

INTRODUCTION

	Page
HOW TO USE THIS MANUAL	IN-2
IDENTIFICATION INFORMATION	IN-4
GENERAL REPAIR INSTRUCTIONS	IN-4
PRECAUTIONS FOR VEHICLES EQUIPPED WITH A CATALYTIC CONVERTER	IN-7
VEHICLE LIFT AND SUPPORT LOCATIONS	IN-8
ABBREVIATIONS USED IN THIS MANUAL	IN-9

IN

HOW TO USE THIS MANUAL

To assist in finding your way through the manual, the Section Title and major heading are given at the top of every page.

An **INDEX** is provided on the first page of each section to guide you to the item to be repaired.

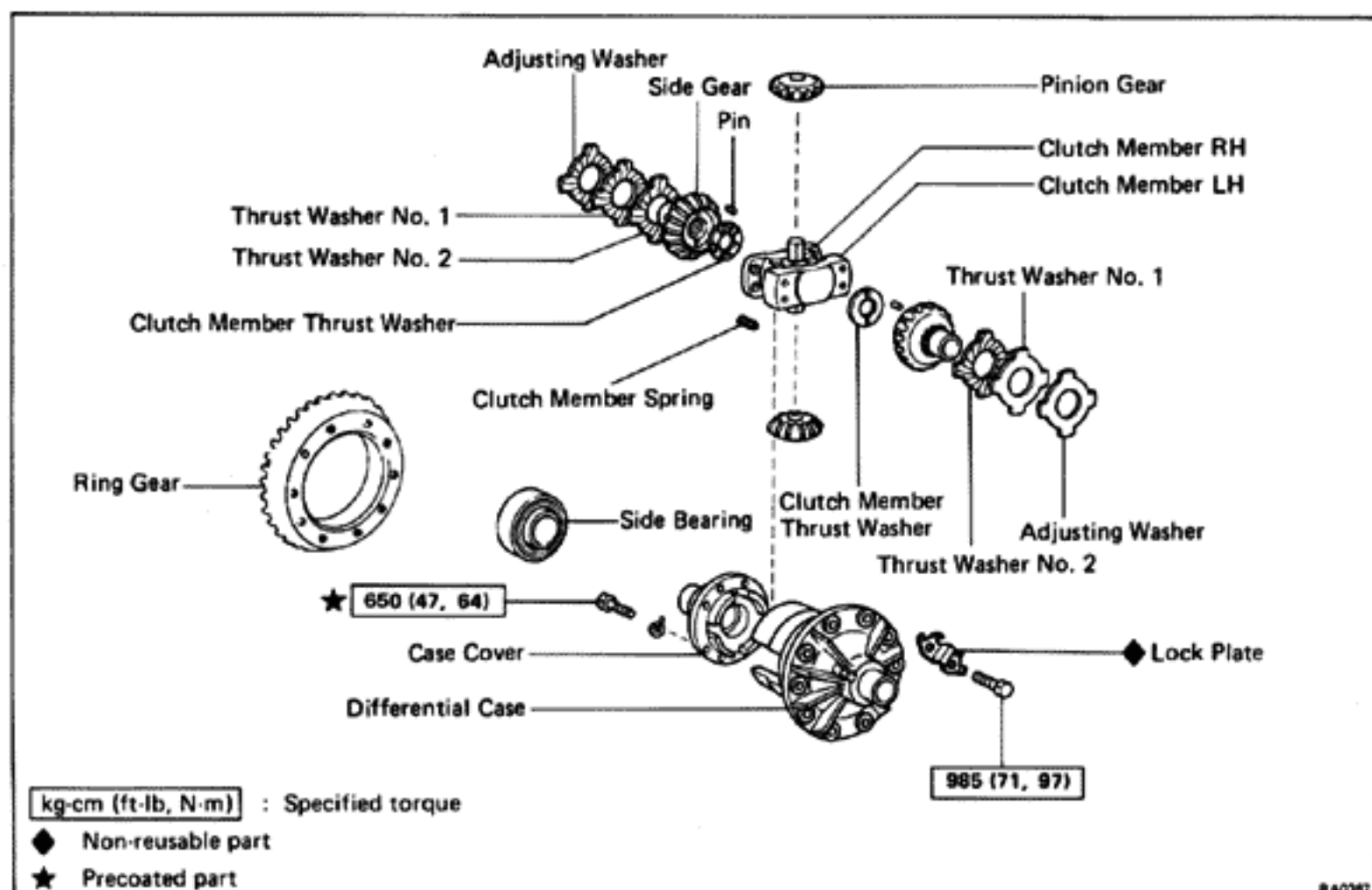
At the beginning of each section, **PRECAUTIONS** are given that pertain to *all* repair operations contained in that section. *Read these precautions before starting any repair task.*

TROUBLESHOOTING tables are included for each system to help you diagnose the system problem and find the cause. The repair for each possible cause is referenced in the remedy column to quickly lead you to the solution.

REPAIR PROCEDURES

Most repair operations begin with an overview illustration. It identifies the components and shows how the parts fit together.

Example:



The procedures are presented in a step-by-step format:

- The photo or illustration shows *what* to do and *where* to do it.
- The task heading tells *what* to do.
- The detailed text tells *how* to perform the task and gives other information such as specifications and warnings.

Example:

Task heading: what to do

21. CHECK PISTON STROKE OF OVERDRIVE BRAKE

- (a) Place SST and a dial indicator onto the overdrive brake piston as shown in the figure.

SST 09350-30020 (09350-06120)

Set part No.

Component part No.

Detail text: how to do it

- (b) Measure the stroke applying and releasing the compressed air (4 – 8 kg/cm², 57 – 114 psi or 392 – 785 kPa) as shown in the figure.

Piston stroke: 1.40 – 1.70 mm (0.0551 – 0.0669 in.)

Specification

*Photograph or Illustration:
what to do and where*

This format provides the experienced technician with a FAST TRACK to the information needed. The upper case task heading can be read at a glance and only when necessary, the text below it provides detailed information. Important specifications and warnings always stand out in bold type.

REFERENCES

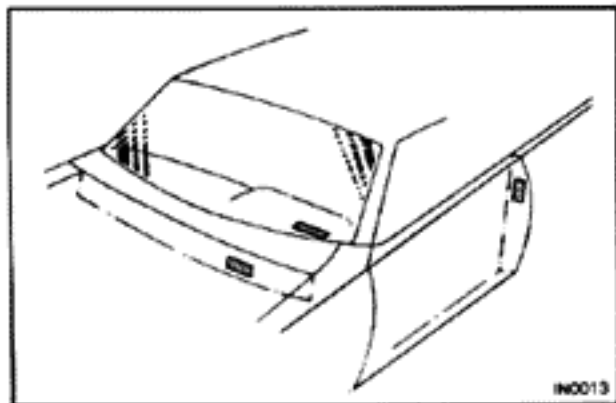
References have been kept to a minimum. However, when they are required you are given the page to go to.

SPECIFICATIONS

Specifications are presented in bold type throughout the text in the applicable step. You never have to leave the procedure to look up your specs. All specifications are also found in Appendix A, specifications, for quick reference.

WARNINGS, CAUTIONS, NOTES:

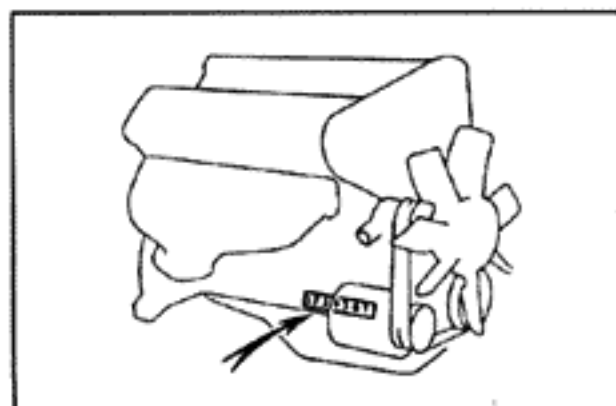
- **WARNINGS** are presented in bold type, and indicate there is a possibility of injury to you or other people.
- **CAUTIONS** are also presented in bold type, and indicate the possibility of damage to the components being repaired.
- **NOTES** are separated from the text but do not appear in bold. They provide additional information to help you efficiently perform the repair.



IDENTIFICATION INFORMATION

VEHICLE IDENTIFICATION NUMBER

The vehicle identification number is stamped on the cowl panel of the engine compartment. This number is also stamped on top of the instrument panel and the driver's door post.

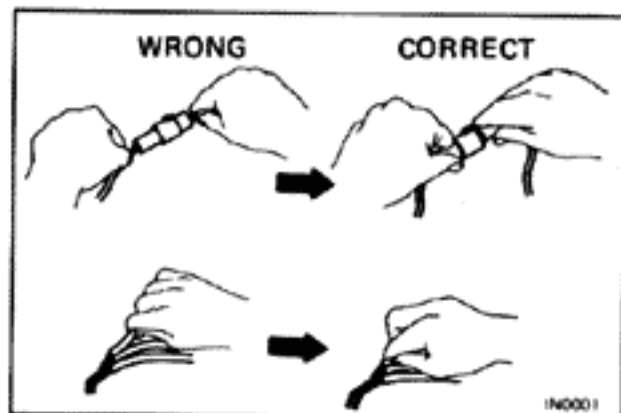


ENGINE SERIAL NUMBER

The engine serial number is stamped on the right side of the cylinder block.

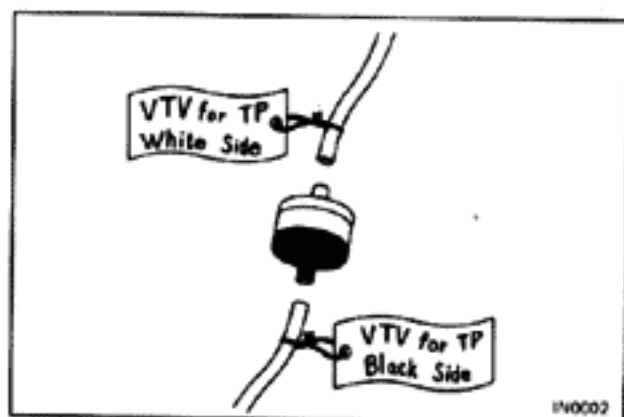
GENERAL REPAIR INSTRUCTIONS

1. Use fender seat and floor covers to keep the vehicle clean and prevent damage.
2. During disassembly, keep parts in order to facilitate re-assembly.
3. Observe the following:
 - (a) Before performing electrical work, disconnect the negative from the battery terminal.
 - (b) If it is necessary to disconnect the battery for inspection or repair, always disconnect the cable from the negative (–) terminal which is grounded to the vehicle body.
 - (c) To prevent damage to the battery terminal post, loosen the terminal nut and raise the cable straight up without twisting it or prying it.
 - (d) Clean the battery terminal posts and cable terminals with a shop rag. Do not scrape them with a file or other adrasive object.
 - (e) Install the cable terminal to the battery post with the nut loose, and tighten the nut after installation. Do not use a hammer to tap the terminal onto the post.
 - (f) Be sure the cover for the positive (+) terminal is properly in place.
4. Check hose and wiring connectors to make sure that they are secure and correct.



12. Observe the following precautions to avoid damage to the parts:

- (a) To disconnect vacuum hoses, pull on the end, not the middle of the hose.
- (b) To pull apart electrical connectors, pull on the connector itself, not the wires.
- (c) Be careful not to drop electrical components, such as sensors or relays. If they are dropped on a hard floor, they should be replaced and not reused.
- (d) When steam cleaning an engine, protect the distributor, coil, air filter, carburetor intake, air pump and VCV from water.
- (e) Never use an impact wrench to remove or install thermo switches or thermo sensors.
- (f) When checking continuity at the wire connector, insert the tester probe carefully to prevent terminals from bending.
- (g) When using a vacuum gauge, never force the hose onto a connector that is too large. Use a step-down adapter instead. Once the hose has been stretched, it may leak.

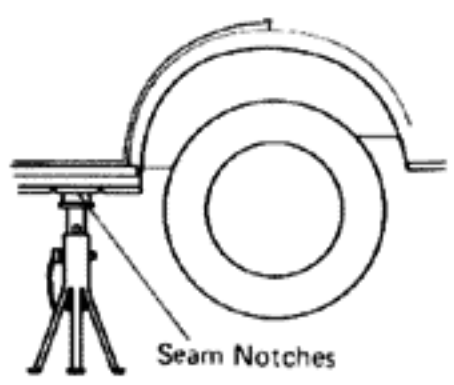
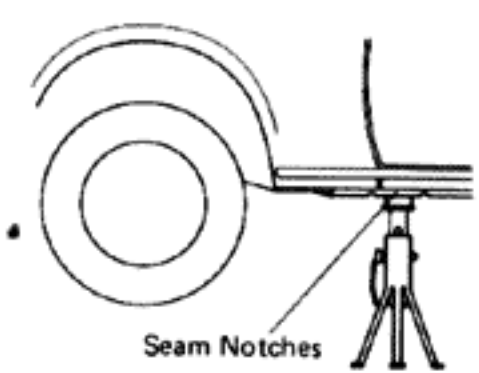
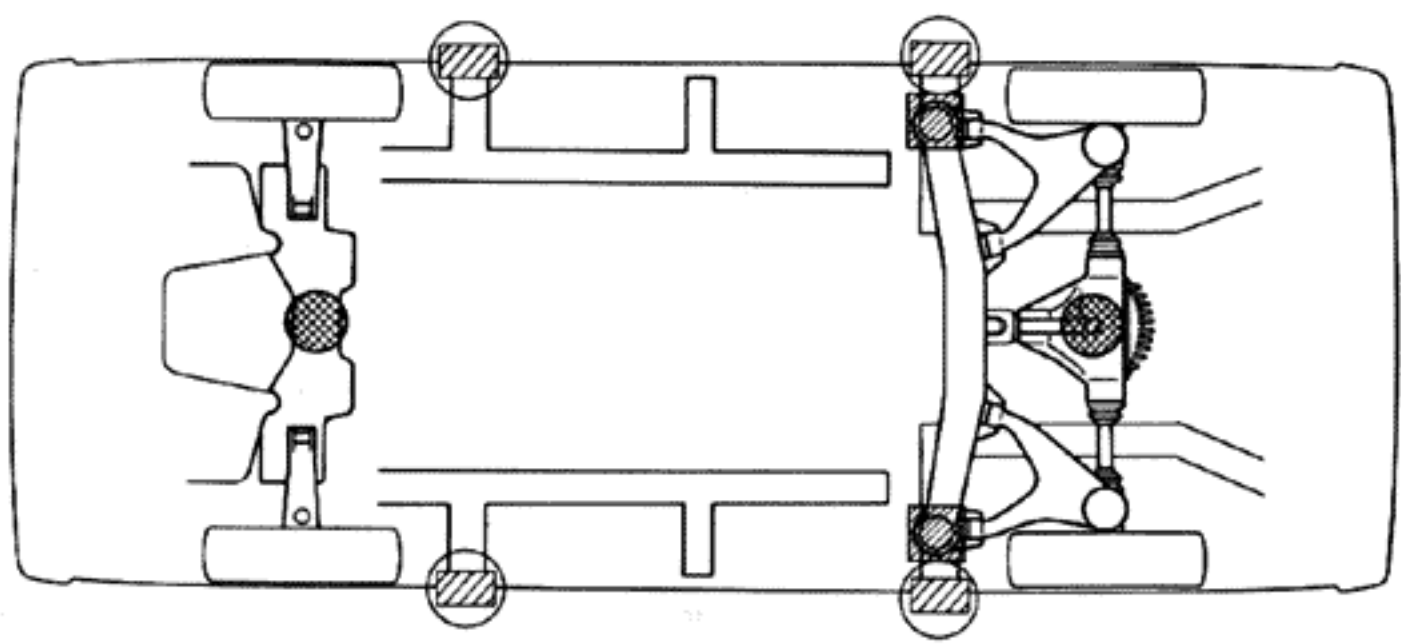


13. Tag hoses before disconnecting them:

- (a) When disconnecting vacuum hoses, use tags to identify how they should be reconnected.
- (b) After completing a job, double check that the vacuum hoses are properly connected. A label under the hood shows the proper layout.

VEHICLE LIFT AND SUPPORT LOCATIONS

← Front



- JACK POSITION** ————— ●
 - Front Center of crossmember
 - Rear Center of rear axle housing
- PANTOGRAPH JACK POSITION** ————— ○
- SUPPORT POSITION**
 - Safety stand ▨

ABBREVIATIONS USED IN THIS MANUAL

A/C	Air Conditioner
ALR	Automatic Locking Retractor
A/T, ATM	Automatic Transmission
ATF	Automatic Transmission Fluid
B ₀	Overdrive Brake
B ₁	No. 1 Brake
B ₂	No. 2 Brake
B ₃	No. 3 Brake
BDC	Bottom Dead Center
BTDC	Before Top Dead Center
BVSV	Bimetal Vacuum Switching Valve
C ₀	Overdrive Direct Clutch
C ₁	Front Clutch
C ₂	Rear Clutch
C/B	Circuit Breaker
DOHC	Double Over Head Cam
DP	Dash Pot
DVV	Double Vacuum Valve
ECT	Electronic Controlled Transmission
ECU	Electronic Controlled Unit
EFI	Electronic Fuel Injection
EGR	Exhaust Gas Recirculation
ELR	Emergency Locking Retractor
EPR	Evaporator Pressure Regulator
ESA	Electronic Spark Advance
ETR	Electronic Tuning Radio
EVAP	Evaporative (Emission Control)
EX	Exhaust (manifold, valve)
Ex.	Except
FL	Front Left
FR	Front Right
IG	Ignition
IN	Intake (manifold, valve)
IRS	Independent Rear Suspension
ISC	Idle Speed Control
LH	Left-hand
LHD	Left-hand Drive
LSD	Limited Slip Differential
MP	Multipurpose
M/T, MTM	Manual Transmission
OD	Overdrive
OPT	Option
O/S	Oversize
PCV	Positive Crankcase Ventilation
PS	Power Steering
RH	Right-hand
RL	Rear Left
RR	Rear Right
SED	Sedan
SSM	Special Service Materials
SST	Special Service Tools
STD	Standard
S/W	Switch
T/C	Torque Converter
TCCS	Toyota Computer Controlled System
TDC	Top Dead Center
TWC	Three-Way Catalyst
U/S	Undersize
VSV	Vacuum Switching Valve
w/	With
w/o	Without