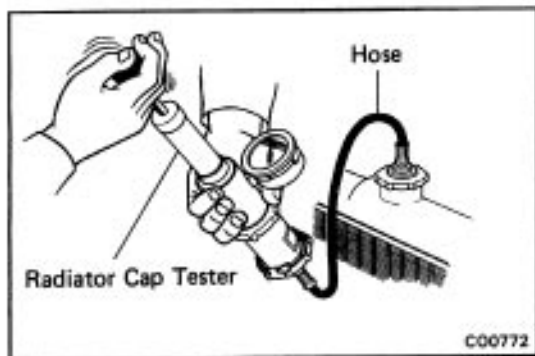
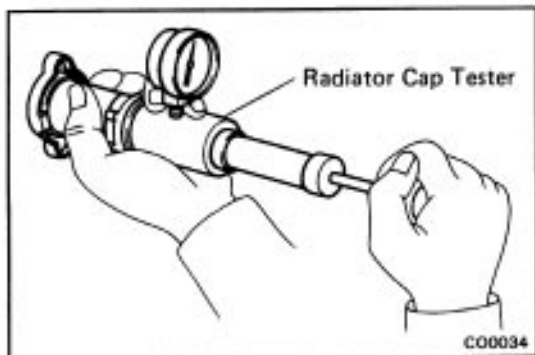


## RADIATOR

### CLEANING OF RADIATOR

Using water or steam cleaner, remove any mud and dirt from the radiator core.

**NOTICE:** If using a high pressure type cleaner, be careful not to deform the fins of the radiator core. If the cleaner nozzle pressure is 30 – 35 kg/cm<sup>2</sup> (427 – 498 psi, 2,942 – 3,432 kPa), keep a distance of at least 40 – 50 cm (15.75 – 19.69 in.) between the radiator core and cleaner nozzle.



### INSPECTION OF RADIATOR

#### 1. CHECK RADIATOR CAP

Using a radiator cap tester, pump the tester until the relief valve opens. Check that the valve opens between 0.75 kg/cm<sup>2</sup> (10.7 psi, 74 kPa) and 1.05 kg/cm<sup>2</sup> (14.9 psi, 103 kPa).

Check that the pressure does not drop rapidly when pressure on the cap is below 0.6 kg/cm<sup>2</sup> (8.5 psi, 59 kPa).

If either check is not within limits, replace the cap.

#### 2. CHECK COOLING SYSTEM FOR LEAKS

- (a) Fill the radiator with coolant and attach a radiator cap tester.
- (b) Warm up the engine.
- (e) Pump it to 1.2 kg/cm<sup>2</sup> (17 psi, 118 kPa), check that the pressure does not drop.

If the pressure drops, check for leaks from the hoses, radiator or water pump. If no external leaks are found, check the heater core, block and head.

### REMOVAL OF RADIATOR

#### 1. DRAIN COOLANT (See page CO-5)

#### 2. (A/T)

##### DISCONNECT TWO COOLER HOSES

HINT:

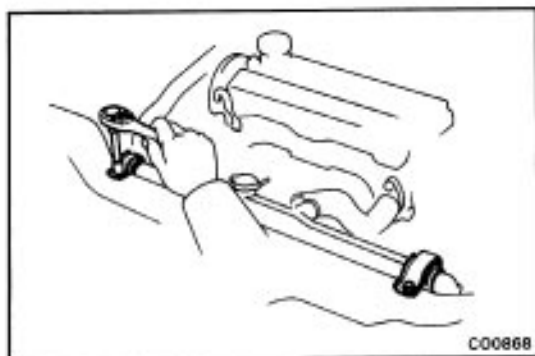
- Be careful as some oil will leak out. Catch it in a suitable container.
- Plug the hose to prevent oil from escaping.

#### 3. DISCONNECT RESERVOIR TANK WITH HOSE

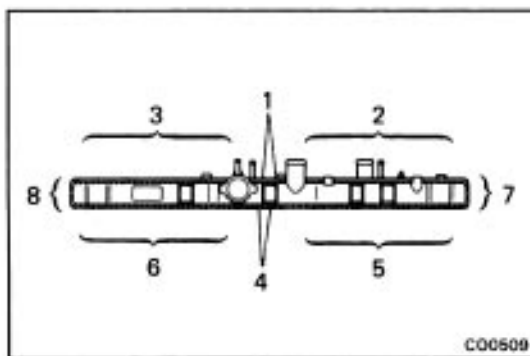
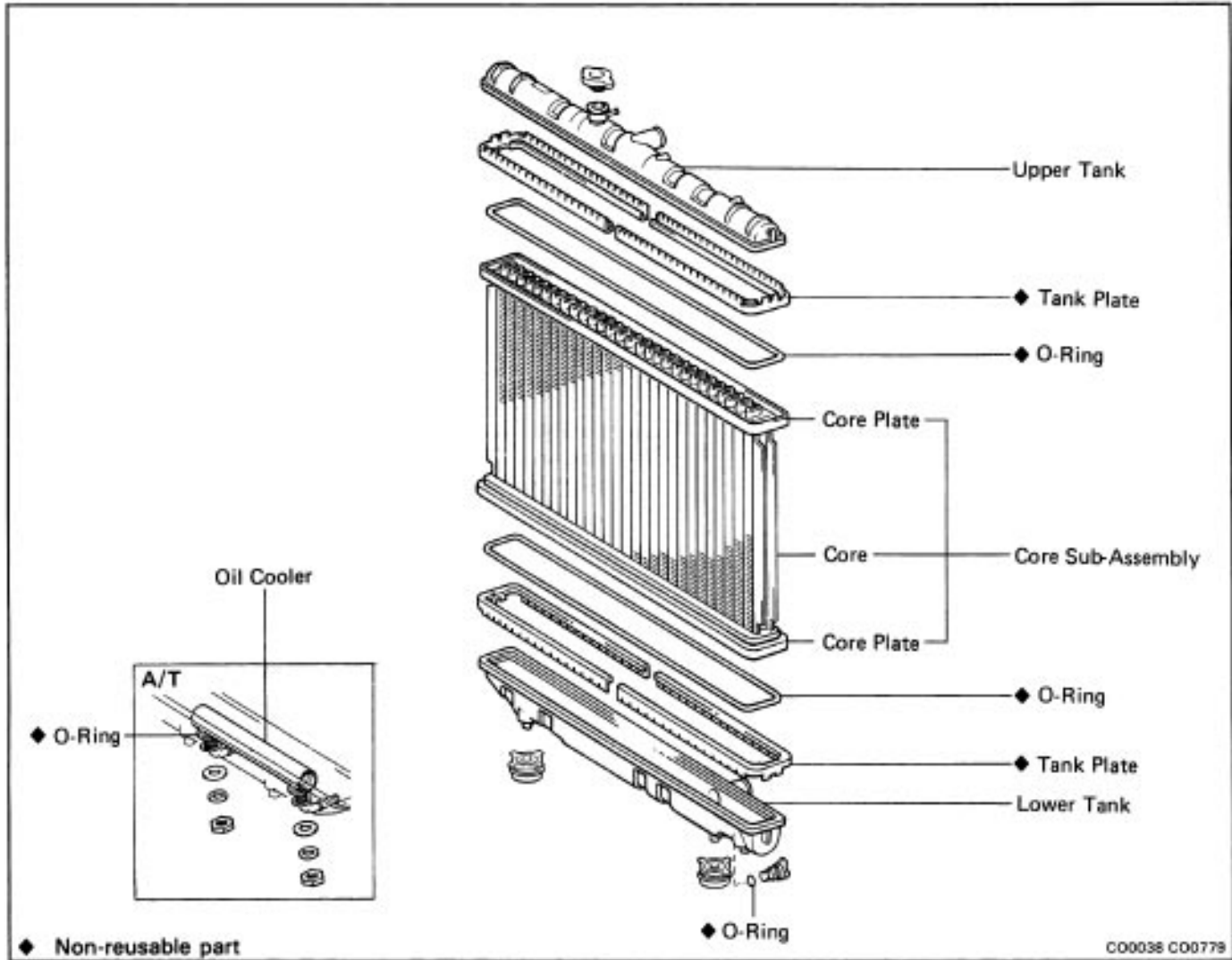
#### 4. DISCONNECT FAN MOTOR CONNECTOR

#### 5. DISCONNECT TWO RADIATOR HOSES

#### 6. REMOVE TWO RADIATOR SUPPORTS AND RADIATOR



## COMPONENTS



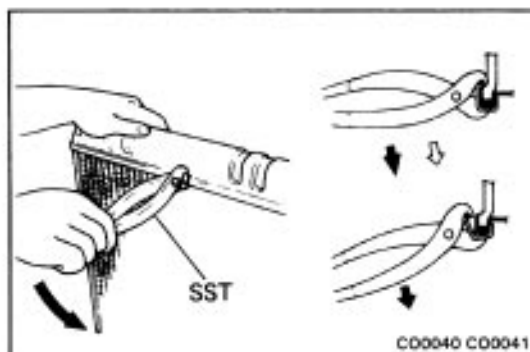
## DISASSEMBLY OF RADIATOR

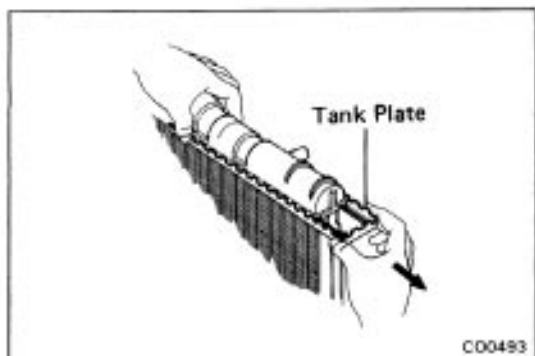
### 1. REMOVE TANK PLATE

(a) Raise the claws of the tank plates with SST in the numerical order shown in the illustration.

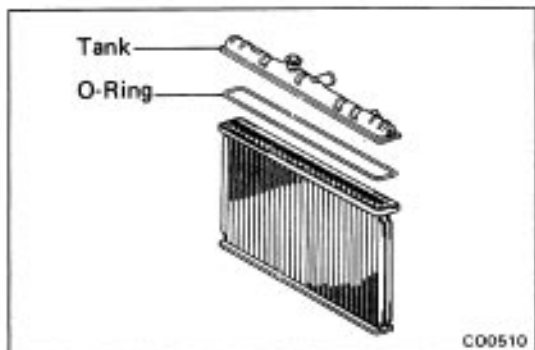
SST 09230-00010

**NOTICE:** Be careful not to damage the core plate.



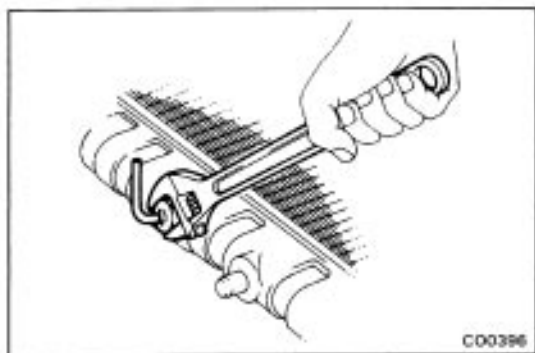


(b) Pull the tank plates outward.



## 2. REMOVE TANK AND O-RING

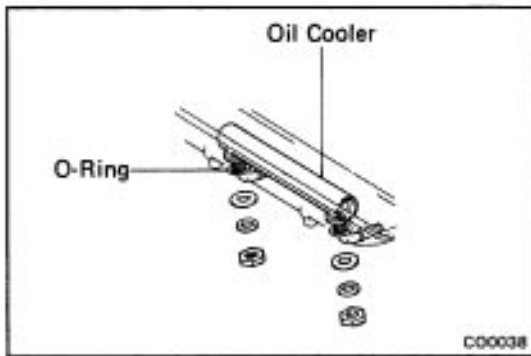
- (a) Pull the tank upward.
- (b) Remove the O-ring.



## 3. (A/T)

### REMOVE OIL COOLER FROM LOWER TANK

- (a) Remove the two nuts, spring washers, plate washers and oil cooler.
- (b) Remove the O-ring from the oil cooler.



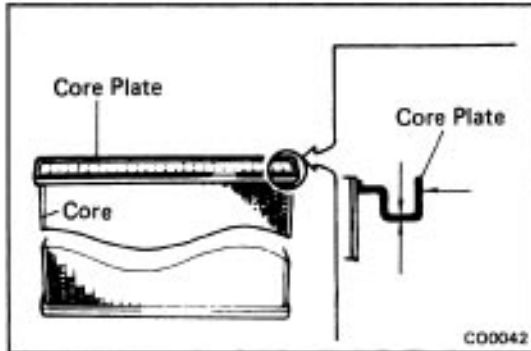
## ASSEMBLY OF RADIATOR

(See page CO-14)

### 1. (A/T)

#### INSTALL OIL COOLER TO LOWER TANK

- Clean the O-ring contact surface of the lower tank and oil cooler.
- Install a new O-ring to the oil cooler.
- Install the oil cooler with the O-rings to the lower tank.
- Install the plate washers, spring washers and nuts.

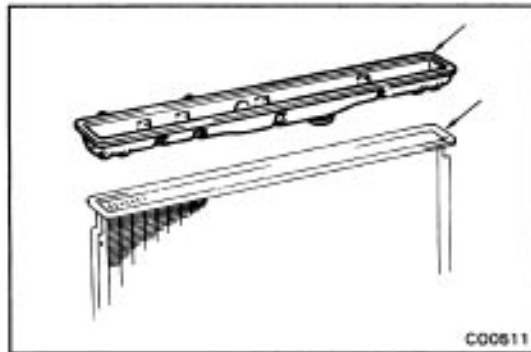


### 2. INSPECT CORE PLATE

Inspect the core plate for damage.

HINT:

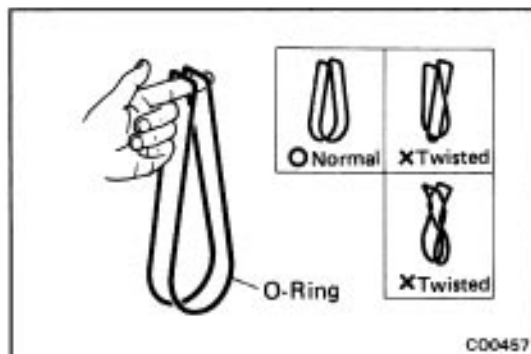
- If the sides of the core plate groove are deformed, reassembly of the tank will be impossible.
- Therefore, first correct any deformation with pliers or like object. Water leakage will result if the bottom of the core plate groove is damaged or dented. Therefore, repair or replace if necessary.



### 3. INSTALL NEW O-RING AND TANK

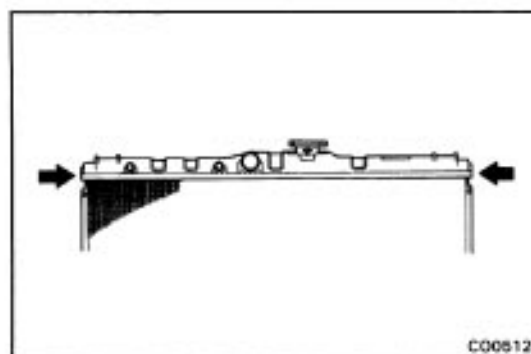
HINT:

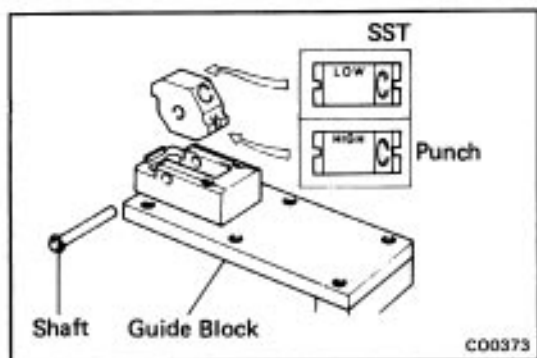
- Clean the tank and core plate.
- Take out any twists.



### 4. INSTALL TANK PLATE

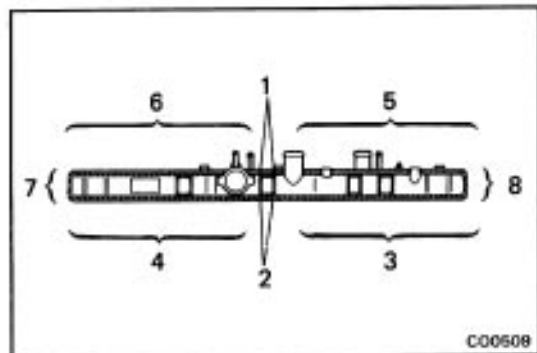
Install the tank plates from both ends in the direction of the arrows. Insert to where the portions shown by the arrows contact with the tank.





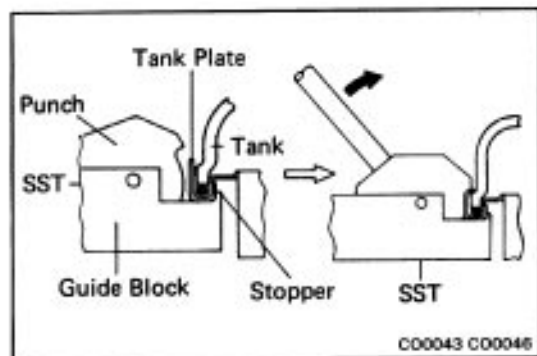
## 5. STAKE CLAW OF TANK PLATE

- (a) Set the punch of SST to "LOW".  
SST 09230-00010



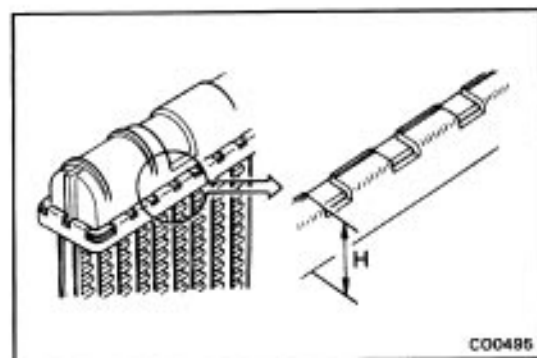
- (b) Stake the claws of the tank plates with SST in the numerical order shown in the illustration.

SST 09230-00010



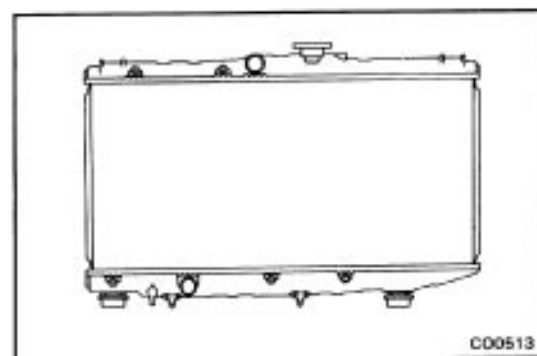
**NOTICE:** If the bottom of the core plate is staked with the SST on the guide block stopper, it may result in water leakage.

SST 09230-00010

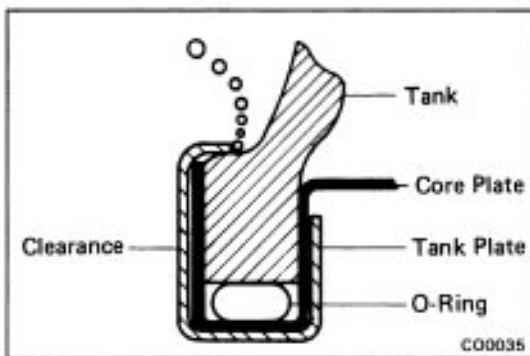
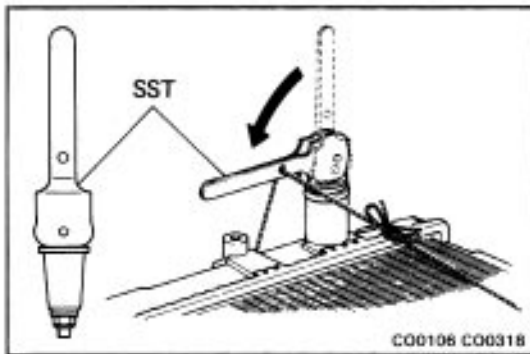
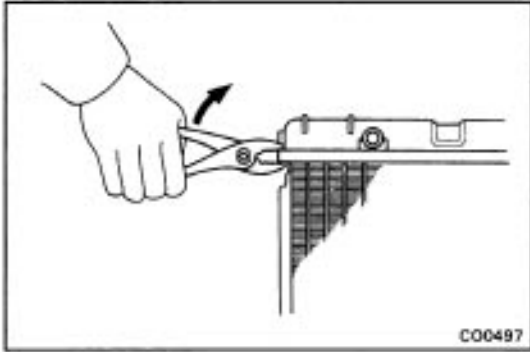
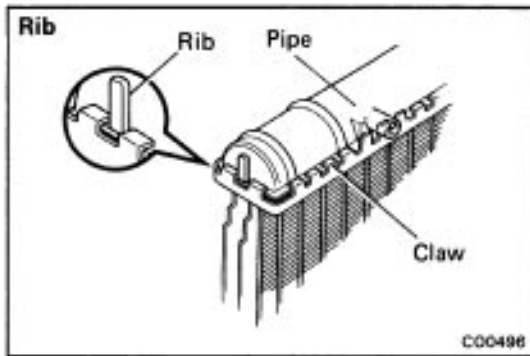


HINT:

- Stake with just enough pressure to leave a mark on the claw. The staked plate height (H) should be as follows:  
**Plate height: 9.08 – 9.43 mm (0.3575 – 0.3713 in.)**



- Do not stake the areas protruding around the pipes, brackets or tank ribs.



- The points shown in the illustration cannot be staked with the SST. Use a pliers or like object and be careful not to damage the core plates.

## 6. INSPECT FOR WATER LEAKS

(a) Tighten the drain plug.

(b) Plug the inlet and outlet pipes of the radiator with SST.

SST 09230-00010

(c) Using a radiator cap tester, apply pressure to the radiator.

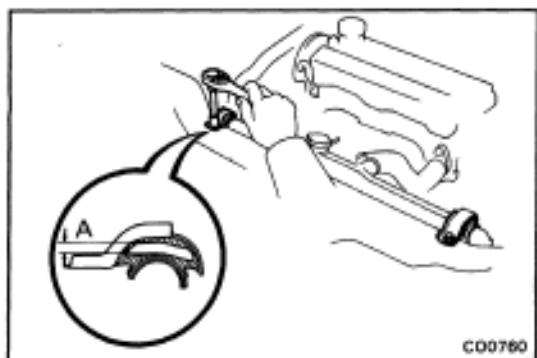
**Test pressure: 1.5 kg/cm<sup>2</sup> (21 psi, 147 kPa)**

(d) Inspect for water leaks.

HINT: On radiators with resin tanks, there is a clearance between the core plate and tank plate where a minute amount of air will remain, giving the appearance of an air leak when the radiator is submerged in water. Therefore, before performing the water leak test, first switch the radiator around in the water until all air bubbles disappear.

## 7. PAINT TANK PLATE

HINT: If the water leak test checks out okay, allow the radiator to completely dry and then paint the tank plates.



## INSTALLATION OF RADIATOR

### 1. INSTALL RADIATOR AND SUPPORT

Place the radiator in installed position and install the two supports with the two bolts.

HINT: After installation, confirm that the rubber cushion (A) of the support is not depressed.

### 2. CONNECT TWO RADIATOR HOSES

### 3. CONNECT FAN MOTOR CONNECTOR

### 4. (A/T)

#### CONNECT TWO COOLER HOSES

### 5. CONNECT COOLANT RESERVOIR TANK WITH HOSE

### 6. REFILL WITH COOLANT

(See page [CO-5](#))

### 7. CHECK AUTOMATIC TRANSMISSION FLUID LEVEL

(See pages [MA-10](#) and [MA-11](#))

Fluid type: 2WD ATF DEXRON® II

4WD ATF Type T

NOTICE: Do not overfill

### 8. START ENGINE AND CHECK FOR LEAKS