

TOYOTA

REPAIR MANUAL SUPPLEMENT FOR CHASSIS & BODY

LAND CRUISER/ LAND CRUISER PRADO

**RZJ9_, VZJ9_ series
KZJ9_, LJ9_ series**

Jan., 1998

FOREWORD

This supplement has been prepared to provide information covering general service repairs for the chassis and body of the TOYOTA LAND CRUISER/LAND CRUISER PRADO which underwent changes in January, 1998.

Applicable models: RZJ90, 95 series
VZJ90, 95 series
KZJ90, 95 series
LJ90, 95 series

For the service specifications and repair procedures of the above model other than those listed in this supplement, refer to the following manuals.

Manual Name	Pub.No.
• LAND CRUISER/LAND CRUISER PRADO Chassis and Body Repair Manual	RM517E
• 3RZ-F, 3RZ-FE Engine Repair Manual	RM521E
• 5VZ-FE Engine Repair Manual	RM519E
• 1KZ-T Engine Repair Manual	RM353E
• 1KZ-T, 1KZ-TE Engine Repair Manual Supplement	RM522E
• 2L, 3L Engine Repair Manual	RM520E
• A343F Automatic Transmission Repair Manual	RM528E
• LAND CRUISER/LAND CRUISER PRADO Electrical Wiring Diagram	EWD269F
• LAND CRUISER/LAND CRUISER PRADO Electrical Wiring Diagram Supplement	EWD340F

All information in this manual is based on the latest product information at the time of publication. However, specifications and procedures are subject to change without notice.

TOYOTA MOTOR CORPORATION

CAUTION

This manual does not include all the necessary items about repair and service. This manual is made for the purpose of the use for the persons who have special techniques and certifications. In the cases that non-specialized or uncertified technicians perform repair or service only using this manual or without proper equipment or tool, that may cause severe injury to you or other people around and also cause damage to your customer's vehicle.

In order to prevent dangerous operation and damages to your customer's vehicle, be sure to follow the instruction shown below.

- Must read this manual thoroughly. It is especially important to have good understanding all the contents written in the PRECAUTION of "IN" section.
- The service method written in this manual is very effective to perform repair and service. When performing the operations following the procedures using this manual, be sure to use tools specified and recommended. If using non-specified or recommended tools and service method, be sure to confirm safety of the technicians and any possibility of causing personal injury or damage to the customer's vehicle before starting the operation.
- If part replacement is necessary, must replace the part with the same part number or equivalent part. Do not replace it with inferior quality.
- It is important to note that this manual contains various "Cautions" and "Notices" that must be carefully observed in order to reduce the risk of personal injury during service or repair, or the possibility that improper service or repair may damage the vehicle or render it unsafe. It is also important to understand that these "Cautions" and "Notices" are not exhaustive, because it is important to warn of all the possible hazardous consequences that might result from failure to follow these instructions.

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STEERING	SR
SUPPLEMENTAL RESTRAINT SYSTEM	RS
BODY ELECTRICAL	BE
BODY	BO
ALPHABETICAL INDEX	ID

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HOW TO USE THIS MANUAL

IN00U-10

GENERAL INFORMATION

1. INDEX

An INDEX is provided on the first page of each section to guide you to the item to be repaired. To assist you in finding your way through the manual, the Section Title and major heading are given at the top of every page.

2. GENERAL DESCRIPTION

At the beginning of each section, a General Description is given that pertains to all repair operations contained in that section.

Read these precautions before starting any repair task.

3. TROUBLESHOOTING

TROUBLESHOOTING tables are included for each system to help you diagnose the problem and find the cause. The fundamentals of how to proceed with troubleshooting are described on page IN-21.

Be sure to read this before performing troubleshooting.

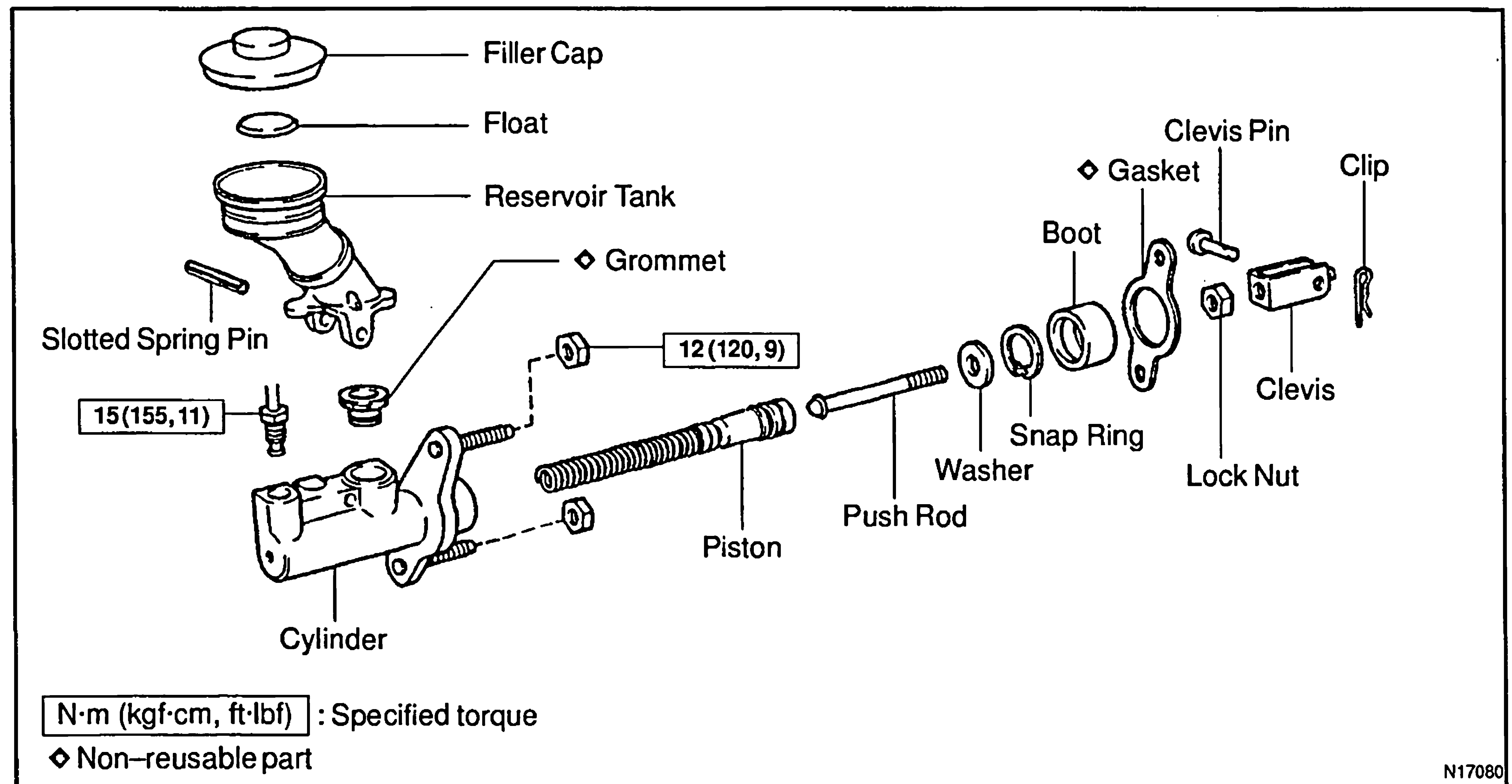
4. PREPARATION

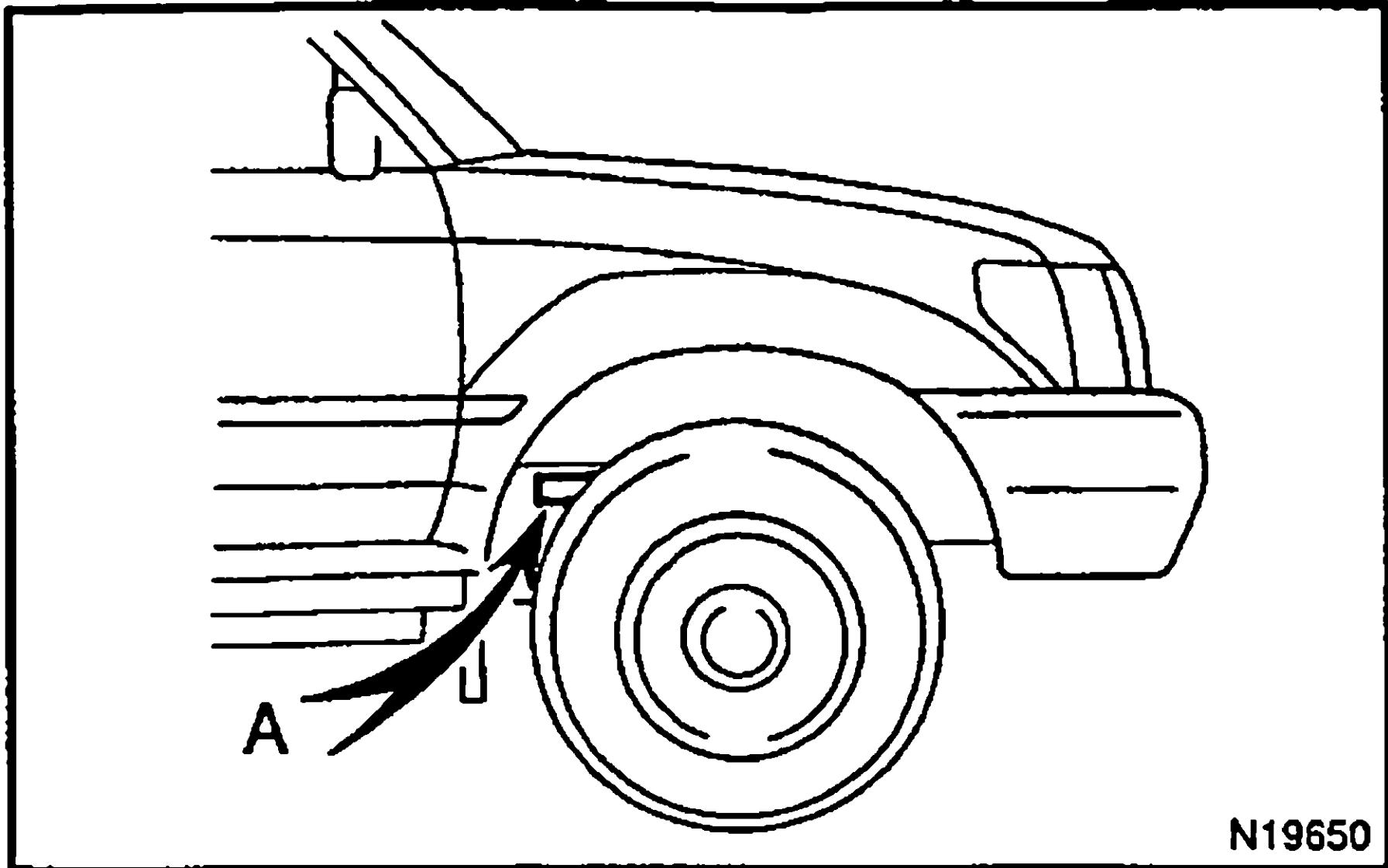
Preparation lists the SST (Special Service Tools), recommended tools, equipment, lubricant and SSM (Special Service Materials) which should be prepared before beginning the operation and explains the purpose of each one.

5. REPAIR PROCEDURES

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

Example:





IDENTIFICATION INFORMATION

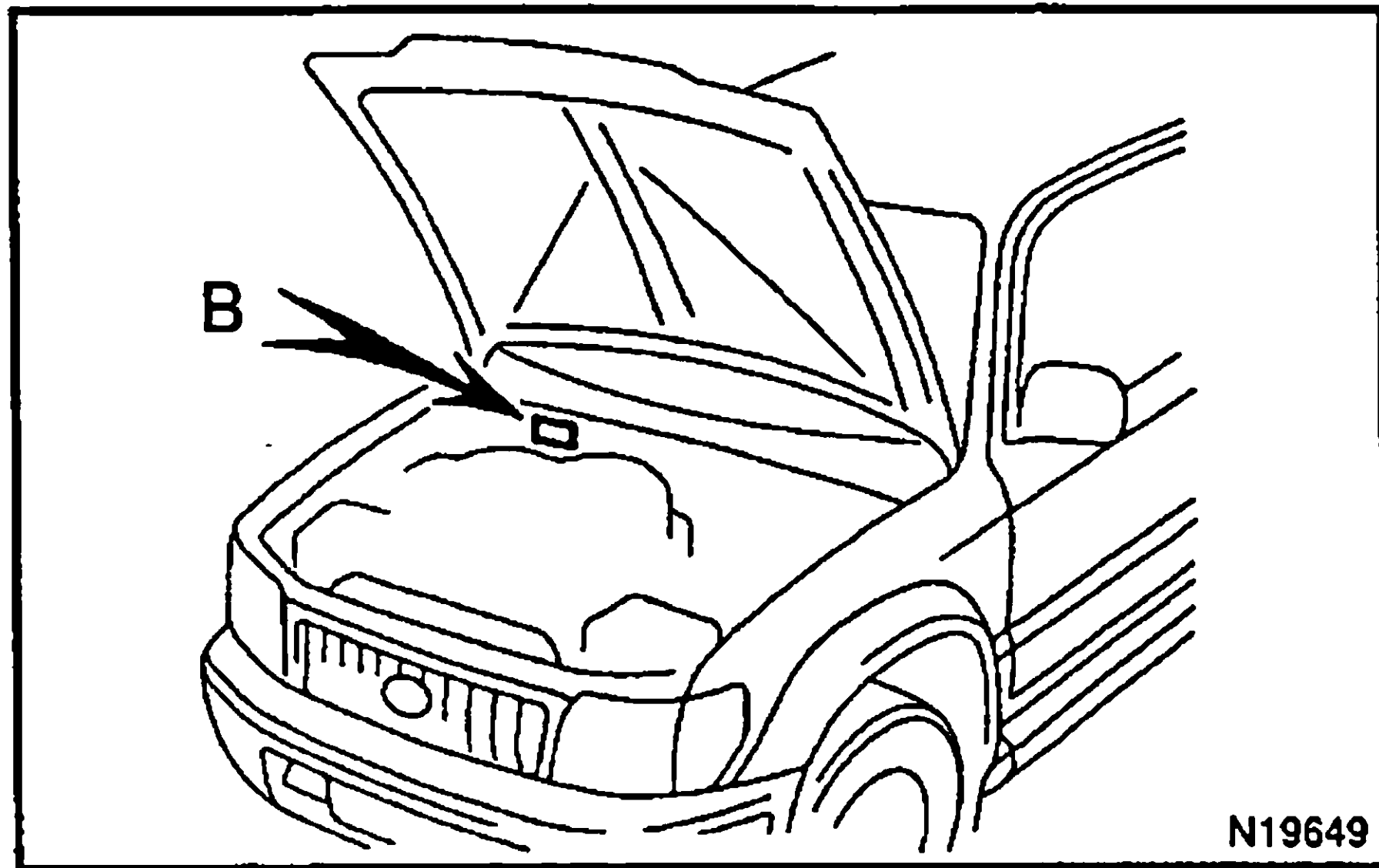
VEHICLE IDENTIFICATION AND ENGINE SERIAL NUMBER

IN09T-01

1. VEHICLE IDENTIFICATION NUMBER

The vehicle identification number is stamped on the outer surface of the front right side frame. This number is also stamped on the manufacturer's plate.

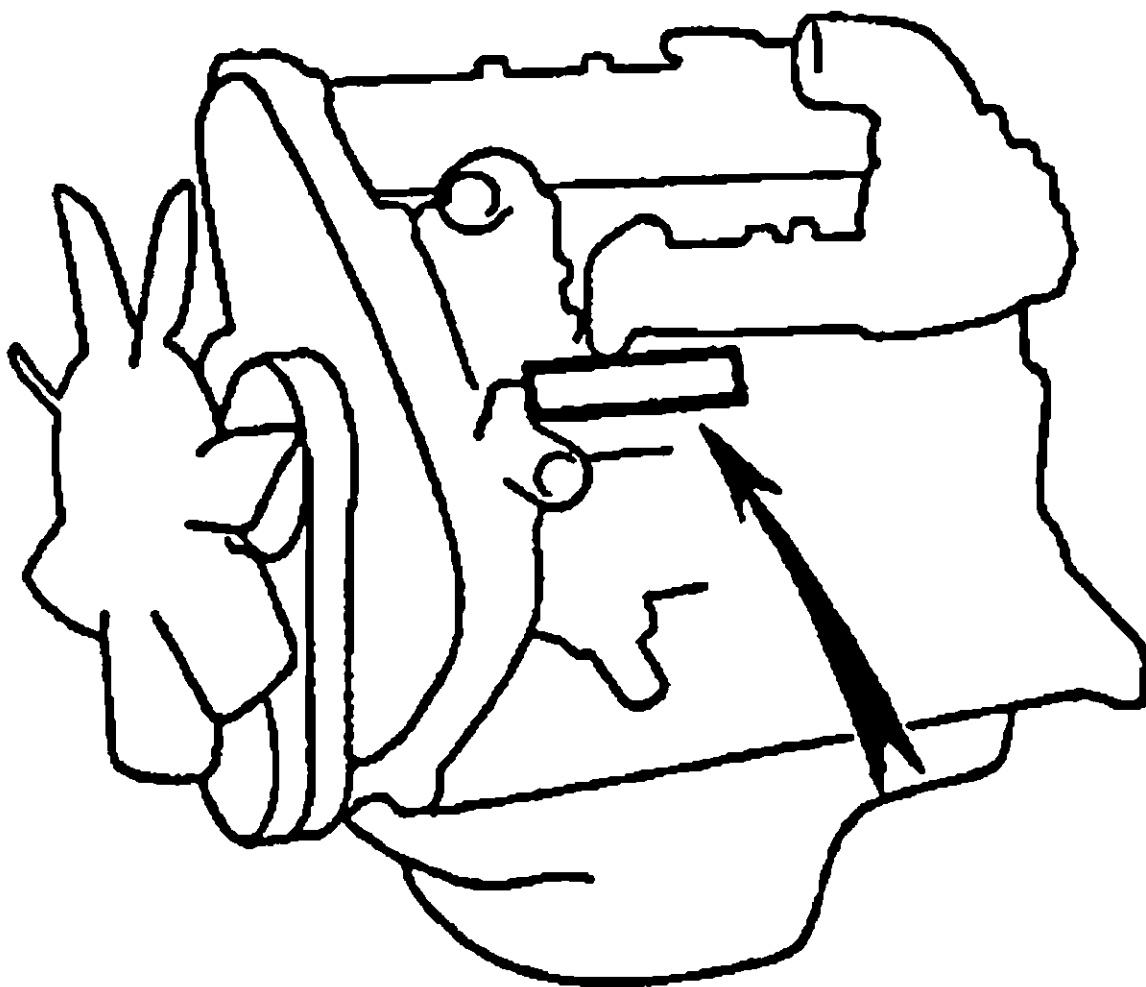
- A: Vehicle Identification Number
- B: Manufacturer's Plate



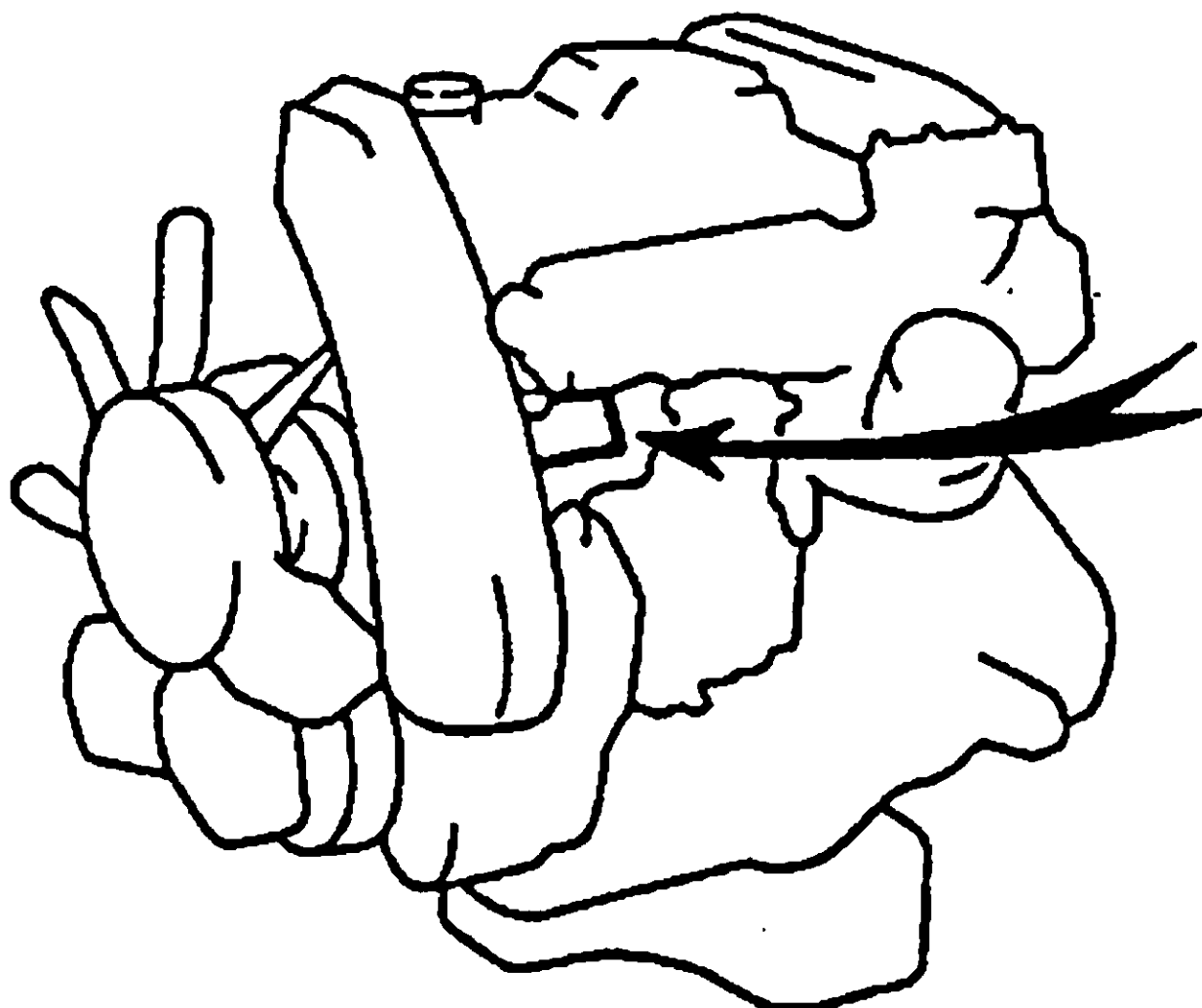
2. ENGINE SERIAL NUMBER

The engine serial number is stamped on the engine block, as shown in the illustration.

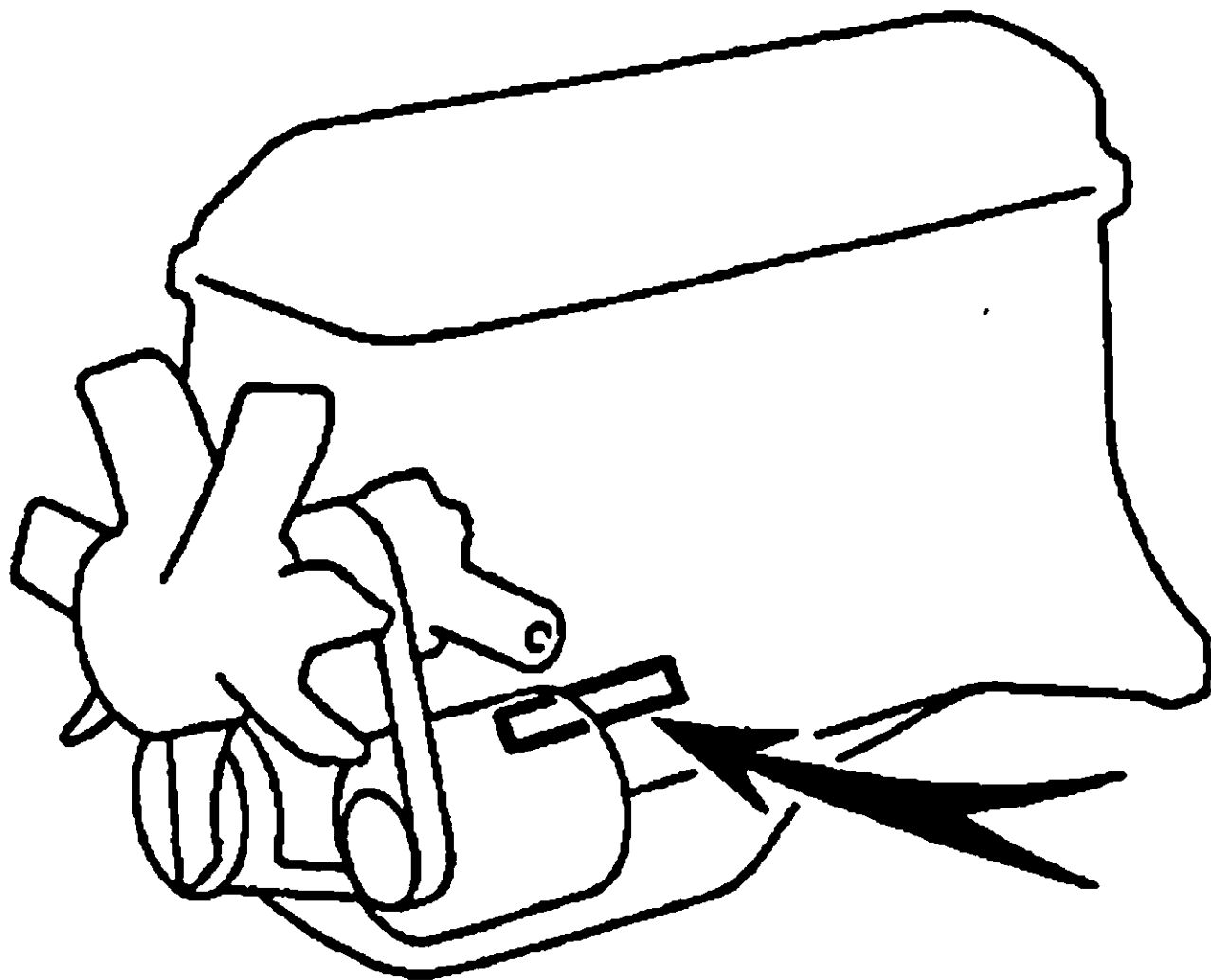
3L Engine



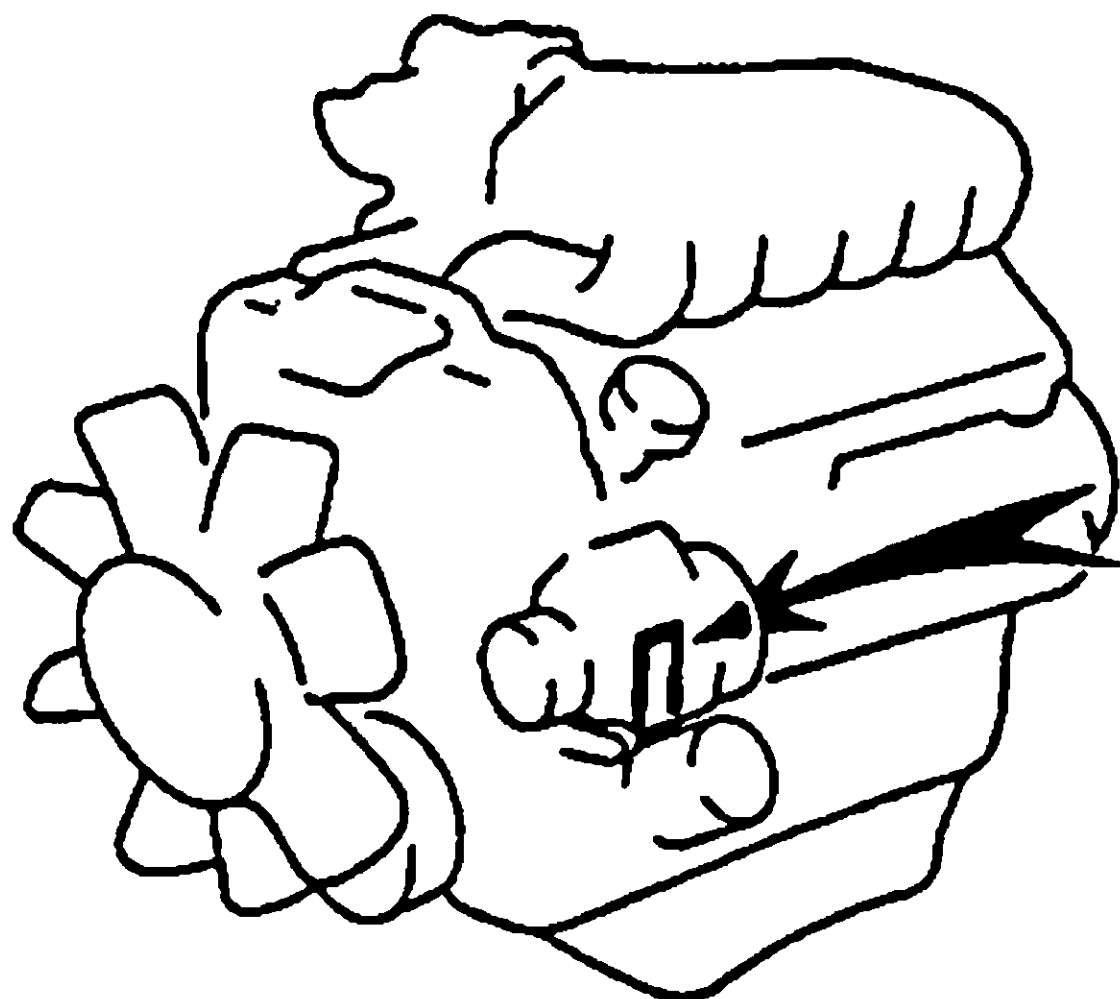
1KZ-T, 1KZ-TE Engine



3RZ-F, 3RZ-FE Engine

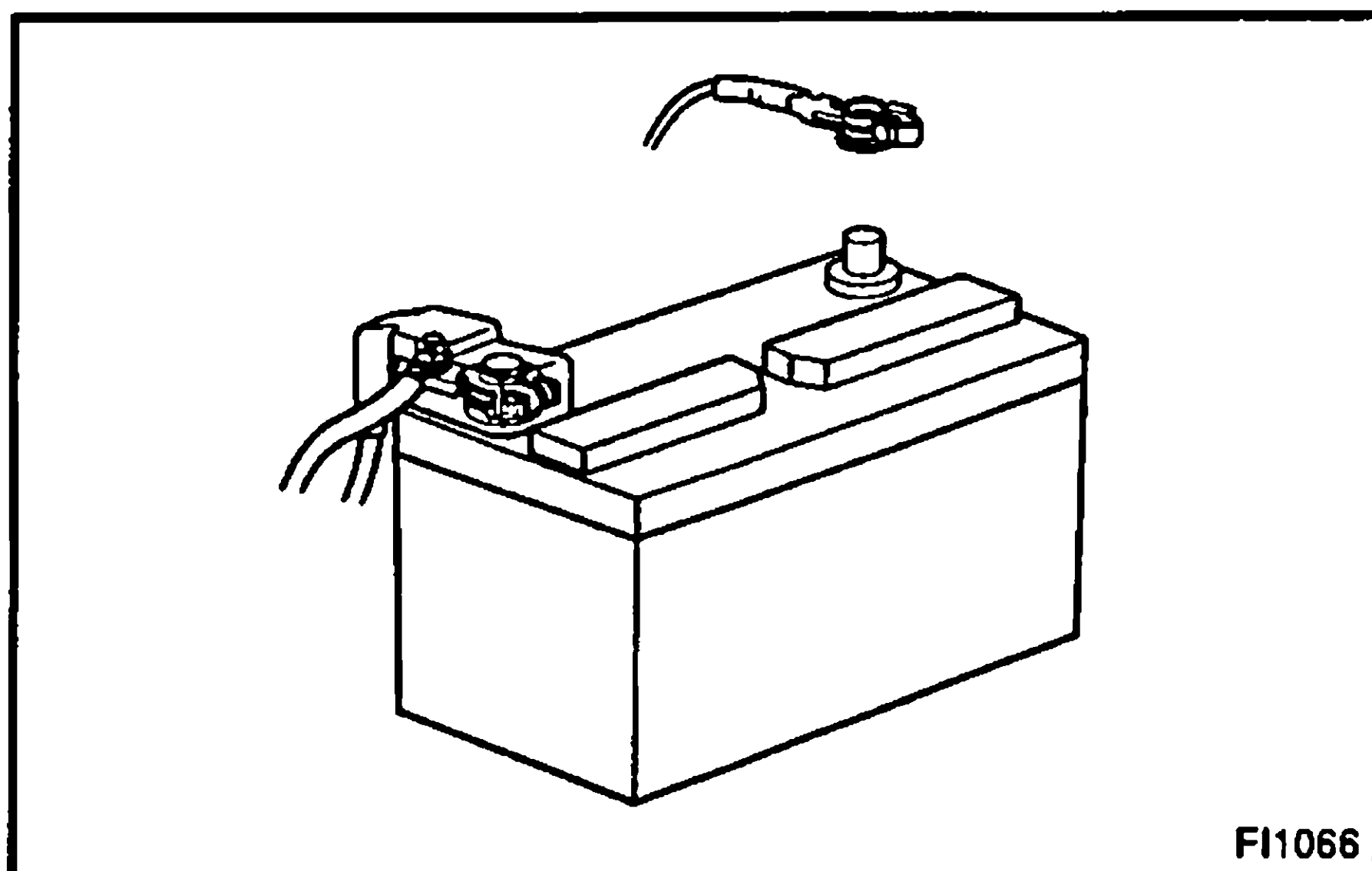


5VZ-FE Engine



N19545 N09034
N17730 N17731

Z18427



REPAIR INSTRUCTIONS

IN09U-01

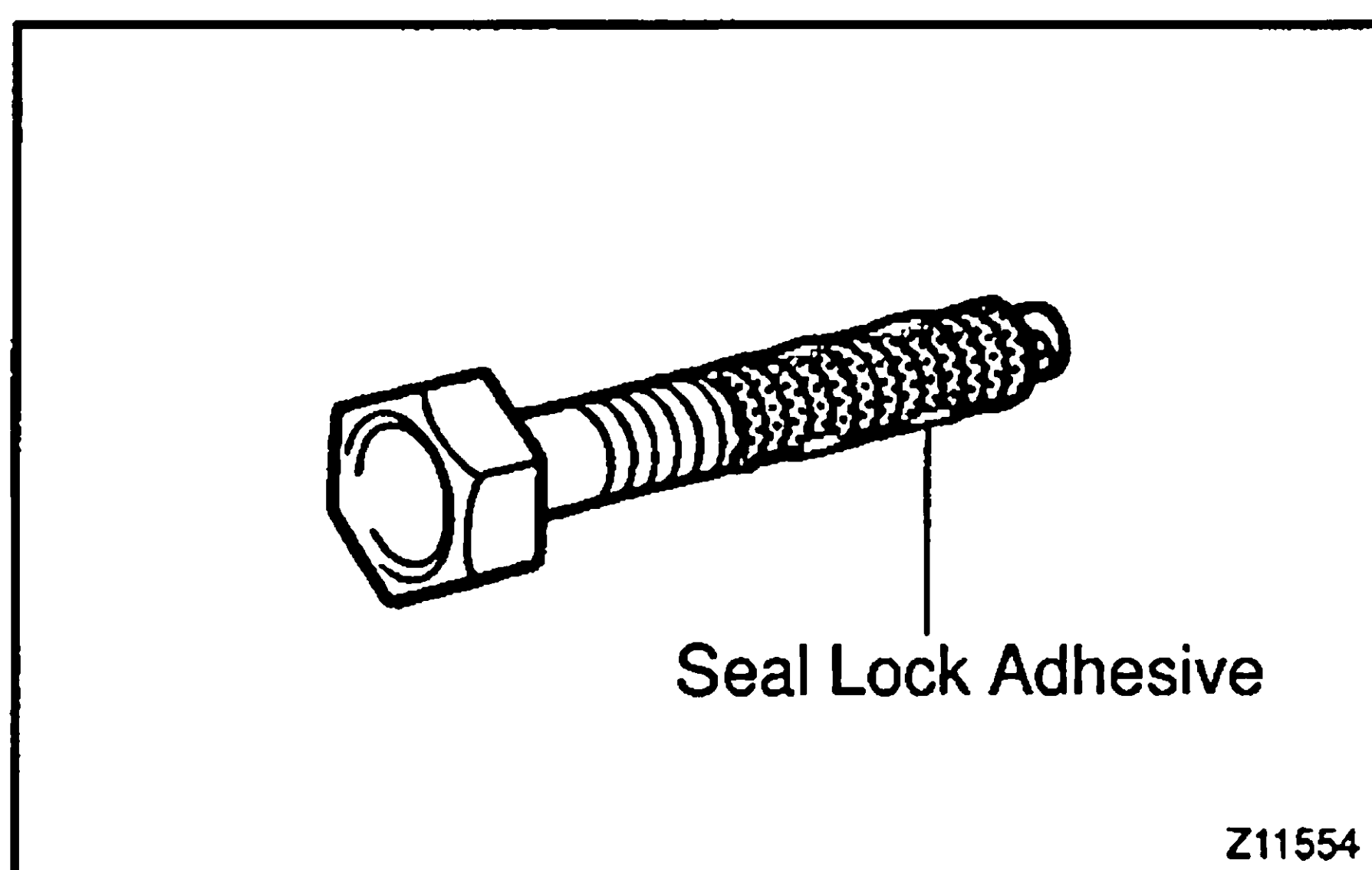
GENERAL INFORMATION

BASIC REPAIR HINT

- (a) Use fender, seat and floor covers to keep the vehicle clean and prevent damage.
- (b) During disassembly, keep parts in the appropriate order to facilitate reassembly.
- (c) Observe the following operations:
 - (1) Before performing electrical work, disconnect the negative (–) terminal cable from the battery.
 - (2) If it is necessary to disconnect the battery for inspection or repair, always disconnect the negative (–) terminal cable which is grounded to the vehicle body.
 - (3) To prevent damage to the battery terminal, loosen the cable nut and raise the cable straight up without twisting or prying it.
 - (4) Clean the battery terminals and cable ends with a clean shop rag. Do not scrape them with a file or other abrasive objects.
 - (5) Install the cable ends to the battery terminals with the nut loose, and tighten the nut after installation. Do not use a hammer to tap the cable ends onto the terminals.
 - (6) Be sure the cover for the positive (+) terminal is properly in place.
- (d) Check hose and wiring connectors to make sure that they are secure and correct.
- (e) Non-reusable parts
 - (1) Always replace cotter pins, gaskets, O-rings, oil seals, etc. with new ones.
 - (2) Non-reusable parts are indicated in the component illustrations by the "◇" symbol.
- (f) Precoated parts

Precoated parts are bolts and nuts, etc. that are coated with a seal lock adhesive at the factory.

 - (1) If a precoated parts is retightened, loosened or caused to move in any way, it must be precoated with the specified adhesive.
 - (2) When reusing precoated parts, clean off the old adhesive and dry with compressed air. Then apply the specified seal lock adhesive to the bolt, nut or threads.
 - (3) Precoated parts are indicated in the component illustrations by the "★" symbol.
- (g) When necessary, use a sealer on gaskets to prevent leaks.



- (h) Carefully observe all specifications for bolt tightening torques. Always use a torque wrench.
- (i) Use of special service tools (SST) and special service materials (SSM) may be required, depending on the nature of the repair. Be sure to use SST and SSM where specified and follow the proper work procedure. A list of SST and SSM can be found in Preparation section in this manual.



- (j) When replacing fuses, be sure the new fuse has the correct amperage rating. DO NOT exceed the rating or use one with a lower rating.

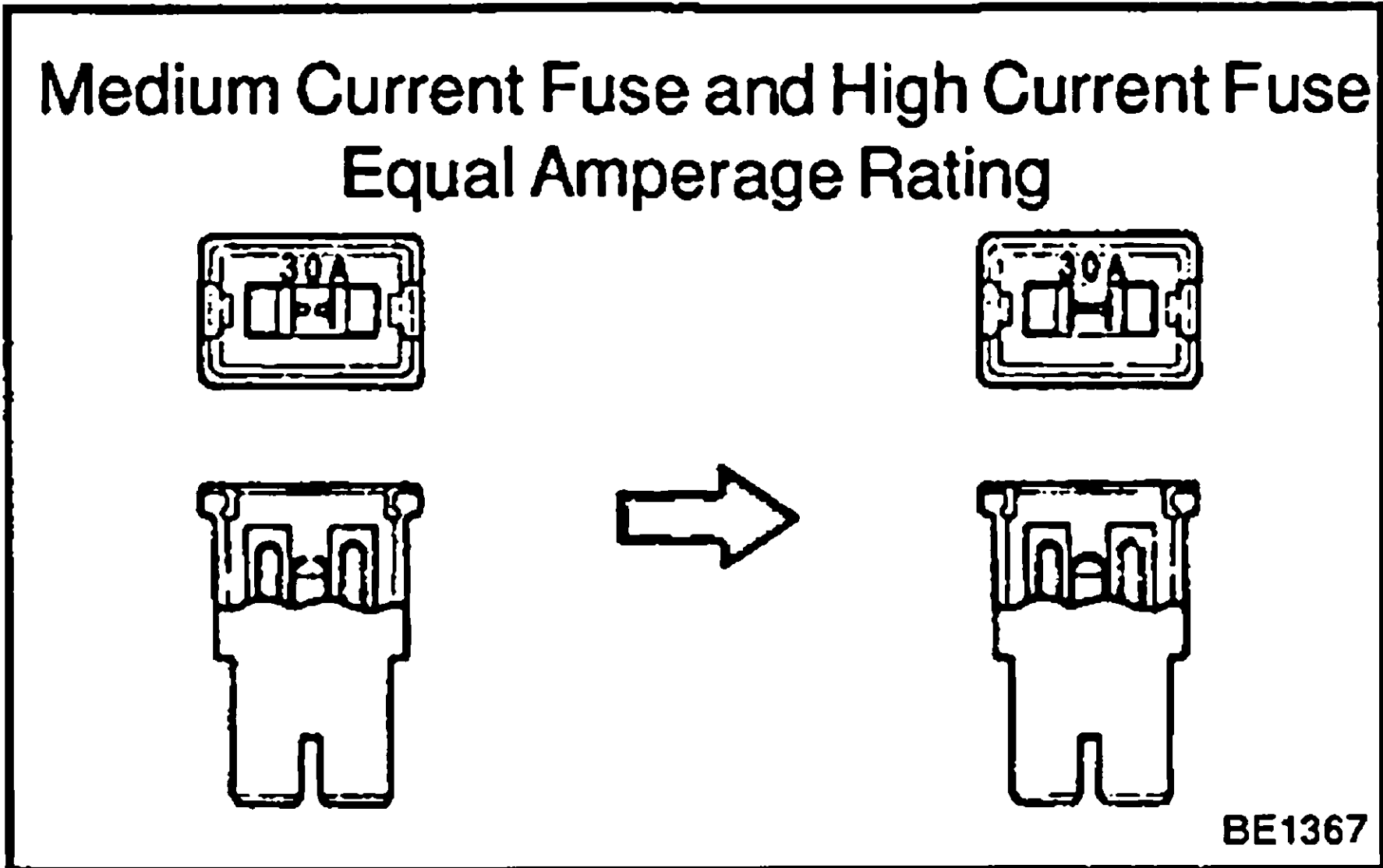


Illustration	Symbol	Part Name	Abbreviation
 BE5594	 IN0365	FUSE	FUSE
 BE5595	 IN0366	MEDIUM CURRENT FUSE	M-FUSE
 BE5596	 IN0367	HIGH CURRENT FUSE	H-FUSE
 BE5597	 IN0367	FUSIBLE LINK	FL
 BE5598	 IN0368	CIRCUIT BREAKER	CB

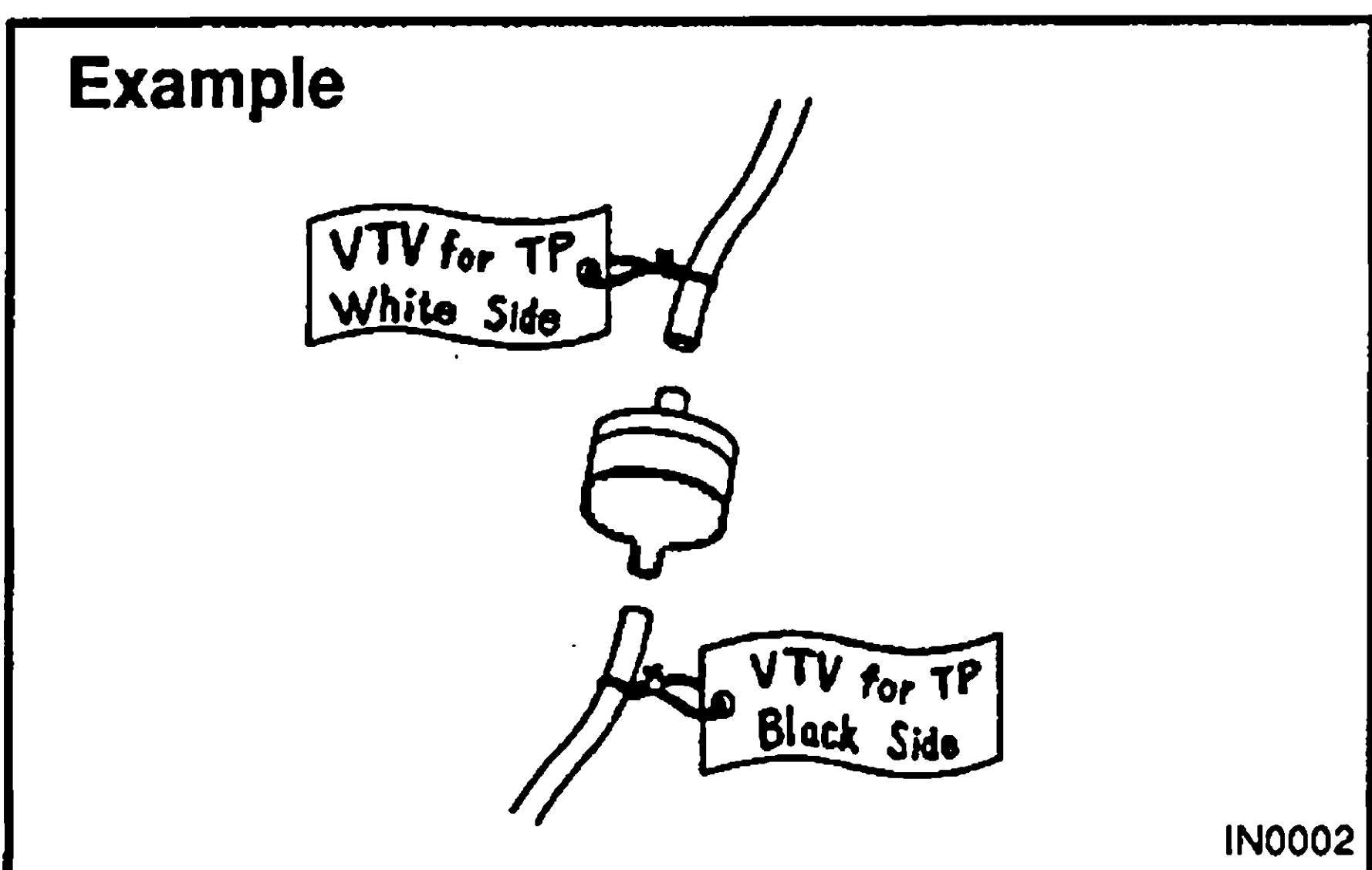
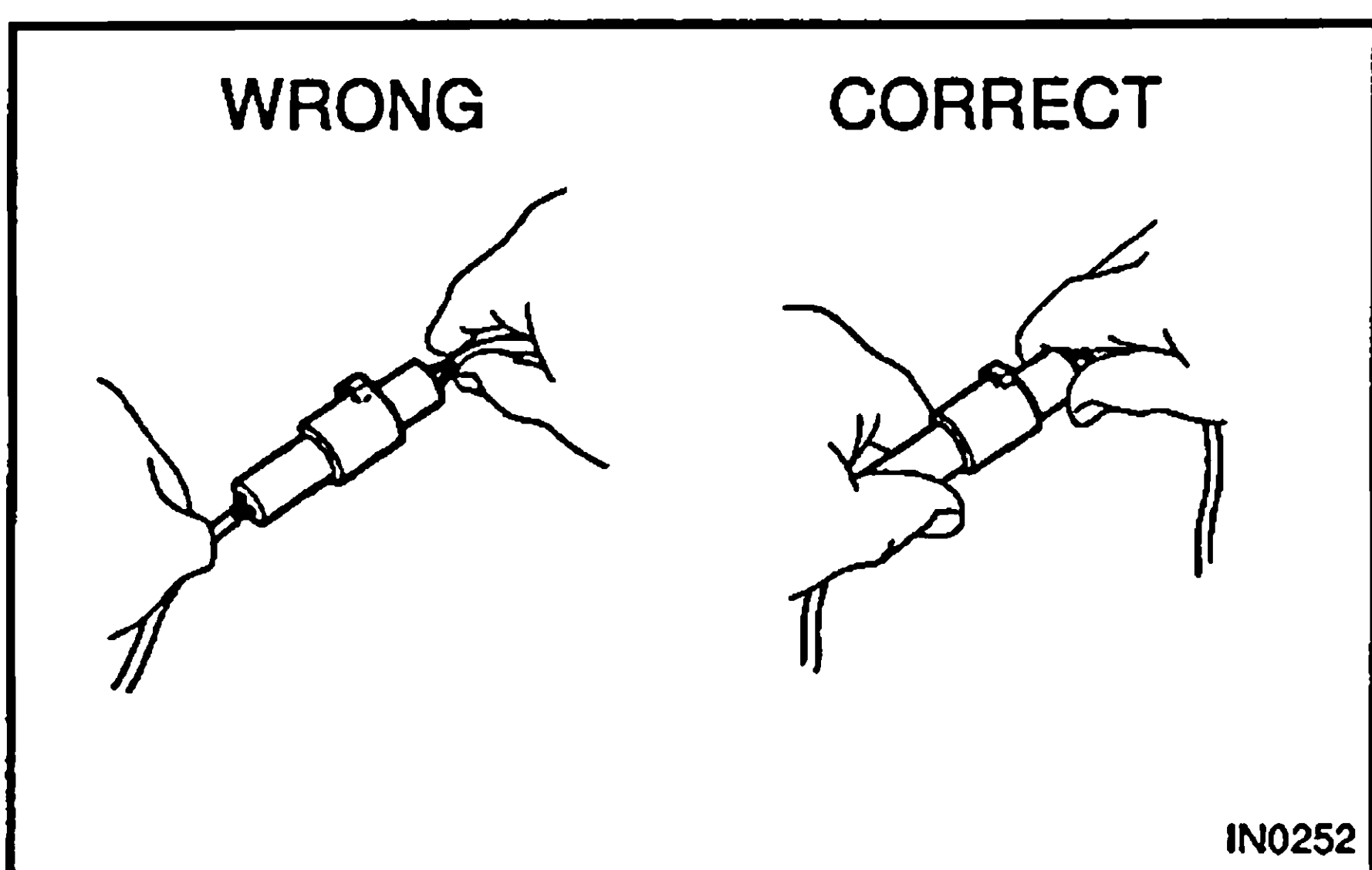
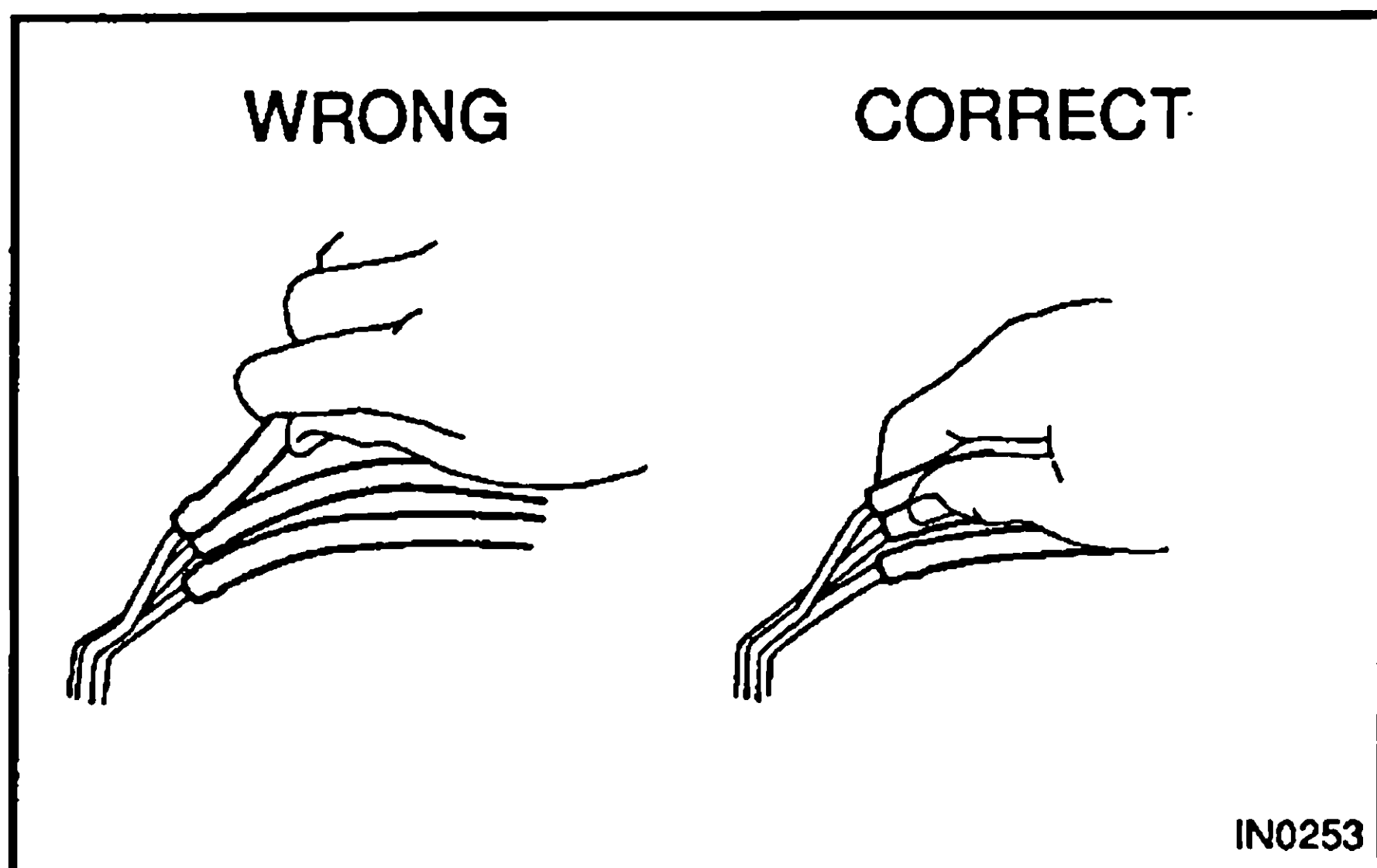
V00076

- (k) Care must be taken when jacking up and supporting the vehicle. Be sure to lift and support the vehicle at the proper locations (See page IN-7).
 - (1) If the vehicle is to be jacked up only at the front or rear end, be sure to block the wheels at the opposite end in order to ensure safety.
 - (2) After the vehicle is jacked up, be sure to support it on stands. It is extremely dangerous to do any work on a vehicle raised on a jack alone, even for a small job that can be finished quickly.

IN

- (l) Observe the following precautions to avoid damage to the following parts:

(1) Do not open the cover or case of the ECU unless absolutely necessary. (If the IC terminals are touched, the IC may be destroyed by static electricity.)



- (2) To disconnect vacuum hoses, pull off the end, not the middle of the hose.
- (3) To pull apart electrical connectors, pull on the connector itself, not the wires.
- (4) 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.
- (5) When steam cleaning an engine, protect the electronic components, air filter and emission-related components from water.
- (6) Never use an impact wrench to remove or install temperature switches or temperature sensors.
- (7) When checking continuity at the wire connector, insert the tester probe carefully to prevent terminals from bending.
- (8) 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.

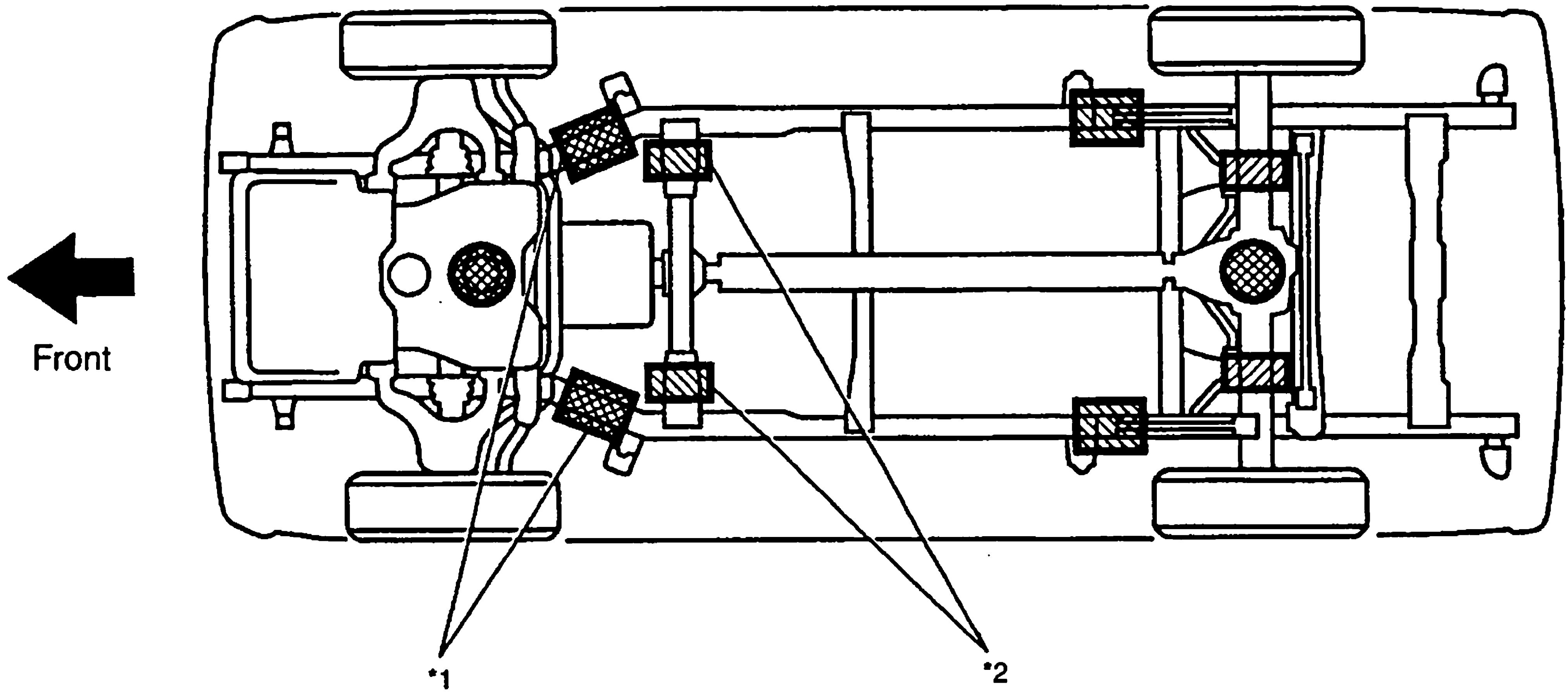
- (m) Tag hoses before disconnecting them:

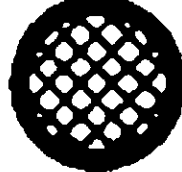
- (1) When disconnecting vacuum hoses, use tags to identify how they should be reconnected.
- (2) After completing a job, double check that the vacuum hoses are properly connected. A label under the hood shows the proper layout.

- (n) Unless otherwise stated, all resistance is measured at an ambient temperature of 20°C (68°F). Because the resistance may be outside specifications if measured at high temperatures immediately after the vehicle has been running, measurement should be made when the engine has cooled down.

VEHICLE LIFT AND SUPPORT LOCATIONS

IN



JACK POSITION 

- Front Center of crossmember
- Rear Center of rear axle housing

SUPPORT POSITION

- Safety stand 
- Swing arm type lift 

*1 : Support position when equipping without side step.

*2 : Support position when equipping with side step.

CAUTION : For 3 door models, do not use the swing arm type lift as this type lift may not support the short wheel based models securely.

FOR ALL OF VEHICLES PRECAUTION

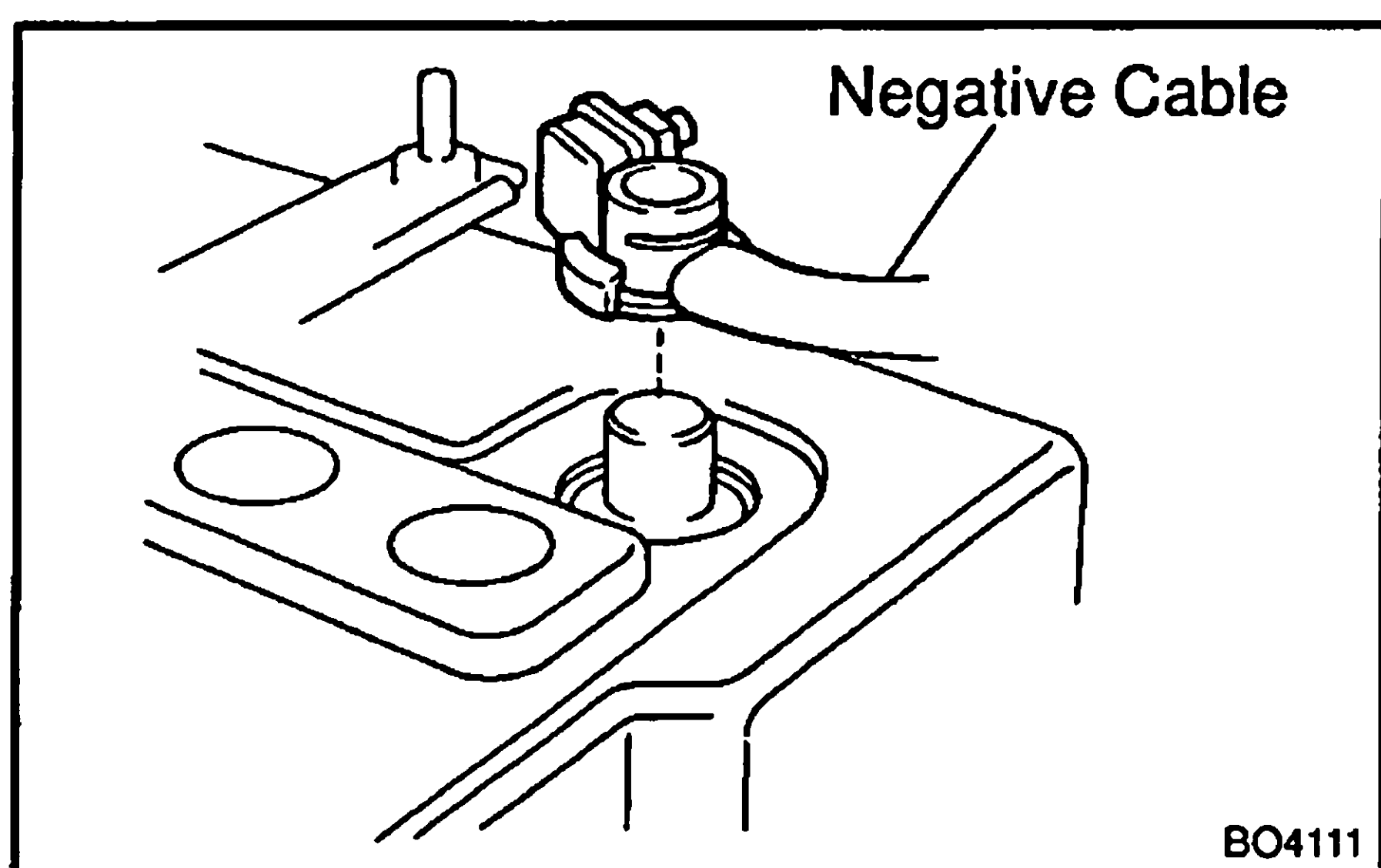
IN09W-01

1. FOR VEHICLES EQUIPPED WITH SRS AIRBAG AND SEAT BELT PRETENSIONER

- (a) The LAND CRUISER/LAND CRUISER PRADO is equipped with an SRS (Supplemental Restraint System), such as the driver airbag, front passenger airbag and seat belt pretensioners.

Failure to carry out service operations in the correct sequence could cause the supplemental restraint system to unexpectedly deploy during servicing, possibly leading to a serious accident.

Further, if a mistake is made in servicing the supplemental restraint system, it is possible the SRS may fail to operate when required. Before servicing (including removal or installation of parts, inspection or replacement), be sure to read the following items carefully, then follow the correct procedure described in this manual.



(b) GENERAL NOTICE

- (1) Malfunction symptoms of the supplemental restraint system are difficult to confirm, so the diagnostic trouble codes become the most important source of information when troubleshooting. When troubleshooting the supplemental restraint system, always inspect the diagnostic trouble codes before disconnecting the battery (See page DI-3).

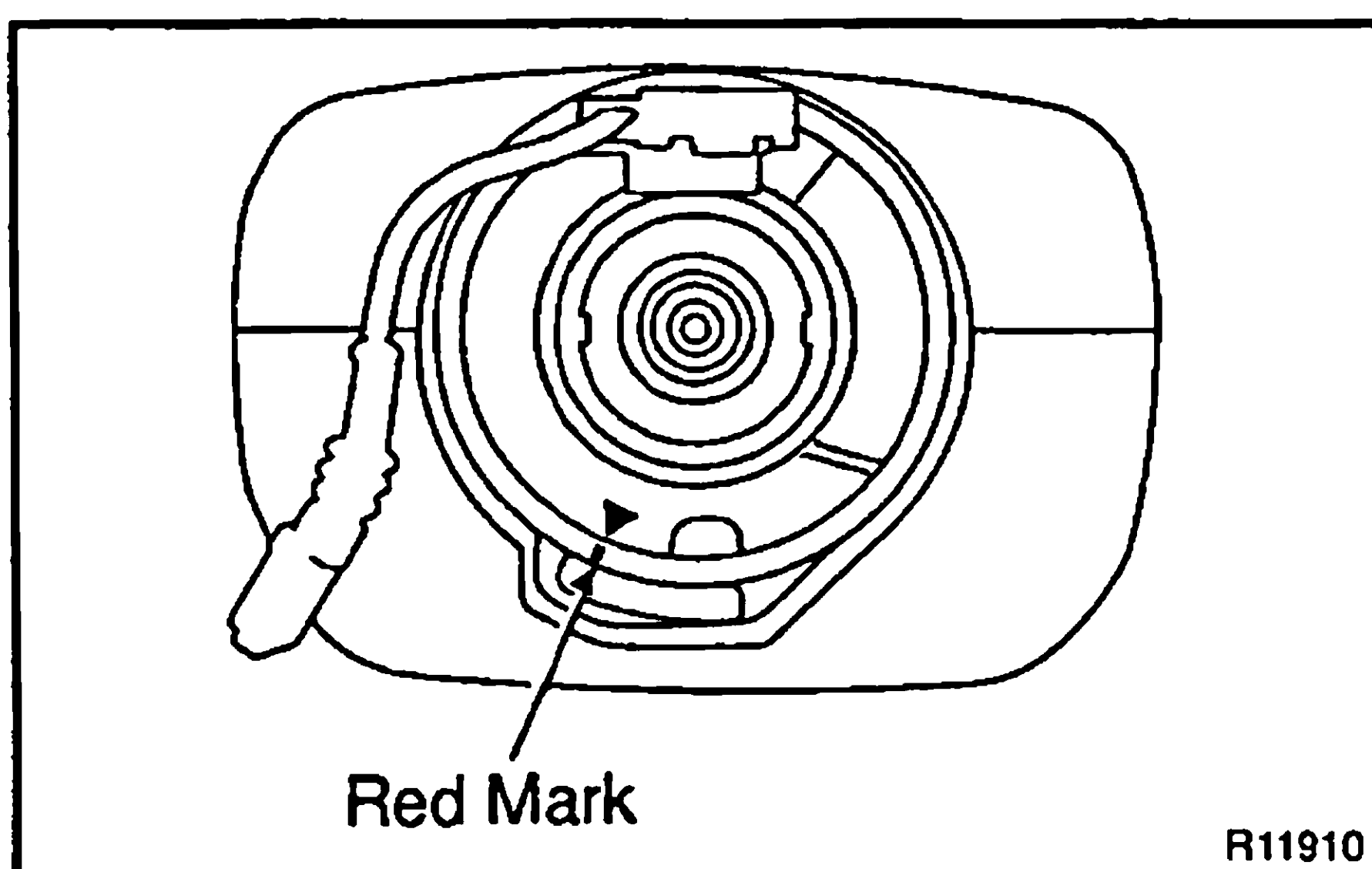
- (2) Work must be started after 90 seconds from the time the ignition switch is turned to the "LOCK" position and the negative (–) terminal cable is disconnected from the battery.

(The supplemental restraint system is equipped with a back-up power source so that if work is started within 90 seconds of disconnecting the negative (–) terminal cable from the battery, the SRS may deploy.)

When the negative (–) terminal cable is disconnected from the battery, memory of the clock and audio systems will be cancelled. So before starting work, make a record of the contents memorized by the each memory system. Then when work is finished, reset the clock and audio systems as before. To avoid erasing the memory of each memory system, never use a back-up power supply from outside the vehicle.

- (3) Even in cases of a minor collision where the SRS does not deploy, the passenger's airbag assembly, seat belt pretensioner and the steering wheel pad should be inspected (See page RS-13, RS-27, BO-24).
- (4) Never use SRS parts from another vehicle. When replacing parts, replace them with new parts.
- (5) Before repairs, remove the airbag sensor if shocks are likely to be applied to the sensor during repairs.
- (6) Never disassemble and repair the airbag sensor assembly, steering wheel pad, front passenger airbag or seat belt pretensioner in order to reuse it.
- (7) If the airbag sensor assembly, steering wheel pad, front passenger airbag or seat belt pretensioner have been dropped, or if there are cracks, dents or other defects in the case, bracket or connector, replace them with new ones.
- (8) Do not expose the airbag sensor assembly, steering wheel pad directly to hot air or flames.
- (9) Use a volt/ohmmeter with high impedance (10 k Ω /V minimum) for troubleshooting of the electrical circuit.
- (10) Information labels are attached to the periphery of the SRS components. Follow the instructions on the notices.
- (11) After work on the supplemental restraint system is completed, check the SRS warning light (See page DI-3).

IN



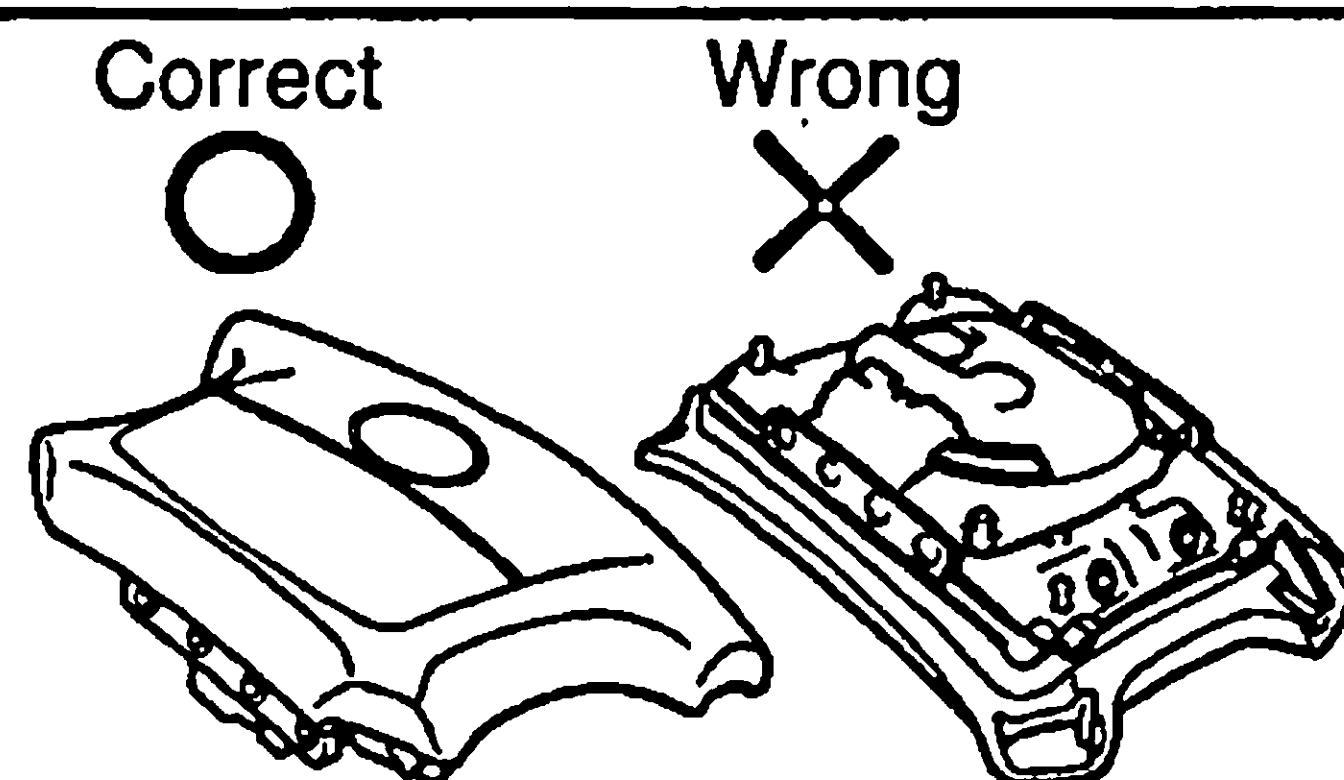
(c) SPIRAL CABLE (in Combination Switch)

The steering wheel must be fitted correctly to the steering column with the spiral cable at the neutral position, otherwise cable disconnection and other troubles may result. Refer to SR-4 of this manual concerning correct steering wheel installation.

(d) STEERING WHEEL PAD (with Airbag)

- (1) When removing the steering wheel pad or handling a new steering wheel pad, it should be placed with the pad top surface facing up.
In addition do not store a steering wheel pad on top of another one. Storing the pad with its metallic surface facing upward may lead to a serious accident if the airbag inflates for some reason.
- (2) Never measure the resistance of the airbag squib. (This may cause the airbag to deploy, which is very dangerous.)
- (3) Grease should not be applied to the steering wheel pad and the pad should not be cleaned with detergents of any kind.
- (4) Store the steering wheel pad where the ambient temperature remains below 93°C (200°F), without high humidity and away from electrical noise.
- (5) When using electric welding, first disconnect the airbag connector (yellow color and 2 pins) under the steering column near the combination switch connector before starting work.
- (6) When disposing of a vehicle or the steering wheel pad alone, the airbag should be deployed using an SST before disposal (See page RS-15).
Carry out the operation in a safe place away from electrical noise.

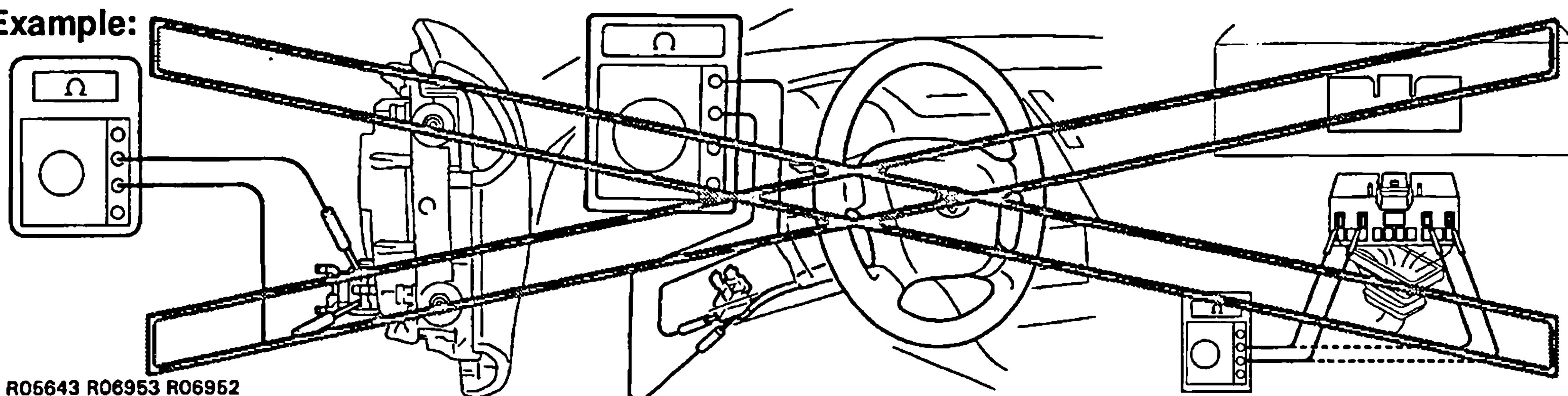
Example:



Z13953

B05084

Example:

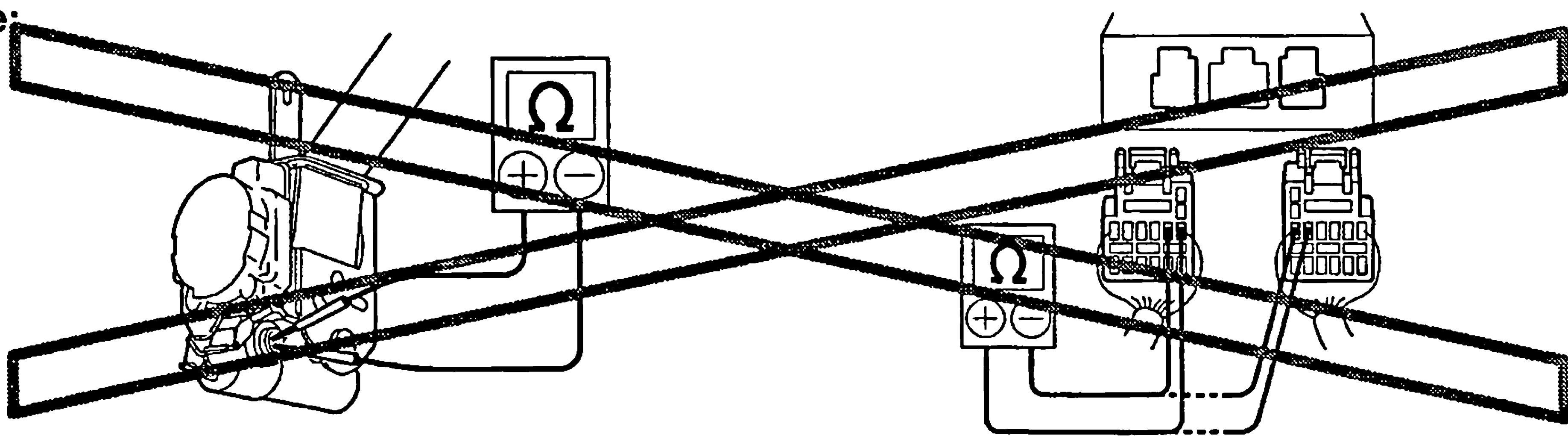


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- (f) SEAT BELT PRETENSIONER (MECHANICAL TYPE)
 - (1) Before doing any operation which will apply a strong shock to the vehicle, or before removing the seat belt pretensioner, be sure to apply the sensor shock.
 - (2) Never disassemble the seat belt pretensioner.
 - (3) Do not subject the seat belt pretensioner to shocks or bring magnets close to it.
 - (4) Do not expose the seat belt pretensioner to high temperature or fire.
 - (5) Do not drop the seat belt pretensioner. Never use a seat belt pretensioner which has been dropped.
 - (6) Never install the seat belt pretensioner in another vehicle.
 - (7) Store removed seat belt pretensioner on a flat, stable surface.
 - (8) After frontal collision, always check whether the seat belt pretensioners have been activated.
 - (9) When disposing of a vehicle or the pretensioner by itself, always activate the pretensioner before disposal (Refer to Pub. No. RM517E).
 - (10) The seat belt pretensioner is hot when activated, so let it cool down fully before you dispose of it. Never apply water to the seat belt pretensioner.

(g) SEAT BELT PRETENSIONER (ELECTRICAL TYPE)

- (1) Never measure the resistance of the seat belt pretensioner. (This may cause the pretensioner operates, which is very dangerous.)
- (2) Oil or water should not be put the front seat outer belt and the front seat outer belt should not be cleaned with detergents of any kind.
- (3) Store the front seat outer belt where the ambient temperature remains below 80°C (176°F), without high humidity and away from electrical noise.
- (4) When using electric welding, first disconnect the connector (yellow color and 2 pins) before starting work.
- (5) When disposing of a vehicle or a front seat outer belt alone, the seat belt pretensioner should be activated using a SST before disposal (See page BO-25). Carry out the operation in a place away from electrical noise.

Example:

B02121

(h) **AIRBAG SENSOR ASSEMBLY**

- (1) Never reuse the airbag sensor assembly involved in a collision when the SRS has deployed.
- (2) The connectors to the airbag sensor assembly should be connected or disconnected with the sensor mounted on the floor. If the connectors are connected or disconnected while the airbag sensor assembly is not mounted to the floor, it could cause undesired ignition of the supplemental restraint system.
- (3) Work must be started after 90 seconds from the time the ignition switch is turned to the "LOCK" position and the negative (–) terminal cable is disconnected from the battery, even if only loosening the set bolts of the airbag sensor assembly.

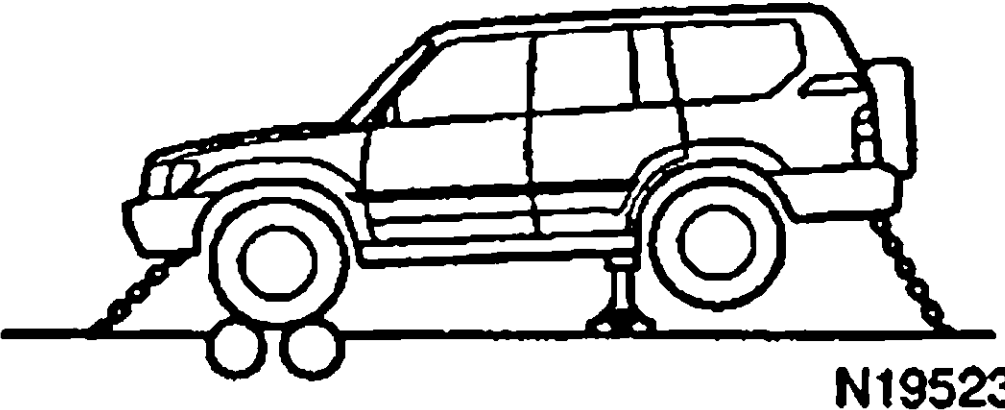
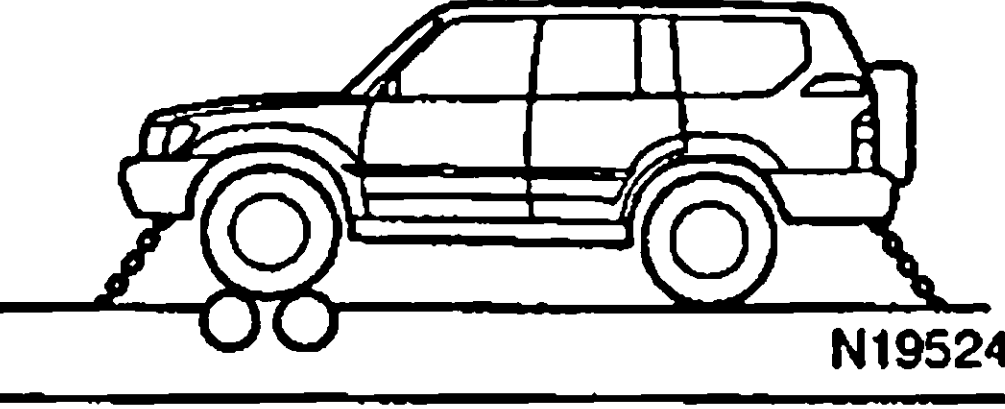
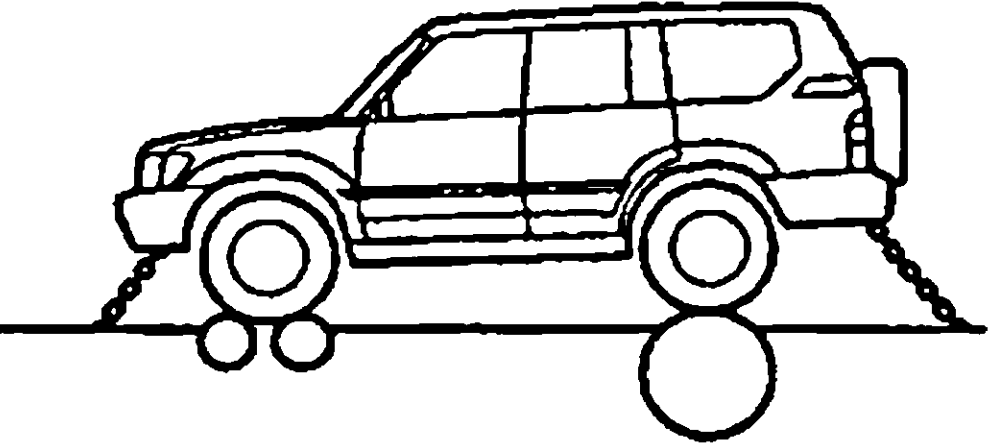
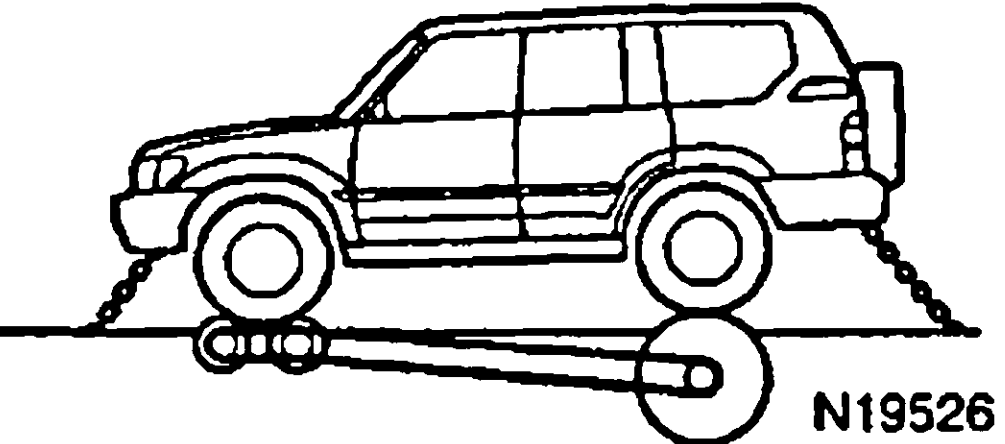
(i) **WIRE HARNESS AND CONNECTOR**

The SRS wire harness is integrated with the cowl wire harness assembly and floor wire harness assembly. The wires for the SRS wire harness are encased in a yellow corrugated tube. All the connectors for the system are also a standard yellow color. If the SRS wire harness becomes disconnected or the connector becomes broken due to an accident, etc., repair or replace it.

(c) Speedometer Test or Other Tests

(Using Speedometer Tester or Chassis Dynamometer)

When performing test at high speed or high load, use the methods shown below.

No.	Chassis Dynamometer Type	Vehicle Condition	Vehicle Speed and Test Time	4-Wheel Drive Control Lever Position
1	2-Wheel Chassis Dynamometer	 N19523	Low speed (60 km/h or less) and 1 minute or less	HL (Locked)
		Remove propeller shaft.  N19524	No restriction on vehicle speed or duration of test	HL (Locked)
2	4-Wheel Free Chassis Dynamometer	 N19525	Low speed (60 km/h or less) and 1 minute or less	HL (Locked)
			No restriction on vehicle speed or duration of test	HL (Locked)
3	4-Wheel Driven Chassis Dynamometer	 N19526	No restriction on vehicle speed or duration of test	HF (Free)

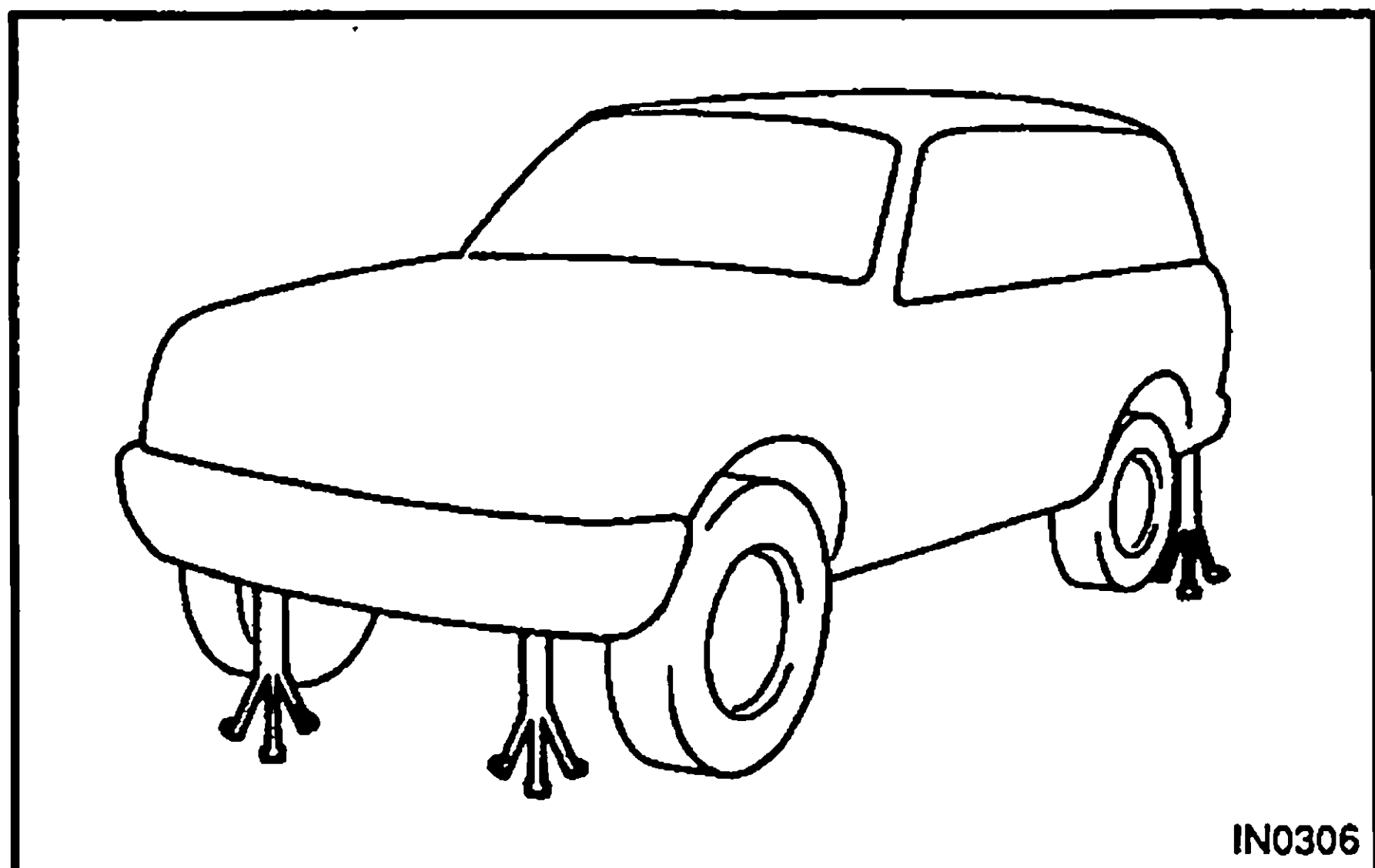
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NOTICE:

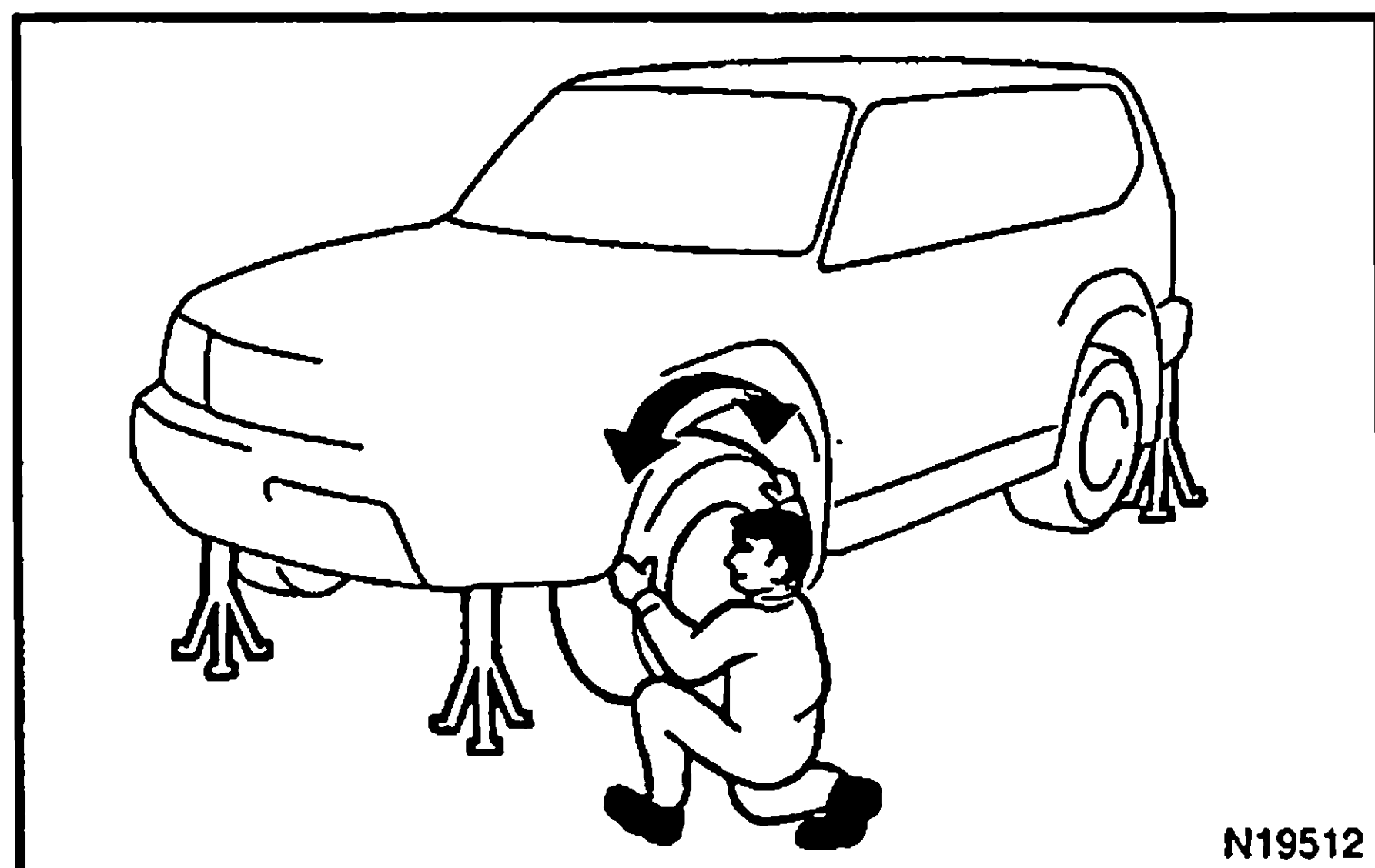
- Confirm that the vehicle is securely immobilized.
- Never operate the clutch or brakes to drive the wheels or stop them suddenly.

(d) On-Vehicle Wheel Balancing

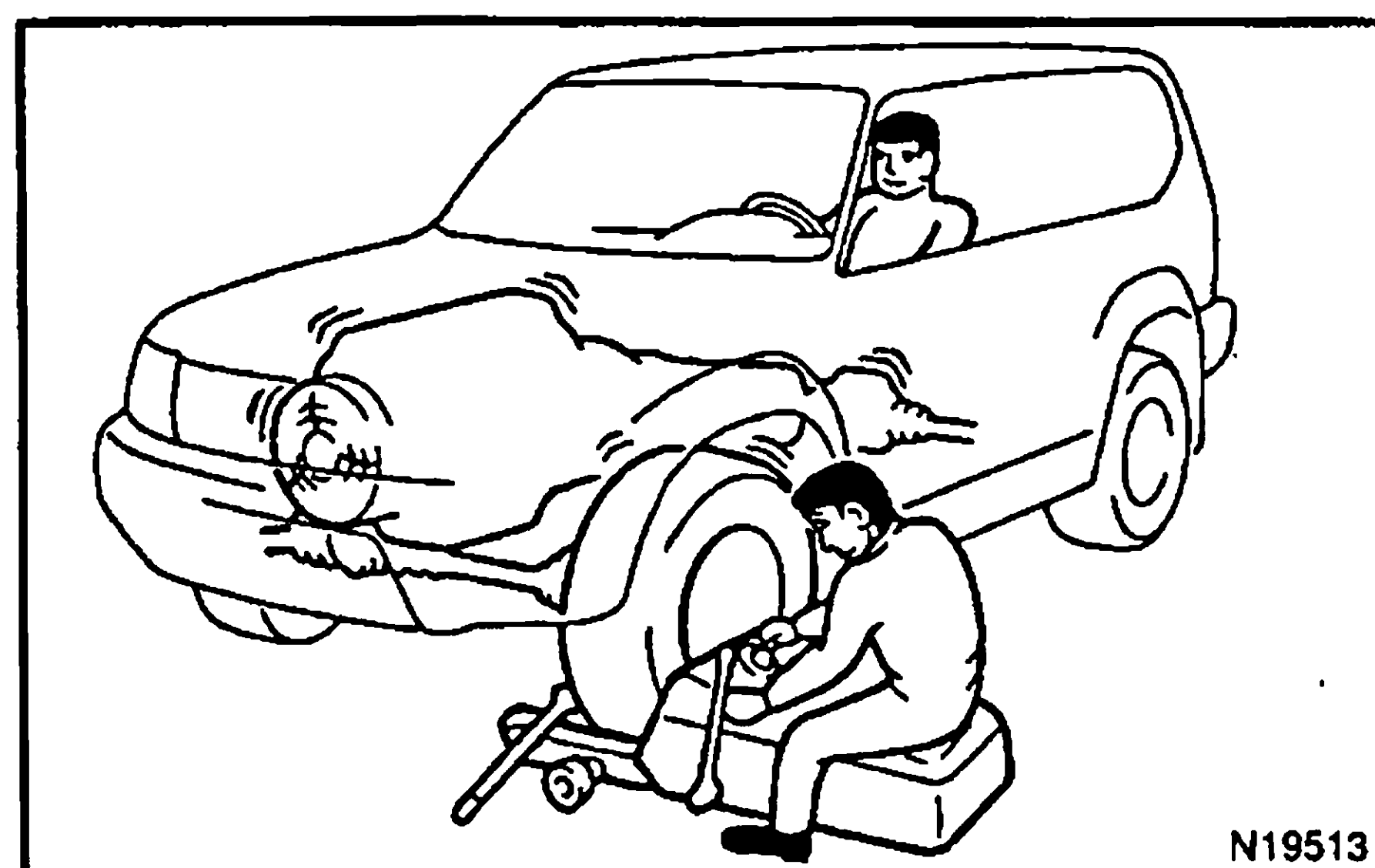
When doing on-vehicle wheel balancing on a full-time 4WD vehicle, to prevent the wheels from rotating at different speeds in different directions from each other (which could damage the center differential), always be sure to observe the following precautions:



- (1) All 4 wheels should be jacked up, clearing the ground completely.
- (2) The center differential should be in the LOCK position with the transfer gear in HL position.
- (3) The parking brake lever should be fully released.



- (4) None of the brakes should be allowed to drag.



- (5) The wheels should be driven with both the engine and the wheel balancer.

HINT:

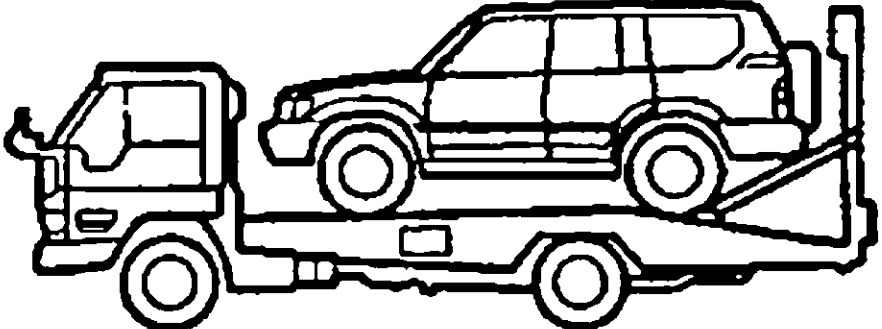
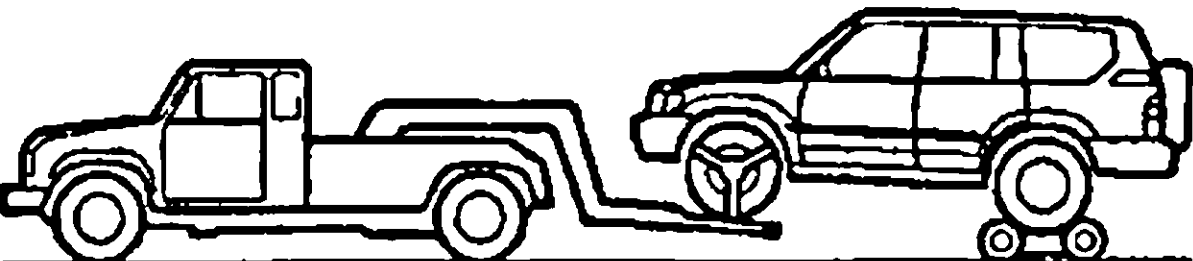
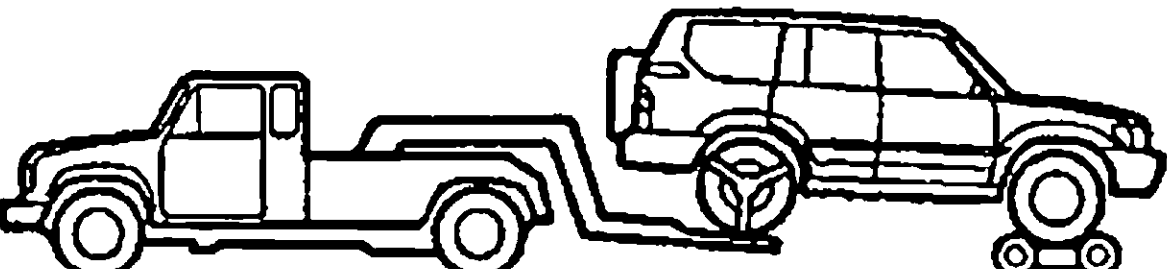
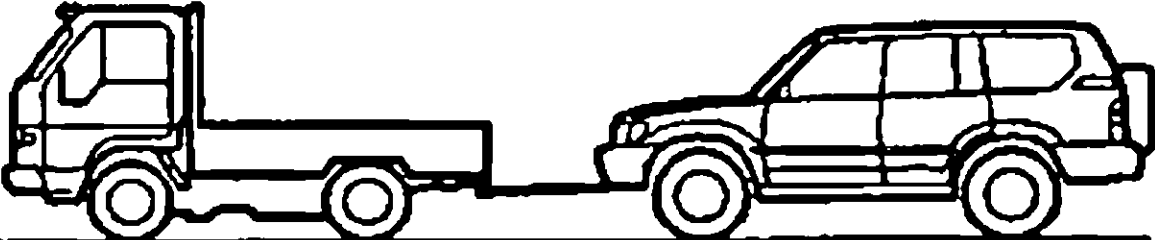
When doing this, be careful of the other wheels, which will rotate at the same time.

- (6) Avoid sudden acceleration, deceleration and braking.
- (7) Carry out the wheel balancing with the transmission in 3rd or 4th gear (automatic transmission in D range).

3. WHEN TOWING FULL-TIME 4WD VEHICLES

Use one of the methods shown below to tow the vehicle.

If the vehicle has trouble in the chassis and drive train, use method 1 (flat bed truck).

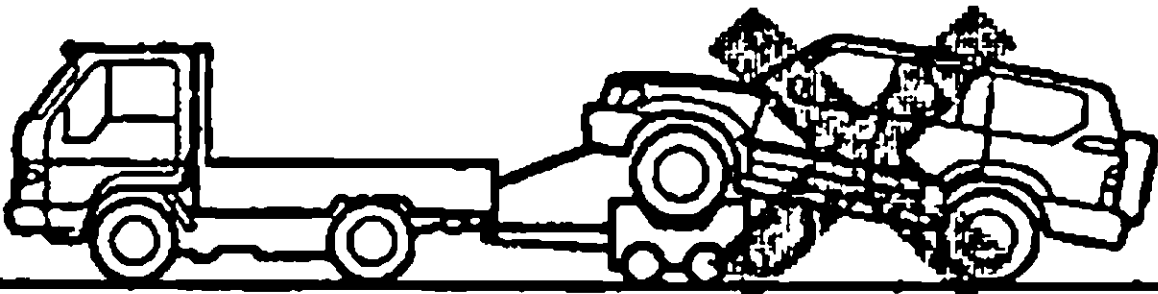
Condition Towing Method	Parking Brake	Transmission Shift Lever Position (M/T)	Transmission Shift Lever Position (A/T)	Transfer Shift Lever Position
① Flat Bed Truck  N19527	Applied	–	"P" Range	"H" Position
② Wheel Lift Type Truck with Dollies – From Front  N20098				
③ Wheel Lift Type Truck with Dollies – From Rear  N20099				
④ Towing with Rope  N19530	Released	Neutral	"N" Range	"HF" Position
HINT : Do not tow the vehicle at a speed faster than 45 km/h (30mph) or distance greater then 80 km (50 miles).				

V08065

NOTICE:

Do not use any towing method other than those shown above.

For example, the towing methods shown below are dangerous or damage the vehicle, so do not use them.

 N19531	During towing with this towing method, there is a danger of the drive train heating up and causing breakdown, or of the front wheels flying off the dolly.
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V08066

HOW TO TROUBLESHOOT ECU CONTROLLED SYSTEMS

IN00Z-10

GENERAL INFORMATION

A large number of ECU controlled systems are used in the LAND CRUISER/LAND CRUISER PRADO. In general, the ECU controlled system is considered to be a very intricate system requiring a high level of technical knowledge and expert skill to troubleshoot. However, the fact is that if you proceed to inspect the circuits one by one, troubleshooting of these systems is not complex. If you have adequate understanding of the system and a basic knowledge of electricity, accurate diagnosis and necessary repair can be performed to locate and fix the problem. This manual is designed through emphasis of the above standpoint to help service technicians perform accurate and effective troubleshooting, and is compiled for the following major ECU controlled system:

System	Page
1. Supplemental Restraint System	DI-1

The troubleshooting procedure and how to make use of it are described on the above page.

INTRODUCTION – TERMS

Abbreviations	Meaning
SST	Special Service Tools
STD	Standard
SW	Switch
TDC	Top Dead Center
TEMP.	Temperature
T/M	Transmission
U/S	Undersize
VCV	Vacuum Control Valve
VSV	Vacuum Switching Valve
VTV	Vacuum Transmitting Valve
w/	With
w/o	Without

PREPARATION

STEERING	PP-1
SUPPLEMENTAL RESTRAINT SYSTEM ...	PP-4
BODY ELECTRICAL	PP-7
BODY	PP-9

PP

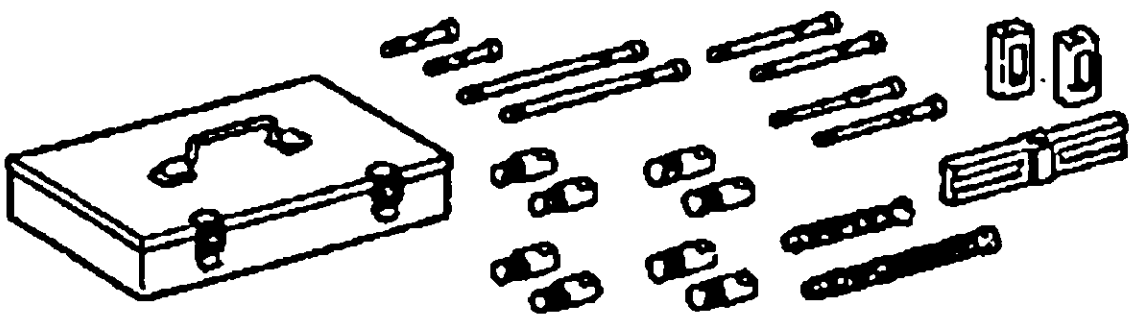
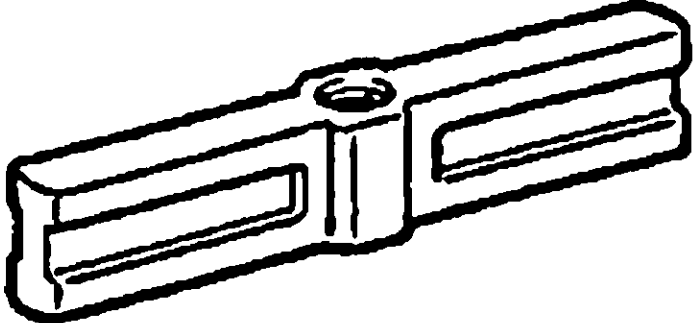
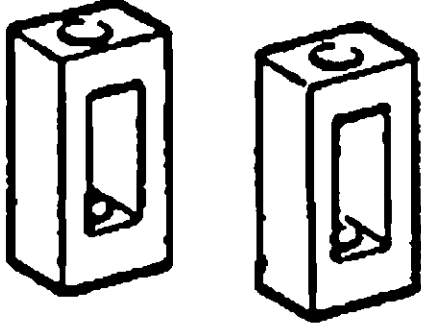
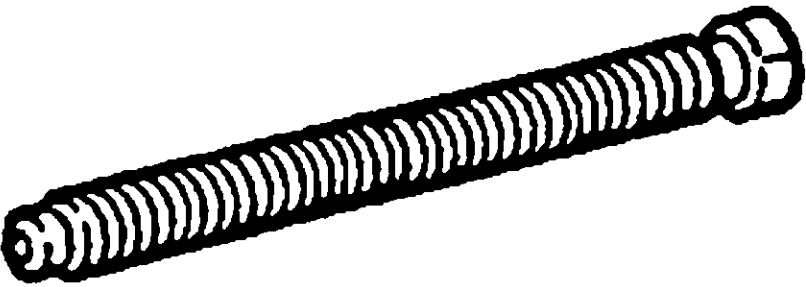
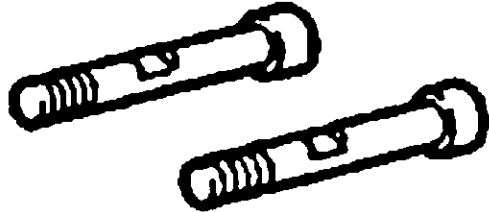
REFER TO LAND CRUISER/LAND CRUISER PRADO REPAIR MANUAL FOR CHASSIS AND BODY (Pub. No. RM517E)

NOTE: The above pages contain only the points which differ from the above listed manual.

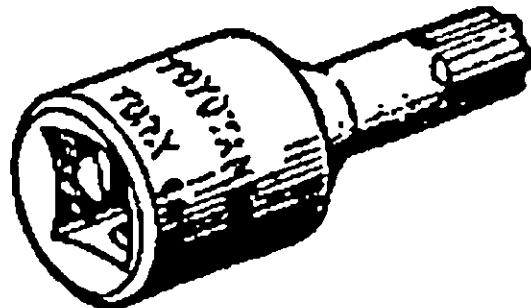
STEERING

SST (Special Service Tools)

PP1NL-01

	09950-50010 Puller C Set	
	(09951-05010) Hanger 150	
	(09952-05010) Slide Arm	
	(09953-05020) Center Bolt 150	
	(09954-05020) Claw No.2	

RECOMMENDED TOOLS

	09042-00010 Torx Socket T30 .	
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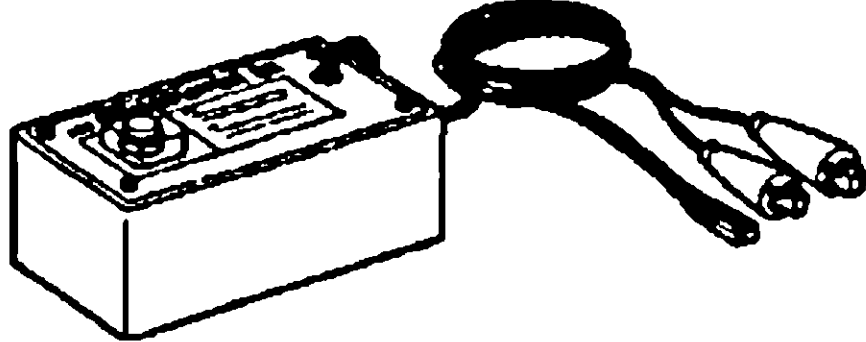
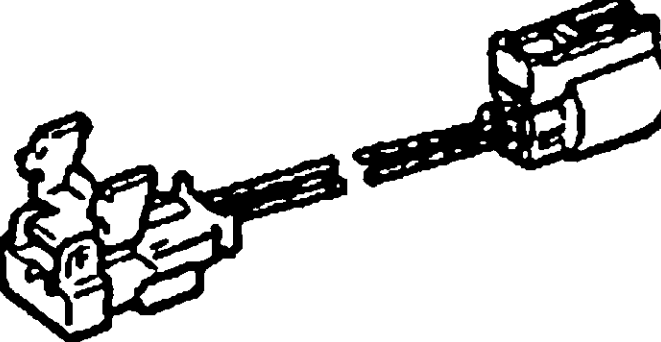
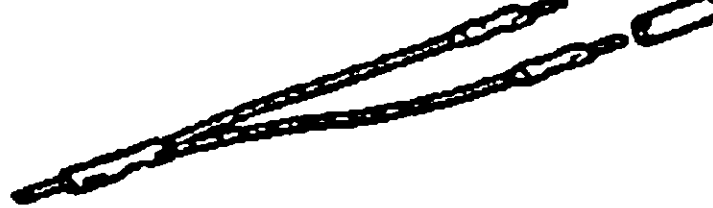
EQUIPMENT

PP1NN-01

Torque wrench	
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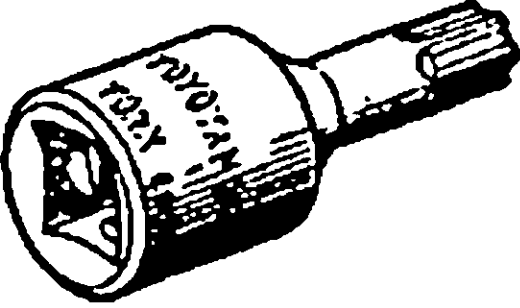
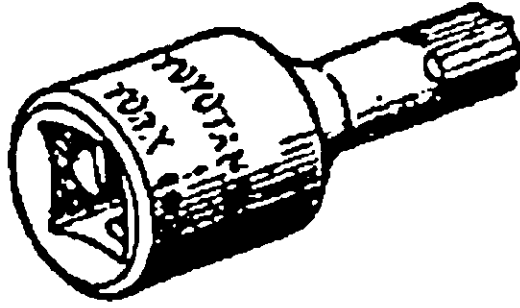
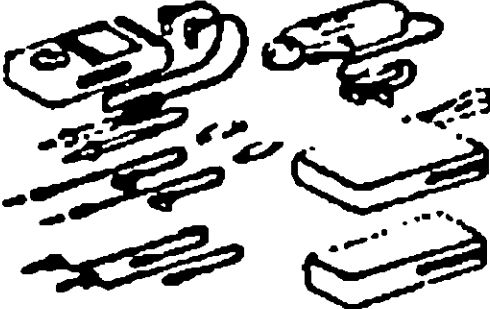
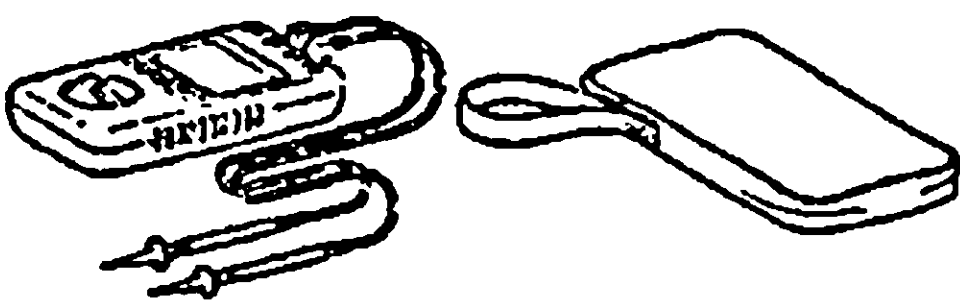
SUPPLEMENTAL RESTRAINT SYSTEM
SST (Special Service Tools)

PP0XK-02

	09082-00700 SRS Airbag Deployment Tool	
	09082-00760 Airbag Deployment Wire Sub-harness No.4	
	09843-18020 Diagnosis Check Wire	

PP

RECOMMENDED TOOLS

	09042-00010 Torx Socket T30 .	
	09042-00020 Torx Socket T40 .	
	09082-00050 TOYOTA Electrical Tester Set.	
	09082-00040 TOYOTA Electrical Tester.	

PP

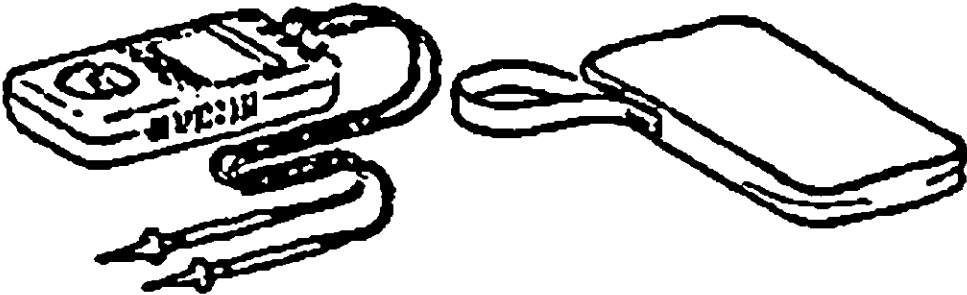
EQUIPMENT

Hand-held tester	
Torque wrench	
Bolt: Length: 35 mm (1.38 in.) Pitch: 1.0 mm (0.039 in.) Diam: 6.0 mm (0.236 in.)	Airbag disposal
Tire Width: 185 mm (7.28 in.) Inner diam: 360 mm (14.17 in.)	Airbag disposal
Tire with disc wheel Width: 185 mm (7.28 in.) Inner diam: 360 mm (14.17 in.)	Airbag disposal
Vinyl bag	Airbag disposal

PP

BODY ELECTRICAL
RECOMMENDED TOOLS

PP0XL-02

 09082-00040 TOYOTA Electrical Tester.	
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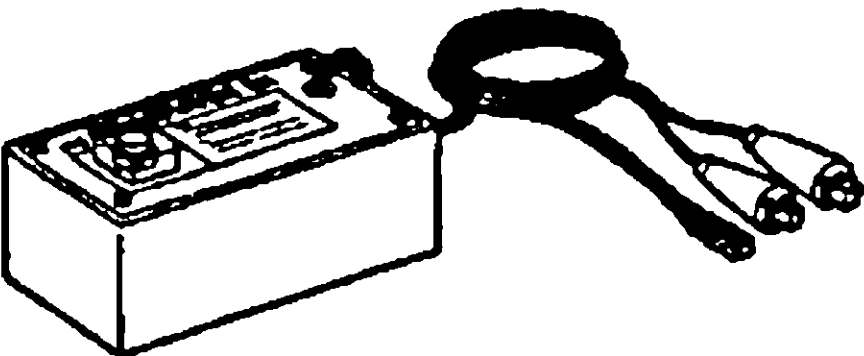
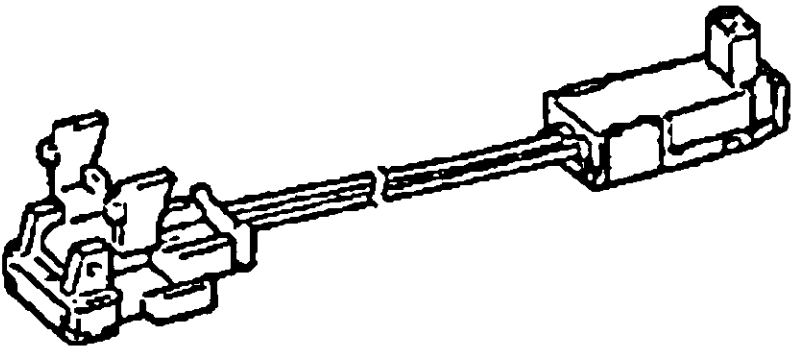
EQUIPMENT

Voltmeter	
Ammeter	
Ohmmeter	
Test lead	

BODY

SST (Special Service Tools)

PP0XN-02

	09082-00700 SRS Airbag Deployment Tool	
	09082-00740 Airbag Deployment Wire Sub-harness No.2	

EQUIPMENT

Clip remover	
Torque wrench	
Hog ring pliers	
Tape	To avoid surface damage
Adhesive tape	To avoid surface damage
Double-stick tape	
Adhesive	
Cleaner	
Shop rag	
Knife	
Sealer gun	
Brush	
Piano wire	
Rope (no projections, difficult to break)	Seat belt pretensioner
Tire Width: 185 mm (7.28 in.) Inner diam: 360 mm (14.17 in.)	Seat belt pretensioner
Tire with disk wheel Width: 185 mm (7.28 in.) Inner diam: 360 mm (14.17 in.)	Seat belt pretensioner
Vinyl bag	Seat belt pretensioner

PP

SSM (Special Service Materials)

08833-00070	Adhesive 1324, THREE BOND 1324 or equivalent	
08833-00030	Three cement black or equivalent	
08850-00801	Windshield Glass Adhesive Set or equivalent	

SERVICE SPECIFICATIONS

STANDARD BOLT	SS-1
STEERING	SS-3
SUPPLEMENTAL RESTRAINT SYSTEM ...	SS-4
BODY ELECTRICAL	SS-5
BODY	SS-6

SS

REFER TO LAND CRUISER/LAND CRUISER PRADO RE-PAIR MANUAL FOR CHASSIS AND BODY (Pub. No. RM517E)

NOTE: The above pages contain only the points which differ from the above listed manual.

STEERING
TORQUE SPECIFICATION

SS0VI-01

Part tightened	N·m	kgf·cm	ft·lbf
Steering wheel set nut	34	350	25
Steering wheel pad set screw (Torx screw)	8.8	90	78 in.·lbf
Steering column assembly set nut	26	260	18
Main shaft assembly x Universal joint No.2	35	360	26
Universal joint No.2 x Intermediate shaft No.2	35	360	26
Control valve shaft x Intermediate shaft No.2	35	360	26
Column hole cover No.2 x Column hole cover,x Body	8.0	80	69 in.·lbf

SS

SUPPLEMENTAL RESTRAINT SYSTEM
TORQUE SPECIFICATION

SS035-03

Part tightened	N·m	kgf·cm	ft·lbf
Steering wheel	34	350	25
Steering wheel pad	8.8	90	78 in.·lbf
Front passenger airbag assembly x Instrument panel reinforcement	18	184	13
Airbag sensor assembly	20	200	14
Front airbag sensor	10	100	7

SS

DIAGNOSTICS

SUPPLEMENTAL RESTRAINT SYSTEM ...	DI-1
HOW TO PROCEED WITH	
TROUBLESHOOTING	DI-1
CUSTOMER PROBLEM ANALYSIS CHECK ...	DI-2
PRE-CHECK	DI-3
DIAGNOSTIC TROUBLE CODE CHART	DI-9
PARTS LOCATION	DI-11
TERMINALS OF ECU	DI-12
PROBLEM SYMPTOMS TABLE	DI-13
CIRCUIT INSPECTION	DI-14

