

TECHNICAL INSTRUCTIONS

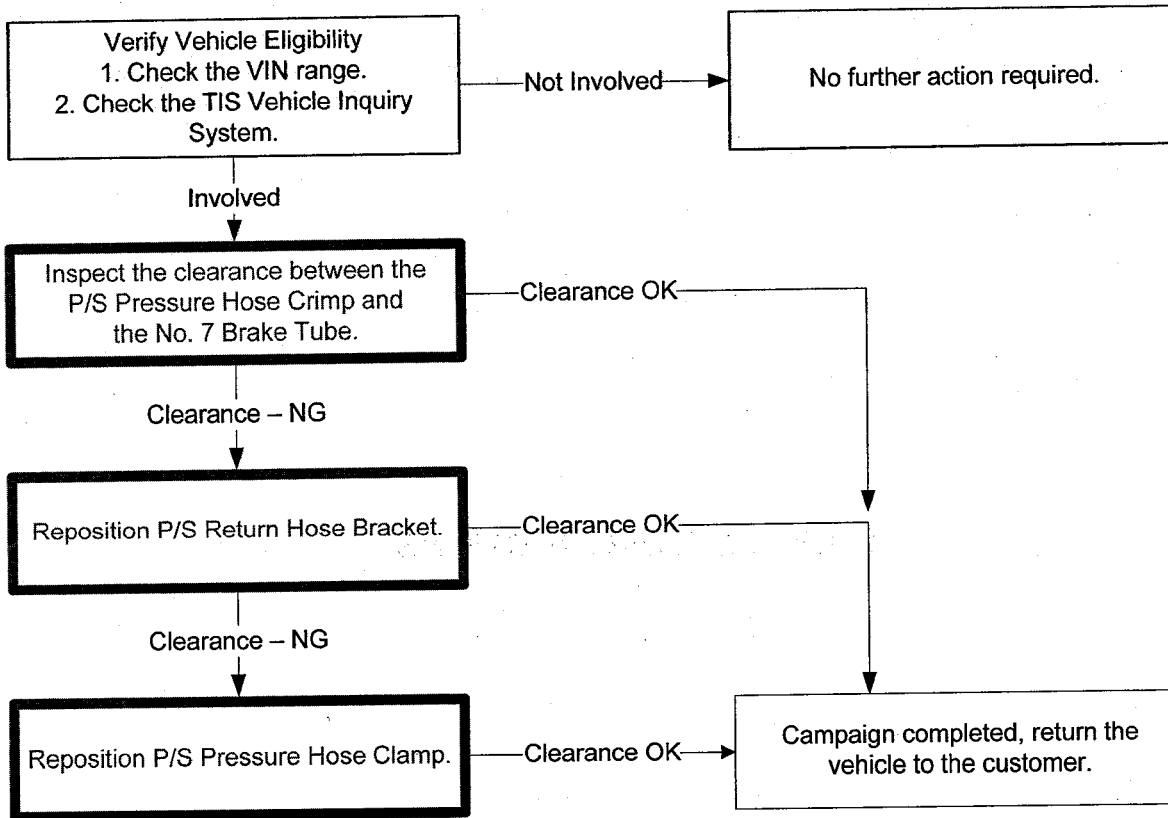
FOR

SAFETY RECALL A0C

**CLEARANCE INSPECTION BETWEEN THE P/S PRESSURE HOSE CRIMP
AND THE NO. 7 BRAKE TUBE**

**2010 CAMRY
4-CYLINDER ENGINE ONLY (2AR-FE)**

I. OPERATION FLOW CHART



II. IDENTIFICATION OF AFFECTED VEHICLES

A. AFFECTED VIN RANGE

Model	WMI	Year	VIN Range	
			VDS	Range
CAMRY	4T1	2010	BF3EK	U001018 – U001021
				U500012 – U503263
	4T4			R001024 – R012346

- Check Dealer Daily/TIS to confirm the VIN is involved in this SSC. This will verify the vehicle is affected and has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.

III. PREPARATION

A. TOOLS & MATERIALS

- Standard hand tools
- Special Service Tool (SST) 00002-GTMAR – Taper Gauge (Gap Tool) (drawer 20)
- Super Glue

IV. BACKGROUND

On 7,314 specific early production 2010 MY Camry vehicles equipped with the 4 cylinder (2AR-FE) engine, a P/S pressure hose in the engine compartment may be too long. If this condition exists a crimp on the P/S hose may come in contact with the No.7 brake tube. The safety recall will entail inspection and if necessary repositioning the P/S return hose bracket and/or P/S pressure hose clamp.

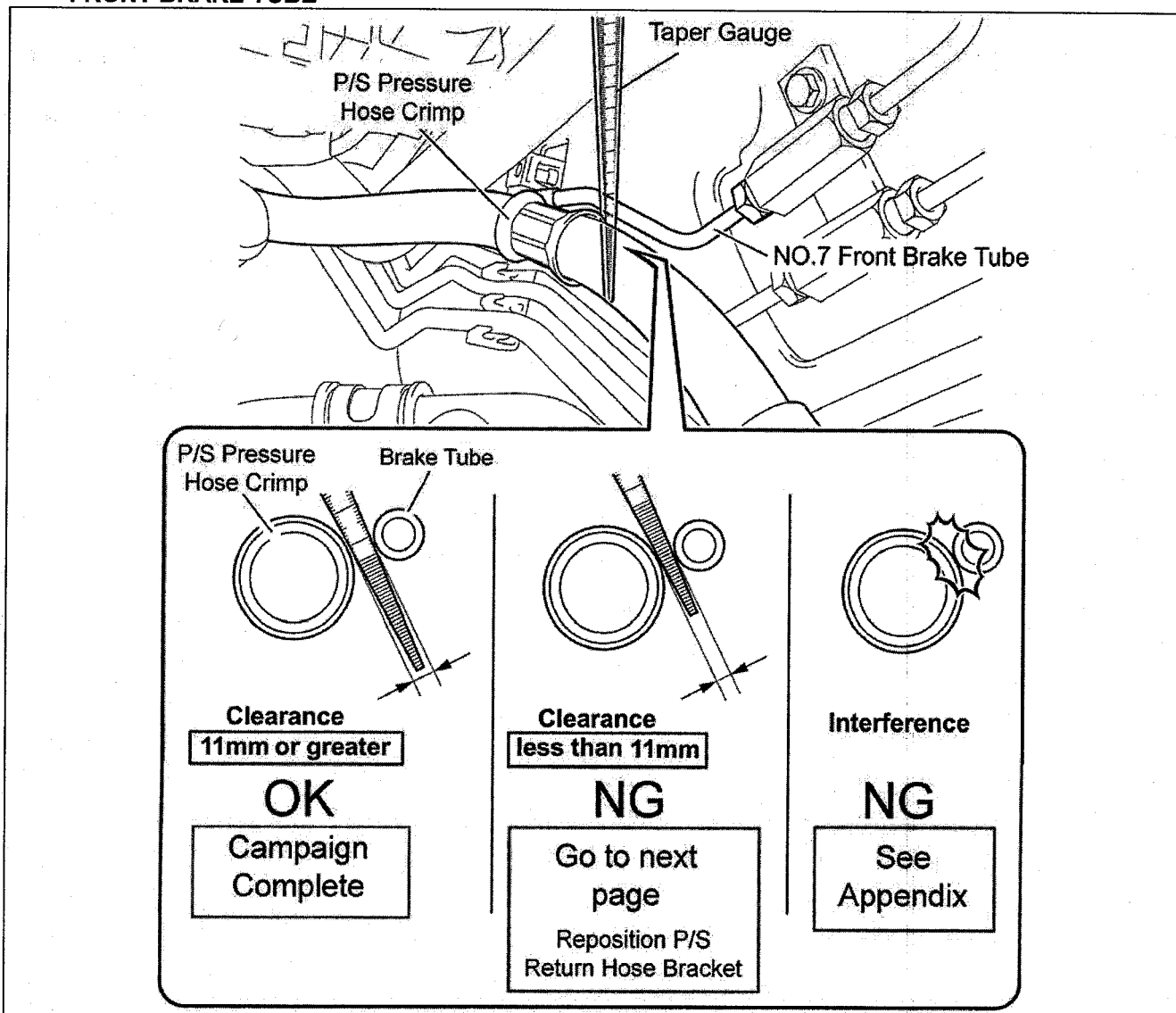
V. WORK PROCEDURE

A. MEASURE CLEARANCE

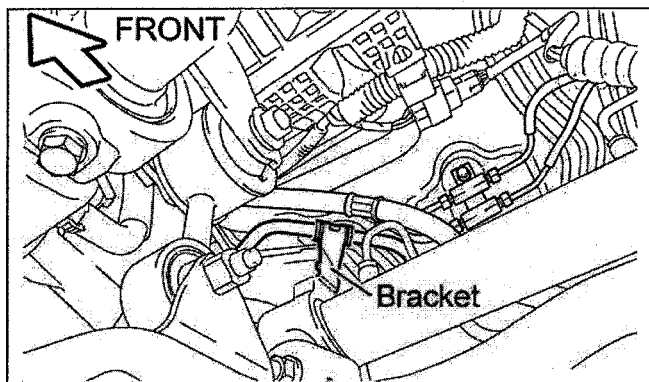


1. LOCATE P/S PRESSURE HOSE CRIMP

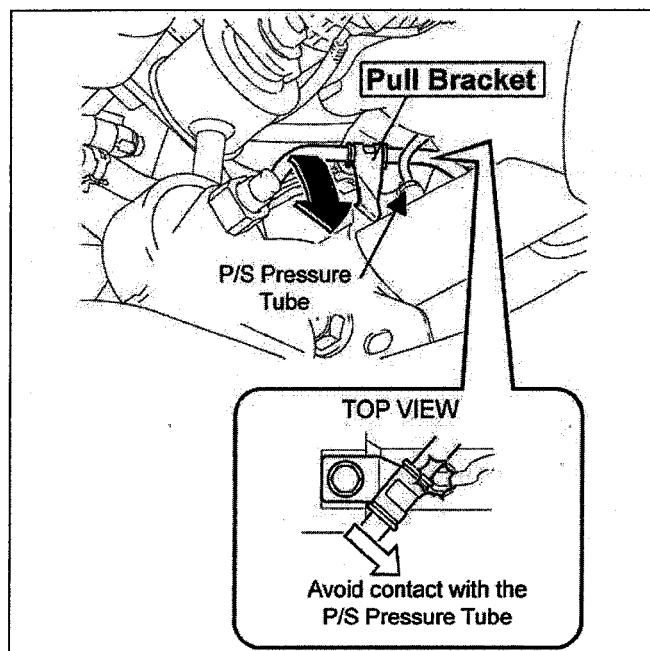
2. MEASURE THE CLEARANCE BETWEEN THE P/S PRESSURE HOSE CRIMP AND THE NO. 7 FRONT BRAKE TUBE



B. REPOSITION P/S RETURN HOSE BRACKET



1. LOCATE THE P/S RETURN HOSE BRACKET



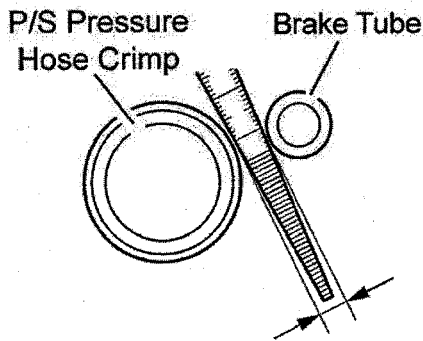
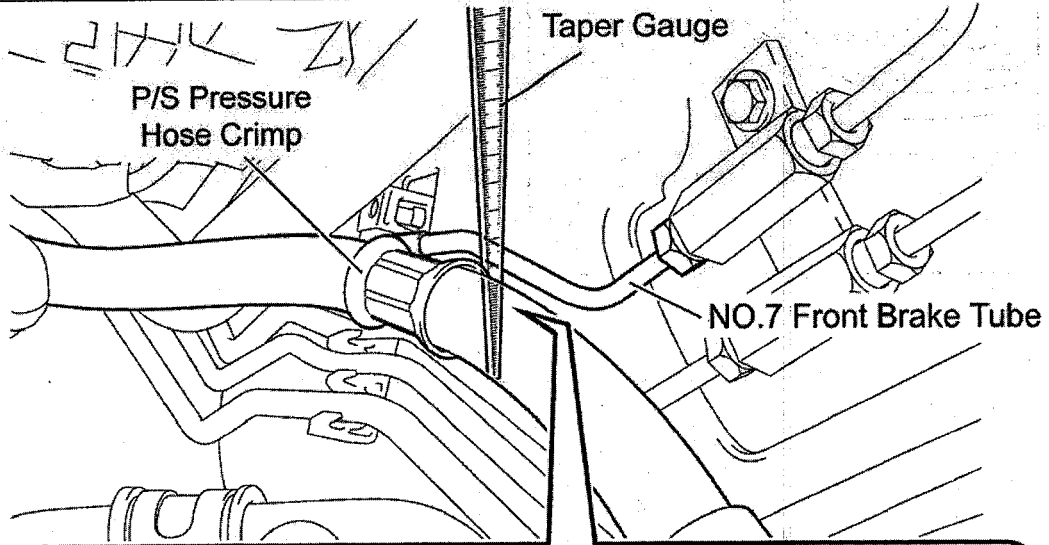
2. REPOSITION BRACKET POSITION

- Carefully bend the bracket towards the front of the vehicle and down.
- Stop before contact is made with the P/S pressure tube.

NOTES:

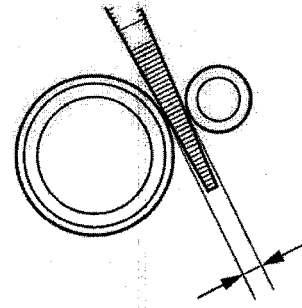
- Only bend the bracket - Not the P/S return hose.
- 3mm of clearance must be maintained between the P/S pressure tube and the P/S return hose.

C. RE-MEASURE CLEARANCE BETWEEN THE P/S PRESSURE HOSE CRIMP AND THE NO. 7 FRONT BRAKE TUBE



Clearance
11mm or greater

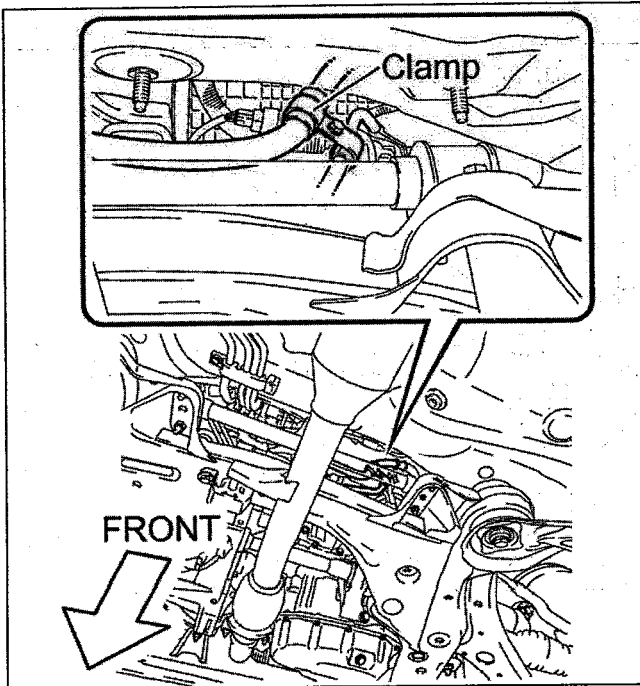
OK
Campaign
Complete



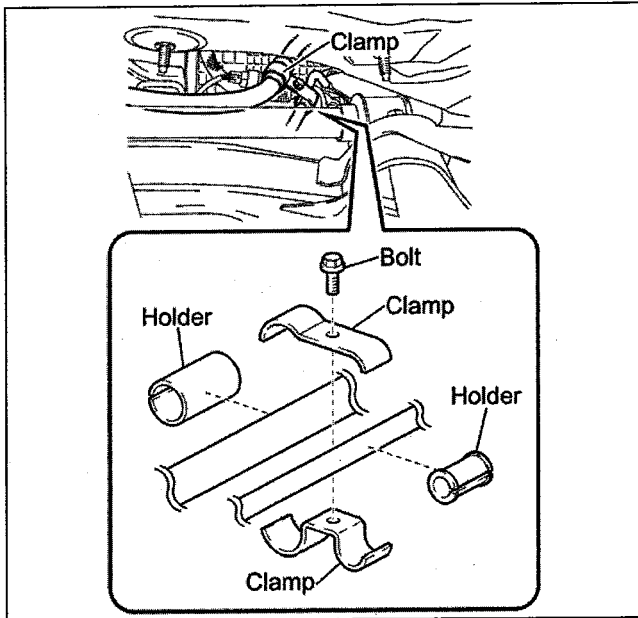
Clearance
less than 11mm

NG
Go to next
page
Reposition the P/S
Pressure Hose Clamp

D. REPOSITION THE P/S PRESSURE HOSE CLAMP



1. LOCATE P/S PRESSURE HOSE CLAMP

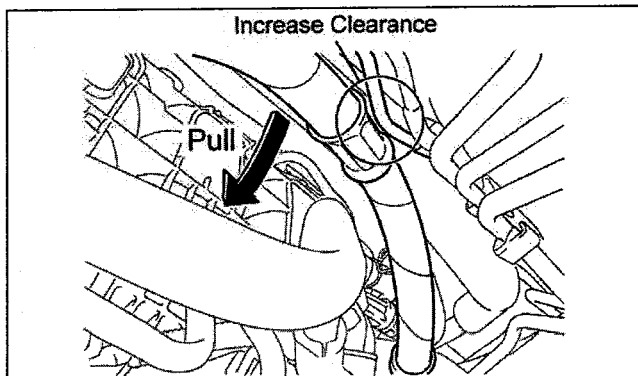


2. REMOVE CLAMP AND HOLDER

- Remove the bolt.
- Remove both halves of the clamp and the holders.
- Clean the clamp, holders and hoses with warm water. Dry the components.

NOTE:

- The clamp, holders and hoses are lightly glued together from the factory.
- To avoid damage, be careful not to pull too hard on the hoses during disassembly.

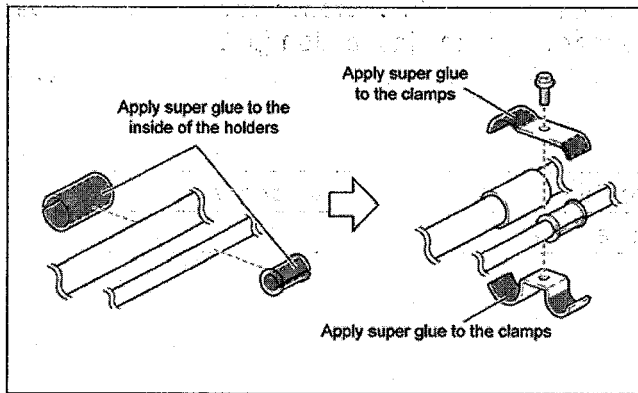


3. REPOSITION POSITION OF P/S PRESSURE HOSE ASSEMBLY

- Pull the P/S pressure hose away from the No. 7 brake tube by 11-15 mm (approx. 1/2 inch).

STOP

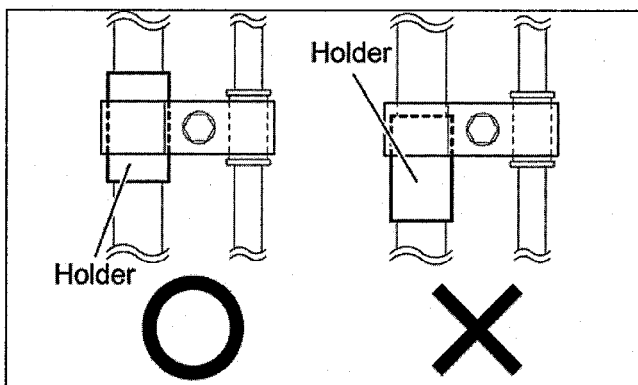
Steps b) through e) must be performed before the glue dries.



- b) Lightly glue the 2 holders to the same location from where they were removed on the hoses.
- c) Lightly glue the clamp to the holders.
- d) While holding the hose in the proper position (approx. 1/2 inch from the brake tube), fasten the bolt.

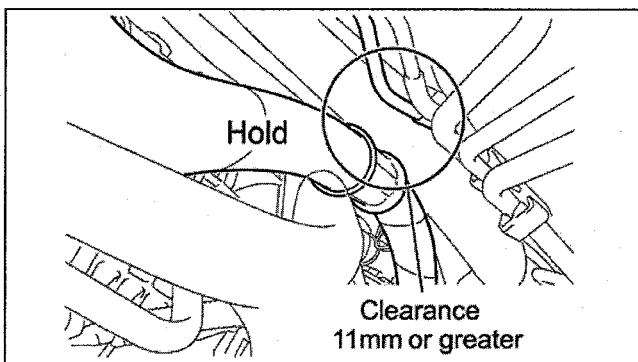
Bolt Torque Specification:
5.5 N-m (56 kgf-cm, 49 in-lbf)

NOTE:
The glue is necessary to keep the hoses in the correct orientation after the adjustment.

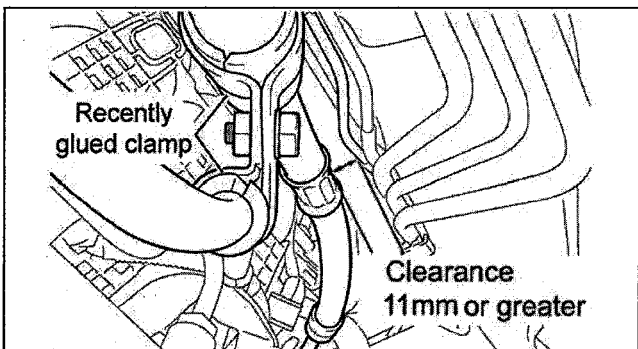


- e) Verify the clamp is directly on the holders.

NOTE:
If the clamp is not directly on the holders readjust the position as it may wear the power steering hoses.



- f) Hold the P/S pressure hose in place to maintain sufficient clearance until the glue is set.



- g) Verify that at least an 11mm clearance exists between the P/S pressure hose crimp and the no. 7 brake tube.

NOTE:
If the clearance is still less than 11mm, re-perform steps B & D.

-Campaign Complete-

VI. APPENDIX

Work Procedure - No.7 Front Brake Tube Installation



Replacement of the brake tube is only necessary when interference or scuffing has been identified on the No. 7 front brake tube according to the inspection (p. 2)

A. PARTS

Part Number	Part Description	Quantity
47317-06160	No.7 Front Brake Tube	1

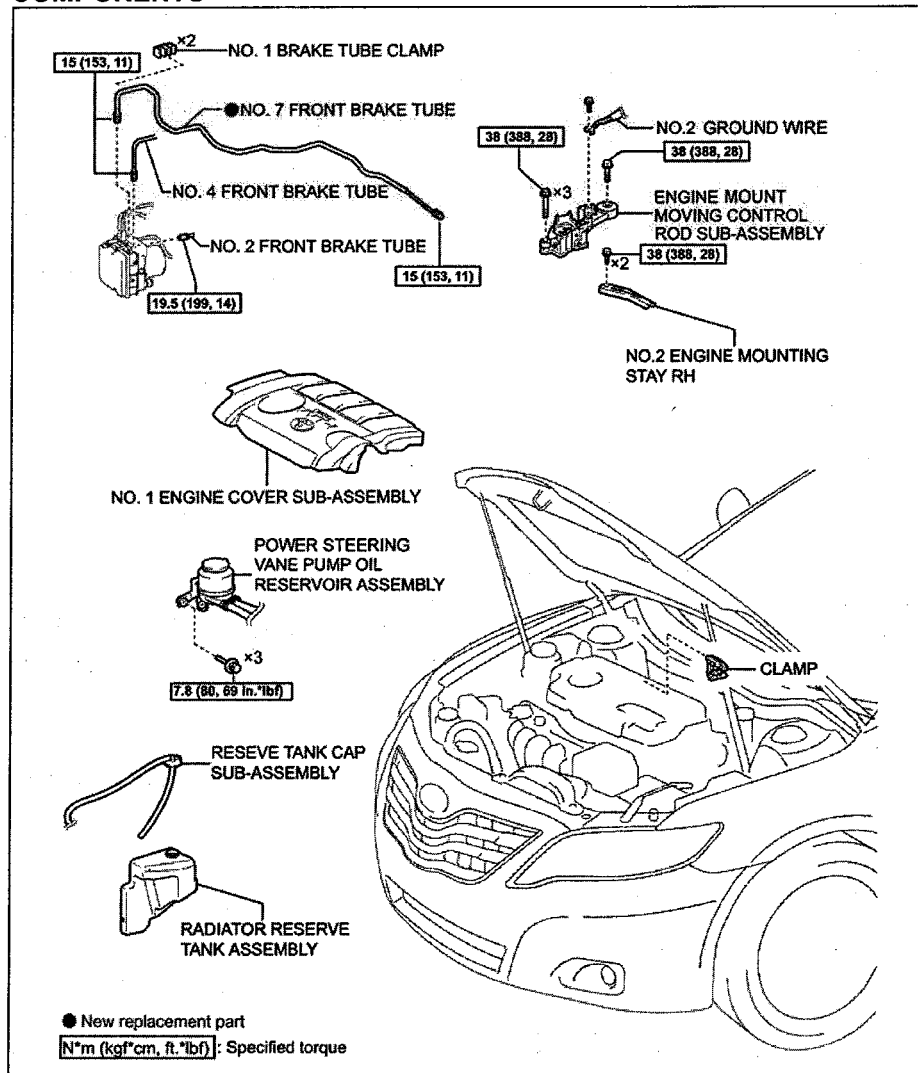
B. TOOLS & EQUIPMENT

- Standard hand tools
- Torque Wrench
- Brake Bleeder
- Union Nut Wrench 10mm & 12mm

C. MATERIALS

- Toyota DOT 3 Brake Fluid

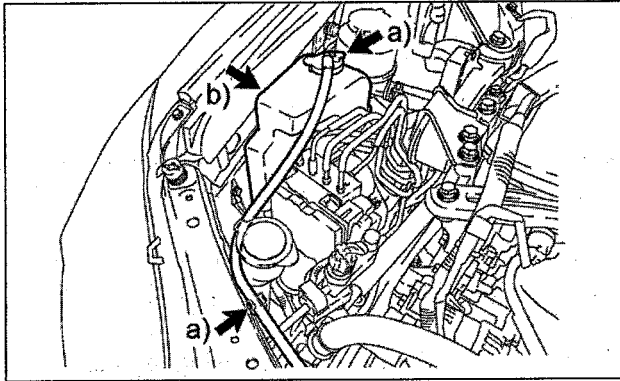
D. COMPONENTS



DO NOT FORGET TO PERFORM THE WORK PROCEDURE STARTING ON PAGE 2
AFTER REPLACING THE NO. 7 FRONT BRAKE TUBE.

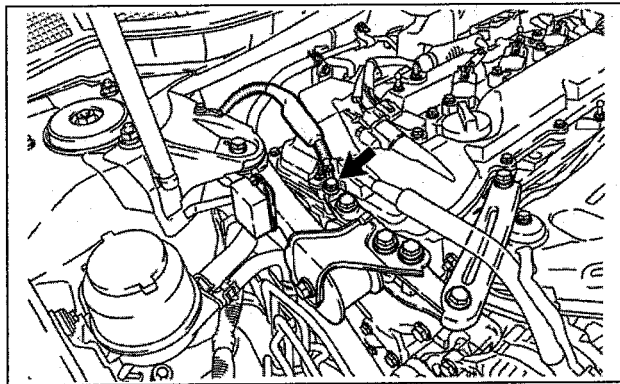
E. REMOVE NO.7 FRONT BRAKE TUBE -

1. DRAIN BRAKE FLUID
2. REMOVE NO. 1 ENGINE COVER SUB-ASSEMBLY
3. REMOVE THE RADIATOR RESERVE TANK ASSEMBLY

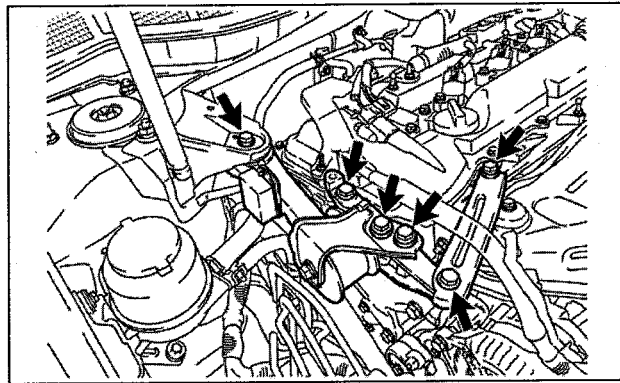


- a) Separate the radiator reservoir tank cap and hose.
- b) Remove the radiator reserve tank assembly.

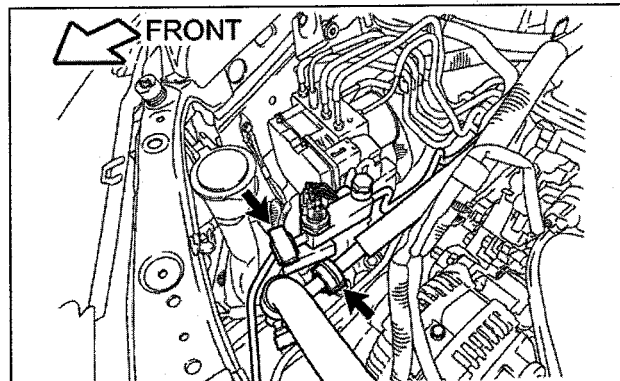
4. REMOVE THE ENGINE MOUNT



- a) Remove the bolt and separate No.2 ground wire.



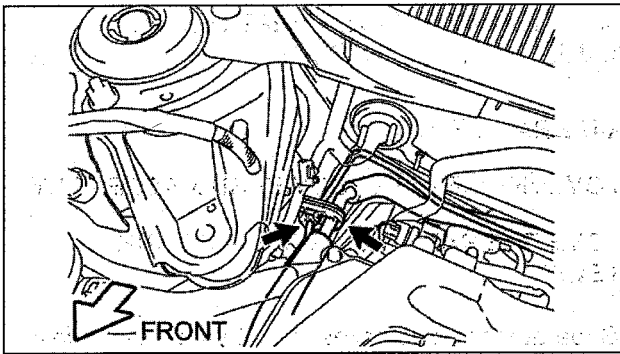
- b) Remove the 6 bolts and the No.2 engine mounting stay RH and engine mount.



5. SEPARATE THE A/C LINE CLAMPS

- a) Disengage the 2 clamps and separate the two air conditioner lines shown.

NOTE:
Disengaging the clamps from the A/C lines is necessary to provide clearance for brake tube removal.



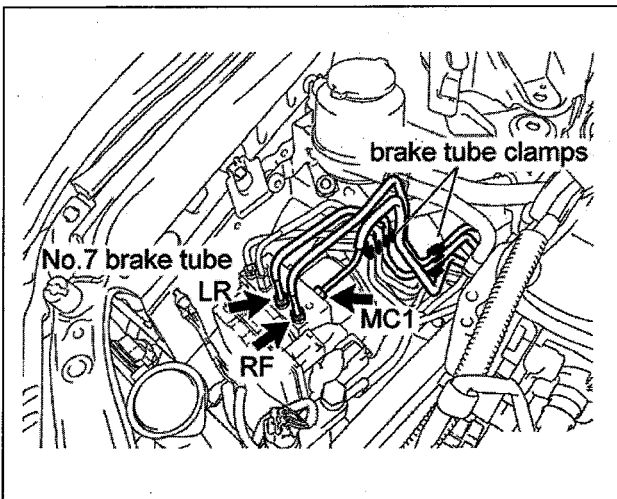
- b) Remove the clamp and disengage the air conditioning lines.

HINT:

Access the back of the clamp from the right front wheel-well to release the clamp claws.



Carefully and correctly identify each brake tube to ensure correct reinstallation. This is critical to prevent brake system damage.

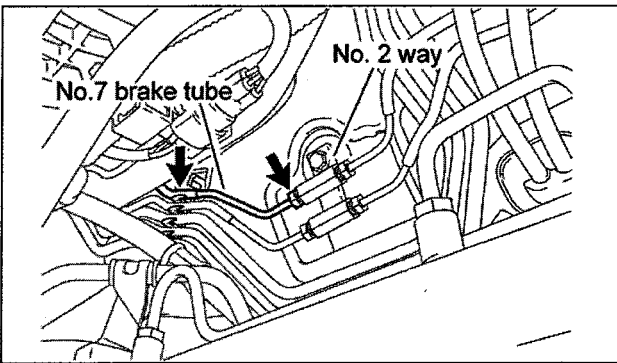


6. REMOVE THE NO.7 FRONT BRAKE TUBE

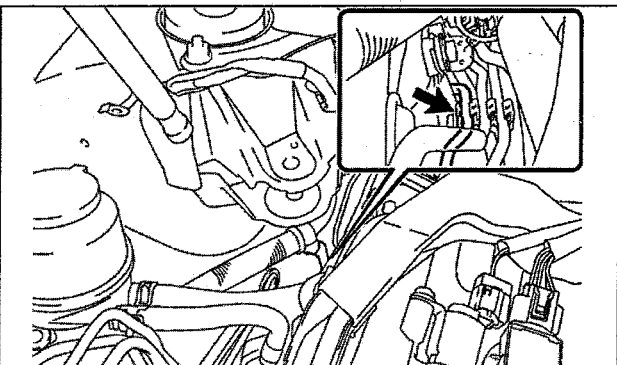
- a) Clearly identify the brake tubes using tags or markings.
 - LR (No. 7 brake tube)
 - RF brake tube
 - MC1 brake tube
- b) Clearly identify the two brake tube clamp locations in relation to the brake tubes.
- c) Remove both brake tube clamps.
- d) Remove the 3 brake tubes from the brake actuator assembly.

NOTE:

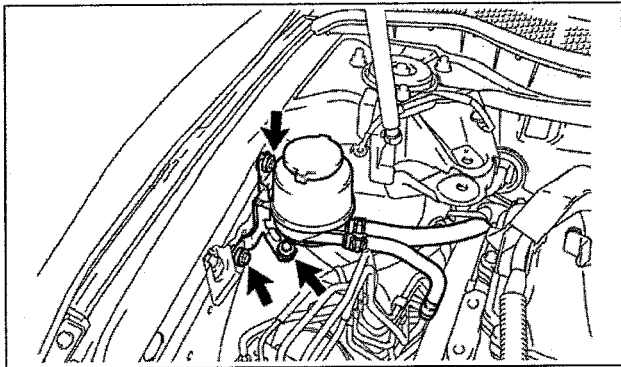
All 3 tubes must be removed to allow clearance for the No.7 front brake tube.



- e) Disconnect No.7 brake tube from the No.2 way located on the bulk head.
- f) Disconnect the brake tube from the clamp.

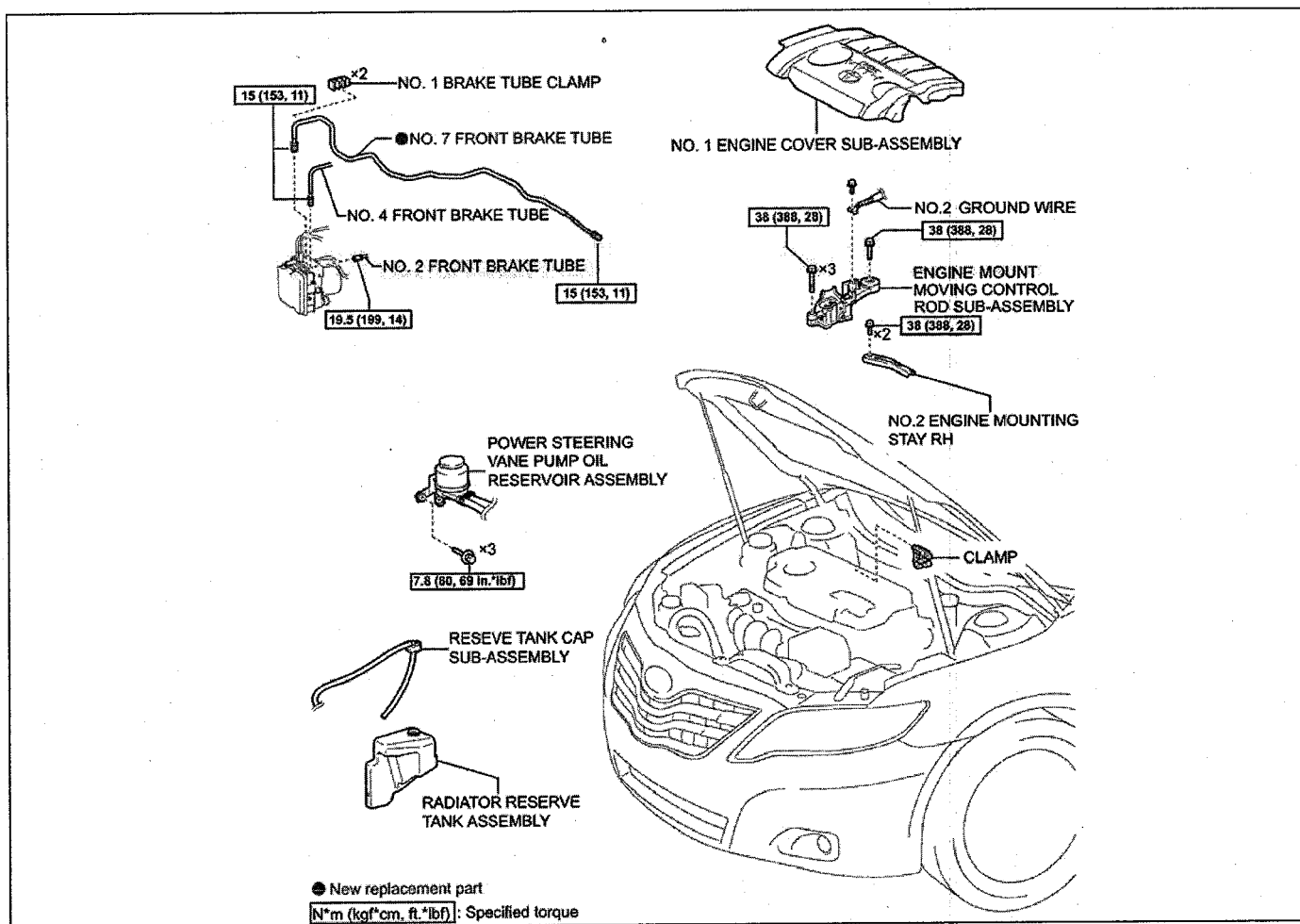


- g) Disconnect the No.7 brake tube from the clamp.



- h) Remove the 3 bolts and move the power steering reservoir aside to provide the necessary clearance for the brake tube removal.
- i) Remove the No.7 brake tube from the engine compartment.

F. INSTALL THE NEW NO.7 FRONT BRAKE TUBE



1. INSTALL THE COMPONENTS IN THE REVERSE ORDER OF REMOVAL.
2. FILL RESERVOIR WITH BRAKE FLUID
3. BLEED BRAKE LINES Click link for detail: [BRAKE: BRAKE FLUID: BLEEDING](#)
4. INSPECT FOR BRAKE FLUID LEAKS – VERIFY CORRECT FLUID LEVEL IN RESERVOIR

5. **RETURN TO PAGE 2 - PERFORM THE WORK PROCEDURE PREVENT ADDITIONAL INTERFERENCE WITH THE NO. 7 BRAKE TUBE.**