

QUICK REFERENCE INDEX: To use, bend manual back to expose black markers on pages of the various groups. Then, by means of the index marks on this page, locate the corresponding black marker on the page of the group you desire to find.

MITSUBISHI MAGNA, VERADA SIGMA, V3000 R and S SERIES WORKSHOP MANUAL

INCLUDING 1995 MODEL
SEDAN AND WAGON
Part No. AW342051



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SERVICE DIVISION
TONSLEY PARK
SOUTH AUSTRALIA

Body Repair Manual

AW338329



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Filling instructions

File these pages in your TR/KR-TS/KS Loose Leaf Workshop Manual part number AW342051.

All revised pages carry a revision date, part number and **REVISED** or **ADDED** to signify that the page has been modified. Alterations to the text and/or illustrations are indicated by a single vertical marker adjacent to the revision.

Major revisions or new page layouts carry the revision date, part number and **REVISED** or **ADDED** only, no vertical line.

Fit the new pages to your manual as soon as possible, removing the current pages they replace. Destroy the old pages to avoid confusion at a later date.

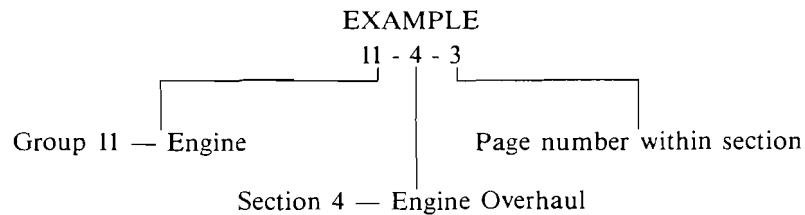
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SECTION 1 — INTRODUCTION

USING THE MANUAL

The pages of this service manual are numbered using a three segment numbering system, these number groups located in the centre of each page, are divided by a dash, and serve the following functions.

- The first figure indicates the service manual **group**;
- The second figure indicates the **section number** within a **group**;
- The last figure is the **page sequence number** within the **section**. Each section commences with page 1.



- Illustrations are numbered in sequence within each section.
- When reference is made to a side of the vehicle, or a handed component, the side is defined as viewed from the driver's seat unless otherwise specified.
- Where possible the component parts described in this manual have been identified by a part number or serial number. Where this is the case, the component part or serial number should be established and then reconciled with the service specifications/descriptions in this manual.

METRIC CONVERSION

In this manual all measurements and capacities are quoted in Metric Units. To carry out conversions from Metric to imperial or vice versa, multiply the unit to be converted by the appropriate factor, or in the case of Temperature, Fuel and Oil consumption apply the required formula. These may be found in the Conversion Values column of the Conversion Chart.

Examples:

Converting millimetres to inches

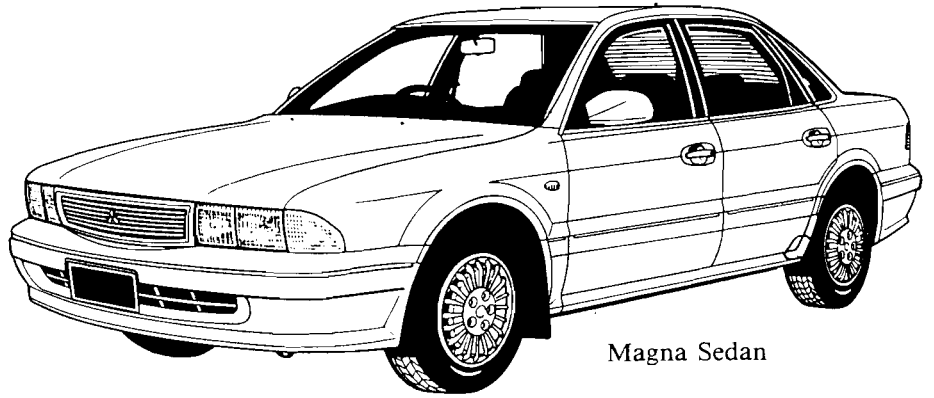
$$1.2 \text{ mm} \times 0.03937 \text{ (from table)} = 0.050''$$

Converting °F to °C

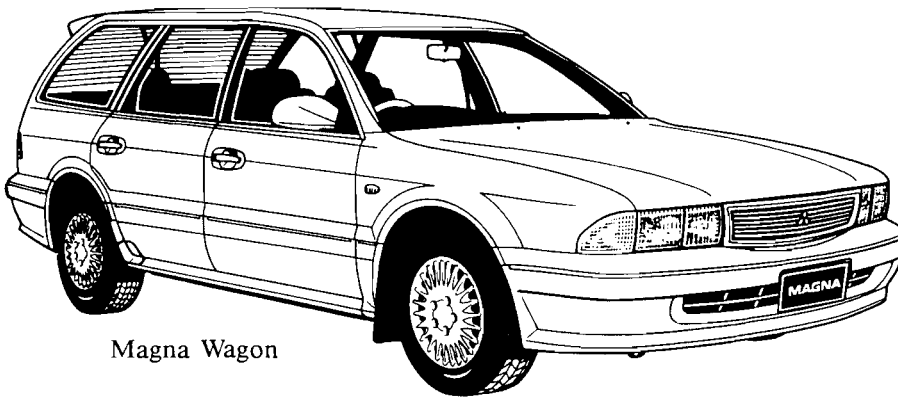
$$\begin{aligned} 86^{\circ}\text{F}: \quad ^{\circ}\text{C} &= \frac{5}{9}(\text{°F}-32) \text{ (from table)} \\ &= \frac{5}{9}(86-32) \\ &= \frac{5}{9} \times 54 \\ &= 30^{\circ}\text{C} \end{aligned}$$

CONVERSION CHART — METRIC AND IMPERIAL MEASURES				
Quantity	Metric units		Conversion Values	
	Name	Symbol	metric to imperial	imperial to metric
LENGTH	millimetre	mm	1 mm = 0.03937 inches	1 inch = 25.4 mm
	metre	m	1 m = 1.09 yard	1 yard = 0.914 m
	kilometre	km	1 km = 0.621 miles	1 mile = 1.61 km
MASS	gram	g	1 g = 0.0353 ozs.	1 oz. = 28.3 g
	kilogram	kg	1 kg = 2.2 lbs.	1 lb. = 0.454 kg
	tonne	t	1 t = 0.984 ton	1 ton = 1.02 t
AREA	square millimetre	mm ²	1 mm ² = 0.00155 in. ²	1 in. ² = 645.16 mm ²
	square centimetre	cm ²	1 cm ² = 0.155 in. ²	1 in. ² = 6.45 cm ²
	square metre	m ²	1 m ² = 1.20 yd ²	1 yd ² = 0.836 m ²
VOLUME	cubic centimetre	cm ³	1 cm ³ = 0.0610 in. ³	1 in. ³ = 16.4 cm ³
	cubic metre	m ³	1 m ³ = 35.3 ft. ³	1 ft. ³ = 0.0283 m ³
VOLUME- FLUIDS	litre	l	1 litre = 1.76 pts.	1 pt. = 0.568 litre
			1 litre = 0.2199 gallon	1 gallon = 4.546 litre
FORCE	newton	N	1 N = 0.225 lb. force	1 lb. force = 4.45 N
TORQUE	newton metre	Nm	1 Nm = 0.74 lb. ft.	1 lb. ft. = 1.36 Nm
			1 Nm = 8.94 lb. ins.	1 lb. in. = 0.113 Nm
PRESSURE	kilopascal	kPa	1 kPa = 0.145 p.s.i.	1 p.s.i. = 6.89 kPa
VACUUM	kilopascal	kPa	1 kPa = 0.295 in. Hg.	1 in. Hg. = 3.386 kPa
VELOCITY	kilometre per hour	km/h	1 km/h = 0.621 m.p.h.	1 m.p.h. = 1.61 km/h
TEMPERATURE	degree Celsius	°C	$^{\circ}\text{F} = \frac{9}{5} \times ^{\circ}\text{C} + 32$	$^{\circ}\text{C} = \frac{5}{9} (^{\circ}\text{F} - 32)$
POWER	kilowatt	kW	k kW = 1.34 h.p.	1 h.p. = 0.746 kW
FUEL CONSUMPTION	litre per 100 km	l/100 km	$\frac{282.481}{l/100 \text{ km}} = \text{m.p.g.}$	$\frac{282.481}{\text{m.p.g.}} = l/100 \text{ km}$
OIL CONSUMPTION	litre per 1000 km	l/1000 km	$\frac{2824.81}{l/1000 \text{ km}} = \text{m.p.g.}$	$\frac{2824.81}{\text{m.p.g.}} = l/1000 \text{ km}$

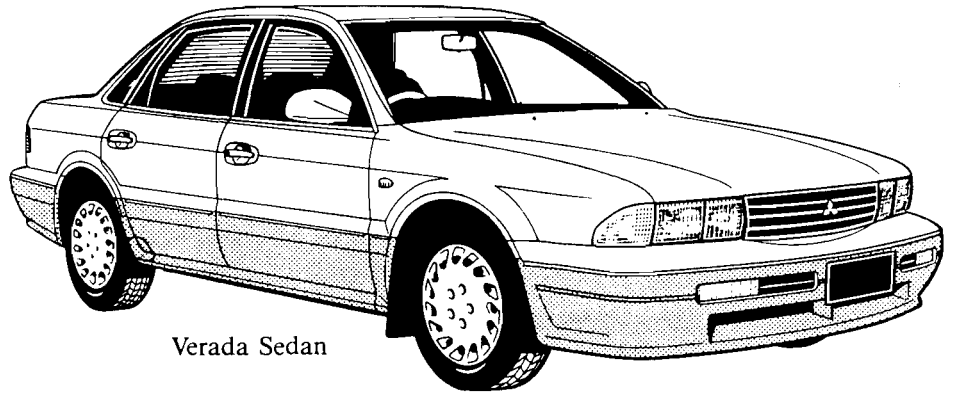
SECTION 2 — VEHICLE SPECIFICATIONS < R Series >



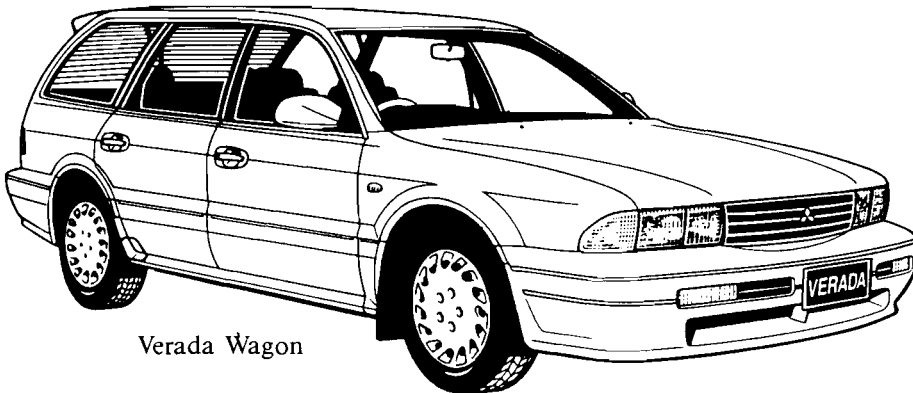
Magna Sedan



Magna Wagon

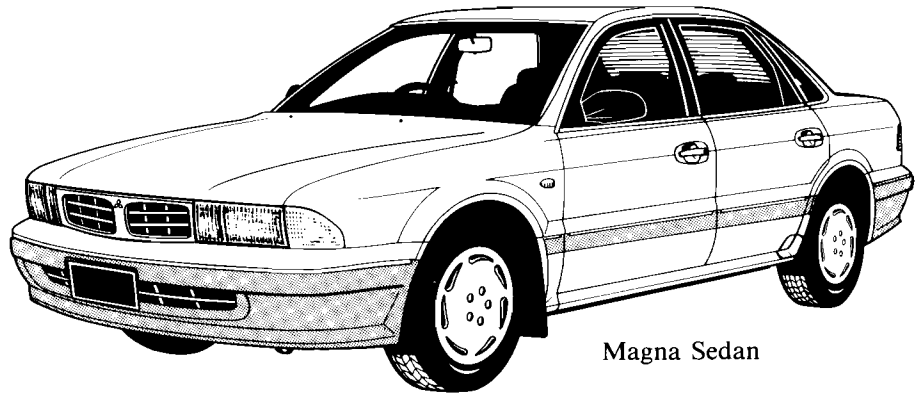


Verada Sedan

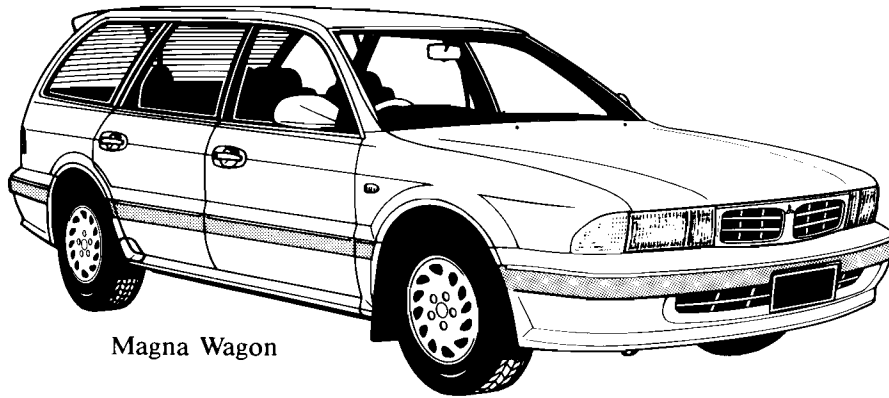


Verada Wagon

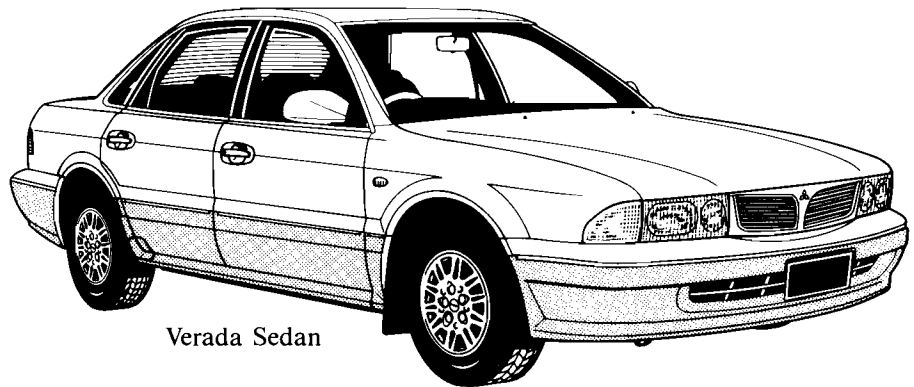
SECTION 2 — VEHICLE SPECIFICATIONS <S Series>



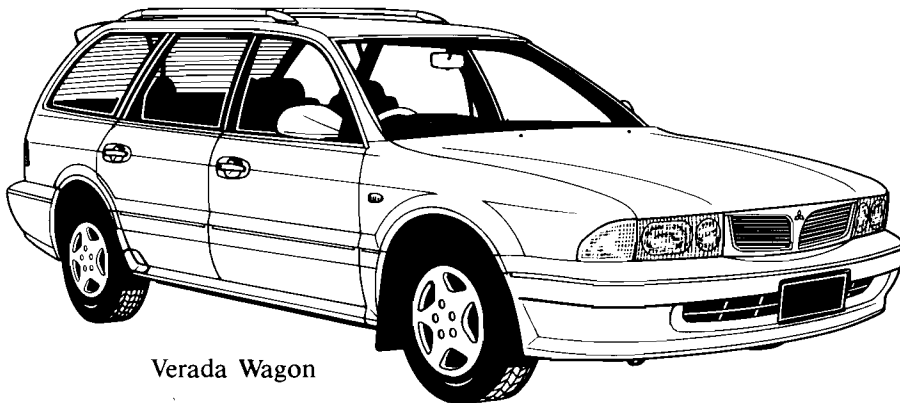
Magna Sedan



Magna Wagon



Verada Sedan



Verada Wagon

MODEL IDENTIFICATION < R Series >**Australia**

Model Name	Model Code	Body Type	Engine Type	Transaxle	Price Line
Magna GLX	TR1-H-41	Sedan	2.6L Carby	5 speed manual	GLX
Magna GLX	TR2-H-41	Sedan	2.6L Carby	4 speed automatic	GLX
Magna Executive	TR3-D-41	Sedan	2.6L ECI-Multi	5 speed manual	Executive
Magna Executive	TR4-D-41	Sedan	2.6L ECI-Multi	4 speed automatic	Executive
Magna SE	TR3-P-41	Sedan	2.6L ECI-Multi	5 speed manual	SE
Magna SE	TR4-P-41	Sedan	2.6L ECI-Multi	4 speed automatic	SE
Magna Elite	TR4-X-41	Sedan	2.6L ECI-Multi	4 speed automatic	Elite
Magna Executive	TR5-D-41	Sedan	3.0L ECI-Multi	5 speed manual	Executive
Magna Executive	TR6-D-41	Sedan	3.0L ECI Multi	4 speed automatic	Executive
Verada V6Ei	KR8-P-41	Sedan	3.0L ECI-Multi	4 speed automatic	V6Ei
Verada V6Xi	KR8-X-41	Sedan	3.0L ECI-Multi	4 speed automatic	V6Xi
Magna GLX	TR1-H-45	Wagon	2.6L Carby	5 speed manual	GLX
Magna GLX	TR2-H-45	Wagon	2.6L Carby	4 speed automatic	GLX
Magna Executive	TR3-D-45	Wagon	2.6L ECI-Multi	5 speed manual	Executive
Magna Executive	TR4-D-45	Wagon	2.6L ECI-Multi	4 speed automatic	Executive
Magna SE	TR3-P-45	Wagon	2.6L ECI-Multi	5 speed manual	SE
Magna SE	TR4-P-45	Wagon	2.6L ECI-Multi	4 speed automatic	SE
Magna Executive	TR5-D-45	Wagon	3.0L ECI-Multi	5 speed manual	Executive
Magna Executive	TR6-D-45	Wagon	3.0L ECI-Multi	4 speed automatic	Executive
Verada V6Ei	KR8-P-45	Wagon	3.0L ECI-Multi	4 speed automatic	V6 Ei

New Zealand

Model Name	Model Code	Body Type	Engine Type	Transaxle	Price Line
Magna GLX	TR7-D-41	Sedan	2.6L ECI-Multi	5 speed manual	GLX
Magna GLX	TR8-D-41	Sedan	2.6L ECI-Multi	4 speed automatic	GLX
Magna Super Saloon	TR7-P-41	Sedan	2.6L ECI-Multi	5 speed manual	Super Saloon
Magna Super Saloon	TR8-P-41	Sedan	2.6L ECI-Multi	4 speed automatic	Super Saloon
V3000 Executive	KR5-D-41	Sedan	3.0L ECI-Multi	5 speed manual	Executive
V3000 Executive	KR6-D-41	Sedan	3.0L ECI-Multi	4 speed automatic	Executive
V3000 Super Saloon	KR6-P-41	Sedan	3.0L ECI-Multi	4 speed automatic	Super Saloon
V3000 SEi	KR6-X-41	Sedan	3.0L ECI-Multi	4 speed automatic	SEi
Magna GLX	TR7-H-45	Wagon	2.6L ECI-Multi	5 speed manual	GLX
Magna GLX	TR8-H-45	Wagon	2.6L ECI-Multi	4 speed automatic	GLX
V3000 Executive	KR5-D-45	Wagon	3.0L ECI-Multi	5 speed manual	Executive
V3000 Executive	KR6-D-45	Wagon	3.0L ECI-Multi	4 speed automatic	Executive
V3000 Elite	KR6-P-45	Wagon	3.0L ECI-Multi	4 speed automatic	Elite

Papua New Guinea, Brunei & Fiji

Model Name	Model Code	Body Type	Engine Type	Transaxle	Price Line
Magna Executive	TR7-D-41	Sedan	2.6L ECI-Multi	5 speed manual	Executive
Magna Executive	TR8-D-41	Sedan	2.6L ECI-Multi	4 speed automatic	Executive
Magna SE	TR7-P-41	Sedan	2.6L ECI-Multi	5 speed manual	SE
Magna SE	TR8-P-41	Sedan	2.6L ECI-Multi	4 speed automatic	SE
Magna Elite	TR8-X-41	Sedan	2.6L ECI-Multi	4 speed automatic	Elite
Verada Ei	KR6-P-41	Sedan	3.0L ECI-Multi	4 speed automatic	Ei
Verada Xi	KR6-X-41	Sedan	3.0L ECI-Multi	4 speed automatic	Xi
Magna Executive	TR7-D-45	Wagon	2.6L ECI-Multi	5 speed manual	Executive
Magna Executive	TR8-D-45	Wagon	2.6L ECI Multi	4 speed automatic	Executive
Magna SE	TR7-P-45	Wagon	2.6L ECI-Multi	5 speed manual	SE
Magna SE	TR8-P-45	Wagon	2.6L ECI-Multi	4 speed automatic	SE
Verada Ei	KR6-P-45	Wagon	3.0L ECI-Multi	4 speed automatic	V6 Ei

MODEL IDENTIFICATION <S Series>**Australia**

Model Name	Model Code	Body Type	Engine Type	Transaxle	Price Line
Magna GLX	TS1-H-41	Sedan	2.6L Carby	5 speed manual	GLX
Magna GLX	TS2-H-41	Sedan	2.6L Carby	4 speed automatic	GLX
Magna Executive	TS3-D-41	Sedan	2.6L ECI-Multi	5 speed manual	Executive
Magna Executive	TS4-D-41	Sedan	2.6L ECI-Multi	4 speed automatic	Executive
Magna SE	TS3-P-41	Sedan	2.6L ECI-Multi	5 speed manual	SE
Magna SE	TS4-P-41	Sedan	2.6L ECI-Multi	4 speed automatic	SE
Magna SE	TS6-P-41	Sedan	3.0L ECI-Multi	4 speed automatic	SE
Magna Executive	TS5-D-41	Sedan	3.0L ECI-Multi	5 speed manual	Executive
Magna Executive	TS6-D-41	Sedan	3.0L ECI-Multi	4 speed automatic	Executive
Verada V6Ei	KS8-P-41	Sedan	3.0L ECI-Multi	4 speed automatic	V6Ei
Verada V6Xi	KS8-X-41	Sedan	3.0L ECI-Multi	4 speed automatic	V6Xi
Magna GLX	TS1-H-45	Wagon	2.6L Carby	5 speed manual	GLX
Magna GLX	TS2-H-45	Wagon	2.6L Carby	4 speed automatic	GLX
Magna Executive	TS3-D-45	Wagon	2.6L ECI-Multi	5 speed manual	Executive
Magna Executive	TS4-D-45	Wagon	2.6L ECI-Multi	4 speed automatic	Executive
Magna SE	TS3-P-45	Wagon	2.6L ECI-Multi	5 speed manual	SE
Magna SE	TS4-P-45	Wagon	2.6L ECI-Multi	4 speed automatic	SE
Magna SE	TS6-P-45	Wagon	3.0L ECI-Multi	4 speed automatic	SE
Magna Executive	TS5-D-45	Wagon	3.0L ECI-Multi	5 speed manual	Executive
Magna Executive	TS6-D-45	Wagon	3.0L ECI-Multi	4 speed automatic	Executive
Verada V6Ei	KS8-P-45	Wagon	3.0L ECI-Multi	4 speed automatic	V6Ei

New Zealand

Model Name	Model Code	Body Type	Engine Type	Transaxle	Price Line
Magna GLX	TS7-D-41	Sedan	2.6L ECI-Multi	5 speed manual	GLX
Magna GLX	TS8-D-41	Sedan	2.6L ECI-Multi	4 speed automatic	GLX
Magna Super Saloon	TS7-P-41	Sedan	2.6L ECI-Multi	5 speed manual	Super Saloon
Magna Super Saloon	TS8-P-41	Sedan	2.6L ECI-Multi	4 speed automatic	Super Saloon
V3000 Executive	KS5-D-41	Sedan	3.0L ECI-Multi	5 speed manual	Executive
V3000 Executive	KS6-D-41	Sedan	3.0L ECI-Multi	4 speed automatic	Executive
V3000 Super Saloon	KS6-P-41	Sedan	3.0L ECI-Multi	4 speed automatic	Super Saloon
V3000 SEi	KS6-X-41	Sedan	3.0L ECI-Multi	4 speed automatic	SEi
Magna GLX	TS7-H-45	Wagon	2.6L ECI-Multi	5 speed manual	GLX
Magna GLX	TS8-H-45	Wagon	2.6L ECI-Multi	4 speed automatic	GLX
V3000 Executive	KS5-D-45	Wagon	3.0L ECI-Multi	5 speed manual	Executive
V3000 Executive	KS6-D-45	Wagon	3.0L ECI-Multi	4 speed automatic	Executive
V3000 Elite	KS6-P-45	Wagon	3.0L ECI-Multi	4 speed automatic	Elite

Papua New Guinea, Brunei & Fiji

Model Name	Model Code	Body Type	Engine Type	Transaxle	Price Line
Magna Executive	TS7-D-41	Sedan	2.6L ECI-Multi	5 speed manual	Executive
Magna Executive	TS8-D-41	Sedan	2.6L ECI-Multi	4 speed automatic	Executive
Magna SE	TS7-P-41	Sedan	2.6L ECI-Multi	5 speed manual	SE
Magna SE	TS8-P-41	Sedan	2.6L ECI-Multi	4 speed automatic	SE
Magna Elite	TS8-X-41	Sedan	2.6L ECI-Multi	4 speed automatic	Elite
Verada Ei	KS6-P-41	Sedan	3.0L ECI-Multi	4 speed automatic	Ei
Verada Xi	KS6-X-41	Sedan	3.0L ECI-Multi	4 speed automatic	Xi
Magna Executive	TS7-D-45	Wagon	2.6L ECI-Multi	5 speed manual	Executive
Magna Executive	TS8-D-45	Wagon	2.6L ECI Multi	4 speed automatic	Executive
Magna SE	TS7-P-45	Wagon	2.6L ECI-Multi	5 speed manual	SE
Magna SE	TS8-P-45	Wagon	2.6L ECI-Multi	4 speed automatic	SE
Verada Ei	KS6-P-45	Wagon	3.0L ECI-Multi	4 speed automatic	Ei

South East Asia

Model Name	Model Code	Body Type	Engine Type	Transaxle	Price Line
Sigma	KS2-X-41	Sedan	3.0L ECI-Multi	4 speed automatic	Xi
Sigma	KS2-X-45	Wagon	3.0L ECI-Multi	4 speed automatic	Ei

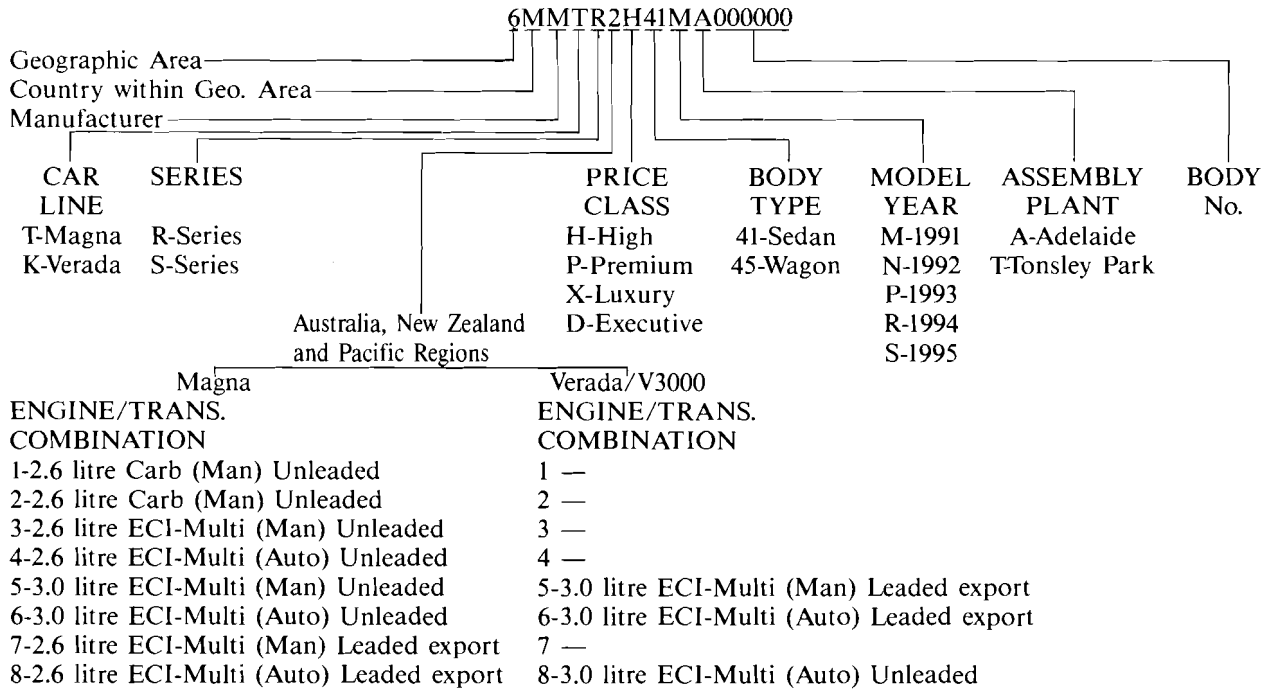
OPTIONAL EQUIPMENT CODES

Code No.	Equipment Description
A03	Supplementary Restraint System (SRS)
A13	Luxury Pack
A15	Luxury Pack
A26	Luxury Pack
B14	ABS Brakes
C34	Seat Height Adjuster
D66	5 speed Manual Transaxle — F5M31 (4 Cylinder Models)
D67	4 speed Automatic Transaxle — F4A23 (Carburettor Models)
D68	4 speed Automatic Transaxle — F4A33 (ECI-Multi 4 Cylinder Models)
D69	4 speed Automatic Transaxle — F4A33 (V6 ECI-Multi Models)
D78	5 speed Manual Transaxle — F5M33 (V6 ECI-Multi Models)
E02	3.0 litre V6 Engine (ECI-Multi Version)
E24 (Export)	2.6 litre Engine (ECI-Multi Leaded Fuel)
E25 (Export)	3.0 litre V6 Engine (ECI-Multi Leaded Fuel)
E55	2.6 litre Engine (Carburettor Version)
E48	2.6 litre Engine (ECI-Multi Version)
E49	3.0 litre V6 Engine (ECI-Multi Version)
G39	Sunroof
H50	Air Conditioning — M.M.A.L. Fitment
H57	Auto Air Conditioning
J14	Roof Rack
J30	Cruise Control
*K20	Police Vehicle
R17	CD Player
V03	Monotone Paint
V20	Metallic Paint
V21	Pearlescent Paint
V98	Cargo Compartment Blind (Wagon)
W37	Cast Alloy Wheels
W44	Cast Alloy Wheels and Tyres
X27	Export Vehicle Leaded Fuel Magna
X30	Export Vehicle Brunei
X62	Export Vehicle New Zealand
X66	Export Vehicle New Zealand Police
X67	Export Vehicle New Zealand Police
X71	Export Vehicle Fiji
*Y06	Rear Bumper Protector
*Y14	Sun Visor Rear — Exterior
*Y19	Sun Visor (Blade)
Y25	Fuel Cap (locking)
*Y26	Sun Visor (Mesh)
*Y27	Door Weathershield
*Y29	Radiator Insect Screen
*Y31	Fire Extinguisher
*Y34	Mudflaps — rear
*Y44	Cargo Barrier
Y50	Weathershield (LH Door)
*Y51	Air Conditioning — M.M.A.L. Fitment
*Y52	Air Conditioning — Dealer Fitment
*Y54	Air Conditioner — Vendor Fitment
*Y57	Rubber Floor Mats (Front and Rear)
*Y58	Rubber Floor Mats (Front Only)
*Y63	Additional Set of Keys
*Y64	Roof Rack
*Y69	Headlamp Protectors
*Y71	Rear Window Louvre
*Y86	Towbar Package — 1200 kg (Manual)
*Y90	Towbar package — 1200 kg (Automatic)
*Y91	Rear Window Blind — Internal
*Y92	Bonnet Protector
*Y93	Rear Window Venetian (Internal)
*Y94	Side Window Venetian (Internal)
Z45	Cargo Barrier — Wagon
*Z46	Roof Ladder Rack

*Government and Fleet Orders only.

VEHICLE IDENTIFICATION NUMBER (V.I.N.)

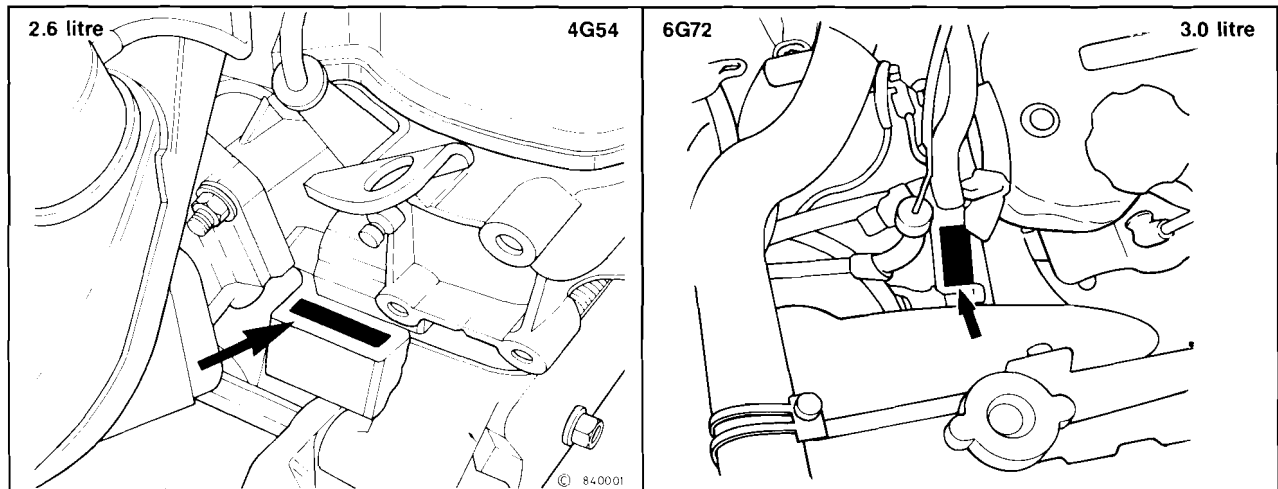
This number is stamped on the plenum chamber above the Data Plate and also on the compliance plate. It supplies information for vehicle identification purposes and should be quoted when ordering parts or in any correspondence related to the vehicle.



ENGINE NUMBER LOCATION

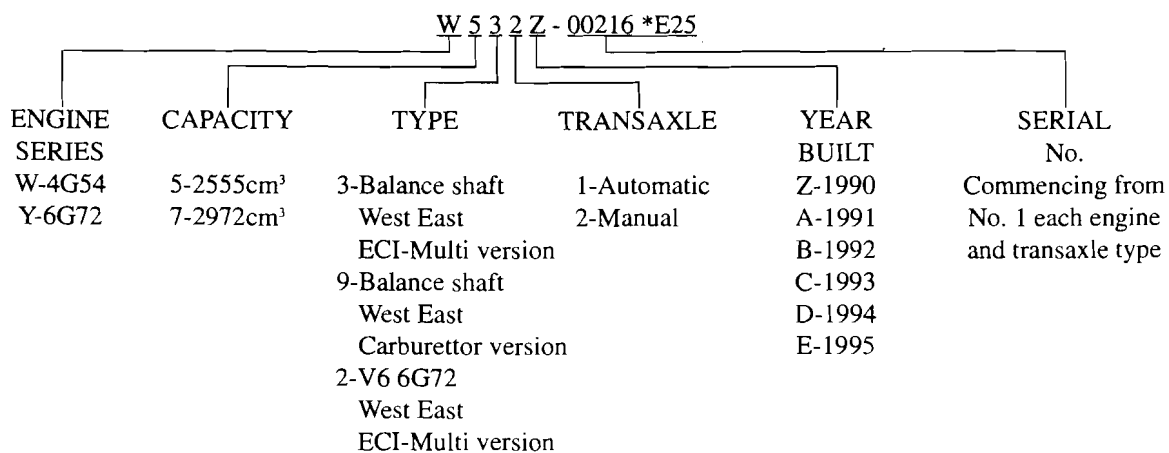
Location

The engine number is stamped on the right hand front, top edge of the cylinder block. Always quote the engine number when ordering engine replacement parts.



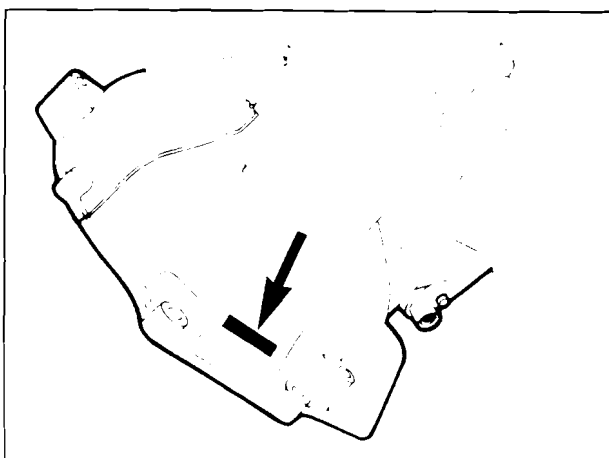
Engine number locations

ENGINE NUMBER IDENTIFICATION

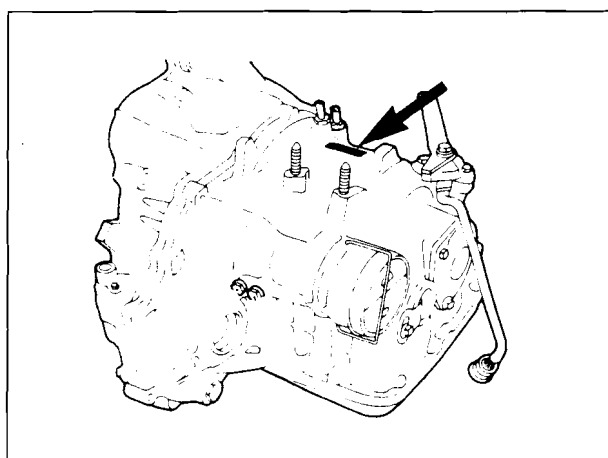


*Where special engines (for export models) are built, the engine option code will be stamped in this position.

TRANSAXLE SERIAL NUMBER LOCATION




Manual transaxle serial number



Automatic transaxle serial number (typical)

DATA PLATE

SOA No.:		BUILT:	
PAINT	BODY	*	
TRIM			
OPTIONS			
USE GENUINE MITSUBISHI PARTS			
 MITSUBISHI MOTORS AUSTRALIA LTD. <small>ABST. CO. INC. 001 870 399</small>		ALL CORRESPONDENCE MUST QUOTE V.I.N. SHOWN ON COMPLIANCE PLATE AS WELL AS INFORMATION ABOVE	

The Data Plate is attached to the right hand side of the plenum chamber (adjacent to the compliance plate) in the engine compartment and is stamped with vehicle option codes, trim codes and a daily body sequential build number.

*Body sequential build number

In all correspondence related to a vehicle or when purchasing spare parts, the following information should be quoted:

- The engine number
- The VIN code.
- The trim code.
- The paint code.
- The option code/s.

KERB MASS (Estimated)**Australian Models**

Sedan Model Code	R Series Mass Kg	S Series Mass Kg	Wagon Model Code	R Series Mass Kg	S Series Mass Kg
TR/TS1-H-41	1335	1360	TR/TS1-H-45	1428	1454
TR/TS2-H-41	1357	1382	TR/TS2-H-45	1442	1468
TR/TS3-D-41	1347	1375	TR/TS3-D-45	1443	1469
TR/TS4-D-41	1384	1406	TR/TS4-D-45	1476	1502
TR/TS3-P-41	1380	1389	TR/TS3-P-45	1482	1496
TR/TS4-P-41	1420	1428	TR/TS4-P-45	1516	1530
TR4-X-41	1427	—	TR/TS5-D-45	1459	1520
TR/TS5-D-41	1370	1430	TR/TS6-D-45	1495	1556
TR/TS6-D-41	1407	1466	KR/KS8-P-45	1563	1595
KR/KS8-P-41	1472	1446			
KR/KS8-X-41	1521	1480			

New Zealand Models

Sedan Model Code	R Series Mass Kg	S Series Mass Kg	Wagon Model Code	R Series Mass Kg	S Series Mass Kg
TR/TS7-D-41	1349	1345	TR/TS7-H-45	1438	1440
TR/TS8-D-41	1386	1376	TR/TS8-H-45	1471	1473
TR/TS8-P-41	1419	1423	KR/KS5-D-45	1488	1456
KR/KS5-D-41	1379	1368	KR/KS6-D-45	1522	1492
KR/KS6-D-41	1416	1404	KR/KS6-P-45	1555	1537
KR/KS6-P-41	1452	1443			
KR/KS6-X-41	1529	1530			

Papua New Guinea, Brunei & Fiji Models

Sedan Model Code	R Series Mass Kg	S Series Mass Kg	Wagon Model Code	R Series Mass Kg	S Series Mass Kg
TR/TS7-D-41	1374	1373	TR/TS7-D-45	1469	1469
TR/TS8-D-41	1411	1404	TR/TS8-D-45	1502	1498
TR/TS8-P-41	1427	1428	TR/TS7-P-45	1490	1561
KR/KS6-P-41	1479	1490	TR/TS8-P-45	1524	1525
KR/KS6-X-41	1521	1535	KR/KS6-P-45	1571	1561

NOTE: Kerb mass as specified is with no load, full fuel tank, oil, water etc. Tolerance is $\pm 2\%$.

OPTIONAL EQUIPMENT MASS (Estimated)

	Kg
A03 — Supplemental Restraint System	+ 9.3
A13 — Luxury Pack	+ 7.0
H50 — Air conditioning	+ 23.0
W37 — Cast alloy wheels	- 11.0
B14 — ABS brakes	+ 25.0

NOTE: The mass quoted for factory approved options is not the actual mass of the option, but the difference in mass between the standard vehicle and one fitted with the option.

Some items listed as options on page 00-2-5 may be fitted as standard equipment. When this is the case the mass of that equipment is included in the kerb mass quoted above.

GENERAL SPECIFICATIONS

Front Suspension Independent McPherson strut type with A-arms and stabiliser bar

Brakes

Type— front — 14"..... 256 mm x 24 mm ventilated disc with BCI single piston, sliding caliper
 — front — 15"..... 276 mm x 24 mm ventilated disc with BCI single piston, sliding caliper
 — rear (All) 258 mm x 10.4 mm solid disc with BCI single piston, sliding caliper
 Master cylinder BCI tandem master cylinder with integral proportioning valves and "fast fill" system
 Vacuum booster BCI 205/180 mm dual diaphragm "Master Vac". Ratio 5:1
 Park brake..... Cable operated on rear wheels, drum in disc

Clutch

Type Hydraulically actuated single dry disc with diaphragm type pressure plate
 Clutch disc diameter 225 mm

Engine

Type	OHC 4 cylinder in line, with counter-balance shafts	OHC/OHV/VIV — V6
Model.....	4G54	6G72 V6
Displacement	2555 cc	2972 cc
Bore	91.10 mm	91.1 mm
Stroke.....	98.00 mm	76.0 mm
Compression ratio — ECI-Multi	9.2:1	10:1
— Carburettor.....	8.8:1	

Fuel System

Type — carburettor models Mikuni resin body carburettor with low pressure, in-tank electric fuel pump
 fuel injection models Electronically controlled "multi point" injection system with high pressure, in-tank electric fuel pump

Rear Suspension (Sedan) 3 link torsion axle with coil springs
(Wagon) 5 link tubular axle with coil springs and lateral rod

Steering

Type Rack and pinion power assisted with collapsible steering column
 Ratio 17:1
 Turns lock to lock 3.09

Manual Transaxle

Model — 4 cylinder models F5M31-2-RPKJ 25 tooth splined drive shafts
 — V6 models F5M33-2-SNQJ 27 tooth splined drive shafts
 — New Zealand V6 models F5M33-2-SNZJ 25 tooth splined drive shafts
 Type Cable operated 5 speed, with synchromesh on all gears

Automatic Transaxle

Model — carburettor 4 cylinder models F4A23-2-LPN — 25 tooth splined drive shafts
 — fuel injection 4 cylinder models F4A33-1-MPN1 — 25 tooth splined drive shafts
 — fuel injection 4 cylinder models F4A33-1-MPP1 — 27 tooth splined drive shafts
 — fuel injection 4 cylinder models F4A33-1-MPP2 — 27 tooth splined drive shafts
 — fuel injection 4 cylinder models F4A33-1-MPQ1 — 27 tooth splined drive shafts
 — fuel injection V6 models F4A33-1-MNN6 — 25 tooth splined drive shafts
 — fuel injection V6 models F4A33-1-MNP6 — 27 tooth splined drive shafts
 — fuel injection V6 models F4A33-1-MNP9 — 27 tooth splined drive shafts
 — fuel injection V6 models F4A33-1-MNQ3 — 27 tooth splined drive shafts

Gear Ratios

	Manual Transaxle			Automatic Transaxle	
	(4 Cylinder)	(V6 ECI-Multi)	(Carburettor)	(ECI-Multi)	(V6 ECI-Multi)
	F5M31-2-RPKJ	*F5M33-2-SNQJ 5M33-2-SNZJ	F4A23-2-LPN	*F4A33-1-MNPQ1 F4A33-1-MPP2 *F4A33-1-MPP1 F4A33-1-MPN1	*F4A33-1-MNQ3 *F4A33-1-MNP9 *F4A33-1-MNP6 F4A33-1-MNN6
1st	3.166:1	3.090:1	2.551:1	←	←
2nd	1.833:1	1.833:1	1.488:1	←	←
3rd	1.240:1	1.217:1	1.000:1	←	←
4th	0.896:1	0.888:1	0.685:1	←	←
5th	0.666:1	0.741:1	—	—	—
Reverse	3.166:1	3.166:1	2.176:1	←	←
Transfer gear	1.192:1	1.208:1	1.125:1	1.228:1	←
Differential ratio	3.411:1	3.437:1	3.466:1	3.222:1	←
Final gear ratios	4.068:1	4.153:1	3.900:1	3.958:1	←
Type		2 pinion, helical cut spur gear set			

***NOTE: Transaxle models marked * require 27 tooth splined drive shafts.**

Vehicle standing height

As measured from the wheel centre to wheel arch.

	Front	Rear
Sedan and Wagon (All models)	406 ± 10 mm	382 ± 10 mm
KR Sedan (with ECS)	396 ± 5 mm	367 ± 5 mm

SECTION 3 — SERVICE INFORMATION

PROTECTING THE VEHICLE

- When performing maintenance or repair operations use suitable covers to prevent damage to paint and interior trim.
- If high pressure or steam cleaning equipment is being used to wash the vehicle, the spray nozzle should be positioned a **MINIMUM** of 300 mm from any plastic components and all opening parts, e.g. doors, deck lid etc.
- Although the paint surface will resist damage, any oil, brake fluid or petrol spills should be cleaned up as soon as possible to prevent discolouration.

SPECIAL TOOLS

Special tools are developed to prevent component damage during assembly/disassembly procedures and to reduce the possibility of operator injury.

It is therefore recommended that special tools are used whenever they are available for a particular operation.

NON RE-USABLE PARTS

If any of the parts listed below are removed, they must be replaced with new parts:

- Oil seals
- Gaskets (except rocker cover)
- O-rings
- D-rings
- Lock washers
- Split pins
- Self-locking nuts

RUBBER/PLASTIC COMPONENTS

Avoid spilling petrol, oil, solvents, brake fluid etc. on plastic and rubber components, as this may lead to deterioration of the component.

METRIC FASTENERS

The vehicles covered in this Service Manual are in most instances, fitted with metric fasteners. The only exceptions are seat belt and child restraint anchorages, in these applications Imperial fasteners, conforming to Australian Design Rules and International Standards, are used.

ELECTRICAL SYSTEM SERVICE PRECAUTIONS

When performing any repair work on the electrical system always disconnect the negative cable from the battery.

CAUTION: Before connecting or disconnecting the negative cable, ensure that the ignition and lighting switches are turned OFF. Failure to do this may result in damage to electronic components incorporated in same equipment.

Wiring Connectors

- When uncoupling a connector, pull on the connector **NOT** the harness.

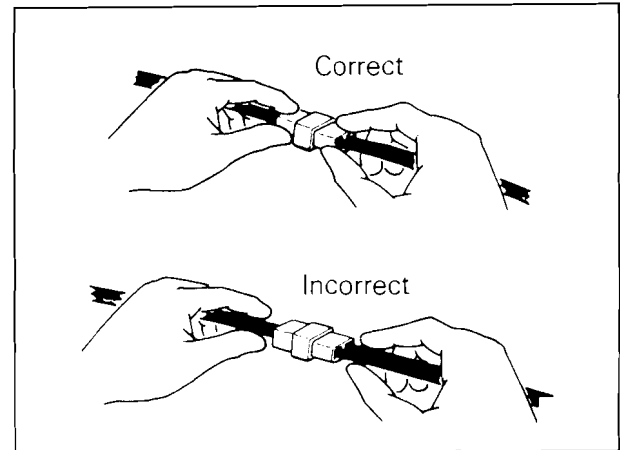


Fig. 1—Disconnecting wiring harness

- To uncouple a connector with a catch, press in the direction of the arrows shown in Fig. 2.

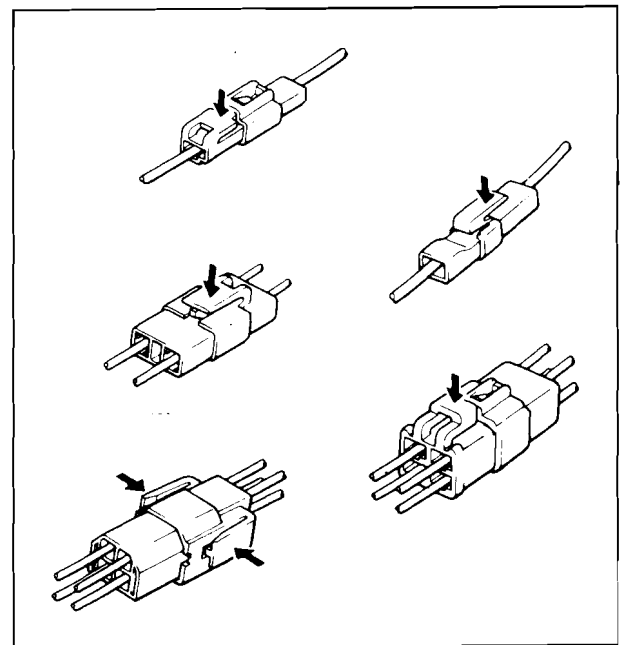


Fig. 2—Uncoupling connectors

- When coupling a connector with a catch insert the connectors until they “snap”.

Wiring Harness Routing

- Wiring harnesses, with the exception of those connected to the engine and transaxle, should be routed and clamped so that there is no slack in the harness.
- If a harness mounting identification mark is visible on a harness, the harness should be clamped at that point.