



MITSUBISHI  
MOTORS

1998

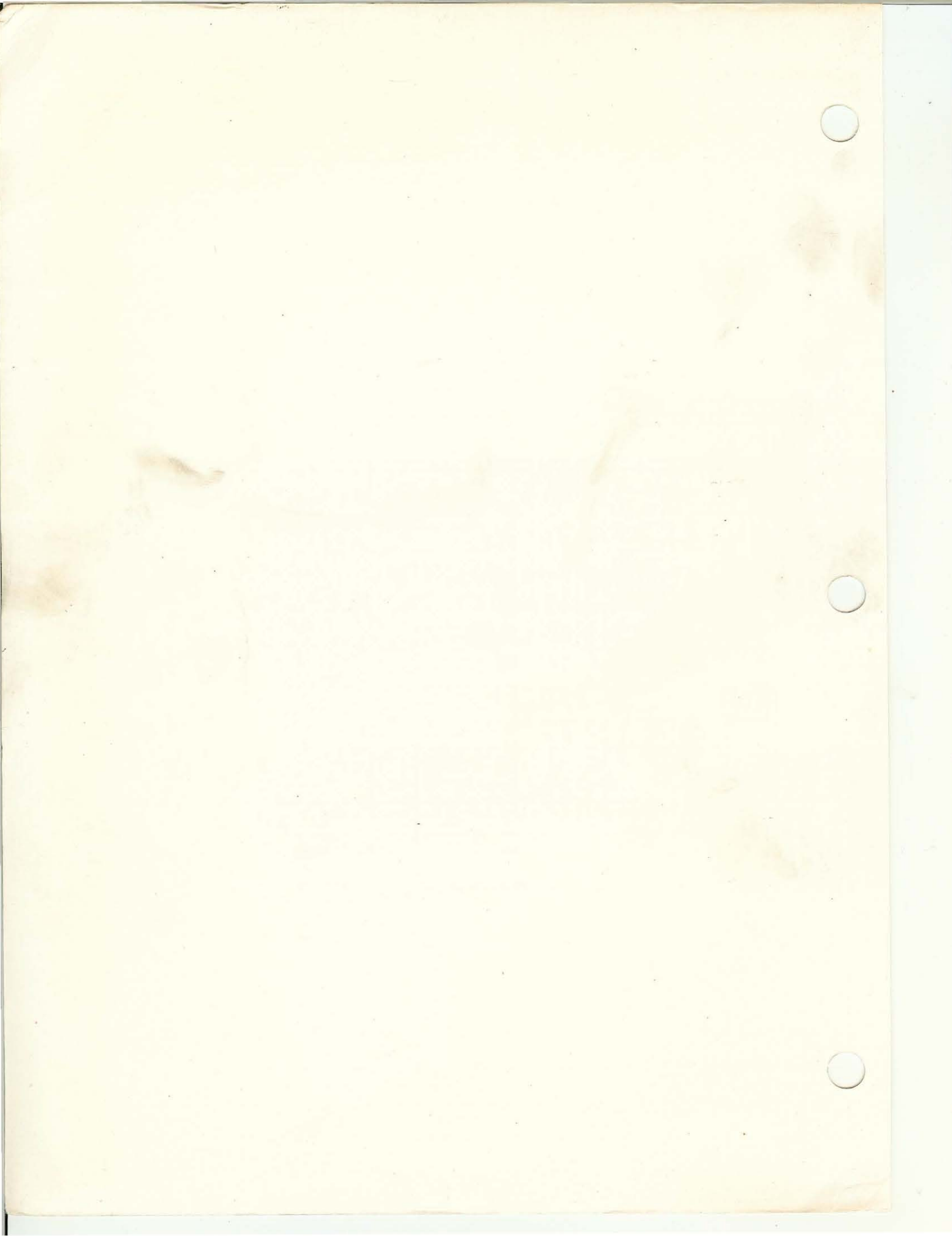
# MONTERO



**SERVICE MANUAL**

**VOLUME 1**





# Service Manual

# MONTERO

1998  
Volume 1

## FOREWORD

This Service Manual has been prepared with the latest service information available at the time of publication. It is subdivided into various group categories and each section contains diagnosis, disassembly, repair, and installation procedures along with complete specifications and tightening references. Use of this manual will aid in properly performing any servicing necessary to maintain or restore the high levels of performance and reliability assigned into these outstanding vehicles.

## GROUP INDEX

00109001196

General .....	00
Engine .....	11
Engine Lubrication .....	12
Fuel .....	13
Engine Cooling .....	14
Intake and Exhaust .....	15
Engine Electrical .....	16
Engine and Emission Control ...	17
Automatic Transmission .....	23
Alphabetical Index .....	

### NOTE:

For information on all service manual groups not listed above, please refer to Volume 2.



Mitsubishi Motors Corporation reserves the right to make changes in design or to make additions to or improvements in its products without incurring any obligations upon itself to install them on its products previously manufactured.

## **WARNINGS REGARDING SERVICING OF SUPPLEMENTAL RESTRAINT SYSTEM (SRS) EQUIPPED VEHICLES**

### **WARNING!**

- (1) Improper service or maintenance of any component of the SRS, or any SRS-related component, can lead to personal injury or death to service personnel (from inadvertent firing of the air bag) or to the driver and passenger (from rendering the SRS inoperative).
- (2) If it is possible that the SRS components are subjected to heat over 93°C (200°F) in baking or in drying after painting, remove the SRS components (air bag module, SRS diagnosis unit, front impact sensors) beforehand.
- (3) Service or maintenance of any SRS component or SRS-related component must be performed only at an authorized MITSUBISHI dealer.
- (4) MITSUBISHI dealer personnel must thoroughly review this manual, and especially its GROUP 52B – Supplemental Restraint System (SRS), before beginning any service or maintenance of any component of the SRS or any SRS-related component.

### **NOTE**

Section titles with the asterisks (\*) in the table of contents in each group indicate operations requiring warnings.

---

# GENERAL

## CONTENTS

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GENERAL <BODY AND CHASSIS> .....	00
GENERAL <ELECTRICAL> .....	00E





# GENERAL

## <BODY AND CHASSIS>

### CONTENTS

00109001202

<b>GENERAL DATA AND SPECIFICATIONS ...</b>	<b>28</b>	Fuel Hoses .....	38
<b>HOW TO USE THIS MANUAL .....</b>	<b>3</b>	Fuel System .....	38
Explanation of Manual Contents .....	4	Ignition Cables .....	40
Explanation of the Troubleshooting Guide .....	6	Propeller Shaft Joints .....	48
Maintenance, Repair and Servicing		Rear Axle Oil (Limited-Slip Differential) .....	47
Explanations .....	3	Spark Plugs .....	40
Model Indications .....	3	SRS Maintenance .....	48
Special Tool Note .....	3	Timing Belt .....	40
Terms Definition .....	3	Transfer .....	44
Tightening Torque Indication .....	3	<b>PRECAUTIONS BEFORE SERVICE .....</b>	
<b>HOW TO USE TROUBLESHOOTING/ INSPECTION SERVICE POINTS .....</b>	<b>7</b>	Applying Anti-corrosion Agent or Other Undercoating Agents .....	21
<b>LUBRICATION AND MAINTENANCE .....</b>	<b>30</b>	Scan Tool (MUT-II) .....	21
<b>MAIN SEALANT AND ADHESIVE TABLE ...</b>	<b>53</b>	Servicing Electrical System .....	20
<b>MAINTENANCE SERVICE .....</b>	<b>38</b>	Supplemental Restraint System (SRS) .....	20
Air Cleaner Element .....	38	Vehicle Washing .....	21
Automatic Transmission .....	43	<b>RECOMMENDED LUBRICANTS AND LUBRICANT CAPACITIES TABLE .....</b>	<b>32</b>
Automatic Transmission Fluid .....	44	<b>SCHEDULED MAINTENANCE TABLE .....</b>	<b>35</b>
Ball Joint and Steering Linkage Seals .....	46	<b>TIGHTENING TORQUE .....</b>	<b>29</b>
Ball Joints with Grease Fitting .....	47	<b>TOWING AND HOISTING .....</b>	<b>25</b>
Brake Hoses .....	46	<b>TREATMENT BEFORE/AFTER THE FORDING OF A STREAM .....</b>	<b>22</b>
Disc Brake Pads .....	46	<b>VEHICLE IDENTIFICATION .....</b>	<b>14</b>
Drive Belts .....	41	Chassis Number .....	16
Drive Shaft Boots .....	46	Engine Model Stamping .....	16
Engine Coolant .....	45	Theft protection .....	17
Engine Oil .....	41	Vehicle Identification Code Chart Plate .....	14
Engine Oil Filter .....	42	Vehicle Identification Number Location .....	14
Evaporative Emission Control System (Except Canister) .....	38	Vehicle Identification Number List .....	15
Exhaust System (Connection Portion of Muffler, Pipings and Converter Heat Shields) .....	48	Vehicle Information Code Plate .....	15
Front Axle and Rear Axle .....	47	Vehicle Safety Certification Label .....	16

## HOW TO USE THIS MANUAL

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### MAINTENANCE, REPAIR AND SERVICING EXPLANATIONS

This manual provides explanations, etc. concerning procedures for the inspection, maintenance, repair and servicing of the subject model. Unless otherwise specified, each service procedure covers all models. Procedures covering specific models are identified by the model codes, or similar designation (engine type, transaxle type, etc.). A description of these designations is covered in this manual under "VEHICLE IDENTIFICATION".

### SERVICE ADJUSTMENT PROCEDURES

"Service adjustment procedures" are procedures for performing inspections and adjustments of particularly important locations with regard to the construction and for maintenance and servicing, but other inspections (for looseness, play, cracking, damage, etc. ) must also be performed.

### SERVICE PROCEDURES

The service steps are arranged in numerical order. Attention must to be paid in performing vehicle service are described in detail in SERVICE POINTS.

### TERMS DEFINITION

#### STANDARD VALUE

Indicates the value used as the standard for judging the quality of a part or assembly on inspection or the value to which the part or assembly is corrected and adjusted. It is given by tolerance.

#### LIMIT

Shows the standard for judging the quality of a part or assembly on inspection and means the maximum or minimum value within which the part

or assembly must be kept functionally or in strength. It is a value established outside the range of standard value.

#### REFERENCE VALUE

Indicates the adjustment value prior to starting the work (presented in order to facilitate assembly and adjustment procedures, and so they can be completed in a shorter time).

#### CAUTION

Indicates the presentation of information particularly vital to the worker during the performance of maintenance and servicing procedures in order to avoid the possibility of injury to the worker, or damage to component parts, or a reduction of component or vehicle function or performance, etc.

#### TIGHTENING TORQUE INDICATION

The tightening torque shown in this manual is a basic value with a tolerance of  $\pm 10\%$  except the following cases when the upper and lower limits of tightening torque are given.

- (1) The tolerance of the basic value is within  $\pm 10\%$ .
- (2) Special bolts or the like are in use.
- (3) Special tightening methods are used.

#### SPECIAL TOOL NOTE

Only MMC special tool part numbers are called out in the repair sections of this manual. Please refer to the special tool cross reference chart, which is located in the service manual at the beginning of each group, for a cross reference from the MMC special tool number to the special tool number that is available in your market.

### MODEL INDICATIONS

The following abbreviations are used in this manual for classification of model types.

A/T: Indicates automatic transmission, or models equipped with automatic transmission.

MFI: Indicates multiport fuel injection, or engines equipped with multiport fuel injection.

A/C: Indicates air conditioning.

3.5L Engine: Indicates the 3.5 dm<sup>3</sup> (213.4 cu.in.) <6G74> engine, or a model equipped with such an engine.



## EXPLANATION OF MANUAL CONTENTS

Indicates procedures to be performed before the work in that section is started, and procedures to be performed after the work in that section is finished.

**Component Diagram**

A diagram of the component parts is provided near the front of each section in order to give the reader a better understanding of the installed condition of component parts.

Indicates (by symbols) where lubrication is necessary.

**Maintenance and Servicing Procedures**

The numbers provided within the diagram indicate the sequence for maintenance and servicing procedures.

- Removal steps :  
The part designation number corresponds to the number in the illustration to indicate removal steps.
- Disassembly steps :  
The part designation number corresponds to the number in the illustration to indicate disassembly steps.
- Installation steps :  
Specified in case installation is impossible in reverse order of removal steps. Omitted if installation is possible in reverse order of removal steps.
- Reassembly steps :  
Specified in case reassembly is impossible in reverse order of disassembly steps. Omitted if reassembly is possible in reverse order of disassembly steps.

**Classifications of Major Maintenance / Service points**






When there are major points relative to maintenance and servicing procedures (such as essential maintenance and service points, maintenance and service standard values, information regarding the use of special tools, etc.), these are arranged together as major maintenance and service points and explained in detail.

◀A▶ : Indicates that there are essential points for removal or disassembly.

▶A◀ : Indicates that there are essential points for installation or reassembly.

**Symbols for Lubrication, Sealants and Adhesives**

Information concerning the locations for lubrication and for application of sealants and adhesives is provided, by using symbols, in the diagram of component parts or on the page following the component parts page, and explained.

-  : Grease  
(multipurpose grease unless there is a brand or type specified)
-  : Sealant or adhesive
-  : Brake fluid or automatic transmission fluid
-  : Engine oil, gear oil or air conditioner compressor oil
-  : Adhesive tape or butyl rubber tape

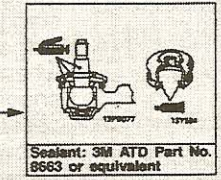
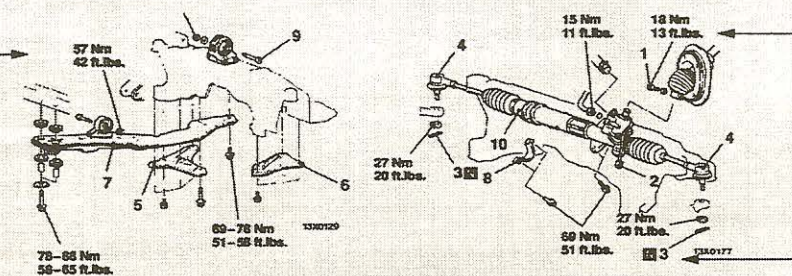


Indicates the group title.  
 Indicates the section title.  
 Indicates the group number.  
 Indicates the page number.

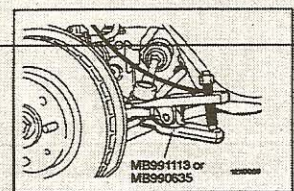
STEERING – Power Steering Gear Box 37A-23

**POWER STEERING GEAR BOX  
REMOVAL AND INSTALLATION**

**Pre-removal Operation**  
 • Power Steering Fluid Draining (Refer to P37A-15.)  
 • Stabilizer Bar Removal (Refer to GROUP 33A - Stabilizer Bar)

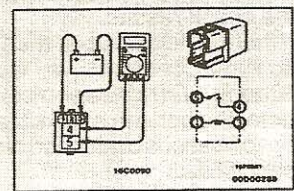


- Removal steps**
1. Joint assembly and gear box connecting bolt
  2. Solenoid valve connector <Vehicles with EPS>
  3. Cotter pin
  4. Connection for tie-rod end and knuckle
  5. Stay (L.H.)
  6. Stay (R.H.)
  7. Center member assembly
  8. Clamp
  9. Bolt
  10. Gear box assembly



**REMOVAL SERVICE POINTS**

- TIE-ROD END DISCONNECTION**
- Caution**
1. Be sure to tie the cord of the special tool to the nearby part.
  2. Loosen the nut but do not remove it.

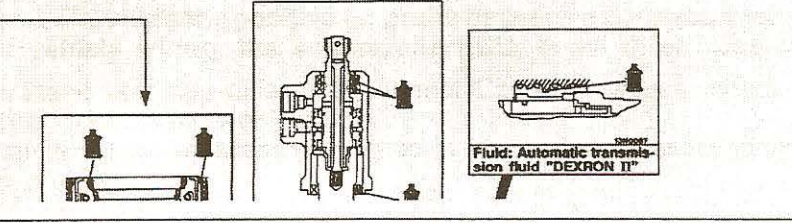


**FOG LIGHT RELAY CONTINUITY CHECK**

Battery voltage	Terminal			
	1	3	4	5
Power is not supplied	○	○	○	○
Power is supplied	⊕	⊖	⊕	⊖

37A-28 STEERING – Power Steering Gear Box

**LUBRICATION AND SEALING POINTS**  
 <Conventional power steering gear box>



Denotes tightening torque.

Denotes non-reusable part.

Repair kit or set parts are shown. (Only very frequently used parts are shown.)

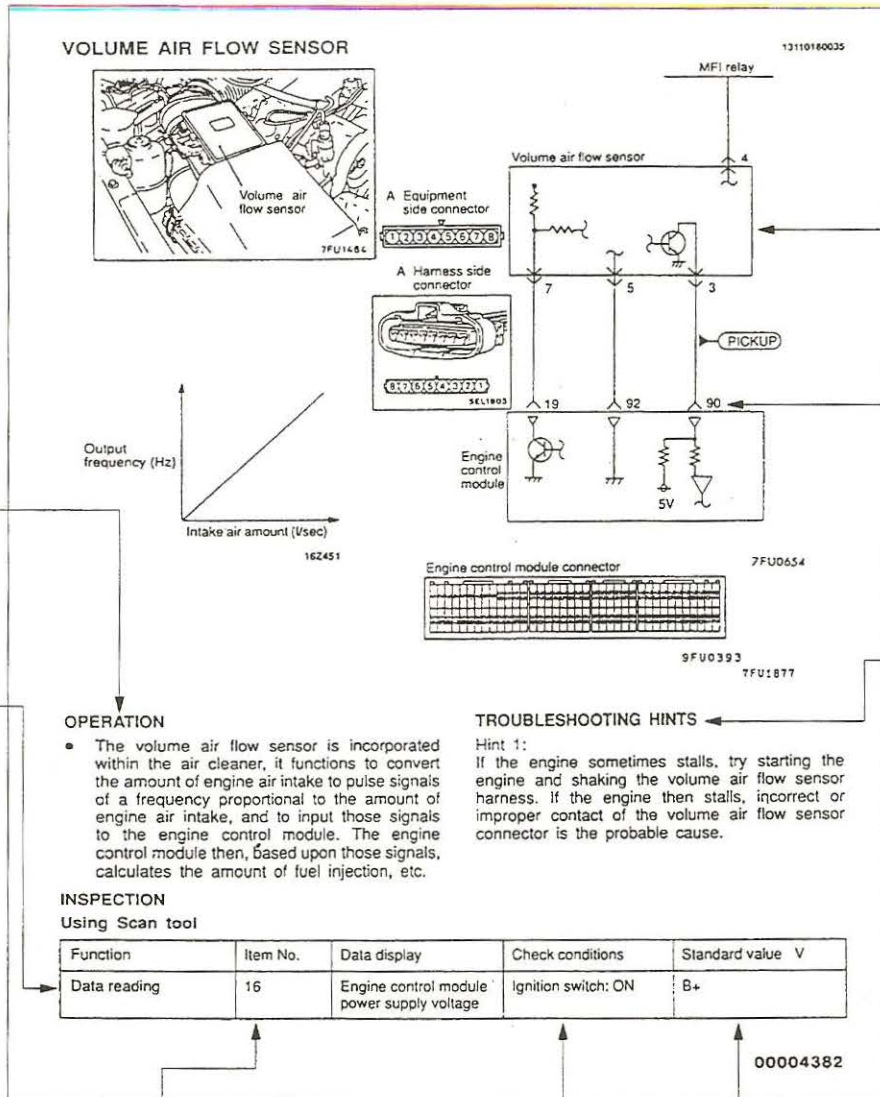
Operating procedures, cautions, etc. on removal, installation, disassembly and reassembly are described.

○ ○ indicates that there is continuity between the terminals.  
 ⊕ ⊖ indicates terminals to which battery voltage is applied.

The title of the page (following the page on which the diagram of Component parts is presented) indicating the locations of lubrication and sealing procedures.



EXPLANATION OF THE TROUBLESHOOTING GUIDE



Provides the necessary description of circuit operation for basic understanding.

Indicates the check to be made.

Indicates the circuit diagram for checking.

Indicates a connector terminal number.

Provides hints (including standards for judgement) when troubleshooting procedures are followed.

Indicates the item to be checked.

Indicates the conditions under which the check should be made.

Indicates the specification to be used for judgement of the check results. If there is no particular mention of conditions in the "Check Conditions" column, the column shows the specifications under normal conditions.