

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 Mazda-trained 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.

VEHICLE IDENTIFICATION NUMBERS (VIN)

626

1YV GE22C*T5 500001—

1YV GE22D*T5 500001—

MX-6

1YV GE31C*T5 500001—

1YV GE31D*T5 500001—

1996 Mazda 626/MX-6 Workshop Manual

FOREWORD

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

All 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.

All rights reserved. No part of this book may be reproduced or used in any form or by any means, electronic or mechanical—including photocopying and recording and the use of any kind of information storage and retrieval system—without permission in writing.

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) shown on the following page.

CONTENTS

Title		Section
General Information		G1
Engine	FS	B1
	KL	B2
Lubrication System	FS	D1
	KL	D2
Cooling System	FS	E1
	KL	E2
Fuel and Emission Control Systems	FS (MTX)	F1
	KL	F2
	FS (ATX)	F3
Engine Electrical System		G
Clutch		H
Manual Transaxle	G25M-R	J
Automatic Transaxle	GF4A-EL	K1
	LA4A-EL	K2
Front and Rear Axles		M
Steering System		N
Braking System		P
Wheels and Tires		Q
Suspension		R
Body		S
*Body Electrical System		T
*Heater and Air Conditioner Systems		U

* Refer to the 1996 626/MX-6 Body Electrical Troubleshooting Manual (Form No.1493-10-95F, Part No.9999-95-084F-96) for servicing of the body electrical components.

© 1995 Mazda Motor Corporation
PRINTED IN THE U.S.A. JUNE, '95
Form No.1492-10-95F
Part No.9999-95-019B-96

GENERAL INFORMATION

SAFETY INFORMATION	GI- 2
LUBRICANTS	GI- 2
JACKING POSITIONS	GI- 2
SAFETY STAND POSITIONS	GI- 2
VEHICLE LIFT POSITIONS	GI- 3
DYNAMOMETER	GI- 3
COMPRESSED AIR	GI- 3
HOW TO USE THIS MANUAL	GI- 4
ADVISORY MESSAGES	GI- 4
PREPARATION	GI- 4
REPAIR PROCEDURE	GI- 4
SYMBOLS	GI- 5
IDENTIFICATION NUMBER LOCATIONS	GI- 6
UNITS	GI- 7
ABBREVIATIONS	GI- 8
SAE STANDARDS	GI- 9
FUNDAMENTAL PROCEDURES	GI-11
PROTECTION OF THE VEHICLE	GI-11
PREPARATION OF TOOLS AND MEASURING EQUIPMENT	GI-11
SPECIAL TOOLS	GI-11
REMOVAL OF PARTS	GI-11
DISASSEMBLY	GI-11
REASSEMBLY	GI-12
ADJUSTMENTS	GI-13
RUBBER PARTS AND TUBING	GI-13
HOSE CLAMPS	GI-13
TORQUE FORMULAS	GI-13
VICE	GI-13
ELECTRICAL TROUBLESHOOTING TOOLS ...	GI-14
TEST LIGHT	GI-14
JUMPER WIRE	GI-14
VOLTMETER	GI-14
OHMMETER	GI-14
ELECTRICAL PARTS	GI-15
BATTERY CABLE	GI-15
CONNECTORS	GI-15
TERMINALS	GI-16
SENSORS, SWITCHES, AND RELAYS	GI-16
WIRING HARNESS	GI-17
MAIN FUSE BLOCK	GI-17
FUSE BLOCK	GI-17
INSTALLATION OF RADIO SYSTEM	GI-18
TOWING	GI-19
PRE-DELIVERY INSPECTION	GI-20
PRE-DELIVERY INSPECTION TABLE	GI-20
SCHEDULED MAINTENANCE	GI-21
MAINTENANCE TABLE (EXCEPT CANADA) ..	GI-21
MAINTENANCE TABLE (CANADA)	GI-24

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

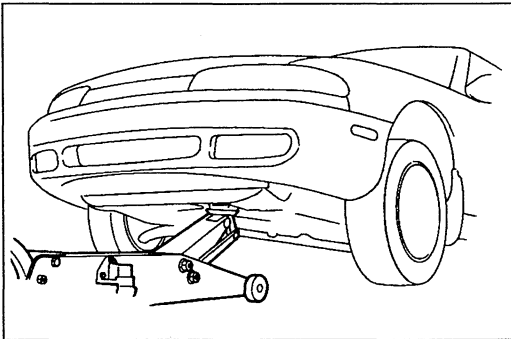
Warning

- **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.

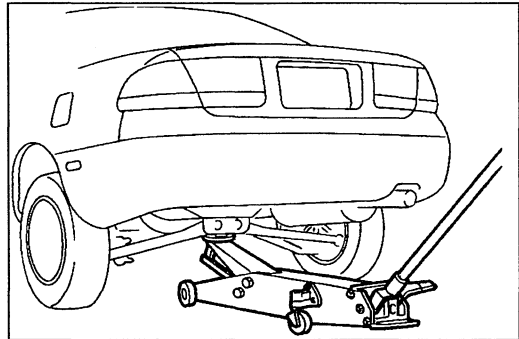
Front

At the center of the crossmember



Rear

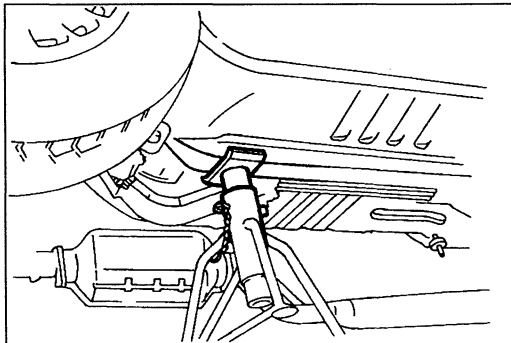
At the center of the crossmember



SAFETY STAND POSITIONS

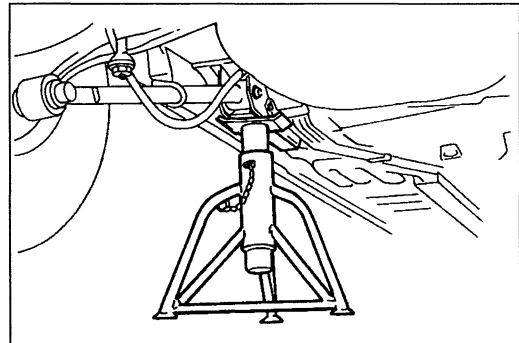
Front

Both sides of the vehicle



Rear

Both sides of the vehicle

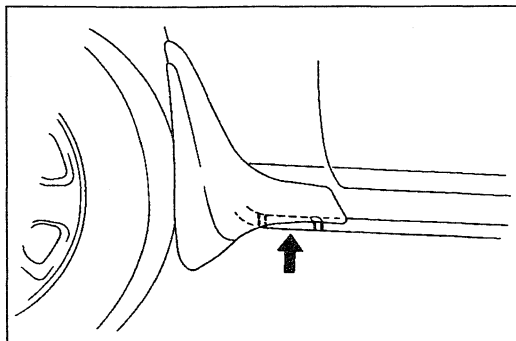


VEHICLE LIFT POSITIONS

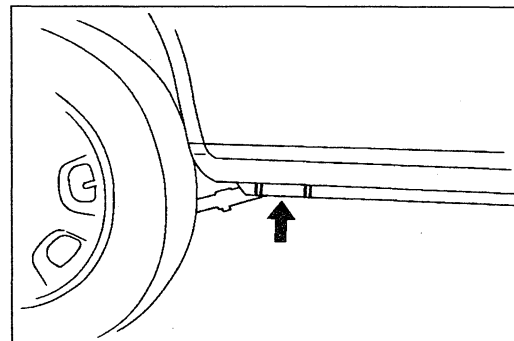
GI

Front

Both sides of the side sill

**Rear**

Both sides of the side sill

**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.

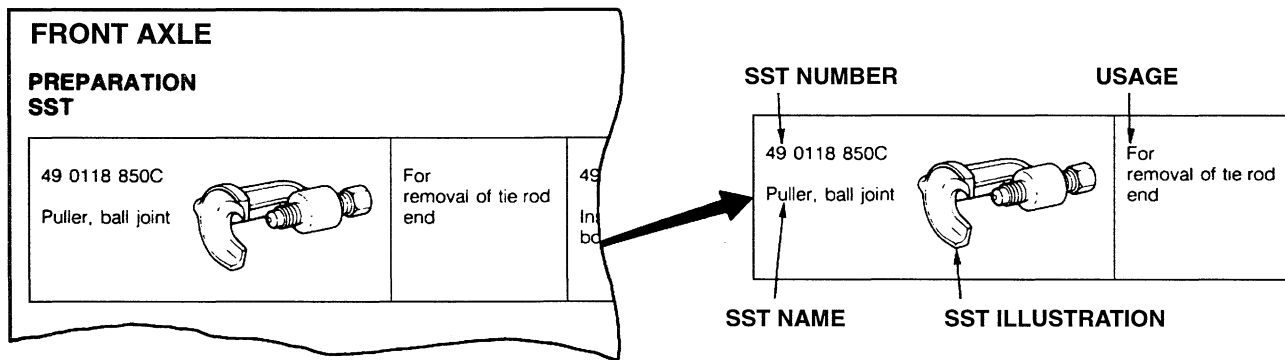
Note

- 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 **SSTs** 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.

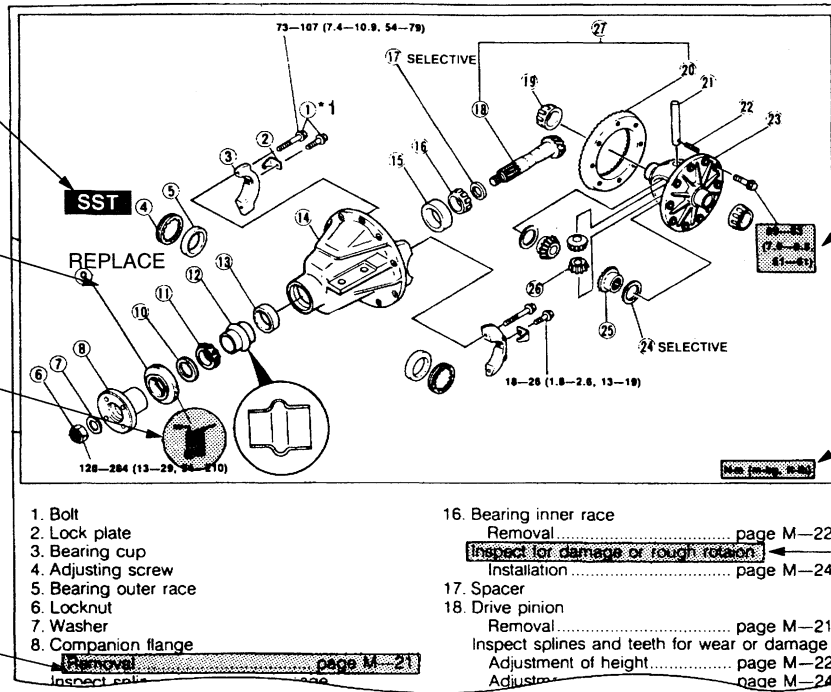
Example:

SHOWS SPECIAL SERVICE TOOL (SST) FOR THE SERVICE OPERATION

SHOWS EXPENDABLE PARTS

SHOWS APPLICATION POINT OF OIL, ETC.

SHOWS RELATED PAGE FOR SERVICE



SHOWS TIGHTENING TORQUE SPECIFICATIONS

SHOWS TIGHTENING TORQUE UNITS

SHOWS VISUAL INSPECTION INFORMATION

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

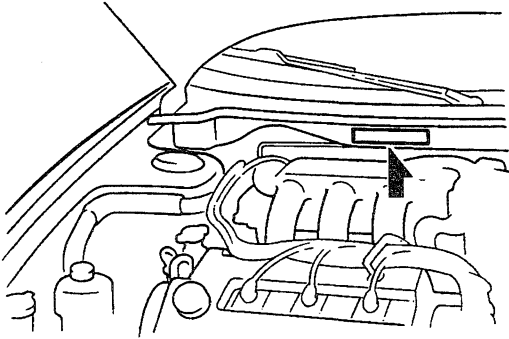
SYMBOLS

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

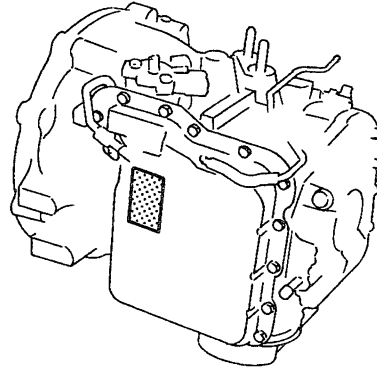
Symbol	Meaning	Kind
	Apply oil	New engine oil or gear oil as appropriate
	Apply brake fluid	FMVSS116: DOT-3
	Apply automatic transaxle fluid	M-III or Dexron®II
	Apply grease	Appropriate grease
	Apply sealant	Appropriate sealant
	Apply petroleum jelly	Appropriate petroleum jelly

IDENTIFICATION NUMBER LOCATIONS

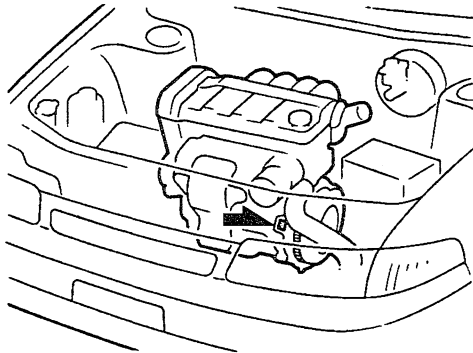
VEHICLE IDENTIFICATION NUMBER (VIN)



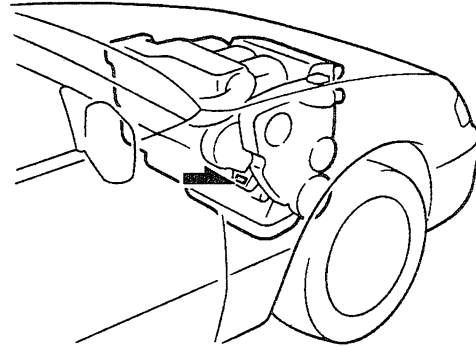
AUTOMATIC TRANSAXLE MODEL AND NUMBER



ENGINE MODEL AND NUMBER
FS ENGINE



KL ENGINE



UNITS

Electrical current	A (ampere)
Electric potential	V (volt)
Electric power	W (watt)
Length	mm (millimeter) in (inch)
Negative pressure	kPa (kilo Pascal) mmHg (millimeters of mercury) inHg (inches of mercury)
Positive pressure	kPa (kilo Pascal) kgf/cm ² (kilogram force per square centimeter) psi (pounds per square inch)
Resistance	Ω (ohm)
Torque	N·m (Newton meter) kgf·m (kilogram force per meter) kgf·cm (kilogram force per centimeter) ft·lbf (foot pound) in·lbf (inch pound)
Volume	L (liter) US qt (U.S. quart) Imp qt (Imperial quart) ml (milliliter) cc (cubic centimeter) cu in (cubic inch) fl oz (fluid ounce)
Weight	g (gram) oz (ounce)

Conversion to SI Units (Système International d’Unités)

All numerical values in this manual are based on SI units. Numbers shown in conventional units are converted from these values.

Rounding off

Converted values are rounded off to the same number of places as the SI unit value. For example, if the SI unit value is 17.2 and the value after conversion is 37.84, the converted value will be rounded off to 37.8.

Upper and lower limits

When the data indicates upper and lower limits, the converted values are rounded down if the SI unit value is an upper limit and rounded up if the SI unit value is a lower limit. Therefore, converted values for the same SI unit value may differ after conversion. For example, consider 2.7 kgf/cm² in the following specifications:

- 210—260 kPa {2.1—2.7 kgf/cm², 30—38 psi}
- 270—310 kPa {2.7—3.2 kgf/cm², 39—45 psi}

The actual converted values for 2.7 kgf/cm² are 264 kPa and 38.4 psi. In the top specification, 2.7 is used as an upper limit, so its converted values are rounded down to 260 and 38. In the bottom specification, 2.7 is used as a lower limit, so its converted values are rounded up to 270 and 39.