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

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:29AM

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.

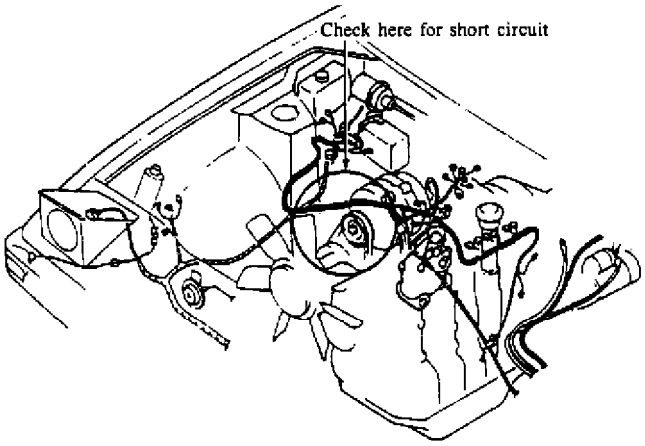


Fig. 1: View of Wiring Harness

END OF ARTICLE

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

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:29AM

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.

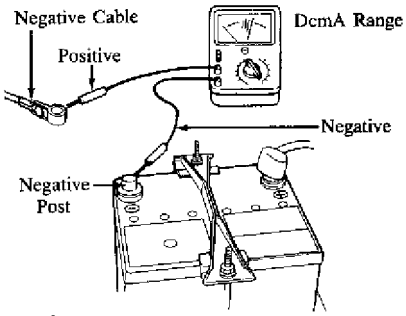


Fig. 1: Testing Currant Draw

END OF ARTICLE

ALTERNATOR/REGULATOR TEST PROCESS/REPLACEMENT INFO CAT. 5, NO. 058/83
Article Text
1983 Mazda RX7
For www.iluvmyrx7.com

Monday, August 27, 2001 06:30AM

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).

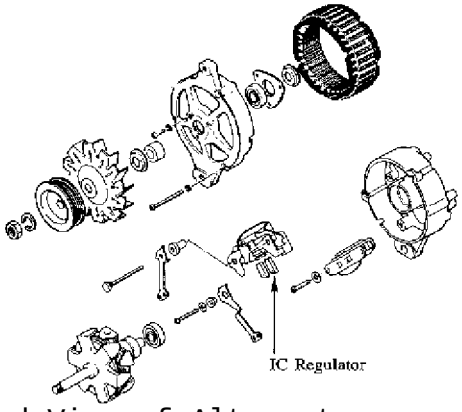


Fig. 1: Exploded View of Alternator

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.

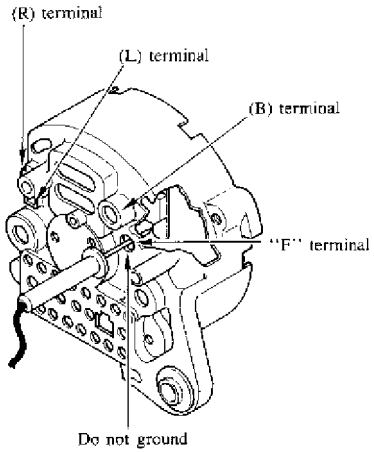


Fig. 2: Location of "F" Terminal

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.

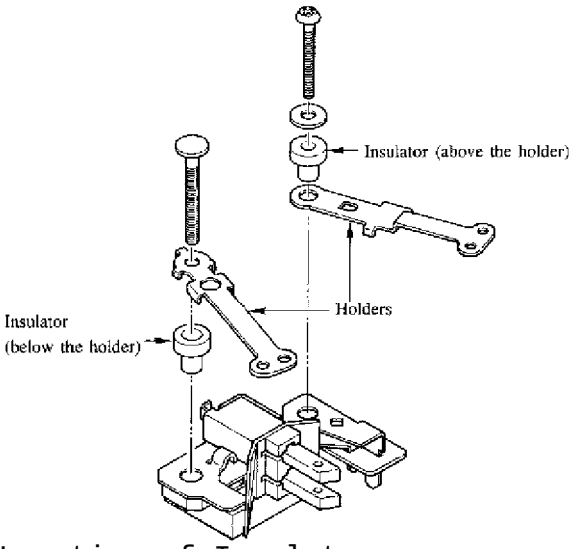


Fig. 3: Proper Location of Insulators

END OF ARTICLE

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

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:30AM

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.

AUDIO SYSTEM TROUBLESHOOTING PROCEDURES CAT. 15, NO. 078/89
Article Text (p. 2)
1983 Mazda RX7
For www.iluvmyrx7.com

Monday, August 27, 2001 06:30AM

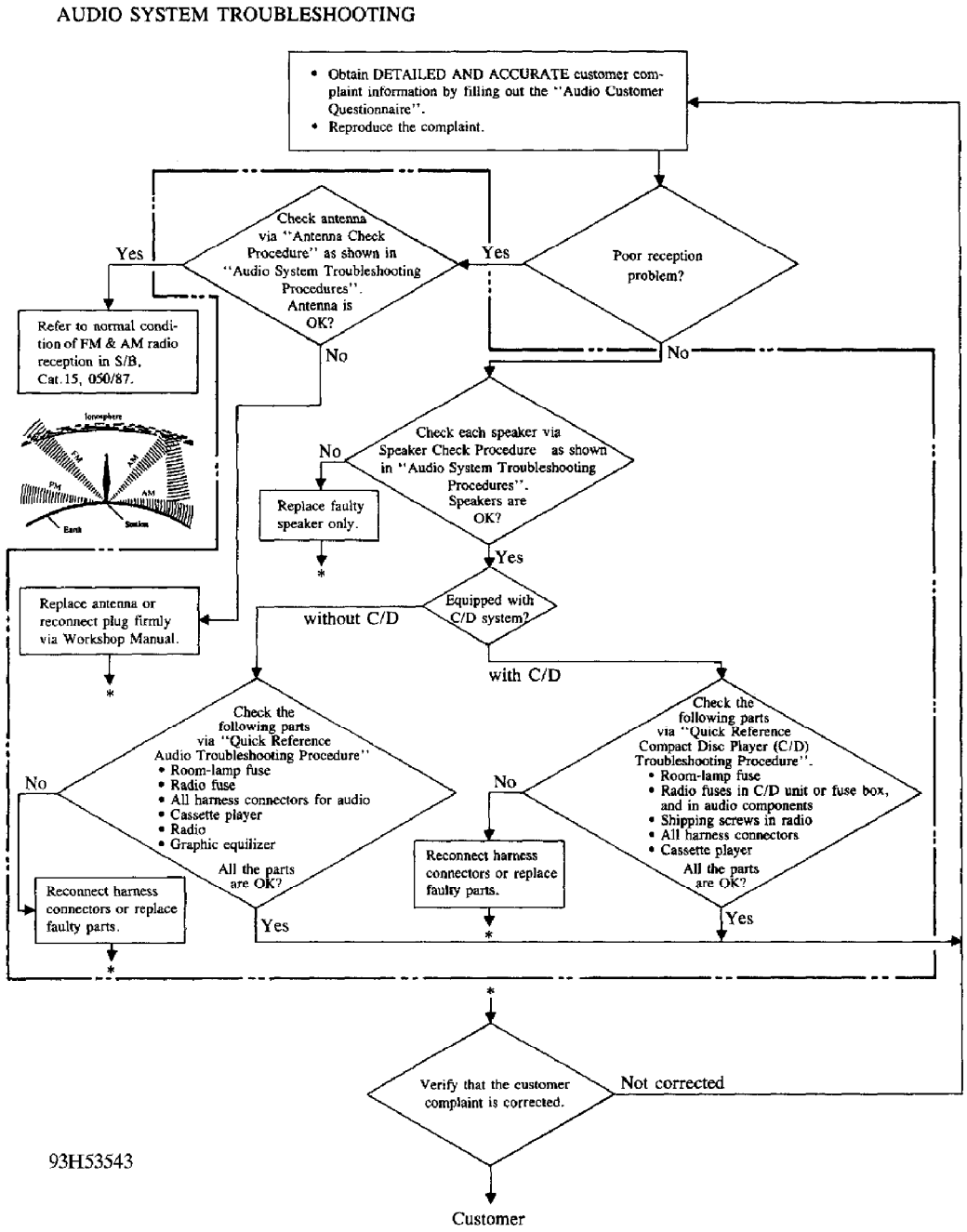


Fig. 1: Audio System Troubleshooting

END OF ARTICLE

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

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:31AM

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.

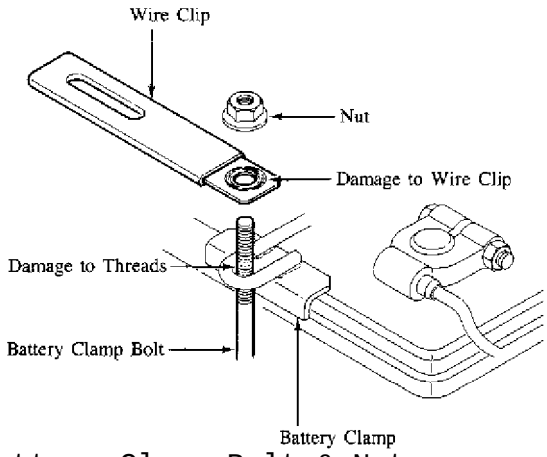


Fig. 1: Battery Clamp Bolt & Nut

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

FUSIBLE LINK REFERENCE CHART NO. T-2-3
Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:31AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

FUSIBLE LINK REFERENCE CHART

Model: All Mazda
Date: November 1, 1990 (Revised - April 27, 1992)
No: T-2-3
Group: Parts Bulletin

SERVICE INFORMATION

For easy reference, the following list of Fusible Links have been compiled.

FUSIBLE LINK REFERENCE CHART

Year	Model	Location	P/N
1979-82	626	Engine Compartment	8174-66-760B
1983-85	626 Gas	Engine Compartment	3775-67-099
1983-85	626 Diesel	Engine Compartment	H047-67-099
1983-85	626	Alternator	HA67-67-099
1979	RX-7	Under Dash	1175-66-710A
1980	RX-7	Under Dash	8130-66-710
1980	RX-7	Engine Compartment	8341-18-055
1981	RX-7	Under Dash	FA02-67-099
1981-85	RX-7	Engine Compartment	3777-67-099
1981-85	RX-7	Transmission	8341-18-055
1981-85	RX-7	Engine Compartment	8871-67-099
1984-85	RX-7	Engine Compartment	3775-67-099
1981-85	GLC	Engine Compartment	B003-67-099
1981-85	GLC	Engine Compartment	B005-67-099
1981-85	GLC	Engine Compartment	B006-67-099
1977-82	B2000	Engine Compartment	B094-67-099
1983-84	B2000/B2200	Engine Compartment	UA47-66-099
1988-93	MX-6 M/T, Non-Turbo A/T	Engine Compartment	FB01-67-099
1988-93	626 Sedan	Engine Compartment	FB01-67-099
1988-93	626 Hatchback M/T, Non-Turbo A/T	Engine Compartment	FB01-67-099
1990-92	929, 929S	Engine Compartment	FB01-67-099
1986-92	323	Engine Compartment	FB01-67-099
1987-89	323 Wagon	Engine Compartment	FB01-67-099
1986-91, 93	RX-7	Engine Compartment	FB01-67-099

FUSIBLE LINK REFERENCE CHART NO. T-2-3
Article Text (p. 2)
1983 Mazda RX7
For www.iluvmyrx7.com

Monday, August 27, 2001 06:31AM

1992	MX-3	Engine Compartment	FB01-67-099
1984-86	GLC Wagon	Engine Compartment	8573-66-760

END OF ARTICLE

HIGH PITCH BUZZING NOISE AT DASH: REMOVE OSCILLATOR

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 10:01AM

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

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

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:32AM

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	ÄÄ	Speed Nut

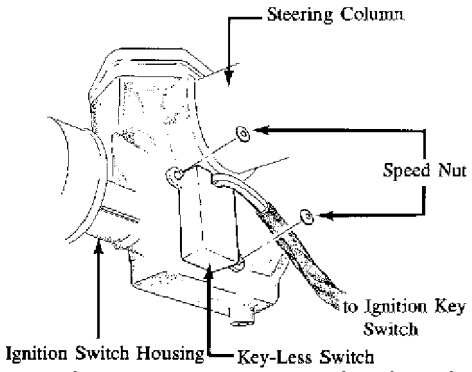


Fig. 1: Securing Key-Less Switch with Speed Nut

END OF ARTICLE

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

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:32AM

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.

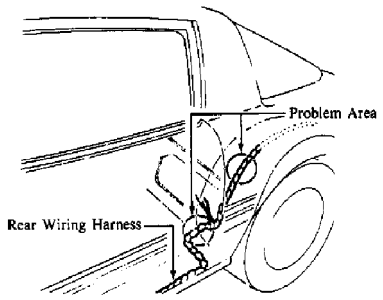


Fig. 1: View of Rear Wiring Harness

END OF ARTICLE

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

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:33AM

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

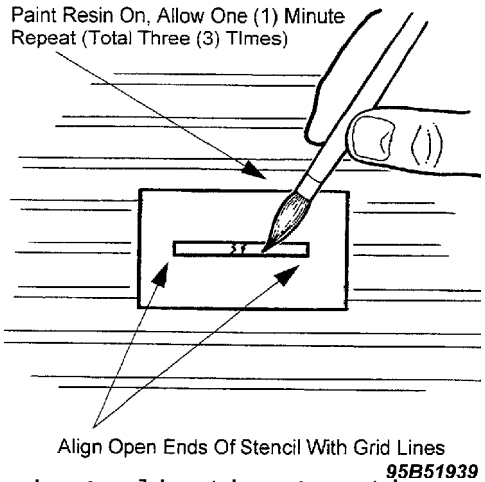


Fig. 1: Resin Application Location

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

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:33AM

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.

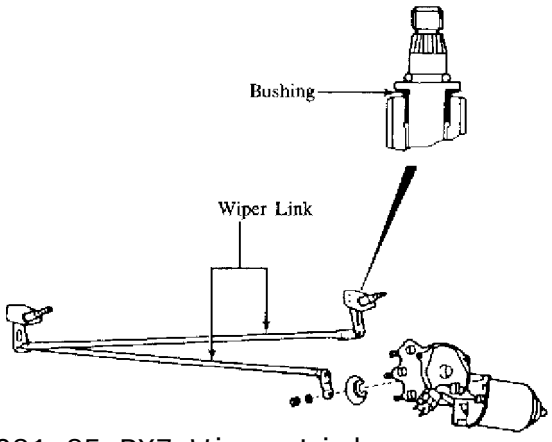


Fig. 1: 1981-85 RX7 Wiper Link

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

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:34AM

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.

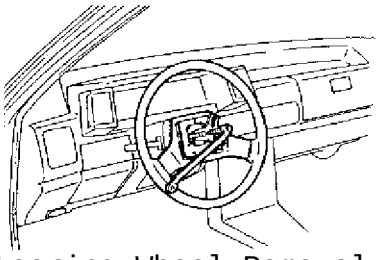


Fig. 1: Steering Wheel Removal

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.

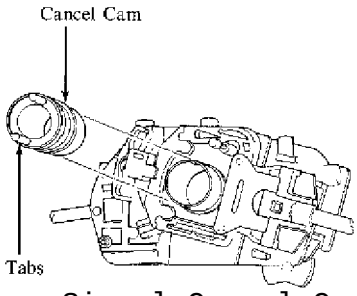


Fig. 2: Turn Signal Cancel Cam

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.

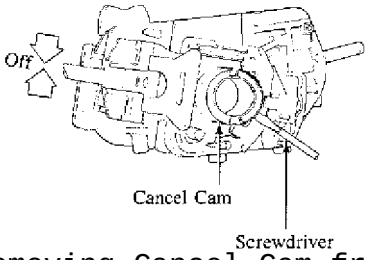


Fig. 3: Removing Cancel Cam from Switch

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

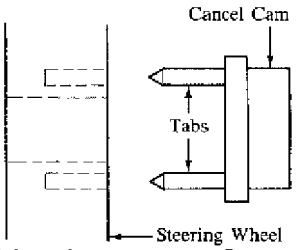


Fig. 4: Aligning Cancel Cam Tabs

END OF ARTICLE

1.2L ENG MODIFIED A/C COMPRESSOR BRACKET INSTRUCTION CAT. 15, NO. 124/83
Article Text
1983 Mazda RX7
For www.iluvmyrx7.com

Monday, August 27, 2001 06:35AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

A/C COMPRESSOR BRACKET INSTALLATION

Models	1983 RX-7
Bulletin No.	124/83
Category	15
Date	11/2/83

DESCRIPTION

The unthreaded portion of studs for air conditioner compressor bracket has been extended for common use of the parts with other models. Because of this change since the production date of September, 1983, it is necessary to insert plain washers between the bracket and securing nuts in order to compensate for the extended length of the studs.

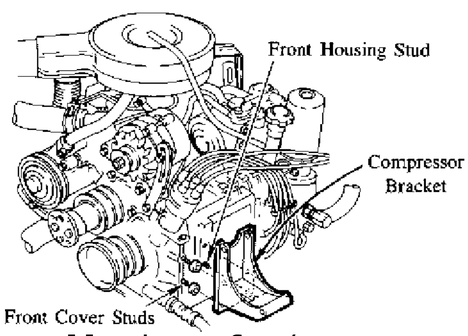


Fig. 1: Installation of A/C Compressor Bracket

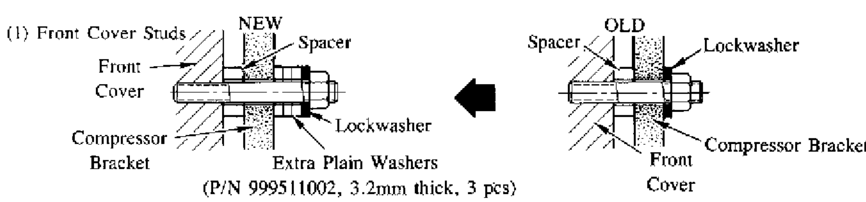


Fig. 2: Installation of A/C Compressor Bracket to Front Cover

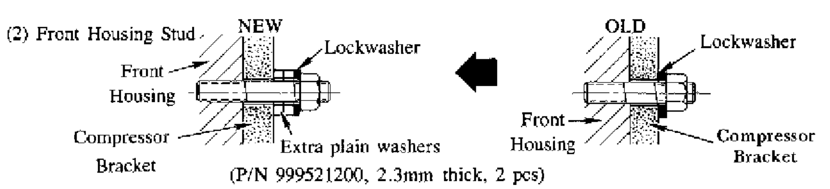


Fig. 3: Installation of A/C Compressor Bracket to Front Housing

VIN OF PRODUCTION CHANGE
ÄÄ
RX-7: JMIFB331 D0762194 September, 1983
ÄÄ

PARTS INFORMATION

Plain washers are not included in the 1983 RX7 kits but will be in 1984. However, these washers will be available under the following part numbers:

9995 11 022 (3.2mm, 6 pcs.) for Front Cover Stud.
9995 21 200 (2.3mm, 2 pcs.) for Front Housing Stud.

END OF ARTICLE

A/C LITE DIM/NOT ON - WIRE HARNESS CONNECTOR CAT. 16, NO. 008/85

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:35AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

AIR CONDITIONER INDICATOR LIGHT

Models	RX-7
Bulletin No.	008/85
Category	16
Date	7/16/85
Symptom	No A/C Light

DESCRIPTION

Some air conditioner kits manufactured by Lone Star Manufacturing Company may contain incorrectly assembled harness connectors. If the indicator light on the air conditioner switch does not illuminate. or illuminates dimly after installation, the problem may be due to incorrectly assembled G-03 or G-16 connectors. See Fig. 1.

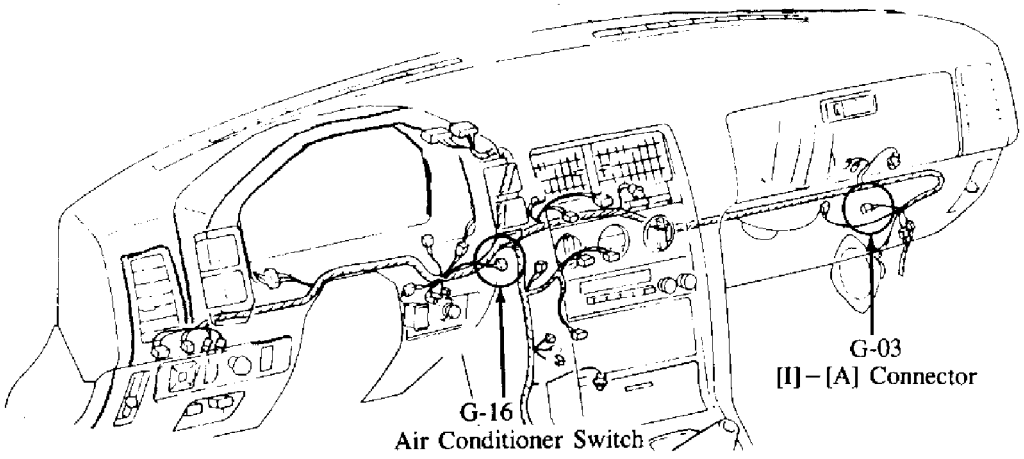


Fig. 1: A/C Indicator Light Harness Routing

REPAIR PROCEDURE

1. Check that the G-03 accessory connector (A) is assembled correctly as viewed from the harness side of the connector. If not, remove the incorrect terminals and reassemble according to the connector diagram.
2. Check that the G-16 accessory connector (A) is assembled correctly as viewed from the harness side of the connector. If not, remove the incorrect terminals and reassemble according to the connector diagram. See Fig. 2.

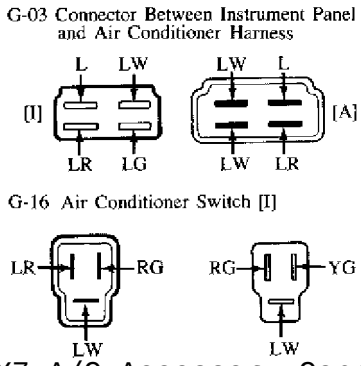


Fig. 2: RX7 A/C Accessory Connectors

END OF ARTICLE

CORRECT FREON CHARGE WARNING SPECS CAT. 16, NO. 034/88

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:36AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

REFRIGERANT CHARGE SERVICE

Model: ALL MODELS WITH A/C
Bulletin No.: 034/88
Date: 6/30/88
Category: 16

DESCRIPTION

To insure proper and efficient operation of the Air Conditioning System, it is of extreme importance to verify that the Air Conditioning System is properly charged. Also, please note that over-charging the Air Conditioning system can cause higher than normal system pressures which could result in Air Conditioning System component damage.

The recommended refrigerant charge for 1988 Mazda vehicles is as follows:

323, RX-7, B-Series Truck.....28 ounces
626, MX-6.....35 ounces
929.....39 ounces

QUICK VISUAL CHECK

It is possible to make a quick visual check of the Air Conditioning System to verify the correct refrigerant charge.

1) Run the engine as fast idle.
2) Operate the Air Conditioning System at maximum cooling for approximately 5 minutes.
3) Observe the sight glass and compare to the possible results as shown in Fig. 1.

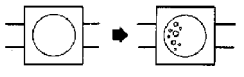
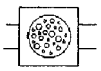
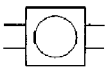
CONDITION	INSPECTION	
	DESCRIPTION	SIGHT GLASS VIEW
Correct Charge	During compressor operation, no bubbles are evident. When compressor cycles off, some bubbles are evident, then refrigerant stays clear.	
Low Charge	Numerous bubbles are evident during compressor operation. Check system for leaks.	
Over Charge	During compressor cycling on or off, no bubbles are evident.	

Fig. 1: A/C Charging Sight Glass Symptoms

HEATING SYSTEM TROUBLESHOOTING CAT. U, NO. 93-04
Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:36AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

HEATING SYSTEM TROUBLESHOOTING MANUAL

Model	All Mazda Models
Category	U
Bulletin No.	93-04
Date	September, 1993

DESCRIPTION

This Service Bulletin contains a new Heating System Troubleshooting Manual that was developed by the Mazda Canada Quality Assurance Section. The diagnostic procedures were developed and tested in Canada during a Cold Weather Test that took place in February 1993. The diagnostic procedures were tested on vehicles in which customers had complained about a lack of heat for several winters. The effectiveness of these procedures was confirmed.

SPECIAL NOTE

This same manual will also be used as a hand out for all forth coming Training Courses on Climate Control Systems.

HEATER AND DEFROSTER TROUBLESHOOTING MANUAL

INTRODUCTION

An investigation was conducted using customer vehicles at dealer-ships across North America over a two year period. The investigation was conducted to determine if there were any concerns that were difficult to repair using existing Mazda repair manuals.
The following list represents items most commonly left unrepaired or undiagnosed by the dealer.

1. Air leakage between the blower unit and the cooler unit.
2. Missing or mis-installed sealing grommets in the firewall.
3. Incorrect operation of the thermostat.
4. Improper usage of the recirculation and fresh air mode of the ventilation system.

In order to assist in the correct diagnosis and repair of Heating System concerns the following troubleshooting manual was developed. See Fig. 1. for a visual description of the Climate Control System.

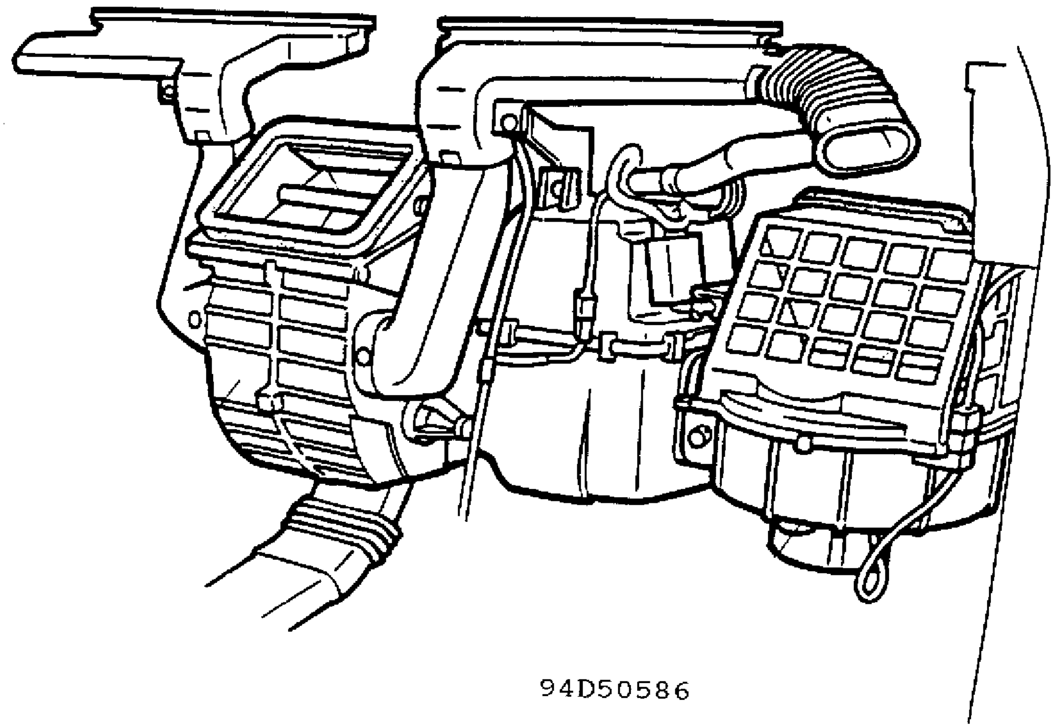


Fig. 1: Climate Control System

USING THIS MANUAL

Follow the flow charts and diagnostic procedures below to repair the complaints which were determined on the Customer Comment Sheet.

```
                   ÚÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ¿
                   ³ 1. Complete customer ³
                   ³    comment sheet.    ³
                   ÀÄÄÄÄÄÄÄÄÄÄÄÂÄÄÄÄÄÄÄÄÄÄÄÄÙ
             ÚÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÁÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ¿
             ³ 2. Determine Nature of complaint ³
             ³ a) problem or b) improper usage  ³
             ÀÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÂÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÙ
           ÚÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÁÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ¿
    ÚÄÄÄÄÄÄÄÄÄÄÄÁÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ¿       ÚÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÁÄÄÄÄÄÄÄÄÄÄ¿
    ³ 3a. Use diagnostic flow ³       ³ 3b. Instruct on proper ³
    ³     chart to determine  ³       ³     system usage.      ³
    ³     repair procedure.   ³       ÀÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÙ
    ÀÄÄÄÄÄÄÄÄÄÄÄÂÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÙ
    ÚÄÄÄÄÄÄÄÄÄÄÄÁÄÄÄÄÄÄÄÄÄÄÄÄ¿
    ³ 4. Use check sheet to ³
    ³    perform repairs.   ³
    ÀÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÙ
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Diagnostic Procedures

1. Collect detailed complaint information from the customer using the Customer Comment Sheet.

2. Use the information collected on the Customer Comment Sheet to determine the nature of the complaint.

3a. Refer to the diagnostic flow chart and determine the necessary checks.

3b. After determining the complaint is of a usage nature instruct the customer on the proper operation of the system.

4. Use the Check Sheet to perform the necessary repairs.

CUSTOMER COMMENT SHEET

Please complete the following with the aid of the customer.

1. Heater Concern

No.	Customer Comment	Checked	Result
1	Water temp indicator reads low at high speed		
2	While driving the interior temp. is cooler than when parked		
3	Heater outlet air temperature is always cold		
4	Passenger side is cooler than driver's side		
5	Passenger feels cold air at feet		
6	After vehicle interior has reached normal temperature cool air is felt at body		
7	Upper body is cooler than foot		
8	Temperature is unbalanced between driver's and passenger's side		

2. Defroster Concern

1	At cold temperatures or high		

	³ humidity the windows never clear	³	³
	³ (all)	³	³
2	³ Even after reaching normal	³	³
	³ operating temp. the front wind-	³	³
	³ shield is only cleared 30-50 %	³	³
3	³ Rear window does not clear	³	³
4	³ Rear window clears only in the	³	³
	³ middle	³	³

3. Temperature Control Concern

1	³ Difficult to set temperature	³	³
2	³ Temperature unbalance between	³	³
	³ head and foot	³	³
3	³ Temperature unbalance between	³	³
	³ driver and passenger seat	³	³

4. Other Concerns

1	³	³	³
2	³	³	³
3	³	³	³

Record in the appropriate column if the item was checked and the result.

1. Heater Concern - Use the Diagnostic Flow Chart (see Fig. 2) to determine the necessary diagnostic checks. Refer to the Check Sheet.

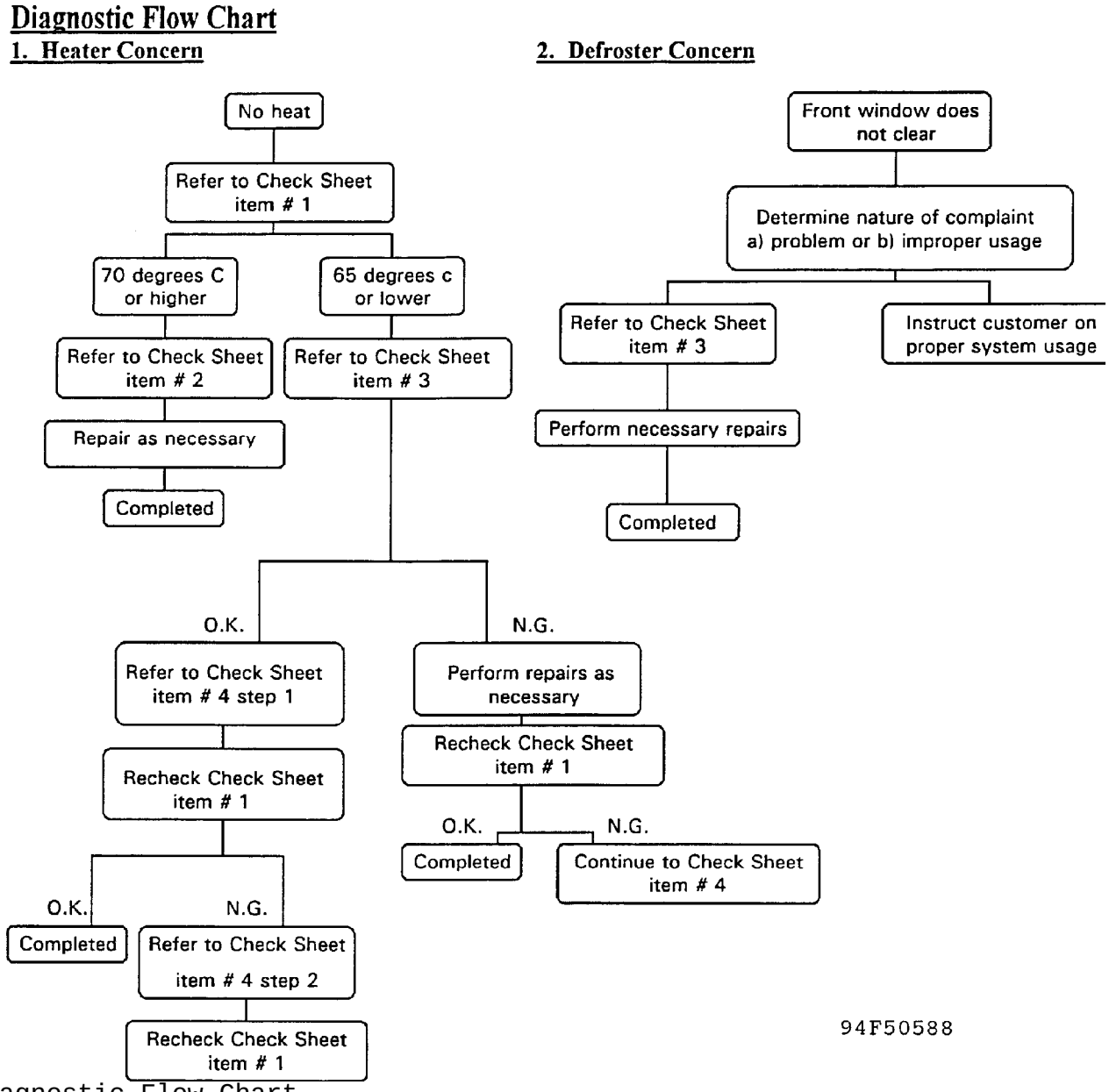

Fig. 2: Diagnostic Flow Chart

CHECK SHEET

Heater concern

Item 1: Measuring Vent Outlet Air Temperature

1. Place transmission in park or place manual transmission in neutral and set the parking brake.

2. Start the engine and let idle until the engine reaches normal operating temperatures.

3. Adjust the climate controls to the following settings:

Function	Bi-level
Temperature	Max. hot
Fan speed	2
Recirculate/fresh	Fresh

4. Raise the engine speed to 2000 rpm and hold for ten minutes.

5. Measure the vent outlet air temperature.

NOTE: The thermostat will cycle after the engine has reached operating temperatures. Measure outlet air temperature several times over a ten minute period to attain the high temperature reading (thermostat closed).

Item 2 - Air Leakage

A. Interior Components

1. Remove the lower kick panel on passenger side.

2. Remove the glove box.

3. Adjust the climate controls to the following settings:

Function	Defrost
Temperature	Max. hot
Fan speed	4
Recirculation-fresh	Fresh

4. Check for leakage between blower unit and cooler unit (air duct).

5. Check for leakage between cooler unit (air duct) and heater unit.

NOTE: Air duct is present only on vehicles not equipped with air conditioning.

B. Engine compartment

1. Turn off the engine.

2. Raise the hood and visually inspect the following for proper sealing:

* A/C drain grommet
* A/C pipes where they enter the cooling unit at the firewall.
* Heater pipes where they enter the firewall.
* All body harnesses that pass through the firewall.
* Speedometer cable.

NOTE: Do not perform the above checks with the engine running.

Item 3 - Link and Wire Adjustment

1. Remove the kick panel on the passenger side of the vehicle.
2. Remove the glove box.
3. Place the transmission in park or set manual transmission in neutral and set the parking brake.
4. Start the engine and allow to idle.
5. Set the climate controls to the following settings:

   Temperature ..... Max. hot
   Recirculation-fresh ... fresh

6. Using Figs. 3 and 4 for reference, ensure the linkages are adjusted properly.

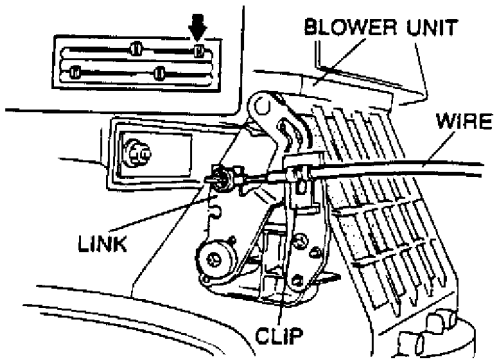

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Fig. 3: Blower Unit Linkage Adjustment

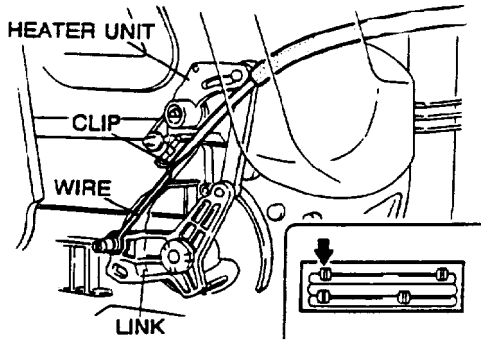

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Fig. 4: Heater Unit Linkage Adjustment

Item 4 - Coolant By-passing the Thermostat/Thermostat Stuck

1. Drain the engine coolant from the radiator.

2. Remove the thermostat from the thermostat housing.

3. Visually inspect the coolant passages and thermostat housing for any casting debris.

4. Feel around inside the thermostat housing for any foreign materials, especially in the area around the heater pipe outlet. If present, remove any casting sand or debris which may be blocking the coolant passages or causing the thermostat to stick open.

5. Verify the operation of the thermostat using the appropriate workshop manual.

NOTE: In addition to the procedure to check for proper thermostat opening the following check must be performed to ensure the thermostat is closing properly. When the thermostat has opened fully continue to bring the water to a boil. When the water has reached a boil remove the thermostat from the water and set it on the work bench. Closely watch as the thermostat begins to close and that it closes smoothly and does not hang up.

6. If the thermostat fails either of the above tests, Replace it.

7. Using a filter, refill the radiator with engine coolant.

Recommended Climate Control System Operation

If all systems check out O.K., or through reviewing the Customer Comment Sheet it is determined the system is being operated incorrectly, instruct the customer on the proper system operation using the operating guidelines listed below.

Item 1 - Air Intake Selector (Fresh/Recirculation)

This selector controls the source of air that enters the vehicle. Usually, for heating or defrosting the air intake selector should be in the "Fresh" or outside air mode. However, if there is a heavy presence of exhaust fumes in the surrounding area it may be necessary to switch to the "Recirculation" mode. It is important to remember to return to the "Fresh" mode because humidity may build up in the "Recirculation" mode causing the windows to fog up. See Fig. 5. Another method to help reduce humidity within the vehicle is to use the Air Conditioning system. Its dehumidifying characteristics can be taken advantage of in any situation.

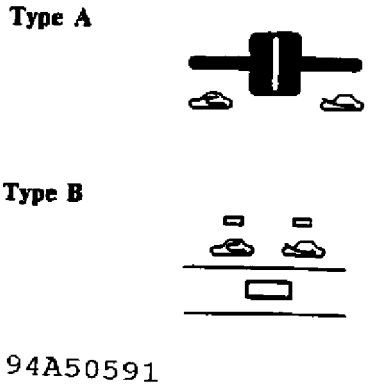


Fig. 5: Air Intake Selector (Type A and B)

Item 2 - Function Selector

This selector controls the direction of the airflow from the vents. On initial start during cold or high humidity temperatures the selector should be placed in the defrost position and the fan speed set to 3 or 4. After the front and side windows become clear the selector can be switched to defrost/heat and then to heat only as necessary and the fan speed reduced. If the front or side windows begin to fog again while driving the selector should be reset to the defrost/heat or full defrost and the fan speed adjusted as necessary. In addition to the above, air-conditioning can be used in conjunction with the heating system to control the humidity level in the vehicle while providing heat.

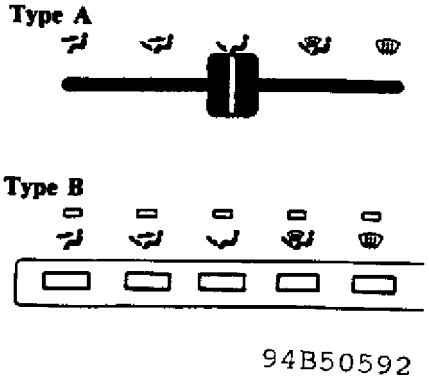


Fig. 6: Function Selector (Type A and B)

Item 3 - Temperature Selector Lever

This lever controls air temperature by sliding the lever either to the right for hot or to the left for cold. On start up during cold temperatures the selector should be set to the full heat position at far right of the selectors travel. See Fig. 7.
As the interior of the vehicle reaches the desired temperature the selector should be adjusted to the left towards the cold setting by increments until the desired temperature is reached.

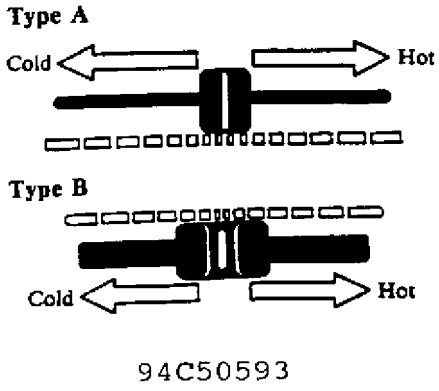


Fig. 7: Temperature Selector (Type A and B)

Climate Control System

Shown in Fig. 8 is a typical climate control system. Detailed descriptions of each function are found under the heading "Driving Your Mazda" in the appropriate Owners Manual.

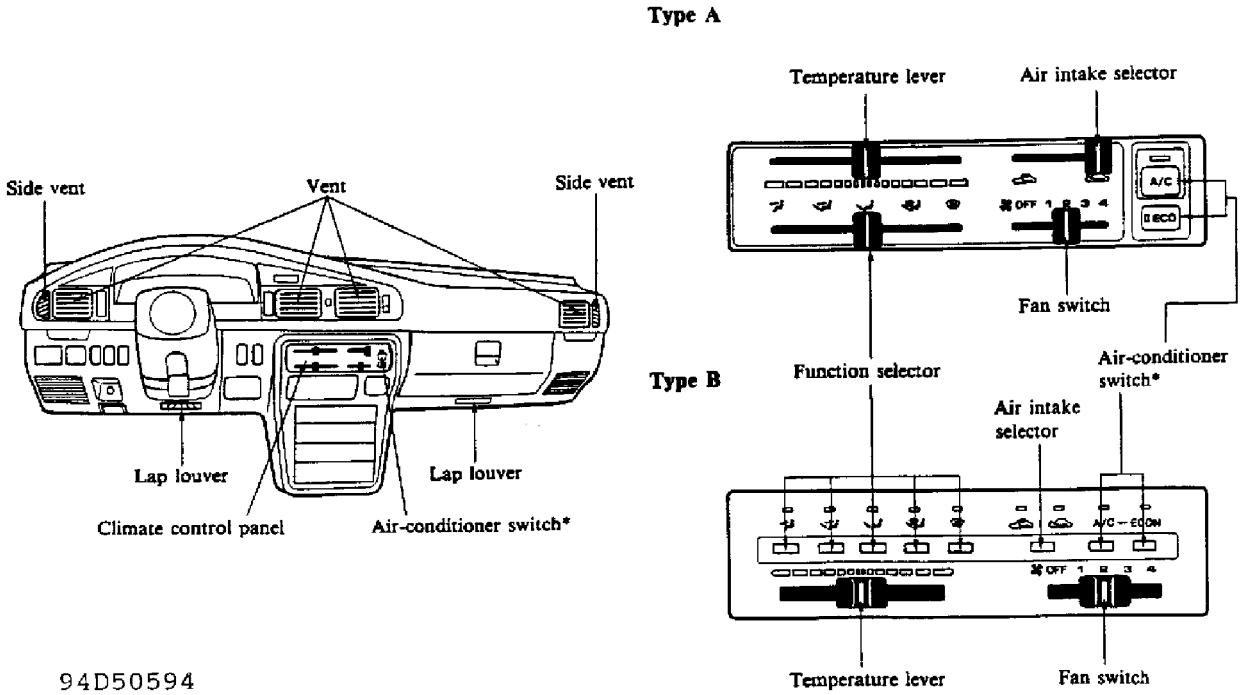


Fig. 8: Climate Control System Layout

END OF ARTICLE

INOPERATIVE A/C - BLOWN FUSIBLE RECEIVER/DRYER PLUG CAT. 16, NO. 009/85

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:36AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

APPLICATION

1979-85 RX7

SUBJECT

Inoperative A/C

REFERENCE

Mazda Motors Corp., Service Bulletin, No. 16 009/85, September, 1985

CONDITION & CAUSE

Some 1979-85 RX7 vehicles may exhibit an inoperative air conditioning system. This condition may be caused by a variety of factors blowing the fusible plug on the receiver/drier.

REPAIR

1) If the fusible plug on the receiver/drier is blown, replace the receiver/drier and evacuate the A/C system.
2) Check the tension of the compressor drive belt. With center span of belt pushed with a force of 22 lbs. (10 kg), deflection should be 5/16-3/8" (8-10 mm). Ensure the fins on the condenser are not clogged or restricted and clean as necessary.
3) Attach an air conditioning manifold to the suction and discharge fittings. If the high pressure gauge shows excessive pressure, check the fan drive clutch and replace as necessary.

END OF ARTICLE

POOR A/C COOLING - ADJUST A/C THERMOSTAT CAT. 16, NO. 006/85

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:37AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

NIPPONDENSO AIR CONDITIONER

Models	RX-7 13B
Bulletin No.	006/85
Category	16
Date	5/17/85
Symptom	Poor Cooling

DESCRIPTION

If the customer objects to the cooling performance of the air conditioner on RX-7 13B vehicles, please follow the procedure described below.

REPAIR PROCEDURE

1. Check the air conditioning system for insufficient cooling according to the current Service Information. If no problem is found, proceed to Step 2.
2. Remove the glove box and the under cover. See Fig. 1.

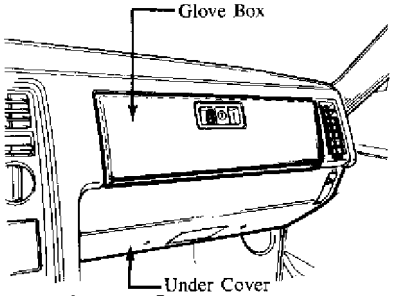


Fig. 1: Removing Glove Box & Under Cover

3. Remove the 2 screws securing the thermostat. Pull the thermostat approximately "1" away from the evaporator in order to provide access to the thermostat adjusting screw.

NOTE: Do not damage the capillary tube attached to the thermostat by excessive bending or twisting. See Fig. 2.

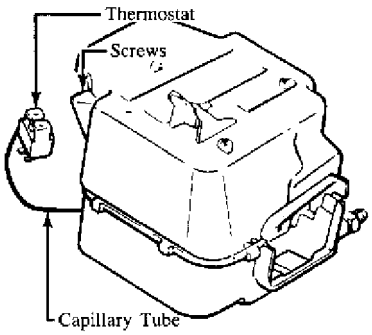


Fig. 2: Removing 2 Screws Securing the Thermostat

4. Turn the adjusting screw of the thermostat clockwise 90ø from the original position.

CAUTION: Do not turn the adjusting screw more than 90ø, otherwise the evaporator core will freeze, resulting in an adverse effect on the cooling performance. See Fig. 3.

5. Reassemble in the reverse order of disassembly.

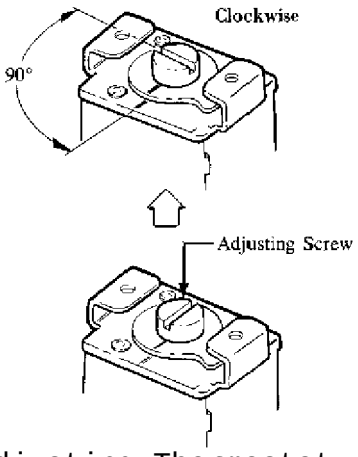


Fig. 3: Adjusting Thermostat

END OF ARTICLE

POOR COOLING - DIAGNOSING/REPAIR A/C LEAKS CAT. 16, NO. 033/88

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:37AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

DIAGNOSIS & REPAIR OF A/C REFRIGERANT LEAKS

Model: ALL MODELS with A/C
Bulletin No.: 033/88
Date: 6/30/88
Category: 16
Symptom: Poor Cooling

DESCRIPTION

When diagnosing customer complaints regarding insufficient cooling and a refrigerant leak is suspected, please follow these procedures for locating and repairing the leak in order to prevent unnecessary component replacement.

VERIFY THE CUSTOMER'S COMPLAINT

1. Check the outlet air volume and temperature. (However, the outlet temperature will vary according to ambient conditions. 35-45 degrees F is normal)
2. Verify the compressor clutch operation. (The compressor will not operate if the system is empty of refrigerant.)

VERIFY THE STATE OF CHARGE AMOUNT

The following indication shows low charge condition. (Fig. 1)

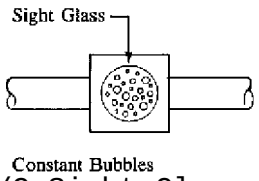


Fig. 1: A/C Sight Glass

CHECK FOR LEAK IN THE ENGINE COMPARTMENT

1. Visually check all components for obvious leaks and signs. Also, check the fittings by hand for tightness.

NOTE:
Some leaks may have an oil stain around leak area.

2. Use the electric leak detector to locate the leak.

When using leak detector:
a) the system should be at least partially charged.
b) the detector probe should be moved slowly at a rate of about 1

inch a second.

3. Whenever possible, the detector probe should be held underneath the components since the refrigerant is heaver than air. (Fig. 2)

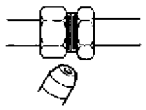


Fig. 2: Freon Detector Inspection Angle

HINT: Hold the electric leak detector probe near the drain hose. Refrigerant from evaporator core may be detected through the water drain hose.

INVESTIGATION & REPAIR

Most of the leaks from the pipe connection can be fixed with O-ring replacement and proper torquing, but please pay attention to the failure on pipe and components. (Fig. 3)

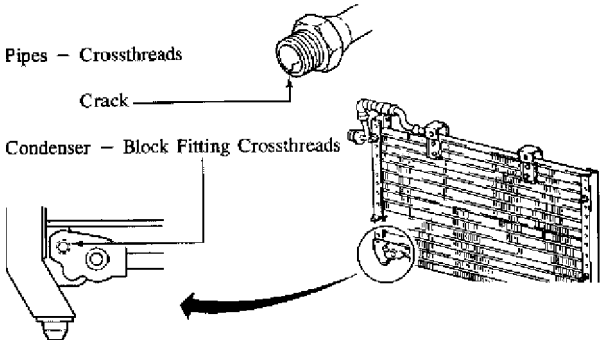


Fig. 3: Damaged Component Illustration

LEAK TEST

1. After replacing O-rings or components, evacuate the system at least 10 minutes and hold the vacuum further 10 minutes.
2. If the vacuum does not drop, no leak is evident. Charge the system with proper amount of refrigerant if it still leaks, check for leak from cooling unit area.
3. Remove the cooling unit and look for the oil stain.

HINT: Before removing the cooling unit, charge the system with a leak-detector-refrigerant which contains a dye. After operating the system for a period of time, any leaks will be identified by a dye stain around the leaking area.

REPAIR

Replace the O-ring at the expansion valve connection, or evaporator core.

RECEIVER DRIER REPLACEMENT CRITERIA (CANADIAN) CAT. U, NO. 95-02

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, September 03, 2001 03:25PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

RECEIVER DRIVER REPLACEMENT CRITERIA WHEN REPLACING OTHER A/C COMPONENTS

Model(s): All Mazda Models with A/C (Canadian)
Category: U - Heater and Air Conditioner
Bulletin No.: 95-02
Date: March, 1995

APPLICABLE MODELS/VINS

All models equipped with R12 and R134a (Except 1994 and later B-Series vehicles).

DESCRIPTION

The following information is designed to assist dealers in determining the necessity to replace the receiver-drier when replacing other A/C components. Do not replace the receiver-drier unless the following criteria have been met.

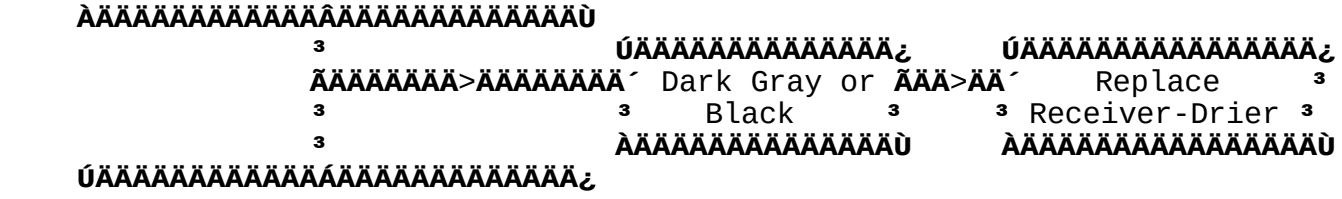
RECEIVER-DRIER REPLACEMENT CRITERIA

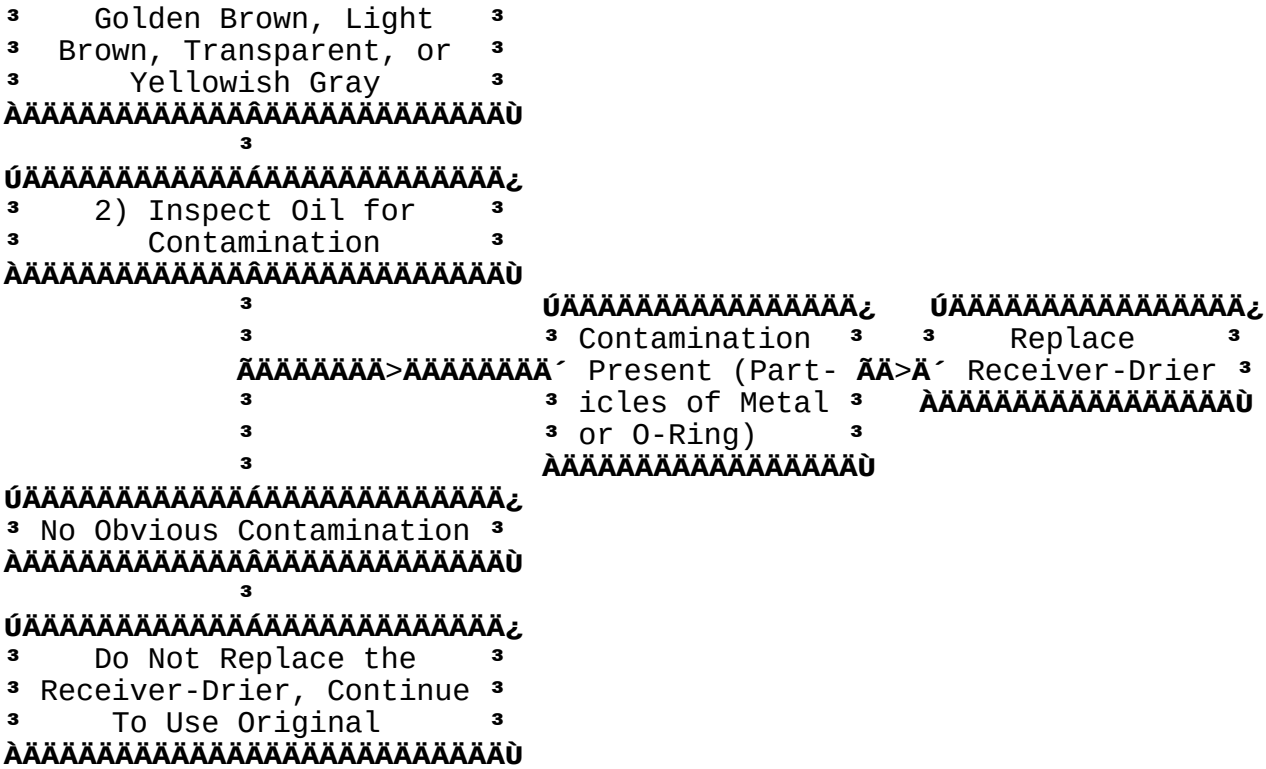
Replace the receiver-drier when the A/C system has been ruptured and all system pressure is lost.

Receiver-drier will require replacement if the compressor oil becomes discolored or foreign substances become visible (Refer to the flow chart in this article).

NOTE: Refer to section U of the workshop manual for additional receiver-drier diagnostic procedures.

If an A/C component has failed, extract the compressor oil from the failed part and inspect the oil according to the procedure described in the following flow chart. Follow the procedure to determine if the receiver-drier requires replacement as a precaution.





CAUTION: Before charging, always evacuate the A/C system thoroughly to remove air and moisture. Use a vacuum pump to evacuate the system. Hold vacuum at 29 inches (740mm Hg) for 5-10 minutes.

END OF ARTICLE

RECEIVER DRIER REPLACEMENT CRITERIA - INFORMATION CAT. U, NO. 001/95

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, September 03, 2001 03:25PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

RECEIVER DRIVER REPLACEMENT CRITERIA WHEN REPLACING OTHER A/C COMPONENTS

Model(s): All Mazda Models with A/C
Category: U - Heater and Air Conditioner Systems
Bulletin No.: 001/95
Date: February 15, 1995

APPLICABLE MODELS/VINS

All models equipped with R12 and R134a (Except Navajo and 1994 and later B-Series vehicles.

DESCRIPTION

The following information is designed to assist dealers in determining when to replace the receiver-drier when replacing other A/C components. Do not replace the receiver-drier unless the following criteria have been met.

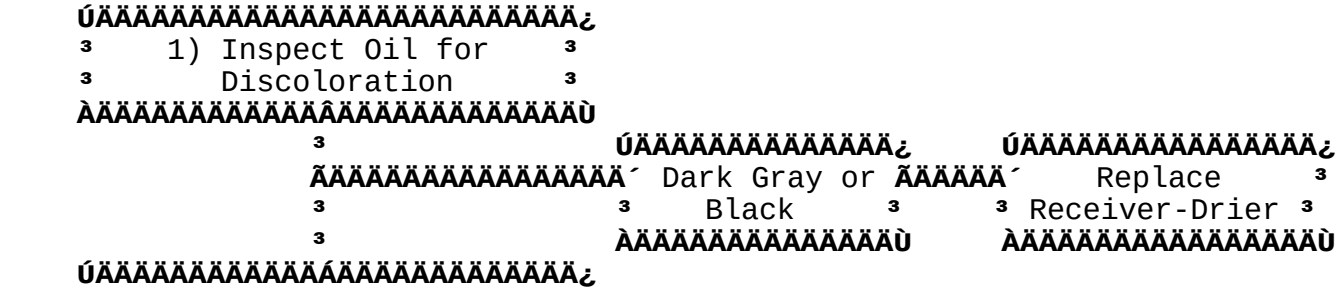
RECEIVER-DRIER REPLACEMENT CRITERIA

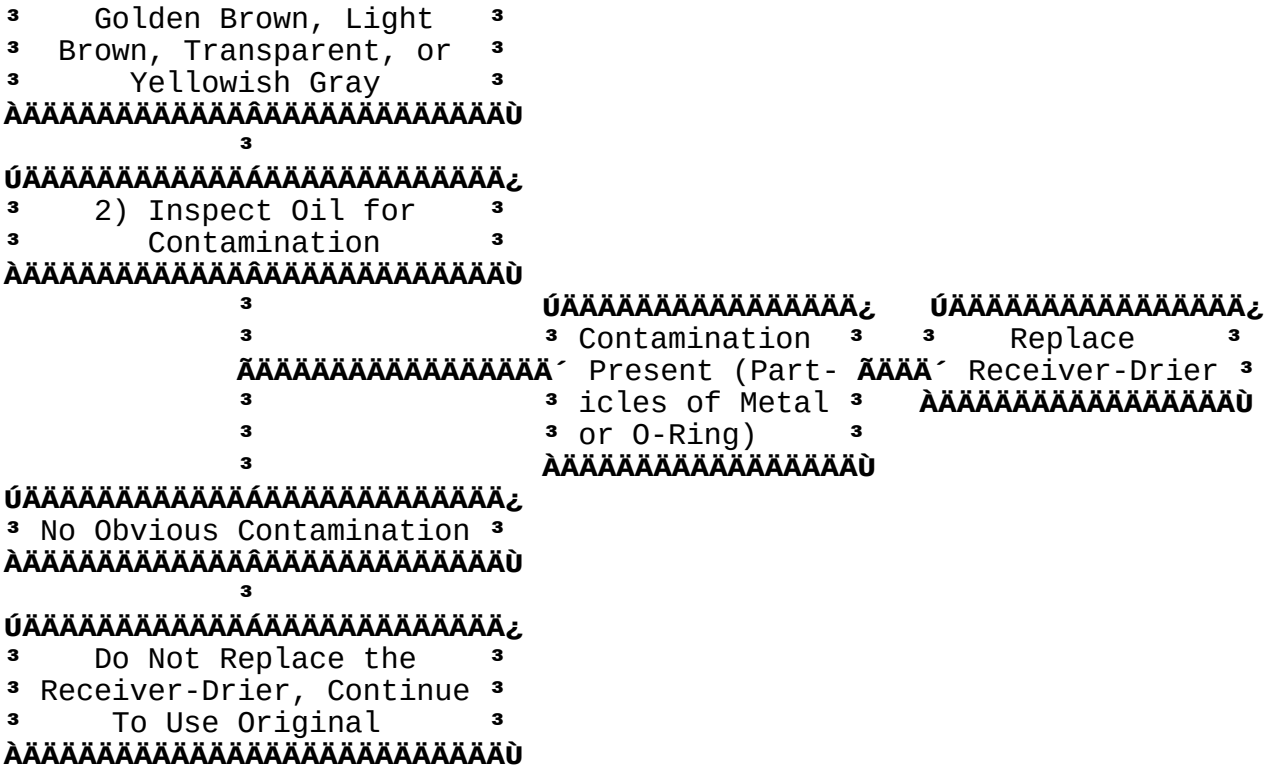
* Replace the receiver-drier when the A/C system has been ruptured and ALL system pressure is lost.

* Receiver-drier will require replacement if the compressor oil becomes discolored or foreign substances become visible (Refer to the flow chart in this article).

NOTE: Refer to section U of the workshop manual for additional receiver-drier diagnostic procedures.

If an A/C component has failed, extract the compressor oil from the failed part and inspect the oil according to the procedure described in the following flow chart. Follow the procedure to determine if the receiver-drier requires replacement as a precaution.





CAUTION: Before charging, always evacuate the A/C system thoroughly to remove air and moisture. Use a vacuum pump to evacuate the system. Hold vacuum at 29 inches (740mm Hg) for 5-10 minutes.

END OF ARTICLE

USE OF A/C TRACER DYE SERVICE INFO CAT. U, NO. 008/97

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, September 03, 2001 03:26PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

USE OF A/C TRACER DYE

Model: All Mazda models
Category: U - Heater & Air Conditioner Systems
Bulletin No.: 008/97
Date: May 19, 1997

DESCRIPTION

Use a fluorescent A/C leak detecting tracer dye and light for finding minute, intermittent leaks.

NOTE: Most electronic leak detectors can detect small steady leaks, but are ineffective on minute, intermittent leaks.

WHEN USING A/C TRACER DYE METHOD

1. Follow the A/C tracer dye manufacturers instructions.

NOTE: Different manufacturers have different methods for installing, measuring and diagnosing with their particular product.

CAUTION:

* Use only a tracer dye that is compatible with the type of refrigerant and oil in the vehicle's A/C system.

* Tracer dye can lead to misdiagnosis and unnecessary parts replacement if used improperly.

2. After repairing the leak, clean the area that is covered with A/C tracer dye.

NOTE: This will prevent a future technician from mistaking this residue as a current leak.

3. When diagnosing an A/C leak on a vehicle that previously had tracer dye installed, thoroughly clean the suspected area and re-verify the leak prior to repairing.

4. After repairing the leak, evacuate and recharge the system as outlined in the workshop manual.

NOTE: DO NOT add additional A/C tracer dye when recharging the system.

a. Flushing or changing he A/C oil is not necessary.

b. Small amounts of the tracer dye will be found in the Recovery / Recycling tank, if recovery is necessary.

TRACER DYE SUPPLIERS

TRACER DYE SUPPLIERS INFORMATION TABLE

Supplier	Available At	Part Number	Note
Spectronics Corporation Equivalent)	(800) 641-1133	- - -	Or Equivalent
Ford - Rotunda	See Dealer	112-R0027	Or Equivalent

REFRIGERANT/COMPRESSOR OIL

REFRIGERANT/COMPRESSOR OIL INFORMATION TABLE

Model	Model Year	Refrigerant	Compressor Oil Type
MX-6/626	1993 and prior	R12	ATMOS S150
	1994 and after	R134a	ATMOS GU10
Protege	1994 and prior	R12	ATMOS S150
	1995 and after	R134a	SP10
Miata	1993 and prior	R12	ND7
	1994 and after	R134a	ND9
RX-7	1994 and prior	R12	ND7
	1995 and after	R134a	ND9
MX-3	1993 and prior	R12	ATMOS S150
	1994 and after	R134a	ATMOS GU10
MPV	1993 and prior	R12	ND6
	1994 and after	R134a	ND8
Millenia	1995 and after	R134a	ATMOS GU10
929	1993 and prior	R12	ATMOS S150

USE OF A/C TRACER DYE SERVICE INFO CAT. U, NO. 008/97

Article Text (p. 3)

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, September 03, 2001 03:26PM

	1994 and after	R134a	ATMOS GU10
Navajo	1993 and prior	R12	ESHM2C31A2
	1994 and after	R134a	WSHM1C231B
B-Series	Built before Sep 20, 1993	R12	ESHM2C31A2
	Built after Sep 20, 1993	R134a	WSHM1C231B

END OF ARTICLE

USE OF R-12 REFRIGERANT SUBSTITUTES CAT. U, NO. 009/96

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, September 03, 2001 03:26PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

USE OF R-12 REFRIGERANT SUBSTITUTES

Model(s): All Mazda Models
Category: U - Heater and Air Conditioning Systems
Bulletin No.: 009/96
Date: October 21, 1996

DESCRIPTION

Mazda Corporation does not approve of using substitute R-12 refrigerants when an A/C system requires charging. Use of these products may result in component damage and loss of warranty. If service is required on a vehicle with an R-12 system, use only new or known good recycled refrigerant.

NOTE: A/C systems designed to operate on R-134a can be recharged using only HFC-134a. Using R-12 substitutes may result in a hazardous condition and/or A/C component damage.

END OF ARTICLE

L4N71B TRANS OIL PRESSURE GAUGE ADAPTER CAT. 40, NO. 018/87

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:39AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

OIL PRESSURE GAUGE ADAPTER

Model: 1983 - 1987 RX-7 A/T
Bulletin No.: 018/87
Date: 4/9/87
Category: 40

DESCRIPTION

An adaptor for the (4903 78 400A) oil pressure gauge has been newly established for 1983-87 RX7 with automatic transmission. This adaptor is necessary when checking line pressure in "R" range because of the limited space between the transmission and the body. (See the 1986-87 RX-7 Service Information.

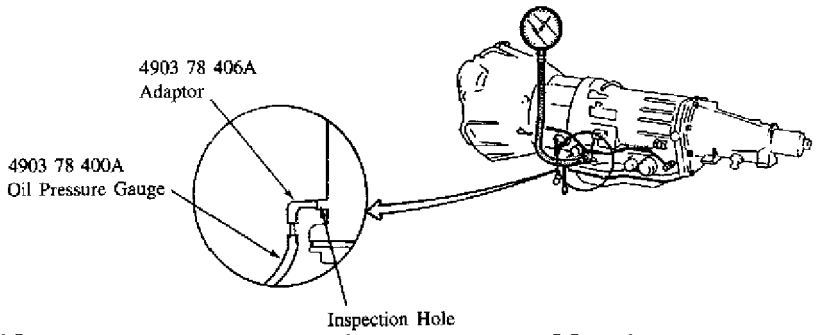


Fig. 1: Oil Pressure Gauge Adaptor Installation

PARTS INFORMATION

PART NUMBER	DESCRIPTION
4903 78 406A	Adaptor

END OF ARTICLE

PAINTING RUSTPROOF STEEL PANELS CAT. 14, NO. 070/89

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:40AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

PAINTING RUSTPROOF STEEL PANELS

Model All Mazda Models
Category 14 Body
Bulletin No. 070/89
Date June 6, 1989

DESCRIPTION

When you repair and repaint the rustproof steel panels, zinc phosphate acid solution must be used in preparation of the surface finishing; otherwise, paint damage such as peeling off or blistering may result. Please refer to the following instructions for proper repairs of the rustproof steel panels.

REPAIR PROCEDURE

Painting Procedure of Rustproof Steel Panels

ÚÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ¿
³ Sanding, grinding **ÃÄÄÄÄÄ** Conventional method
ÀÄÄÄÄÄÄÄÄÄÄÄÂÄÄÄÄÄÄÄÄÄÄÄÙ
³
ÚÄÄÄÄÄÄÄÄÄÄÄÁÄÄÄÄÄÄÄÄÄÄÄ¿
³ Degreasing **ÃÄÄÄÄÄ** Conventional method
ÀÄÄÄÄÄÄÄÄÄÄÄÂÄÄÄÄÄÄÄÄÄÄÄÙ
³
ÚÄÄÄÄÄÄÄÄÄÄÄÁÄÄÄÄÄÄÄÄÄÄÄ¿
³ Surface finishing **ÃÄÄÄÄÄ** Use zinc phosphate acid solution
ÀÄÄÄÄÄÄÄÄÄÄÄÂÄÄÄÄÄÄÄÄÄÄÄÙ
³
ÚÄÄÄÄÄÄÄÄÄÄÄÁÄÄÄÄÄÄÄÄÄÄÄ¿
³ Putting, painting**ÃÄÄÄÄÄ** Conventional method
ÀÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÙ

Location of the parts made of rustproof steel panels (see Fig. 1)

RUSTPROOF STEEL PANELS LOCATION TABLE

Part Name / Fig.	Model Ä ³ 323 ³ 323 ³ 626 ³ RX-7 ³ RX-7 Conv	³929³ MPV³B2200 ³ ³ ³B2600
	³ #1	³ #2 ³ #3 ³ #4 ³ #4 ³ #5 ³ #6 ³ #7
Engine Hood Outer Panel	³ **	³ ** ³ ** ³ ** ³ ** ³ ** ³ ** ³ **
Cowl Grille	³	³ ³ ³ ³ ³ ³ ³ * ³
Front Fender Panel	³ **	³ ** ³ ** ³ * ³ * ³ ** ³ * ³ **

PAINTING RUSTPROOF STEEL PANELS CAT. 14, NO. 070/89

Article Text (p. 2)

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:40AM

Front Door Outer Panel	**	**	**	**	**	**	**	*
Rear Door Outer Panel	**	**	**	**			**	
Side Sill Outer Panel	**	**	**	**	*	**	**	* **
Rear Fender Panel	**	**	**	**	*	**	**	*
Fuel Filler Lid	**	**	**	**	**	**	**	
Rear Crossmember				**				**
Rear End Member or Extension								*
Tailgate Outer Panel	*	*	*	**	**			
Trunk Lid Outer Panel	*	*	*	**		*	*	*
Center Pillar Outer Pnl				**				
Front Pillar Outer Pnl								*
Side Gate								**
Tail Gate								*
Floor Panel								**

NOTE: Rustproof steel panels used: * **ÄÄÄÄ** One side only

** **ÄÄÄÄ** Both sides

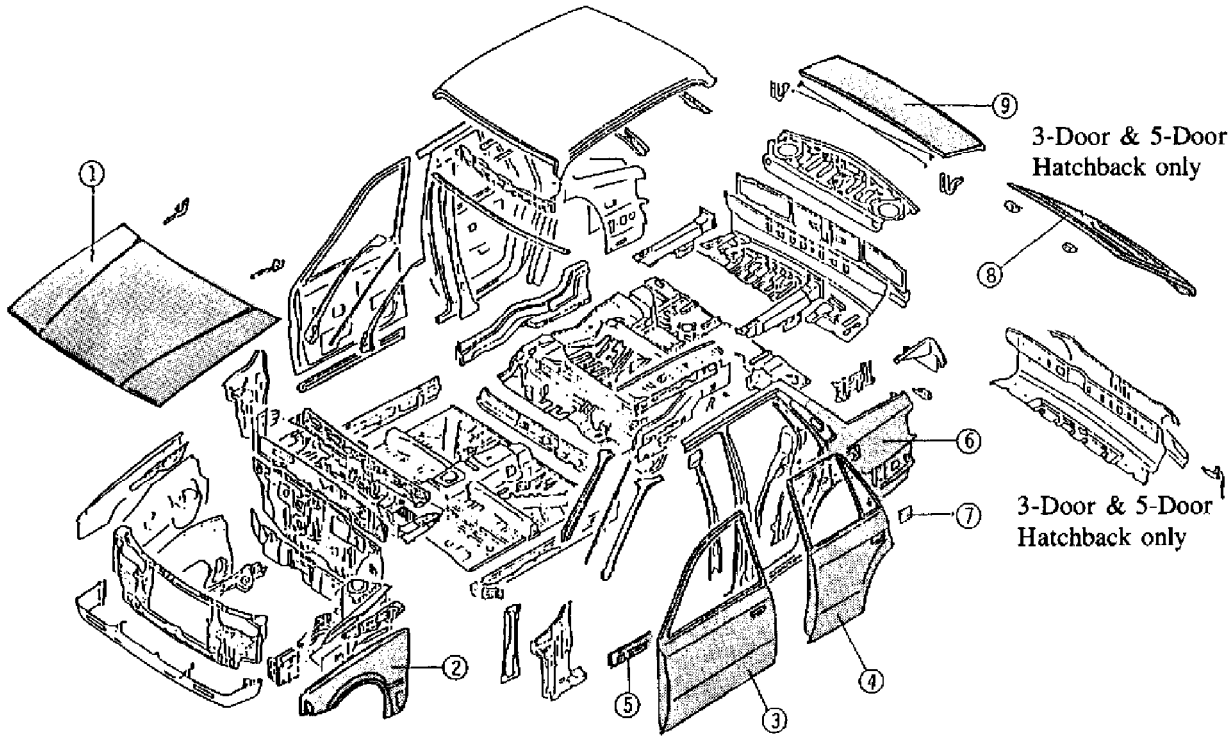
PAINTING RUSTPROOF STEEL PANELS CAT. 14, NO. 070/89

Article Text (p. 3)

1983 Mazda RX7

For www.iluvmyrx7.com

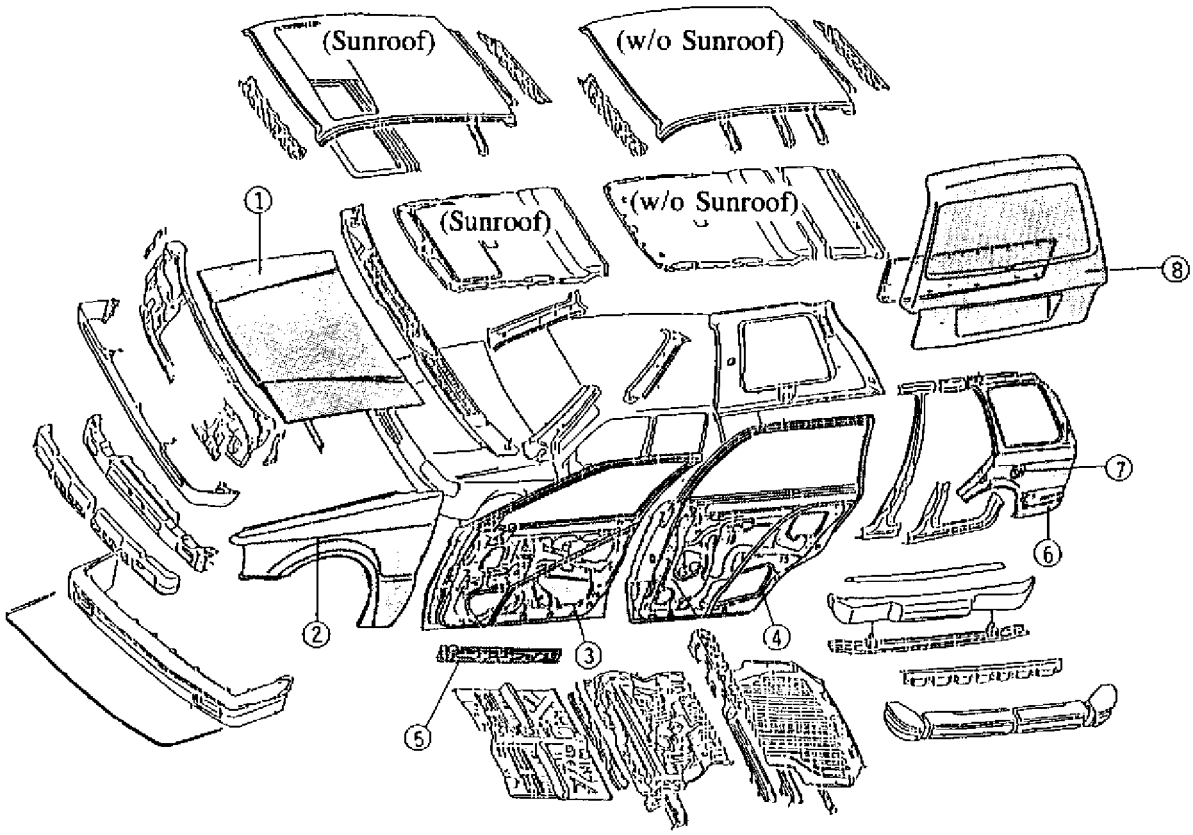
Monday, August 27, 2001 06:40AM



① ENGINE HOOD OUTER PANEL	⑥ REAR FENDER PANEL
② FRONT FENDER PANEL	⑦ FUEL FILLER LID
③ FRONT DOOR OUTER PANEL	⑧ LIFT GATE OUTER PANEL
④ REAR DOOR OUTER PANEL	⑨ TRUNK LID OUTER PANEL
⑤ SIDE SILL OUTER PANEL	

93F53491

Fig. 1: Location of Rustproof Steel Panels on 3 & 5-dr Hatchbacks



① ENGINE HOOD OUTER PANEL	⑤ SIDE SILL OUTER PANEL
② FRONT FENDER PANEL	⑥ REAR FENDER PANEL
③ FRONT DOOR OUTER PANEL	⑦ FUEL FILLER LID
④ REAR DOOR OUTER PANEL	⑧ LIFT GATE OUTER PANEL

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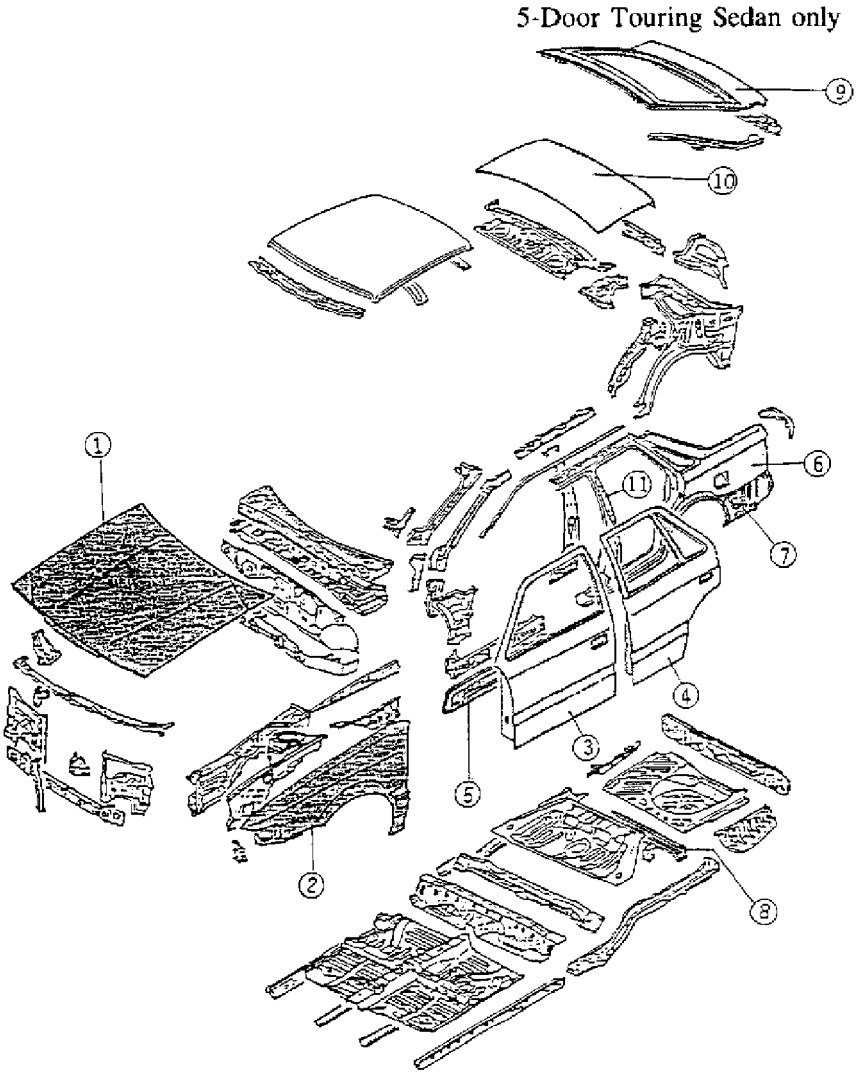
Fig. 2: Mazda 323 Wagon - Rustproof Body Panels



1 ENGINE HOOD OUTER PANEL	7 FUEL FILLER LID
2 FRONT FENDER PANEL	8 REAR CROSSMEMBER
3 FRONT DOOR OUTER PANEL	9 LIFT GATE OUTER PANEL
4 REAR DOOR OUTER PANEL	10 TRUNK LID OUTER PANEL
5 SIDE SILL OUTER PANEL	11 CENTER PILLAR OUTER PANEL
6 REAR FENDER PANEL	

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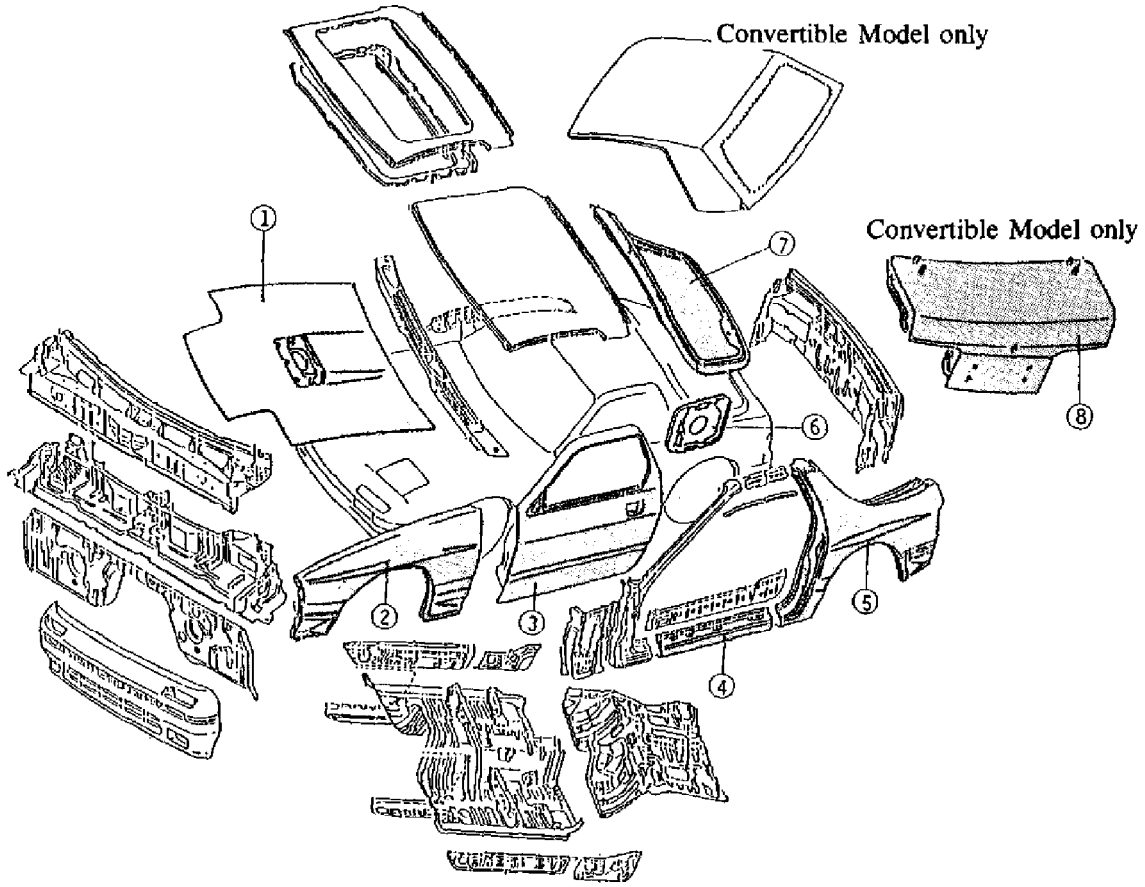
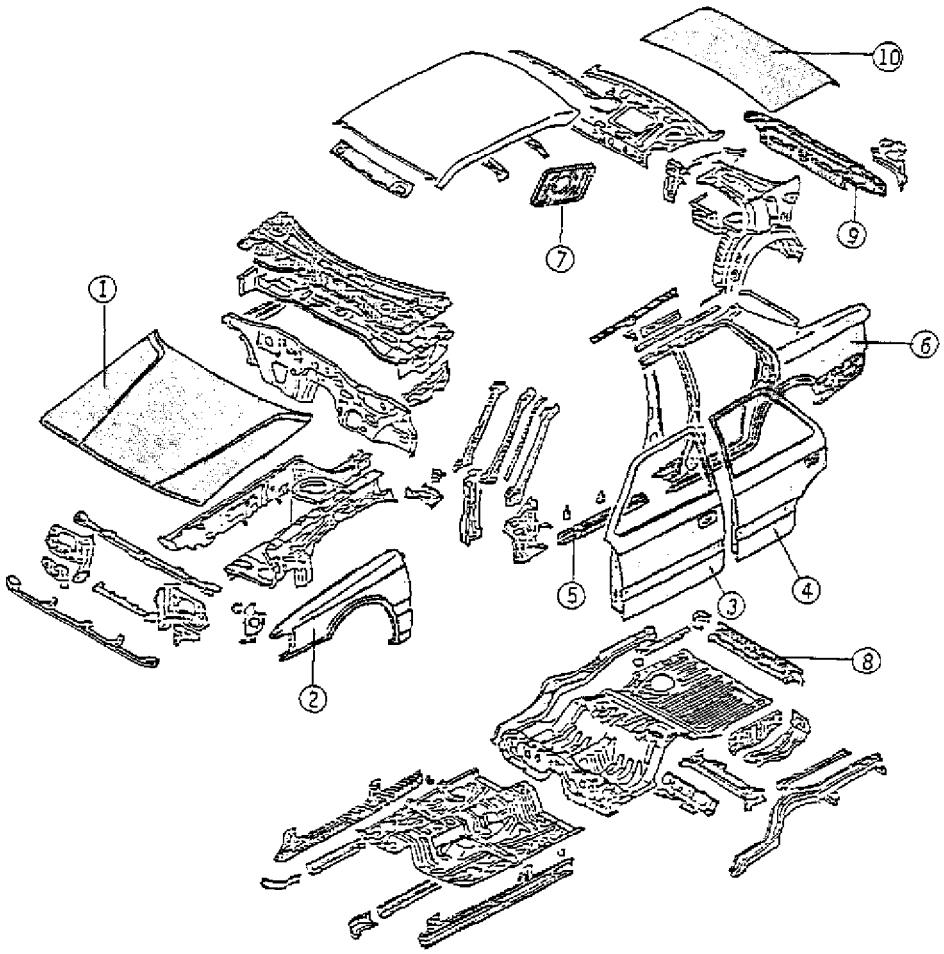
Fig. 3: Mazda 626/MX-6 - Rustproof Body Panels



1 ENGINE HOOD OUTER PANEL	5 REAR FENDER PANEL
2 FRONT FENDER PANEL	6 FUEL FILLER LID
3 FRONT DOOR OUTER PANEL	7 LIFT GATE OUTER PANEL
4 SIDE SILL OUTER PANEL	8 TRUNK LID OUTER PANEL

93I53494

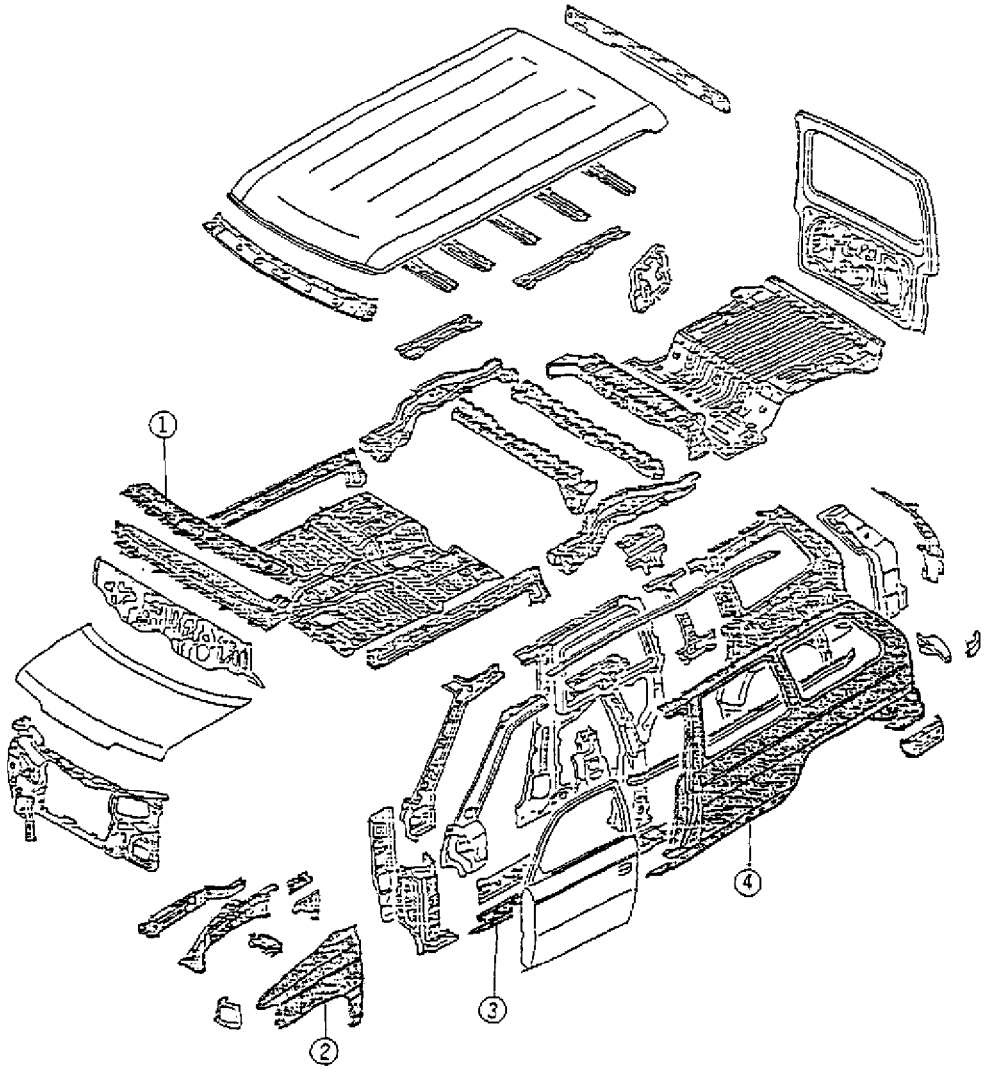
Fig. 4: Mazda RX-7 - Rustproof Body Panels



① ENGINE HOOD OUTER PANEL	⑥ REAR FENDER PANEL
② FRONT FENDER PANEL	⑦ FUEL FILLER LID
③ FRONT DOOR OUTER PANEL	⑧ REAR CROSSMEMBER
④ REAR DOOR OUTER PANEL	⑨ REAR END MEMBER
⑤ SIDE SILL OUTER PANEL	⑩ TRUNK LID OUTER PANEL

93J53495

Fig. 5: Mazda 929 - Rustproof Body Panels



1 COWL GRILLE
2 FRONT FENDER PANEL
3 SIDE SILL OUTER PANEL
4 REAR FENDER PANEL

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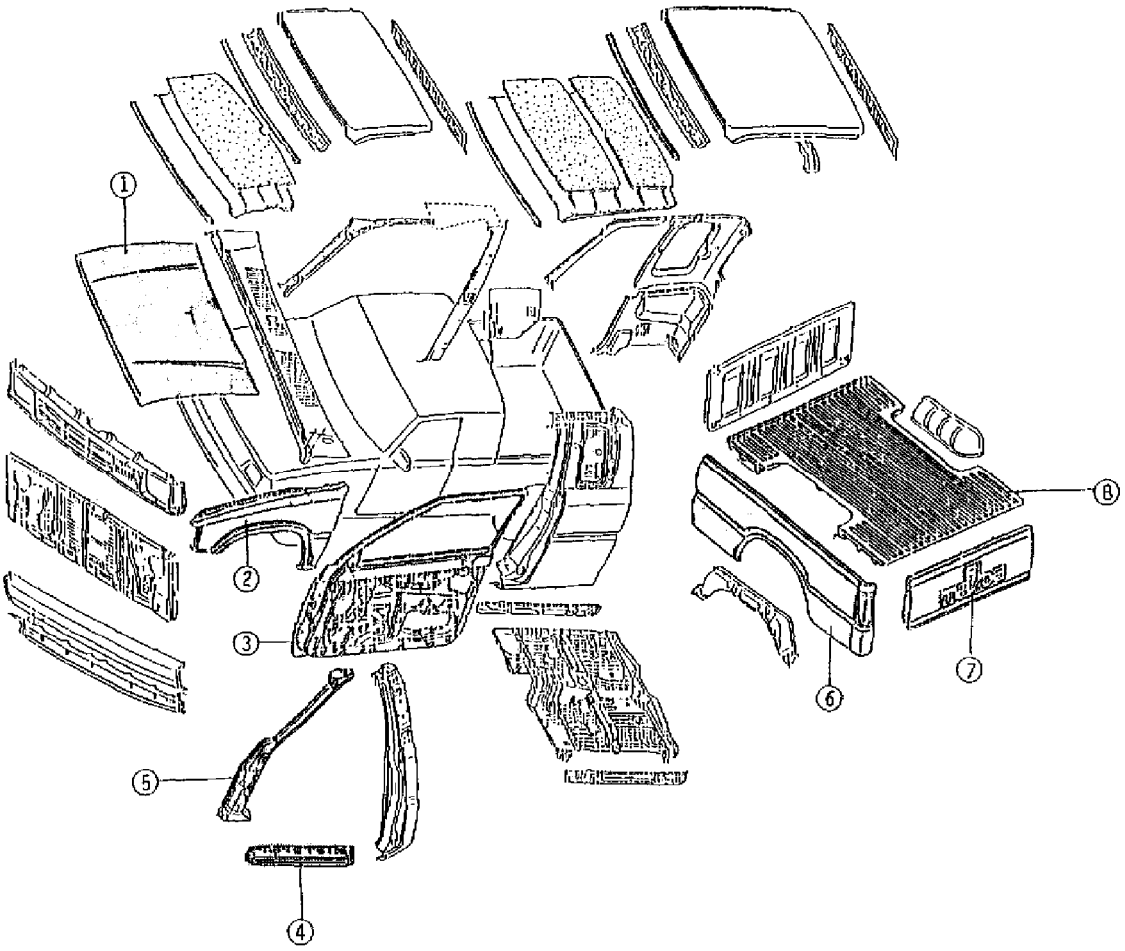
Fig. 6: Mazda MPV - Rustproof Body Panels



①ENGINE HOOD OUTER PANEL	⑤FRONT PILLAR OUTER PANEL
②FRONT FENDER PANEL	⑥SIDE GATE
③FRONT DOOR OUTER PANEL	⑦TAIL GATE
④SIDE SILL OUTER PANEL	⑧FLOOR PANEL

93B53497

Fig. 7: Mazda "B" Series - Rustproof Body Panels

END OF ARTICLE

STATIC ELECTRICITY SHOCK WHEN EXITING VEHICLE CAT. 14, NO. 067/89

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:41AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

STATIC ELECTRICITY SHOCK

Model	All Mazda Models
Category	14, Body
Bulletin No.	067/89
Date	March 29, 1989

DESCRIPTION

Drivers or passengers may occasionally feel static electricity shock when they touch the door after getting out of the vehicle.

If you encounter the customer complaint on the above condition, spray anti-static agent to the surface of the seat cushion and back trim.

The following anti-static agents are recommended for static electricity shock on Mazda vehicles.

RECOMMENDED ANTI-STATIC PRODUCTS

Manufacturer	Product
Tech Spray	Anti-stat
National System Corporation	anti-stat
ACL Incorporated	Staticide
Chemtronics Inc.	Static Free

NOTE: Before using the spray, carefully read the instructions of each product.

END OF ARTICLE

WHISTLE NOISE FROM CHECK &CUT VALVES - REPL VALVES CAT. 4, NO. 015/85

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, August 27, 2001 06:41AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

APPLICATION

1980-85 RX7 & 1981-85 GLC

SUBJECT

Whistle Noise From Check & Cut Valve

REFERENCE

Mazda Motors Corp., Service Bulletin, No. 4 015/85, September, 1985

CONDITION & CAUSE

Some 1980-85 RX7 and 1981-85 GLC vehicles may exhibit a whistle noise from the check and cut valve. The whistle noise is most noticeable at high temperature and low fuel level, and can be heard from the rear of the vehicle.

REPAIR

Replace the check and cut valve with the new service component (RX7 - 8341-42-910, GLC - BA01-42-910).

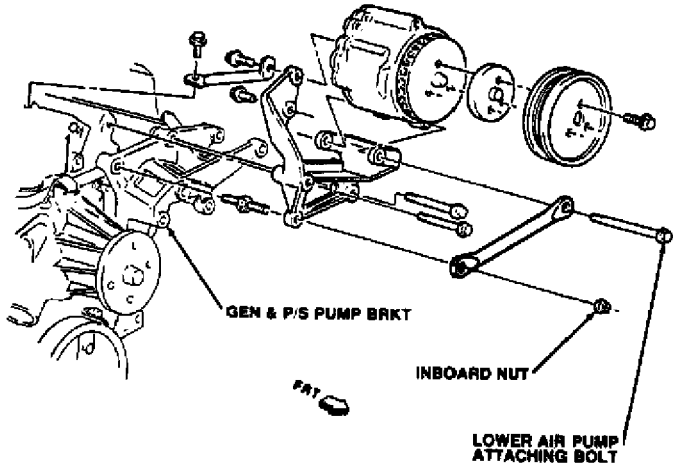


Fig. 1: Anything Installation

END OF ARTICLE

WIND NOISE AROUND DOORS CAT. S, NO. 018/98
Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, September 03, 2001 03:34PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

WIND NOISE AROUND DOORS

Model(s): All Mazda models except MX-5 Miata and MX-6
Category: S (09) - Body
Bulletin No.: 018/98
Date: July 29, 1998

DESCRIPTION

Wind noise around doors may occur with some vehicles. This may be caused by the door weather-strip seal.

Customers complaining of this should have their vehicle inspected and repaired according to this service bulletin.

REPAIR PROCEDURE

1. Verify customer complaint.

2. Examine weather-strip for the following conditions:

   a. Rips, tears, cuts

   b. Loose or falling off

   c. Excessive deterioration

      - If the weather-strip has any of the above conditions, replace it. Go to step 3.

      - If weather-strip does not have any of the above conditions, but wind noise still exists, proceed to the CARD TEST.

CARD TEST

1. Open the door and insert a business card (0.2 mm thickness) between the door and the weather-strip at the base of the A-pillar. Close the door. See Fig. 1.

2. Slide the business card up along the A-pillar. See Fig. 1.

   a. If the card slides easily at any location along the A-pillar, the sealing contact between the door is insufficient and requires adjustment. Proceed to DOOR ADJUSTMENT.

   b. If there is consistent resistance, proceed to the WHITE GREASE TEST.

NOTE: The card test can only be used to evaluate the A-pillar sealing contact. Use the following WHITE GREASE TEST to evaluate the rest of the weather-strip.

WHITE GREASE TEST

1. Roll down windows and adequately cover all interior surfaces to prevent contact with grease.

2. Thoroughly and evenly spray the sheet metal surface of the body that seals against the weather-strip on the door.

NOTE:

* It is recommended that you use KAR Products #78620 "Multi-purpose white grease (aerosol spray)" or equivalent.

* DO NOT spray the weather-strip.

3. Using only the door handle, very gently close the door. This will prevent over-slam which could result in an inaccurate reading.

4. Open the door and measure the width of the grease pattern that is left along the length of the weather-strip (check for any unevenness in width). See Fig. 2.

   a. If 4 mm or more, sealing contact is adequate if door closing effort is acceptable. Clean grease from vehicle.

   b. If 3 mm or less, sealing contact is insufficient. Clean grease from vehicle and proceed to DOOR ADJUSTMENT.

DOOR ADJUSTMENT

The door should be adjusted to obtain the proper seal compression while maintaining proper door alignment. The hinges control the in/out location of the door at the front as well as overall tip or tilt of the door when viewed from the front or rear. The door striker controls the in/out location of the door at the rear latch.

CAUTION: DO NOT pry or force the door into alignment.

In addition to Workshop Manual procedures for door alignment, the following information tips are provided

* As a guideline, if the weather-strip contact is insufficient, the door hinge(s) should be adjusted 2-4 mm inward. Determine the amount of movement by outlining the hinge mount area before door adjustment and after. See Fig. 3.

* Adjusting one hinge at a time will prevent any extreme door

movement. This is done by loosening the hinge bolts and moving the door with a padded pry bar just enough to permit movement of the door.

* Hinges should be adjusted first, followed by the striker.

* Adjustment to the rear door(s), if applicable, may require adjustments to the front door and possibly to the front fender to maintain alignment.

* Door closing effort should be checked to ensure that it remains acceptable after adjustments are completed. If any doors are too difficult to close, the seal compression may be excessive and adjustment will need to be repeated.

* After completing adjustments, verify seal compression by using the card test and white grease test.

3. Verify repair.

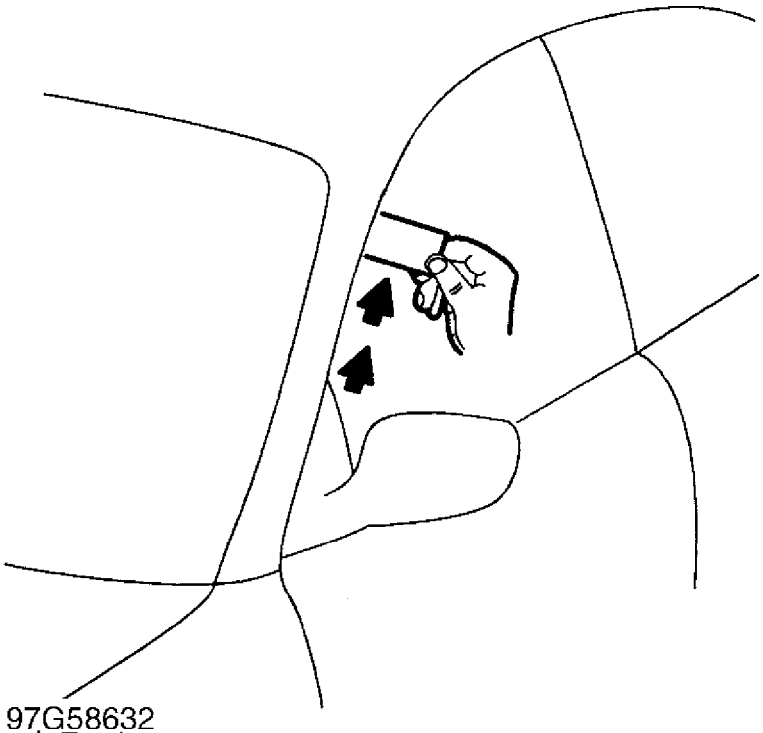


Fig. 1: Card Test

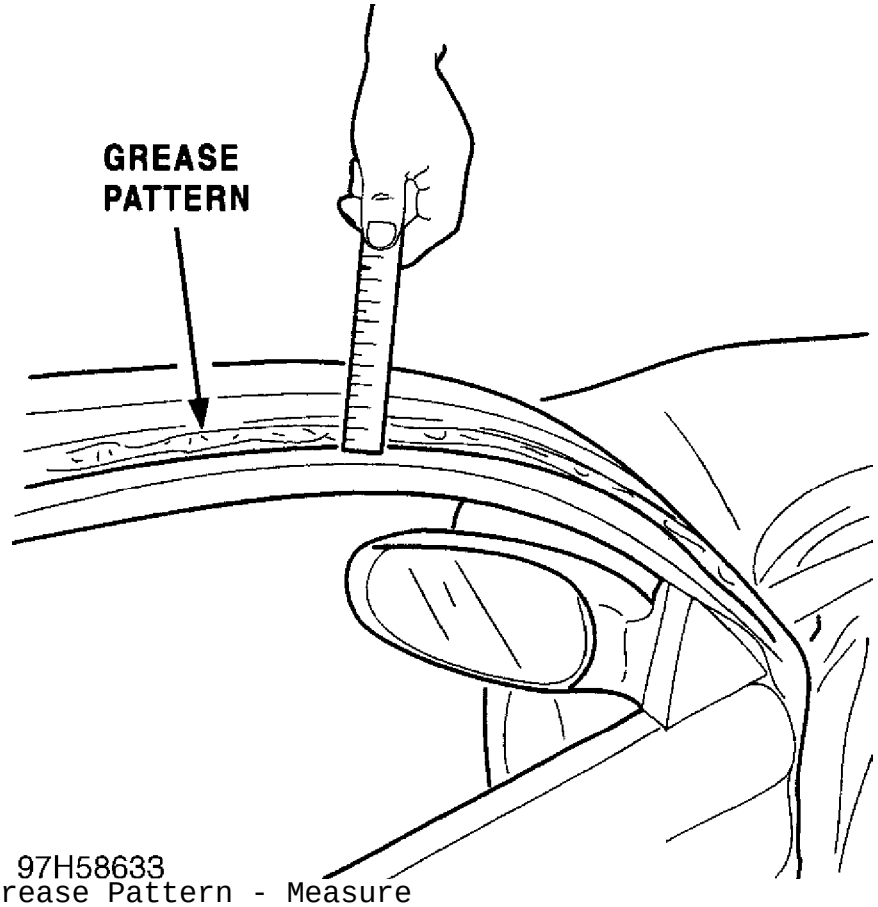


Fig. 2: Grease Pattern - Measure

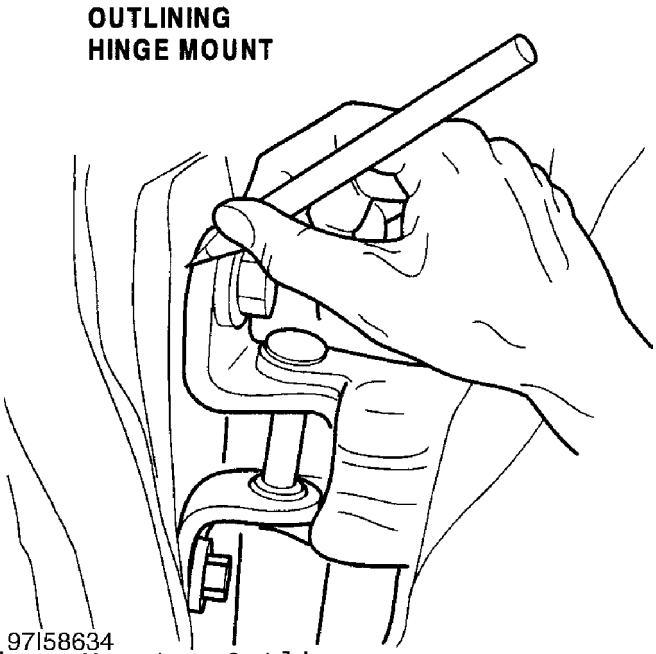


Fig. 3: Hinge Mount - Outline

END OF ARTICLE

WINDSHIELD STONE CHIPPING INSPECTION CAT. S, NO. 037/96

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, September 03, 2001 03:33PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

WINDSHIELD STONE CHIPPING INSPECTION

Model(S): All Mazda Models
Category: S - Body
Bulletin No.: 037/96
Date: August 10, 1996

DESCRIPTION

Windshield cracks caused by stone chips are not covered under the new vehicle warranty. Service Advisers and Service Managers should review the criteria below for addressing customer complaints regarding cracked windshields. If possible, customers should be present when the inspection is performed.

INSPECTION PROCEDURE

1. Visually inspect the length of the crack and the windshield molding for signs of stone contact.

2. Trace the length of the crack with a needle or small nail to determine chipping location.

IMPORTANT

Windshield replacement is not warrantable if a chip larger than 1 mm in diameter exists along the length of the crack.

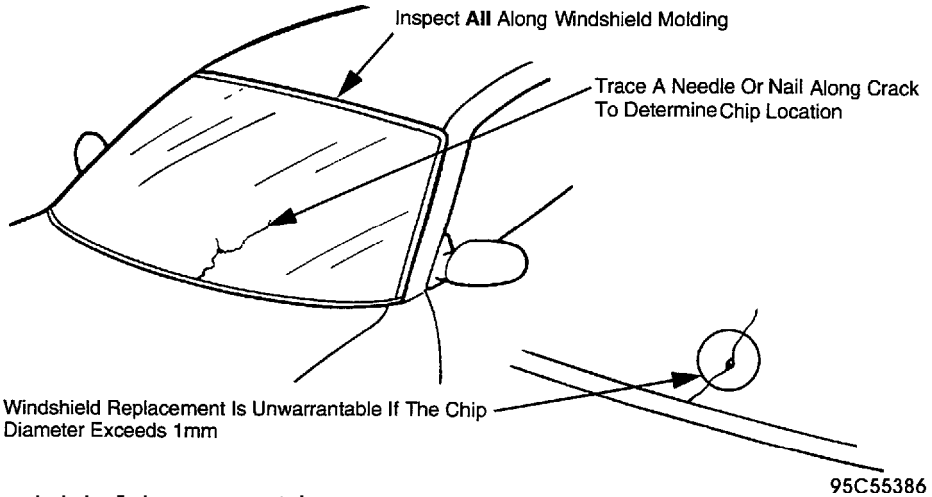


Fig. 1: Windshield Inspection

BRAKE CALIPER BOLT CORROSION - CLEAN & SEAL MT 0995-11

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, September 03, 2001 03:36PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

BRAKE CALIPER BOLTS

Model(s): All Mazda Models
Category: Mazda Tips
Bulletin No.: MT 0995-11
Date: 1995

DESCRIPTION

When reinstalling disk brake calipers, use the following procedure to secure the caliper bolts and seal against road corrosion. When installing caliper mounting bolts, first clean the bolt threads of any old residue. Be sure to clean out the female portion as well, using a wire brush, brake cleaner and an air hose. When parts are dry apply 3-4 drops of Loctite Threadlocking Adhesive/Sealant 272 (Loctite part number 27200) on the male threads, one full thread back from the lead thread. Assemble and torque to specification in less than 5-8 minutes.

END OF ARTICLE

BRAKE JUDDER REPAIR (CANADIAN) CAT. P, NO. 94-06
Article Text

1983 Mazda RX7
For www.iluvmyrx7.com

Monday, September 03, 2001 03:36PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

BRAKE JUDDER REPAIR

Model(s): 1983-95 Mazda Vehicles (Canadian)
Category: P - Brakes
Bulletin No.: 95-02
Date: May, 1995

NOTE: This bulletin supersedes Service Bulletin Cat. P, No. 94-06.

DESCRIPTION

Customers who complain of vibration or pulsation in the steering wheel, brake pedal, floor or seat while applying the brakes may be experiencing symptoms of brake judder. Judder is caused by:

* Disk Thickness Variation (DTV)
* rotor run-out and/or
* rotor surface rust (which leads to DTV)

This bulletin describes the causes and corrections for each condition.

CAUSES OF JUDDER

1. Disc Thickness Variation (DTV) - DTV creates a vibration/pulsation during application of the brakes. DTV will increase with distance travelled if the run-out of the disc is excessive.

2. Disc Rotor Run-Out - Run-out, or rotor "wobble", leads to DTV. It is corrected by precision machining to bring the run-out within specification.

3. Rotor Surface Rust - Under certain conditions (storage or use in extreme environments), the surface of the brake rotors may become rusted in the pad non-contact area. If this corrosion penetrates the rotor surface deeply enough, it will not wear or rub off during normal use. This will cause DTV.

CORRECTION

In order to effectively correct brake judder, rotor surfaces must be precisely machined. Mazda Canada Inc., has evaluated both on and off-car brake lathes and has determined that on-car lathes are more precise and greatly reduces comeback repairs.

The steps necessary for correction of brake judder are as follows:

1. If the vehicle is in dealer inventory and the condition is rotor rust:

   A. Clean the rotor surface by driving the vehicle several miles while frequently applying the brakes.

   B. If vibration/pulsation is still felt, processed to step "C".

   C. Machine the rotor surface enough to remove all rust or surface staining (generally 0.1 mm per side).

NOTE: If machining is performed, the Service Manager's signature must appear on the repair order.

2. If the vehicle has been in service:

   A. Verify customer's complaint with a test drive.

   B. If brake judder is felt, proceed to step "C". If brake judder is not felt, refer to the work shop manual or the NVH manual for additional troubleshooting information.

   C. Mark the front wheel(s) and the lug nut stud with chalk. This will determine the original position of the wheel to the rotor. Remove the front wheel(s).

NOTE: A high majority of brake judder is due to DTV of the front rotors. Customer complaints of brake judder are most often corrected by machining the front rotors only.

   D. Measure the remaining front rotor thickness and run-out. Determine if sufficient rotor material remains to allow machining.
   Limit: Stated minimum thickness for the model plus 0.8 mm.

   E. If machining can be achieved, an on-car brake lathe is recommended to ensure a precise rotor surface.

NOTE: After machining rotor(s) with an on-car brake lathe, you must remove all metal cuttings (particles) from the ABS "toothed ring" (the reluctor) and the ABS sensor. Failure to remove these particles will prevent proper function of the ABS system.

   F. If machining can not be achieved due to rotor thickness limitations, the dealer should replace the rotor. To ensure a successful repair, run-out and/or DTV must be removed by on-car machining, even on new rotor(s).

   G. Install the wheel in the same location relative to the hub as it was originally positioned.

H. Torque wheel lug nuts to the specifications in the service manual.

I. Test drive the vehicle to confirm repair.

J. If the brake judder is still felt, correct the rear rotor(s) using steps "C" through "I".

SERVICE TOOLS

The Accu-Turn (model 8750) On-Car Brake Lathe is recommended by Mazda. The brake lathe is available through Mazda Canada's Equipment Program at 1-800-33-6687.

WARRANTY INFORMATION

(Applies To Vehicles Covered Under Normal Warranty.)

Warranty Type:	O
Symptom Code:	83
Damage Code:	9B
Part Number Main Cause:	**** 33 25 *
	**** 26 25 * (Rear of Vehicle - Rear Wheel Drive Only)
Operation Number:	P0113AMX/0.7 hrs. (Front/One Side)
	P0113BMX/1.2 hrs. (Front/Both Sides)
	P0214AMX/0.7 hrs. (Rear/One Side)
	P0214BMX/1.2 hrs. (Rear/Both Sides)

NOTE:
1. Unnecessary replacement of rotors will result in warranty claim denial.
2. Brake pad replacement costs will not be warrantable for brake judder repair.
3. The 1995 SRT Microfiche (for the MX-3, RX-7, 929, MPV, Miata, etc.) shows labor times for on-car rotor machining are 0.7 hrs. Max for one side, and 1.2 hrs. Max for both sides.
4. If an Accu-Turn on-car lathe is used, apply the labor time from the table above. If an off-car lathe is used, refer to the labor times from the 1994 SRT. The next issue of the SRT microfiche will be revised to show the new labor times.
5. Please refer to the attached sheet for all valid off-car brake and on-car brake machining operation codes for all models and model years.

END OF ARTICLE

VIBRATION/PULSATION WHILE BRAKING - PROCEDURE CAT. P, NO. 001/95

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, September 03, 2001 03:36PM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

BRAKE JUDDER REPAIR

Model(s): All Mazda Models Through 1995
Category: P
Bulletin No.: 001/95
Date: April, 27 1995

NOTE: This bulletin replaces Service Bulletin Cat. P, 006/94 dated Sept. 1994.

DESCRIPTION

Customers who complain of vibration or pulsation in the steering wheel, brake pedal, floor or seat while applying the brakes may be experiencing symptoms of brake judder. Judder is caused by:

* Disk Thickness Variation (DTV)
* rotor run-out and/or
* rotor surface rust (which leads to DTV)

This bulletin describes the causes and corrections for each condition.

CAUSES OF JUDDER

1. Disc Thickness Variation (DTV) - DTV creates a vibration/pulsation during application of the brakes. DTV will increase with mileage accumulation if the run-out of the disc is excessive.

2. Disc Rotor Run-Out - Run-out, or rotor "wobble", leads to DTV. It is corrected by precision machining to bring the run-out within specification.

3. Rotor Surface Rust - Under certain conditions (storage or use in extreme environments), the surface of the brake rotors may become rusted in the pad non-contact area. If this I corrosion penetrates the rotor surface deeply enough, it will not wear or rub off during normal use. This will cause DTV.

CORRECTION

In order to effectively correct brake judder, rotor surfaces must be precisely machined. Mazda has evaluated both on and off-car brake lathes and has determined that on-car lathes are more precise and greatly reduces comeback repairs.

The steps necessary for correction of brake judder are as follows:

1. If the vehicle is in dealer inventory and the condition is rotor rust:

    a. Clean the rotor surface by driving the vehicle several miles while frequently applying the brakes.
    b. If vibration/pulsation is still felt, processed to step "c".
    c. Machine the rotor surface enough to remove all rust or surface staining (generally 0.1 mm per side).

NOTE: If machining is performed, the Service Manager's signature must appear on the repair order.

2. If the vehicle has been in service:

    a. Verify customer's complaint with a test drive.
    b. If brake judder is felt, proceed to step c. If brake judder is not felt, refer to the work shop manual or the NVH manual for additional troubleshooting information.
    c. Mark the front wheel(s) and the lug nut stud with chalk. This will determine the original position of the wheel to the rotor. Remove the front wheel(s).

NOTE: A high majority of brake judder is due to DTV of the front rotors. Customer complaints of brake judder are most often corrected by machining the front rotors only.

    d. Measure the remaining front rotor thickness and run-out. Determine if sufficient rotor material remains to allow machining. Limit: Stated minimum thickness for the model plus 0.8 mm.
    e. If machining can be achieved, an on-car brake lathe is recommended and will be required for all warranty repairs after January 1, 1995 to ensure a precise rotor surface.

NOTE: After machining rotor(s) with an on-car brake lathe, you must remove all metal cuttings (particles) from the ABS "toothed ring" (the reluctor) and the ABS sensor. Failure to remove these particles will prevent proper function of the ABS system.

    f. If machining can not be achieved due to rotor thickness limitations, the dealer should replace the rotor. To ensure a successful repair, run-out and/or DTV must be removed by on-car machining, even on new rotor(s).
    g. Install the wheel in the same location relative to the hub as it was originally positioned.
    h. Torque wheel lug nuts to the specifications in the service manual.
    i. Test drive the vehicle to confirm repair.
    j. If the brake judder is still felt, correct the rear rotor(s) using steps "c" through "i".

VIBRATION/PULSATION WHILE BRAKING - PROCEDURE CAT. P, NO. 001/95

Article Text (p. 3)

1983 Mazda RX7

For www.iluvmyrx7.com

Monday, September 03, 2001 03:36PM

SERVICE TOOLS

The Accu-Tum (model 8750) On-Car Brake Lathe is recommended by Mazda. The brake lathe will be available soon from MMA's National Accounts Program at a substantial savings. When the national account is established, a Special Tools Service Bulletin will be released which will combine further details. However, if you wish to receive a brochure on this brake lathe, please call Accu-Turn at (800) 551-2228.

WARRANTY INFORMATION

(Applies To Vehicles Covered Under Normal Warranty.)

Warranty Type:	A
Symptom Code:	83
Damage Code:	9B
Part Number Main Cause:	**** 33 25 **** 26 25 (Rear of Vehicle - Rear Wheel Drive Only)
Operation Number:	P0113AMX/0.7 hrs. (Front/One Side) P0113BMX/1.2 hrs. (Front/Both Sides) P0214AMX/0.7 hrs. (Rear/One Side) P0214BMX/1.2 hrs. (Rear/Both Sides)

NOTE:
1. Unnecessary replacement of rotors will result in warranty claim denial.
2. Brake pad replacement costs will not be warrantable for brake judder repair.
3. If an on-car lathe is used, apply the labor time from the table above.

NOTE: Warranty policy does not permit using an off-car brake lathe after January 1, 1995. The next issue of the SRT microfiche will be revised to show new labor times.

BRAKE DRUMS LABOR OPERATION/TIME CODES - 1993-1995 MODELS

626/MX-6

- Rear Brakes/Brake Drums(s), R&R (one side)
  - Labor Operation: P0201ARX/0.3 hrs.
- Rear Brakes/Brake Drums(s), R&R (both sides)
  - Labor Operation: P0201BRX/0.4 hrs.
- Brake Drum(s), Machine (one side)
  - Labor Operation: P0201AMX/0.5 hrs.
- Brake Drum(s), Machine (both sides)
  - Labor Operation: P0201AMX/0.7 hrs.
- Brake Shoe(s), R&R (one side)
  - Labor Operation: P0204ARX/0.4 hrs.
- Brake Shoe(s), R&R (both sides)

Labor Operation: P0204BRX/0.6 hrs.

MPV (1993 Models only)
Rear Brakes/Brake Drums(s), R&R (one side)
Labor Operation: P0201ARX/0.3 hrs.
Rear Brakes/Brake Drums(s), R&R (both sides)
Labor Operation: P0201BRX/0.6 hrs.
Brake Drum(s), Machine (one side)
Labor Operation: P0201AMX/0.3 hrs.
Brake Drum(s), Machine (both sides)
Labor Operation: P0201AMX/0.6 hrs.
Brake Shoe(s), R&R (one side)
Labor Operation: P0204ARX/0.5 hrs.
Brake Shoe(s), R&R (both sides)
Labor Operation: P0204BRX/0.8 hrs.

323/PROTEGE
Rear Brakes/Brake Drums(s), R&R (one side)
Labor Operation: P0201ARX/0.3 hrs.
Rear Brakes/Brake Drums(s), R&R (both sides)
Labor Operation: P0201BRX/0.6 hrs. (1993-94)
Labor Operation: P0201BRX/0.3 hrs. (1995)
Brake Drum(s), Machine (one side)
Labor Operation: P0201AMX/0.3 hrs.
Brake Drum(s), Machine (both sides)
Labor Operation: P0201AMX/0.6 hrs.
Brake Shoe(s), R&R (one side)
Labor Operation: P0204ARX/0.5 hrs. (1993-94)
Labor Operation: P0204ARX/0.3 hrs. (1995)
Brake Shoe(s), R&R (both sides)
Labor Operation: P0204BRX/0.8 hrs. (1993-94)
Labor Operation: P0204BRX/0.5 hrs. (1995)

MX-3
Rear Brakes/Brake Drums(s), R&R (one side)
Labor Operation: P0201ARX/0.3 hrs.
Rear Brakes/Brake Drums(s), R&R (both sides)
Labor Operation: P0201BRX/0.4 hrs.
Brake Drum(s), Machine (one side)
Labor Operation: P0201AMX/0.3 hrs.
Brake Drum(s), Machine (both sides)
Labor Operation: P0201AMX/0.6 hrs.
Brake Shoe(s), R&R (one side)
Labor Operation: P0204ARX/0.4 hrs.
Brake Shoe(s), R&R (both sides)
Labor Operation: P0204BRX/0.6 hrs.

93 B-Series and earlier
Rear Brakes/Brake Drums(s), R&R (one side)
Labor Operation: P0201ARX/0.3 hrs.
Rear Brakes/Brake Drums(s), R&R (both sides)
Labor Operation: P0201BRX/0.6 hrs.

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  Brake Drum(s), Machine (one side)
    Labor Operation:    P0201AMX/0.8 hrs.
  Brake Drum(s), Machine (both sides)
    Labor Operation:    P0201AMX/1.3 hrs.
  Brake Shoe(s), R&R (one side)
    Labor Operation:    P0204ARX/0.7 hrs.
  Brake Shoe(s), R&R (both sides)
    Labor Operation:    P0204BRX/1.0 hrs.

Navajo
  Rear Brakes/Brake Drums(s), R&R (one side)
    Labor Operation:    P0201ARX/0.5 hrs.
  Rear Brakes/Brake Drums(s), R&R (both sides)
    Labor Operation:    P0201BRX/0.7 hrs.
  Brake Drum(s), Machine (one side)
    Labor Operation:    P0201AMX/0.2 hrs.
  Brake Drum(s), Machine (both sides)
    Labor Operation:    P0201AMX/0.4 hrs.
  Brake Shoe(s), R&R (one side)
    Labor Operation:    P0204XRX/1.0 hrs.
  Brake Shoe(s), R&R (both sides)
    Labor Operation:    P0204XRX/1.0 hrs.

94 B-Series and later
  Rear Brakes/Brake Drums(s), R&R (one side)
    Labor Operation:    P0201ARX/0.4 hrs.
  Rear Brakes/Brake Drums(s), R&R (both sides)
    Labor Operation:    P0201BRX/0.6 hrs.
  Brake Drum(s), Machine (one side)
    Labor Operation:    P0201AMX/0.2 hrs.
  Brake Drum(s), Machine (both sides)
    Labor Operation:    P0201AMX/0.4 hrs.
  Brake Shoe(s), R&R (one side)
    Labor Operation:    P0204XRX/1.0 hrs.
  Brake Shoe(s), R&R (both sides)
    Labor Operation:    P0204XRX/1.0 hrs.
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REAR DISC BRAKES LABOR OPERATION/TIME CODES - 1993-1995 MODELS

```
Millenia
  Rear Brakes/Disc Plate(s), R&R (one side)
    Labor Operation:    P0208ARX/0.3 hrs.
  Rear Brakes/Disc Plate(s), R&R (both sides)
    Labor Operation:    P0208BRX/0.4 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation:    P0214AMX/0.7 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation:    P0214BMX/1.2 hrs.
  Rear Brakes/Pad(s), R&R (one sides)
    Labor Operation:    P0209ARX/0.3 hrs.
  Rear Brakes/Pad(s), R&R (both sides)
    Labor Operation:    P0214BRX/0.5 hrs.
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626/MX-6
  Rear Brakes/Disc Plate(s), R&R (one side)
    Labor Operation: P0208ARX/0.4 hrs.
  Rear Brakes/Disc Plate(s), R&R (both sides)
    Labor Operation: P0208BRX/0.6 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation: P0214AMX/0.7 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation: P0214BMX/1.2 hrs.
  Rear Brakes/Pad(s), R&R (one sides)
    Labor Operation: P0209ARX/0.4 hrs.
  Rear Brakes/Pad(s), R&R (both sides)
    Labor Operation: P0214BRX/0.5 hrs.

RX-7
  Rear Brakes/Disc Plate(s), R&R (one side)
    Labor Operation: P0208ARX/0.3 hrs.
  Rear Brakes/Disc Plate(s), R&R (both sides)
    Labor Operation: P0208BRX/0.4 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation: P0214AMX/0.7 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation: P0214BMX/1.2 hrs.
  Rear Brakes/Pad(s), R&R (one sides)
    Labor Operation: P0209ARX/0.3 hrs.
  Rear Brakes/Pad(s), R&R (both sides)
    Labor Operation: P0214BRX/0.5 hrs.

MX-5
  Rear Brakes/Disc Plate(s), R&R (one side)
    Labor Operation: P0208ARX/0.4 hrs.
  Rear Brakes/Disc Plate(s), R&R (both sides)
    Labor Operation: P0208BRX/0.5 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation: P0214AMX/0.7 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation: P0214BMX/1.2 hrs.
  Rear Brakes/Pad(s), R&R (one sides)
    Labor Operation: P0209ARX/0.4 hrs.
  Rear Brakes/Pad(s), R&R (both sides)
    Labor Operation: P0214BRX/0.5 hrs.

MPV (1994-95)
  Rear Brakes/Disc Plate(s), R&R (one side)
    Labor Operation: P0208ARX/0.6 hrs.
  Rear Brakes/Disc Plate(s), R&R (both sides)
    Labor Operation: P0208BRX/0.8 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation: P0214AMX/0.7 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation: P0214BMX/1.2 hrs.

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  Rear Brakes/Pad(s), R&R (one sides)
    Labor Operation:    P0209ARX/0.5 hrs.
  Rear Brakes/Pad(s), R&R (both sides)
    Labor Operation:    P0214BRX/0.6 hrs.

MX-3
  Rear Brakes/Disc Plate(s), R&R (one side)
    Labor Operation:    P0208ARX/0.4 hrs.
  Rear Brakes/Disc Plate(s), R&R (both sides)
    Labor Operation:    P0208BRX/0.6 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation:    P0214AMX/0.7 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation:    P0214BMX/1.2 hrs.
  Rear Brakes/Pad(s), R&R (one sides)
    Labor Operation:    P0209ARX/0.5 hrs.
  Rear Brakes/Pad(s), R&R (both sides)
    Labor Operation:    P0214BRX/0.9 hrs.

929
  Rear Brakes/Disc Plate(s), R&R (one side)
    Labor Operation:    P0208ARX/0.4 hrs.
  Rear Brakes/Disc Plate(s), R&R (both sides)
    Labor Operation:    P0208BRX/0.6 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation:    P0214AMX/0.7 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation:    P0214BMX/1.2 hrs.
  Rear Brakes/Pad(s), R&R (one sides)
    Labor Operation:    P0209ARX/0.3 hrs.
  Rear Brakes/Pad(s), R&R (both sides)
    Labor Operation:    P0214BRX/0.5 hrs.

323/PROTEGE
  Rear Brakes/Disc Plate(s), R&R (one side)
    Labor Operation:    P0208ARX/0.5 hrs. (1993-94)
    Labor Operation:    P0208ARX/0.4 hrs. (1995)
  Rear Brakes/Disc Plate(s), R&R (both sides)
    Labor Operation:    P0208CRX/0.9 hrs. (1993-94)
    Labor Operation:    P0208CRX/0.6 hrs. (1995)
  Rear Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation:    P0214AMX/0.7 hrs.
  Rear Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation:    P0214BMX/1.2 hrs.
  Rear Brakes/Pad(s), R&R (one sides)
    Labor Operation:    P0209ARX/0.4 hrs. (1993-94)
    Labor Operation:    P0209ARX/0.3 hrs. (1995)
  Rear Brakes/Pad(s), R&R (both sides)
    Labor Operation:    P0214BRX/0.5 hrs.
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FRONT BRAKES LABOR OPERATION/TIME CODES - 1993-1995 MODELS

Millenia
  Front Brakes/Disc Plate(s), R&R (one side)
    Labor Operation: P0102ARX/0.5 hrs.
  Front Brakes/Disc Plate(s), R&R (both side)
    Labor Operation: P0208CRX/0.6 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation: P0113AMX/0.7 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation: P0113BMX/1.2 hrs.
  Front Brakes/Pad(s), R&R (one sides)
    Labor Operation: P0104ARX/0.5 hrs.
  Front Brakes/Pad(s), R&R (both sides)
    Labor Operation: P0104BRX/0.6 hrs.

626/MX-6
  Front Brakes/Disc Plate(s), R&R (one side)
    Labor Operation: P0102ARX/0.3 hrs.
  Front Brakes/Disc Plate(s), R&R (both side)
    Labor Operation: P0208CRX/0.5 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation: P0113AMX/0.7 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation: P0113BMX/1.2 hrs.
  Front Brakes/Pad(s), R&R (one sides)
    Labor Operation: P0104ARX/0.4 hrs.
  Front Brakes/Pad(s), R&R (both sides)
    Labor Operation: P0104BRX/0.5 hrs.

RX-7
  Front Brakes/Disc Plate(s), R&R (one side)
    Labor Operation: P0102ARX/0.3 hrs.
  Front Brakes/Disc Plate(s), R&R (both side)
    Labor Operation: P0208CRX/0.5 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation: P0113AMX/0.7 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation: P0113BMX/1.2 hrs.
  Front Brakes/Pad(s), R&R (one sides)
    Labor Operation: P0104ARX/0.3 hrs.
  Front Brakes/Pad(s), R&R (both sides)
    Labor Operation: P0104BRX/0.4 hrs.

MX-5
  Front Brakes/Disc Plate(s), R&R (one side)
    Labor Operation: P0102ARX/0.5 hrs.
  Front Brakes/Disc Plate(s), R&R (both side)
    Labor Operation: P0208CRX/0.6 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation: P0113AMX/0.7 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation: P0113BMX/1.2 hrs.
  Front Brakes/Pad(s), R&R (one sides)

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    Labor Operation:    P0104ARX/0.4 hrs.
  Front Brakes/Pad(s), R&R (both sides)
    Labor Operation:    P0104BRX/0.6 hrs.

MPV
  Front Brakes/Disc Plate(s), R&R (one side)
    Labor Operation:    P0102ARX/0.6 hrs.
  Front Brakes/Disc Plate(s), R&R (both side)
    Labor Operation:    P0208CRX/0.9 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation:    P0113AMX/0.7 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation:    P0113BMX/1.2 hrs.
  Front Brakes/Pad(s), R&R (one sides)
    Labor Operation:    P0104ARX/0.4 hrs.
  Front Brakes/Pad(s), R&R (both sides)
    Labor Operation:    P0104BRX/0.5 hrs.

323/PROTEGE
  Front Brakes/Disc Plate(s), R&R (one side)
    Labor Operation:    P0102ARX/0.5 (1993-94)
    Labor Operation:    P0102ARX/0.3 (1995)
  Front Brakes/Disc Plate(s), R&R (both side)
    Labor Operation:    P0208CRX/0.9 hrs. (1993-94)
    Labor Operation:    P0208CRX/0.4 hrs. (1995)
  Front Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation:    P0113AMX/0.7 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation:    P0113BMX/1.2 hrs.
  Front Brakes/Pad(s), R&R (one sides)
    Labor Operation:    P0104ARX/0.4 hrs. (1993-94)
    Labor Operation:    P0104ARX/0.3 hrs. (1995)
  Front Brakes/Pad(s), R&R (both sides)
    Labor Operation:    P0104BRX/0.5 hrs. (1993-94)
    Labor Operation:    P0104BRX/0.4 hrs. (1995)

MX-3
  Front Brakes/Disc Plate(s), R&R (one side)
    Labor Operation:    P0102ARX/0.3 hrs.
  Front Brakes/Disc Plate(s), R&R (both side)
    Labor Operation:    P0208CRX/0.5 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation:    P0113AMX/0.7 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation:    P0113BMX/1.2 hrs.
  Front Brakes/Pad(s), R&R (one sides)
    Labor Operation:    P0104ARX/0.5 hrs.
  Front Brakes/Pad(s), R&R (both sides)
    Labor Operation:    P0104BRX/0.6 hrs.

929
  Front Brakes/Disc Plate(s), R&R (one side)
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    Labor Operation:    P0102ARX/0.4 hrs.
  Front Brakes/Disc Plate(s), R&R (both side)
    Labor Operation:    P0208CRX/0.7 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation:    P0113AMX/0.7 hrs.
  Front Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation:    P0113BMX/1.2 hrs.
  Front Brakes/Pad(s), R&R (one sides)
    Labor Operation:    P0104ARX/0.4 hrs.
  Front Brakes/Pad(s), R&R (both sides)
    Labor Operation:    P0104BRX/0.6 hrs.

Navajo
  Front Brakes/Disc Plate(s), R&R (one side)
    Labor Operation:    P0102ARX/0.6 hrs. (2WD)
    Labor Operation:    P0102CRX/0.8 hrs. (4WD)
  Front Brakes/Disc Plate(s), R&R (both side)
    Labor Operation:    P0102BRX/0.9 hrs. (2WD)
    Labor Operation:    P0102DRX/1.2 hrs. (4WD)
  Front Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation:    P0113AMX/0.8 hrs. (2WD)
    Labor Operation:    P0113CMX/0.6 hrs. (4WD)
  Front Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation:    P0113BMX/1.5 hrs. (2WD)
    Labor Operation:    P0113DMX/1.1 hrs. (4WD)
  Front Brakes/Pad(s), R&R (one sides)
    Labor Operation:    P0104ARX/0.4 hrs.
  Front Brakes/Pad(s), R&R (both sides)
    Labor Operation:    P0104BRX/0.7 hrs.

94 B-Series and later
  Front Brakes/Disc Plate(s), R&R (one side)
    Labor Operation:    P0102ARX/0.5 hrs. (2WD)
    Labor Operation:    P0102CRX/0.7 hrs. (4WD)
  Front Brakes/Disc Plate(s), R&R (both side)
    Labor Operation:    P0102BRX/0.8 hrs. (2WD)
    Labor Operation:    P0102DRX/1.1 hrs. (4WD)
  Front Brakes/Disc Plate(s), Machine on vehicle (one sides)
    Labor Operation:    P0113AMX/0.8 hrs. (2WD)
    Labor Operation:    P0113CMX/0.6 hrs. (4WD)
  Front Brakes/Disc Plate(s), Machine on vehicle (both sides)
    Labor Operation:    P0113BMX/1.5 hrs. (2WD)
    Labor Operation:    P0113DMX/1.1 hrs. (4WD)
  Front Brakes/Pad(s), R&R (one sides)
    Labor Operation:    P0104ARX/0.4 hrs.
  Front Brakes/Pad(s), R&R (both sides)
    Labor Operation:    P0104BRX/0.7 hrs.

93 B-Series and earlier
  Front Brakes/Disc Plate(s), R&R (one side)
    Labor Operation:    P0102ARX/0.6 hrs. (2WD)
    Labor Operation:    P0102BRX/0.9 hrs. (4WD)
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```
Front Brakes/Disc Plate(s), R&R (both side)
  Labor Operation:    P0102CRX/1.1 hrs. (2WD)
  Labor Operation:    P0102DRX/1.6 hrs. (4WD)
Front Brakes/Disc Plate(s), Machine on vehicle (one sides)
  Labor Operation:    P0113AMX/0.8 hrs. (2WD)
  Labor Operation:    P0113CMX/0.6 hrs. (4WD)
Front Brakes/Disc Plate(s), Machine on vehicle (both sides)
  Labor Operation:    P0113BMX/1.5 hrs. (2WD)
  Labor Operation:    P0113DMX/1.1 hrs. (4WD)
Front Brakes/Pad(s), R&R (one sides)
  Labor Operation:    P0104ARX/0.4 hrs.
Front Brakes/Pad(s), R&R (both sides)
  Labor Operation:    P0104BRX/0.6 hrs.
```

END OF ARTICLE

1.2L ENG COOLING FAN DRIVE - NEW GREASE FOR COLD CAT. 3, NO. 019/83

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:17AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

1983 RX-7 COOLING FAN DRIVE (CLUTCH)

Models	1983 RX-7
Bulletin No.	019/83
Category	3
Date	2/1/83

DESCRIPTION

In order to improve the characteristic of bearing grease in cold climates, the type of grease has been changed.

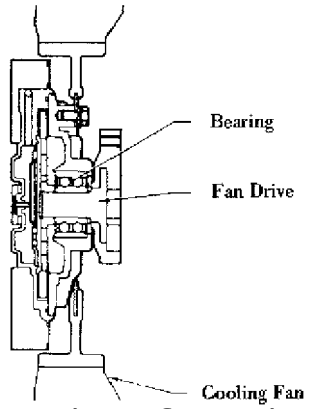

Fig. 1: Location of Bearing in Fan Drive

VIN OF PRODUCTION CHANGE

RX-7 JM1FB331 D0717536	November, 1982

PARTS INFORMATION

NEW PART NO.	OLD PART NO.	DESCRIPTION	INTERCHANGEABILITY
N201 15 210B	N201 15 210A	Fan Drive	A
N201 15 250B	N201 15 250A	Fan & Fan Drive	A

Interchangeability "A" means new part can be used in place of former part.

END OF ARTICLE

1.2L HARD CRANK/NO START - CARBON IN ROTOR/HOUSING CAT. 1, NO. 103/83

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:17AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

HARD CRANKING

Models	RX7
Bulletin No.	103/83
Category	1
Date	5/7/83
Symptom	Hard Cranking/No Start

DESCRIPTION

If RX-7 vehicles have not been in use for a long period of time and the engine is cranked with a weak battery, hard cranking may occur due to carbon trap.

When the vehicles have been stored for such a long period of time carbon accumulated on the rotor surface may be flaked off, and it can be trapped between the rotor and rotor housing by the sweeping motion of the apex seals only when the engine is started. It will not occur when the engine is running.

To verify carbon trap, the following two conditions must be confirmed:

l) The problem occurred when the engine was started.
2) The apex seal can be observed through one of the leading spark plug holes. (If carbon trap occurs, the rotor will always stop at this location).

If carbon trap is verified, please use the following procedure:

Procedure:

I. For vehicles with manual transmission:
   1) Disconnect the negative battery cable and remove the spark plugs.
   2) Hoist the vehicle, remove the starter and install the Flywheel Turning Tool, P/N 49FA 42 065. This special tool is newly established for vehicles with manual transmission.
   3) Turn the Flywheel Turning Tool counterclockwise (as shown in Fig. 1 until the force is reduced considerably).

CAUTION: Do not turn the Flywheel in the direction of normal engine rotation.

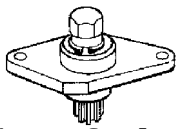

Fig. 1: View of Flywheel Turning tool (49FA 42 065)

   4) Remove the special tool (Fig. 2) and reinstall the starter.

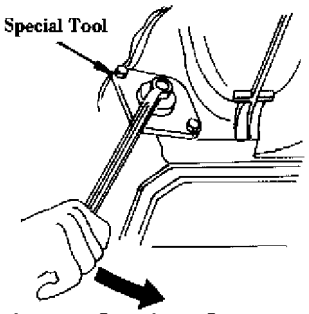

Fig. 2: Using Flywheel Turning Tool

5) Lower the vehicle. Turn the front pulley clockwise, facing the rear of the car, with a l9mm wrench. At the same time, inject 20-30 cc of engine oil through carburetor. Do not exceed the specified quantity of oil.
6) Turn the engine approximately five (5) revolutions to make certain the engine rotates freely.

NOTE: Do not use the starter to rotate the engine.

7) Install the spark plugs.
8) Check that the battery is fully charged.
9) Start the engine and warm up to normal operating temperature.
10) Stop the engine. Remove the spark plugs and check compression. If the compression is over 6.0 kg/cmý, the repair is completed.

II. For vehicles with automatic transmission:
1) Disconnect the negative battery cable and remove the spark plugs.
2) Remove the inspection plate from the converter housing. (Fig. 3).

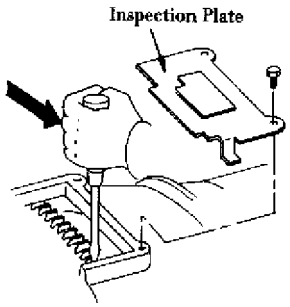

Fig. 3: Removing Inspection Plate From Convertor Housing

3) Insert a standard screwdriver through the inspection hole. Turn the flywheel by prying against the flywheel teeth and converter housing as shown until the force is reduced considerably.

CAUTION: Do not turn the flywheel in the direction of normal engine rotation.

4) Follow the procedure in I, steps 5-10.

END OF ARTICLE

1.3L ENG CLUTCH VIB - REPL FLYWHEEL ALIGNMENT PINS CAT. 6, NO. 002/86

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:18AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

CLUTCH ALIGNMENT PINS

Models	1983-86 RX-7
Bulletin No.	002/86
Category	6
Date	4/8/86
Symptom	Clutch Vibration

DESCRIPTION

Replacement flywheels for the 1983-1986 RX-7 are shipped without clutch alignment pins. These pins are necessary to accurately align the clutch cover to the flywheel during assembly. Failure to use the alignment pins will result in vibration of the flywheel and clutch assembly. See Fig. 1.

When replacing the flywheel, please order the pin by the part number listed below.

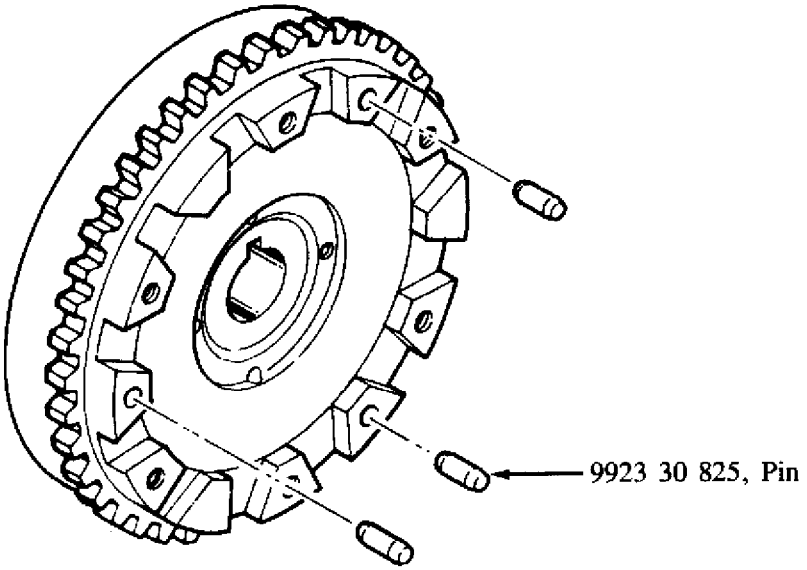

Fig. 1: 83-86 RX7 Flywheel and Alignment Pins

PARTS INFORMATION

PART NUMBER	DESCRIPTION	QTY
9923 30 825	Knock Pin	3

END OF ARTICLE

BAD SHUTTER VALVE CAUSES ROUGH IDLE/NO IDLE

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 10:03AM

ARTICLE BEGINNING

TECHNICAL INFORMATION TIP

ROTARY ROUGH IDLE

YEAR(S): 1982-85
MANUFACTURER: Mazda
MODELS: RX-7
DATE OF ISSUE: June 1993

ISSUE: BAD SHUTTER VALVE CAUSES ROUGH IDLE/NO IDLE

A bad shutter valve may cause a rough or no idle on 1982-85 Mazda RX-7 models. To test the shutter valve, remove the hose from the valve (it's located below the carburetor) and check for vacuum. If there is vacuum at idle, the shutter valve is bad and should be replaced.

Another thing to check that may be causing your idle problems is the vacuum hose that leads from the carburetor to the AA valve. This large hose may be burned or split at the bend in the hose near the intake manifold and can introduce a large vacuum leak if it's leaking.

Courtesy of Import Service Magazine
with thanks to:

Bill Jasper
Charles Levy Motor Company
Columbus, Georgia

REFERENCE NUMBER: MAZ0518AP

END OF ARTICLE

ENGINE STAND ADAPTOR MODIFICATIONS CAT. 40, NO. 025/88

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:18AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

ENGINE STAND ADAPTOR MODIFICATION

Model: All Models
Bulletin No.: 023/88
Date: 10/28/88
Category: 40

DESCRIPTION

With the introduction of universal engine hanger (49L0-10-1A0), a slight modification will be necessary on some types of engine stand adaptors.

If you currently use engine stand adaptor 0000-41-001C or 0000-41-001R, the following modifications is needed to obtain adequate bolt clearance for the universal engine hanger. If you use the older style engine stand adaptor (0000-41-001H), no modification is required.

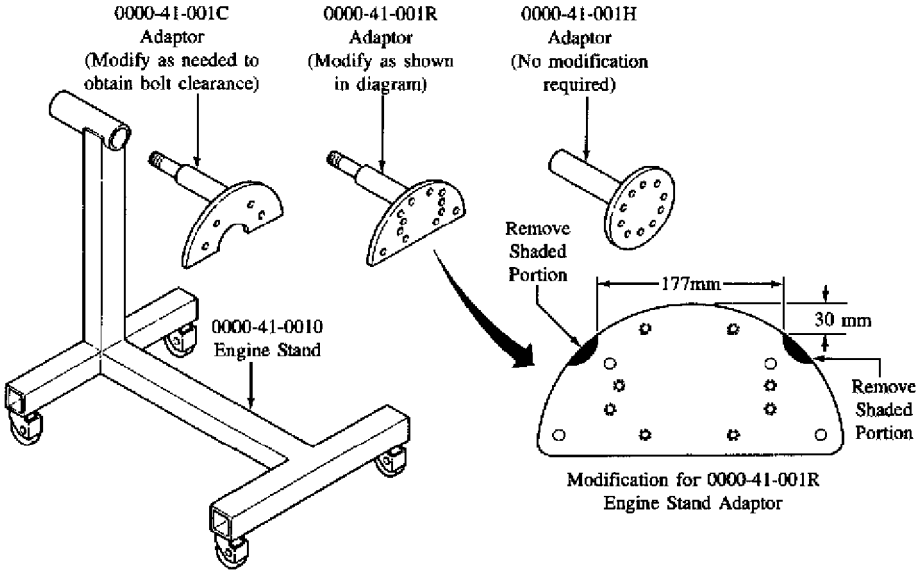

Fig. 1: Engine Stand Adaptor Modification

END OF ARTICLE

FILLING COOLING SYSTEM CAT. 3, NO. 008/87

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:18AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

ENGINE COOLANT

Model: ALL MODELS
Bulletin No.: 008/87
Date: 7/16/87
Category: 3

DESCRIPTION

The proper level for the coolant is between the "FULL" and "LOW" marks on the coolant reservoir. If the level is below the "LOW" mark when the engine is cool, add enough 50/50 mixture of water and ethylene glycol anti-freeze mix to bring the level up to or near the "FULL" mark. Do not overfill.

In addition to freezing protection, ethylene glycol provides corrosion protection for aluminum engine parts.

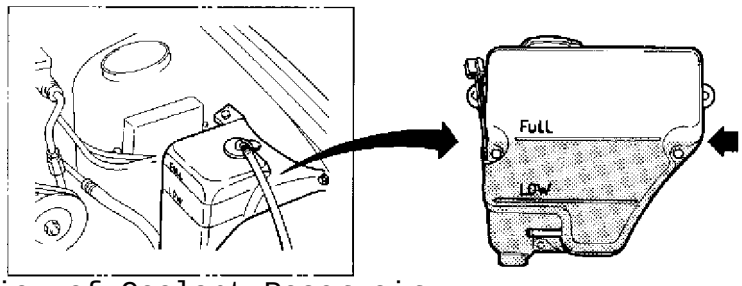

Fig. 1: View of Coolant Reservoir

CAUTION WHEN ADDING COOLANT

1. If water only is added, the mixture ratio of coolant will be reduced, which may result in the following:

   * Rust or corrosion in the engine.
   * Water leakage or overheating caused by rust or corrosion in the radiator.
   * Water leakage due to corrosion of the water pump at the seal.

2. If the reservoir is overfilled, a rise in coolant temperature will cause expansion of the coolant volume, which will allow some coolant to overflow. The customer may misunderstand this overflow to be a mechanical problem.

CAUTION WHEN REPLACING COOLANT

After replacement, set the heater control lever to the "HOT" position and warm up the engine to the normal operating temperature (Thermostat

fully open). Check that there are no coolant leaks.

Add additional coolant as needed so that the radiator is full and the coolant level is at the "FULL" mark on the coolant reservoir.

NOTE: If you encounter a reservoir bottle that is empty, it is likely that the level of coolant inside the radiator is also low. In such a case always....

1. Wait until the engine is cool and then remove the radiator cap. Add coolant as needed to bring the level inside the radiator up to full.
2. Pressure check the radiator and radiator. Also perform general check of coolant system.

END OF ARTICLE

INSTALLING MAZDA BRAND OIL FILTER CAT. 2, NO. 005/89

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:19AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

ENGINE OIL FILTER CARTRIDGE

Models	ALL MODELS
Bulletin No.	005/89
Category	2
Date	2/10/89

DESCRIPTION

When servicing Mazda vehicles, please be aware of the following installation procedure and tightening requirements of the Mazda brand oil filters.

INSTALLATION PROCEDURE

1. Apply a thin film of oil to the surface of the gasket before installing the filter.
2. Tightening requirements:

Oil Filter Part No.	
FEY0 14 3020	Tighten 1 and 1/6 turns after the gasket contacts the filter base.
JEY0 14 3020	Tighten 1 and 1/6 turns after the gasket contacts the filter base (six dots are printed on the filter at even intervals to facilitate tightening instructions).
N3Y6 14 3020	Tighten by hand.

NOTE: For rotary engine with a water cooled oil cooler, tighten an additional 1/12 turn with a suitable tool (twelve dots are printed on the filter at even intervals to facilitate tightening instructions).

8173 23 8020	Tighten by hand.
F802 23 8020	Tighten by hand.

3. Start engine and check for oil leakage.

IMPORTANT: Always be sure the correct filter is installed on the proper Mazda vehicle.

INSTALLATION INSTRUCTIONS FOUND ON THE FILTER BOXES AND THE FILTERS

FEY0 14 3020	8173 23 8020
Caution	Caution
1. Apply a Thin Film of Oil to the Surface of Gasket before Screwing on.	1. Apply a Thin Film of Oil to the Surface of Gasket before Screwing on.
2. Tighten 1-1/6 Turn after Contacts Base.	2. Then tighten enough by Gasket hand.
3. Start Engine and Check	3. Start Engine and Check

for Oil Leakage.
TOKYO ROKI CO., LTD.

JEYO 14 3020
Caution
1. Apply a Thin Film of Oil to the Surface of Gasket before Screwing on.
2. Tighten 1-1/6 Turn after Gasket Contacts Base.
3. Start Engine and Check for Oil Leakage.
TOKYO ROKI CO., LTD.

N3Y6 14 3020
Caution
1. Apply a Thin Film of Oil to the Surface of Gasket before Screwing on.
2. Then Tighten Enough by Hand, But Rotary Engine with watercooled oil-cooler Tighten Additional About 1/12 turn by tool.
3. Start Engine and Check for Oil Leakage.
TOKYO ROKI CO., LTD.

for Oil Leakage.
TOKYO ROKI CO., LTD.

F802 23 8020
Caution
1. Apply a Thin Film of Oil to the Surface of Gasket before Screwing on.
2. Then tighten enough by hand.
3. Start Engine and Check for Oil Leakage.
TOKYO ROKI CO., LTD.

END OF ARTICLE

OIL LEAK AT REAR STATIONARY GEAR O-RING - CAR FIX CAT. B, NO. 003/98

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:19AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

OIL LEAK AT REAR STATIONARY GEAR O-RING/ON-CAR REPLACEMENT PROCEDURE

Model(s): 1979-95 Mazda RX-7
Category: B (01) - Engine
Bulletin No.: 003/98
Date: July 16, 1998

DESCRIPTION

The following procedure is for on-car rear stationary (RS) gear O-ring replacement. This procedure is not included in the Workshop Manual. When the RS gear O-ring is leaking, use the following on-car procedure.

REPAIR PROCEDURE

1. Verify customer complaint.

2. Remove the flywheel (M/T) or counterweight (A/T). Refer to the Workshop Manual section C and H.

3. Set the front rotor to TDC (top dead center) per the Work-shop Manual section C.

4. Remove the six bolts from the RS gear.

NOTE: If the eccentric shaft and rotor are rotated with the RS gear removed, they cannot be re-used. The engine will require overhauling.

5. Insert two screwdrivers or pry bars and pry out the RS gear. See Fig. 1.

CAUTION: To prevent the (RS) gear from falling out, loosely reinstall one of the bolts back into the gear. This will hold the gear in place while prying.

6. After the (RS) gear is pried loose, remove the one bolt used to hold it in place, and remove the (RS) gear assembly.

7. Remove the O-ring and oil seal, and clean the (RS) gear. After (RS) gear is cleaned, use shop air to remove any remaining debris. See Fig. 2.

8. Apply a small amount of oil to the new O-ring and oil seal and install.

9. Install the (RS) gear.

   Tightening torque: 16-22 N.m

10. Install remaining parts in the reverse order of removal.

11. Verify repair.

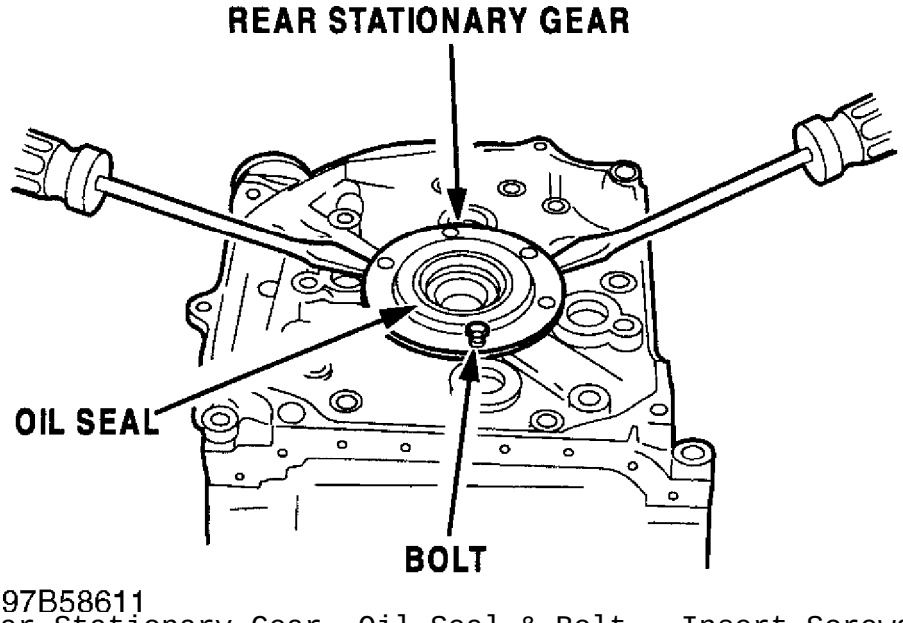

Fig. 1: Rear Stationary Gear, Oil Seal & Bolt - Insert Screwdrivers

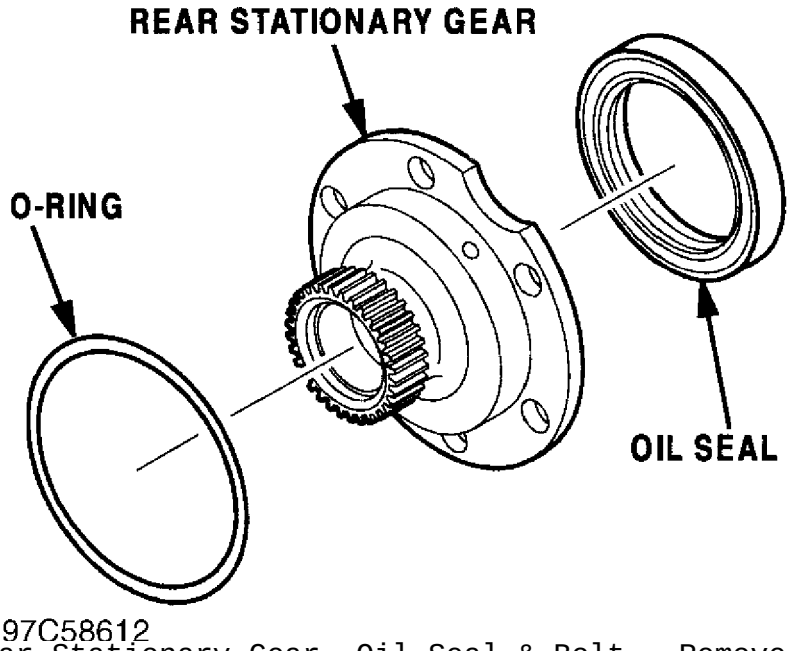

Fig. 2: Rear Stationary Gear, Oil Seal & Bolt - Remove & Clean

PARTS INFORMATION

OIL LEAK AT REAR STATIONARY GEAR O-RING - CAR FIX CAT. B, NO. 003/98

Article Text (p. 3)

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:19AM

PARTS INFORMATION TABLE

Part Number	Description	Qty.	Applicable Models
0813-10-555A	O-Ring	1	Rotary Engine

WARRANTY INFORMATION

NOTE:

* This information applies to verified customer complaints on vehicles covered under normal warranty. Refer to the SRT microfiche for warranty term information.

* The Operation Numbers / Labor Hours below include complete transmission R&R, flywheel or counterweight R&R, and road test.

Warranty Type:	A
Symptom Code:	76
Damage Code:	Use Code Applicable to Problem
Part Number Main Cause:	0813-10-555A
Quantity:	1
Operation Number / Labor Hours:	XX012XR1 / 2.9 (FC - M/T)
	XX012XR2 / 3.6 (FC - A/T)
	XX012XR3 / 3.7 (FD - M/T)
	XX012XR4 / 4.7 (FD - A/T)

END OF ARTICLE

PARTIAL ENGINE (LONG BLOCK) AVAILABILITY CAT. B, NO. 004/94

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:19AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

PARTIAL ENGINE (LONG BLOCK) AVAILABILITY

Model(s): All Mazda Models
Category: B
Bulletin No.: 004/94
Date: 3/9/94
Revised: 6/21/94

DESCRIPTION

Partial engines are available as repair components and will replace the need to replace the entire engine. When installing a partial engine, the following components must be utilized from the original engine:

1. Engine Electrical Parts
2. Cooling System Parts
3. Intake And Exhaust System Parts
4. Fuel And Emission Control Parts
5. Clutch And/Or Flywheel

WARRANTY INFORMATION

Partial engines are warranted for the remainder or the original vehicle warranty or for the first 12 months after installation of the partial engine, whichever is longer. All warranty repairs of the partial engine replacement will require prior authorization from the DCSM.

NEW ENGINE (LONG BLOCK) REPLACEMENT PROGRAM

B-TRUCKS NEW ENGINE AVAILABILITY PARTS TABLE

Year/Model	Engine P/N	Gasket P/N	Remarks
1979-84 B2000	HEA4-23-800	8AU1-23-900	
1986-87 B2000	FEY3-02-300	8AU1-02-310	Requires the replacement of the Heat Gauge Unit - (G607-18-510)
1987-89 B2200	F2Y3-02-300	8AU2-02-310	
1990-93 B2200 (CAL)	F2Y6-02-300	8AU5-02-310	
(FED)	F2Y7-02-300	8AU2-02-310	

PARTIAL ENGINE (LONG BLOCK) AVAILABILITY CAT. B, NO. 004/94

Article Text (p. 2)

1983 Mazda RX7

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1990-93 B2600 (4x4)	(A/T)	G6Y1-02-300	8AU3-02-310	
	(M/T)	G6Y2-02-300	8AU3-02-310	
1990-93 B2600 (4x2)	(A/T)	G6Y3-02-300	8AU3-02-310	
	(M/T)	G6Y4-02-300	8AU3-02-310	
1994 B-TRUCKS		NONE	NONE	

MPV NEW ENGINE AVAILABILITY PARTS TABLE

Year/Model		Engine P/N	Gasket P/N	Remarks
1989-94 MPV	(2.6L)	G6Y5-02-300	8AL1-02-310	
1989-94 MPV (3.0L)	(4X2)	JE57-02-300	8AL2-02-310	
	(4X4)	JE58-02-300	8AL2-02-310	

NAVAJO NEW ENGINE AVAILABILITY PARTS TABLE

Year/Model		Engine P/N	Gasket P/N	Remarks
1991-93 NAVAJO		NONE	NONE	

323 NEW ENGINE AVAILABILITY PARTS TABLE

Year/Model		Engine P/N	Gasket P/N	Remarks
1986-89 323 (1.6L)	(4X2)	B630-02-300	8AB1-02-310	Does Not Fit 86-87 w/Std. Steering & A/C
1988-89 323 (1.6L TURBO)	(4X2)	WILL BE AVAILABLE.	8AB2-02-310	
	(4x4)	WILL BE AVAILABLE.	8AB2-02-310	
1990-92 323(1.6L, 4x2)		B6AL-02-300	8AB9-02-310	
1993-94 323, (1.6L, 4X2)	(FED)	B6AL-02-300	8AB9-02-310	
	(CAL)	B6BN-02-300	8AB8-02-310	

PROTEGE NEW ENGINE AVAILABILITY PARTS TABLE

PARTIAL ENGINE (LONG BLOCK) AVAILABILITY CAT. B, NO. 004/94

Article Text (p. 3)

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:19AM

Year/Model	Engine P/N	Gasket P/N	Remarks
1990-94 PROTEGE (M/T) (1.8L DOHC)	BP05-02-300	8ABA-02-310	
(A/T)	BP06-02-300	8ABA-02-310	
1990-94 PROTEGE (M/T) (1.8L SOHC)	BP01-02-300	8ABB-02-310	
(A/T)	BP02-02-300	8ABB-02-310	

626/MX-6 NEW ENGINE AVAILABILITY PARTS TABLE

Year/Model	Engine P/N	Gasket P/N	Remarks
1981-82 626	HE41-02-300	8AU1-02-310	
1983-85 626	FE01-02-300	8AG1-02-310	
1986-87 626 (NON-TURBO)	FEY1-02-300	8AG2-02-310	Requires the replacement of the Heat Gauge Unit - (G607-18-510)
(TURBO)	FEY2-02-300	8AG3-02-310	
1988-89 626/MX-6 (NON-TURBO)	F2Y1-02-300	8AG4-02-310	
(TURBO)	F2Y2-02-300	8AG5-02-310	
1990-92 626/MX-6 (NON-TURBO)	F2Y4-02-300	8AG4-02-310	
(TURBO)	F2Y5-02-300	8AG5-02-310	
1993-94 626/MX-6 (2.0L) (M/T)	FS01-02-300A	8AGB-02-310	
1993 626/MX-6 (2.0L) (A/T)	FS01-02-300A	8AGB-02-310	
1994 626/MX-6 (2.0L) (A/T)	FS71-02-300A	8AGB-02-310	
1993-94 626/MX-6(2.5L)	KLY1-02-300A	8AE3-02-310	

929 NEW ENGINE AVAILABILITY PARTS TABLE

Year/Model	Engine P/N	Gasket P/N	Remarks

PARTIAL ENGINE (LONG BLOCK) AVAILABILITY CAT. B, NO. 004/94

Article Text (p. 4)

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:19AM

1988-89 929	(3.0L SOHC)	JE15-02-300	8AH1-02-310	
1990-91 929 (3.0L)	(SOHC)	JE39-02-300	8AJA-02-310	
	(DOHC)	JE27-02-300	8AJB-02-310	
1992-93 929 (3.0L)	(DOHC)	NONE	NONE	Use Short Block # JE48-02-200B
1994 929	(3.0L DOHC)	JE74-02-300A	8AH3-02-310	

RX-7 NEW ENGINE AVAILABILITY PARTS TABLE

Year/Model	Engine P/N	Gasket P/N	Remarks
ALL RX-7			See Parts Bulletin R-6 MANA Rebuilt Rotary Engines

MIATA NEW ENGINE AVAILABILITY PARTS TABLE

Year/Model	Engine P/N	Gasket P/N	Remarks
1990-93 MIATA (1.6L) (M/T)	B61P-02-300	8AN1-02-310	
(A/T)	B64J-02-300	8AN1-02-310	
1994 MIATA (1.8L)	BPE8-02-300	8ABC-02-310	

MX-3 NEW ENGINE AVAILABILITY PARTS TABLE

Year/Model	Engine P/N	Gasket P/N	Remarks
1992-93 MX-3(1.6L,I-4)	B66S-02-300	8AE2-02-310	
1994 MX-3 (1.6L,1-4)	B6DC-02-300	8ABD-02-310	
1992-94 MX-3(1.8L,V-6)	K8Y1-02-300	8AE3-02-310	

MILLENlA NEW ENGINE AVAILABILITY PARTS TABLE

Year/Model	Engine P/N	Gasket P/N	Remarks
1994 MILLENIA (2.3L, V-6 MILLER)	KJY2-02-300	8AK1-02-310A	

PARTIAL ENGINE (LONG BLOCK) AVAILABILITY CAT. B, NO. 004/94
Article Text (p. 5)
1983 Mazda RX7
For www.iluvmyrx7.com

Saturday, September 08, 2001 09:19AM

	(2.5L, V-6)	KL47-02-300	8AK2-02-310	

END OF ARTICLE

PROPYLENE GLYCOL BASED COOLANT: RECOMMENDATIONS CAT. E, NO. 001/94

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:19AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

PROPYLENE GLYCOL BASED COOLANT

Model(s): All Mazda Models
Category: E
Bulletin No.: 001/94
Date: 10/21/94

AFFECTED MODELS

All Mazda Vehicles

DESCRIPTION

Mazda does not recommend propylene glycol coolants. Available information indicates the following characteristics regarding propylene glycol coolants:

* Provides less heat transfer
* May not provide adequate corrosion protection (to meet Mazda specifications)
* Freezing temperature is 10 - 20% higher than ethylene glycol based coolants

Mazda recommends ethylene glycol and water mixture. Customer's with questions regarding coolant should be directed to the information in Section 7 of their owner's manual.

END OF ARTICLE

RATTLE FROM FLOOR WHEN ACCEL - BROKEN MUFFLER HANGER CAT. 4, NO. 055/89
Article Text
1983 Mazda RX7
For www.iluvmyrx7.com

Saturday, September 08, 2001 09:19AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

PRE-SILENCER HANGER BREAKAGE

Models	ALL MODELS
Bulletin No.	055/89
Category	4
Date	2/20/89
Symptom	Noise

DESCRIPTION

If a rattling noise is heard from underneath the floor during the acceleration, this may be due to the broken silencer hanger.

REPAIR PROCEDURE

Check the exhaust hanger for breakage. If it is broken, replace the pre-silencer with the modified one which has been reinforced with stiffener as shown in Fig. 1.

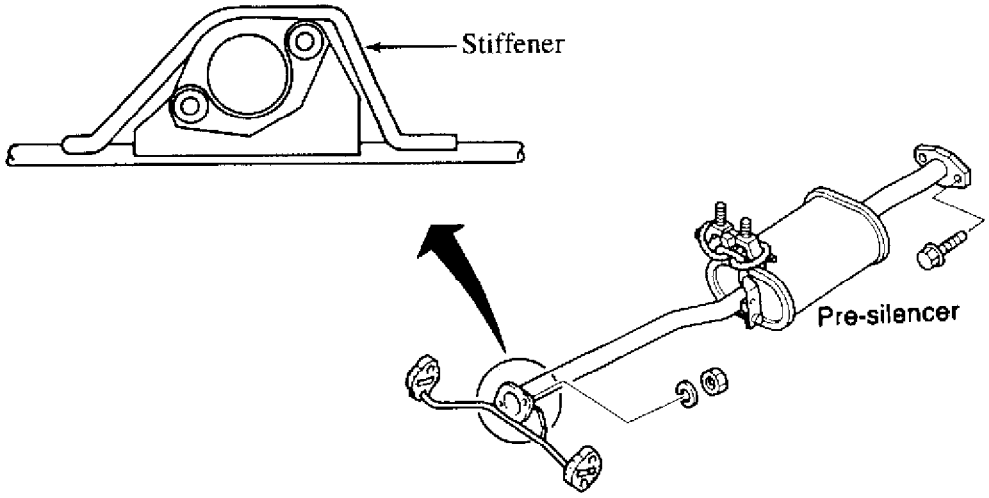


Fig. 1: View of Pre-Silencer with Stiffener

PARTS INFORMATION

NEW PART NO.	OLD PART NO.	DESCRIPTION	INTERCHANGEABILITY
B601 40 300B	B601 40 300A	Pre-Silencer	NEW = OLD

END OF ARTICLE

RECONDITIONED ANTI-FREEZE CAT. E, NO. 002/96

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:20AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

RECONDITIONED ANTI-FREEZE

Model(s): All Mazda Models
Category: E - Cooling System
Bulletin No.: 002/96
Date: June 27, 1996

DESCRIPTION

Mazda does not recommend the use of reconditioned anti-freeze. Mazda recommends ethylene glycol base coolants for all Mazda aluminum engines.

Although reconditioned anti-freeze is available, this product may contain silicon particles which may be abrasive to the water pump seal. Additionally, reconditioned anti-freeze may contain chemicals (alcohol or methanol) that erode metal parts.

Service Managers should inform customers that Mazda does not recommend reconditioned anti-freeze and that problems (mechanical and otherwise) related to the use of reconditioned anti-freeze are not warrantable.

CAUTION: Antifreeze is considered a hazardous and toxic substance. Handled and disposed must be done in accordance with local, state and federal laws.

END OF ARTICLE

RECONDITIONED ANTIFREEZE WARNINGS CAT. E, NO. 001/90

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:20AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

RECONDITIONED ANTIFREEZE

Models	All Models
Bulletin No.	001/90
Category	E
Date	2/14/90

DESCRIPTION

Mazda Motor Corporation (MC) does not recommend the use of reconditioned anti-freeze. Please use ethylene glycol base coolant for Mazda's aluminum engines.

Although it is available on the market, reconditioned anti-freeze might contain silicon particles, which could abrade the water pump seal, or it might contain other chemicals, alcohol or methanol, that may erode metal parts.

Since Mazda does not advocate the use of reconditioned anti-freeze, any problems caused by its use cannot be covered by the warranty.

END OF ARTICLE

REVISED ROTORY ENGINE PRICING CAT. RF, NO. 95-24
Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:20AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

REVISED ROTARY ENGINE PRICING

Model(s): All Mazda RX-7 Models
Category: Parts Flash
Bulletin No.: RF 95-24
Date: October 20, 1995

DESCRIPTION

The price of the Rebuilt Rotary Engines has changed. A core charge of $600.00 is now included in the dealer Price. Refer to the PARTS INFORMATION TABLE.

These new prices were effective 10-2-95 and are not reflected in List or the DMS tapes. The DMS tapes will be updated the first week of November. The next issue of the Dealer Price List will contain the new prices.

PARTS INFORMATION

PARTS INFORMATION TABLE

Part Number	Year/Model	Current Pricing	Revised Pricing
A008-99-008R	1970-73	$1,000.00	$1,600.00
B008-99 008R	1974-78	$1,000.00	$1,600.00
C008-99-008R	1979-85 RX-7 12A	$1,250.00	$1,850.00
D008-99-008R	1984-85 RX-7 13B	$1,250.00	$1,850.00
E008-99-008R	86-88 RX-7 13B W/O TURBO	$1,250.00	$1,850.00
F008-99-008R	87-88 RX-7 13B W/ TURBO	$1,250.00	$1,850.00
G008-99-008R	89-91 RX-7 13B W/O TURBO	$1,250.00	$1,850.00
H008-99-008R	89-91 RX-7 13B W/ TURBO	$1,270.00	$1,870.00
J008-99X08R	1993 RX-7	$1,270.00	$1,870.00

	W/ TWIN TURBO			

END OF ARTICLE

1.2L ENG NO POWER/STUMBLE/ROUGH IDLE/BUCKING CAT. 4, NO. 014/85

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:29AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

APPLICATION

1981-85 RX7 (High Altitude Vehicles)

SUBJECT

No Power, Stumble, Rough Idle, Bucking, Etc.

REFERENCE

Mazda Motors Corp., Service Bulletin, No. 4 014/85, August, 1985

CONDITION & CAUSE

Some 1981-85 RX7 high altitude vehicles may exhibit one or more of the following driveability problems:

* Lack of acceleration, hesitation on acceleration
* No power under load
* Engine stumble, surge or bucking below approximately 3000 RPM
* Rough idle

One or more of the above conditions may be caused by the altitude compensator valve. The altitude compensator valve is attached to the carburetor to supply additional air into the carburetor at high altitudes (1640-4920 ft.)

REPAIR

1) Remove the altitude compensator valve. Blow through the valve from port "A" and "B". Above 4920 feet, air from port "A" should exit from port "D" and air into port "B" exits from port "C".
2) Below 1640 feet air should not pass through valve. If not, replace the altitude compensator valve (N249 20 770).

END OF ARTICLE

1.2L NEW THROTTLE SENSOR ADJUSTING PROCEDURE CAT. 1A, NO. 029/83

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:29AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

THROTTLE SENSOR CHECKING AND ADJUSTING PROCEDURES

Models	1983 RX-7
Bulletin No.	029/83
Category	1A
Date	2/8/83

DESCRIPTION

In order to ease extensive damage on emission control unit and related components, electrical connection ("+" and "-") for the circuits has been reversed.

Due to a change in the vehicle's wiring, it is necessary to connect the alligator clip of the tester to B+ instead of ground when checking or adjusting the throttle sensor.

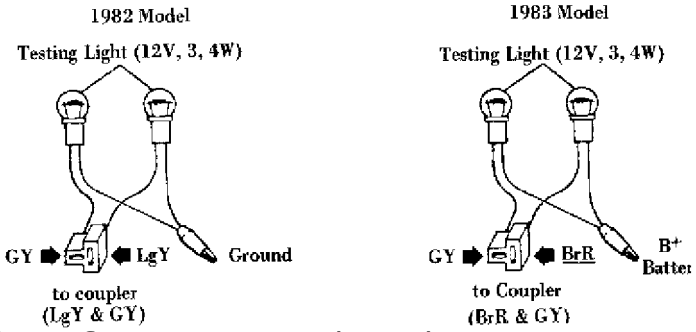


Fig. 1: View of Test Connections in 1982 & 1983 Models

END OF ARTICLE

1.3L ENG THROTTLE SENSR TOOL & ADJUSTMENT INFO CAT. 40, NO. 007/85

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:30AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

THROTTLE SENSOR CHECKER

Models	1981-85 RX-7
Bulletin No.	007/85
Category	40
Date	7/23/85

DESCRIPTION

The Throttle Sensor Checker and Attachment have been established for adjusting the throttle sensor for 1984-1985 REX-7 (13B) with E.G.I. and 1981-1985 RX-7 (12A) with carburetor. See Fig. 1.

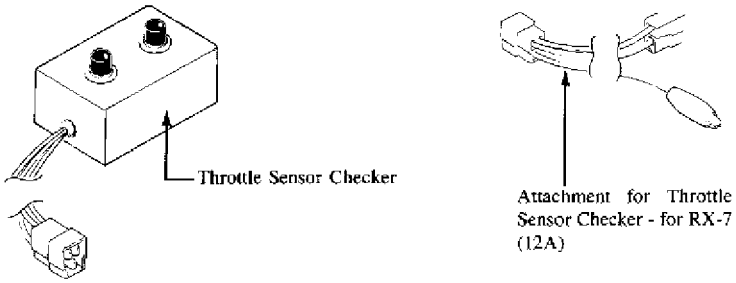


Fig. 1: RX7 Throttle Adjusting Tools

PARTS INFORMATION

PART NUMBER	DESCRIPTION
0000 41 0200	Throttle Sensor Checker & Attachment

CHECKING THROTTLE SENSOR - 1984-1985 RX-7 (13B) with E.G.I.

1. Warm up the engine to the normal operating temperature. Turn off the engine.
2. Connect the checker to the checking connector (green).
3. Turn on the ignition switch and check that one of the lamps illuminates. See Fig. 2.

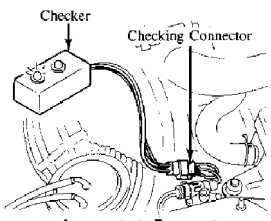


Fig. 2: RX7 Throttle Sensor Checker Hookups

4. If both lamps illuminate or neither lamp illuminates, proceed as follows:
   * Remove the cap from the adjusting screw.
   * If both lamps illuminate turn the adjusting screw counterclockÄwise until only the red lamp illuminates. Then turn the adjusting screw an additional 1/4 turn counterclockwise.
   * If neither lamp illuminates, turn the adjusting screw clockwise until only the red lamp illuminates. Then turn the adjusting screw an additional 1/4 turn clockwise. See Fig. 3.
5. Reinstall the cap on the adjusting screw.

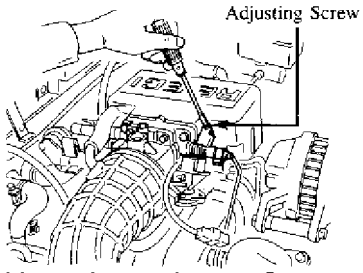


Fig. 3: Adjusting Throttle Sensor

CHECKING THROTTLE SENSOR - 1981-1985 RX-7 (12A) with carburetor

1. Warm up the engine to the normal operating temperature. Turn off the engine.
2. Disconnect the connector (brown) as shown in Fig. 4.

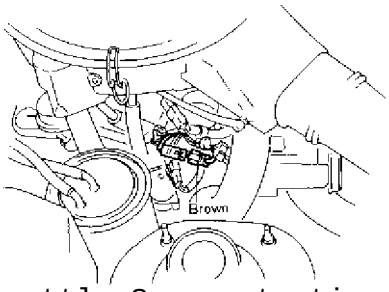


Fig. 4: Throttle Sensor testing

3. Connect the attachment for the throttle sensor checker to the checking connector as shown in Fig. 5. The color of the checking connector is:
   Green - 1984-1985 RX-7
   Black - 1981-1983 RX-7

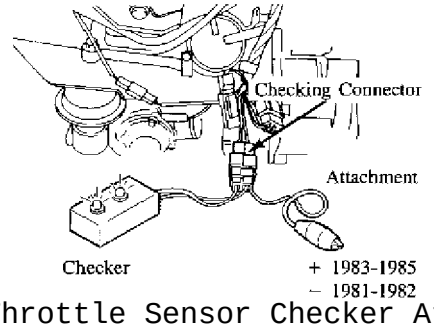


Fig. 5: Throttle Sensor Checker Attachments

4. Attach the red clip of the attachment to the battery as follows:
   + terminal - 1983-1985 RX-7
   - terminal - 1981-1982 RX-7
5. Start the engine. Raise the engine speed to 3000 rpm and release the throttle. Check that the green and red lamps illuminate at the same time.
6. If the green and red lamp do not illuminate at the same time, proceed as follows:
   * Remove the cap from the adjusting screw. See Fig. 6.
   * If the red lamp illuminates first. turn the adjusting screw counterclockwise until both lamps illuminate at the same time.
   * If the green lamp illuminates first turn the adjusting screw clockwise until both lamps illuminate at the same time.
7. Install the cap on the adjusting screw.
8. Connect the connecter (brown) disconnected in Step 2.

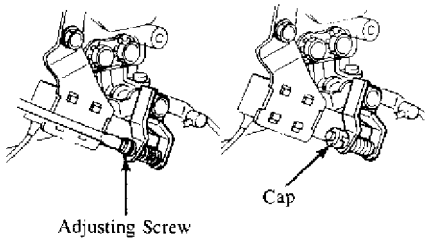


Fig. 6: Throttle Sensor Adjusting Positions

END OF ARTICLE

CALIFORNIA REFORMULATED GASOLINE CAT. F, NO. 014/96
Article Text
1983 Mazda RX7
For www.iluvmyrx7.com

Saturday, September 08, 2001 09:30AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

CALIFORNIA REFORMULATED GASOLINE

Model(s): All Mazda Models
Category: F - Fuel & Emission Control Systems
Bulletin No.: 014/96
Date: June 6, 1996

DESCRIPTION

This bulletin is issued to provide service personnel with information to answer commonly asked questions regarding California Reformulated Gasoline (CaRFG). Please use this information to address customer concerns.

BACKGROUND

* The purpose of CaRFG is to reduce emissions.
* CaRFG replaces the traditionally high pollution generating gasoline distributed in Northern California.
* CaRFG improves the reformulated gasoline distributed in Southern California.

The California Air Resources Board (CARB) expects smog forming emissions from motor vehicles to decrease by approximately 15% due to CaRFG.

MAZDA'S POSITION ON CaRFG

* CaRFG does not affect the new vehicle or emission warranty.
* Mazda recommends the use of CaRFG as a cost effective means of reducing emissions to provide cleaner air.
* Vehicle and laboratory testing of CaRFG ensures that CaRFG is acceptable for customer use.
* Based on the above studies, no unusual vehicle performance concerns are expected.

DIFFERENCE BETWEEN CaRFG AND OTHER GASOLINES

CaRFG consists of the same basic components as other gasoline but, pollutes less due to cleaner burning components and fewer toxic components. These components provide:

* Reduced aromatic hydrocarbons to form less smog emissions.
* Added oxygenates to reduce emissions.
* Decreases the amount of vehicle fuel evaporation.
* Lower sulfur to provide more efficient catalytic converter

operation.
* Reduced benzene by approximately 50%.

CaRFG AFFECT ON VEHICLE PERFORMANCE

Properly blended CaRFG should have no adverse affect on vehicle performance, engine durability or fuel system components. Basic components of CaRFG are not significantly different from other cleaner burning gasoline used in the United States for several years.

If the vehicle is a California calibrated 1996 or later model, the vehicle will:

* Operate satisfactorily on gasoline in the other 49 states but the emission control system performance may be effected.
* Using gasoline other then CaRFG may cause the Malfunction Indicator Light (MIL) to illuminate or cause the vehicle to fail an emission test.

CaRFG AFFECT ON FUEL ECONOMY

A very small reduction in MPG (less than one-half MPG) is possible if the customer uses gasoline without oxygenates. This is attributed to the lower energy content of oxygenates, which have been included in all Southern California gasoline since January 1995 and some gasoline since the 1970s.

NOTE: Driving habits, vehicle maintenance and weather conditions all affect fuel economy. Fuel economy may vary more than 1 MPG from one fill up to the next using the same gasoline.

NO SPECIAL ADDITIVES ARE NECESSARY WHEN USING CaRFG.

It is not necessary to add anything to the vehicle's fuel tank after CaRFG is purchased from the service station. California regulations require deposit control additives in CaRFG to avoid port fuel injector and valve deposits.

OLDER VEHICLE'S PERFORMANCE USING CaRFG

Older vehicles are expected to operate satisfactorily on CaRFG because these vehicles have been operating on gasoline similar to CaRFG for a number of years. However, considerable testing indicates that older, high mileage vehicles are more susceptible to fuel system problems due to age and normal wear and tear regardless of whether they are operated on conventional or CaRFG gasoline.

NOTE: Owners of older vehicles are encouraged to have their vehicle's fuel systems inspected periodically and to follow their vehicle manufacturers recommendations regarding vehicle maintenance.

ODOR EMITTED FROM CaRFG

CaRFG is not expected to smell different from gasoline most vehicles currently use. If unusual odor is noticed, it is probably be from oxygenates. Most service stations use vapor recovery systems to minimize gasoline vapor release to the atmosphere during refueling.

ADDITIONAL INFORMATION REGARDING CaRFG

Customers can receive more information on CaRFG from the California Air Resources Board at the following toll free number: 1-800-922-7349.

END OF ARTICLE

CHOKE SYSTEM MAINTENANCE SCHEDULE/CLEANING PROCEDURE CAT. 1A, NO. 032/83

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:30AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

CHOKE SYSTEM SCHEDULED MAINTENANCE

Model: 1983 RX-7, 626, GLC
Bulletin No.: 032/83
Date: 04/07/83
Category: 1A

SUBJECT Choke System Scheduled Maintenance

DESCRIPTION

To prevent any sluggish movement of choke valve, choke system scheduled maintenance has been added as follows:

Federal Models every 15,000 miles
California Models every 45,000 miles

CHOKE SYSTEM CLEANING PROCEDURE

1. Use a cleaning agent such as STP Spray Cleaner or equivalent for cleaning.
2. Spray cleaning agent on choke linkage to remove dirt or grease. See Fig. 1.
3. Spray cleaning agent on both ends of choke shaft while moving choke valve slowly by hand.
4. Use compressed air to dry sprayed areas.
5. Apply spray lubricant such as WD-40 and move the choke lever several times to check the free movement of the choke mechanism.

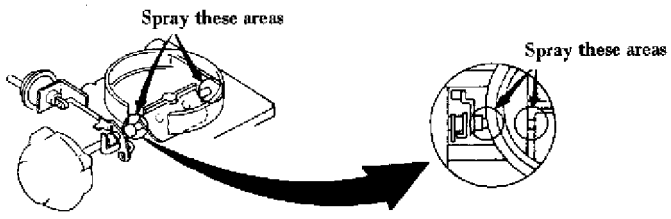


Fig. 1: Spraying Cleaner on Carburetor

END OF ARTICLE

EMISSION INSPECTION & MAINTENANCE TEST PREPARATIONS CAT. F, NO. 005/93

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:31AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

PROPER PREPARATION FOR STATE EMISSION INSPECTION AND MAINTENANCE TEST

Model All Mazda Models
Category F
Bulletin No. 005/93
Date April 28, 1993

DESCRIPTION

Some vehicles with properly functioning emission control systems may fail certain states' emission inspection and maintenance test(s) (tailpipe emission tests).
In order to avoid the above mentioned condition, make sure the following items are observed before conducting the test:

* Engine should be warmed up but not overheating (as indicated by gauge or warning light).
* All electrical loads and AC should be turned off.
* For 5-speed models: Neutral range should be selected.
* For automatic transmission models: "N" or "P" range should be selected.

NOTE: All Mazda vehicles meet the U.S. EPA and California emission standards when tested under the EPA certification test procedure.

PREPARATION PROCEDURE

Perform the following before conducting the emission inspection and maintenance test:

1. Before testing, bring the engine's operating temperature to normal by operating the engine for approximately 3 minutes at 2,500-3,000 rpm.

NOTE: When the cooling fan has cycled on and off twice, the engine has reached its normal operating temperature.

2. Test the vehicle as soon as possible after the engine has warmed up. Keep the engine at operating temperature during the test.

END OF ARTICLE

PARTS BULLETIN - SPARK PLUG COIL/WIRE SET NO. T-1-6

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:31AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

SPARK PLUG COIL/WIRE SET

Model(s): All Mazda Models Through 1995
Category: Parts Bulletin
Bulletin No.: T-1-6
Date: November 1, 1990
Revised: April, 24 1995

DESCRIPTION

A complete line of Mazda Spark Plug Wire Sets are available from your servicing PDC. These high-quality wire sets are manufactured for Mazda by NGK.

Each wire set includes the coil/wire(s) and is attractively packaged for merchandising purposes. The carton can be placed on a wall display. The part number and model applications are clearly indicated on the front and on the end of the carton. Each wire is numbered for easy installation and the instructions are printed on the back.

Complete wire sets cannot be used for new vehicle warranty. Individual wires are available under the MC part numbers, as indicated in the Parts Catalog Microfiche.

PARTS INFORMATION

PART NUMBERS AND APPLICATIONS TABLE

Year/Model	NGK P/N	Mazda P/N
1971-74 RX-2	RC-ZE91	0000-18-091A
1972-78 RX-3	RC-ZE91	0000-18-091A
1974-78 RX-4	RC-ZE91	0000-18-091A
1976-78 Cosmo	RC-ZE91	0000-18-091A
1974-77 Repu	RC-ZE91	0000-18-091A
1975-77 808 (1600CC)	RC-ZE92	0000-18-092A
1976-77 808 (1300CC)	RC-ZE92	0000-18-092A
1977-80 GLC	RC-ZE92	0000-18-092A
1981-83 GLC Wagon	RC-ZE92	0000-18-092A

PARTS BULLETIN - SPARK PLUG COIL/WIRE SET NO. T-1-6

Article Text (p. 2)

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:31AM

1972-74 808 (1600CC)	³	RC-ZE94A	³	0000-18-094A
1972-74 B1600	³	RC-ZE94A	³	0000-18-094A
1977-78 B1800	³	RC-ZE94A	³	0000-18-094A
1979-84 B2000	³	RC-ZE94A	³	0000-18-094A
1979-82 626	³	RC-ZE94A	³	0000-18-094A
1979-85 RX-7	³	RC-ZE97	³	0000-18-097B
1981-85 GLC FWD	³	RC-ZE98	³	0000-18-098A
1986-87 323	³	RC-ZE98	³	0000-18-098A
1983-87 626 FWD	³	RC-ZX99A	³	0000-18-099A
1983-87 B2000	³	RC-ZX99A	³	0000-18-099A
1986-91 RX-7 (All Models)	³	RC-ZE02	³	0000-18-100A
1987-93 B2600	³	RC-ME51	³	0000-18-101A
1988-89 323 (Turbo)	³	RC-ZE07	³	0000-18-102A
1988-91 929 (Except S)	³	RC-ZE06	³	0000-18-103A
1989-94 MPV (3.0L)	³	RC-ZE06	³	0000-18-103A
1987-93 B2600i (2.6L)	³	RC-ZE17	³	0000-18-104A
1989-94 MPV (2.6L)	³	RC-ZE17	³	0000-18-104A
1988-92 626/MX-6	³	RC-ZX12	³	0000-18-105A
1987-93 B2200	³	RC-ZE94A	³	0000-18-094A
1990-94 Protege (1.8L/DOHC)	³	RC-ZX18	³	0000-18-118A
1988-94 323/Protege	³	RC-ZX19	³	0000-18-119A
(1.6L & 1.8L SOHC)	³		³	
MX-3 (1.6L)	³		³	
1990-95 Miata	³	RC-ZE21	³	0000-18-121A
1990-91 929S	³	RC-ZX22	³	0000-18-122A
1992-93 MX-3 (1.3L)	³	RC-ZE25	³	0000-18-125A
1992-95 929	³	RC-ZE26	³	0000-18-126A

PARTS BULLETIN - SPARK PLUG COIL/WIRE SET NO. T-1-6

Article Text (p. 3)

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:31AM

1991-93 Navajo	³	-	³ ZZLO-18-140
19993-94 626/MX-6 2.5L	³	RC-ZE28	³ 0000-18-128A
1995 626 2.5L	³	RC-ZE32	³ 0000-18-132A
1993-94 626/MX-6 2.0L	³	RC-ZX29	³ 0000-18-129A
1995 626 2.0L (A/T)	³	RC-ZX40	³ 0000-18-140A
1995 626/MX-6 2.0L (M/T)	³	RC-ZX41	³ 0000-18-141A
1993-95 RX7	³	RC-ZE30	³ 0000-18-130A
1995 Millenia	³	RC-ZE31	³ 0000-18-131A
1995 MX-3 (1.8L)	³	RC-ZE35	³ 0000-18-135A
1995 MX-3 (1.6L)	³	RC-ZE36	³ 0000-18-136A
1995 Protege (1.8L)	³	RC-ZE36	³ 0000-18-136A
1995 Protege (1.5L)	³	RC-ZE37	³ 0000-18-137A

END OF ARTICLE

RECOMMENDED FUEL CAT. 4, NO. 054/89
Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:31AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

USE OF REGULAR UNLEADED GASOLINE

Models	ALL MODELS
Bulletin No.	054/89
Category	4
Date	2/20/89

DESCRIPTION

It is recommended that REGULAR UNLEADED gasoline be used in all Mazda vehicles NOT equipped with a turbocharger. All non-turbocharged Mazda vehicles are designed to perform best when REGULAR UNLEADED fuel is used.

Due to the low volatility of some SUPER UNLEADED fuels, an overlean air-fuel condition may occur especially when cold. This may result in start and driveability problems.

We urge you to NOT recommend the use of SUPER UNLEADED gasoline to your customers. Also, if a customer complains about a rough idle after starting, inquire as to what type of fuel the customer has been using as a first step in troubleshooting.

END OF ARTICLE

RX-7 OIL REPLACEMENT TIP
Article Text

1983 Mazda RX7
For www.iluvmyrx7.com

Saturday, September 08, 2001 10:02AM

ARTICLE BEGINNING

TECHNICAL INFORMATION TIP

RX-7 OIL FILTER REPLACEMENT

YEAR(S): All RX-7 Engines
MANUFACTURER: Mazda
MODELS: RX-7

ISSUE: OIL FILTER REPLACEMENT

The oil filter is mounted face down on Mazda RX-7 engines. This makes filter replacement an unnecessarily messy job. To cut down on the spilled oil, punch two holes in the top of the filter to let the filter drain into the crankcase. Remove the drain plug, then let the filter drain while the crankcase drains. Now you can remove an empty filter rather than a full one (due to the check valve inside the filter). No more mess filters dripping all over the top of the engine.

Courtesy of Import Service Magazine
with thanks to:

A.J. Diamant
LMT Auto Repair
Columbia, Maryland

REFERENCE NUMBER: MAZ0045AP

END OF ARTICLE

SPARK PLUG CROSS-REFERENCE CHART NO. T-1-3
Article Text

1983 Mazda RX7
For www.iluvmyrx7.com

Saturday, September 08, 2001 09:31AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

SPARK PLUG CROSS-REFERENCE CHART

Model: All Mazda
Date: November 1, 1990 (Revised - April 27, 1992)
No: T-1-3
Group: Parts

SPARK PLUGS FOR PISTON ENGINES

YEAR	MODEL	NGK P/N	MAZDA P/N	BLISTER PACK
1992	MX-3 1.8L, V-6	BKR6E11	BP03-18-110	-
1992	MX-3 (1.6L)	BKR5E11	BPO1-18-110	-
1992	929 COLD TYPE	BKR6EVX11	JE43-18-110	-
1992	929 STD. TYPE	BKR5EVX11	JE41-18-110	-
1988-91	929/929S	ZFR6A11	F201-18-110	-
1989	MPV	ZFR6A11	F201-1B-110 (Prod. 8701-9623)	-
		ZFR6E11	F285-18-110 (Prod. 9623-9B01)	-
1990-92	MPV	ZFR5F11	F287-18-110	-
1993	MX6/626 (4CYL.) (STD TYPE)	BKR5E11	BP01-18-110	-
1993	MX6/626 (4CYL.) (COLD TYPE)	BKR6E11	BP03-18-110	-
1993	MX6/626 (V6) (STD TYPE)	ZFR5F11	F287-18-110	-
1993	MX6/626 (V6)	ZFR6E11	F285-18-110	-
1988-92	MX-6/626	ZFR6A11	F201-18-110	-
1979-82	626	BP5ES	0660-18-110	8AG1-18-110A-BP
1979-87	626	BPR5ES*	8914-18-110	8AB1-18-110A-BP
1986-87	626 (Turbo)	BPR6ES	1690-18-110	-
1990-92	MIATA	BKR6E11	BP03-18-110	-
1986-92	323	BPR5ES11*	B601-18-110	-
1990-92	PROTEGE SOHC 1.8L	BKR5E11	BP01-18-110	-
1990-92	PROTEGE DOHC 1.8L	BKR6E11	BP03-18-110	-
1988-89	323 (Turbo)	BCPR6E11*	F220-18-110	-
1987-88	323 (Wagon)	BPR5ES11*	B601-18-110	-
1987-92	B2200	BPR5ES	8914-18-110	8AB1-18-110A-BP
1987-88	B2600	BPR6ES11*	B601-18-110	-
1989-92	B2600i	ZFR6A11*	F201-18-110	-
1977-79	GLC	BP6ES	025G-18-110	8AU1-18-110A-BP
1977-79	GLC	BPRBES*	1BG0-18-110	-
1977-80	GLC	BP5ES	0660-18-110	8AG1-18-110A-BP
1977-85	GLC	BPR5ES*	8G14-18-110	8AB1-18-110A-BP

SPARK PLUG CROSS-REFERENCE CHART NO. T-1-3

Article Text (p. 2)

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:31AM

1979-80	GLC (Wagon)	BP5ES	0660-18-110	8AG1-18-110A-BP
1980-83	GLC (Wagon)	BPR5ES *	8G14-18-110	8AB1-18-110A-BP
1986				
1972-77	808	BP7ES	0745-18-110	-
1976	808 (1300)	BP6ES13	3710-18-110	-
1977	808 (1300)	BPR6ES *	1690-18-110	-
1972-77	808 (1600)	BP6ES	0259-18-110	8AU1-18-110A-BP
1972-76	B1600	BP6ES	0259-18-110	8AU1-18-110A-BP
1972-76	B1600	BP7ES	0745-18-110	-
1977-78	B1800	BP6ES	0259-18-110	8AU1-18-110A-BP
1979	B2000	BPR5ES *	8914-18-110	8AB1-18-110A-BP
1981-87				
1980-81	B2000	BPRBES *	1690-18-110	-
1970	1500	BP7ES	0745-18-110	-
1970-72	1800	BP7ES	0745-18-110	-
1971	616	BP7ES	0745-18-110	-
1972-73	618	BP7ES	0745-18-110	-

* = Resistor Plug

1974-76	REPU	B7EM	2328-18-600	8AH1-18-110A-BP
1977	REPU	B7ET	3743-18-600	8AF1-18-110A-BP
1971-74	RX-2	B7EM	2328-18J600	8AH1-18-1 10A-BP
1972-75	RX-3	B7EM	2328-18-600	8AH1-18-1 10A-BP
1976	RX-3	BR7ET *	3648-18-600	-
1977-78	RX-3	B7ET	3743-18-600	8AF1-18-110A-BP
1972-78	RX-3	B8EM	2359-18-600	-
1974-75	RX4	B7EM	2328-18-600	8AH1-18-11OA-BP
1974-78	RX4	BR7EM	2182-18-600	-
1974-78	RX4	B7EMV	1757-18-600	-
1976-78	RX4	B7ET	3743-18-600	8AF1-18-1110A-BP
1976-78	RX4	BR7ET	3648-18-600	-
1976-78	RX4	BR8ET *	3649-18-600	8AF3-18-110A-BP
1979	RX-7	B7ET	3743-18-600	8AF1-18-110A-BP
1979	RX-7	BR7ET	3648-18-600	-
1980	RX-7	BR8ET	3649-18-600	8AF3-18-110A-BP
1980	RX-7	BR9ET	8344-18-600	-
1981-85	RX-7	BR8EQ14	N201-18-600	8AF2-18-110A-BP
1984-85	RX-7	BR9EQ14	N203-18-600	-
1986-91	RX-7 (Leading)	BUR7EQ	N343-18-110	N3X4-18-110
1986-91	RX-7 (Trailing)	BUR9EQ	N342-18-110	N3X4-18-110
1993	RX-7 (Leading)	BUR7EQP	N3A2-A8-110	N3X5-18-110
1993	RX-7 (Trailing)	BUR9EQP	N3A1-18-110	N3X5-18-110

(See Fig. 1).

SPARK PLUG CROSS-REFERENCE CHART NO. T-1-3
Article Text (p. 3)
1983 Mazda RX7
For www.iluvmyrx7.com

Saturday, September 08, 2001 09:31AM

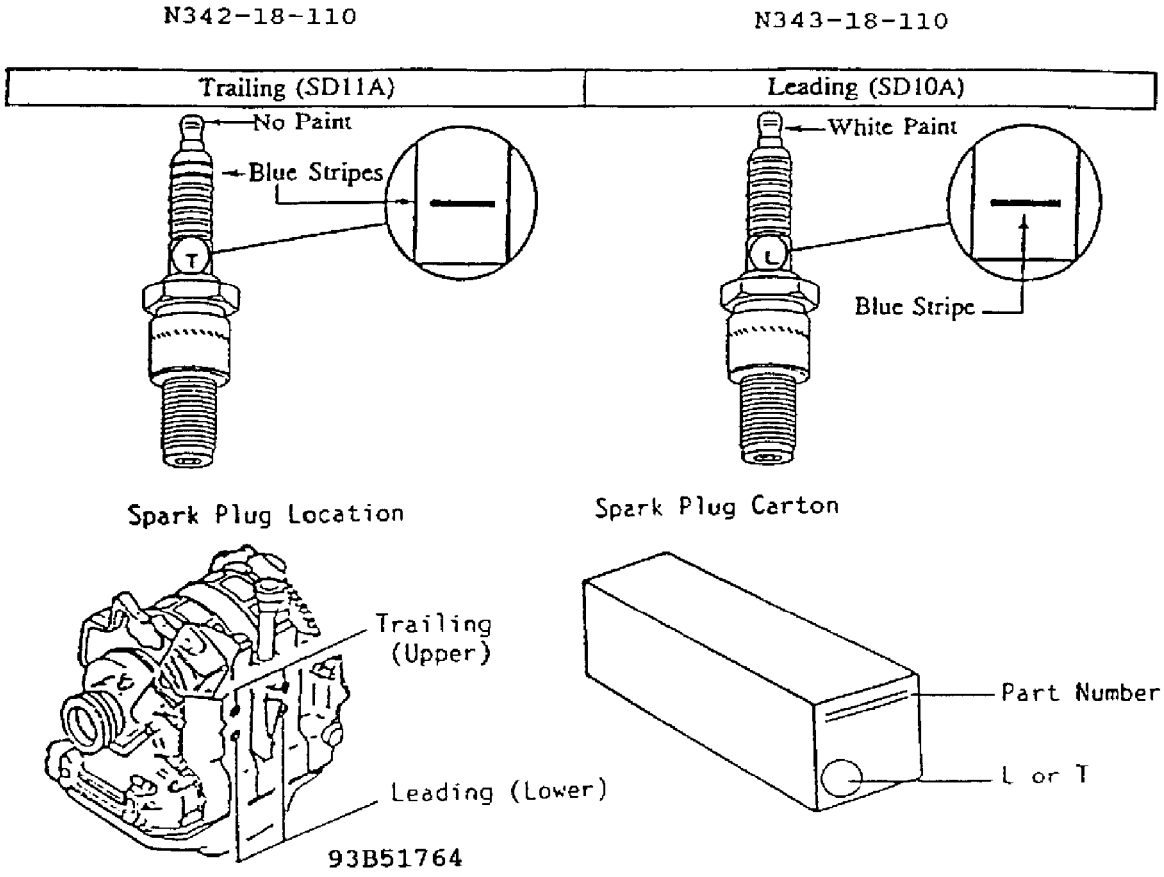


Fig. 1: Spark Plug Identification for 1986-91 RX-7 Engines

END OF ARTICLE

TAS (THROTTLE ADJUSTMENT SCREW) LOCATION/ADJUSTMENT CAT. F, NO. 014/98

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:32AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

TAS (THROTTLE ADJUSTMENT SCREW) ADJUSTMENT

Model(s): All Mazda Models with Fuel Injection
Category: F (01) - Fuel & Emission Control
Bulletin No.: 014/98
Date: December 9, 1998

VEHICLES AFFECTED

All fuel injected models.

DESCRIPTION

Fuel injected vehicles with idle speed control motors should NOT have the TAS (Throttle Adjustment Screw) adjusted for any reason. The TAS functions as a stopper when the throttle valve is fully closed. During production, the TAS is accurately set by measuring the airflow rate past a closed throttle plate. Any adjustment to this screw will affect PCM control of idle speed.

Customers complaining of low idle speed should have their vehicle repaired using the Workshop Manual.

NOTE: * Tampering with this screw will affect the idle contact switch and/or throttle position sensor settings. This can lead to rough idle and difficulty in diagnosis of idle quality concerns.

* The TAS locations on the examples below may vary depending on model year of vehicle. See Fig. 1.

TAS (THROTTLE ADJUSTMENT SCREW) LOCATION/ADJUSTMENT CAT. F, NO. 014/98

Article Text (p. 2)

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:32AM

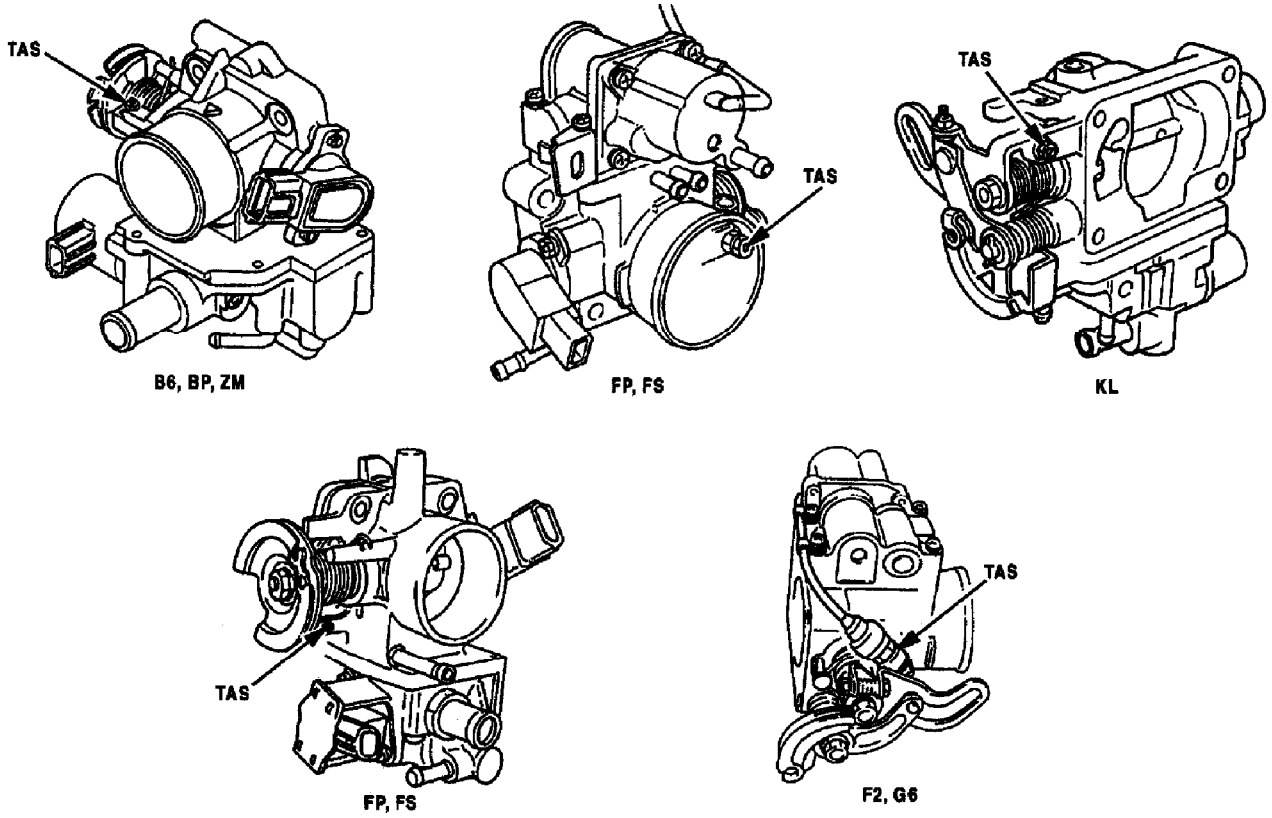


Fig. 1: Throttle Adjustment Screw Locations

END OF ARTICLE

WHISTLE NOISE FROM CHECK &CUT VALVES - REPL VALVES CAT. 4, NO. 015/85

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:32AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

APPLICATION

1980-85 RX7 & 1981-85 GLC

SUBJECT

Whistle Noise From Check & Cut Valve

REFERENCE

Mazda Motors Corp., Service Bulletin, No. 4 015/85, September, 1985

CONDITION & CAUSE

Some 1980-85 RX7 and 1981-85 GLC vehicles may exhibit a whistle noise from the check and cut valve. The whistle noise is most noticeable at high temperature and low fuel level, and can be heard from the rear of the vehicle.

REPAIR

Replace the check and cut valve with the new service component (RX7 - 8341-42-910, GLC - BA01-42-910).

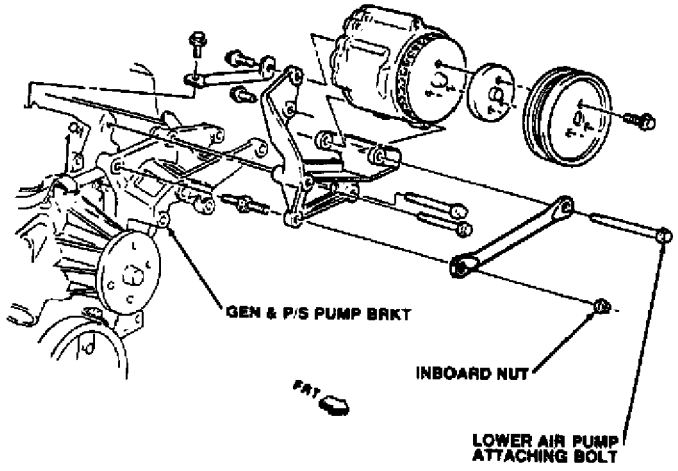


Fig. 1: Anything Installation

END OF ARTICLE

1.2/1.3L ENG CLUTCH CHATTER/JUDDER - NEW DISC CAT. 6, NO. 003/86

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:42AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

APPLICATION

1983-86 RX7

SUBJECT

Clutch Chatter/Judder

REFERENCE

Mazda Motors Corp., Service Bulletin, No. 6 003/86, April, 1986

CONDITION & CAUSE

Some 1983-86 RX7 vehicles may exhibit clutch chatter/judder. This condition may be caused by the clutch disc.

REPAIR

To repair the above mentioned complaint, install a new service clutch disc.

NEW SERVICE COMPONENT APPLICATION & PART NUMBER

Application	Part Number
Clutch Disc	
1983-85 (12A)	N203 16 460B
1984-85 (13B), 1986	N303 16 460

END OF ARTICLE

1.3L ENG CLUTCH VIB - REPL FLYWHEEL ALIGNMENT PINS CAT. 6, NO. 002/86

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:43AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

CLUTCH ALIGNMENT PINS

Models	1983-86 RX-7
Bulletin No.	002/86
Category	6
Date	4/8/86
Symptom	Clutch Vibration

DESCRIPTION

Replacement flywheels for the 1983-1986 RX-7 are shipped without clutch alignment pins. These pins are necessary to accurately align the clutch cover to the flywheel during assembly. Failure to use the alignment pins will result in vibration of the flywheel and clutch assembly. See Fig. 1.

When replacing the flywheel, please order the pin by the part number listed below.

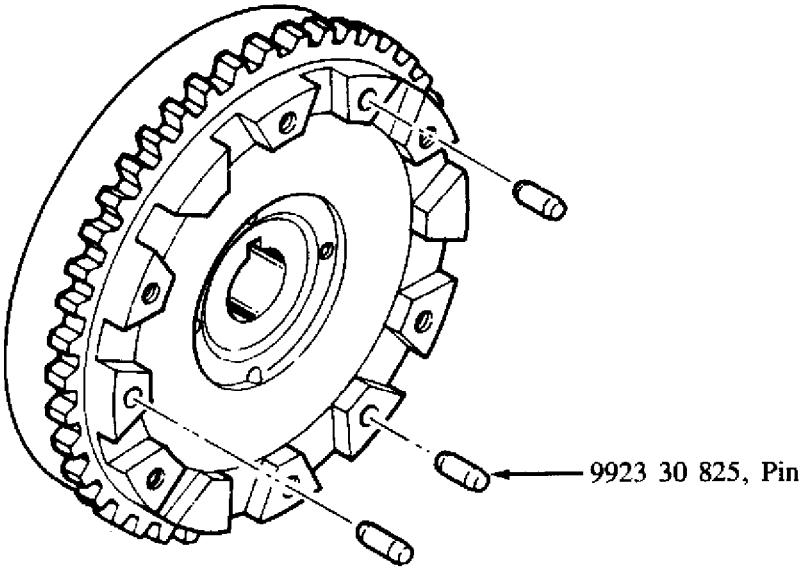


Fig. 1: 83-86 RX7 Flywheel and Alignment Pins

PARTS INFORMATION

PART NUMBER	DESCRIPTION	QTY
9923 30 825	Knock Pin	3

END OF ARTICLE

HARD SHIFT TO 2ND GEAR AFTER COLD START - NEW PARTS CAT. J, NO. 004/92

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:43AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

HARD SHIFT TO 2ND GEAR AFTER COLD START

Model(s): 1980-91 Mazda RX-7 (non-turbo)
1990-91 Mazda Miata
Category: J
Bulletin No.: 004/92
Date: 7/7/92

DESCRIPTION

Hard shifting into second gear before the vehicle has had sufficient time to warm up may be caused by insufficient clearance between 2nd gear synchronizer ring and the 1-2 clutch hub. Design changes have been made to the 2nd gear synchronizer ring and clutch hub sleeve to correct this problem since April 1, l99l .

If you experience hard shifting into 2nd gear after a cold start with an RX-7 (non-turbo) or Miata produced prior to April 1, 1991, replace the 2nd gear synchronizer ring and 1-2 clutch sleeve (or 1-2 clutch hub set) with redesigned ones. Refer to the appropriate service information for installation procedures.

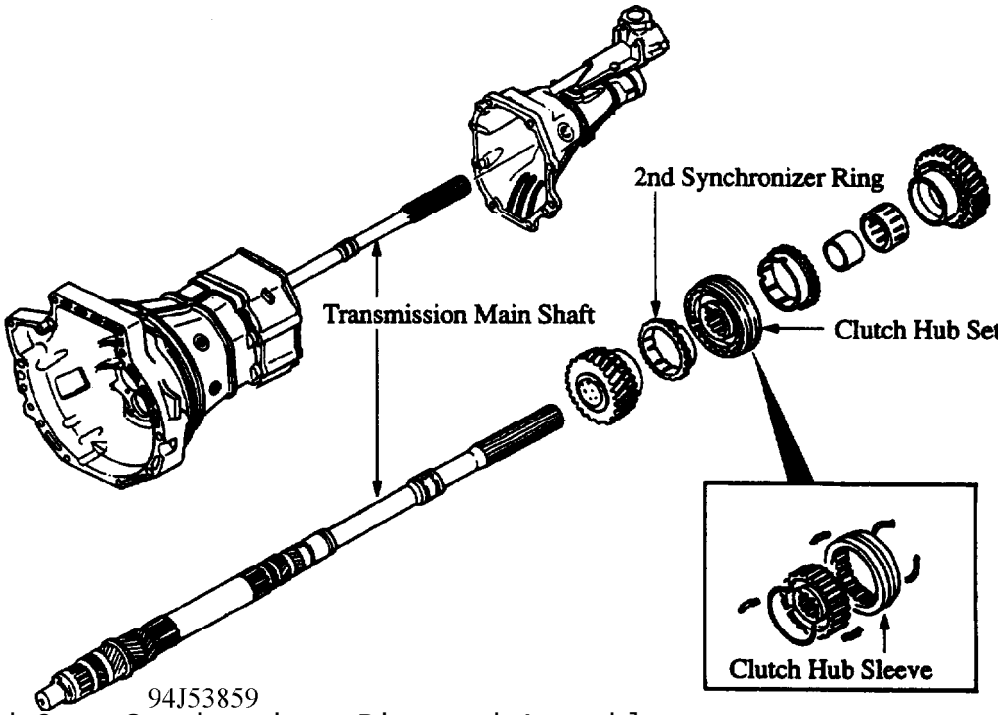


Fig. 1: 2nd Gear Synchronizer Ring and Assembly

VIN OF PRODUCTION CHANGE

HARD SHIFT TO 2ND GEAR AFTER COLD START - NEW PARTS CAT. J, NO. 004/92

Article Text (p. 2)

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:43AM

MX-5 Miata	JM1NA351*M*232720	April 1, 1991
RX-7 (non-turbo)	JM1FC3***M0906971	April 1, 1991

PARTS INFORMATION TABLE

Part Number		Description	Qty	Interchange -ability
New	Old			
M502 17 265C	M502 17 265B	2nd Synchronizer Ring	1	New-Old
M503 17 262A	M503 17 262	1-2 Clutch Hub Sleeve	1	New-Old
M505 17 260B	M505 17 260A	1-2 Clutch Hub Set	1	New-Old

WARRANTY INFORMATION

(Applies to Vehicles Covered Under Warranty.)

Warranty Type Code:	A	
Customer Comment Code:	99	
Damage Code:	99	
Part No. of Main Cause:	M502 17 265C (Qty. 1)	
Related Parts:	M503 17 262A (Qty. 1)	
	M505 17 260B (Qty. 1)	
	Miata	RX-7
Operation No:	J0315XRX	J0315ARX
Labor Hours:	5.2 Hrs.	5.1 Hrs

END OF ARTICLE

IMPROVED SPEEDO GEAR SLEEVE TO ELIMINATE LEAKS CAT. 7, NO. 027/87

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:43AM

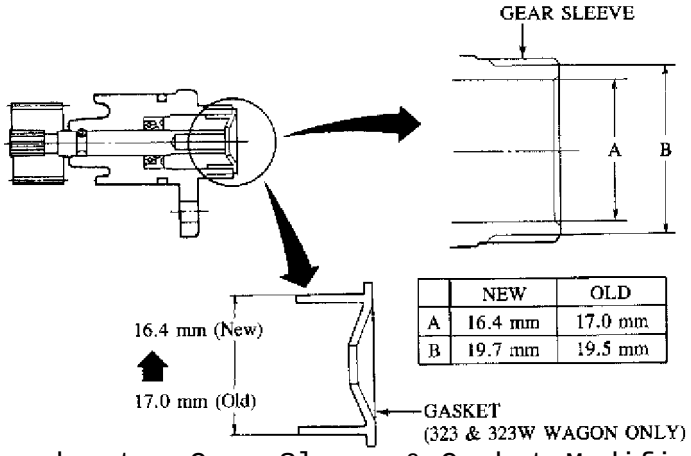
ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

SPEEDOMETER DRIVEN GEAR SLEEVE

Model: ALL MODELS
Bulletin No.: 027/87
Date: 3/11/87
Category: 7

DESCRIPTION
In order to improve the sealing ability of the joint between the speedometer cable and driven gear sleeve, the shape of the driven gear sleeve has been changed as shown In addition, the shape of the gasket for the 323 has also been changed. These modifications were made on the production line since November 1, 1986.



	NEW	OLD
A	16.4 mm	17.0 mm
B	19.7 mm	19.5 mm

Fig. 1: Speedometer Gear Sleeve & Gasket Modifications

VIN OF PRODUCTION

323	4-Door Sedan	JM1BF222	
	3-Door Hatch	JM1BF232	H0528227
	S-Door Hatch	JM1BF242	
	J Wagon	JM1BW622	H0507406
626	4-Door Sedan (Non-Turbo)	JM1GC221	
	4-Door Sedan (Turbo)	JM1GC223	
	S-Door Hatch (Non-Turbo)	JM1GC241	H1140384
	S-Door Hatch (Turbo)	JM1GC243	
	2-Door Coupe (Non-Turbo)	JM1GC311	
	2-Door Coupe (Turbo)	JM1GC313	
RX-7	Non-Turbo	JM1FC331	H0522333
	Turbo	JM1FC332	
B2000	Short Bed	JM2UF111	

Long Bed	JM2UF211	H0603331
Cab Plus	JM211311	

PARTS INFORMATION

NEW PART NO.	OLD PART NO.	DESCRIPTION	APPLIED MODEL
F401 17 442A	F401 17 442	Speedometer Sleeve	323, 323W
1669 17 442B	1669 17 442A	Speedometer Sleeve	RX-7, B2000
G471 17 442A	G471 17 442	Speedometer Sleeve	626
		Speedometer Guide	
B092 60 076A	B092 60 076	Seal Gasket	323 323W

END OF ARTICLE

M & R TYPE TRANS HARD SHIFT COLD - NEW GEAR OIL CAT. 7, NO. 062/89

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:43AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

HARD SHIFT IN LOW TEMPERATURE

Models RX-7, 929 & B-Series (M/T)
Bulletin No. 062/89
Category 7
Date 6/6/89
Symptom Hard Shift in Low Temperature

DESCRIPTION

In order to improve shift feeling on manual transmission in low temperature, the gear oil has been changed to SAE75W-90 as shown below.

	Previous Oil		Current Oil
RX-7	SAE80W-90	ÄÄ>	SAE75W-90
929	SAE75W-80	ÄÄ>	SAE75W-90
B2200	SAE75W-80	ÄÄ>	SAE75W-90
B2600	SAE75W-80	ÄÄ>	SAE75W-90

VIN OF PRODUCTION CHANGE

RX-7:	JM1FC****	10626727	July 9, 1988
929:	JM1HC****	K0200684	July 9, 1988
B2200:	JM2UF113*	J0401564	July 9, 1988
	JM2UF213*	J0401564	July 9, 1988
	JM2UF313*	J0401564	July 9, 1988
B2600i:	JM2UF414*	K0746274	November 15, 1988
	JM2UF416*	K0746274	November 15, 1988

If you encounter vehicles which were produced before the modificaÄtion and have the problem mentioned above, replace the gear oil with SAE75W-90.

NOTE: Do not mix engine oil or ATF into transmission gear oil. Also, do not use it instead of manual transmission gear oil since it may result in scoring of the gears and premature wear of shift rods.

END OF ARTICLE

MANUAL TRANS NEW BEARING COVER BOLTS/TORQUE CAT. 7, NO. 002/84
Article Text
1983 Mazda RX7
For www.iluvmyrx7.com

Saturday, September 08, 2001 09:43AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

MODIFICATION OF BEARING COVER BOLTS

Model: B2000, B2200, & RX-7
Bulletin No.: 002/84
Date: 3/28/84
Category: 7

DESCRIPTION

The bolts attaching the transmission bearing cover have been strengthened and the tightening torque has been increased to improve the durability of the transmission.

BOLT INFORMATION TABLE
ÄÄÄ
Identification mark on the bolt head: Old: 6T
Old: 6T
New: 8T

Bolt torque:
Old: 160 - 230 kg-cm (11.6 - 16.7 ft-lb)
New: 180 Ä 270 kg-cm (13.0 - 19.6 ft-lb)
ÄÄ

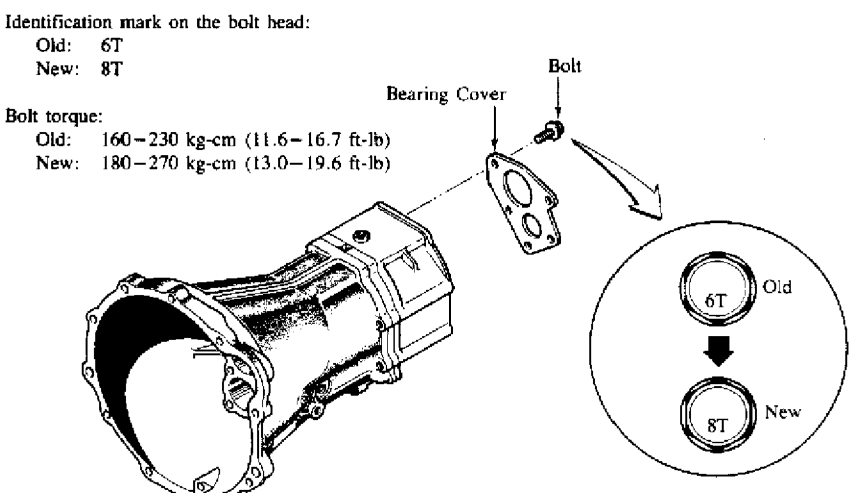


Fig. 1: Bearing Cover Bolt Modification

VIN OF PRODUCTION CHANGE
ÄÄ

B2000	Short Bed:	JM2UC121 E0841838	February, 1984
	Long Bed:	JM2UC221 E0818017	February, 1984
B2200	Short Bed:	JM2UD121 E0800931	February, 1984
	Long Bed:	JM2UD221 E0801401	February, 1984

RX-7	12A:	JM1FB331 E0819695	February, 1984
	13B:	JM1FB332 E0819695	February, 1984

PARTS INFORMATION

NEW PART NO.	OLD PART NO.	DESCRIPTION	QTY	INTERCHANGEABILITY
9078 12 820	9080 12 820	Bolt	5	NEW = OLD

END OF ARTICLE

MANUAL TRANSMISSION SHIM ADJUSTMENTS CAT. J, NO. 001/90

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:44AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

MANUAL TRANSMISSION SHIM ADJUSTMENTS

Model: Mazda 1981-90 RX-7 & B-Series, 1988-90 929, 1999-90 MPV, 1990 MX-5 Miata
Date: March 2, 1990
No: 001/90
Group: J

DESCRIPTION
On vehicles (1981-90 RX7 and B-Series, 1988-90 929, 1989-90 MPV, 1990 MXS) with rear-wheel-drive and manual transmissions, the shim adjustments of 5th gear and the mainshaft rear bearing have been changed.

This bulletin contains the new shim adjustment procedures.

There are different shim adjustment procedures or Type-M and Type-R manual transmissions. Use the chart in Fig. 1 to reference the correct type of transmission.

MANUAL TRANSMISSION SHIM ADJUSTMENTS CAT. J, NO. 001/90

Article Text (p. 2)

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:44AM

MANUAL TRANSMISSION APPLICATION CHART

Model	Type	'81	'82	'83	'84	'85	'86	'87	'88	'89	'90
RX-7	M	○	○	○	○	○	○	○	○	○	○
	R	—	—	—	—	—	—	○	○	○	○
B2000	M	○	○	○	○	—	○	—	—	—	—
	R	—	—	—	—	—	—	—	—	—	—
B2200	M	—	○	○	○	—	—	○	○	○	○
	R	—	—	—	—	—	—	—	—	—	—
B2600	M	—	—	—	—	—	—	—	—	—	—
	R	—	—	—	—	—	—	○	○	○	○
929	M	—	—	—	—	—	—	—	—	—	—
	R	—	—	—	—	—	—	—	○	○	—
MX-5	M	—	—	—	—	—	—	—	—	—	○
	R	—	—	—	—	—	—	—	—	—	—
MPV	M	—	—	—	—	—	—	—	—	—	—
	R	—	—	—	—	—	—	—	—	○	○

○ = Equipped 93J51770

Fig. 1: Manual Transmission Application Chart

1. Install the synchronizer ring and 5th gear.
2. Insert the steel ball and thrust washer.
3. Install only the two 3.0mm (0.118 in) thick "C", washers in the front mainshaft groove and hold them with the retaining ring. See Figure 2.

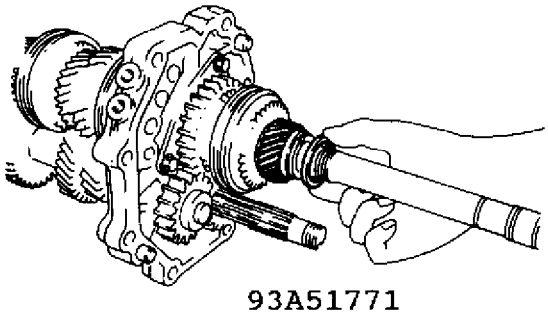


Fig. 2: Retaining Ring Installation (M-Type)

Note: If the "C" washers are not pushed fully forward in the mainshaft groove the measurement will be incorrect.

4. While pushing the "C" washers forward, measure the clearance between the thrust washer and "C" washers. (See Fig. 3).

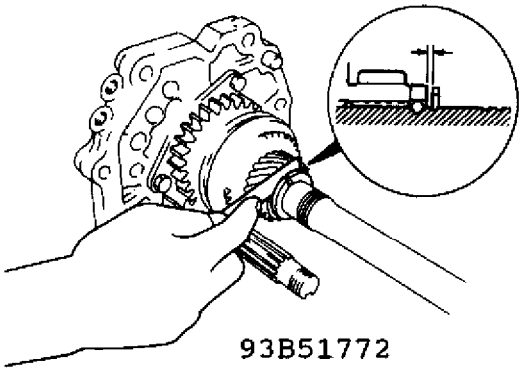


Fig. 3: Measuring Clearance Between Thrust Washer & "C" Washer (M-Types)

If the clearance is not as specified select the proper thrust washer.
Standard Clearance: Refer to the appropriate Service Information for the vehicle being repaired.

MAINSHAFT REAR BEARING
1. Drive on the mainshaft rear bearing using he SST, fully seating it against the front "C" washers. See Fig. 4.

2. Install the original "C" washers and hold them with the retaining ring.

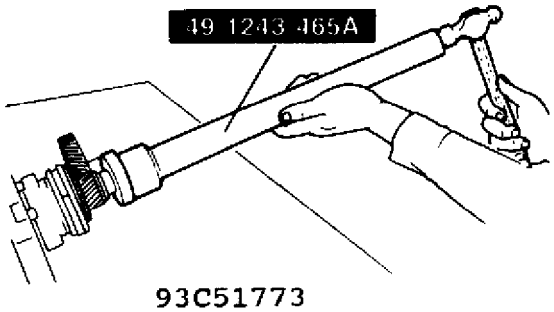


Fig. 4: Installing Rear Bearing (M-Types)

NOTE: If the "C" washers will not fit into the rear mainshaft groove, select the proper thickness "C" washers. Ensure both "C" washers at this position are the same thickness.

3. Measure the clearance between the "C" washers and mainshaft rear bearing. See Fig. 5. If the clearance is not as specified, select the proper "C" washers.

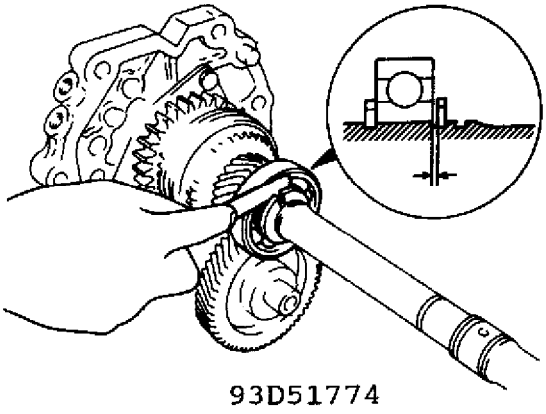


Fig. 5: Measuring Clearance Between "C" Washer & Rear Bearing (M-Type)

Standard Clearance: Refer to the appropriate Service Information for the vehicle being repaired.

R-TYPE
5th Gear
1. Install the synchronizer ring and 5th gear.
2. Install the steel ball and thrust washer.
3. Install only the two 3.0mm (0.118 in) thick "C" washers in the front mainshaft groove and hold them with the retaining rings. See Fig. 6.

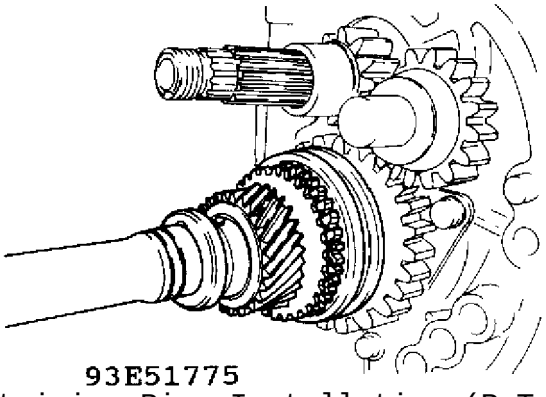


Fig. 6: Retaining Ring Installation (R-Type)

Note: If the "C" washers are not pushed fully forward in the mainshaft groove the measurement will be incorrect.

4. While pushing the "C" washers forward, measure the clearance between the "C" washers and thrust waster. (See Fig. 7).

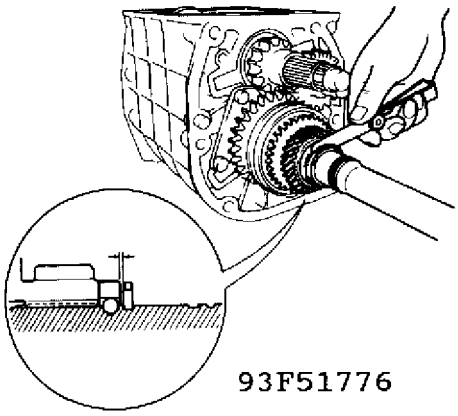


Fig. 7: Measuring Clearance Between "C" Washers & Thrust Washer (R-Type)

Standard Clearance: Refer to the appropriate service information for the vehicle being repaired.

MAINSHAFT REAR BEARING
1. Drive on the mainshaft rear bearing using a suitable pipe, fully seating it against the front "C" washers. See Fig. 8.
2. Install the original "C" washers and hold them with the retaining ring.

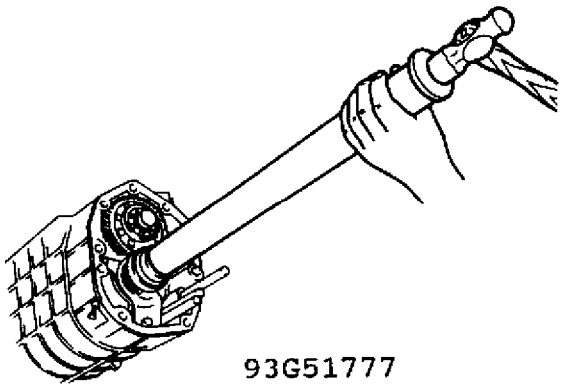


Fig. 8: Rear Bearing Installation (R-Type)

Note: If the "C" washers will not fit into the rear mainshaft groove, select the proper thickness "C" washers. Ensure both "C" washers at this position are the same thickness.

3. Measure the clearance between the "C" washers and mainshaft rear bearing. See Fig. 9.
   If the clearance is not as specified, select the proper "C" washers.

Standard Clearance: Refer to the appropriate service information for the vehicle being repaired.

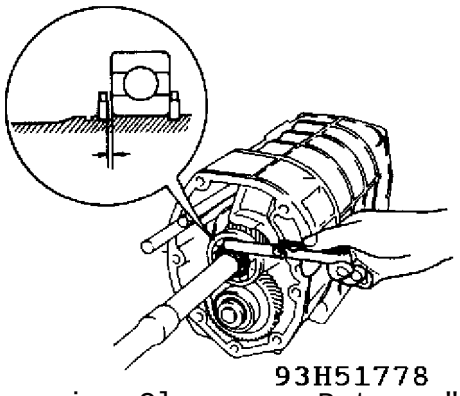


Fig. 9: Measuring Clearance Between"C" Washer and Rear Bearing (R-Type)

END OF ARTICLE

REMANUFACTURED TRANS (CANADIAN) - DIAGNOSIS SHEET CAT. J, NO. 95-02

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:44AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

REMANUFACTURED TRANSMISSIONS

Model(s): All Mazda (Canadian) Models through 1995
Category: J - Manual Transmission
Bulletin No.: 95-02
Date: May 1995

DESCRIPTION

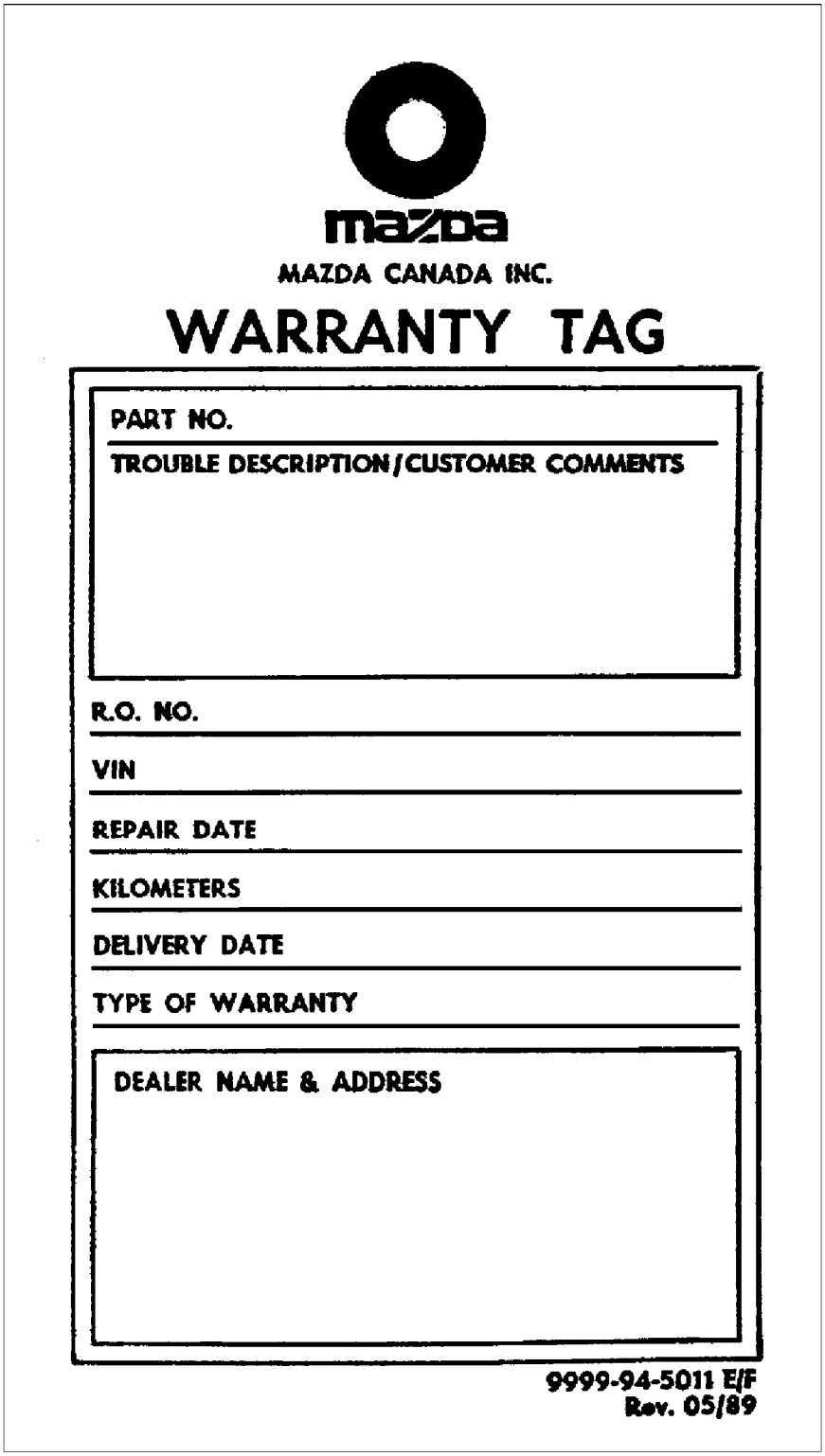
Remanufactured Transmissions and Transaxles which are supplied by Mazda Canada Inc., are rebuilt by M.A.N.A. (Mazda North America Inc.). This division of Mazda supplies remanufactured units for both Canada and United States.

In their continued efforts to upgrade the quality of these remanufactured units they are looking for more information on what initially failed and why. This will allow the cause to be recognized and addressed during the remanufacturing of the failed unit.

To assist M.A.N.A. in their efforts, the following procedures will be put into place immediately:

1. A properly completed "Warranty Tag" (P/N 9999-94-5011-E/F) must be attached, directly to the body of the core unit (Attachment #1 is a completed sample).

2. A properly completed "Automatic Transmission, Diagnosis Information Sheet" must be folded twice and stapled to the "Warranty Tag". See Fig. 1.



94C59313

Fig. 1: Example of Warranty Tag

3. The defective unit must be shipped to the Quality Assurance Centre

as specified in the enclosed revised Parts Merchandising Bulletin.

If a core unit is received without a properly completed "Warranty Tag" and/or properly completed "Automatic Transmission Diagnosis Information Sheet" the core credit will not be processed for payment. The dealer will be advised of the situation by the Warranty Administration Department. Once the missing information is faxed/received by the Warranty Administration Department, the core credit will be processed.

If the requested information is not received within 10 working days, the core unit will be shipped back to the dealer, freight collect.

Two copies of this Service Bulletin are being supplied to each dealer. Please give the second copy to the Mazda Parts Manager.

NOTE: Five copies of the Automatic Transmission Diagnosis Information Sheet are being supplied with this bulletin. Ensure 1 copy remains intact with the original bulletin so that additional copies can be produced as necessary by your dealership.

Your understanding and continued co-operation are appreciated. See Fig. 1 for example.

AUTOMATIC TRANSMISSION DIAGNOSIS INFORMATION SHEET

ÄÄ

1. Dealer Code __________ RO _________ Date _________ Model Yr. _________
   VIN ____________________________________ Odometer ___________________

2. Customer Concern: (Check appropriate box)

Shifting/Engagement:	Does Not Occur	Slips	Delayed	Harsh
A. Engagement into drive	____	____	____	____
B. Engagement into reverse	____	____	____	____
C. 1-2 Upshift	____	____	____	____
D. 2-3 Upshift	____	____	____	____
E. 3-4 Upshift	____	____	____	____
F. Downshifts	____	____	____	____
G. Kickdowns	____	____	____	____

Noise/Vibration: ____ Clunk ____ Whine ____ Buzz ____ Other
Condition Occurs: ____ Hot ____ Cold
Frequency: ____ Intermittent ____ Always

Other: ____

3. Technician Diagnosis:

   Visual Inspection: (note leaks) _____________________________________

```
   Fluid Condition:   ____ Burnt     ____ Normal
   Fluid Level:       ____ Correct   ____ High    ____ Low

   Line Pressure (record applicable data)
       Idle    WOT
   P   ____    N/A
   R   ____    ____
   N   ____    N/A
   OD  ____    ____
   D   ____    ____
   2   ____    ____
   1   ____    ____

4. Replacement Transmission Identification: (unit to be installed into
   vehicle)

   Installation date ______ Part Number ______ Unit Serial No. ______

5. Transmission Identification: (MCI use only)
   _____ Original unit    _____ reman unit
   _____ Unit Serial Number
```

ÄÄ

END OF ARTICLE

REAR WHEEL DRIVE PINION HEIGHT ADJUSTMENT INFO CAT. 9, NO. 014/83

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:49AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

PINION HEIGHT ADJUSTMENT

Models	All Rear Drive Models
Bulletin No.	014/83
Category	9
Date	12/23/83

DESCRIPTION

If the differential pinion height adjustment is necessary for rear wheel drive vehicles, the number on the end surface of the drive pinion should be used to obtain the adjustment value.

There are two types of markings:

1. Handwritten marking with electric pen. This number should be used for the adjustment value. See Fig. 1.

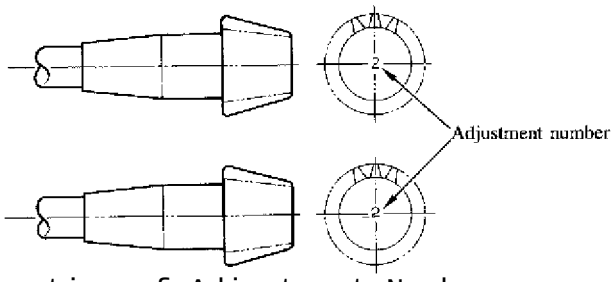


Fig. 1: Location of Adjustment Numbers

2. No handwritten marking. If there is no handwritten marking on the end surface of the drive pinion, the adjustment value is zero (0).

NOTE: 1. There are some cases of numbers stamped on the end surface of the drive pinion, however, these numbers do not indicate the adjustment value.

2. It is essential to check tooth contact after assembling the differential even though the pinion height adjustment has been made. Please refer to the Service Information for the proper tooth contact.

END OF ARTICLE

ALIGNMENT SPECIFICATIONS (CANADIAN) CAT. N, NO. 95-02

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:50AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

ALIGNMENT SPECIFICATIONS

Models: 1993-95 Mazda Models (Except 1994-95 B-Series) (Canada)
Category: N - Steering
Bulletin No.: 95-02
Date: January, 1995

APPLICABLE MODELS

All models except 1994-95 B-Series.

DESCRIPTION

This bulletin provides background information on standard specification and measuring conditions for wheel alignment.

Measured vales are not absolute. Variations occur between technician, equipment and the condition of the vehicle at the time of measurement. To avoid unnecessary adjustments, specifications and measurement conditions have been changed in the Workshop Manual. These changes are described below.

NOTE: Changes in the specifications do not imply that alignment tolerances have increased during production. Vehicle alignment is set to the median specifications during production and technicians should also use median specifications during alignment adjustment.

NEW SPECIFICATIONS TABLE

	Items	Standard Tolerance	Note
F R O N T	Camber (Difference between right and left)	±1 (±1.5) degrees	
	Caster (Difference between right and left	±1 (±1.5) degrees	
	Toe (Total toe-in)	±4mm (Angle indicated is also described)	One side is not mentioned. (No specification)
R E	Camber (Difference between right and left	±1 (±1.5) degrees	
	Toe (Total toe-in)	±4mm (Angle	One side toe is

A R	indicated is also described)	not mentioned. (No specification)
Thrust Angle	ñ0.8 degrees	

NOTE: Each vehicle varies in specification median. Refer to the Workshop Manual for each vehicle's specification.

VEHICLE PREPARATION AND CONDITION

1. The vehicle should have:

   * No Passengers
   * No Luggage
   * Gas Tank Full, Radiator And Engine Oil To The Specified Levels
   * Spare Tire, Jack And Tools Stored In Designated Areas
   * Tire Pressure Checked And, If Necessary, Adjusted

NOTE: If the specifications are different (depending on load conditions), adjust the pressure for the lightest load.

2. The table below contains examples of front caster specifications based on fuel tank level.

CASTER SPECIFICATION TABLE

Fuel Gauge Indication	Front Caster (Shown in degrees, minutes)
Empty	3 degrees 05' to 5 degrees 05'
1/4	3 degrees 10' to 5 degrees 10'
1/2	3 degrees 15' to 5 degrees 15'
3/4	3 degrees 20' to 5 degrees 20'
Full	3 degrees 25' to 5 degrees 25'

NOTE: Specifications may differ between models.

3. Follow the operating procedures specified for the alignment equipment being used.

4. Prior to measuring the current settings, firmly push the vehicle bumper up and down to stabilize the vehicle's height.

END OF ARTICLE

ALIGNMENT SPECIFICATIONS AND TOLERANCES -INFORMATION CAT. N, NO. 001/95
Article Text
1983 Mazda RX7
For www.iluvmyrx7.com

Saturday, September 08, 2001 09:50AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

ALIGNMENT SPECIFICATIONS

Model(s): All Mazda Models
(except Navajo & 1994 and on B-Series vehicles)
Category: N - Steering
Bulletin No.: 001/95
Date: 1/19/95

NOTE: This bulletin was originally released as Cat N, #003/94.
Replace the original bulletin with this revised copy.

APPLICABLE MODELS

All models except Navajo and 1994 and on B-Series

DESCRIPTION

This bulletin provides background information on standard specification and measuring conditions for wheel alignment. Measured values are not absolute. Variations occur between technician, equipment and the condition of the vehicle at the time of measurement. To avoid unnecessary adjustments, specifications and measurement conditions have been changed in the workshop manual. These changes are described below.

NOTE: Changes in the specifications do not imply that alignment tolerances have increased during production. Vehicle alignment is set to the median specifications during production and technicians should also use median specifications during alignment adjustment.

NEW SPECIFICATIONS TABLE

Items		Standard Tolerance	Note
Front	Camber (Difference between right and left)	ñ 1 (ñ1.5) degrees	
	Caster (Difference between right and left)	ñ 1 (ñ1.5) degrees	
	Toe (Total toe-in)	ñ 4mm (Angle indicated is also described)	One side toe is not mentioned. No specification

Rear	Camber (Difference between right and left)	ñ 1 (ñ1.5) degrees		
	Toe (Total toe in)	ñ 4mm (Angle indicated is also described)	One side toe is not mentioned. No specification	
	Thrust Angle	ñ 0.8 degrees		

NOTE: Each vehicle varies in specification median. Refer to the appropriate service information for each vehicle's specification.

VEHICLE PREPARATION AND CONDITION

1. The vehicle should have:
   * No Passengers
   * No Luggage
   * Gas Tank Full, Radiator and Engine Oil To The Specified Levels
   * Spare Tire, Jack And Tool Stored In Designated Areas
   * Tire Pressure Checked And, If Necessary, Adjusted.

   NOTE: If the specifications are different (depending on load conditions), adjust the pressure for the lightest load.

2. The table below contains examples of front caster specifications based on fuel tank level.

CASTER EXAMPLE TABLE

Fuel Gauge Indication	Front Caster (Shown in degrees, minutes)
Empty	3 degrees 05' to 5 degrees 05"
1/4	3 degrees 10' to 5 degrees 10"
1/2	3 degrees 15' to 5 degrees 15"
3/4	3 degrees 20' to 5 degrees 20"
Full	3 degrees 25' to 5 degrees 25"

NOTE: Specifications may differ between models.

3. Follow the operating procedures specified for the alignment equipment being used.
4. Prior to measuring the current settings, firmly push the vehicle bumper up and down to stabilize the vehicle's height.

ALUMINUM WHEEL TIRE CHANGE - CENTER HUB DAMAGE INFO CAT. 12, NO. 002/85

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:51AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

TIRE CHANGERS FOR ALUMINUM WHEEL

Models	RX-7, 626 & GLC
Bulletin No.	002/85
Category	12
Date	6/17/85

DESCRIPTION

If standard tire changers are used to change tires on aluminum wheels, damage will occur to the center hub. See Fig. 1.

The manufacturers listed below offer adapters for use on their tire changers when changing tires on aluminum wheels. Call the number listed for the nearest representative. Ask for the Mag Tool Adapter.

FCC - (800) 362-8326
AMMCO - (312) 689-1111
COATS - (800) 323-0661

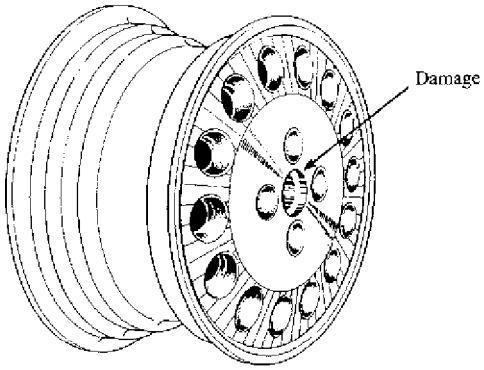


Fig. 1: RX7, 626 & GLC Aluminum Wheel

END OF ARTICLE

CHECKING PROCEDURE FOR POWER STEERING BOOT LEAKAGE CAT. N, NO. 004/97

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:51AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

CHECKING PROCEDURE FOR POWER STEERING BOOT LEAKAGE

Model(s): All Mazda Models with Rack/Pinion
Category: N - Steering System
Bulletin No.: 004/97
Date: December 28, 1997

DESCRIPTION

Customers complaining of problems associated with power steering fluid loss should have the vehicle inspected according to the instructions in section N of the workshop manual. If the leak is determined to be coming from the power steering gear, follow the procedures listed below.

NOTE: Service Managers should place a copy of this bulletin in section N of the workshop manual.

INSPECTION PROCEDURE

1. Check the color of the fluid that is leaking. See Fig. 1.

   * If the fluid is red, proceed to step 3.

   * If the fluid is any color other than red, (i.e. yellow, colorless), this is grease and no problem exists with the power steering gear. Proceed to step 2.

2. Inspect the boot for damage (i.e. cracks or tears).

3. Remove the boot wire and inspect the inside of the boot for contamination (dirt, water, etc.). See Fig. 1.

   * If there is a large quantity of red fluid inside the boot, this indicates insufficient sealing. Replace the side seal and the power steering gear according to section N of the workshop manual. See Fig. 1.

   * If a minimal quantity of red fluid is present, proceed to step 4.

4. Start the engine and turn the steering wheel right and left, lock to lock.

   * If the fluid is leaking, replace the side seal and the power steering gear according to section N of the workshop manual.

   * If no fluid is leaking, no problem exists in the power steering

gear.

CAUTION: DO NOT keep the steering wheel fully turned to the locked position for more than five seconds. Power steering system damage may occur.

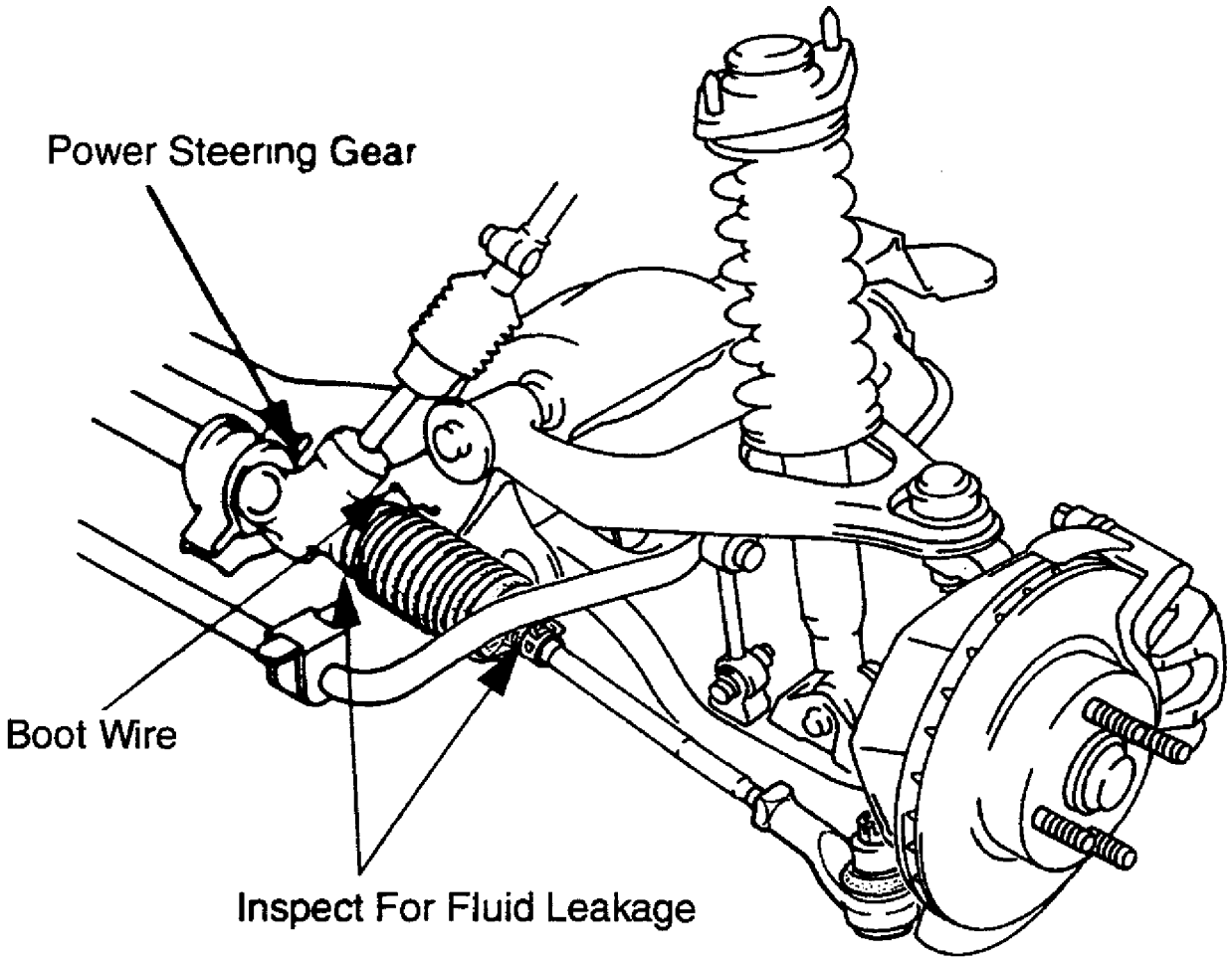


Fig. 1: Power Steering Gear & Boot Wire - Inspect Fluid Leakage

END OF ARTICLE

HIGH STEERING WHEEL EFFORT - VERIFY CONDITION MT 0995-05

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:51AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

STEERING WHEEL EFFORT

Model(s): All Mazda
Category: Mazda Tips
Bulletin No.: MT 0995-05
Date: 1995

DESCRIPTION

If a customer complains of high or uneven steering effort, before attempting any repair, verify the amount of force required to turn the steering wheel. Use the instructions in the Workshop Manual, category "N", under "Steering Wheel Effort". This procedure involves using a pull scale.

CAUTION: Before measuring steering wheel effort make sure that:

1. Tires are the correct size and correctly inflated.

2. Power steering fluid level and condition are OK.

3. Vehicle is on a hard, level surface for testing.

* If the force is within the specification listed in the Workshop Manual, inform the customer that this is a normal condition.
* If the force is out of specification and/or abnormally high, then troubleshoot per the Workshop Manual.

END OF ARTICLE

INSTALLATION OF TIRE CHAINS CAT. Q, NO. 005/93
Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:51AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

INSTALLATION OF TIRE CHAINS

Model(s): All Mazda Models
Category: "Q" Tires/Wheels
Bulletin No.: 005/93
Date: 6/3/93

DESCRIPTION

Tire chains may scratch or chip aluminum wheels. If chains are to be installed, aluminum wheels should be changed to steel wheels.

Please remind your customers of the following instructions when installing tire chains on their vehicle. These recommendations are also explained in the vehicles owner's manual.

1. Investigate local regulations before using tire chains.

2. Use only SAE Class "S" chains, and make sure they fit the vehicle's tires.

3. Follow the chain manufacturer's instructions.

4. Remove the steel wheel covers (if equipped) to avoid scratches or damage.

5. Front Wheel Drive Vehicle: Secure the chains on the front tires as tightly as possible. Retighten after one-half mile of driving. Rear Wheel Drive Vehicles: Secure the chains to the rear wheels as tightly as possible. Retighten after one-half mile of driving.

CAUTION:

- CHAINS MAY AFFECT VEHICLE HANDLING.

- DO NOT GO FASTER THAN 30 MPH OR THE MANUFACTURER'S RECOMMENDED SPEED, WHICHEVER IS LOWER.

- DRIVE CAREFULLY AND AVOID BUMPS, HOLES AND SHARP TURNS.

- AVOID LOCKED-WHEEL BRAKING.

- DO NOT USE CHAINS ON THE TEMPORARY TIRE. THEY MAY DAMAGE THE VEHICLE AND THE TIRE.

END OF ARTICLE

REVISED IDLER ARM/DUST SEAL CAT. 10, NO. 023/83

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:51AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

IDLER ARM MODIFICATION

Models 1983 GLC (WAGON), RX-7
Bulletin No. 023/83
Category 10
Date 7/25/83

DESCRIPTION

To increase the sealing efficiency of the dust seal, the configurations of the dust seal and idler arm have been changed as shown since the production in March, 1983

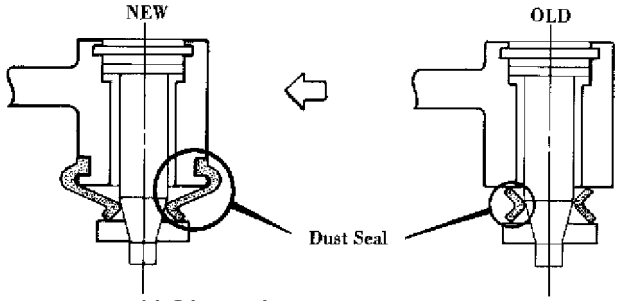


Fig. 1: Idler Arm Modification

VIN OF PRODUCTION CHANGE

GLC (W):	JMlBD521 D0703543	March, 1983
RX-7:	JMlFB331 D0735212	March, 1983

PARTS INFORMATION

NEW PART NO.	OLD PART NO.	DESCRIPTION	MODEL	INTERCHANGEABILITY
3958 32 320A	3958 32 320	Idler Arm	GLC(W)	NEW ÄÄÄÄ> OLD
8871 32 320A	8871 32 320	Idler Arm	RX-7	NEW ÄÄÄÄ> OLD
0866 32 279*	8531 32 279	Dust Seal	GLC(W), RX-7	NO

END OF ARTICLE

STEERING WHEEL SLIGHTLY OFF CENTER - PROCEDURE CAT. N, NO. 005/95

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:51AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

STEERING WHEEL SLIGHTLY OFF CENTER

Models: All Mazda Models Through 1995 Except B-Series & Navajo
Category: N
Bulletin No.: 005/95
Date: 3/15/95

DESCRIPTION

The steering wheel on some models may be slightly off center. The vehicle still drives straight and does not pull right or left. If a customer complains of the position of the steering wheel, confirm that the vehicle is not pulling and repair according to the instructions in this bulletin.

REPAIR PROCEDURE

1. Drive on a straight road and place the steering wheel in a neutral position. If the steering wheel is not centered, go to step 2.

2. Using the outside circumference of the steering wheel, measure the distance between the neutral position and the center position.

NOTE: If the distance is larger than 30 mm (1.18 in.) remove the steering wheel and reinstall in the correct position. If the steering wheel is still off center, proceed to step 3.

3. Measure the distance described in step 2. 1f less than 30 mm (1.18 in) loosen both left and right tie rod end lock nuts. Turn the rods in the opposite directions by the same amount until the steering wheel is centered.

4. Road test the vehicle to confirm the steering wheel is centered. If not centered, repeat step 3.

The TIE ROD OUTSIDE CIRCUMFERENCE DISTANCE TABLE below shows the approximate distance that the outside circumference will move per 90 degree turn on the tie rod (both left and right in opposite directions).

TIE ROD CIRCUMFERENCE DISTANCE TABLE

Model	Type	Approx. Distance (mm)
1990-94 323/Protege, 1995 Protege	With P/S	8 mm
	Without P/S	12 mm

STEERING WHEEL SLIGHTLY OFF CENTER - PROCEDURE CAT. N, NO. 005/95

Article Text (p. 2)

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:51AM

	4 cyl.	8 mm	
1992-95 MX-3	6 cyl.	7 mm	
1993-95 RX-7	All	7 mm	
1992-95 626/MX-6	All	9 mm	
1992-95 929	All	11 mm	
	4 x 2	13 mm	
1989-95 MPV	4 x 4	12 mm	
1990-95 MX-5 Miata	All	10 mm	
1995 Millenia	All	10 mm	

WARRANTY INFORMATION

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

Warranty Type:	A
Symptom Code:	30
Damage Code:	9H
Part Number Main Cause:	5555 FE 001
Operation Number:	XX0640RX
Labor Hours:	0.5 Hrs.

END OF ARTICLE

CATALYST PELLETS & MODIFICATION OF SECONDARY AIR SYS
Article Text

1983 Mazda RX7
For www.iluvmyrx7.com

Saturday, September 08, 2001 09:58AM

ARTICLE BEGINNING

TECHNICAL SERVICE BULLETIN

MAZDA RX-7 EXHAUST EMISSION SYSTEM RECALL CAMPAIGN 23702

Model	1982-83 Mazda RX-7
Recall No.	23702
Date	February 17, 1987
Number of Affected Vehicles:	91,112

DEFECT INFORMATION REPORT

1. Manufacturer: Mazda Motor Corporation

2. Description of the Defect: Recall Surveillance tests performed by EPA found some MY-1982 and 1983 Mazda RX-7's to be in non-compliance of Federal exhaust emission standards for HC and CO. Mazda's investigation determined the non-compliance to be due to excessively-rich air fuel mixture and premature deterioration of the vehicle's catalyst.

3. Class or Category of Vehicles Potentially Affected:

   1982-83 Mazda RX-7 (Federally Certified Vehicle)

4.1. Number of Vehicles Estimated to Have the Defect: The number of vehicles that have the problem identified in (2) above is estimated to be 91,112 units in accordance with manufacturer's production records.

4.2 Production Plants: Mazda Motor Corporation
3-1 Shinchi, Fuchu-cho, Aki-gun, Hiroshima, Japan

5. Evaluation of Emissions Impact and Description of Driveability Problems: The defect may cause noncompliance with Federal emission standards for unburned hydrocarbons and carbon monoxide. The defect has no effect on driveability.

6. Available Emissions Data: The EPA recall surveillance test results are shown in the following tables:

EPA RECALL SURVEILLANCE TEST RESULTS

Model Year	Vehicle	Mileage	Exhaust Emission (g/mile) HC	CO	NOx
1982	1	38,600	1.51	6.01	0.88
	2	19,900	1.25	5.14	0.69
	3	39,200	1.16	4.79	0.58

	4	31,100	1.26	11.58		0.53
	5	38,600	1.31	7.87		0.63
	6	27,550	1.25	2.84		0.79
	Average	32,500	1.29	6.37		0.68
1983	1	22,700	0.56	3.32		0.50
	2	26,800	0.63	5.33		0.44
	3	27,000	0.62	4.19		0.41
	Average	25,500	0.60	4.28		0.45

7. Anticipated Follow-Up Action: Mazda will conduct a voluntary emission recall campaign to repair all subject vehicles. The voluntary emission recall report is shown below.

VOLUNTARY EMISSION RECALL REPORT

1. Description of Each Class of Subject Vehicles

AFFECTED VEHICLES

Make	Year	Model	Serial Vehicle Number Range	No. for Recall*
Mazda	1982	RX-7*	JM1FB3310C0600001-JM1FB3310D0764091	91,112
	1983			

NOTE: * Federally certified vehicle

2. Description of Repair

The content of the rear catalyst chambers will be replaced with more durable catalytic material.

3. Identification of Vehicle Owners

For the above recall campaign, the name and address of the owner will be determined by use of records obtained from the Vehicle Registration record at each importer. These records include the vehicles serial number, the owner's name and address. The notification of this recall to the owner will be made by first-class mail.

4. Owner's Eligibility

There will be no restrictions on eligibility.

5. Procedure to Obtain Correction

The repair will be done by authorized Mazda dealers only. The repair will be available on and after February 27, 1987. The time required for the repair will be about 1.2 hours.

6. Remedy by Persons other than Mazda Dealers

No work under this campaign is to be performed by a person other than an authorized Mazda dealer.

7. Owner Letter

See Attachment III below.

8. Provision for Adequate Supply of Parts

We are planning to supply at least 30% of the parts required for this campaign to dealers as an initial stock before the start of the recall campaign. Thereafter, a local distributor will supply necessary parts to dealers in accordance with the progress of the recall campaign.

9. Repair Instructions to Mazda Dealers

See Attachment I and II below

10. Consequence of fuel Economy, Driveability and Safety

This repair has no impact on the fuel consumption, driveability and safety of the vehicle to be recalled.

11. Label

Affix the Authorized Modification label to the vehicles whose repair is completed.

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ATTACHMENT I

RECALL CAMPAIGN BULLETIN 20604

1982-83 MAZDA RX-7 EXHAUST EMISSION SYSTEM

A. Subject Vehicles

The subject vehicles are all 1982 and 1983 RX-7 models, except California certified vehicles.

VIN: (1982 RX-7) JM1FB331*C0600001 - JM1FB331*C0656909
(1983 RX-7) JM1FB331*D0700001 - JM1F13331*D0764091

B. Notification

The owners of subject vehicles will be notified on and after February 27, 1987 by first class mail.

C. Campaign Parts

1. Recall Parts Kit

The necessary parts to complete this modification will be supplied in kit form. We will provide dealers with a limited number of these kits in advance of the campaign. Each dealer will then be responsible for re-ordering additional kits as they are needed.

PARTS INFORMATION

Part Description	Part Number	Qty.
Pellet Set, Converter	8BF1 20 5050	1
containing:		
Gasket	1480 40 3750	1
Gasket	1480 40 3250	2
Lock Washer	8021 20 5480	2
Nut	8118 40 3550	4
Bolt	9979 60 6100	2
Bolt	9979 60 8160	2
Spring Washer	9997 11 2000	4
Gasket, ACV	N201 13 7240	1
Secondary Air Orifice	N201 13 5010	1
Recall Label	N2Y1 20 6090	1
No.1, No.2 Pellet Set	N222 40 3000	1

2. Related Parts

Kit 8BF1 20 5050 includes all parts necessary to make the repair required in this recall. However, some components on the vehicle which must be removed to perform the repair work may not be re-usable. This may be especially true in areas where a lot of road salt is used to de-ice roads.
In anticipation of this possibility, related components will be available to replace those parts which cannot be re-used. These related components must be ordered from your regional parts department. New pert numbers for some of these related components have been established as follows:

a. Container, Catalyst (P/N: N201 40 3200) - This is an empty catalytic converter housing without pellets.

b. Converter, Monolith (P/N: N2Y1 20 5500) - This supersedes

the monolith converters (N201 40 4000 for 1982 model and N231 40 4000 for 1983 model) to be commonly used for both year models.

c. Gasket (P/N: N201 13 5020), Gasket (P/N: N201 13 5030) and "O" Ring (P/N: N201 13 5040) - These parts are the components of the air control valve, which may require being replaced in rare cases. See Fig. 1.

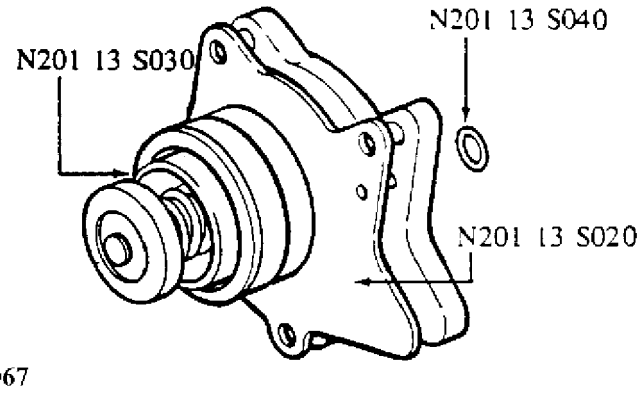

Fig. 1: Air Control Valve Components

3. Exchange Units of Converter Housing

We will provide 3 empty catalytic converter housings to each dealer as initial units of exchange operation.

* Refer to the Note of Item E.

D. Tools Used for Recall Repairs

In addition to the necessary parts mentioned in the above section C, the following special tools will be provided free of charge to assist in completing the repair properly.

Provided Tools

* Funnel
* Dust masks
* Drill bits

E. Repair Procedure

This recall involves performing four different operations:

* Installations of a secondary air orifice in the secondary air hose.
* Inspections and (if necessary) adjustment of the choke.
* Enlargement of a passage in the Air Control Valve.

* Replacement of catalyst pellets in the Catalytic Converter.

NOTE: The catalyst pellets replacement should be performed under the exchange operation. Fill the exchange unit (converter housing) with new pellets prior to initiation of the repair on an individual vehicle and replace the converter housing of the vehicle with the exchange unit. The converter housing that is removed from the vehicle will be suitable for re-use and is to be installed on the next vehicle that receives this recall repair.
In the front compartment of the pelleted converter housing, ALL of the pellets are replaced. In the rear compartment of the pelleted converter housing, a specified amount of new pellets are installed and the remaining space is refilled with old pellets removed during this operation.

Please refer to Attachment II for the detailed repair procedure.

F. Warranty Information

You are requested to send catalyst pellets removed to our Warranty Department and enter P/N 7777 40 0010 (Qty: 1) as a related part for your warranty claim submission. We will reimburse $3.50/claim for the freight cost.

Consumer Comment Code:	99
Damage Code:	99
Part Number of Main Cause:	8BF1 20 5050
Quantity:	1
Process No:	A6022A
Operation No:	XX0128RX
Labor Hour:	1.2 hr.
Related Part No. and Qty.:	7777 40 0010 (Qty: 1)

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ATTACHMENT II

RECALL CAMPAIGN BULLETIN 20604

REPAIR PROCEDURES

I. Installation of Secondary Air Orifice

1. Disconnect the hose from the air pump as shown in Fig. 2.

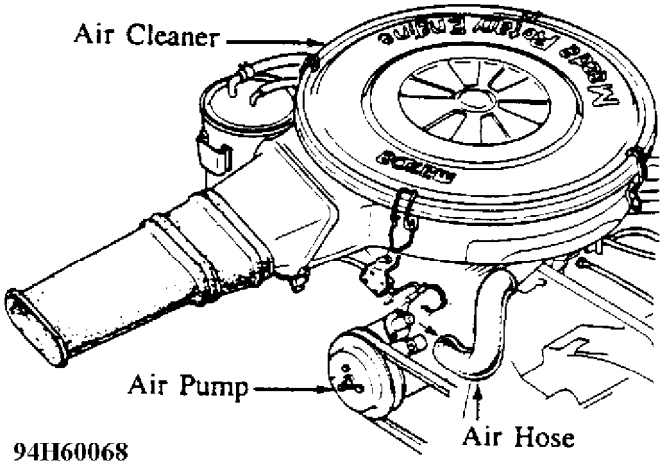

Fig. 2: Disconnecting Hose From Air Pump

2. Insert the secondary air orifice (included in the kit) about 1 inch into the air pump side of the hose. See Fig. 3.

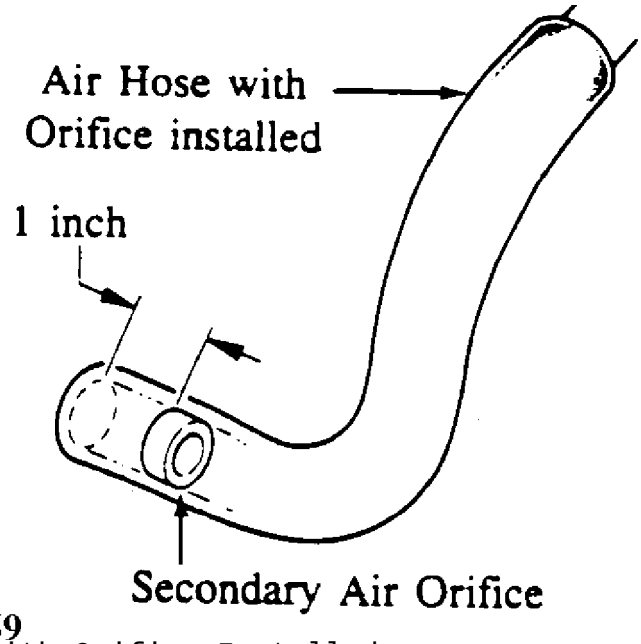

Fig. 3: Air Hose with Orifice Installed

3. Reconnect the hose.

II. Inspection and Adjustment of Choke Wire

Check the free-play of the choke wire and adjust if necessary.

1. Confirm the ignition key is in the "OFF" position.
2. Remove the lock spring.
3. Pull the choke outer cable until the choke linkage starts

moving.
4. Measure the clearance between the lock nut and the bracket (clearance "A" in Fig. 4).

NOTE: The clearance should be 0.04-0.08 in.

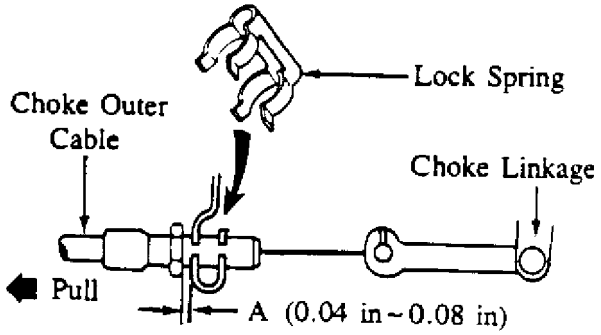

Fig. 4: Measuring Clearance Between Lock Nut and Bracket

5. If it is not within the specification, adjust it by turning the lock nut.
6. Install the lock spring.
7. Remove the air cleaner cover.
8. Confirm the choke valve is fully open. (Pull the choke valve softly with your finger (as shown in Fig. 5) and confirm it will not open further.) If it moves, repeat the adjustment at Step 5 to get the specified clearance of "A".

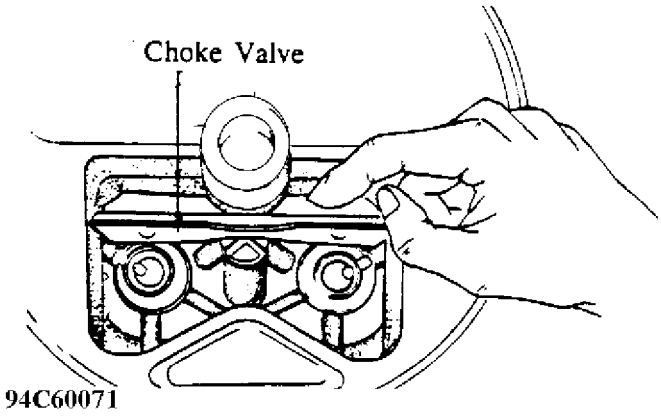

Fig. 5: Checking Choke Valve Opening

9. Re-install the air cleaner cover.

III. Air Control Valve (ACV)

1. Remove the hot air duct. See Fig. 6.

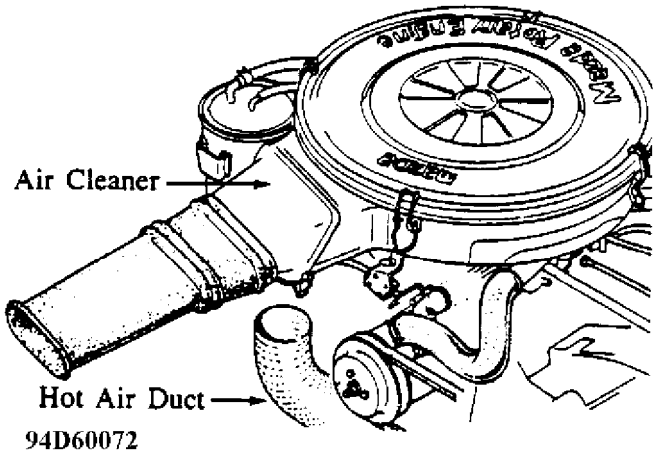

Fig. 6: Hot Air Duct Location

2. Disconnect the air hose between the air cleaner and the air control valve. See Fig. 7.

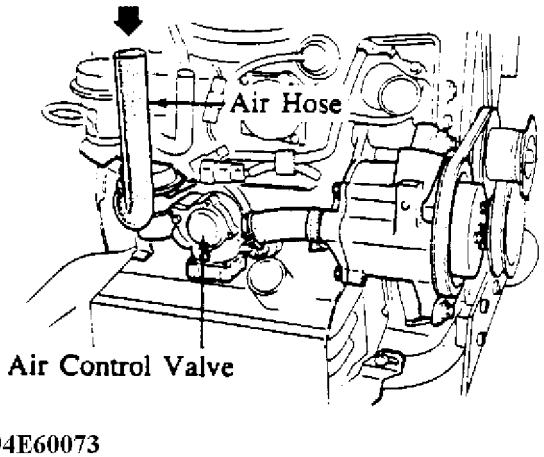

Fig. 7: Disconnecting Air Hose Between Air Cleaner and ACV

3. Slide the clamp on the air pump side of the air hose back down the hose. See Fig. 8.

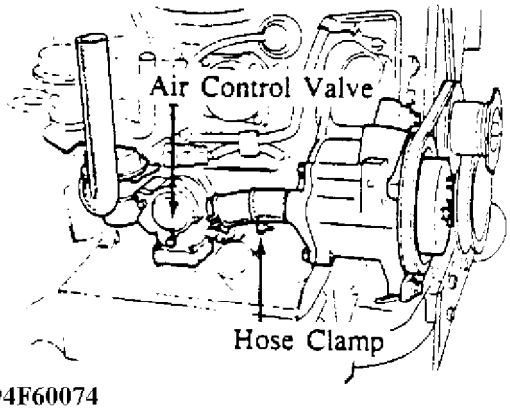

Fig. 8: Sliding Clamp on Air Hose (Air Control Valve Side)

4. Remove the air control valve and the air hose.
5. Remove the check valve from air control valve.

CAUTION: The check valve may fall out when ACV is removed. Be sure to retrieve and set back in place before re-installing. See Fig. 9.

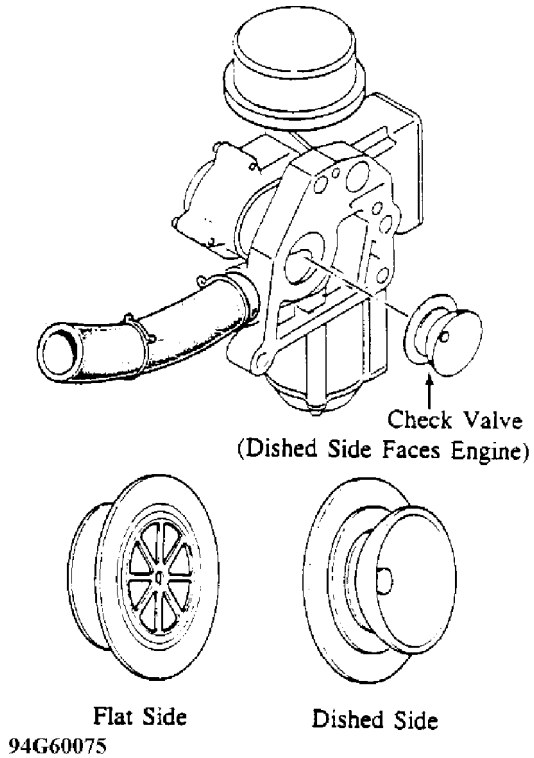

Fig. 9: Proper Check Valve Orientation

6. Remove the cap and switching valve as shown in Fig. 10.

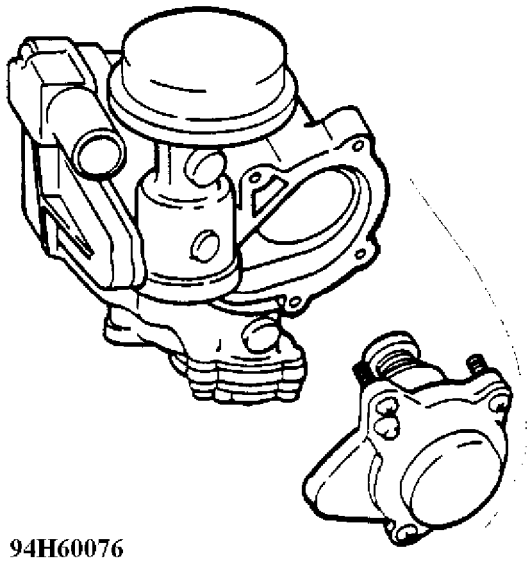

Fig. 10: Removing Cap and Switching Valve

7. Enlarge the hole as shown in Fig. 11 with the 4.2 mm drill bit provided.

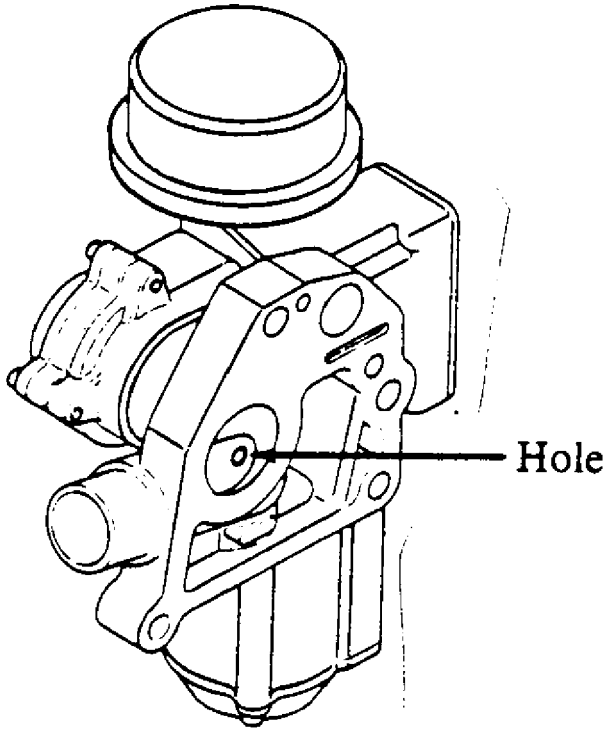

Fig. 11: Location of Hole for Enlargement

8. Blow the chips off with an air gun. See Fig. 12

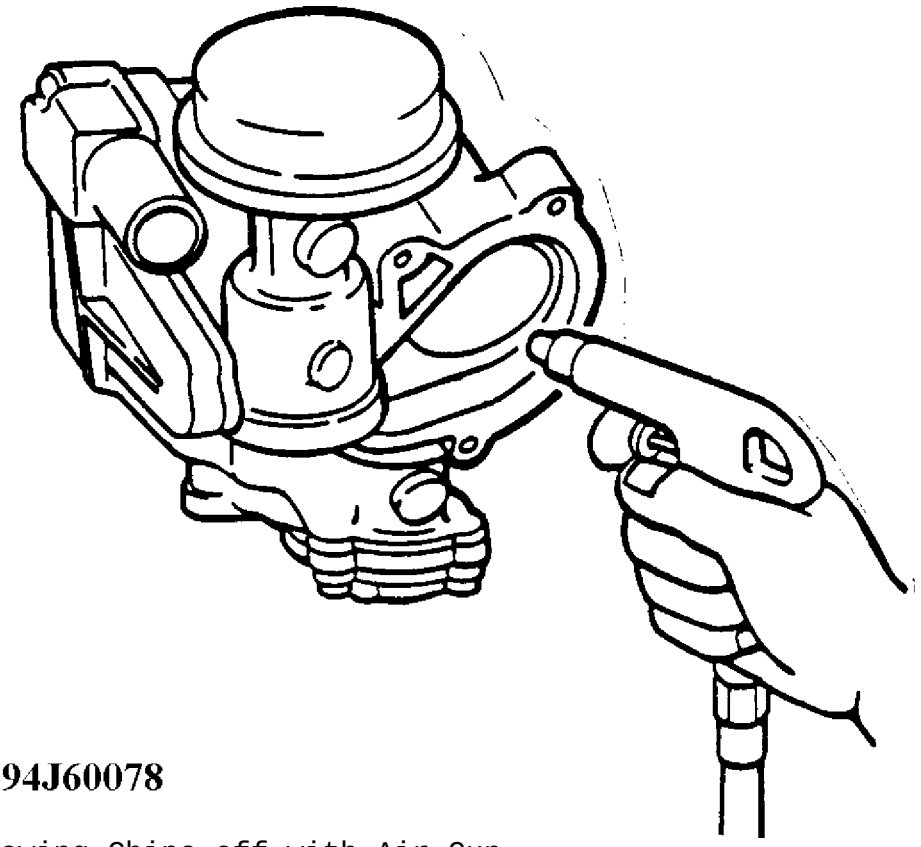

Fig. 12: Blowing Chips off with Air Gun

9. Re-install the cap and switching valve removed in Step 6.
10. Re-install the check valve to the intake manifold.

CAUTION: Be sure to fit the check valve into the intake manifold.

NOTE: The check valve may fall out when ACV is removed. Be sure to retrieve and set back in place before re-installing ACV. See Fig. 13.

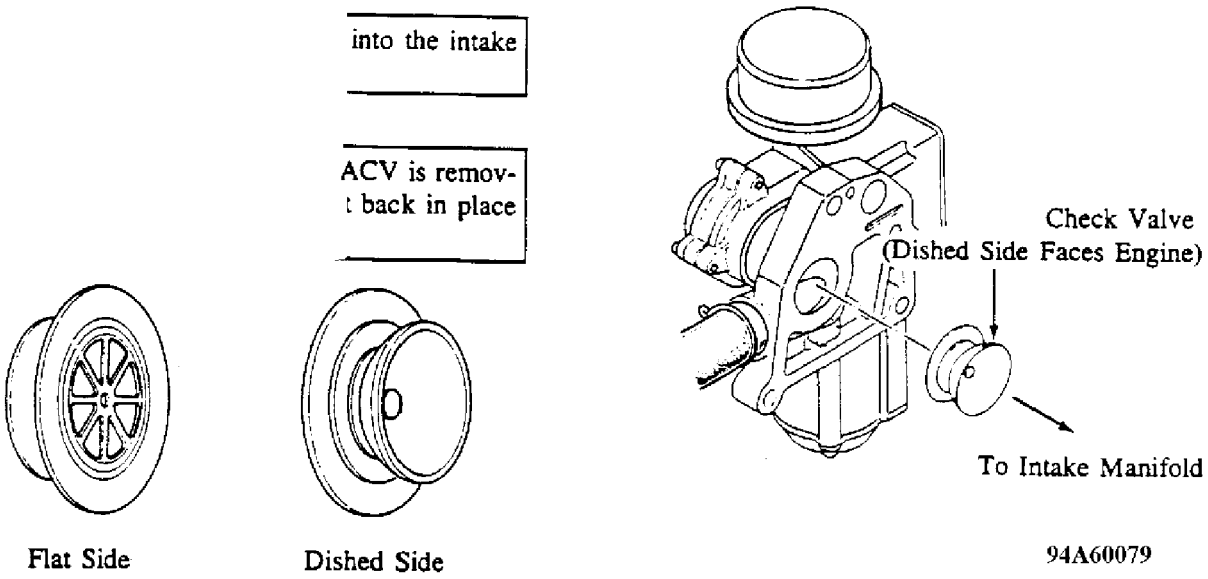

Fig. 13: Check Valve Position and Orientation

11. Re-install the air control valve.

NOTE: If the gasket cannot be re-used, use new one provided in the kit.

12. Reconnect the hoses and the hot air duct. Be sure to install the clamps securely.

IV. Replacement of the Catalyst Pellets

A. Preparation of Exchange Container

As mentioned in Item E of attachment I, the exchange container is to be partially prepared prior to initiation of the repair on each individual vehicle. This section describes how to prepare an exchange container.

CAUTION: * Wait until the catalytic converter has cooled.
* Use protective gloves and a prepared dust mask during replacement of the pellets.

1. Remove the drain plug No. 1 and No. 2 of the empty catalytic converter for exchange operation. See Fig. 14.

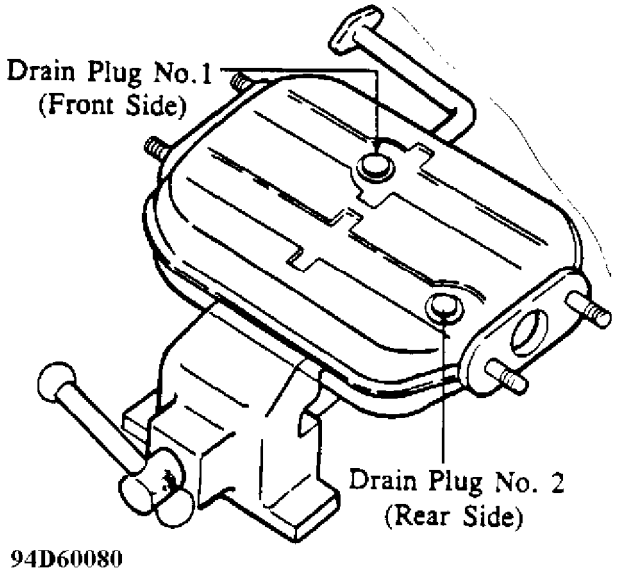

Fig. 14: Location of Drain Plugs No. 1 and 2

2. Hold the converter in a vise at an angle of 25ø-30ø as shown in Fig. 15.

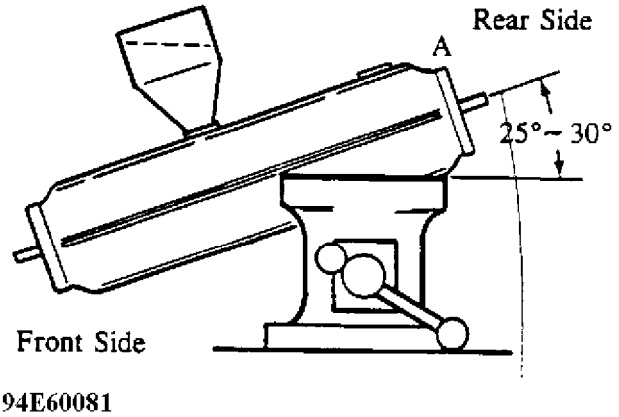

Fig. 15: Proper Positioning of Converter in a Vise

3. Put the funnel provided in the drain hole No. 1 (front side).
4. Pour all the pellets from the plastic bag containing a larger amount of pellets (1.4 L) into the drain hole No. 1.
5. Tap the converter repeatedly at point "A" (see Fig. 15) with a plastic hammer to allow the pellets to flow in until no more pellets can be put in.
6. Hold the converter level in the vise. See Fig. 16.

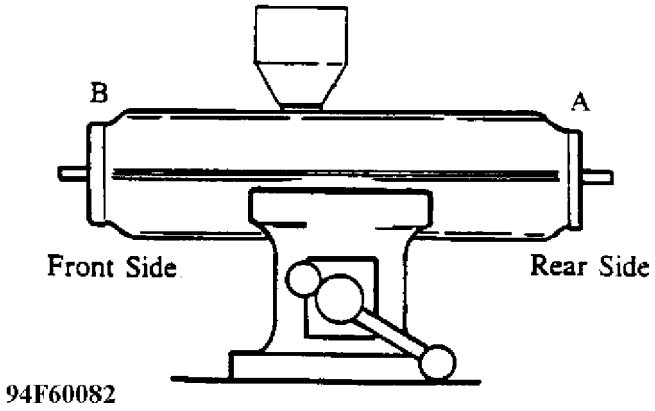

Fig. 16: Converter in Level Position

7. Tap the converter repeatedly at points "A" and "B" until all pellets are in.
8. Install a new lock washer and tighten the drain plug No. 1 to the specified torque. Torque to 30-50 N-m. Bend the lock washer to prevent the plug from loosening. See Fig. 17.

   Specified Torque: 30-50 N-m (22-36 ft-lb)

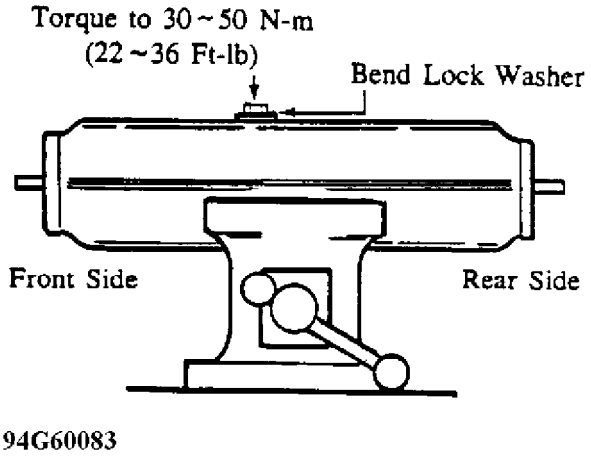

Fig. 17: Installing New Lock Washer on Converter

9. Hold the catalytic converter at an angle of 25ø-30ø in a vise again (see Fig. 15).
10. Put the funnel in drain hole No. 2 (rear side). See Fig. 18.

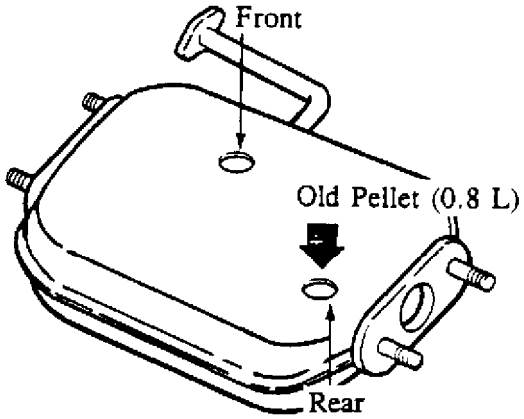

Fig. 18: Location of Drain Hole No. 2

11. Pour all the pellets from the plastic bag containing a smaller amount of pellets (0.6 L) into the drain hole No. 2. See Fig. 19.

NOTE: Do not forget that the remaining space (0.8L) in the rear of converter must later be filled with old pellets (see Fig. 19) from the converter removed from the customer's vehicle as described in Section IV-B, Step 8 through 11 below.

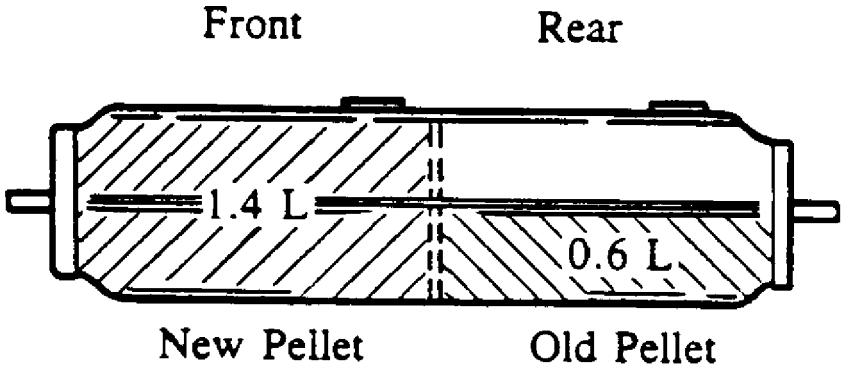

Fig. 19: Distribution of New and Old Pellets in Converter

12. Tighten the drain plug No. 2 temporarily.

B. Replacement of the Catalytic Converter

Following the procedure explained below,

i. remove the catalytic converter from the customer's vehicle,
ii. fill up the remaining space of the exchange converter with the old pellets removed from the customer's converter, and
iii. install the exchange converter on the customer's vehicle.

CAUTION: * Allow the exhaust system to cool to avoid injury.
* Do not use air tool (impact wrenches) for loosening, because it may result in breakage of the bolt or stud.
* Lubricate the threads with penetrating oil before loosening the bolts and nuts to prevent them from breaking.

1. Lift the vehicle on a hoist.
2. Disconnect the split air pipe from the pellet converter.
3. Remove the catalytic converter lower cover (protector No. 2). See Fig. 20.

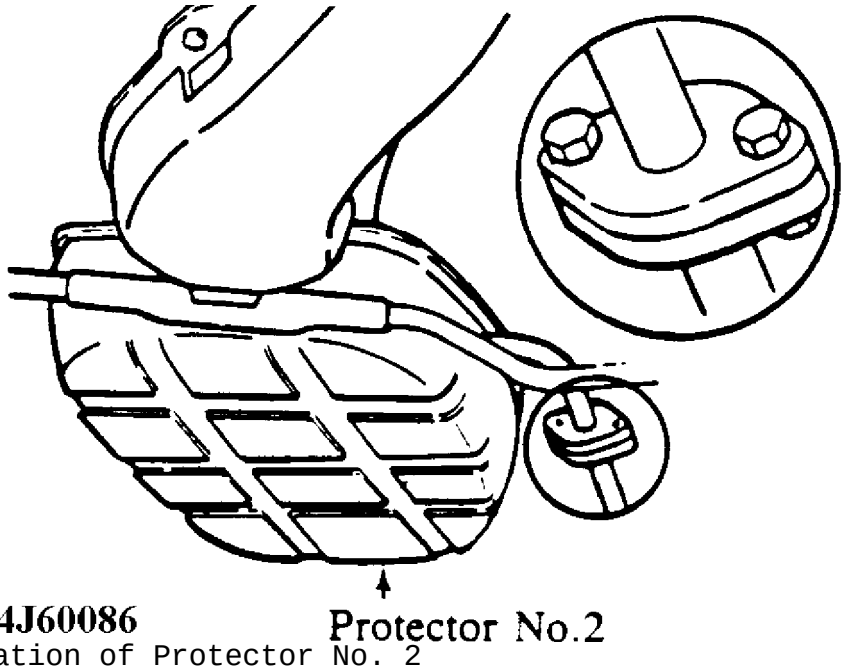

Fig. 20: Location of Protector No. 2

4. Remove the silencer hangers. See Fig. 21.

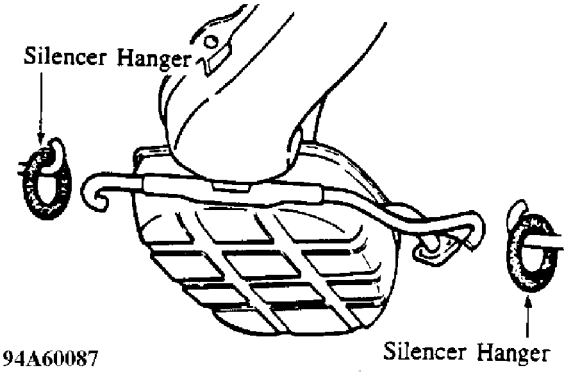

Fig. 21: Removing Silencer Hangers

5. Bend the tip of the exhaust pipe lower cover (protector No.4)

by using pliers in order to get the space for loosening the catalytic converter nuts. See Fig. 22.

CAUTION: Be careful not to cut your fingers on the edge of the lower cover.

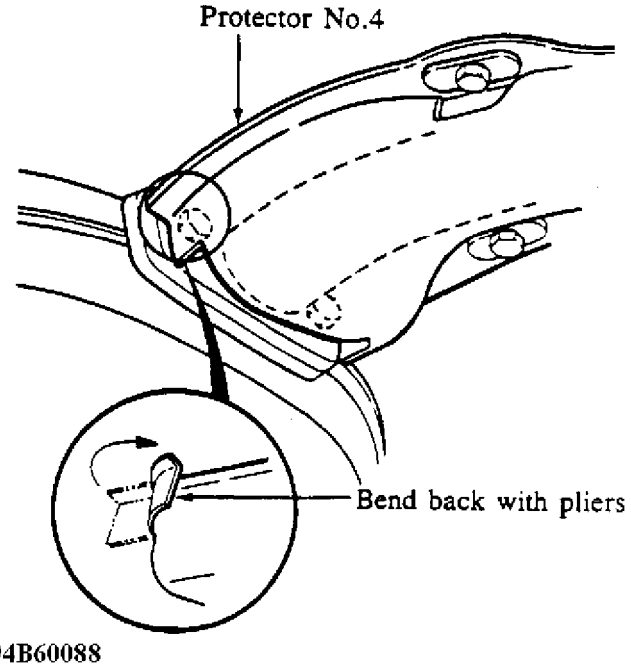

Fig. 22: Bending Back Tip of Exhaust Pipe Lowe Cover

6. Loosen the four nuts connecting the catalytic converter to the exhaust pipe and the monolith converter.

CAUTION: Lubricate the threads with penetrating oil before loosening the nuts to prevent the stud bolts from breaking. Breaking these studs would preclude re-use of the converter housing.

7. Remove the catalytic converter, pushing the exhaust pipe backward. See Fig. 23.

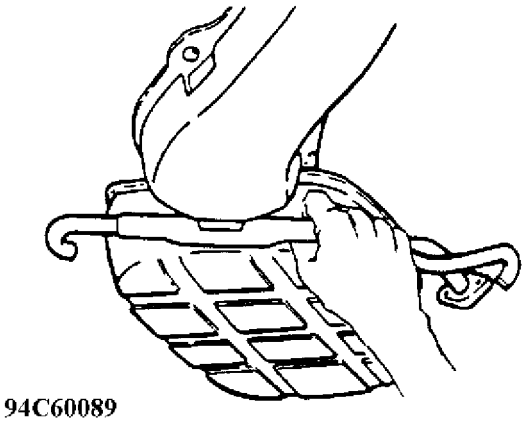

Fig. 23: Removing Catalytic Converter

8. Hold the removed converter level and securely in a vise as shown in Fig. 17. Remove the drain plug No. 2 (rear) and loosen the drain plug No. 1 (front) as shown in Fig. 14.

CAUTION: * Do not overtighten the vise.
* Do not remove the drain plug No. 1. Loosen only.

9. Remove the converter from the vise and remove all pellets from the rear of converter by shaking the converter over a clean pan that will catch the pellets.
10. Pour the pellets removed at Step 9 into the rear compartment (drain hole No. 2) of the previously-prepared exchange converter until it is full. Use the same procedure to fill up as described in Sec. IV-A.

NOTE: If the old pellets removed from the rear compartment are not enough to fill the rear compartment of the exchange converter, use old pellets from the front compartment (drain hole No. 1) of the removed converter.

11. Install a new lock washer and tighten the drain plug No. 2 of the exchange convener to the specified torque and bend the lock washer to prevent the plug from loosening. See Fig. 24.

Specified Torque: 30-50 N-m (22-36 ft-lb)

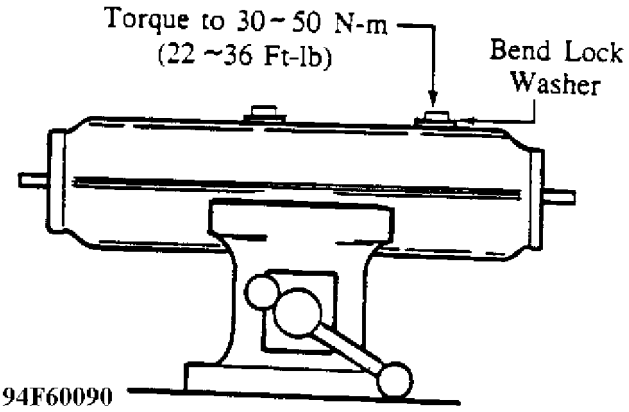

Fig. 24: Installing New Lock Washer on Converter

12. Install the exchange converter on the customer's vehicle using new gaskets, new spring washers and new nuts.

NOTE: Be sure to install the converter correctly. The drain plugs must be on the upper side.

13. Tighten the flange nuts to specified torque. See Fig. 25.

Specified Torque: 55-80 N-m (41-59 ft-lb)

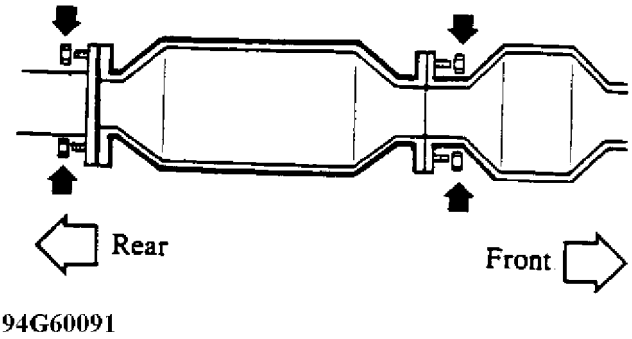

Fig. 25: Tightening Flange Nuts

14. Return the tip of the exhaust pipe lower cover to the original shape.

CAUTION: Be careful not to cut your fingers on the edge of the lower cover.

15. Re-install the pellet converter lower cover using new bolts.
16. Re-install the silencer hangers disconnected at Step 4.
17. Re-install the split air pipe using new gasket.

18. Fill out the recall label with your dealer code and the repair date, then affix this label on the passenger side's door. See Fig. 26.

NOTE: For the 1982 RX-7, please confirm that the recall label (Campaign No. 21605) has been already attached on the inside passenger side's B pillar. If no label, please replace the charcoal canister in accordance with the repair procedure in the letter of "Recall Campaign Number 21605, 1982 RX-7 Evaporative Emission System."

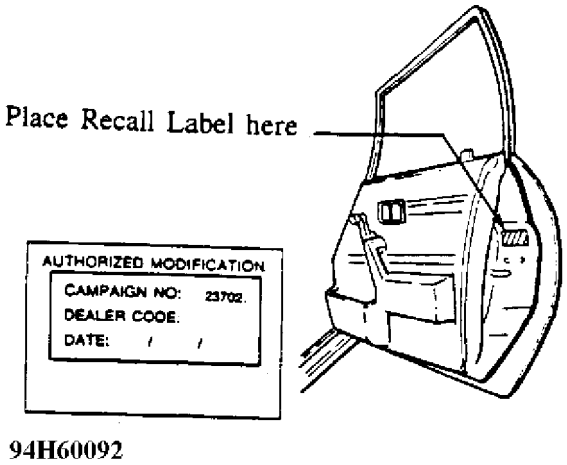

Fig. 26: Location to Affix Recall Label

19. Remove the drain plug No. 1 of the converter removed from the customer's vehicle and remove all pellets from the converter.
20. Put all old pellets (i.e., any leftover pellets from both of the front and rear compartments of the converter) into the plastic bag which originally contained the new pellets.
21. Fill out the warranty tag with all necessary information and attach it to the bag containing the old pellets. See Fig. 27.

Fig. 27: Tagging Returnable Pellets

22. Put 2 packs of the old pellets into the carton box which

contained a recall kit.
23. Send the above carton box to our Warranty Department.
24. Inspect the converter housing to assure that it is suitable for re-use. If it is, prepare it to be ready for use as an exchange converter as described in Sec. IV-A. If it cannot be re-used, you must order an additional empty converter housing.

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ATTACHMENT III

OWNER NOTIFICATION LETTER

1982 & 1983 RX-7 Exhaust Emission Control System
Recall Campaign
Recall No. 23702

Dear Customer,

According to our records, you own a 1982 or 1983 model Mazda RX-7.

Tests performed by the Environmental Protection Agency (U.S. EPA) suggest that Federally-certified 1982 and 1983 Mazda RX-7s may not conform with Federal emission standards for exhaust emissions. To correct such problems as may exist on individual vehicles, Mazda is recalling them for free replacement of the catalyst pellets and modification of the secondary air system. Neither of these operations will affect your vehicle's fuel economy or performance.

Any Authorized Mazda Dealer in your locality can perform this repair on or after February 27, 1987. We anticipate that the repair work will require about one hour. We recommend that you call your Mazda Dealer to make an appointment beforehand so as to minimize inconvenience to you.

If you no longer own your 1982 or 1983 RX-7, please complete the enclosed Change of Ownership pre-paid postcard and mail it to us as soon as possible.

If you have any problem regarding this matter that is not resolved by your Mazda Dealer, or by the nearest Mazda Distributor listed on the Owner's Manual for your vehicle, you may wish to contact the U.S. EPA's Manufacturers Operations Division at U.S. EPA - EN-340, Washington D.C. 20460.

Please accept our apologies for any inconvenience to you over this matter. We hope you will understand that we are conducting this voluntary recall campaign so that your vehicle will continue to serve you to your full satisfaction.

Sincerely,

CATALYST PELLETS & MODIFICATION OF SECONDARY AIR SYS

Article Text (p. 23)

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:59AM

Mazda

END OF ARTICLE

IDLER ARM PIN BREAKAGE COULD CAUSE LOSS OF STEERING

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Saturday, September 08, 2001 09:57AM

ARTICLE BEGINNING

NHTSA RECALL BULLETIN

Model(s):	1983 Mazda GLC (FWD Sedan)
	1983 Mazda RX7
Campaign No:	85V108000
Number of Affected Vehicles:	136526
Beginning Date of Manufacture:	1976 DEC
Ending Date of Manufacture:	1983 FEB

VEHICLE DESCRIPTION:

Passenger cars with rear wheel drive.

SYSTEM:

Steering.

FAULT:

Locks up, Sticks, Grabs

DESCRIPTION OF DEFECT:

In certain high salt areas, the idler arm is exposed to road salt which causes the dust seal to deteriorate resulting in idler arm pin corrosion. This causes the pin to freeze and break.

CONSEQUENCE OF DEFECT:

A broken idler arm pin could result in loss of steering control and may cause an accident.

CORRECTIVE ACTION:

Replace pin with one of improved corrosion resistant quality.

ADDITIONAL INFORMATION:

The National Highway Traffic Safety Administration operates Monday through Friday from 8:00 AM to 4:00 PM, Eastern Time. For more information call (800) 424-9393 or (202) 366-0123. For the hearing impaired, call (800) 424-9153.

END OF ARTICLE