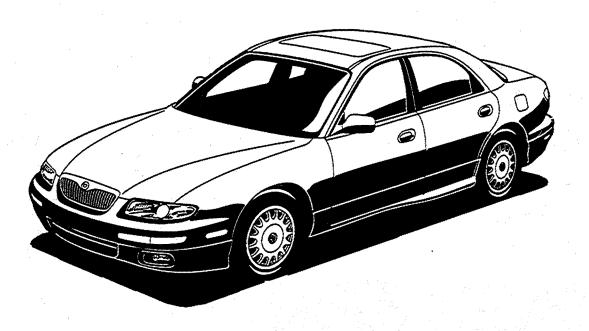
millenia



WARNING

Servicing a vehicle can be dangerous. If you have not received service-related training, the risks of injury and property damage increase. The recommended servicing procedures for the vehicle in this workshop manual were developed with Mazdatrained technicians in mind. This manual may be useful to non-Mazda trained technicians, but a technician with our service-related training and experience will be at less risk when performing servicing operations. However, all users of this manual are expected to know general safety procedures.

This manual contains "Warnings" and "Cautions" applicable to risks not normally encountered in a general technician's experience. They should be followed to reduce the risk of injury and the risk that improper service or repair may damage the vehicle or render it unsafe. It is also important to understand that the "Warnings" and "Cautions" are not exhaustive. It is impossible to warn of all the hazardous consequences that might result from failure to follow the procedures.

The procedures recommended and described in this manual are effective methods of performing service and repair. Some require tools specifically designed for a specific purpose. Nonrecommended procedures and tools should include consideration for safety of the technician and continued safe operation of the vehicle.

Parts should be replaced with genuine Mazda replacement parts, not parts of lesser quality. Use of a nonrecommended replacement part should include consideration for safety of the technician and continued safe operation of the vehicle.

1996 Mazda Millenia Workshop Manual

FOREWORD

A thorough familiarization with this manual is important for proper repair and maintenance. It should always be kept in a handy place for quick and easy reference.

The contents of this manual, including drawings and specifications, are the latest available at the time of printing. As modifications affecting repair or maintenance occur, relevant information supplementary to this volume will be made available at Mazda dealers. This manual should be kept up-to-date.

Mazda Motor Corporation reserves the right to alter the specifications and contents of this manual without obligation or advance notice.

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WARRANTY

The manufacturer's warranty on Mazda vehicles and engines can be voided if improper service or repairs are performed by persons other than those at an Authorized Mazda Dealer.

Mazda Motor Corporation HIROSHIMA, JAPAN

APPLICATION:

This manual is applicable to vehicles beginning with the Vehicle Identification Numbers (VIN), and related materials shown on the following page.

CONTENTS

Title		Section
General Information		Gl
Engine	KL	B1
	KJ	B2
Lubrication System	KL, KJ	D
Cooling System KL, KJ		Ξ
Fuel and Emission Control Systems	KL	F1
	KJ	F2
Engine Electrical System		G
Automatic Transaxle	GF4A-EL	K1
Automatic Transaxie	LJ4A-EL	K2
Front and Rear Axles		M
Steering System		N
Braking System and Traction Cont	P	
Wheels and Tires		Q
Suspension		R
Body	S	
Body Electrical System		Т
Heater and Air Conditioning Syste	U	

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VEHICLE IDENTIFICATION NUMBERS (VIN)

JM1 TA221*T1 200001— JM1 TA222*T1 200001—

RELATED MATERIALS

MILLENIA Service Highlights	9999-95-095F-95
1996 Protegé, MX-3, MX-5, 626/MX-6, 929,	
MPV, Millenia Service Highlights	9999-95-MODL-96
MILLENIA Wiring Diagram	9999-95-036G-96
Engine Workshop Manual KL	9999-95-EWKL-95
Engine Workshop Manual KJ	9999-95-EWKJ-95
ATX Workshop Manual GF4A-EL	9999-95-GF4A-95
ATX Workshop Manual LJ4A-EL	

GENERAL INFORMATION

SAFETY INFORMATION		ELECTRICAL TROUBLESHOOTING	CI 14
LUBRICANTS	GI- 2	TOOLS	
JACKING POSITIONS	GI- 2		
SAFETY STAND POSITIONS	GI- 2	JUMPER WIRE	
VEHICLE LIFT POSITIONS		VOLTMETER	
DYNAMOMETER		OHMMETER	
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FUNDAMENTAL PROCEDURES	GI-11	PRE-DELIVERY INSPECTION	GI-20
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RUBBER PARTS AND TUBING	GI-13		
HOSE CLAMPS			
TORQUE FORMULAS			
VISE			

SAFETY INFORMATION

LUBRICANTS

Avoid prolonged and repeated contact with petroleum-based oils. Used oil may irritate the skin, and can cause skin cancer and other skin disorders.

Wash thoroughly after working with oil. We recommend water-soluble hand cleaners. Do not use kerosene, gasoline, or any other solvent to remove oil from your skin.

If repeated or prolonged contact with oil is necessary, wear protective clothing. Soiled clothing, particularly those soiled with used oils and greases containing lead, should be cleaned at regular intervals.

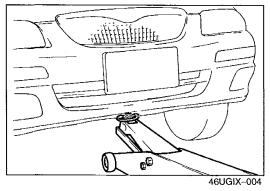
JACKING POSITIONS

Warning

• Improperly jacking a vehicle is dangerous. The vehicle can slip off the jack and cause serious injury. Use only the correct front and rear jacking positions and block the wheels.

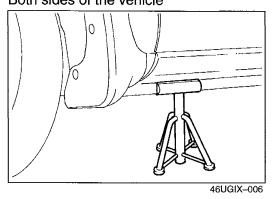
Use safety stands to support the vehicle after it has been lifted.

FrontAt the center of the crossmember

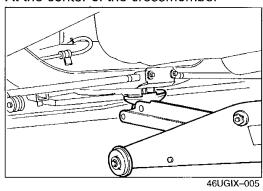


SAFETY STAND POSITIONS

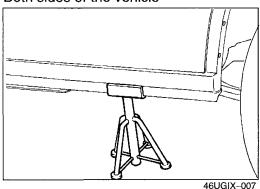
Front Both sides of the vehicle



RearAt the center of the crossmember

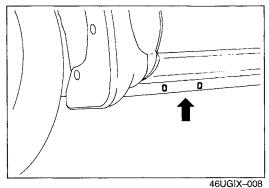


Rear Both sides of the vehicle

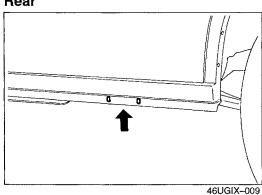


VEHICLE LIFT POSITIONS

Front



Rear



DYNAMOMETER

When test-running a vehicle on a dynamometer;

- Place a fan, preferably a vehicle-speed proportional type, in front of the vehicle.
- · Connect an exhaust gas ventilation unit.
- · Cool the exhaust pipes with a fan.
- Keep the area around the vehicle uncluttered.
- · Watch the water temperature gauge.

COMPRESSED AIR

When using compressed air to clean or remove parts;

- Wear protective eye wear.
- Hold a rag over the opening to prevent parts from shooting out.
- Take precautions so that people around you are not struck by flying debris.

HOW TO USE THIS MANUAL

ADVISORY MESSAGES

You'll find several Warnings, Cautions, and Notes in this manual.

Warning

 A Warning indicates a situation in which serious injury or death could result if the warning is ignored.

Caution

 A Caution indicates a situation in which damage to the vehicle could result if the caution is ignored.

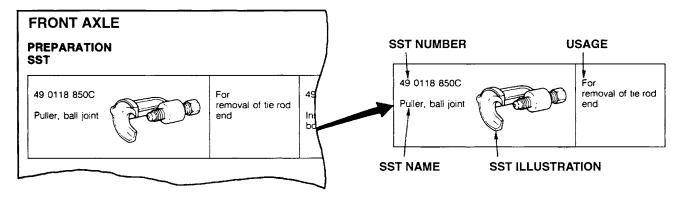
Note

• A **Note** provides added information that will help you to complete a particular procedure.

PREPARATION

This points out the needed **SSTs** for the service operation. It is best to gather all necessary **SST**s before beginning work.

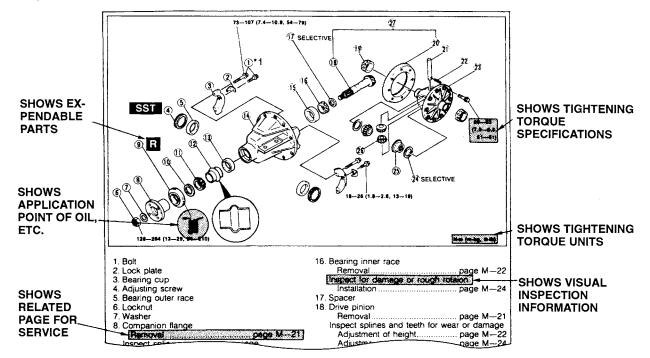
Example:



REPAIR PROCEDURE

- 1. Most repair operations begin with an overview illustration. It identifies the components, shows how the parts fit together, and describes visual part inspection. If a damaged or worn part is found, repair or replace it as necessary.
- 2. Expendable parts, tightening torques, and symbols for oil, grease, and sealant are shown in the overview illustration.
- 3. Pages related to service procedures are shown under the illustration. Refer to this information when servicing the related part.

Example:



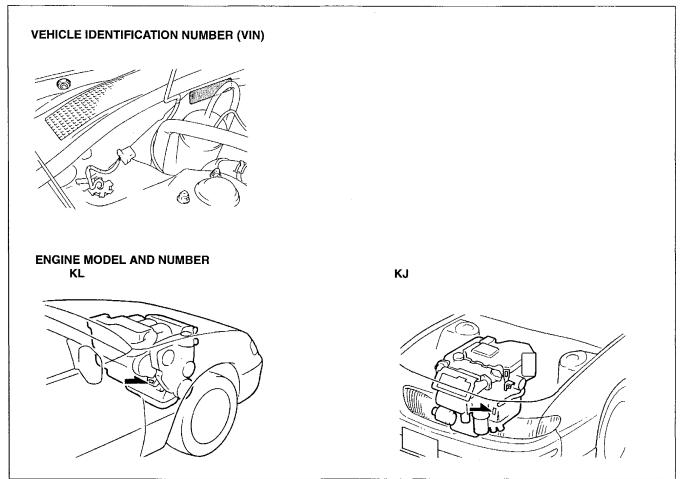
^{*1:} The numbers (1), etc.) refer to part identification and servicing procedures.

SYMBOLS

There are seven symbols indicating oil, grease, and sealant. These symbols show the points of applying such materials during service.

Symbol	Meaning	Kind	
OIL	Apply oil	New engine oil or gear oil as appropriate	
BRAKE FLUID	Apply brake fluid	FMVSS116: DOT-3	
ATF	Apply automatic transaxle fluid	M-III or Dexron®II	
BREASE	Apply grease	Appropriate grease	
SEALANT	Apply sealant	Appropriate sealant	
•	Apply petroleum jelly	Appropriate petroleum jelly	
R	Replace part	O-ring, gasket, etc.	

IDENTIFICATION NUMBER LOCATIONS



46UGIX-017