mm).

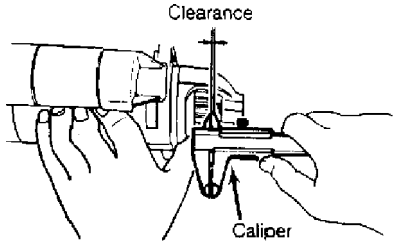
Pinion Case Bearing

Inspect bearing for wear and check side play. If clearance exceeds .008" (.20 mm), replace bearing. New bearing clearance should be .002-.004" (.05-.10 mm) for Mitsubishi starters.

NOTE: Ensure that bearing is installed so that end of bearing is flush with gear case end.

REASSEMBLY

To reassemble, reverse disassembly procedure. Fill rear case on reduction gear models with grease. Lightly oil pinion and all bearing surfaces.



29418

Fig. 4: Measuring Pinion Edge-to-Pinion Stopper Clearance

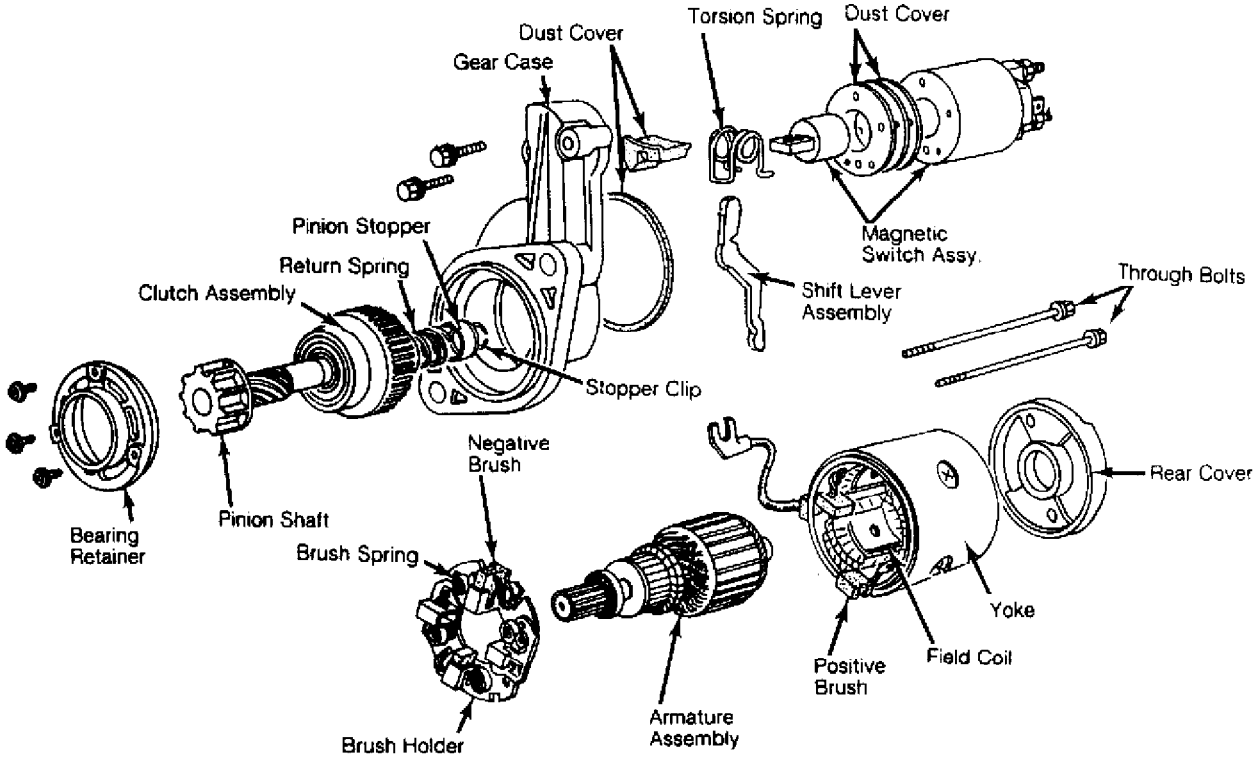


Fig. 5: Disassembled View of Typical Hitachi Reduction Gear Starter

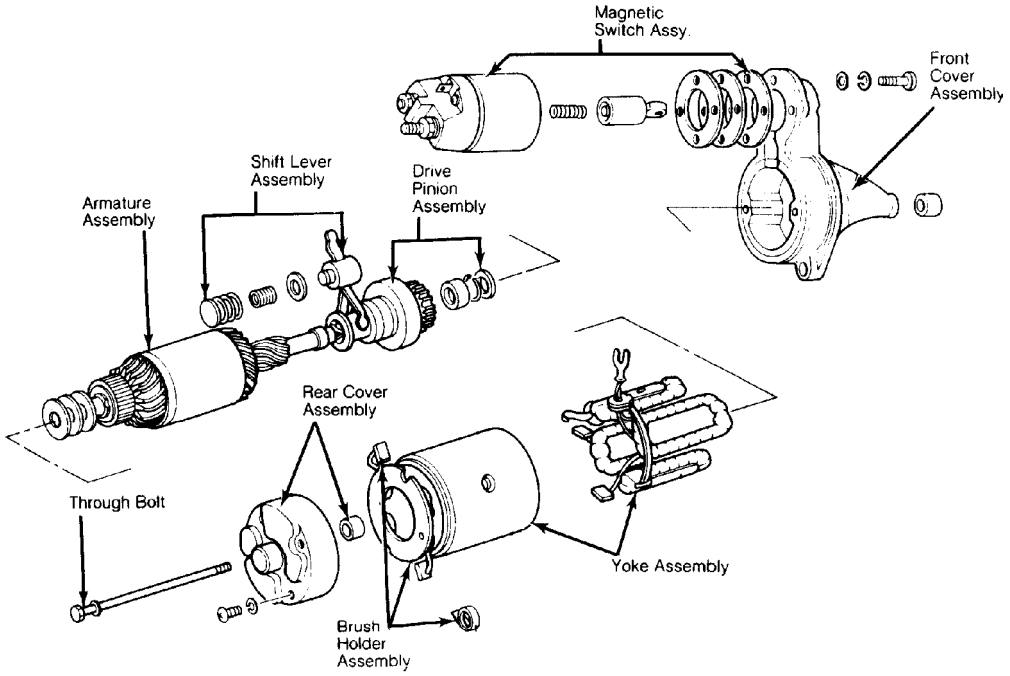


Fig. 6: Disassembled View of Typical Mitsubishi Conventional Starter For 1983 Pickup

END OF ARTICLE

1.3L ENG NO START/BLOWN FUSE - SHORT IN WIRE HARNESS CAT. 15, NO. 012/85

Article Text

1984 Mazda RX7

For iluvmyrx7.com

Saturday, June 08, 2002 05:30PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

APPLICATION

1979-84 RX7

SUBJECT

"ENGINE" Fuse Blows/No Start

REFERENCE

Mazda Motors Corp., Service Bulletin, No. 15 012/85, September, 1985

CONDITION & CAUSE

Some 1979-84 RX7 vehicles may exhibit an "ENGINE" fuse that blows, preventing the engine from starting. This problem may be caused by an electrical short circuit in the wiring harness.

REPAIR

Check for a short circuit in the wire harness in the area of the thermostat and air hose to the air cleaner. See Fig. 1.

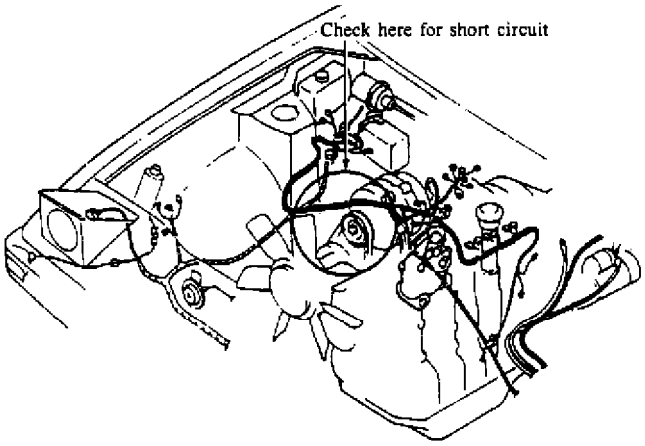


Fig. 1: View of Wiring Harness

END OF ARTICLE

ACCEPTABLE BATTERY DRAIN CAT. 5, NO. 017/88
Article Text

1984 Mazda RX7

For iluvmyrx7.com

Saturday, June 08, 2002 05:30PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

CURRENT DRAW FROM THE BATTERY

Model: All Models
Bulletin No.: 017/88
Date: 7/27/88
Category: 5

DESCRIPTION

In order to maintain the memory of the electrical equipment such as radio, clock, and several other control units, a small amount of current is drawn from the battery even though the vehicle is not in use. Although the actual current may vary according to the electrical equipment in each vehicle, the following specification can be used to determine if the current draw of the vehicle in question is normal or not.

CURRENT DRAW AMPERAGE

All Vehicles: 15 to 25 mA (Ignition key is removed or in the lock position).

NOTE:
If the ignition key is in the ACC position, up to 250 mA is drawn from the battery. This current draw is large enough to discharge the battery in a few days.

TEST PROCEDURES

1. Turn the ignition switch off and remove the key from the cylinder.
2. Turn off all electrical loads. Make sure all doors and the trunk lid are completely closed.
3. Open the hood and disconnect the negative battery terminal.

NOTE:
If the vehicle is equipped with theft-deterrent system, disconnect the coupler from the hood switch so that the warning light of the theft-deterrent system is not operable.

4. Set the circuit tester to the "DC mA" range, to at least 100 mA range and check the current as follows:

Positive lead from tester to Negative Battery Cable

Negative lead from tester to Negative Battery Post.

CAUTION:
Do not open the door while checking the current, as the tester will be damaged by the excessive current.

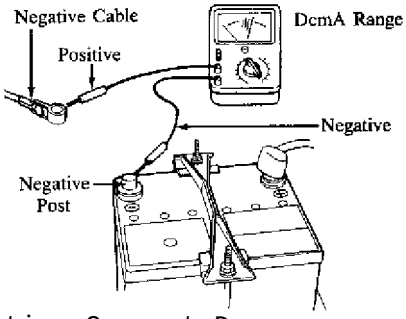


Fig. 1: Testing Currant Draw

END OF ARTICLE

ALTERNATOR/REGULATOR TEST PROCESS/REPLACEMENT INFO CAT. 5, NO. 058/83

Article Text

1984 Mazda RX7

For iluvmyrx7.com

Saturday, June 08, 2002 05:31PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

IC REGULATOR CHECKING PROCEDURE

Models	All Models
Bulletin No.	058/83
Category	5
Date	11/9/83

DESCRIPTION

Checking procedure for the built-in IC regulator has been established to pin point the alternator problem. Basically, the alternator should be replaced as a unit through the exchange program. However, in case of a shortage of refurbished alternators, you may replace the IC regulator to minimize inconvenience of customers (see Fig. 1).

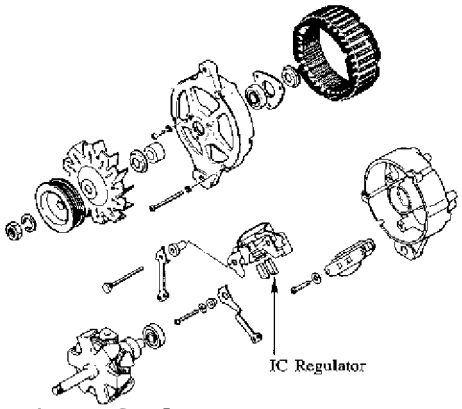


Fig. 1: Exploded View of Alternator

PARTS INFORMATION

Regulator	N221 24 520

CHECKING PROCEDURE

1. Make sure the battery is fully charged.
2. Turn ignition key on to "Ig" position. If the alternator warning light is "off", the problem is likely to be caused by regulator. Leave the key in "Ig" position and take the following step to assure the cause.
3. Insert volt meter between "F" terminal and nearest ground point (Fig. 2).
4. Do not ground to the body of the alternator while positive probe of voltmeter is inserted through the hole for "F" terminal.

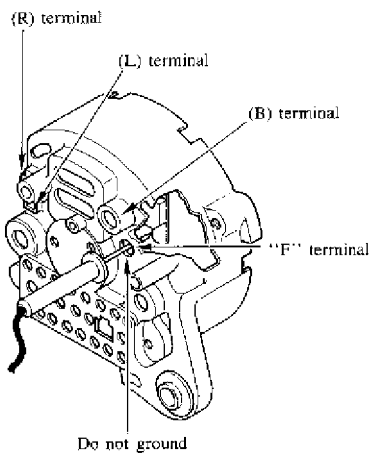


Fig. 2: Location of "F" Terminal

REPAIR PROCEDURE

Please refer to the Service Information for IC regulator replacing procedure.

NOTE: Be sure the insulators are in the proper position as shown in Fig. 3.

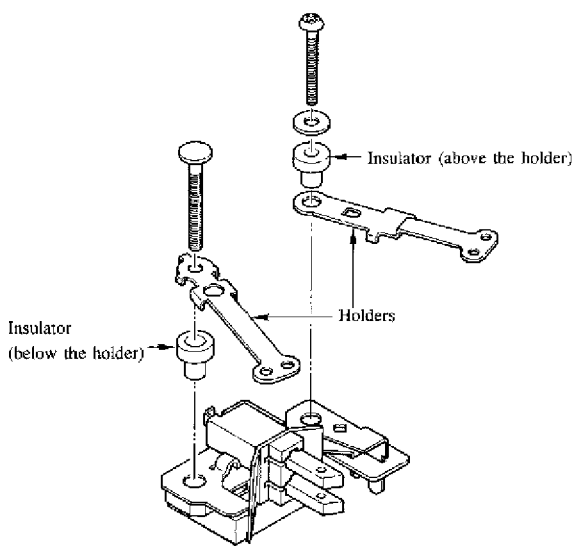


Fig. 3: Proper Location of Insulators

END OF ARTICLE

AUDIO SYSTEM TROUBLESHOOTING PROCEDURES CAT. 15, NO. 078/89
Article Text

1984 Mazda RX7

For iluvmyrx7.com

Saturday, June 08, 2002 05:31PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

AUDIO SYSTEM TROUBLESHOOTING

Model All Mazda Models
Category 15, Body Electrical System
Bulletin No. 078/89
Date May 5, 1989

DESCRIPTION

To simplify audio system troubleshooting, a flow chart (see Fig. 1) has been prepared. It contains essentials of audio system trouble-shooting procedures, focusing on the following:

* Obtain accurate information of customer's complaint.
* Carry out appropriate diagnosis or troubleshooting to find the faulty part.
* Avoid replacing unnecessary parts.
* Verify whether the customer's complaint results from specific characteristics of FM radio waves. If so, the complaint cannot be corrected by audio component replacement.

Use the following materials with the attached flow chart when carrying out inspection and repair of the audio system.

* Audio System Troubleshooting Procedures (plastic sheet)
* Service Bulletin, Category 15, 050/87 (FM Reception)
* Audio Customer Questionnaire
* Workshop Manual

NOTE: If it becomes necessary to disconnect power to the audio system, be sure to copy down the customer's preset stations. Re-set these stations after repairs are complete.

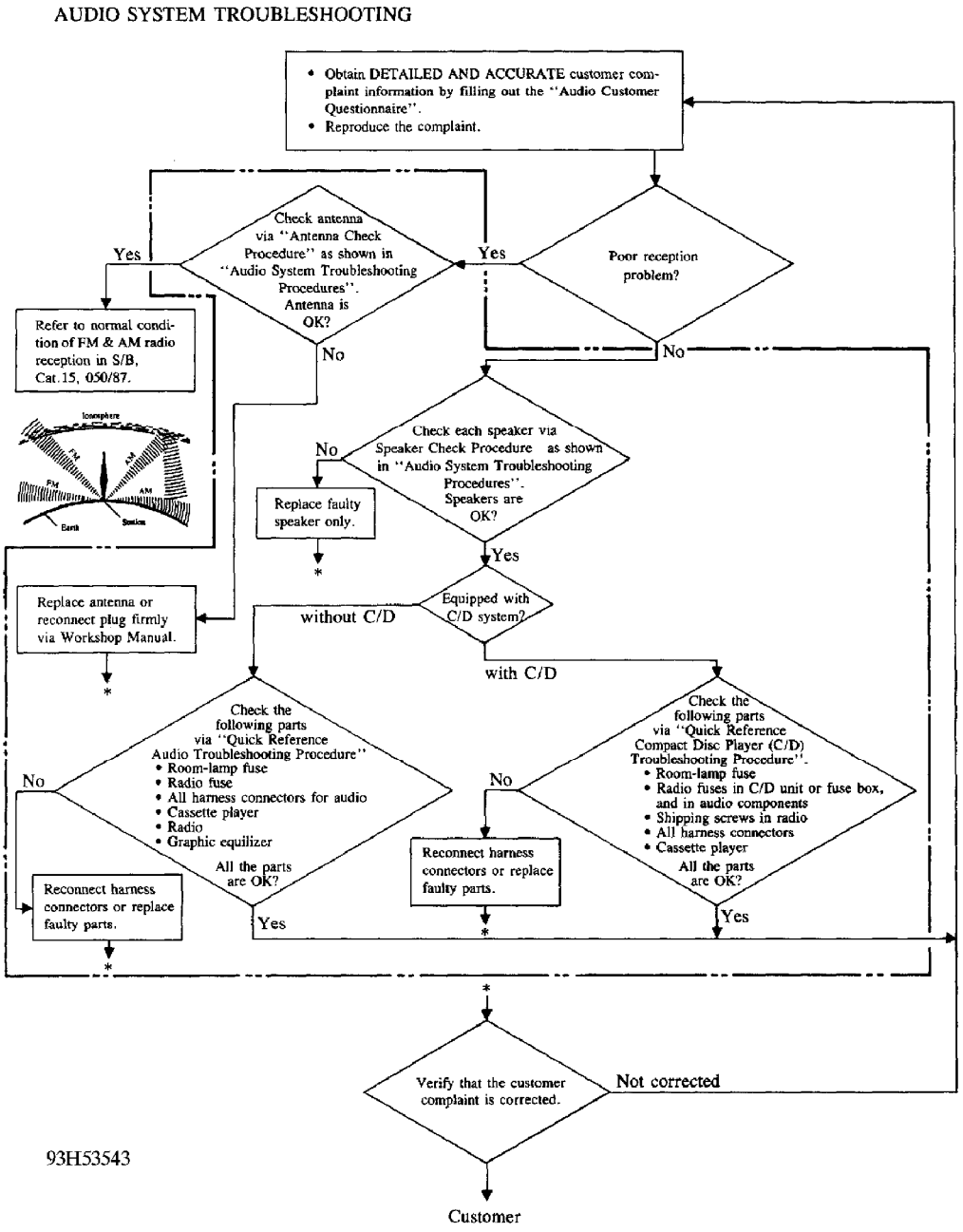


Fig. 1: Audio System Troubleshooting

END OF ARTICLE

BATTERY RECHARGING - DISCONNECT NEGATIVE TERMINAL MT 08-10
Article Text

1984 Mazda RX7

For iluvmyrx7.com

Saturday, June 08, 2002 05:32PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

BATTERY RECHARGING

Model(s): All Mazda Models
Category: Mazda Tips
Bulletin No.: MT 08-10
Date: 1995

DESCRIPTION

Always disconnect the negative cable from the battery before connecting a battery charger to it. Leaving the negative cable connected could damage the control unit or cause the air bag to inflate as the battery recharges.

END OF ARTICLE

BATTERY REMOVAL/INSTALL WIRE CLIP WARNING CAT. 14, NO. 009/85
Article Text

1984 Mazda RX7

For iluvmyrx7.com

Saturday, June 08, 2002 09:46PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

BATTERY CLAMP BOLT & NUT

Models	RX-7
Bulletin No.	009/85
Category	14
Date	1/22/85

DESCRIPTION

During installation of the battery clamp rod and nut, it is possible for wire clip to become pinched in the threads on the clamp bolt, resulting in the nut binding on the clamp rod. See Fig. 1.

If you encounter this problem, please follow the repair procedure below.

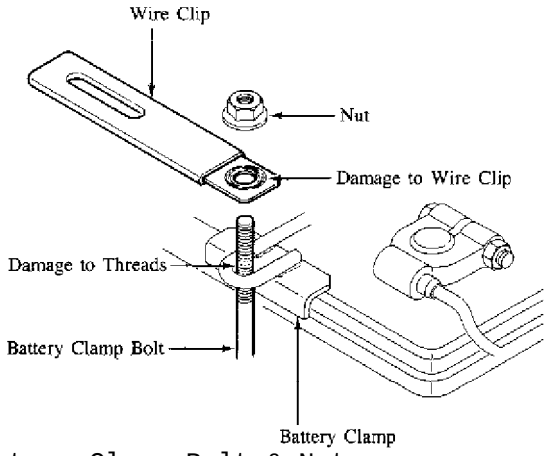


Fig. 1: Battery Clamp Bolt & Nut

PARTS INFORMATION

PART NUMBER	DESCRIPTION
0613 65 857A	Clamp Bolt
9994 00 602	Nut

REPAIR PROCEDURE

1. Carefully remove the nut from the battery clamp bolt.
2. Use a die to repair the threads on the clamp bolt.
3. Install a small washer on top of the wire clip to prevent damage to the threads on the clamp bolt during reinstallation.

END OF ARTICLE

KEYLESS SWITCH SPEED NUT INFORMATION CAT. 15, NO. 010/85
Article Text

1984 Mazda RX7

For iluvmyrx7.com

Saturday, June 08, 2002 09:51PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

SPEED NUT FOR IGNITION KEY SWITCH

Models	GLC, 626, RX-7 & B2000
Bulletin No.	010/85
Category	15
Date	6/25/85

DESCRIPTION

The speed nut for fixing the key-less switch to the ignition key cylinder housing has been established as a service part. If the replacement of the ignition key switch is necessary, please use the new speed nut to secure the key-less switch. See Fig. 1.

PARTS INFORMATION

NEW PART NO.	OLD PART NO.	DESCRIPTION
BC46 66 158	—	Speed Nut

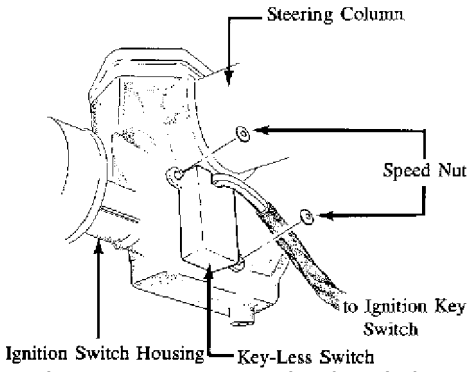


Fig. 1: Securing Key-Less Switch with Speed Nut

END OF ARTICLE

MISCELLANEOUS BLOWN FUSES/ELECTRICAL PROBLEMS CAT. 15, NO. 016/85
Article Text

1984 Mazda RX7

For iluvmyrx7.com

Saturday, June 08, 2002 09:53PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

APPLICATION

1979-85 RX7

SUBJECT

Miscellaneous Blown Fuses/Electrical Problems

REFERENCE

Mazda Motors Corp., Service Bulletin, No. 15 016/85, October, 1985

CONDITION & CAUSE

Some 1979-85 RX7 vehicles may exhibit one or more of the following electrical problems:

* RADIO, ANTENNA fuse blown
* TAIL, ILLUM fuse blown
* METER, BACK fuse blown
* OPENER fuse blown
* Inoperative rear defroster/rear wiper
* Rear wiper operates with wiper switch in OFF position

One or more of the above problems may be caused by a short circuit in the rear harness. The rear harness may be cut by a sharp metal edge where the harness is routed over the inner wheel well. See Fig. 1. This was fixed in production beginning with VIN JM1FB33 F0852204.

REPAIR

If this problem is present, repair the rear harness as necessary.

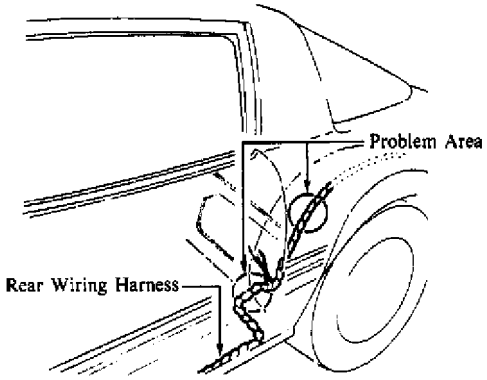


Fig. 1: View of Rear Wiring Harness

END OF ARTICLE

NEW WIRING DIAGRAM IDENTIFICATION INFORMATION CAT. 16, NO. 186/83

Article Text

1984 Mazda RX7

For iluvmyrx7.com

Saturday, June 08, 2002 09:54PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

WIRING DIAGRAMS

Models	1984 All Models
Bulletin No.	185/83
Category	16
Date	9/24/83

DESCRIPTION

A new method of describing color codes for electrical connectors has been established for 1984 Wiring Diagrams. In the new Wiring Diagrams, the connectors are viewed from the harness side rather than the connector side (Fig. 1).

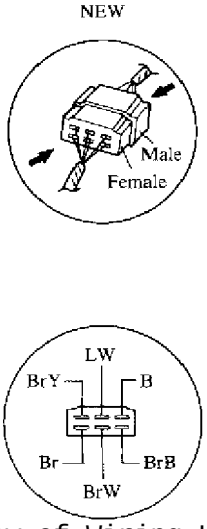


Fig. 1: View of Wiring Harness Connector

END OF ARTICLE

REAR WINDOW DEFROSTER GRID LINE REPAIR PROCEDURE CAT. T, NO. 015/95
Article Text

1988 Mazda RX7

For iluvmyrx7.com

Tuesday, June 11, 2002 08:57AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

REAR WINDOW DEFROSTER GRID LINE REPAIR

Model(s): All Mazda Models
Category: T - Body Electrical System
Bulletin No.: 015/95
Date Issued: November 14, 1995
Date Revised: December 21, 1995

DESCRIPTION

The following procedure should be used to repair broken grid lines on rear window defrosters. Place a copy of these procedures in the appropriate section of the workshop manual.

REPAIR PROCEDURE

1. Turn the defroster switch on with the ignition in the on position.
2. Determine the broken grid line visually or with a test light or voltage meter.
3. Turn the defroster and ignition Off.
4. Clean the area with a glass cleaner.
5. Remove the protective backing from the stencil.
6. Align both ends of the broken grid line with the opening in the stencil and press firmly to attach. See Fig. 1

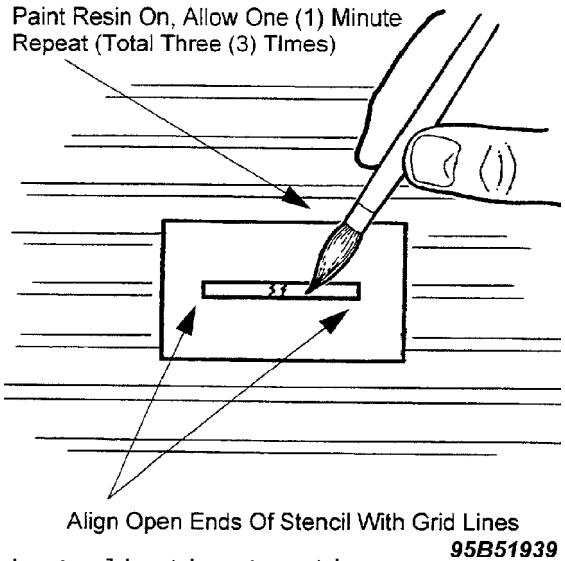


Fig. 1: Resin Application Location

NOTE: Make sure both ends are aligned prior to attaching.

7. Shake the bottle of resin well.

CAUTION: Continuity failure will occur if the ingredients are not mixed completely.

8. Brush on the resin overlapping both ends of the broken grid line.

NOTE: Use paint remover to clean brush for future applications.

9. Repeat application (total of 3 times) when the surface is tack-free (approximately one (1) minute).

10. Allow to dry twenty (20) minutes.

11. Carefully peel stencil from glass.

12. Allow twenty-four (24) hours before activating rear defroster.

PARTS INFORMATION

PARTS INFORMATION TABLE

Part Number	Description
0000 88 5067	Resin

WARRANTY INFORMATION

(Applies To Verified Customer Complaints On Vehicles Covered Under Normal Warranty. Refer To The SRT Microfiche For Warranty Term Information.)

Warranty Type: A
Symptom Code: D5
Damage Code: AA
Part Number Main Cause: 0000 88 5067
Quantity: 0
Operation Number: XX0777RX
Labor Hours: 0.3 Hrs.

END OF ARTICLE

REVISED WIPER LINK BUSHING CAT. 14, NO. 022/85
Article Text
1984 Mazda RX7
For iluvmyrx7.com

Saturday, June 08, 2002 09:57PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

WIPER LINK

Models 1981-1985 RX-7
Bulletin No. 022/85
Category 14
Date 10/18/85

DESCRIPTION

A new wiper link has been established as a service part. This new wiper link features a bushing as shown in Fig. 1.

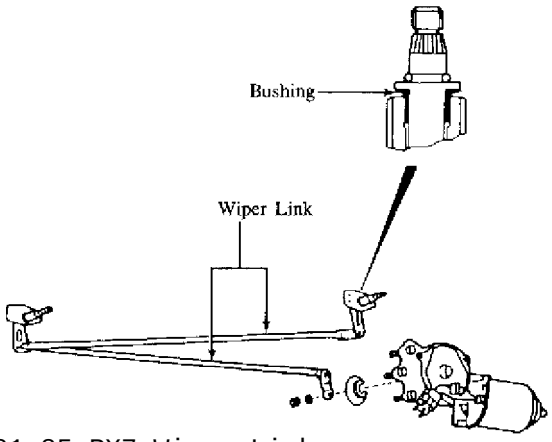


Fig. 1: 1981-85 RX7 Wiper Link

PARTS INFORMATION

NEW PART NO.	OLD PART NO.	DESCRIPTION	INTERCHANGEABILITY	APPLIED MODEL
FA54 76 601A	FA54 76 601	Wiper Link	NEW -> OLD	1984-85 RX-7
8871 76 601B	8871 76 601A	Wiper Link	NEW -> OLD	1981-83 RX-7

NOTE: A new part can be used in place of the former part, but the former part may not be used in place of the new part.

END OF ARTICLE

TURN SIGNAL DOESN'T CANCEL - REPLACE CANCEL CAM CAT. 14, NO. 010/85
Article Text

1984 Mazda RX7

For iluvmyrx7.com

Saturday, June 08, 2002 09:58PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

TURN SIGNAL SWITCH CANCEL CAM

Models	All Models
Bulletin No.	010/85
Category	14
Date	1/22/85
Symptom	Turn Signal Doesn't Cancel

DESCRIPTION

If the turn signal switch does not cancel, the most probable cause is a broken cancel cam. The cancel cam is available separately and can be replaced as shown below.

REPAIR PROCEDURE

1. Put a mark on the steering wheel and steering shaft so that the steering wheel can be reinstalled in the same position.
2. Remove the retaining nut for the steering wheel and remove the steering wheel with a steering wheel puller. See Fig. 1.

CAUTION: Do not strike the steering shaft with a hammer as this will damage the steering shaft.

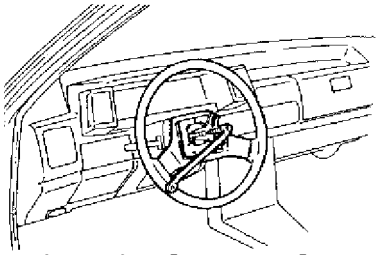


Fig. 1: Steering Wheel Removal

3. Inspect the cancel cam. If the tabs are broken off the cancel cam, the combination switch can be repaired by replacing the cancel cam. See Fig. 2.

NOTE: It is not necessary to remove the combination switch to replace the cancel cam.

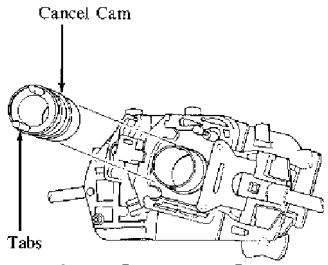


Fig. 2: Turn Signal Cancel Cam

4. Place the turn signal in the "OFF" position .
5. Carefully pry the cancel cam from the combination switch using a screwdriver. See Fig. 3.

6. Install the new cancel cam to the combination switch.

NOTE: It is not necessary to apply additional grease to the cancel cam.

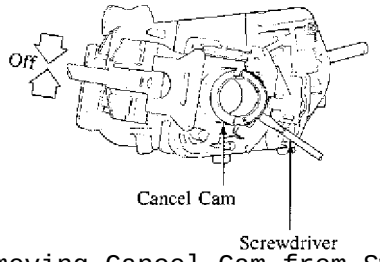


Fig. 3: Removing Cancel Cam from Switch

7. Align the tabs of the cancel cam with the holes in the steering wheel and install the steering wheel.

NOTE: The cancel cam will be broken if the tabs are not aligned with the holes in the steering wheel. See Fig. 4.

8. Install the steering wheel and torque the retaining nut to specification.

TORQUE SPECIFICATION

Model	Specification
RX-7, 626, GLC	29-36 ft-lb
B2000, B2200	22-29 ft-lb

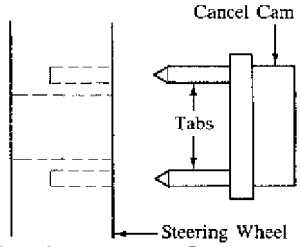


Fig. 4: Aligning Cancel Cam Tabs

END OF ARTICLE

HIGH PITCH BUZZING NOISE AT DASH: REMOVE OSCILLATOR
Article Text

1984 Mazda RX7

For iluvmyrx7.com

Saturday, June 08, 2002 10:00PM

ARTICLE BEGINNING

TECHNICAL INFORMATION TIP

BUZZING ROTARY

YEAR(S): 1979-85
MANUFACTURER: Mazda
MODEL(S): RX-7

ISSUE: HIGH PITCH BUZZING NOISE AT DASH - REMOVE OSCILLATOR

If you hear a high pitched buzzing noise coming from the center of the dash with the key off on a 1979-85 Mazda RX-7, the cause may be a defective oscillator. The oscillator is located under the hood, in the area near the left headlight.

To stop the noise, unplug the oscillator. The oscillator is used as a dash instrument circuit backup. Removing the oscillator has no other effect except to stop the constant buzzing noise.

Courtesy of Import Service Magazine
with thanks to

James Halderman
Sinclair College
Dayton, Ohio

REFERENCE NUMBER: MAZ0170AP

END OF ARTICLE