

**TECHNICAL INSTRUCTIONS
FOR
LIMITED SERVICE CAMPAIGN ESD**

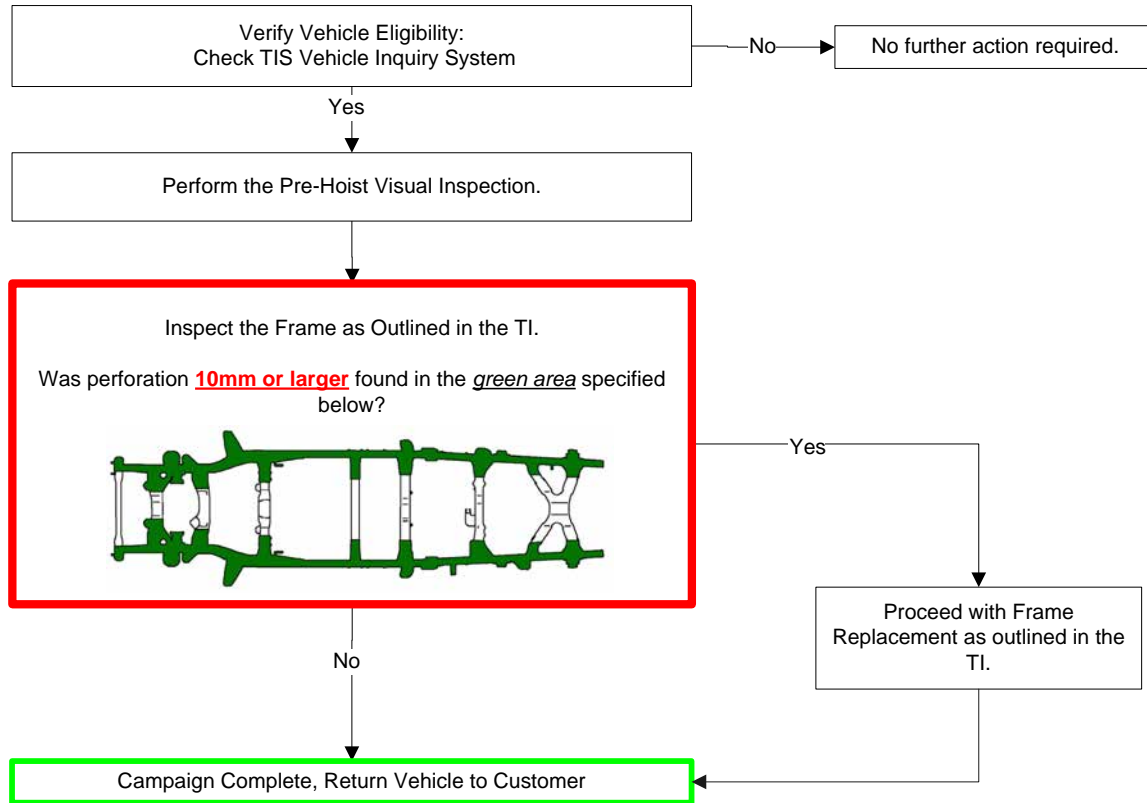
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CERTAIN 2005 THROUGH 2008 MODEL YEAR TACOMA

* * * * *

FRAME INSPECTION/REPLACEMENT

I. OPERATION FLOWCHART



PREPARATION

A. TOOLS & EQUIPMENT

- A/C service equipment
- Alignment rack
- Brake bleeder
- Engine hanger
 - 1GR-FE Engine
 - 12281-31060 – Engine hanger no. 1 (Qty: 1)
 - 12282-31040 – Engine hanger no. 2 (Qty: 1)
 - 90119-08A87 – Bolt (Qty: 4)
 - 2TR-FE Engine
 - 12281-75040 – Engine hanger no. 1 (Qty: 1)
 - 12281-75040 – Engine hanger no. 2 (Qty: 1)
 - 91552-A1020 – Bolt (Qty: 2)
- Engine hoist (Qty: 2) or Hydraulic mini crane (Qty 2)
- Engine sling (Qty: 2)
- Protective eyewear
- Protective gloves
- Ratcheting tie down strap (2 in X 27 ft, minimum work load capacity: 3,000 lbs)
- Special Service Tools (SST)
 - 07110-58060 – Air conditioner service tool set **or** Commercially available air conditioning manifold gauge set
 - 09325-40010 – Transmission oil plug (Transmission A340E)
 - 09610-20012 – Pitman arm puller (2WD)
 - 09628-62011 – Ball joint puller (4WD, Pre-Runner)
 - 09520-32040 – A component of SST 09520-24010, Differential side gear shaft puller
 - 09520-01010 – Drive shaft remover attachment
 - 09628-00011 – Ball joint puller
 - 09922-10010-01 – Variable open wrench
- Standard hand tools
- Techstream
- Torque wrench
- Torx® T55H socket
- Socket wrench 36mm
- Hexagon wrench 8, 10
- Deep socket wrench 10, 12, 14, 17, 19mm
- Union Nut Wrench 10mm
- Weights

B. SUPPLIES

- Toyota Genuine ATF WS or DEXRON® III (DEXRON® II) – As needed
- Hypoid gear oil API GL-5 SAE 75W-90 – 1.5 liter (**4wd Only**)
- R134a refrigerant – As needed
- Toyota DOT 3 brake fluid – 3 pints
- Toyota long life coolant – 2 gallons
- Paint Marker
- MP Grease

C. PARTS

Parts Lookup Website:

To assist dealers in determining the correct part number(s) to order, the 2005 to 2008 Tacoma parts lookup table has been added to the existing parts lookup website. Parts will be looked up by vehicle VIN. Please go to <http://toyota-frame-parts-lookup.imagespm.info> select the appropriate campaign/vehicle, enter the VIN, and the correct part numbers to order will be displayed. ***The website is for part(s) application reference only and won't order the parts, confirm campaign completion status, or confirm campaign applicability.***

Note: This site has been available for previous frame campaigns, but now the 2005 to 2008 Tacoma database has been activated for your dealer. If this is your dealership's first time logging in you will need to enter your dealer code and the default password; XXXXX. Upon logging in the website will ask for you to reset the password and provide an email address.

Due to the number of parts required for the frame replacement repair, ALL ancillary parts and the frame for each vehicle must be ordered on 1 order reference number. This process is required and is not optional. Certain ancillary parts in tight supply have been placed on MAC and will only be released once shipment of the frame is confirmed. This shipment confirmation is based on the order reference number, so the ancillary parts order reference and the frame order reference must match in order for your parts to be released.

The parts will need to be ordered through the Dealer Daily Parts System.

An illustration of the parts replaced and their location(s) have been provided. Please reference the ***"Illustration Name"*** and ***"Page"*** columns in the parts tables below.

Individual Parts:

Part Number	Part Description	Quantity	Illustration Name	Page
04001-76104	Frame, Sub-Assy	1	Frame	8
04001-76204	Frame, Sub-Assy	1	Frame	8
04001-76304	Frame, Sub-Assy	1	Frame	8
04001-76404	Frame, Sub-Assy	1	Frame	8
04001-76504	Frame, Sub-Assy	1	Frame	8
04001-76604	Frame, Sub-Assy	1	Frame	8
04001-76704	Frame, Sub-Assy	1	Frame	8
04001-77604	Frame, Sub-Assy	1	Frame	8
04001-76904	Frame, Sub-Assy	1	Frame	8
04001-77104	Frame, Sub-Assy	1	Frame	8
04001-77204	Frame, Sub-Assy	1	Frame	8
04001-77304	Frame, Sub-Assy	1	Frame	8
04001-77404	Frame, Sub-Assy	1	Frame	8
04001-77504	Frame, Sub-Assy	1	Frame	8
43425-04040	Ring, Drive Shaft Snap	2	Front Suspension	10
47323-04160	Tube, RR Brake, No.3	1	Brake Tubes	12-14
47324-04120	Tube, RR Brake, No.4	1	Brake Tubes	12-14
47325-04160	Tube, RR Brake, No.5	1	Brake Tubes	12,15
47325-04170	Tube, RR Brake, No.5	1	Brake Tubes	13,16
47325-04180	Tube, RR Brake, No.5	1	Brake Tubes	14,17
47326-04130	Tube, RR Brake, No.6	1	Brake Tubes	12,15
47326-04140	Tube, RR Brake, No.6	1	Brake Tubes	13,16
47326-04150	Tube, RR Brake, No.6	1	Brake Tubes	14,17
48068-04030	Arm Sub-Assy, Suspension LWR RH w/ Bush	1	Front Suspension	9
48068-04040	Arm Sub-Assy, Suspension LWR RH w/ Bush	1	Front Suspension	10
48069-04030	Arm Sub-Assy, Suspension LWR LH w/ Bush	1	Front Suspension	9
48069-04040	Arm Sub-Assy, Suspension LWR LH w/ Bush	1	Front Suspension	10

Individual Parts (Continued):

Part Number	Part Description	Quantity	Illustration Name	Page
48210-04370	Spring Assy, RR RH	1	Rear Suspension	11
48210-04380	Spring Assy, RR RH	1	Rear Suspension	11
48210-35A20 or 48210-04660	Spring Assy, RR RH	1	Rear Suspension	11
48210-35A30 or 48210-04640	Spring Assy, RR RH	1	Rear Suspension	11
48210-35A40 or 48210-04650	Spring Assy, RR RH	1	Rear Suspension	11
48210-AD020	Spring Assy, RR RH	1	Rear Suspension	11
48220-04160	Spring Assy, RR LH	1	Rear Suspension	11
48220-04170	Spring Assy, RR LH	1	Rear Suspension	11
48220-35020 or 48220-04300	Spring Assy, RR LH	1	Rear Suspension	11
48220-35030 Or 48220-04280	Spring Assy, RR LH	1	Rear Suspension	11
48220-35040 or 48220-04290	Spring Assy, RR LH	1	Rear Suspension	11
48220-AD020	Spring Assy, RR LH	1	Rear Suspension	11
48304-04090	Bumper Sub-Assy, FR Spring	2	Front Suspension	9
48304-AD010	Bumper Sub-Assy, FR Spring	2	Front Suspension	9
82164-04780	Wire, Frame	1	Wire Harness Clamps	19
82164-04A00	Wire, Frame	1	Wire Harness Clamps	19
82164-04A10	Wire, Frame	1	Wire Harness Clamps	19
82164-04A20	Wire, Frame	1	Wire Harness Clamps	19
82164-04A30	Wire, Frame	1	Wire Harness Clamps	19
82164-04A40	Wire, Frame	1	Wire Harness Clamps	19
82164-04A50	Wire, Frame	1	Wire Harness Clamps	19
89516-04010	Wire, Skid Control Sensor	1	ABS	19
89516-04020	Wire, Skid Control Sensor	1	ABS	19
89516-04040	Wire, Skid Control Sensor	1	ABS	19
89516-04090	Wire, Skid Control Sensor	1	ABS	19
90117-A0001	Bolt, U	4	Rear Suspension	11
90117-A0002	Bolt, U	4	Rear Suspension	11
90117-A0005	Bolt, U	4	Rear Suspension	11
90119-08A91	Bolt, w/ Washer	4	Rear Suspension	11
90119-A0151	Bolt, w/ Washer	2	Propeller Shaft	21
90119-A0161	Bolt, w/ Washer	4	Front Suspension	9
90119-A0169	Bolt, w/ Washer	9	Brake Tubes	12-18
90119-A0193	Bolt, w/ Washer	2	Under Cover	8
90178-A0013	Nut, Flange	4	Front Suspension	9
90179-08241	Nut	4	Fuel Tank	18
90240-08054	Pin, w/ Hole	1	Shift Lever	23
90468-14033	Clip	1	Shift Lever	23
90469-A0004	Clamp	2	Brake Tubes	12,15
90469-A0004	Clamp	3	Brake Tubes	13,16
90469-A0004	Clamp	4	Brake Tubes	14,17
51900-35410	Carrier Assy, Spare Wheel	1	Spare Tire Carrier	8
51900-35420	Carrier Assy, Spare Wheel	1	Spare Tire Carrier	8

Parts Kits:

Part Number	Part Description	Quantity		
04001-71104	Parts Kit No.1 – Common Replacement Kit A	1		
The kit listed above includes the following parts:				
Part Number	Part Description	Qty	Illustration Name	Page
77285-35760	Support, Fuel Return & Main Tube	1	Fuel Tubes	18
90179-10201	Nut	4	Engine Mounting	20
90412-10247	Way, 2	2	Brake Tubes	12-17
90910-03001	Bolt, Engine Mount	4	Engine Mounting	20
91671-80814	Bolt, Flange w/ Washer	4	Engine Mounting	20
94622-51400	Washer, Plain	10	Rear Suspension	11

Part Number	Part Description	Quantity		
04001-71204	Parts Kit No.2 – Common Replacement Kit B	1		
The kit listed above includes the following parts:				
Part Number	Part Description	Qty	Illustration Name	Page
04483-04080	Shackle Kit, RR Spring	2	Rear Suspension	11
17451-0A010	Gasket, Exhaust Pipe	1	Exhaust System	22
47355-04020	Bracket, Flexible Hose, No. 5	1	Brake Tubes	12-17
51719-04010	Holder, Body Support Bracket	2	Cab Mounting	8
90069-08019	Ring, O	1	Radiator	23
90080-10138	Bolt, Flange	2	Rear Suspension	11
90080-11376	Bolt, w/ Washer	2	Fuel Tank	18
90080-11555	Bolt, w/ Washer	2	Power Steering	20
90080-17215	Nut, Flange	6	Front Suspension	9,10
90119-A0169	Bolt, w/ Washer	4	Spare Tire carrier	8
90119-A0192	Bolt, w/ Washer	6	Rear Bumper	23
90171-A0005	Nut, Castle	2	Front Suspension	9-10
90177-A0010	Nut, Lock	2	Rear Suspension	11
90178-A0044	Nut, Flange	6	Front Bumper	23
90178-A0050	Nut, Flange	10	Rear Suspension	11
90210-A0002	Washer, Seal	1	Air Conditioning	23
90210-A0004	Washer, Seal	1	Air Conditioning	23
90412-10248	Way, 2	1	Brake Tubes	12-17
90468-A0007	Clip	4	Brake Tubes	12-18
90949-A1006	Clamp	3	Brake Tubes	12-17

Part Number	Part Description	Quantity		
04001-71304	Parts Kit No.3 – JPN Source Parts kit 1 (4WD)	1		
The kit listed above includes the following parts:				
Part Number	Part Description	Qty	Illustration Name	Page
12157-10010	Gasket, Drain Plug	1	Front Differential	20
43514-28010	Cap, FR Hub Grease	2	Front Suspension	10
90311-47012	Seal, Type T Oil	1	Front Differential	20
90311-47013	Seal, Type T Oil	1	Front Differential	20
90430-24003	Gasket	1	Front Differential	20
95381-04045	Pin, Cotter	2	Front Suspension	10

Part Number	Part Description	Quantity		
04001-71404	Parts Kit No.4 – JPN Source Parts kit 2	1		
The kit listed above includes the following parts:				
Part Number	Part Description	Qty	Illustration Name	Page
48190-25010	Cam Assy, Camber Adjust	4	Front Suspension	9
48198-25010	Cam, Camber Adjust, No. 2	4	Front Suspension	9
95381-03025	Pin, Cotter	2	Power Steering	20
95381-03230	Pin, Cotter	2	Front Suspension	9

Parts Kits (Continued):

Part Number	Part Description	Quantity		
04001-71504	Parts Kit No.5 – JPN Source Parts kit 3	1		
The kit listed above includes the following parts:				
Part Number	Part Description	Qty	Illustration Name	Page
48190-60020	Cam Assy, Camber Adjust	2	Front Suspension	10
48198-60011	Cam, Camber Adjust, No. 2	2	Front Suspension	10
48409-60020	Cam Assy, Camber Adjust	2	Front Suspension	10
48452-35020	Plate, Toe Adjust, No. 2	2	Front Suspension	10
95381-03225	Pin, Cotter	2	Power Steering	20
95381-03230	Pin, Cotter	2	Front Suspension	10

Part Number	Part Description	Quantity		
04001-71604	Parts Kit No.6 – USA Source Parts kit 1 (1GR)	1		
The kit listed above includes the following parts:				
Part Number	Part Description	Qty	Illustration Name	Page
17176-0P010	Gasket, Air Surge Tank to INT Manifold	1	Exhaust System	22
90080-10291	Bolt	2	Exhaust System	22
90080-11180	Bolt, w/ Washer	2	Exhaust System	22
90080-17187	Nut, Lock	4	Exhaust System	22
90080-43036	Gasket, Exhaust Pipe	2	Exhaust System	22
90126-A0011	Stud, Hex Lobular	4	Exhaust System	22

Part Number	Part Description	Quantity		
04001-71704	Parts Kit No.7 – USA Source Parts kit 2 (2TR)	1		
The kit listed above includes the following parts:				
Part Number	Part Description	Qty	Illustration Name	Page
90080-43033	Gasket, Exhaust Pipe	1	Exhaust System	22
90080-10064	Bolt, Flange	2	Exhaust System	22
90080-10291	Bolt	2	Exhaust System	22
90177-A0004	Nut, Lock	2	Exhaust System	22

Part Number	Part Description	Quantity		
04001-71804	Parts Kit No.8 – USA Source Parts kit 3	1		
The kit listed above includes the following parts:				
Part Number	Part Description	Qty	Illustration Name	Page
48304-04100	Bumper Sub-Assy, FR Spring	2	Front Suspension	10
75395-35070	Clip, Outside Molding, No. 1	3	Molding	23
75396-35020	Clip, Outside Molding, No. 2	7	Molding	23
90080-11373	Bolt, w/ Washer	8	Under Cover	8
90119-A0166	Bolt, w/ Washer	2	Front Suspension	10
90119-A0192	Bolt, w/ Washer	2	Under Cover	8
90189-A0002	Grommet, Screw	8	Rear Wheel House Liner	24
90189-A0002	Grommet, Screw	2	Molding	23

Part Number	Part Description	Quantity		
04001-71904	Parts Kit No.9 – USA Source Parts kit 4	1		
The kit listed above includes the following parts:				
Part Number	Part Description	Qty	Illustration Name	Page
75395-04010	Clip, Outside Molding, No. 1	4	Molding	24
75395-35070	Clip, Outside Molding, No. 1	4	Molding	24
75396-04010	Clip, Outside Molding, No. 2	14	Molding	24
75396-35020	Clip, Outside Molding, No. 2	2	Molding	24
90189-A0002	Grommet, Screw	6	Rear Wheel House Liner	24
90189-A0002	Grommet, Screw	2	Molding	24

Parts Kits (Continued):

Part Number	Part Description	Quantity		
04001-72104	Parts Kit No.10 – Brake Tube kit 1 (without VSC)	1		
The kit listed above includes the following parts:				
Part Number	Part Description	Qty	Illustration Name	Page
47313-04190	Tube, FR Brake, No.3	1	Brake Tubes	12-14
47315-04160	Tube, FR Brake, No.5	1	Brake Tubes	12-14

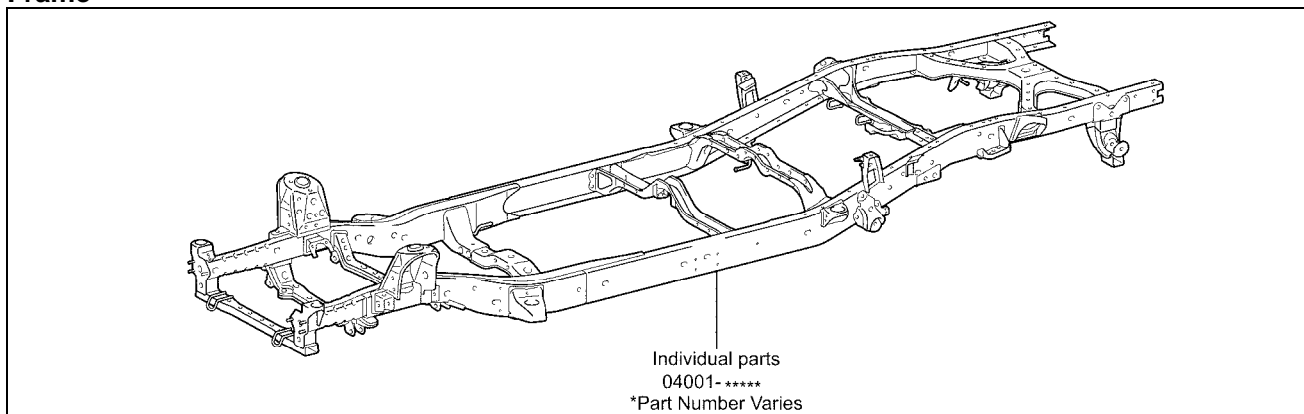
Part Number	Part Description	Quantity		
04001-72204	Parts Kit No.11 – Brake Tube kit 2 (with VSC)	1		
The kit listed above includes the following parts:				
Part Number	Part Description	Qty	Illustration Name	Page
47313-04200	Tube, FR Brake, No.3	1	Brake Tubes	15-17
47315-04170	Tube, FR Brake, No.5	1	Brake Tubes	15-17
47323-04170	Tube, RR Brake, No.3	1	Brake Tubes	15-17
47324-04130	Tube, RR Brake, No.4	1	Brake Tubes	15-17

Part Number	Part Description	Quantity		
04001-72304	Parts Kit No.12 – Brake Tube kit 3 (for 2WD)	1		
The kit listed above includes the following parts:				
Part Number	Part Description	Qty	Illustration Name	Page
47314-04140	Tube, FR Brake, No.4	1	Brake Tubes	12,13, 15,16
47316-04140	Tube, FR Brake, No.6	1	Brake Tubes	12,13, 15,16
47351-04030	Bracket, Flexible Hose, RH	1	Brake Tubes	18
47352-04030	Bracket, Flexible Hose, LH	1	Brake Tubes	18

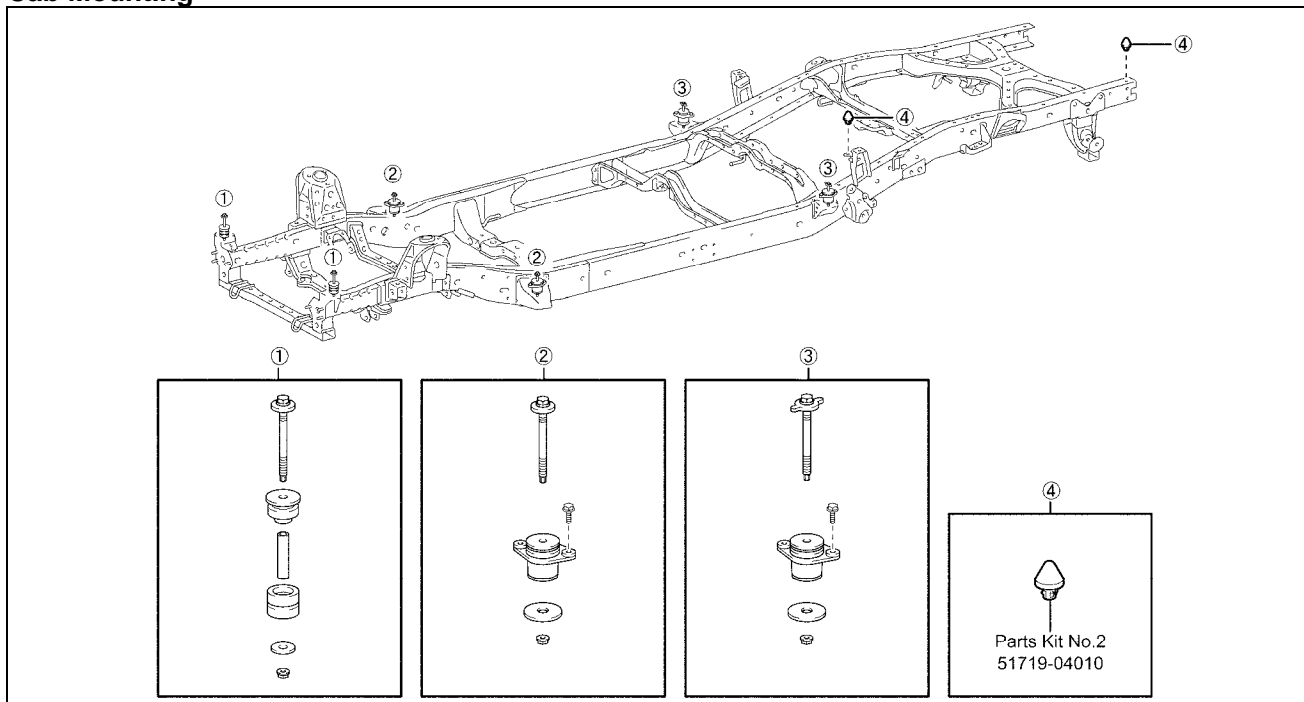
Part Number	Part Description	Quantity		
04001-72404	Parts Kit No.13 – Brake Tube kit 4 (for 4WD, PRE-RUNNER)	1		
The kit listed above includes the following parts:				
Part Number	Part Description	Qty	Illustration Name	Page
47314-04150	Tube, FR Brake, No.4	1	Brake Tubes	12-17
47316-04150	Tube, FR Brake, No.6	1	Brake Tubes	12-17
47353-04010	Bracket, Flexible Hose, No. 3	1	Brake Tubes	18
47354-04010	Bracket, Flexible Hose, No. 4	1	Brake Tubes	18
90119-A0169	Bolt, w/ Washer	7	Brake Tubes	12-18

D. PARTS ILLUSTRATION

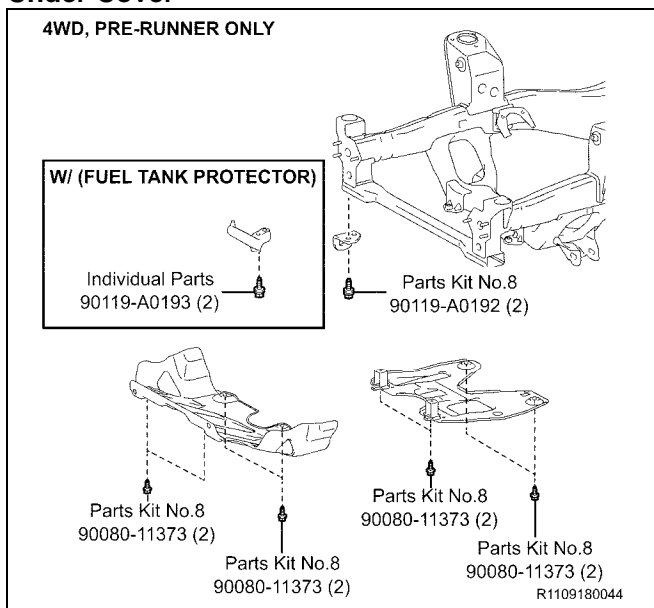
Frame



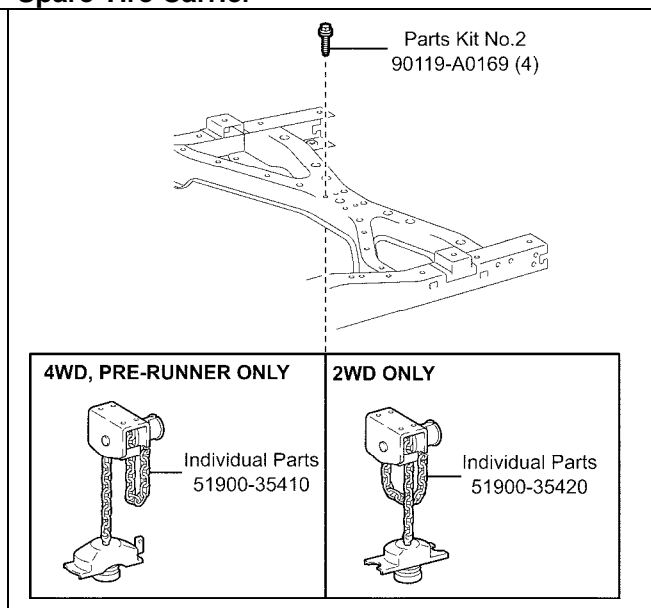
Cab Mounting



Under Cover

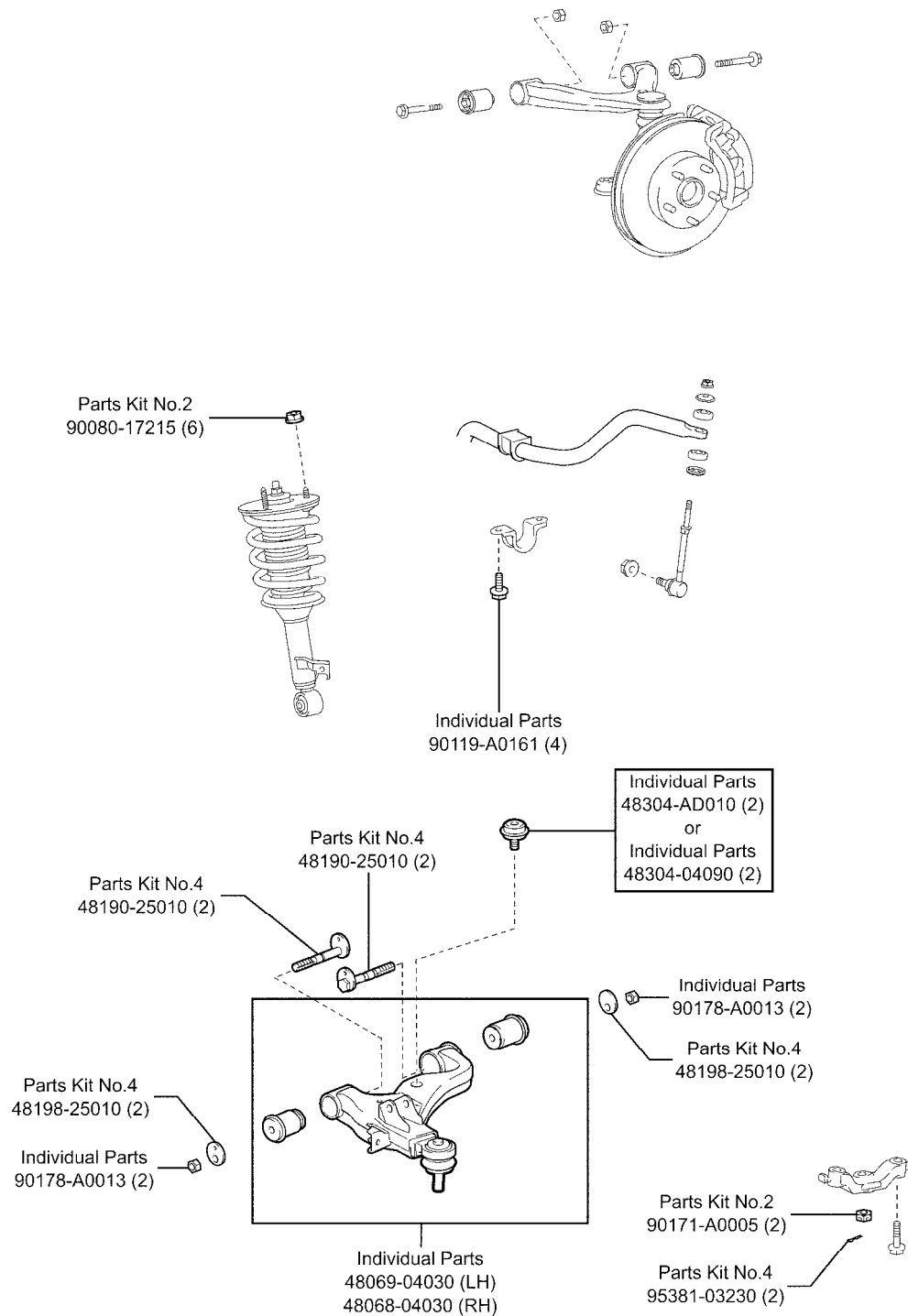


Spare Tire Carrier



Front Suspension

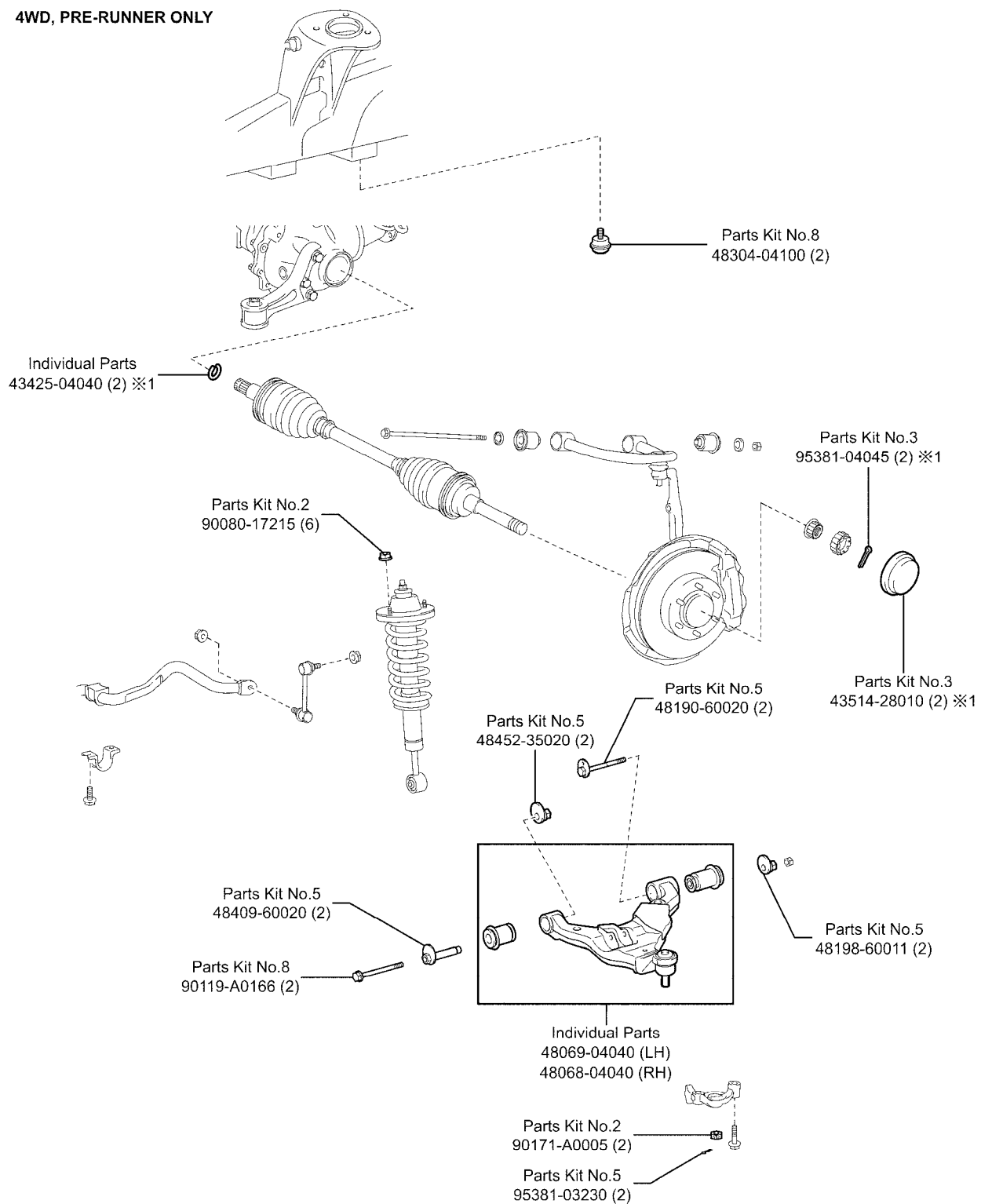
2WD ONLY



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Front Suspension Continued...

4WD, PRE-RUNNER ONLY



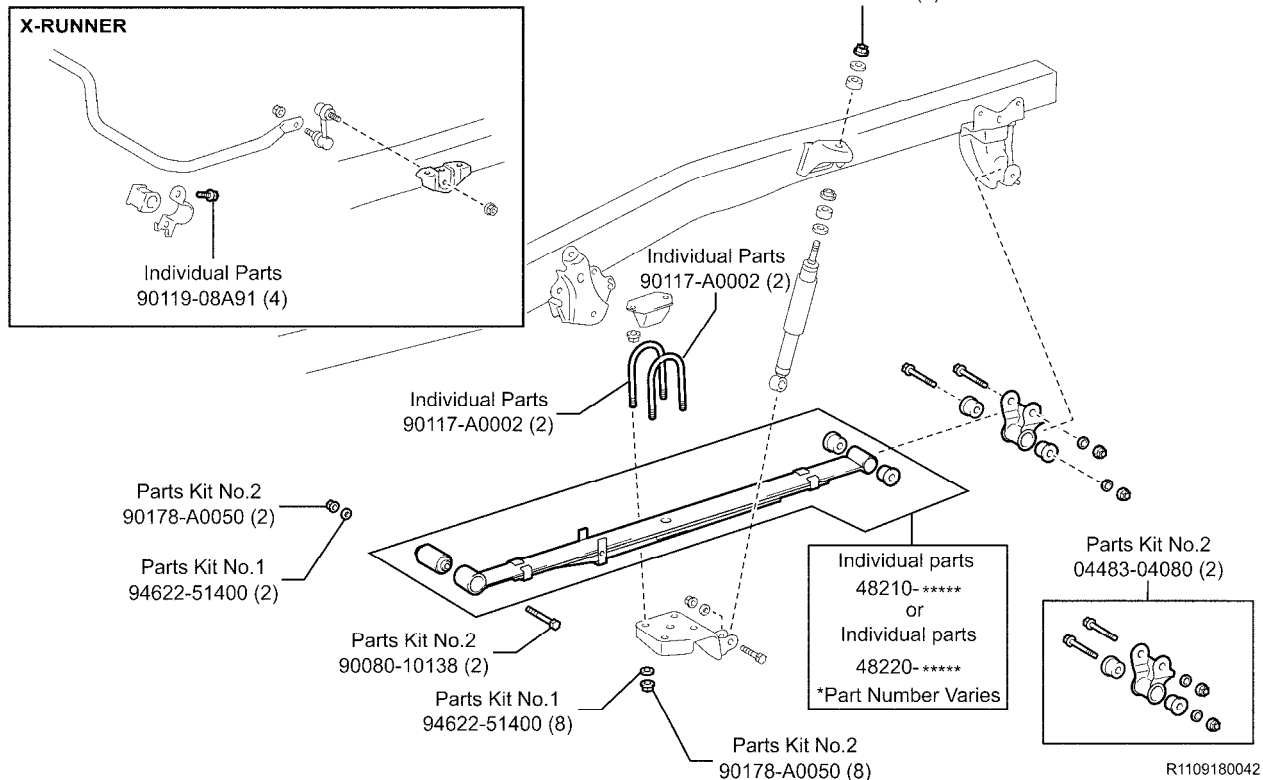
※1 4WD ONLY

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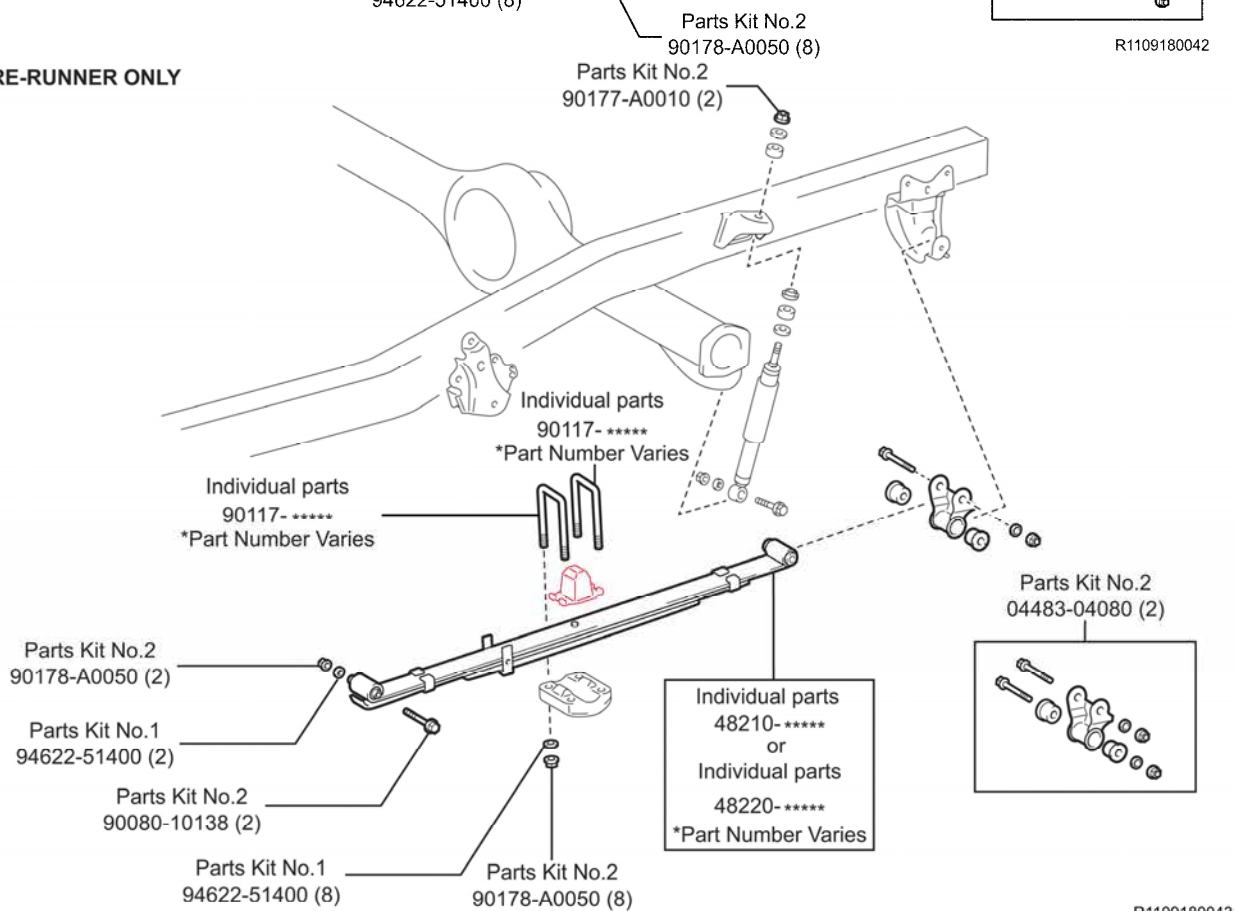
Rear Suspension

2WD ONLY

X-RUNNER



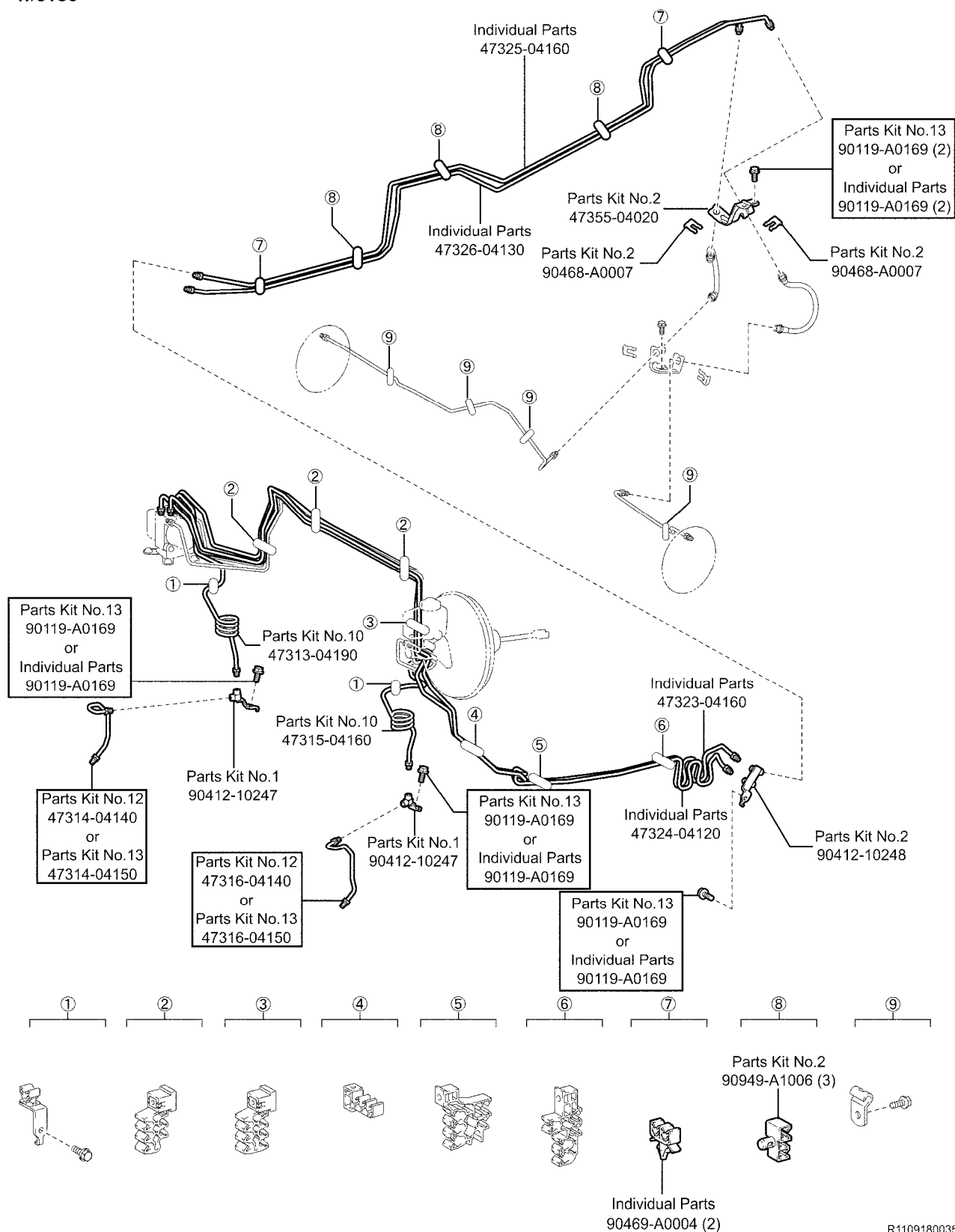
4WD, PRE-RUNNER ONLY



***When replacing the leaf spring from a 3 leaf stack (original spring configuration) to a 4 leaf stack replacement spring, the bump stop is required to be changed. The parts website will indicate when the bump stops should be ordered and installed.**

Brake Tubes

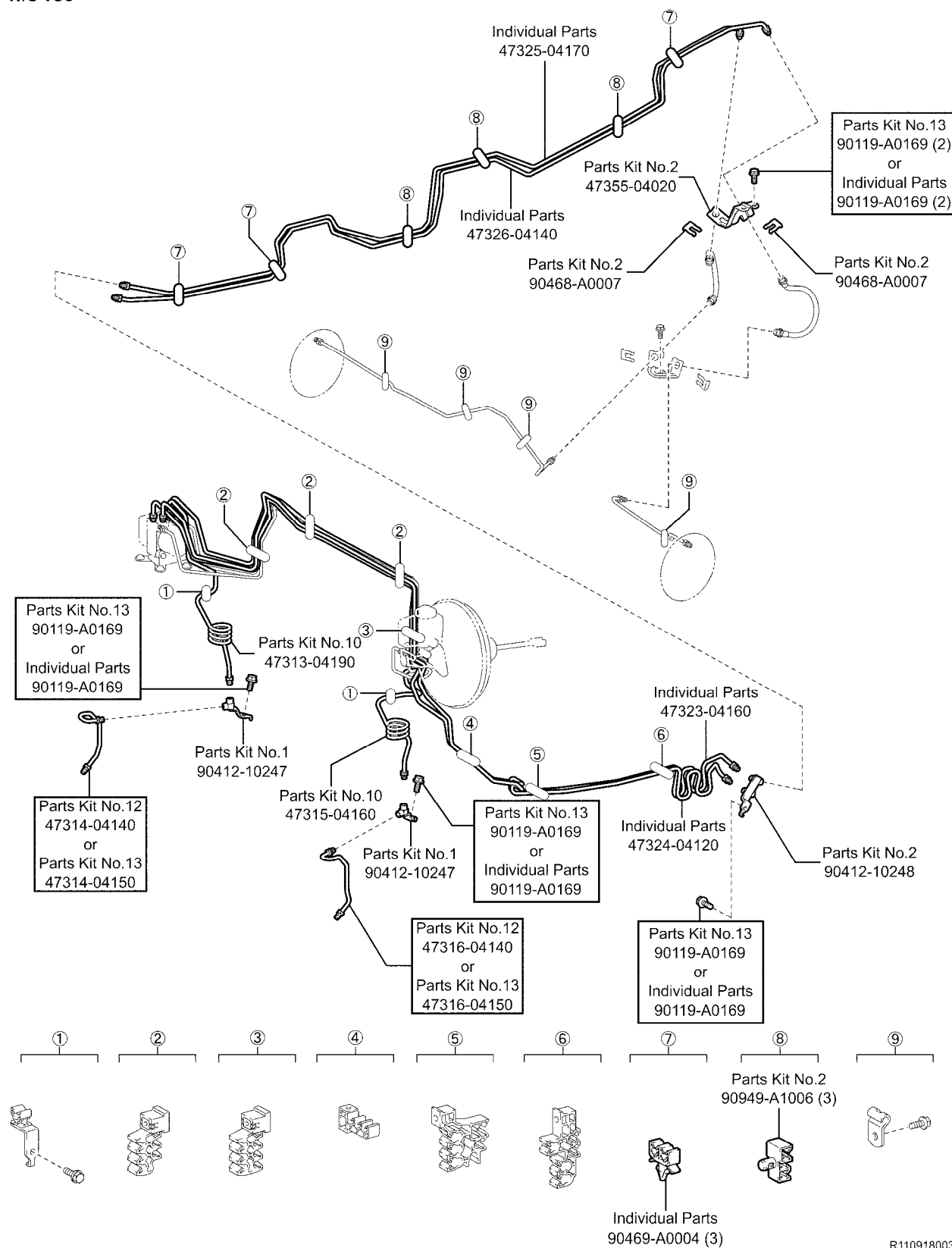
REGULAR CAB
W/OVSC



R1109180035

Brake Tubes Continued...

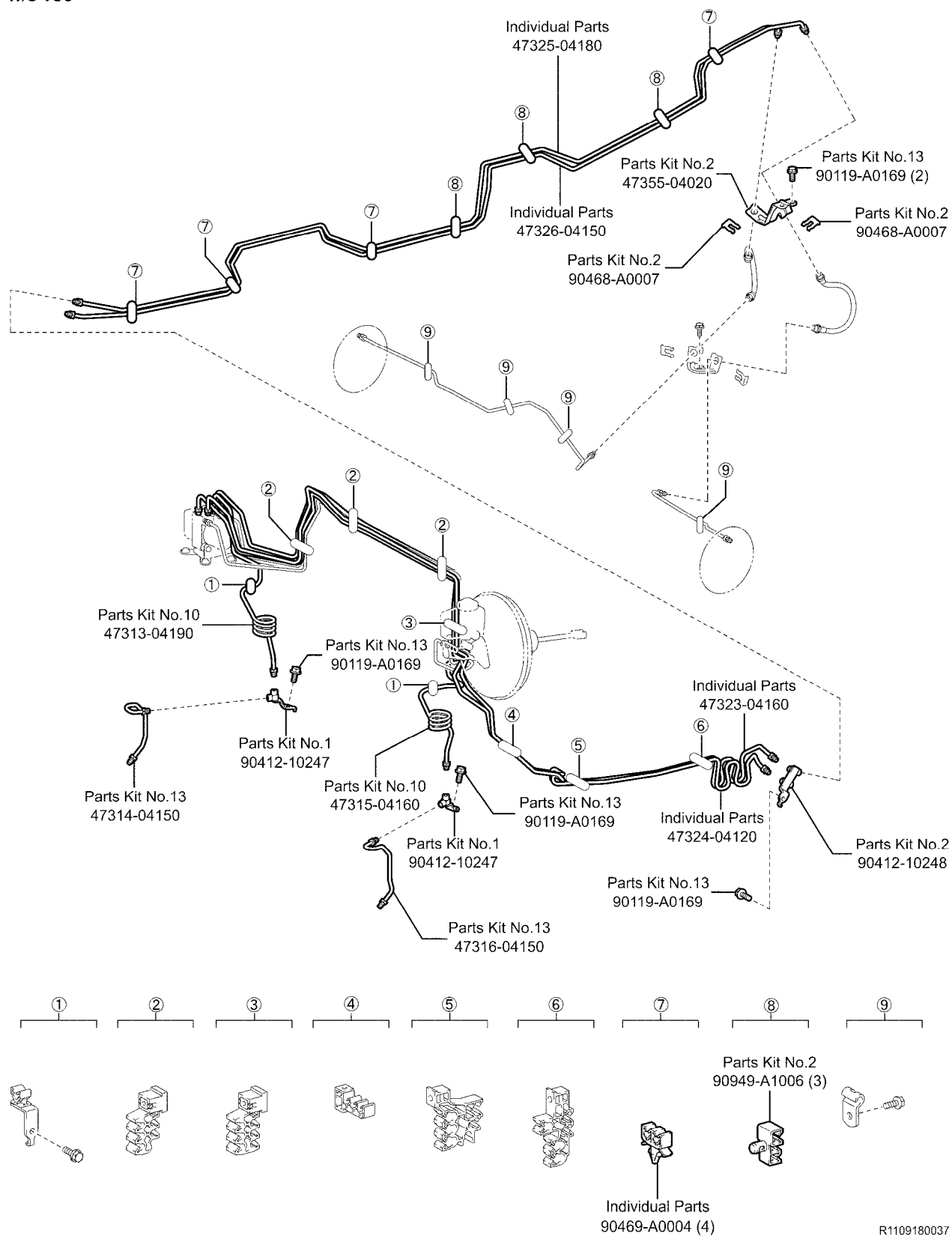
ACCESS CAB
W/O VSC



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Brake Tubes Continued...

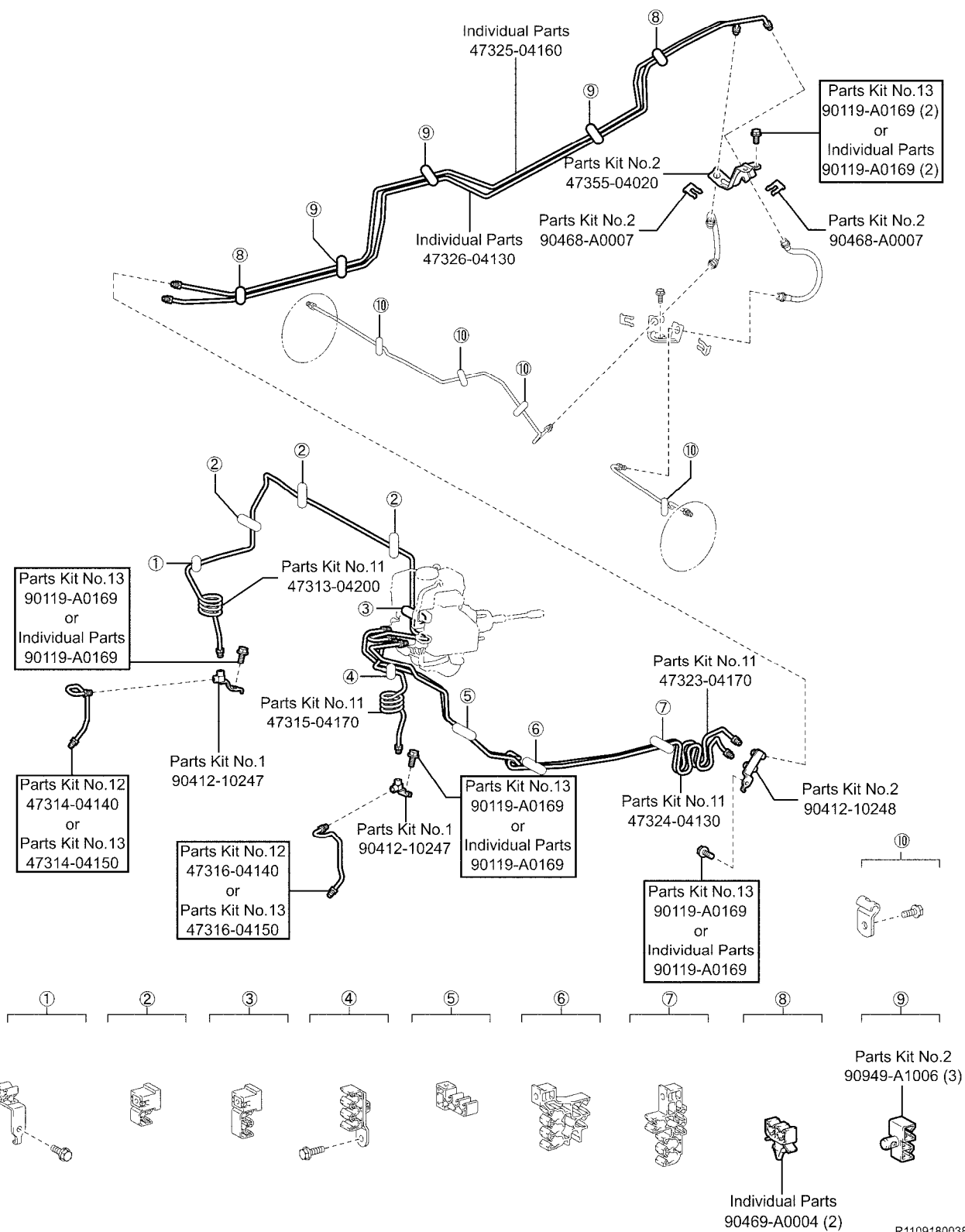
DOUBLE CAB
W/O VSC



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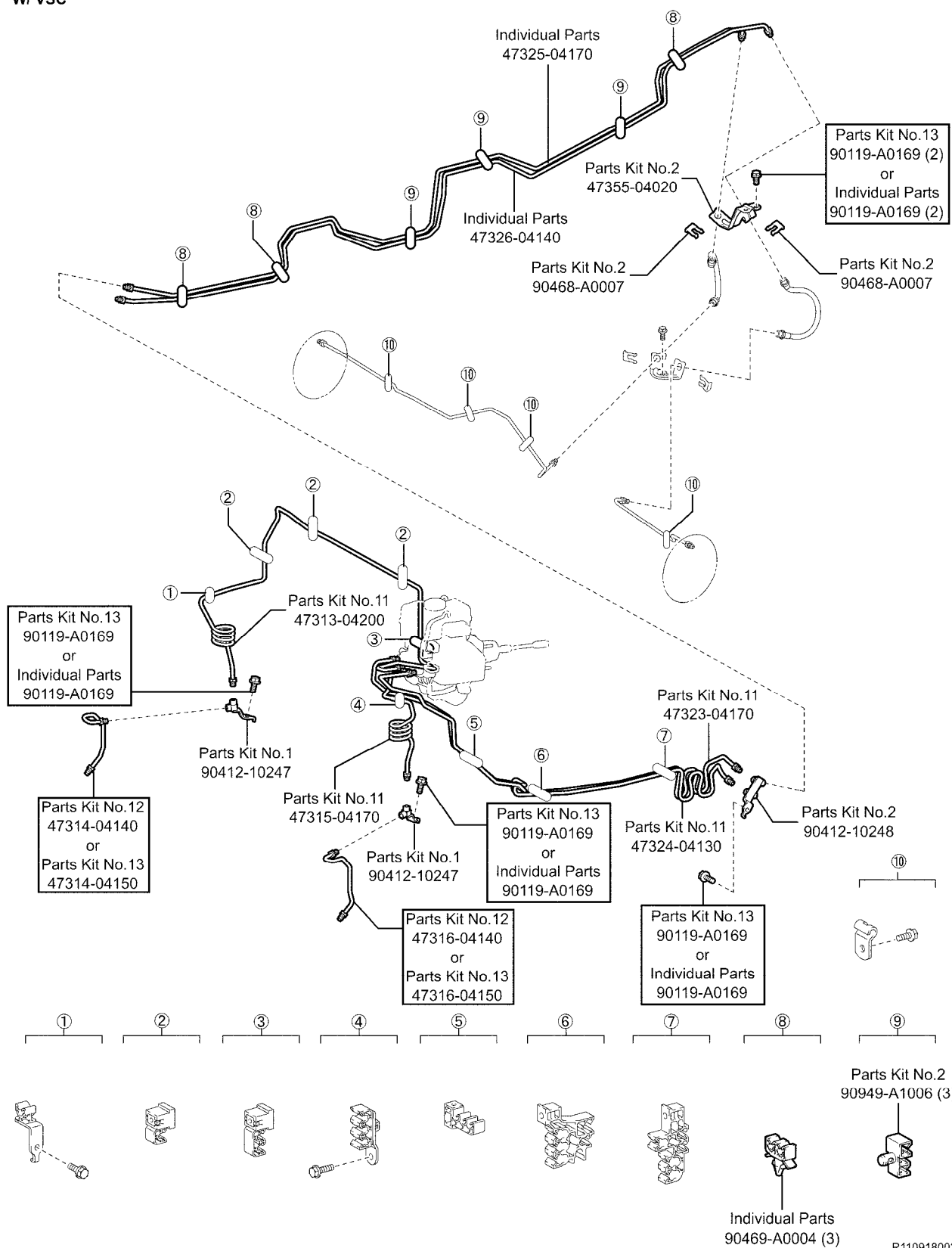
Brake Tubes Continued...

REGULAR CAB
W/ VSC



Brake Tubes Continued...

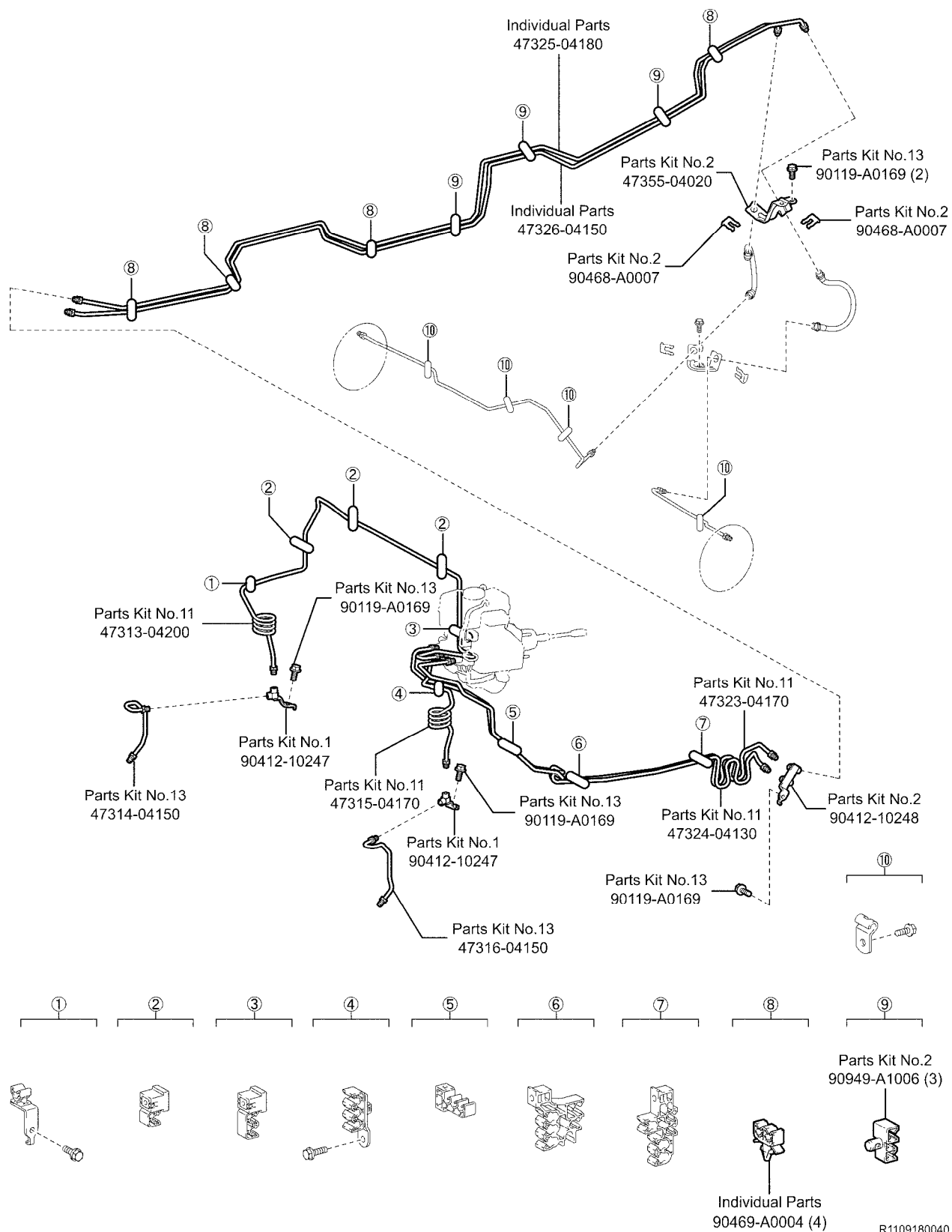
ACCESS CAB
W/ VSC



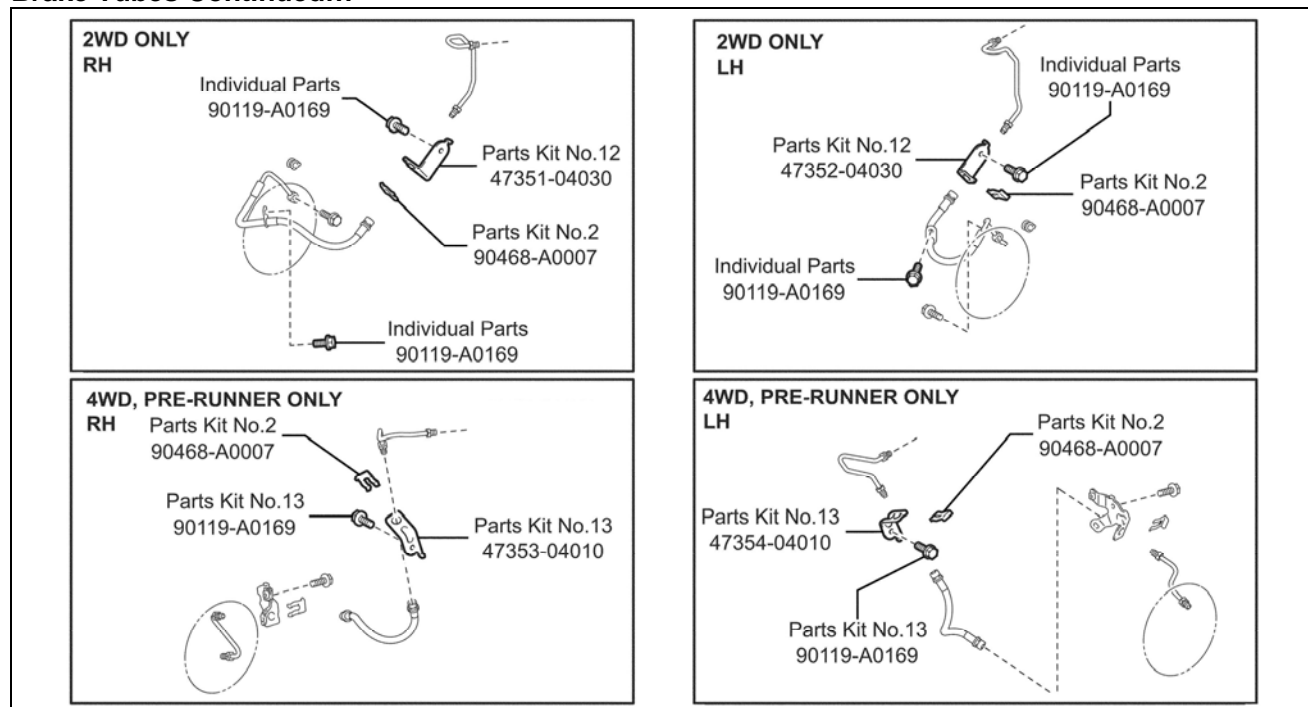
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Brake Tubes Continued...

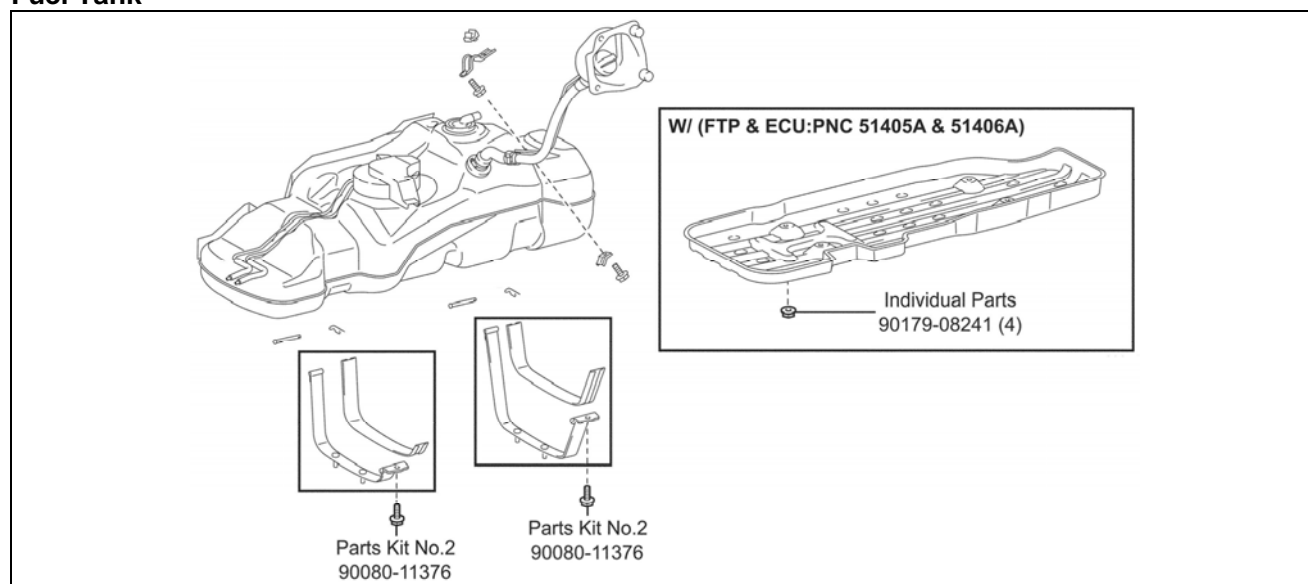
DOUBLE CAB
W/ VSC



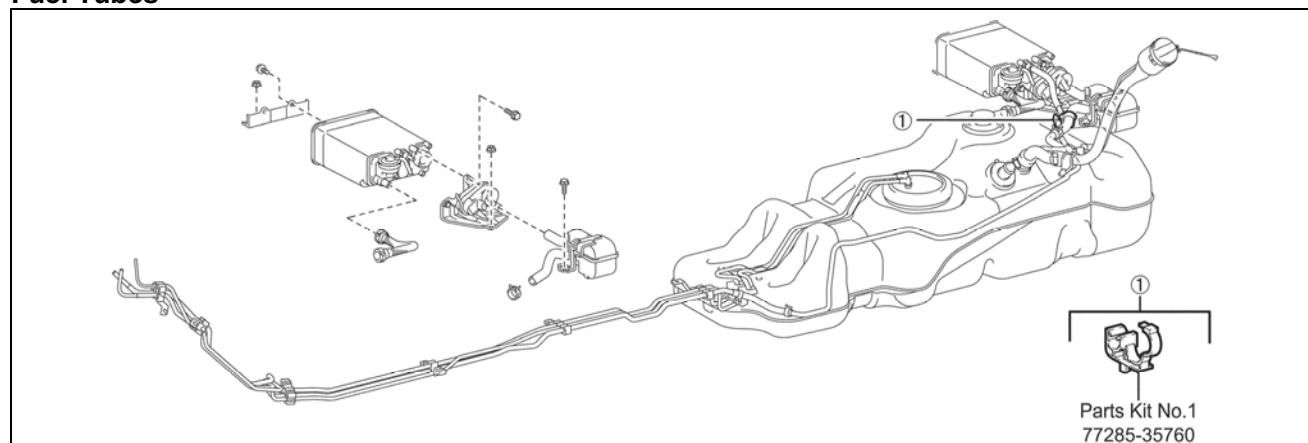
Brake Tubes Continued...



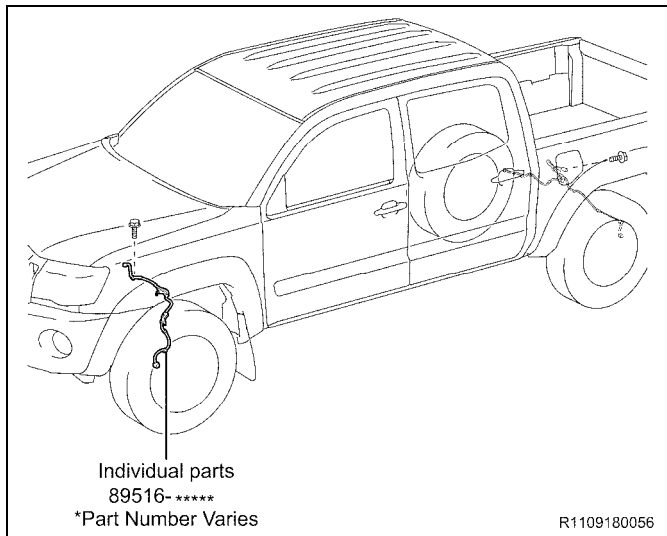
Fuel Tank



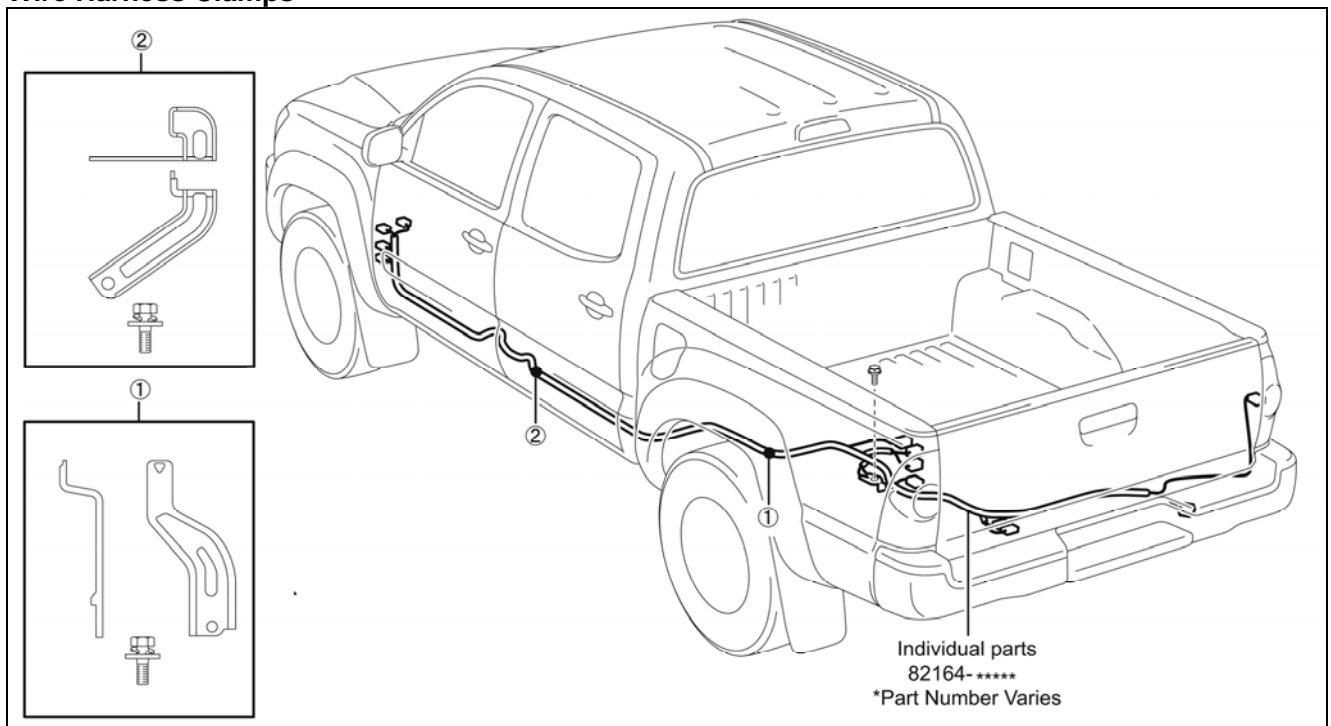
Fuel Tubes



ABS



Wire Harness Clamps



Power Steering

1GR-FE

Parts Kit No.4
95381-03025 ※1
or
Parts Kit No.5
95381-03225 ※2

Parts Kit No.2
90080-11555 (2)

Parts Kit No.4
95381-03025 ※1
or
Parts Kit No.5
95381-03225 ※2

2TR-FE

Parts Kit No.4
95381-03025 ※3
or
Parts Kit No.5
95381-03225 ※4

Parts Kit No.2
90080-11555 (2)

Parts Kit No.4
95381-03025 ※3
or
Parts Kit No.5
95381-03225 ※4

※1 1GR-FE 2WD
※2 1GR-FE 4WD, PRE-RUNNER
※3 2TR-FE 2WD
※4 2TR-FE 4WD, PRE-RUNNER

Front Differential

4WD ONLY

Parts Kit No.3
90311-47013

Parts Kit No.3
90311-47012

Parts Kit No.3
12157-10010

Parts Kit No.3
90430-24003

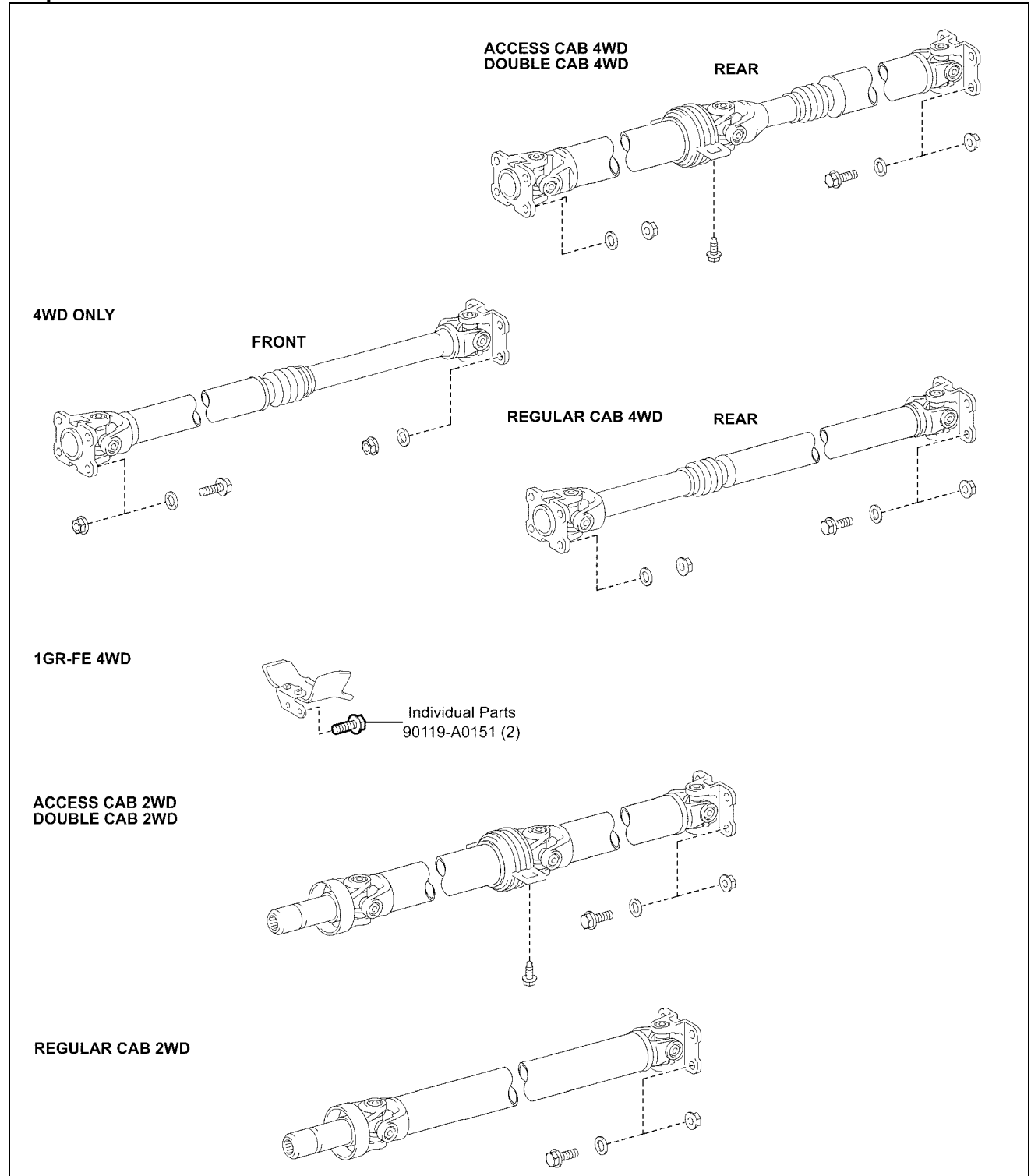
Engine Mounting

Parts Kit No.1
90179-10201 (4)

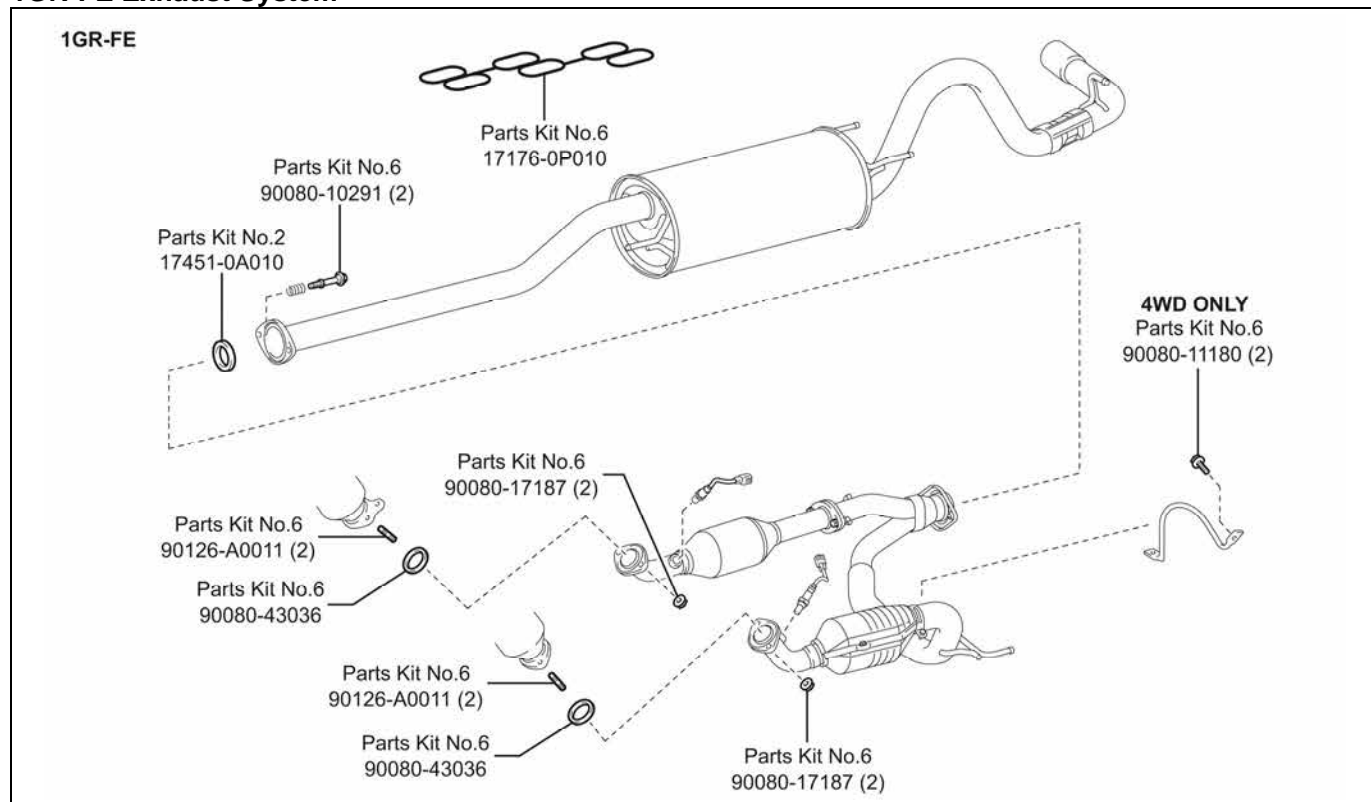
Parts Kit No.1
90910-03001 (4)

Parts Kit No.1
91671-80814 (4)

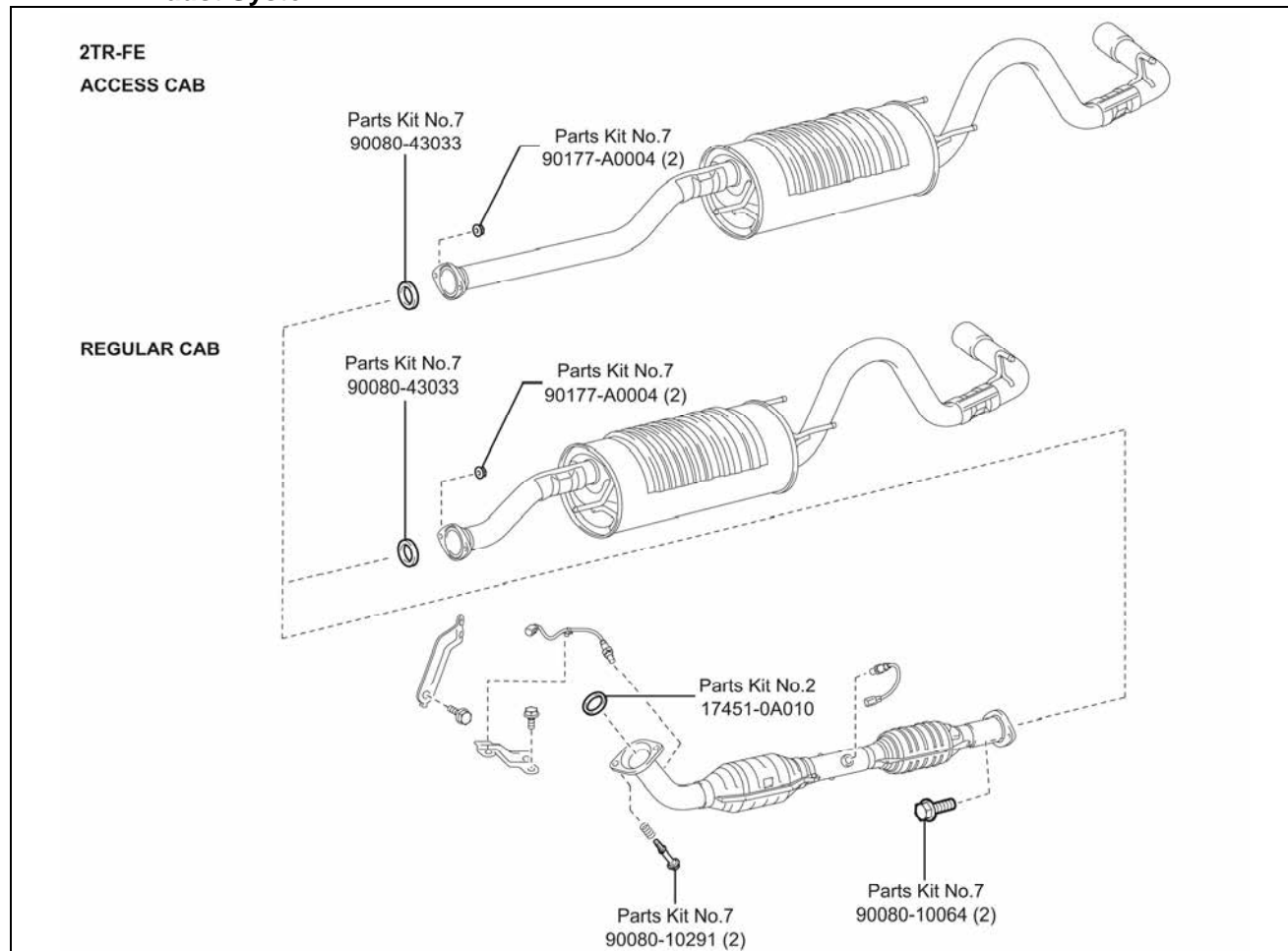
Propeller Shaft



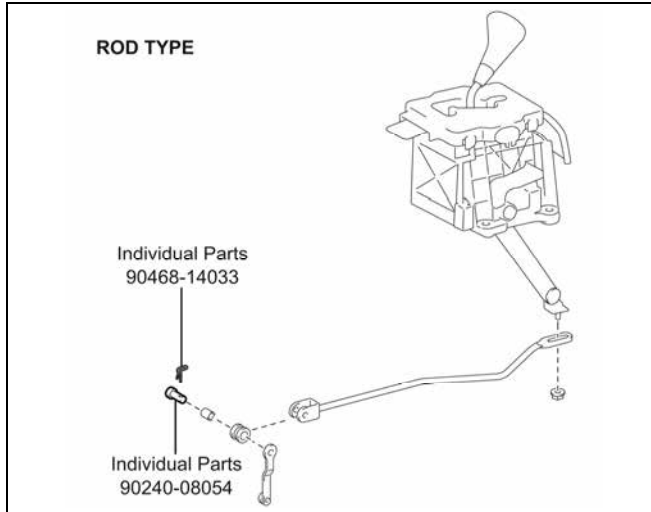
1GR-FE Exhaust System



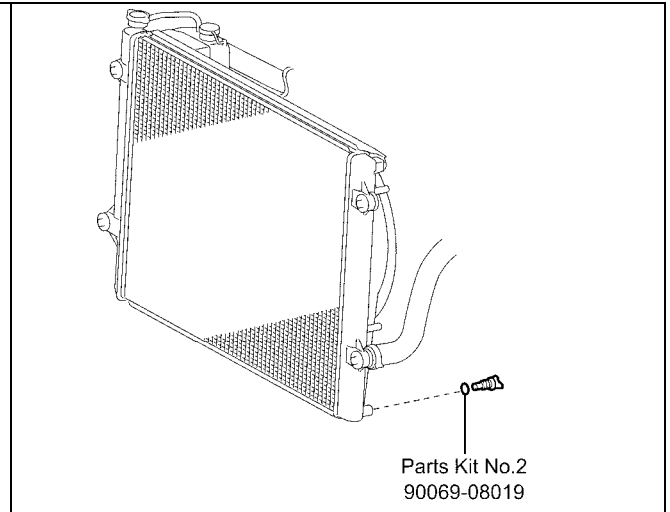
2TR-FE Exhaust System



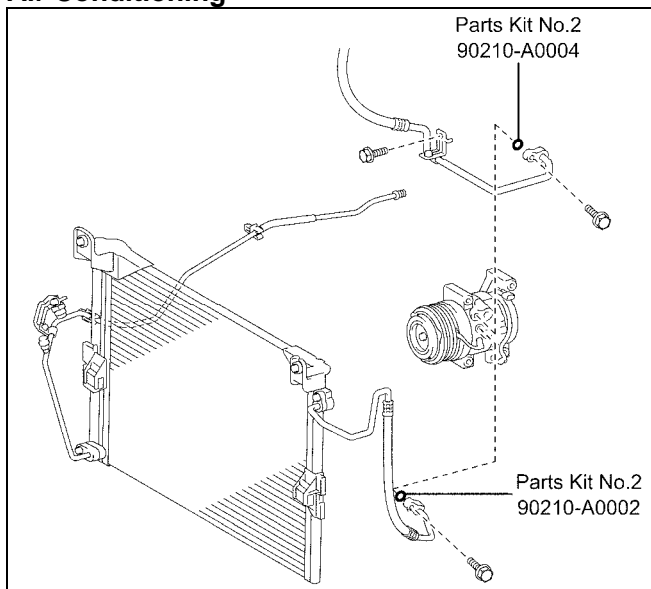
Shift Lever



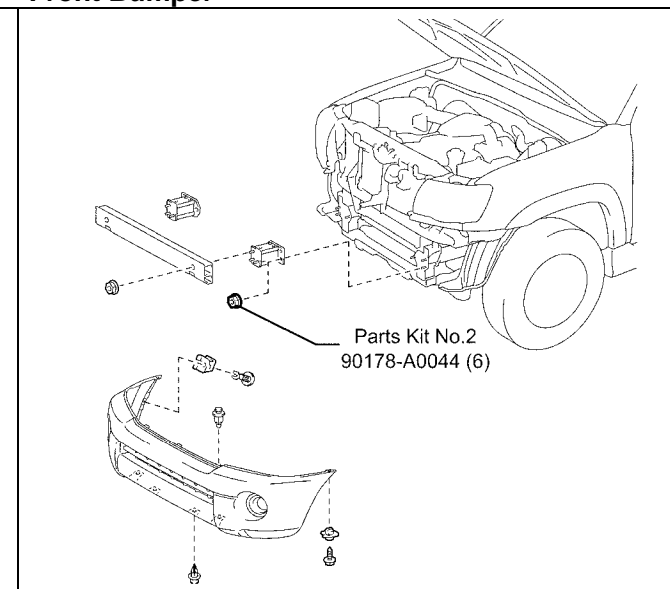
Radiator



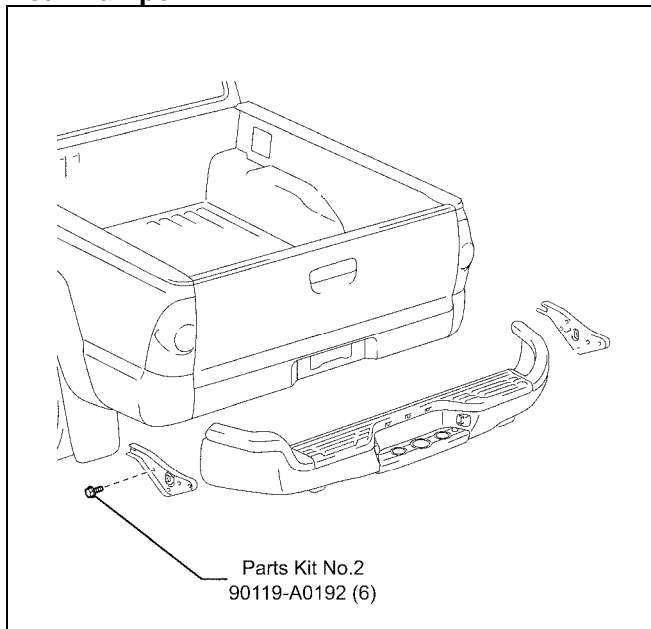
Air Conditioning



Front Bumper

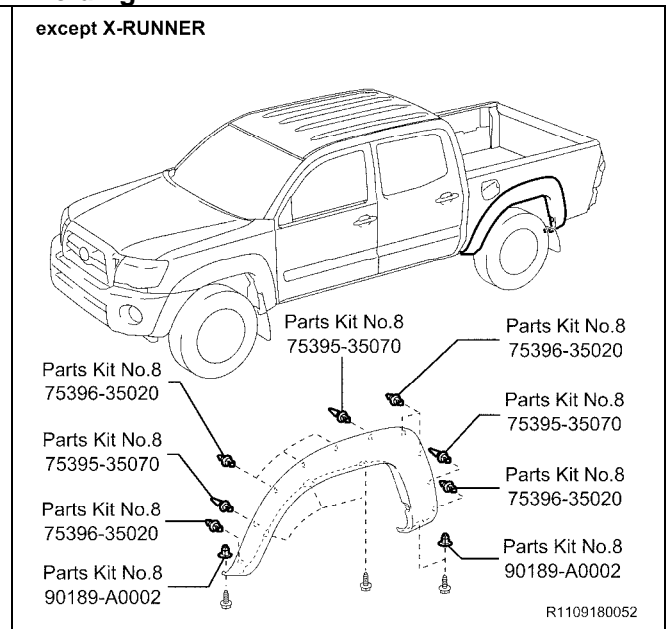


Rear Bumper

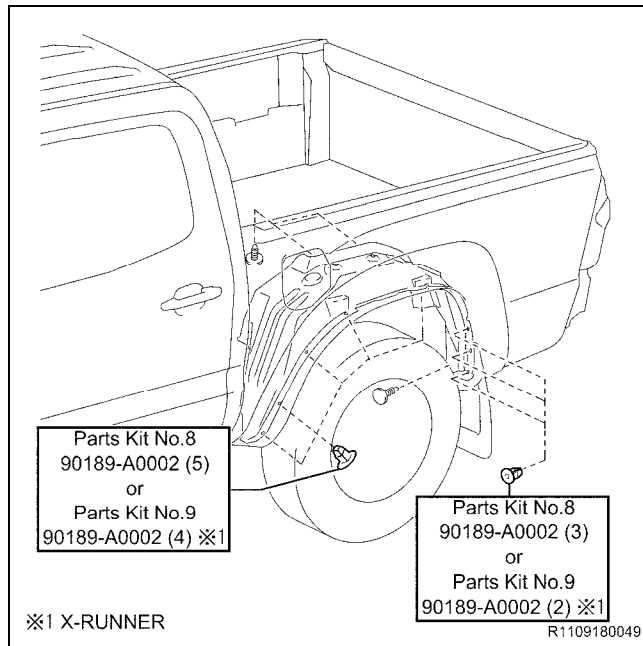


Molding

except X-RUNNER

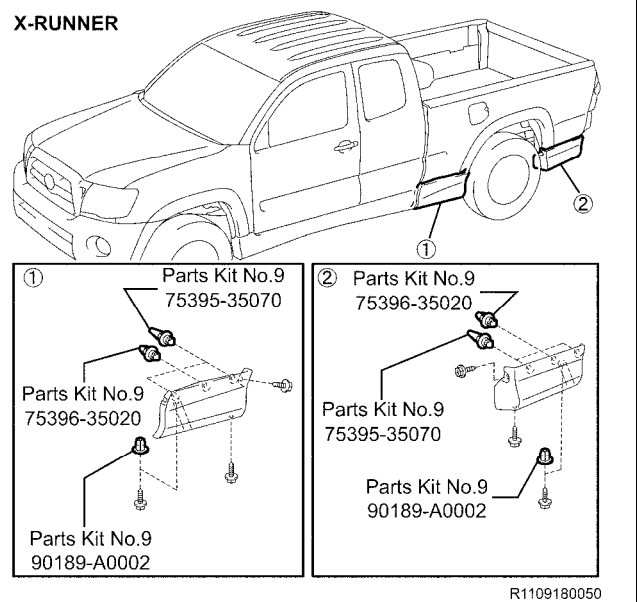


Rear Wheel House Liner



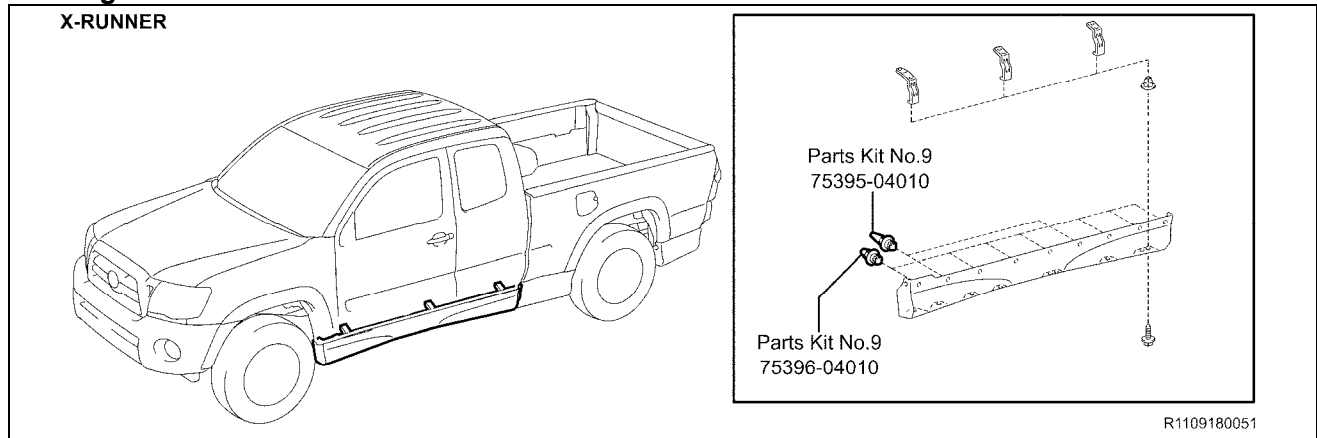
Molding

X-RUNNER



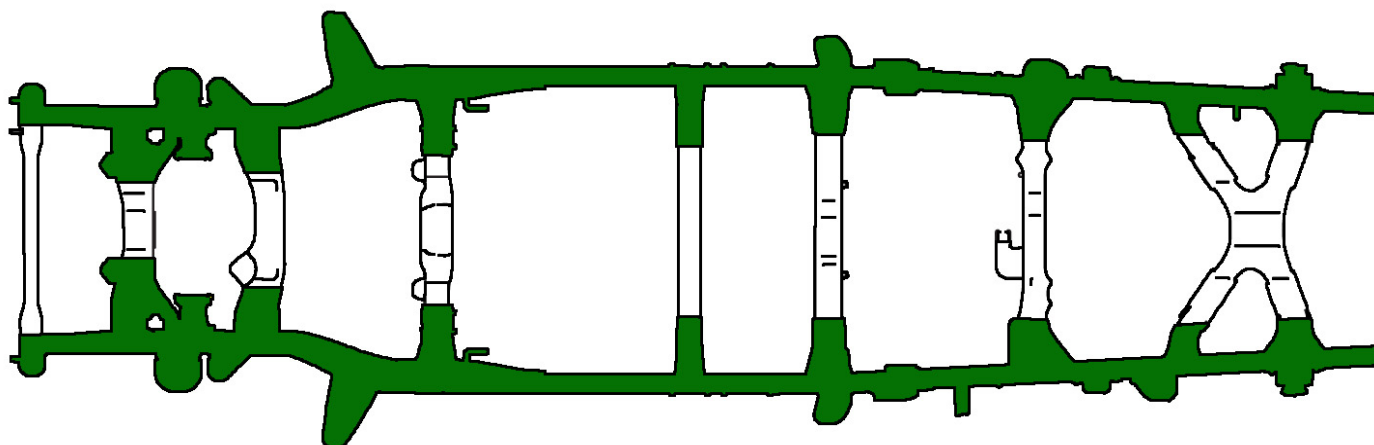
Molding Continued...

X-RUNNER



II. FRAME INSPECTION

1. PERFORM INITIAL PRE-HOIST INSPECTION



2. VISUALLY INSPECT THE FRAME

- Remove the spare tire.
- Visually inspect the specific areas (highlighted in **green**) of the frame assembly as shown for visible signs of perforation.

Judgment Criteria	Result	Action
Perforation (hole) of 10 mm or more	NG	<ul style="list-style-type: none">Replace the frameProceed to section IV. VEHICLE INSPECTION below to begin the frame replacement process.
No perforation or perforation (hole) of less than 10 mm	OK	<ul style="list-style-type: none">Return vehicle to customer, campaign complete.

NOTE: Use protective eyewear and gloves when performing the under vehicle inspection as rusted metal may flake off.

III. VEHICLE INSPECTION



- Visually inspect both the vehicle interior and exterior. Note any damage found during the visual inspection prior to beginning work.
- As you disassemble the vehicle you may encounter parts that are in need of replacement, which are not covered by this repair procedure. If this is the case, please take the time to inform the customer that these parts can be replaced with minimal labor cost.

IV. FRAME REPLACEMENT WORK PROCEDURE

A. SAFETY CHECKLIST & PRECAUTIONS WHEN DRAINING THE FUEL SYSTEM



- Always remember **“SAFETY FIRST”**.
- Be extremely careful when handling fuel to prevent fires from occurring.
- Before beginning work on the fuel system, perform the following safety check list.
- Before removing any fuel system part, drain all fuel to prevent spilling.

1. AIR VENTILATION

- ☐ Perform work in a well ventilated area.
- ☐ **DO NOT** work underground or in an area where fuel vapors may fill the room due to poor ventilation.
- ☐ Quickly clean up any spilled fuel with a dry cloth and dissipate the fuel vapors.
- ☐ Dry all cloths that have come in contact with fuel in a well ventilated area and dispose of them properly (according to applicable local regulations).

2. FIRES AND IGNITION SOURCES ARE STRICTLY PROHIBITED

- ☐ Fires and ignition sources are prohibited while working on the fuel system.
- ☐ Clearly display the sign found on the next page stating **“WORKING WITH GASOLINE, NO FIRES OR IGNITION SOURCES”**.
- ☐ Smoking is prohibited near the work area.
- ☐ **DO NOT** work in areas where there are welders, grinders, drills, electric motors, heaters, etc.
- ☐ **DO NOT** use work lamps or any other electrical appliance due to the risk of sparks flying from the power switch or a rise in temperature.
- ☐ **DO NOT** use metal hammers while working, due to the risk of flying sparks.
- ☐ **DO NOT** start any engines or perform any of the above in neighboring work bays.

3. FIRE EXTINGUISHER

- ☐ Have a fire extinguisher ready and available before beginning work.

4. PREVENT STATIC ELECTRICITY

- ☐ To help prevent static electricity, lightly wet the floor with water, but not to the point where it creates a hazardous working condition.
- ☐ Place appropriate warning cones or stand signs around the area as a caution.

5. PRECAUTIONS WHEN USING A LIFT

- ☐ For bays equipped with auto lifts, cover all access cover joints with duct tape.
- ☐ In the event that fuel has leaked inside the auto lift, remove the access cover and clean up any spilled fuel. Dissipate fuel vapors until the smell is gone.

6. PREVENT THE FUEL FROM SPRAYING

- ☐ When disconnecting any fuel tubes, pipes, hoses or connectors there may still be some pressure remaining, even after discharging the system. To prevent the fuel from spraying, cover the tubes, pipes or connectors with a shop rag before disconnecting.
- ☐ Remember to always wear protective goggles especially when disconnecting fuel tubes, pipes, hoses or connectors.

7. PREVENT THE FUEL FROM CONTACTING OTHER PARTS

- ☐ Do not allow the fuel to come in contact with any parts made of rubber or leather.

8. ASSIGN A SAFETY SUPERVISOR

- ☐ Assign a safety supervisor to be in charge of all safety precautions and fire hazards around the work area.

■ Copy And Display When Working

**WORKING WITH
GASOLINE**

**NO FIRES
NO IGNITION
SOURCES**

Supervisor

■ Copiar y exhibir al trabajar

**TRABAJANDO CON
GASOLINA
NINGÚN INCENDIOS
NINGUNA FUENTE
DE IGNICIÓN**

Supervisor

B. REMOVE THE BED ASSY



- If the frame is perforated, **ONLY** raise the vehicle high enough to remove the tires.
- For added safety and support place jack stands under the front and rear portions of the frame.
- **DO NOT** work directly underneath the vehicle when performing bed assy removal.
- The actual vehicle specs, equipment and parts required may differ than what is shown. Please use the correct specifications and parts for the model you are working on.
- For additional repair information, please reference the appropriate repair manual found on TIS for the vehicle you are working on.

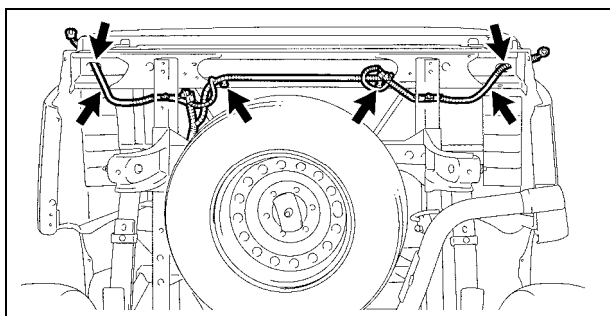
1. CENTER THE VEHICLE BETWEEN THE LIFT ARMS

- a) Verify the vehicle is aligned with the center point of the lift to prevent interference and damage to the frame and/or lift.

2. REMOVE THE FOLLOWING PARTS

- Rear Bumper Assy
- Rear Tail/Combination Light LH/RH
- Rear Mudguard LH/RH (If Equipped)
- Side Step Assy LH/RH (If Equipped)
- Rocker Panel Molding LH/RH (If Equipped)
- Body Rocker Panel Molding Assy LH (If Equipped)
- Outside LH Back Door Molding Sub-Assy (If Equipped)
- Quarter Panel Wheel Opening Molding LH
- Left Rear Wheel Well Liner

NOTE: Be careful not to damage the rear tail/combination lights when removing them.

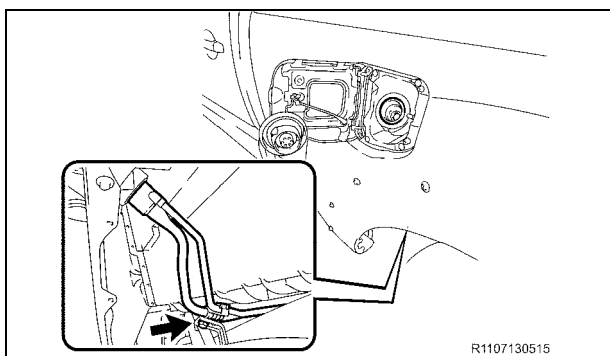


3. REMOVE THE WIRE HARNESS

- a) Disconnect the clamps, connectors and the frame wire harness from the bed assy.

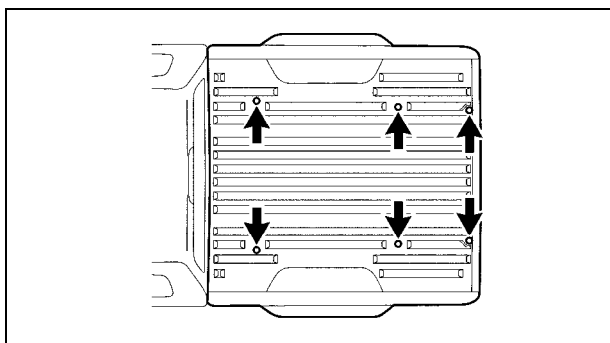
NOTE:

- The number of connectors may differ depending on the vehicle specification.
- Be careful not to damage the wire harness clamps when removing them.



4. DISCONNECT THE FUEL INLET PIPE SUB-ASSY

- a) Remove the bolt and disconnect the fuel inlet pipe sub-assy.



5. REMOVE THE BED ASSY

- a) Using a Torx® T55H Socket, remove the 6 Torx® bolts from the bed assy.

NOTE:

- Use 4 or more people to remove the bed assy from the frame.
- Evenly support the bed assy when removing it.
- Be careful not to damage the filler tubes when removing the bed.

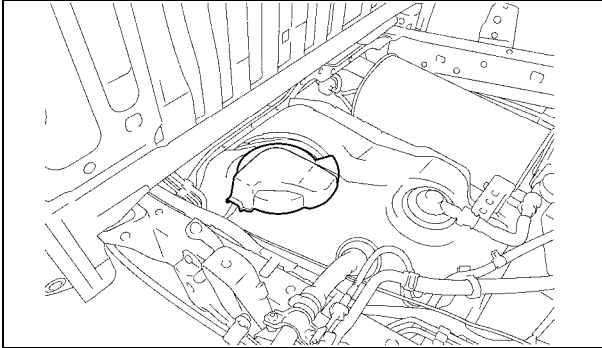
C. DISCHARGE THE FUEL SYSTEM PRESSURE



- **DO NOT** disconnect any part of the fuel system until you have discharged the fuel system pressure.
- Even after discharging the fuel system pressure, place a piece of cloth around the tubes, pipe, hoses and connectors as you separate them to reduce the risk of fuel spraying on yourself, in the engine compartment and onto other parts.
- For additional repair information, please reference the appropriate repair manual in TIS for the vehicle you are working on.

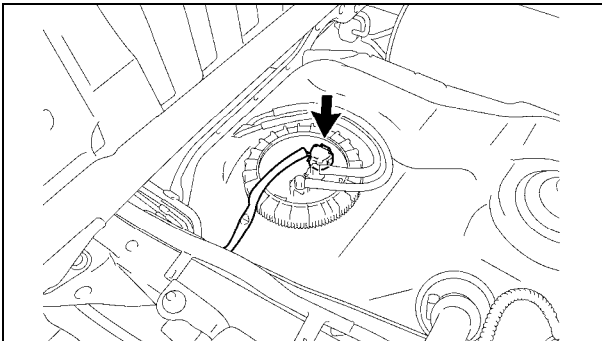
1. CHECK FOR DTCs

2. RECORD THE RADIO STATION PRESETS



3. DISCHARGE THE FUEL SYSTEM PRESSURE

- a) Remove the No. 2 fuel tank protector. *(If Equipped)*



- b) Disconnect the fuel pump connector.
c) Start the engine.
d) After the engine has stopped, turn the ignition switch OFF.
e) Crank the engine again to check that it does not start.

NOTE: Please make sure to follow the procedure listed above. This will prevent a large amount of gasoline from spilling out when high pressure fuel tube is disconnected.

4. DISCONNECT THE NEGATIVE (-) BATTERY TERMINAL

NOTE: Wait 90 seconds after the negative (-) terminal cable is disconnected from the battery before proceeding. Doing so will prevent the SRS from being deployed (i.e. airbag, seat belt pretensioner, etc.).

D. REMOVE THE CAB BODY ASSY



- If the frame is perforated, **ONLY** raise the vehicle high enough to remove the tires.
- For added safety and support place jack stands under the front and rear portions of the frame.
- **DO NOT** work directly underneath vehicle when performing cab assy removal, unless noted.
- The actual vehicle specs, equipment and parts required may differ than what is shown. Please use the correct specs and parts for the model you are working on.
- For additional repair information, please reference the appropriate repair manual in TIS for the vehicle you are working on.

1. REMOVE THE ENGINE UNDER COVERS

NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.

2. EVACUATE THE REFRIGERANT FROM THE AIR CONDITIONING SYSTEM

3. DRAIN THE FOLLOWING FLUIDS

- Coolant (including engine block)
- Brake Fluid
- Clutch Fluid (*Manual Transmission Vehicles Of 1GR-FE Only*)
- Front Differential Fluid (4WD Only)

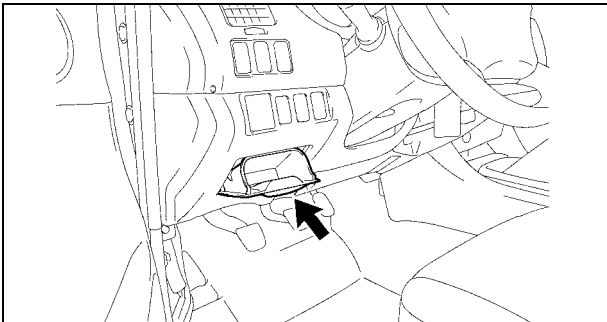
NOTE: **DO NOT** remove the radiator cap while the radiator and engine are hot, doing so may cause the coolant to spray out causing potential injuries.

4. REMOVE THE FOLLOWING BODY COMPONENTS

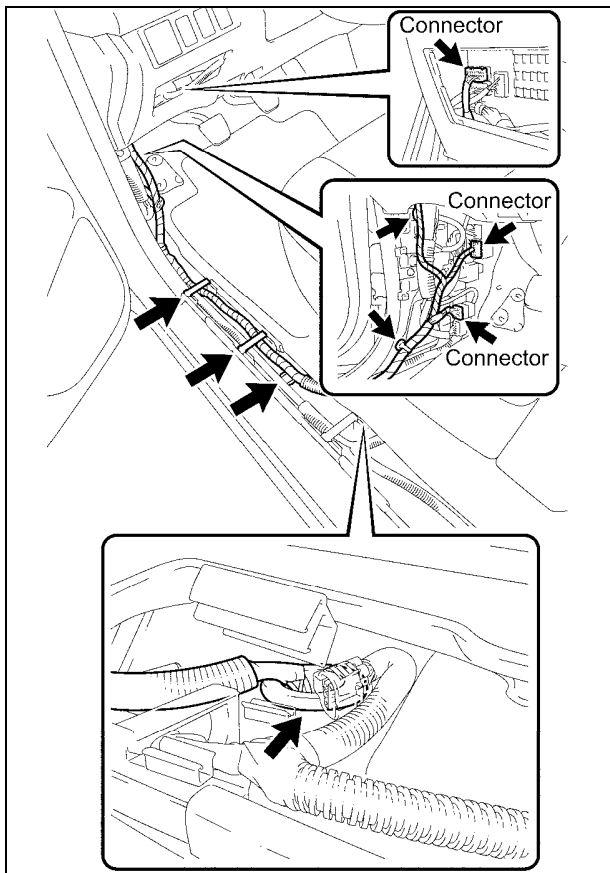
- Radiator Grille
- Front Bumper Filler LH/RH
- Front Fender Mudguard LH/RH
- Front Bumper Assy
- Front Bumper Reinforcement
- Front No.2 Bumper Extension Sub-assy LH/RH

5. REMOVE THE FOLLOWING INTERIOR COMPONENTS

- Front Door Scuff Plate LH/RH
- Front Floor Footrest
- Cowl Side Trim Board LH/RH



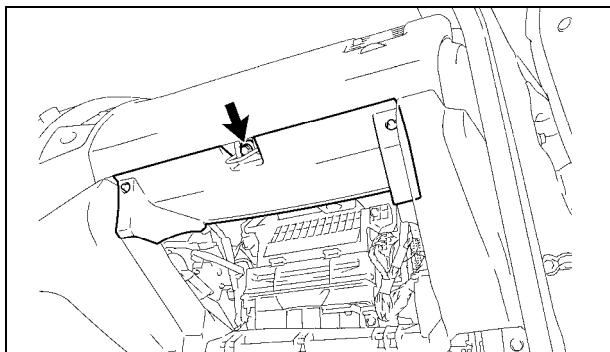
6. REMOVE THE INSTRUMENT PANEL BOX



7. DISCONNECT THE FRAME WIRE HARNESS

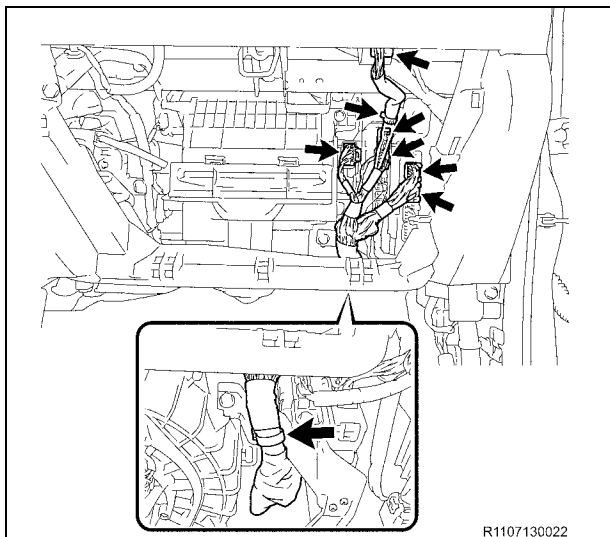
- a) Disconnect the 5 clamps.
- b) Disconnect the connector(s).
- c) Remove the frame wire harness grommet from the cab assy.
- d) Pull out the frame wire harness from the vehicle cab assy.

NOTE: The number of connectors may differ depending on the model.



8. REMOVE THE GLOVE BOX AND LOWER INSTRUMENT PANEL FINISH PANEL

- a) Remove the glove box.
- b) Remove the bolt and the lower instrument panel finish panel.



9. DISCONNECT THE ENGINE WIRE HARNESS

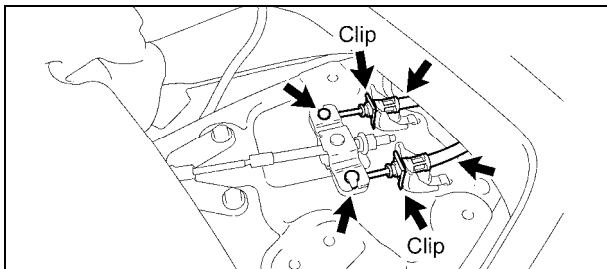
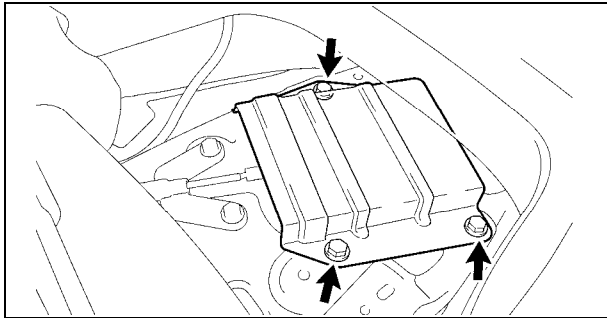
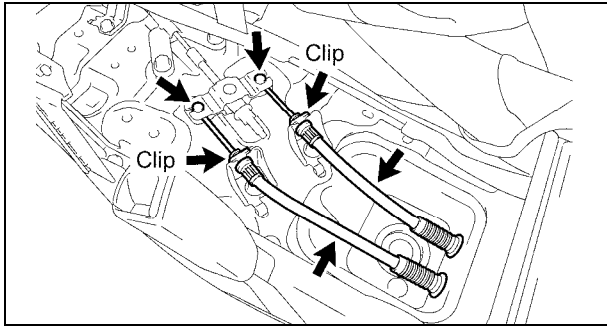
- a) Disconnect each connector and clamp from the ECM and remove the engine wire harness.

NOTE: The number of connectors may differ depending on the model.

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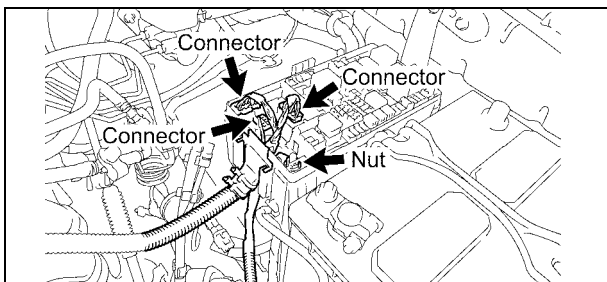
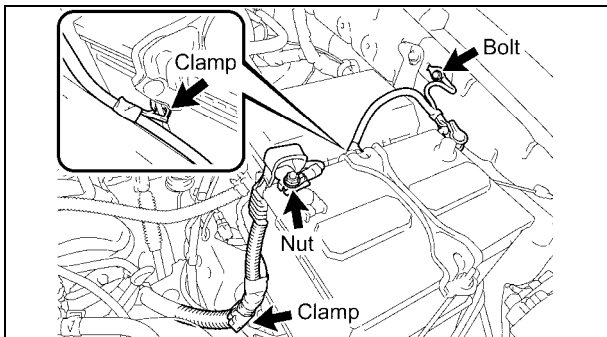
10. REMOVE THE FOLLOWING PARTS

- Rear Console Box (*for Separate Seat Type*)
- Front Console Box



12. REMOVE THE FOLLOWING PARTS

- V-Bank Cover (*1GR-FE Only*)



11. DISCONNECT THE PARKING BRAKE CABLES

For Separate Seat Type:

- Remove the 2 clips.
- Disconnect the 2 parking brake cables.

For Bench Seat Type:

- Turn back the floor carpet.
- Remove the 3 bolts and the parking brake cable joint protector.

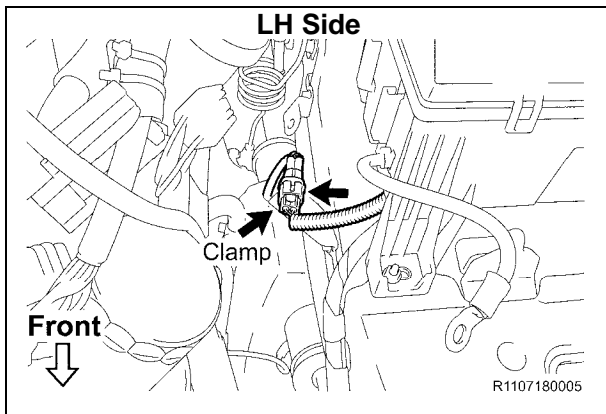
- Remove the 2 clips.
- Disconnect the 2 parking brake cables.

13. DISCONNECT THE NO.2 ENGINE WIRE HARNESS

- Air Cleaner Hose and Air Cleaner Assy

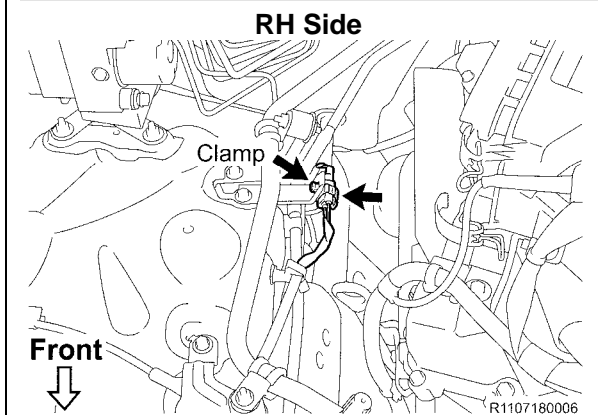
- Remove the nut and disconnect the (+) positive battery cable.
- Remove the bolt and disconnect the ground wire.
- Disconnect the 2 clamps.

- Remove the No.1 upper relay block cover.
- Disconnect the 3 connectors.
- Remove the nut and disconnect the fuse box wire harness.



14. DISCONNECT THE SKID CONTROL SENSOR WIRE HARNESS

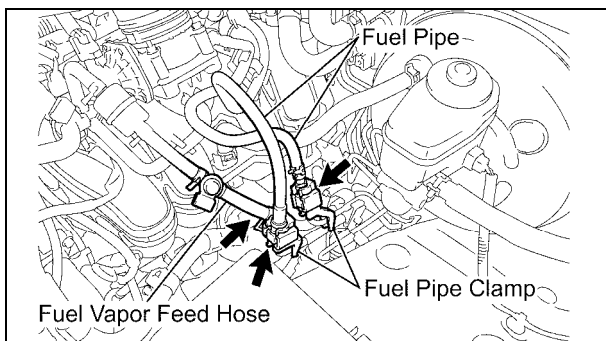
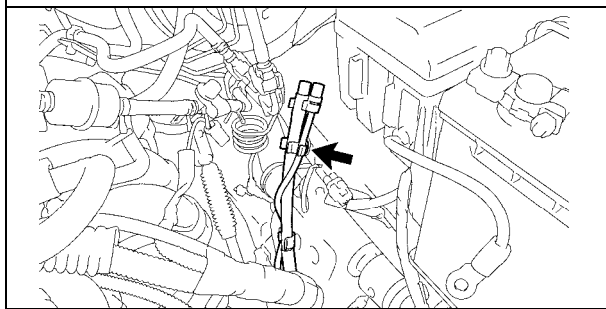
- Disconnect the harness clamp and front skid control sensor connector.
- Repeat the procedure on the opposite side.



15. DISCONNECT THE FRONT DIFFERENTIAL BREATHER TUBES (4WD ONLY)

- Disconnect the front differential breather tubes.

NOTE: There may be 2 front differential breather tubes depending on the vehicle model.



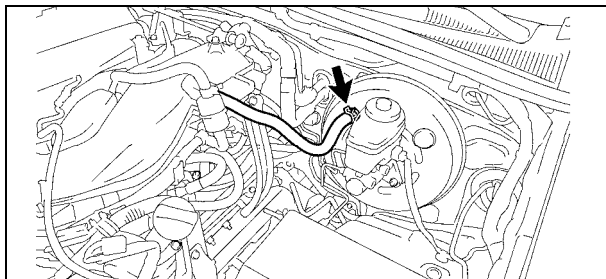
16. DISCONNECT THE FUEL PIPES AND VAPOR FEED HOSE

- Remove the 2 fuel pipe clamps.
- Disconnect the No. 1 and No. 2 fuel pipe.

NOTE: Put a shop towel under the fuel pipe to catch any spilled fuel.

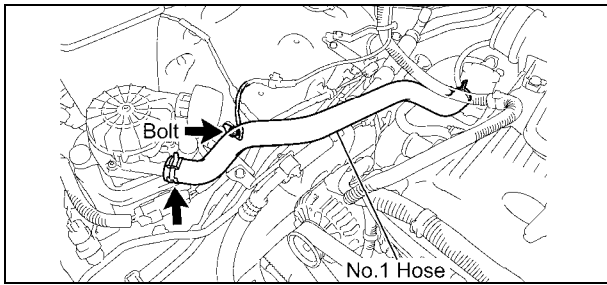
17. DISCONNECT THE VACUUM HOSE

- Disconnect the vacuum hose.



18. REMOVE THE FOLLOWING PARTS

- Radiator Support To Frame Seal
- Radiator Inlet Hose
- Radiator Outlet Hose
- Fan Shroud
- Radiator Assy

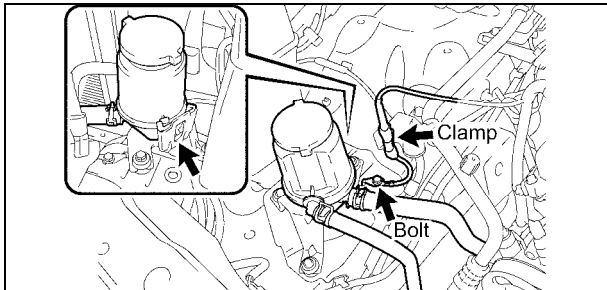


19. DISCONNECT THE NO.1 HOSE (2TR-FE ONLY)

- Disconnect the No.1 hose.

20. DISCONNECT THE GROUND WIRE (2TR-FE ONLY)

- Remove the bolt and disconnect the ground wire.

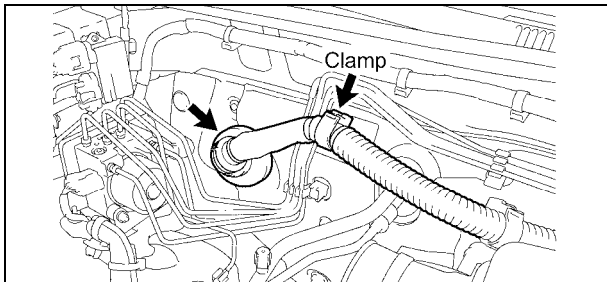


21. DISCONNECT POWER STEERING PUMP OIL RESERVOIR ASSY (1GR-FE ONLY)

- Disconnect power steering pump oil reservoir assy.

22. DISCONNECT THE GROUND WIRE (1GR-FE ONLY)

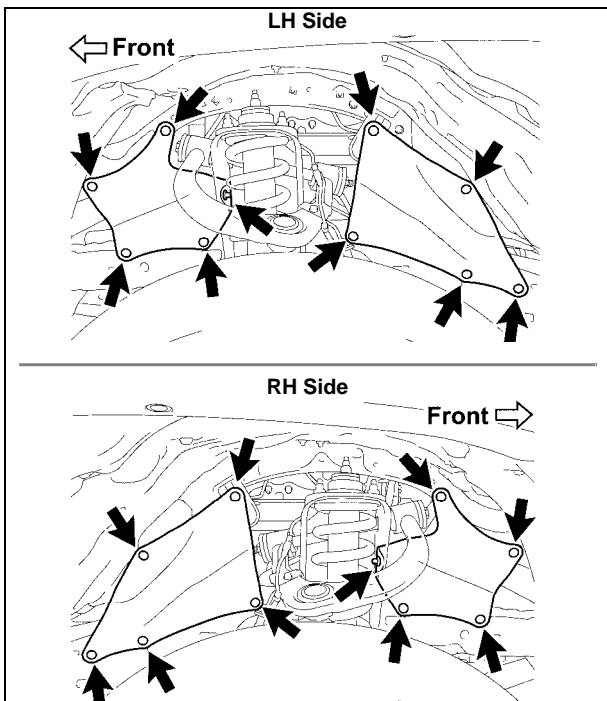
- Remove the bolt and disconnect the clamp and the ground wire.



23. DISCONNECT THE ENGINE WIRE HARNESS

- Disconnect the clamp.
- Remove the engine wire harness container from the cowl panel.

24. DISCONNECT THE WATER / HEATER HOSES, ENGINE SIDE



25. REMOVE THE FRONT FENDER APRON SEALS

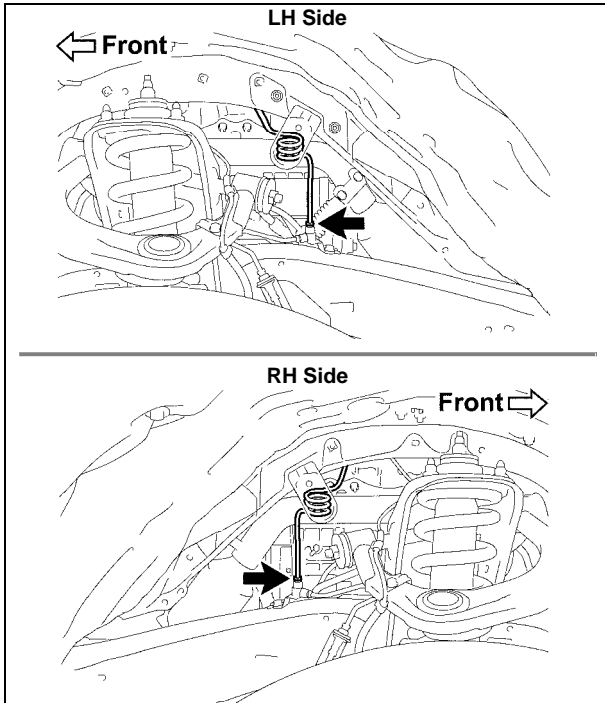
4WD, Pre-Runner Only (Shown):

- Remove the 20 clips and 4 front fender apron seals.

2WD Only:

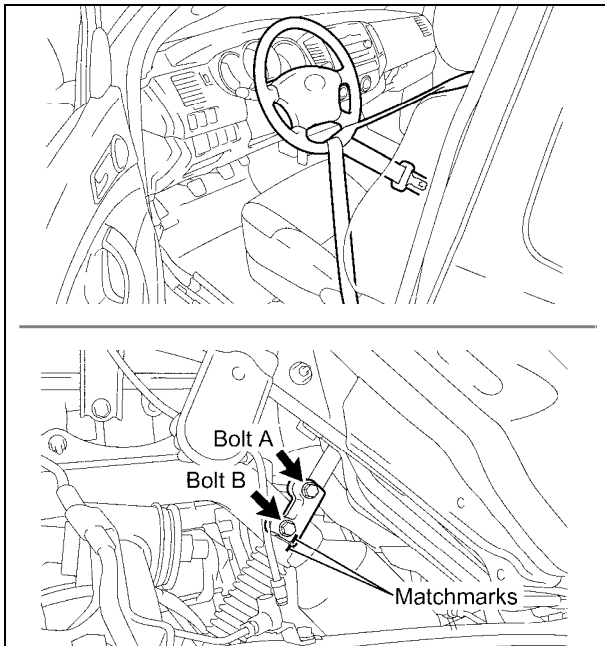
- Remove the 22 clips and 4 front fender apron seals.

26. DISCONNECT THE AIR CONDITIONING DISCHARGE AND SUCTION HOSES FROM THE COMPRESSOR



27. DISCONNECT THE FRONT BRAKE TUBES

- Disconnect the front brake tube.
- Repeat the procedure on the opposite side.

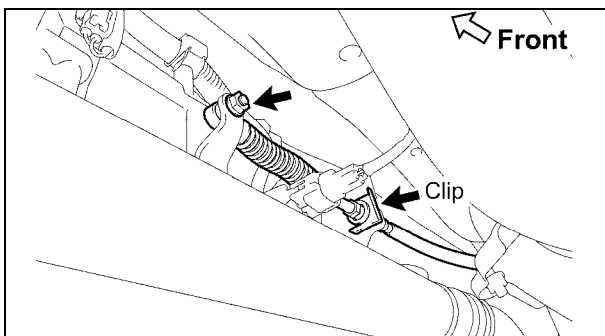


28. DISCONNECT THE STEERING SLIDING YOKE

NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.

- Make sure the front wheels are in a straight-ahead position and the steering wheel is centered.
- Using the seat belt, hold the steering wheel in position as shown in the illustration, in order to prevent damage to the spiral cable.
- Place match marks on the steering sliding yoke and No.2 intermediate shaft.
- Loosen bolt (A) and remove bolt (B).
- Disconnect the steering sliding yoke from the No.2 intermediate shaft.

NOTE: If the steering sliding yoke is stuck, tap it from below with a brass hammer to disconnect it.



29. DISCONNECT THE SHIFT CABLE (AUTO TRANS ONLY)

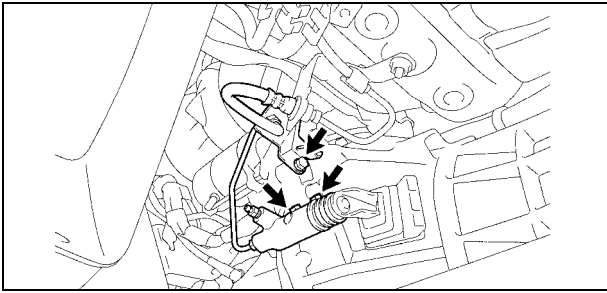
Cable Type:

- Remove the clip.
- Remove the nut and disconnect the shift cable.

Rod Type:

- Remove the pin and clip, disconnect the shift cable.

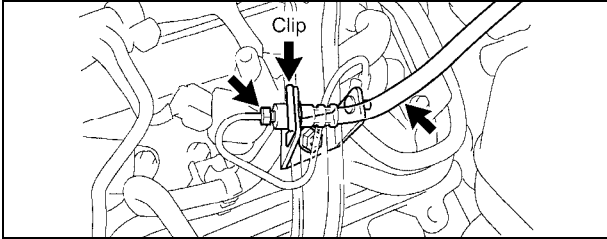
NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.



30. DISCONNECT THE CLUTCH RELEASE CYLINDER ASSY (2TR-FE MANUAL TRANS ONLY)

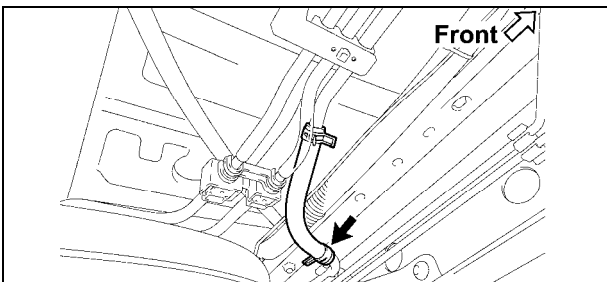
- Remove the bolt and disconnect the clutch hose.
- Remove the 2 bolts and disconnect the clutch release cylinder.

NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.



31. DISCONNECT THE NO.1 CLUTCH HOSE (1GR-FE MANUAL TRANS ONLY)

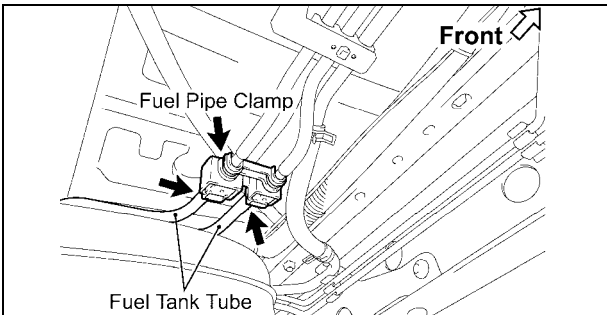
- Disconnect the clutch release cylinder tube from the clutch hose.
- Remove the clip and disconnect the clutch hose.



32. DISCONNECT THE NO.2 FUEL HOSE

- Remove the clip and disconnect the No.2 fuel hose.

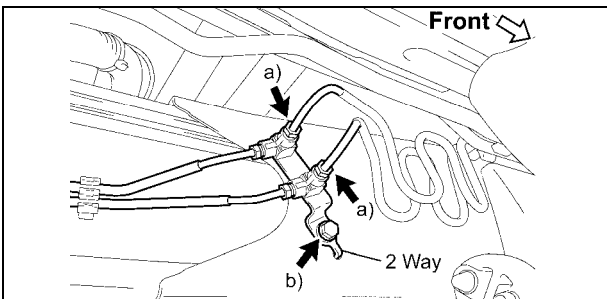
NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.



33. DISCONNECT THE FUEL TANK TUBES

- Remove the fuel pipe clamp.
- Disconnect the 2 fuel tank tubes.

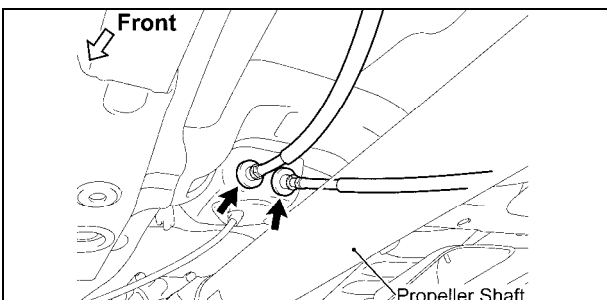
NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.



34. DISCONNECT THE REAR BRAKE TUBES

- Disconnect the 2 rear brake tubes.
- Remove the bolt and disconnect the 2 way.

NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.



35. DISCONNECT THE PARKING BRAKE CABLES

NOTE: Use precaution when performing this step, as you will need to work underneath the vehicle.

36. REMOVE THE FOLLOWING PARTS

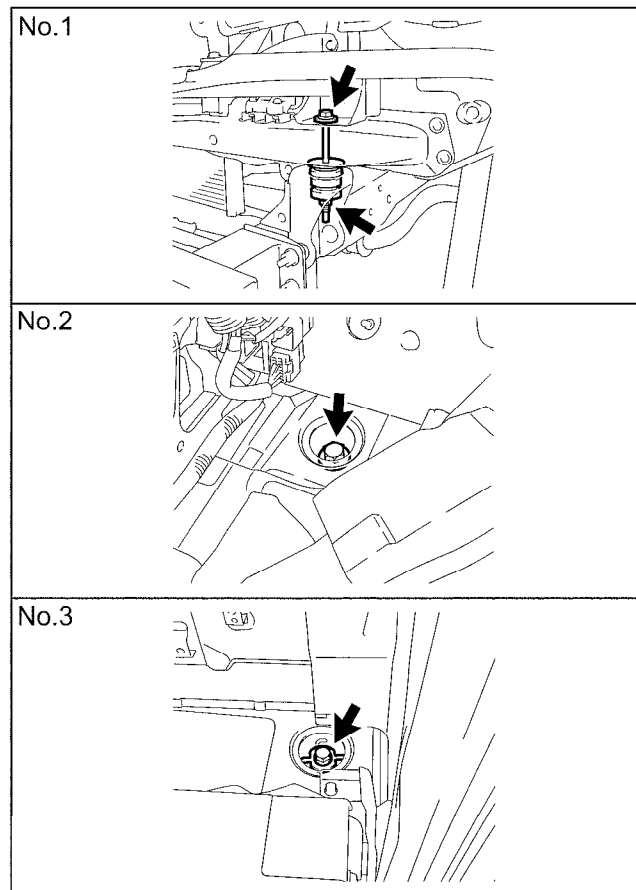
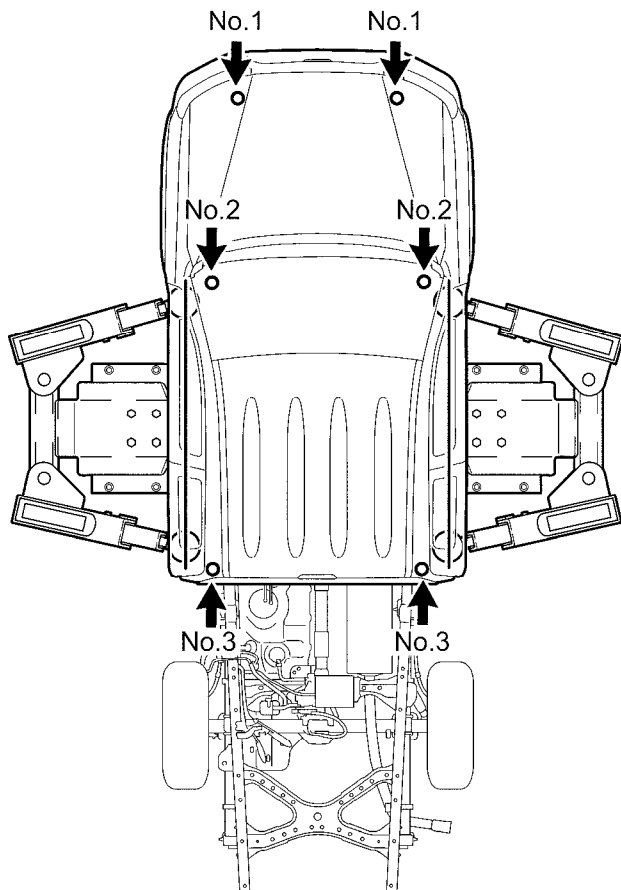
- Floor Board No.1/No.2 (*Access Cab Only*)
- Seat Floor Box (*Access Cab Only*)
- Rear Floor Side Service Hole Cover LH/RH (*Access Cab Only*)
- Luggage Compartment Side Tray (*Double Cab Only*)
- No.1 w/ Box Speaker Assy (*If Equipped*)

37. REMOVE THE CAB BODY ASSY USING AN ABOVE GROUND LIFT

- Remove the 6 nuts and 6 washers.
- Set the lift arms under the cab body assy so they **DO NOT** interfere with the frame or cab mounts.
- Check that all wire harnesses, hoses, cables and the steering shaft are disconnected.
- Mark the location of the tires so it will be easier to install the cab onto the new frame.
- Lift the cab assy up slowly, making sure it does not interfere with anything while being raised.
- Raise the cab assy high enough so that the top of the engine clears the lowest point of the cab assy.
- Pull the frame assy out from under the vehicle.
- Lower the cab assy all the way down and leave it on the lift.

NOTE:

- Center the cab assy weight on the lift arms so that it does not slant/tilt to one side.
- Raise the cab assy slightly off the frame and verify that it is held securely by the lift arms.
- The center of gravity of the cab body may become nose heavy depending on placement of the lift arm which could cause the cab to fall when lifted. To prevent this, use weights to establish a balance and secure the cab body to the lift arm using ratchet tie down belts.
- **DO NOT** work directly underneath the vehicle when pulling the frame assy out from under.
- **DO NOT** remove the cab mount bolts, they will be used as guides during cab assy reinstallation.



E. DISASSEMBLE THE FRAME

1. PLACE THE FRAME ON A LIFT

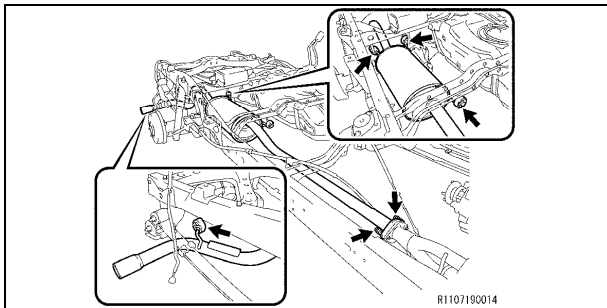
- Place the frame on the lift, and secure it with a ratcheting tie down strap. This will prevent the frame from tilting or falling off as parts are removed.

- **Ratcheting Tie Downs: Qty 1 (Length: 2 in X 27 ft and Min. Work Load Capacity: 3,000 lbs)**

2. REMOVE THE FOLLOWING PARTS

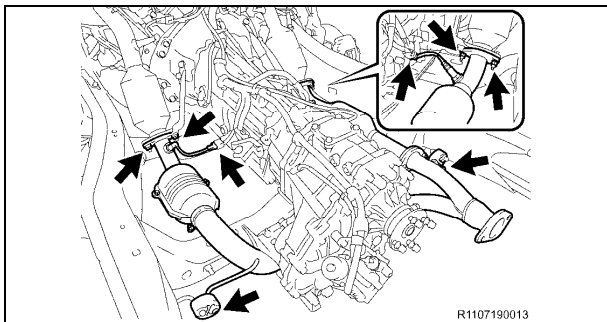
- Wheels
- Front Propeller Shaft Assy (4WD Only)
- Rear Propeller Shaft Assy
 - Insert **SST 09325-40010** into trans after the Rear Prop Shaft is removed to prevent oil leakage (2WD Only)
- Propeller Shaft Heat Insulator (If Equipped)
- Exhaust Pipe Stopper Bracket (If Equipped)

NOTE: Place match marks on the front (if equipped) and rear propeller shafts prior to removal.



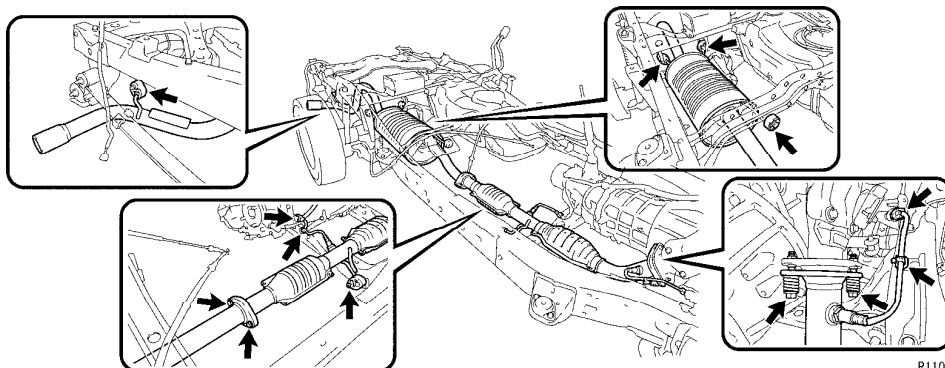
3. REMOVE THE EXHAUST SYSTEM (1GR-FE ONLY)

- Remove the 2 bolts and 4 exhaust pipe supports.
- Remove the center exhaust pipe assy and exhaust pipe supports.
- Remove the exhaust pipe gasket.
- Disconnect the 2 oxygen sensor connectors.
- Remove the 6 nuts and 2 exhaust pipe supports.
- Remove the front exhaust pipe assy and exhaust pipe supports.
- Remove the 2 exhaust pipe gaskets.



4. REMOVE THE EXHAUST SYSTEM (2TR-FE ONLY)

- Remove the 2 bolts and 4 exhaust pipe supports.
- Remove the center exhaust pipe assy and exhaust pipe supports.
- Remove the exhaust pipe gasket.
- Disconnect the 2 oxygen sensor connectors.
- Disconnect the 2 oxygen sensor wire harness clamps.
- Remove the 2 bolts and exhaust pipe support.
- Remove the front exhaust pipe assy and exhaust pipe supports.
- Remove the 2 exhaust pipe gaskets.



5. REMOVE THE FOLLOWING PARTS

- No.1 Fuel Tank Protector Assy (If Equipped)
- Fuel Tank Strap
- Fan /V-belt
- Fuel Tank
- Charcoal Canister Assy

6. REMOVE AND SET ASIDE THE POWER STEERING PUMP ASSY

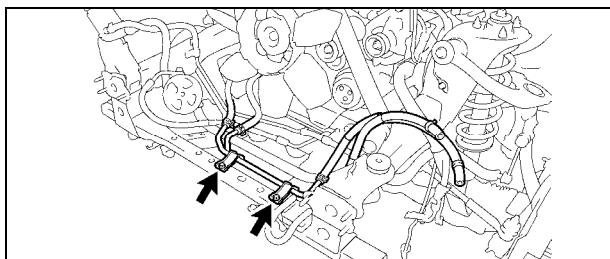
- Disconnect the connector.
- Disconnect the clamp. (1GR-FE Only)
- Remove the bolt and disconnect the ground wire. (1GR-FE Only)
- Remove the 2 bolts and the power steering vane pump.

NOTE:

- **DO NOT** disconnect the power steering pump hoses or tubes.
- **Keep the power steering pump reservoir upright to prevent the fluid from leaking out.**

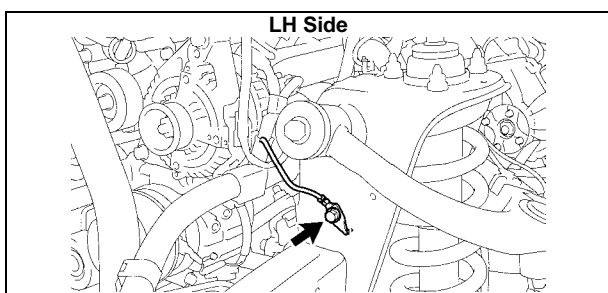
7. REMOVE THE FOLLOWING PARTS

- Intake Air Surge Tank (1GR-FE Only)
- Intake Air Connector (2TR-FE Only)



8. DISCONNECT THE OIL COOLER TUBE (AUTO TRANS ONLY)

- Remove the bolts and disconnect the oil cooler tube.



9. REMOVE THE ENGINE AND TRANSMISSION ASSY

- Remove the bolt and disconnect the ground wire. (LH Side)
- Disconnect the connector and clamp. (4WD Only)
- Disconnect and remove the necessary items/parts to prepare the engine and transmission assy for removal.
- Install the engine hanger.

For 1GR-FE:

12281-31060 = No.1 Engine Hanger

12282-31040 = No.2 Engine Hanger

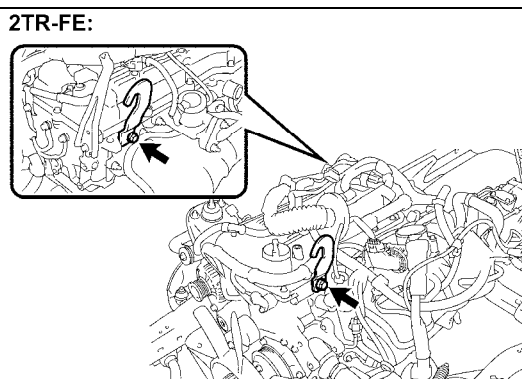
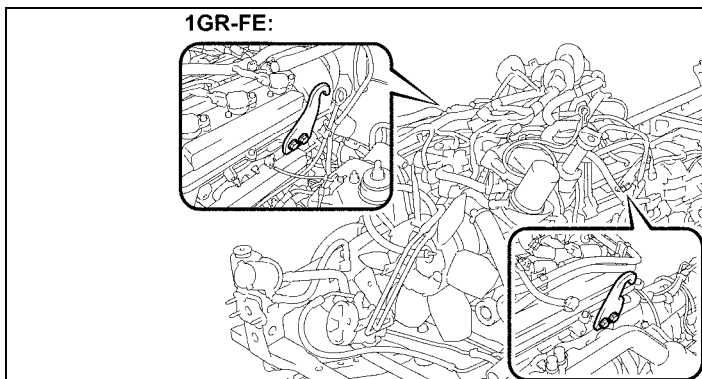
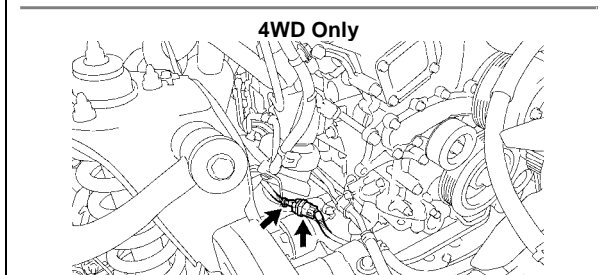
90119-08A87 = 4 Bolts

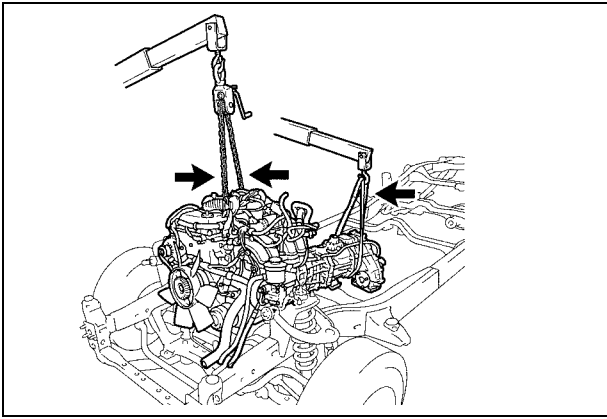
For 2TR-FE:

12281-75040 = No.1 Engine Hanger

12281-75040 = No.2 Engine Hanger

91552-A1020 = 2 Bolts





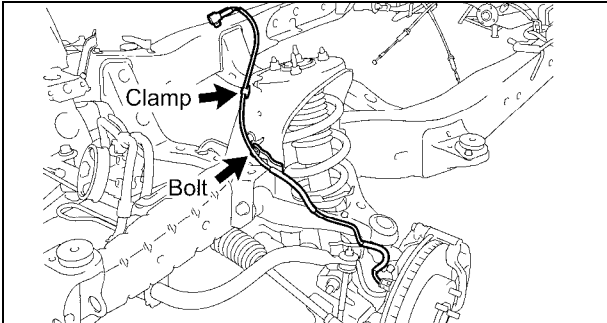
e) Remove the engine and transmission assy.

NOTE:

- **ALWAYS** use 2 engine hoists/cranes to lift it.
- **DO NOT** use 1 engine hoist/crane to lift the engine & transmission assy, as the unbalanced weight may lead to an accident or injury.
- **ONLY** use engine hoists/cranes that can properly support the weight of the engine and transmission assy.
- **Carefully** adjust the 2 engine hoists/cranes used so that the engine and transmission assy is properly balanced.

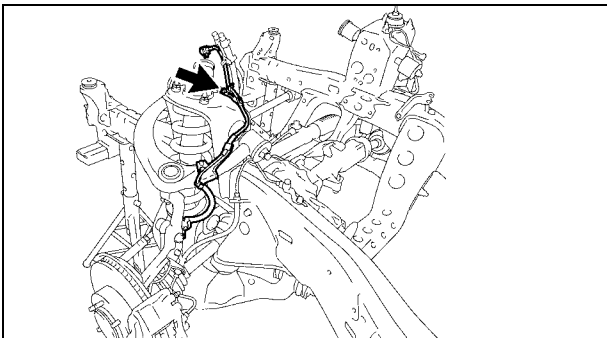
10. DISCONNECT THE FRONT SKID CONTROL SENSOR WIRE HARNESS (2WD ONLY)

- a) Remove the bolt, disconnect the clamp and skid control sensor wire harness.
- b) Repeat the procedure on the opposite side.



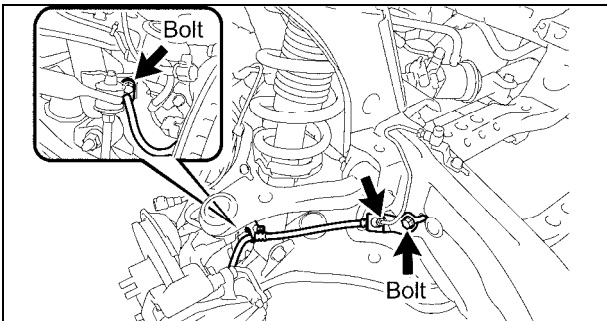
11. DISCONNECT THE FRONT SKID CONTROL SENSOR WIRE HARNESS (4WD, PRE-RUNNER ONLY)

- a) Remove the bolt and disconnect the skid control sensor wire harness.
- b) Repeat the procedure on the opposite side.



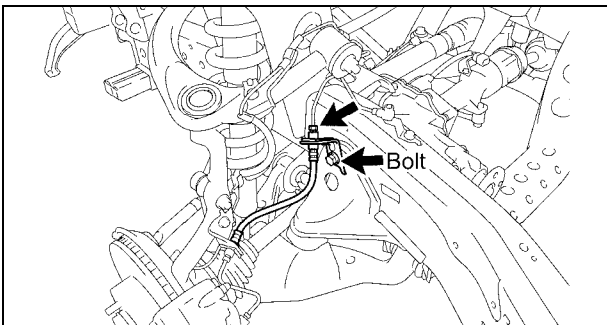
12. DISCONNECT THE FRONT BRAKE HOSE (2WD ONLY)

- a) Disconnect the front brake tube from the brake hose.
- b) Remove the 2 bolts and disconnect the front brake hose and flexible hose bracket.
- c) Repeat the procedure on the opposite side.



13. DISCONNECT THE FRONT BRAKE HOSE (4WD, PRE-RUNNER ONLY)

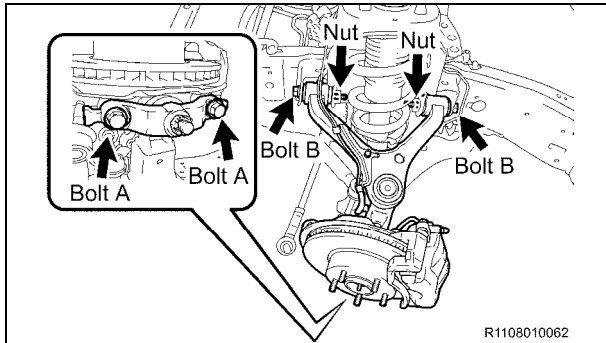
- a) Disconnect the front brake tube from the brake hose.
- b) Remove the bolt and disconnect the front brake hose and flexible hose bracket.
- c) Repeat the procedure on the opposite side.



14. REMOVE THE FOLLOWING PARTS

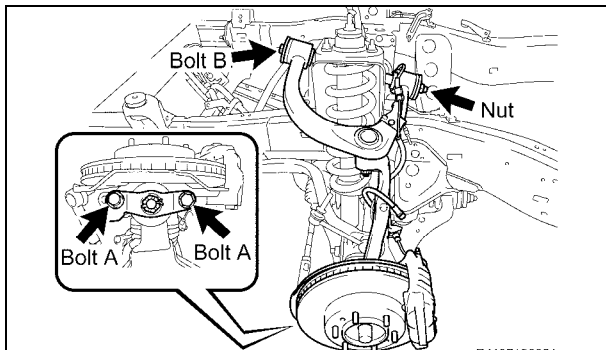
- Front Axle Hub Grease Cap (4WD Only)
- Front Axle Shaft Nut (4WD Only)
- Tie Rod End*
- Front Stabilizer Link Assy

* SST 09610-20012 (2WD), SST 09628-62011 (4WD, Pre-Runner) disconnect the tie rod end.



15. REMOVE THE FRONT SUSPENSION UPPER ARM AND STEERING KNUCKLE ASSY (2WD ONLY)

- Remove the 2 bolts (A).
- Remove the 2 bolts (B), 2 nuts, 2 washers and front suspension upper arm w/ steering knuckle.
- Repeat the procedure on the opposite side.



16. REMOVE THE FRONT SUSPENSION UPPER ARM AND STEERING KNUCKLE ASSY (4WD, PRE-RUNNER ONLY)

- Remove the 2 bolts (A).
- Remove the bolt (B), nut, 2 washers and front suspension upper arm w/ steering knuckle.
- Repeat the procedure on the opposite side.

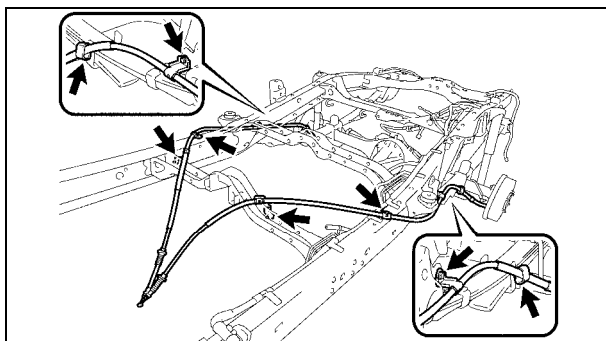
NOTE: If the drive shaft is difficult to disconnect, tap the drive shaft loose with a plastic hammer.

17. REMOVE THE FOLLOWING PARTS

- Front Drive Shaft Assy (4WD Only)*
 - Front Suspension Member Brace Sub-Asy
 - Front Stabilizer Bar
 - Front Shock Absorber Assy
 - Power Steering Link Assy w/ Pump
 - Front Differential Carrier (4WD Only)
 - Lower Ball Joint**
 - Front Spring Bumper***
- *SST 09520-24010 (09520-32040), 09520-01010
 - **SST 09628-00011
 - ***SST 09922-10010-01

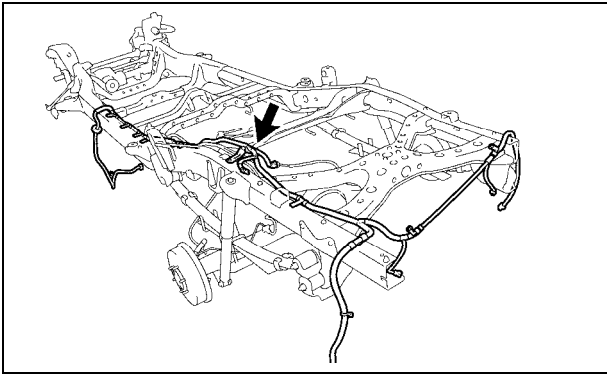
NOTE:

- When removing the power steering link with the pump, have one person support the power steering link and the other support the pump and keep it upright to avoid fluid leakage.
- If the drive shaft is difficult to remove tap it with a plastic hammer.
- Be careful not to damage the dust cover and oil seal.



18. REMOVE THE PARKING BRAKE CABLES

- Remove the 8 bolts and parking brake cables.

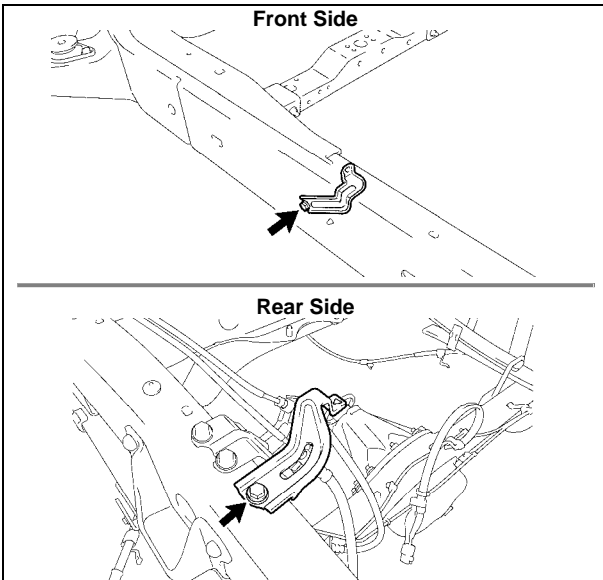


19. REMOVE THE FRAME WIRE HARNESS

- Remove the bolt and disconnect the ground wire *(If Equipped)*.
- Disconnect the clamps and remove the frame wire harness.

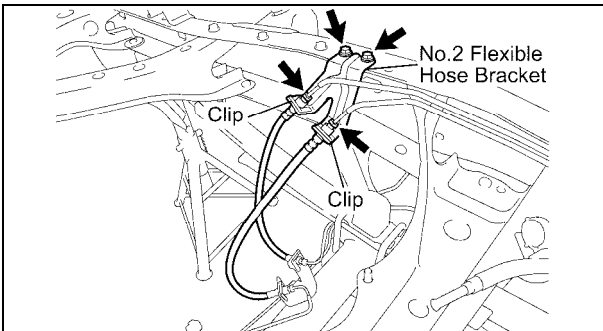
NOTE:

- The number of wire harness clamps will differ depending on the vehicle specification.
- Take care not to damage or break the wire harness clamps during removal.



20. REMOVE THE HARNESS BRACKETS

- Remove the 2 bolts and 2 brackets.



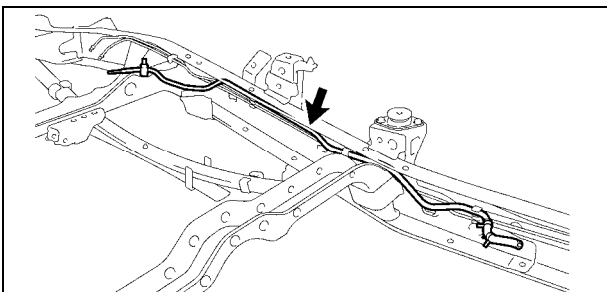
21. DISCONNECT THE BRAKE HOSE

- Disconnect the No.5 rear brake tube.
- Disconnect the No.6 rear brake tube.
- Remove the 2 clips and 2 bolts, disconnect the brake hose and the No.2 flexible hose bracket.

22. REMOVE THE FOLLOWING PARTS

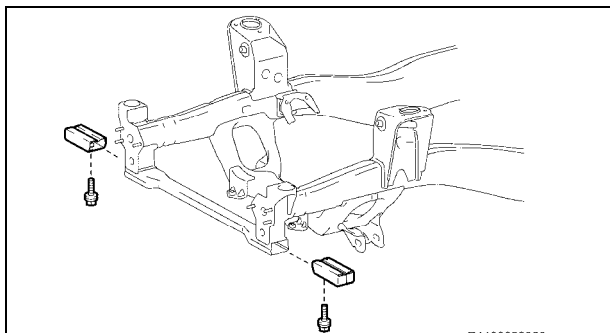
- Rear Stabilizer Bar *(If Equipped)*
- Rear Shock Absorber Assy
- Rear Differential Assy
- No.1 Rear Spring Bumper *(2WD Only)*

NOTE: Cut the rear differential "U" bolts off if the nuts cannot be removed.



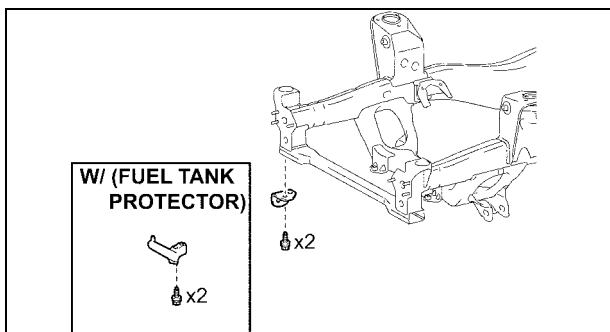
23. REMOVE THE NO.2 CHARCOAL CANISTER PIPE

- Disconnect the clamps and remove the No.2 charcoal canister pipe.



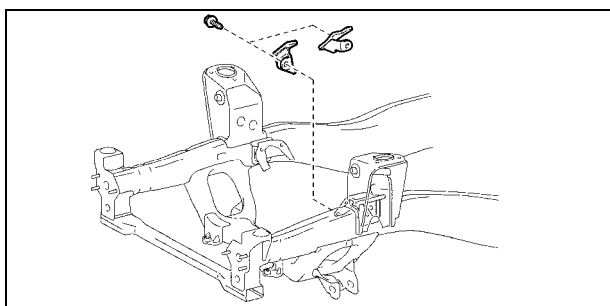
24. REMOVE THE FRAME AUXILIARY CROSSMEMBER EXTENSIONS (IF EQUIPPED)

- a) Remove the 2 bolts and frame auxiliary crossmember extensions.



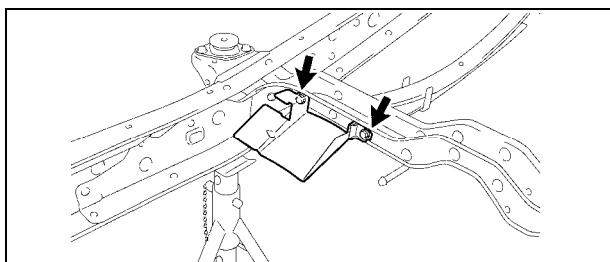
25. REMOVE THE HOOK

- a) Remove the 2 bolts and hook.



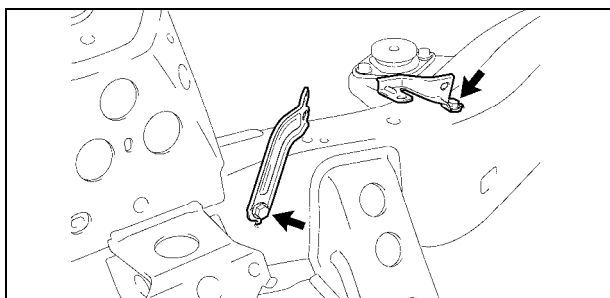
26. REMOVE THE REAR ENGINE MOUNTING REINFORCES (1GR-FE ONLY)

- a) Remove the 2 bolts and 2 rear engine mounting reinforces.



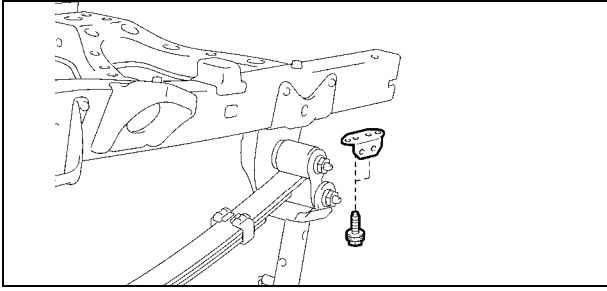
27. REMOVE THE PARKING BRAKE CABLE HEAT INSULATOR (IF EQUIPPED)

- a) Remove the 2 bolts and parking brake cable heat insulator.



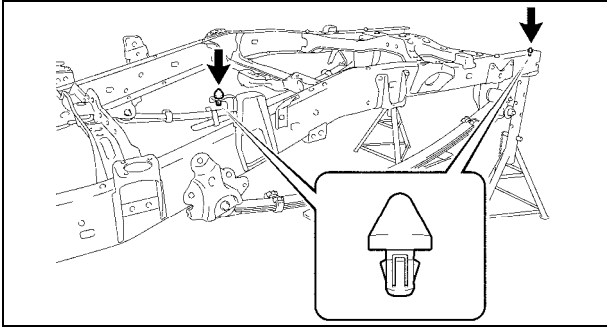
28. REMOVE THE OXYGEN SENSOR BRACKETS (2TR-FE ONLY)

- a) Remove the 2 bolts and 2 brackets.



29. REMOVE THE NO.1 RECEIVER HITCH ATTACHMENT REINFORCEMENT (IF EQUIPPED)

- a) Remove the 2 bolts and No.1 receiver hitch attachment reinforcement.



30. REMOVE THE CLIPS

31. REMOVE THE FOLLOWING PARTS

- Front Suspension Lower Arm
- Cab Mounts (QTY:6)
- Rear Leaf Spring Assy

32. REMOVE THE FRAME FROM THE LIFT

- a) Remove the ratcheting tie down strap and the frame from the lift.

F. ASSEMBLE THE NEW FRAME

1. PLACE THE **NEW** FRAME ON THE LIFT

- a) Place the **NEW** frame on the lift, and secure it with a ratcheting tie down strap. This will prevent the frame from tilting or falling off as parts are installed.

- **Ratcheting Tie Downs: Qty 1 (Length: 2 in X 27 ft and Min. Work Load Capacity: 3,000 lbs)**

2. INSTALL THE **NEW** REAR LEAF SPRINGS

- a) Install the **NEW** rear leaf spring with the all **NEW** parts (shackle, bushings, bolts, washers and nuts) and torque to spec.

Torque Spec: 120 N-m (1224 kgf-cm, 89 ft-lbf)

- b) Repeat the procedure on the opposite side.

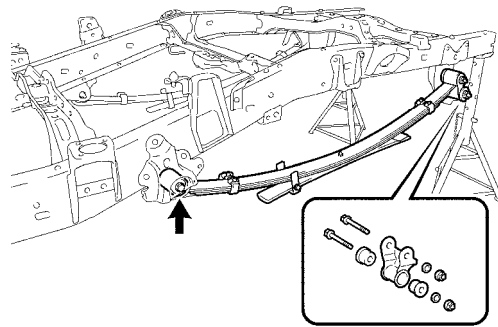
NEW Replacement Parts

Part #	Part Name	Kit #	Qty
04483-04080	Shackle Kit, RR Spring	2	2
90080-10138	Bolt, Flange	2	2
90178-A0050	Nut, Flange	2	2
94622-51400	Washer, Plain	1	2
Varies**	Spring Assy, RR RH	NA*	1
Varies**	Spring Assy, RR LH	NA*	1

*Individual Part(s)

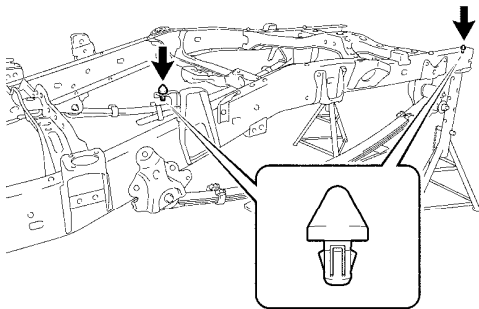
**Only 1 part used, part number varies by vehicle type.

****Replacement leaf springs will come in either 3 or 4 leaf stacks, ensure that the left and right springs contain the same amount of leafs. If replacement springs come in a 4 leaf stack, bump stop replacement is required (new bump stops will be provided)**



NEW Replacement Parts

Part #	Part Name	Kit #	Qty
51719-04010	Holder, Body Support Bracket	2	2



3. INSTALL THE **NEW** CLIPS

4. REINSTALL THE NO.1 RECEIVER HITCH ATTACHMENT REINFORCEMENT (IF EQUIPPED)

- a) Reinstall the No.1 receiver hitch attachment reinforcement with the 2 bolts and torque to spec.

Torque Spec: 45 N-m (459 kgf-cm, 33 ft-lbf)

5. REINSTALL THE NO.1 REAR SPRING BUMPER (2WD ONLY)

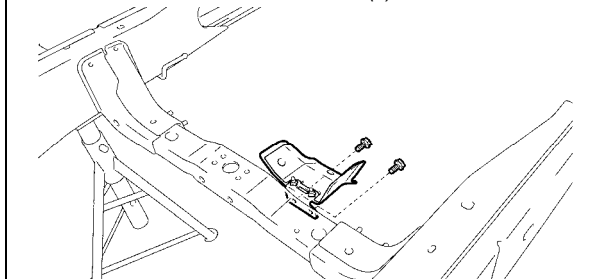
- a) Reinstall the rear spring bumper with the 2 nuts and torque to spec.
b) Repeat the procedure on the opposite side.

Torque Spec: 15 N-m (153 kgf-cm, 11 ft-lbf)

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
90119-A0151	Bolt, w/ Washer	NA*	2

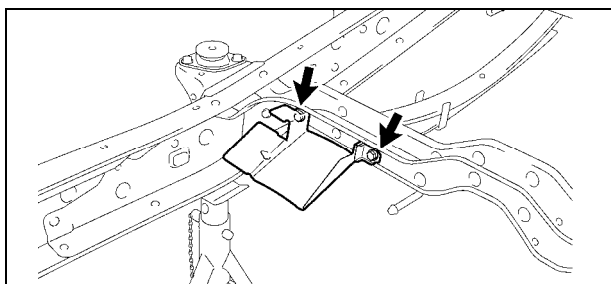
*Individual Part(s)



6. REINSTALL THE PROPELLER SHAFT HEAT INSULATOR (IF EQUIPPED)

- Reinstall the propeller shaft heat insulator with the 2 **NEW** bolts and torque to spec.

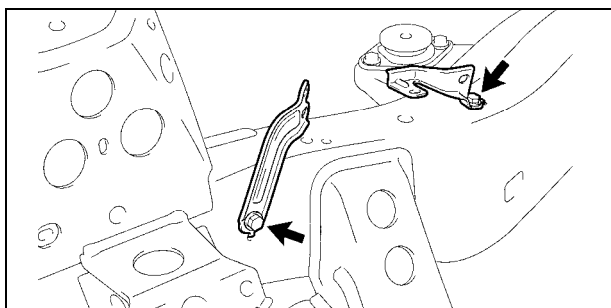
Torque Spec: 15.7 N·m (160 kgf·cm, 12 ft·lbf)



7. REINSTALL THE PARKING BRAKE CABLE HEAT INSULATOR (IF EQUIPPED)

- Reinstall the parking brake cable heat insulator with the 2 bolts and torque to spec.

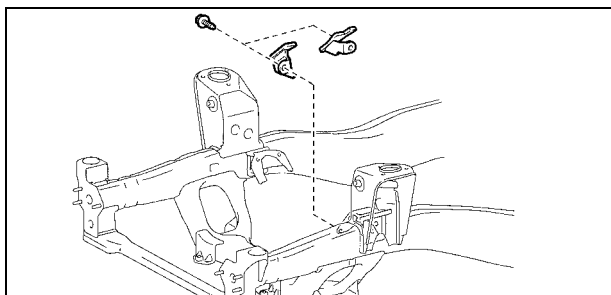
Torque Spec: 12.5 N·m (127 kgf·cm, 9 ft·lbf)



8. REINSTALL THE OXYGEN SENSOR BRACKETS (2TR-FE ONLY)

- Reinstall the 2 brackets with the 2 bolts and torque to spec.

Torque Spec: 14 N·m (143 kgf·cm, 10 ft·lbf)



9. REINSTALL THE REAR ENGINE MOUNTING REINFORCES (1GR-FE ONLY)

- Reinstall the rear engine mounting reinforces with the 2 bolts and torque to spec.

Torque Spec: 31 N·m (316 kgf·cm, 23 ft·lbf)

NEW Replacement Parts

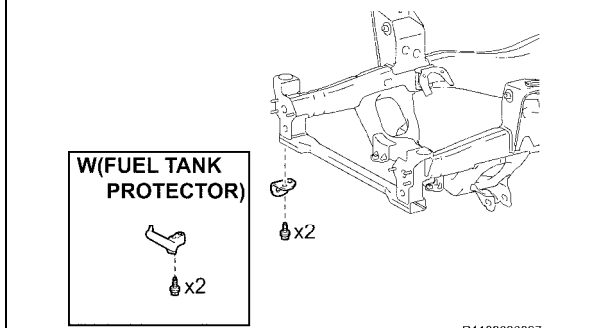
Part #	Part Name	Kit #	Qty
90119-A0192	Bolt, w/ Washer	8	2
90119-A0193	Bolt, w/ Washer	NA*	2

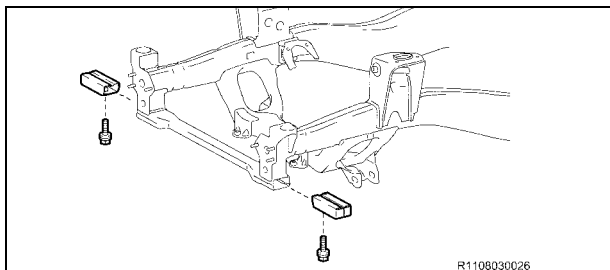
*Individual Part(s)

10. REINSTALL THE HOOK

- Reinstall the hook with the 2 **NEW** bolts and torque to spec.

Torque Spec: 70 N·m (714 kgf·cm, 52 ft·lbf)

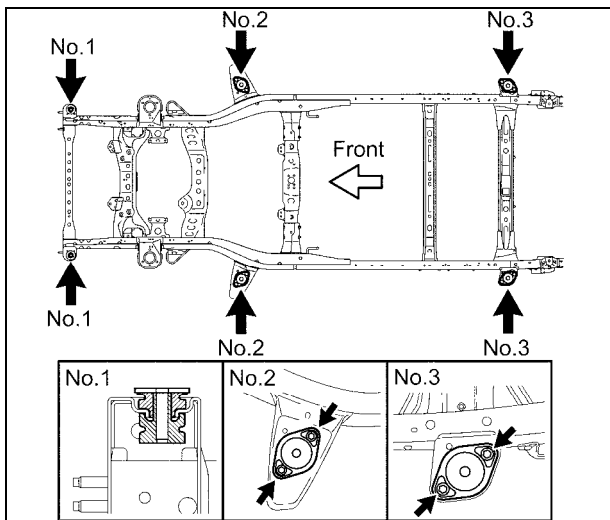




11. REINSTALL THE FRAME AUXILIARY CROSSMEMBER EXTENSION (IF EQUIPPED)

- Reinstall the 2 frame auxiliary crossmember extensions with the 2 bolts and torque to spec.

Torque Spec: 45 N-m (459 kgf-cm, 33 ft-lbf)



12. REINSTALL THE CAB MOUNTS

- Reinstall cab mounts No.1
- Reinstall cab mounts No.2 and No.3 with the 8 bolts and torque to spec.

Torque Spec: 61 N-m (622 kgf-cm, 45 ft-lbf)

13. INSTALL THE NEW FRONT SUSPENSION LOWER ARM (2WD ONLY)

- Install the **NEW** front suspension lower arm with the 2 **NEW** nuts, 2 **NEW** No.1 camber adjust cams and 2 **NEW** No.2 camber adjust cams, then torque to spec.

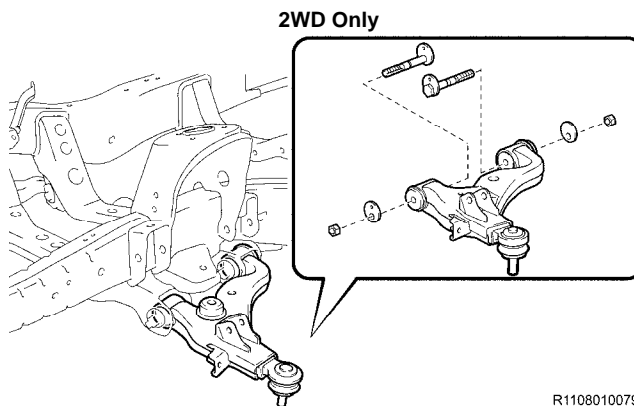
Torque Spec: 210 N-m (2141 kgf-cm, 155 ft-lbf)

- Repeat the procedure on the opposite side.

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
48068-04030	Arm Sub-Assy, Suspension LWR RH w/Bush	NA*	1
48069-04030	Arm Sub-Assy, Suspension LWR LH w/Bush	NA*	1
48190-25010	Cam Assy, Camber Adjust	4	4
48198-25010	Cam, Camber Adjust No. 2	4	4
90178-A0013	Nut, Flange	NA*	4

*Individual Part(s)



14. INSTALL THE NEW FRONT SUSPENSION LOWER ARM (4WD, PRE-RUNNER ONLY)

- a) Install the **NEW** front suspension lower arm with the **NEW** bolt, nut, **NEW** toe adjust cam, **NEW** No.2 toe adjust cam, **NEW** No.1 camber adjust cam and **NEW** No.2 camber adjust cam, then torque to spec.

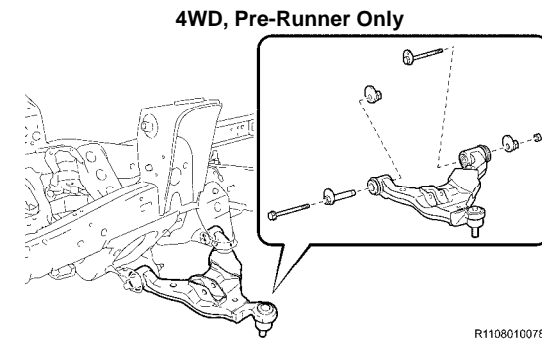
Torque Spec: 135 N-m (1377 kgf-cm, 100 ft-lbf)

- b) Repeat the procedure on the opposite side.

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
48068-04040	Arm Sub-Assy, Suspension LWR RH w/Bush	NA*	1
48069-04040	Arm Sub-Assy, Suspension LWR LH w/Bush	NA*	1
48190-60020	Cam Assy, Camber Adjust	5	2
48198-60011	Cam, Camber Adjust No. 2	5	2
48409-60020	Cam Sub- Assy, Toe Adjust	5	2
48452-35020	Plate, Toe Adjust, No. 2	5	2
90119-A0166	Bolt, w/ Washer	8	2

*Individual Part(s)



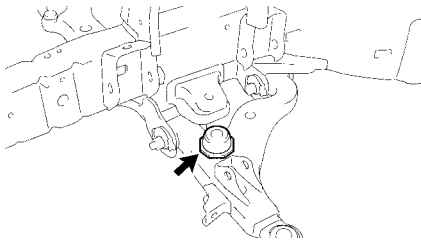
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NEW Replacement Parts (2WD Only)

Part #	Part Name	Kit #	Qty
48304-04090	Bumper, Sub-Assy FR	NA*	2
48304-AD010	Spring**	NA*	2

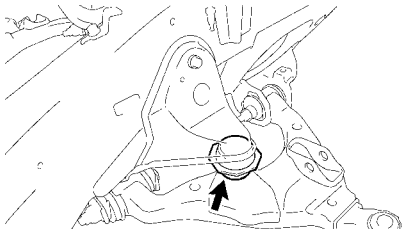
*Individual Part(s)

**Only 1 part used, part number varies by vehicle type.



NEW Replacement Parts (4WD, Pre-Runner Only)

Part #	Part Name	Kit #	Qty
48304-04100	Bumper, Sub-Assy FR Spring	8	2



15. INSTALL THE NEW FRONT SPRING BUMPER

- a) Using the **SST 09922-10010-01**, install the **NEW** front spring bumpers and torque to spec.

Torque Spec: 31 N-m (316 kgf-cm, 23 ft-lbf)

- b) Repeat the procedure on the opposite side.

16. INSTALL THE NEW REAR BRAKE TUBES

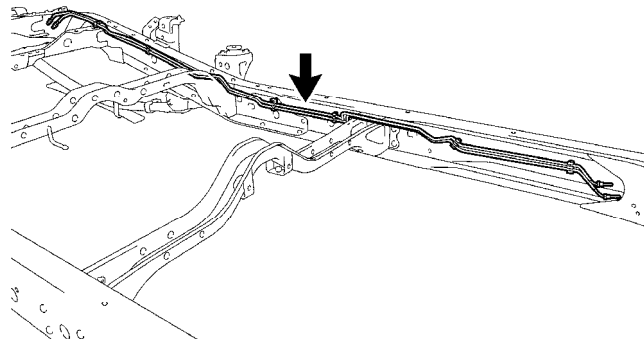
- a) Install the **NEW** rear brake tubes with the **NEW** clamp(s).

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
47325-04160	Tube, RR Brake, No.5**	NA*	1
47325-04170		NA*	1
47325-04180		NA*	1
47326-04130	Tube, RR Brake, No.6**	NA*	1
47326-04140		NA*	1
47326-04150		NA*	1
90469-A0004	Clamp (Regular Cab)	NA*	2
90469-A0004	Clamp (Access Cab)	NA*	3
90469-A0004	Clamp (Double Cab)	NA*	4
90949-A1006	Clamp	2	3

*Individual Part(s)

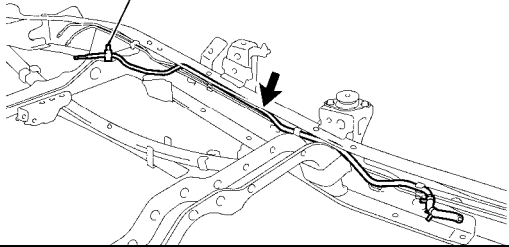
**Only 1 part used, part number varies by vehicle type.



NEW Replacement Parts

Part #	Part Name	Kit #	Qty
77285-35760	Support, Fuel Return & Main Tube	1	1

Fuel Return and Main Tube Support



17. REINSTALL THE NO. 2 CHARCOAL CANISTER PIPE

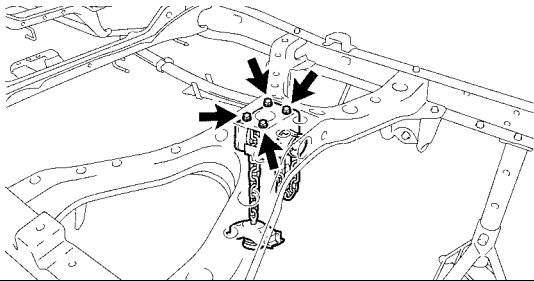
- Install the **NEW** fuel return and main tube support.
- Reinstall the No.2 charcoal canister pipe.

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
90119-A0169	Bolt, w/ Washer	2	4
51900-35410	Carrier Assy, Spare	NA*	1
81900-35420	Wheel**	NA*	1

*Individual Part(s)

**Only 1 part used, part number varies by vehicle type.



18. INSTALL THE NEW SPARE TIRE CARRIER ASSY

- Install the **NEW** spare tire carrier assy with the 4 **NEW** bolts and torque to spec.

Torque Spec: 20 N·m (204 kgf·cm, 15 ft·lbf)

NEW Replacement Parts

Rear Differential Assy

Part #	Part Name	Kit #	Qty
90117-A0001	Bolt, U**	NA*	4
90117-A0002		NA*	4
90117-A0005		NA*	4
90178-A0050	Nut, Flange	2	8
90178-51400	Washer, Plain	1	8
48341-04090	Bump Stop***	NA*	2

*Individual Part(s)

**Only 1 part used, part number varies by vehicle type.

*** Only replaced if leaf springs replacement springs are a 4 leaf configuration.

Rear Shock Absorber Assy

Part #	Part Name	Kit #	Qty
90117-A0010	Nut, Lock	2	2

Rear Stabilizer Bar

Part #	Part Name	Kit #	Qty
90119-08A91	Bolt, w/ Washer	NA*	4

*Individual Part(s)

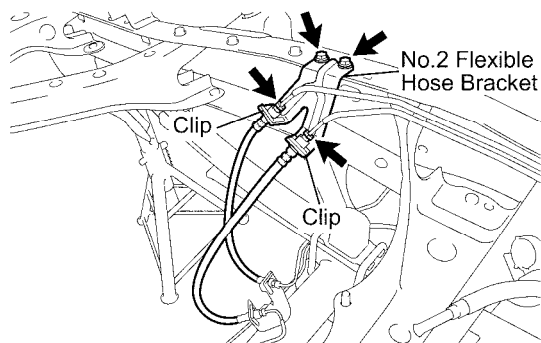
19. REINSTALL THE FOLLOWING PARTS

- Rear Differential Assy
 - Reinstall with the 4 **NEW** U-bolts, 2 spring seats, 2 spring bumpers (If Equipped), 8 **NEW** flange nuts and 8 **NEW** plain washers, then torque to spec.
 - Torque Spec: 50 N·m (510 kgf·cm, 37 ft·lbf)**
- Rear Shock Absorber Assy
 - Reinstall rear shock absorber assy with the bolt, nut and washer. (Lower side)
 - Torque Spec: Nut - 58 N·m (591 kgf·cm, 43 ft·lbf)**
 - Reinstall the 3 retainers, 2 cushions and **NEW** nut, then torque to spec. (Upper side)
 - Torque Spec: Nut - 20 N·m (204 kgf·cm, 15 ft·lbf)**
 - Repeat the procedure on the opposite side.
- Rear Stabilizer Bar (If Equipped)
 - Reinstall with the 2 brackets and **NEW** 4 bolts, then torque to spec.
 - Torque Spec: 27 N·m (275 kgf·cm, 20 ft·lbf)**
 - Reconnect the 2 stabilizer bar links with the 4 nuts, then torque to spec.
 - Torque Spec: 65 N·m (663 kgf·cm, 48 ft·lbf)**

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
47355-04020	Bracket, Flexible Hose, No. 2	2	1
90119-A0169	Bolt, W/ Washer	13 or NA*	2
90468-A0007	Clip	2	2

*Individual Part(s)



20. RECONNECT THE BRAKE HOSE

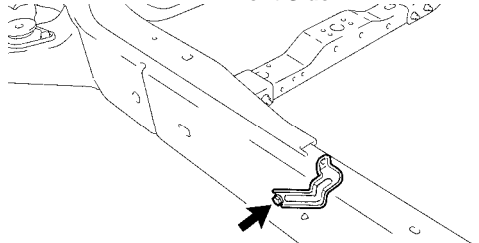
- Install the **NEW** No.2 flexible hose bracket with the 2 **NEW** bolts.
- Reconnect the 2 brake hoses with the 2 **NEW** clips.
- Reconnect the No.5, No.6 rear brake tubes and torque to spec.

Torque Spec:

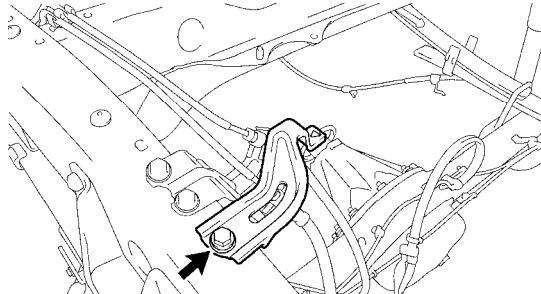
Flexible hose bracket - 29 N·m (296 kgf·cm, 21 ft·lbf)

Rear brake tube - 15.2 N·m (155 kgf·cm, 11 ft·lbf)

Front Side



Rear Side



21. REINSTALL THE HARNESS BRACKETS

- Reinstall the 2 brackets with the 2 bolt and torque to spec.

Torque Spec: 14 N·m (143 kgf·cm, 10 ft·lbf)

22. INSTALL THE NEW FRAME WIRE HARNESS

- Reconnect the clamps to install the **NEW** frame wire harness.
- Reconnect the ground wire with the bolt and torque to spec.

Torque Spec: 12.7 N·m (130 kgf·cm, 9 ft·lbf)

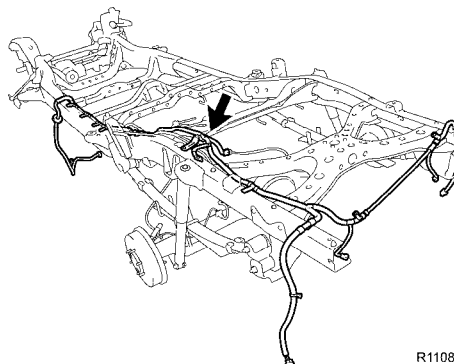
NOTE: The number of wire harness clamps will differ depending on the vehicle spec.

NEW Replacement Parts

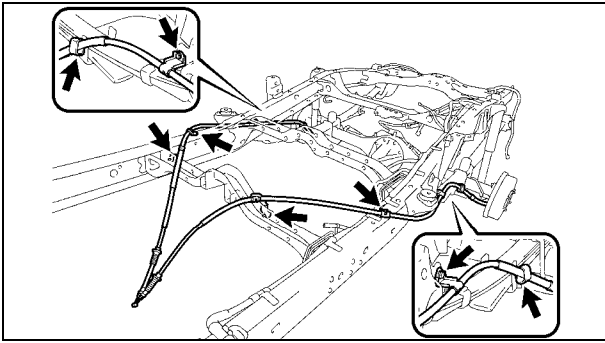
Part #	Part Name	Kit #	Qty
82164-04780	Wire, Frame**	NA*	1
82164-04A00		NA*	1
82164-04A10		NA*	1
82164-04A20		NA*	1
82164-04A30		NA*	1
82164-04A40		NA*	1
82164-04A50		NA*	1

*Individual Part(s)

**Only 1 part used, part number varies by vehicle type.



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23. REINSTALL THE PARKING BRAKE CABLES

- Reinstall the 2 parking brake cables with the 8 bolts, then torque to spec.

Torque Spec: 12.5 N·m (127 kgf·cm, 9 ft·lbf)

NEW Replacement Parts

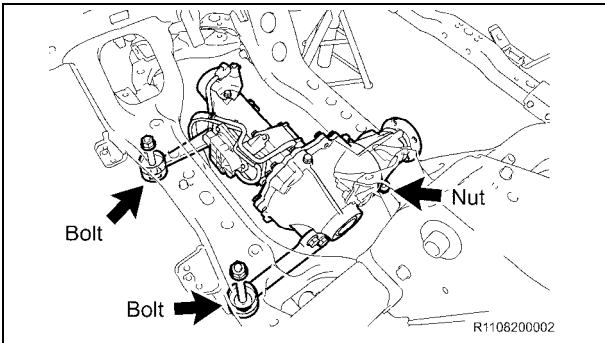
Part #	Part Name	Kit #	Qty
90171-A0005	Nut, Castle	2	2
95381-03230	Pin, Cotter	4-5	2

24. REINSTALL THE LOWER BALL JOINT

- Reinstall the lower ball joint with the **NEW** nut and torque to spec.

Torque Spec: 160 N·m (1632 kgf·cm, 118 ft·lbf)

- Install the **NEW** cotter pin.
- Repeat the procedure on the opposite side.

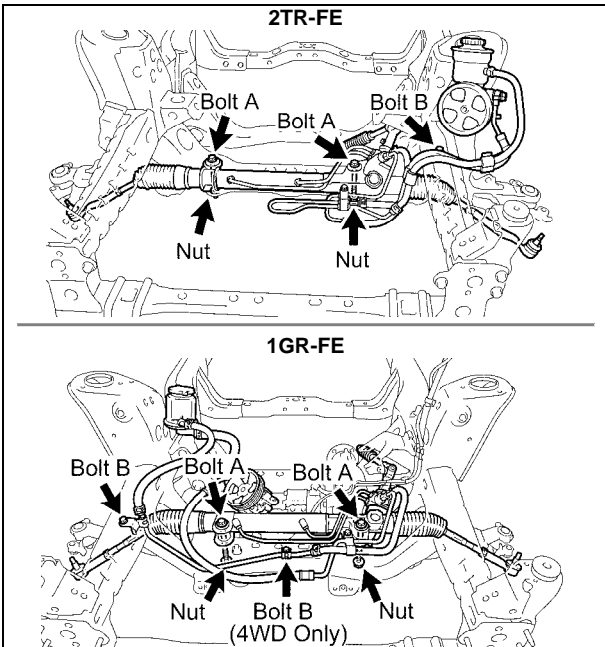


25. REINSTALL FRONT DIFFERENTIAL CARRIER (4WD ONLY)

- Reinstall the front differential carrier with the 2 bolts, 4 stoppers and 3 nuts, then torque to spec.

Torque Spec: Except TMMTX Made
Bolt - 137.3 N·m (1400 kgf·cm, 101 ft·lbf)
Nut - 87.2 N·m (889 kgf·cm, 64 ft·lbf)

Torque Spec: TMMTX Made
Bolt - 128.5 N·m (1310 kgf·cm, 95 ft·lbf)
Nut - 81.5 N·m (831 kgf·cm, 60 ft·lbf)



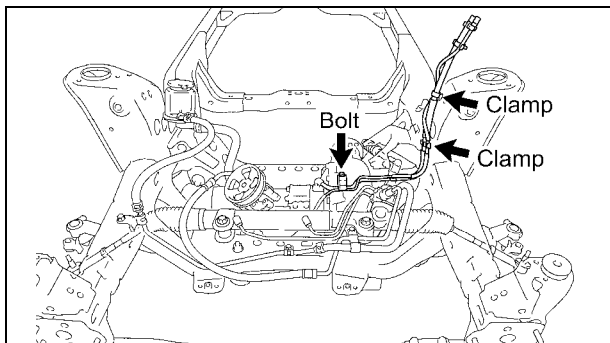
26. REINSTALL THE POWER STEERING LINK ASSY W/ POWER STEERING VANE PUMP

- Reinstall the power steering link assy w/ power steering vane pump with the bolts and nuts, then torque to spec.

Torque Spec:
Bolt A - 92 N·m (938 kgf·cm, 68 ft·lbf)
Bolt B - 28 N·m (286 kgf·cm, 21 ft·lbf)

NOTE:

- When reinstalling the power steering link with the pump, have one person support the power steering link and the other support the pump.
- Keep the power steering pump reservoir upright to prevent the fluid from leaking out.



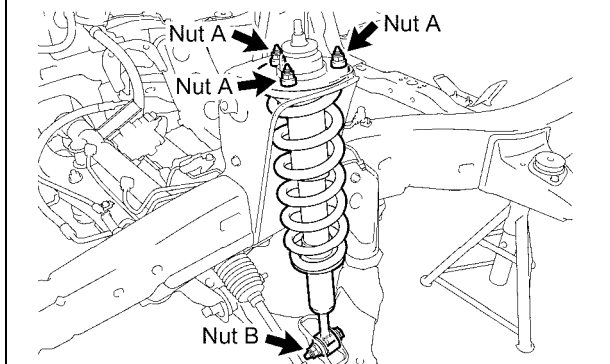
27. RECONNECT THE FRONT DIFFERENTIAL BREATHER TUBE (4WD ONLY)

- Reconnect the front differential breather tube with the bolt and 2 clamps, then torque to spec.

Torque Spec: 12.7 N·m (130 kgf·cm, 9 ft·lbf)

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
90080-17215	Nut, Flange	2	6



28. REINSTALL THE FRONT SHOCK ABSORBER ASSY

- Install the 3 **NEW** nuts (A) and torque to spec.
- Reinstall the front shock absorber assy with the bolt and nut (B), then torque to spec.

Torque Spec:

Nut A - 64 N·m (653 kgf·cm, 47 ft·lbf)

Nut B - 83 N·m (846 kgf·cm, 61 ft·lbf)

- Repeat the procedure on the opposite side.

NEW Replacement Parts (2WD Only)

Part #	Part Name	Kit #	Qty
90119-A0161	Bolt, w/ Washer	NA*	4

*Individual Part(s)

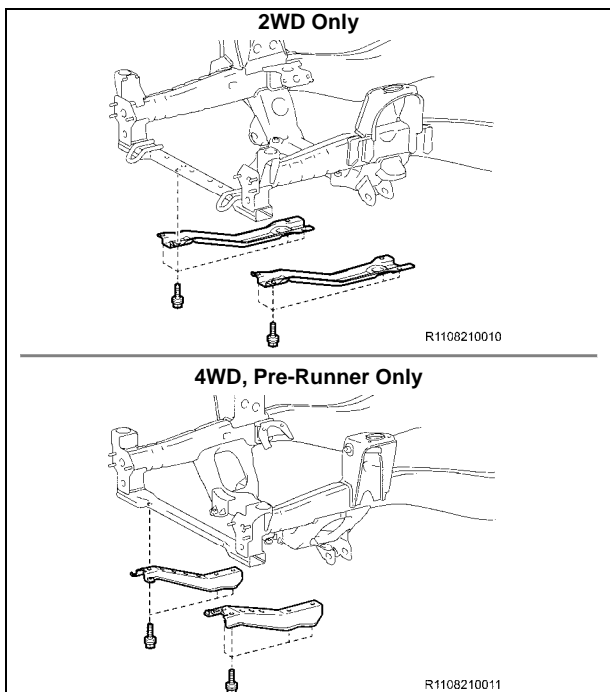
29. REINSTALL THE FRONT STABILIZER BAR

- Reinstall the stabilizer bar with 2 brackets and 4 **NEW** bolts, then torque to spec. (*2WD Only*)
- Reinstall the stabilizer bar with 2 brackets and 4 bolts, then torque to spec. (*4WD, Pre-Runner Only*)

Torque Spec:

2WD - 21 N·m (214 kgf·cm, 15 ft·lbf)

4WD, Pre-Runner - 40 N·m (408 kgf·cm, 30 ft·lbf)



30. REINSTALL THE SUSPENSION MEMBER BRACE SUB-ASSY

- Reinstall the suspension member brace sub-assy with 8 bolts (*2WD Only*) or 7 bolts (*4WD, Pre-Runner Only*), then torque to spec.

Torque Spec: 45 N·m (459 kgf·cm, 33 ft·lbf)

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
43425-04040	Ring, Drive Shaft Snap	NA*	2
90311-47012	Seal, Type T Oil (LH)	3	1
90311-47013	Seal, Type T Oil (RH)	3	1

*Individual Part(s)

31. REINSTALL THE FRONT DRIVE SHAFT ASSY (4WD ONLY)

- Install a **NEW** snap ring.
- Reinstall the front drive shaft assy.
- Repeat the procedure on the opposite side.

NOTE:

- Be careful not to damage the dust cover and oil seal.
- If the oil seal is damaged, replace the **NEW** parts.

32. REINSTALL THE FRONT SUSPENSION UPPER ARM AND STEERING KNUCKLE ASSY (2WD ONLY)

- Reinstall the front suspension upper arm w/ steering knuckle with the 2 bolts (A), 2 nuts and 2 washers, then torque to spec.

Torque Spec: Bolt A - 82 N·m (836 kgf·cm, 60 ft·lbf)

- Reinstall the 2 bolts (B), then torque to spec.

Torque Spec: Bolt B - 160 N·m (1632 kgf·cm, 118 ft·lbf)

- Repeat the procedure on the opposite side.

33. REINSTALL THE FRONT SUSPENSION UPPER ARM AND STEERING KNUCKLE ASSY (4WD, PRE-RUNNER ONLY)

- Reinstall the front suspension upper arm w/ steering knuckle with the bolt (A), nut and 2 washers, then torque to spec.

Torque Spec: Nut - 115 N·m (1173 kgf·cm, 85 ft·lbf)

- Reinstall the 2 bolts (B), then torque to spec.

Torque Spec: Bolt B - 160 N·m (1632 kgf·cm, 118 ft·lbf)

- Repeat the procedure on the opposite side.

34. REINSTALL THE FOLLOWING PARTS

- Front Stabilizer Link (*2WD Only*)
 - Reinstall with 2 retainers, 2 cushions and nut, torque to spec.
 - Torque Spec: 19 N·m (194 kgf·cm, 14 ft·lbf)**
 - Reinstall the nut, then torque to spec.
 - Torque Spec: 69 N·m (704 kgf·cm, 51 ft·lbf)**
 - Repeat the procedure on the opposite side.
- Front Stabilizer Link (*4WD, Pre-Runner Only*)
 - Reinstall front stabilizer link with 2 nuts, torque to spec.
 - Torque Spec: 70 N·m (714 kgf·cm, 52 ft·lbf)**
 - Repeat the procedure on the opposite side.
- Tie Rod End
 - Reinstall tie rod end with nut and torque to spec.
 - Torque Spec:**
 - 2WD - 49 N·m (500 kgf·cm, 36 ft·lbf)**
 - 4WD, Pre-Runner - 91 N·m (928 kgf·cm, 67 ft·lbf)**
 - Install the **NEW** cotter pin.
 - Repeat the procedure on the opposite side.
- Front Axle Shaft Nut (*4WD Only*)
 - Temporarily reinstall the front axle nut.
 - Nut will be tightened when the vehicle is completed.
 - Repeat the procedure on the opposite side.

NEW Replacement Parts

Tie Rod End

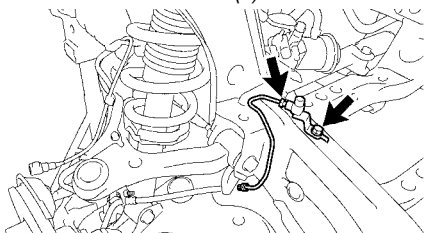
Part #	Part Name	Kit #	Qty
95381-03025	Pin, Cotter**	4	2
95381-03225		5	2

**Only 1 part used, part number varies by vehicle type.

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
47314-04140	Tube, FR Brake No. 4	12	1
47316-04140	Tube, FR Brake No. 6	12	1
90119-A0169	Bolt, w/ Washer	NA*	2
90412-10247	Way, 2	1	2

*Individual Part(s)



35. INSTALL THE NEW FRONT BRAKE TUBE AND NEW WAY (2WD ONLY)

- Temporarily install the **NEW** front brake tube and **NEW** way.
- Install the **NEW** bolt to the **NEW** front way and torque to spec.

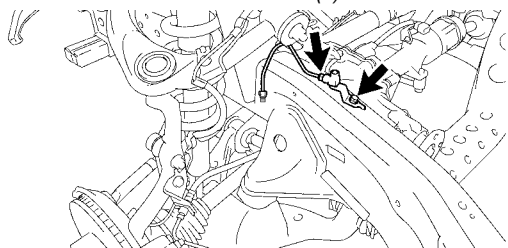
Torque Spec: 32 N·m (326 kgf·cm, 24 ft·lbf)

- Repeat the procedure on the opposite side.

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
47314-04150	Tube, FR Brake No. 4	12	1
47316-04150	Tube, FR Brake No. 6	12	1
90119-A0169	Bolt, w/ Washer	13	2
90412-10247	Way, 2	1	2

*Individual Part(s)



36. INSTALL THE NEW FRONT BRAKE TUBE AND NEW WAY (4WD, Pre-Runner ONLY)

- Temporarily install the **NEW** front brake tube and **NEW** way.
- Install the **NEW** bolt to the **NEW** front way and torque to spec.

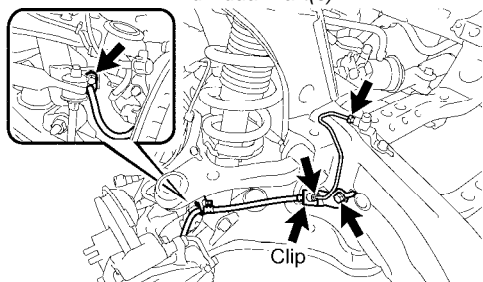
Torque Spec: 32 N·m (326 kgf·cm, 24 ft·lbf)

- Repeat the procedure on the opposite side.

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
47351-04030	Bracket, Flexible Hose, RH	12	1
47352-04030	Bracket, Flexible Hose, LH	12	1
90119-A0169	Bolt, w/ Washer	NA*	4
90468-A0007	Clip	2	2

*Individual Part(s)



37. REINSTALL THE FRONT BRAKE HOSE (2WD ONLY)

- Reinstall the flexible hose bracket with the **NEW** bolt and torque to spec.

Torque Spec: 32 N·m (326 kgf·cm, 24 ft·lbf)

- Reconnect the front brake hose with a **NEW** clip.
- Reconnect the front brake tube and torque to spec.

Torque Spec: 15.2 N·m (155 kgf·cm, 11 ft·lbf)

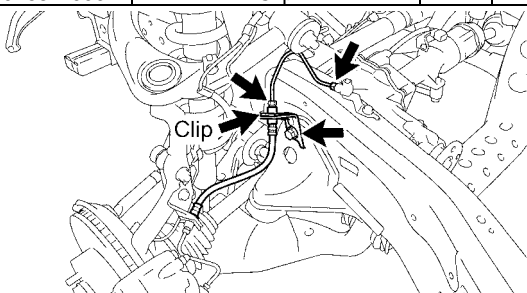
- Reinstall the **NEW** bolt and torque to spec.

Torque Spec: 32 N·m (326 kgf·cm, 24 ft·lbf)

- Repeat the procedure on the opposite side.

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
47353-04010	Bracket, Flexible Hose, No. 3	13	1
47354-04010	Bracket, Flexible Hose, No. 4	13	1
90119-A0169	Bolt, w/ Washer	13	4
90468-A0007	Clip	2	2



38. REINSTALL THE FRONT BRAKE HOSE (4WD, PRE-RUNNER ONLY)

- Reinstall the flexible hose bracket with the bolt and torque to spec.

Torque Spec: 32 N·m (326 kgf·cm, 24 ft·lbf)

- Reconnect the front brake hose with a **NEW** clip.
- Reconnect the front brake tube and torque to spec.

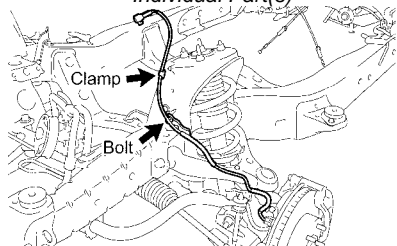
Torque Spec: 15.2 N·m (155 kgf·cm, 11 ft·lbf)

- Repeat the procedure on the opposite side.

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
89516-04010	Wire, Skid Control Sensor RH	NA*	1
89516-04020	Wire, Skid Control Sensor LH	NA*	1

*Individual Part(s)



39. RECONNECT THE FRONT SKID CONTROL SENSOR WIRE HARNESS (2WD ONLY)

- Reconnect the clamp.
- Reinstall the front skid control sensor wire harness with bolt and torque to spec.

Torque Spec: 5.0 N·m (51 kgf-cm, 44 in-lbf)

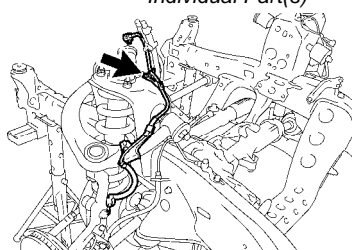
- Repeat the procedure on the opposite side.

NOTE: If the front skid control sensor wire harness and clamp are damaged, replace the **NEW** parts.

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
89516-04040	Wire, Skid Control Sensor RH	NA*	1
89516-04090	Wire, Skid Control Sensor LH	NA*	1

*Individual Part(s)



40. RECONNECT THE FRONT SKID CONTROL SENSOR WIRE HARNESS (4WD, PRE-RUNNER ONLY)

- Reinstall the front skid control sensor wire harness with bolt and torque to spec.

Torque Spec: 12.5 N·m (127 kgf-cm, 9 ft-lbf)

- Repeat the procedure on the opposite side.

NOTE: If the front skid control sensor wire harness and clamp are damaged, replace the **NEW** parts.

41. REINSTALL THE WHEELS

42. REINSTALL THE ENGINE AND TRANSMISSION ASSY

- Reinstall engine and transmission assy.

NOTE:

- Use 2 engine hoists/cranes to lift engine & trans assy.
- DO NOT use 1 engine hoist/crane to lift the engine & trans assy, the unbalanced weight may lead to an accident or injury.
- ONLY use engine hoists/cranes that can properly support the weight of the engine & trans.
- Carefully adjust the 2 engine hoists/cranes used so that the engine & trans assy is balanced.

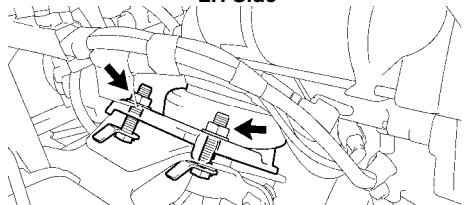
- Attach the engine mounts with the 4 **NEW** bolts and 4 **NEW** nuts, then torque to spec.

Torque Spec: 38 N·m (387 kgf-cm, 28 ft-lbf)

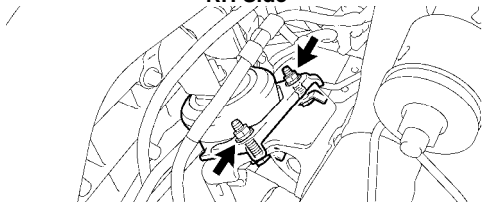
NEW Replacement Parts

Part #	Part Name	Kit #	Qty
90179-10201	Nut	1	4
90910-03001	Bolt, Engine Mount	1	4

LH Side

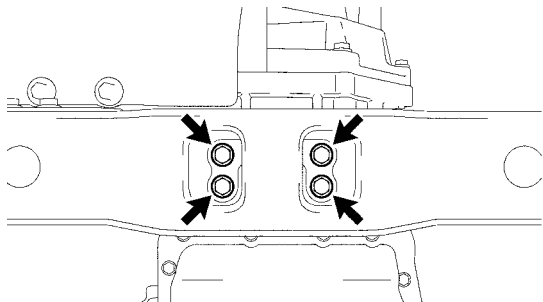


RH Side



NEW Replacement Parts

Part #	Part Name	Kit #	Qty
91671-80814	Bolt, Flange w/ Washer	1	4

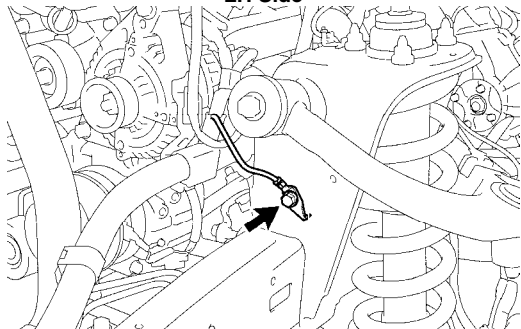


- c) Attach the transmission mount with 4 **NEW** bolts and torque to spec.

Torque Spec: 18.5 N·m (189 kgf-cm, 14 ft-lbf)

- d) Remove the bolt(s) and the engine hangers.
e) Reinstall the items/parts that were removed during the engine and transmission assy removal.

LH Side

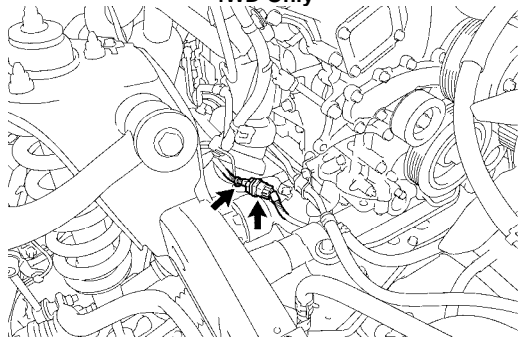


- f) Reinstall the bolt and reconnect the ground wire. (**LH Side**)

Torque Spec: 12.7 N·m (130 kgf-cm, 9 ft-lbf)

- g) Reconnect the connector and clamp. (**4WD Only**)

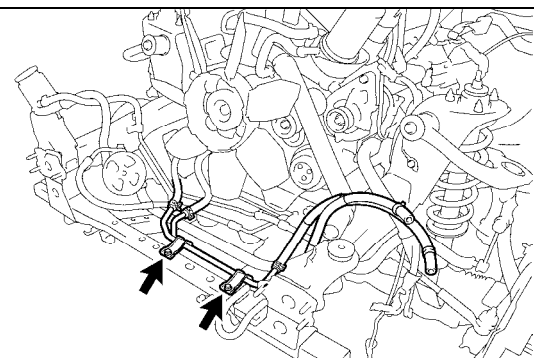
4WD Only



43. RECONNECT THE OIL COOLER TUBE (AUTO TRANS ONLY)

- a) Reconnect the oil cooler tube with the 2 bolts and torque to spec.

Torque Spec: 28 N·m (286 kgf-cm, 21 ft-lbf)



NEW Replacement Parts

Part #	Part Name	Kit #	Qty
17176-0P010	Gasket, Air Surge Tank INT Manifold	6	1

44. REINSTALL THE INTAKE AIR SURGE TANK (1GR-FE ONLY)

- Install a **NEW** gasket onto the intake air surge tank.
- Using an 8mm hexagon socket, reinstall the intake air surge tank with the 4 bolts and torque to spec.

Torque Spec: 28 N·m (286 kgf·cm, 21 ft·lbf)

- Reinstall the 2 intake air surge tank nuts and torque to spec.

Torque Spec: 28 N·m (286 kgf·cm, 21 ft·lbf)

- Reinstall the 2 surge tank stays with the 4 bolts, then torque to spec.

Torque Spec: 21 N·m (214 kgf·cm, 15 ft·lbf)

- Reinstall oil baffle plate with the bolt and torque to spec.

Torque Spec: 9.0 N·m (92 kgf·cm, 80 in·lbf)

- Reinstall the throttle body bracket with the 2 bolts, then torque to spec.

Torque Spec: 21 N·m (214 kgf·cm, 15 ft·lbf)

- Reconnect the 3 wire harness clamps and hose clamp.
- Reconnect the throttle body w/ motor connector.
- Reconnect the 2 VSV connectors.
- Reconnect the ventilation hose.
- Reconnect the fuel vapor feed hose.
- Reconnect the 2 water by-pass hoses.

45. REINSTALL THE INTAKE AIR CONNECTOR (2TR-FE ONLY)

- Reinstall the intake air connector with the 3 bolts, then torque to spec.

Torque Spec: 8.0 N·m (82 kgf·cm, 71 in·lbf)

- Tighten the hose clamp bolts.
- Reconnect the vacuum hose.
- Reconnect the No.2 ventilation hose.
- Reconnect the vacuum hose.
- Reconnect the wire harness clamp.
- Reconnect the pressure sensor connector.

46. REINSTALL THE POWER STEERING PUMP ASSY

- Reinstall the bolt and reconnect the ground wire and torque to spec. *(1GR-FE Only)*

Torque Spec: 8.0 N·m (82kgf·cm, 71 in·lbf)

- Reinstall the power steering vane pump with the 2 bolts, then torque to spec.

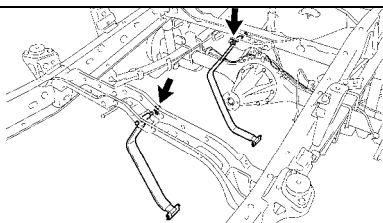
Torque Spec: 21 N·m (214 kgf·cm, 15 ft·lbf)

- Reconnect the connector.
- Reconnect the clamp. *(1GR-FE Only)*

47. REINSTALL THE FAN AND GENERATOR V-BELT

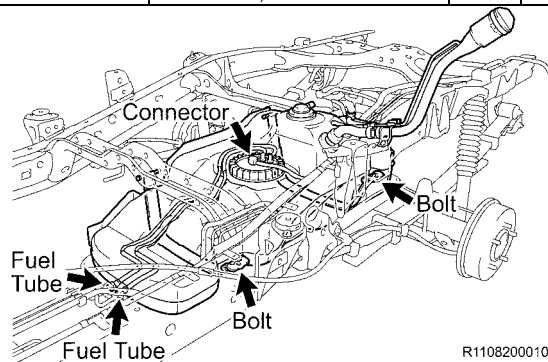
48. REINSTALL THE FUEL TANK STRAPS

- Reinstall the fuel tank straps with the 2 pins and 2 clips.



NEW Replacement Parts

Part #	Part Name	Kit #	Qty
90080-11376	Bolt, W/ Washer	2	2



R1108200010

49. REINSTALL THE FUEL TANK

- Reinstall the fuel tank with the 2 **NEW** bolts and torque to spec.

Torque Spec: 62 N·m (632 kgf·cm, 46 ft·lbf)

- Reinstall the 2 fuel tubes.
- Reconnect the connector.

50. REINSTALL THE NO.2 FUEL TANK PROTECTOR (IF EQUIPPED)

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
90179-08241	Nut	NA*	4

*Individual Part(s)

51. REINSTALL THE NO.1 FUEL TANK PROTECTOR ASSY (IF EQUIPPED)

- Reinstall the No.1 fuel tank protector assy with the 4 **NEW** nuts and torque to spec.

Torque Spec: 20 N·m (204 kgf·cm, 15 ft·lbf)

52. REINSTALL THE CHARCOAL CANISTER ASSY

- Reinstall the charcoal canister assy with the bolt and 3 nuts, then torque to spec.

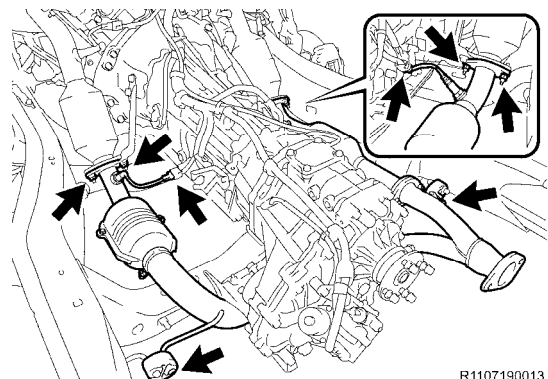
Torque Spec: 20 N·m (204 kgf·cm, 15 ft·lbf)

- Reconnect the fuel tank vent hose.
- Reconnect the fuel hose.
- Reconnect the main tube support and reconnect the filter hose.
- Reconnect the connector.
- Reinstall the bolt and reconnect the skid control sensor wire and torque to spec.

Torque Spec: 14 N·m (143 kgf·cm, 10 ft·lbf)

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
90080-17187	Nut, Lock	6	4
90080-43036	Gasket, Exhaust Pipe	6	2
90126-A0011	Stud, Hex lobular	6	4



R1107190013

53. REINSTALL THE EXHAUST SYSTEM (1GR-FE ONLY)

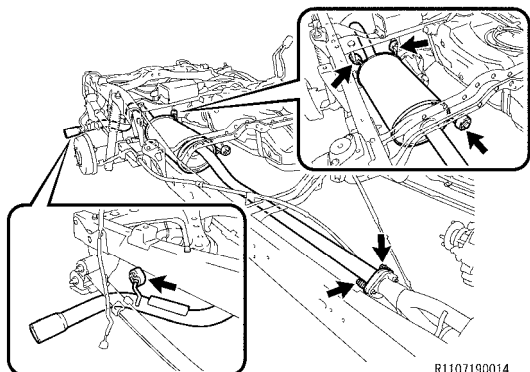
- Install the 2 **NEW** exhaust pipe gaskets.
- Reinstall the front exhaust pipe assy and 2 exhaust pipe supports.
- Install the 4 **NEW** nuts and torque to spec.
- Reconnect the 2 oxygen sensor connectors.

Torque Spec: 54.3 N·m (554 kgf·cm, 40 ft·lbf)

NOTE: If the stud bolt is damaged, replace the **NEW** parts.

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
17451-0A010	Gasket, Exhaust Pipe	2	1
90080-10291	Bolt	6	2



R1107190014

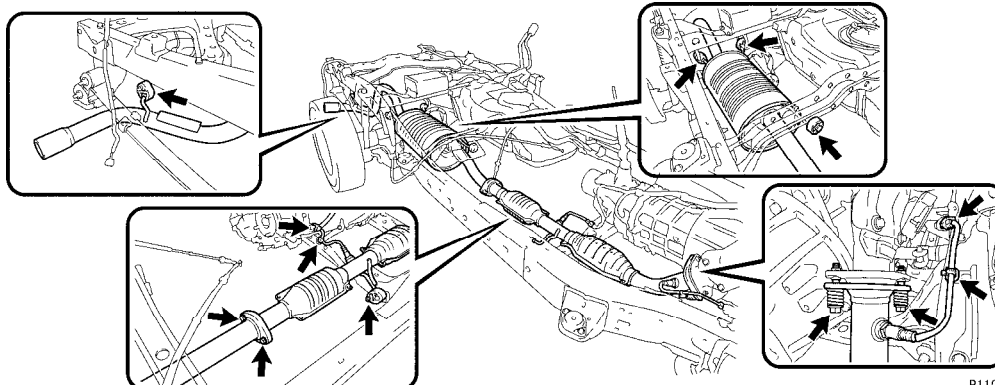
- Install the **NEW** exhaust pipe gasket.
- Reinstall the center exhaust tail pipe and 4 exhaust pipe supports.
- Install the 2 **NEW** bolts and 2 springs, then torque to spec.

Torque Spec: 43 N-m (438 kgf-cm, 32 ft-lbf)

54. REINSTALL THE EXHAUST SYSTEM (2TR-FE ONLY)

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
17451-0A010	Gasket, Exhaust Pipe	2	1
90080-10064	Bolt, Flange	7	2
90080-10291	Bolt, Flange	7	2
90080-43033	Gasket, Exhaust Pipe	7	1
90177-A0004	Nut, Lock	7	2



R1107190015

- Install the **NEW** exhaust pipe gasket.
- Reinstall the front exhaust pipe assy and exhaust pipe support.
- Install the 2 **NEW** bolts and 2 springs, then torque to spec.

Torque Spec: 43 N-m (438 kgf-cm, 32 ft-lbf)

- Reconnect the 2 oxygen sensor connectors and 2 wire harness clamps.
- Install the **NEW** exhaust pipe gasket.
- Reinstall the center exhaust tail pipe and 4 exhaust pipe supports.
- Install the 2 **NEW** bolts and torque to spec.

Torque Spec: 48 N-m (489 kgf-cm, 35 ft-lbf)

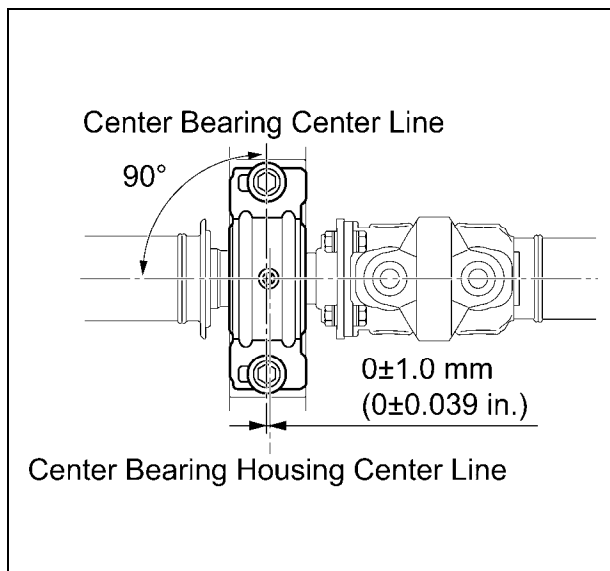
NEW Replacement Parts

Part #	Part Name	Kit #	Qty
90080-11180	Bolt, w/ Washer	6	2

55. REINSTALL THE EXHAUST PIPE STOPPER BRACKET (IF EQUIPPED)

- Reinstall the exhaust pipe stopper bracket with the 2 bolts and torque to spec.

Torque Spec: 19 N-m (194 kgf-cm, 14 ft-lbf)



56. REINSTALL THE REAR PROPELLER SHAFT ASSY

- Remove the SST. (*2WD Only*)
- Referencing the matchmarks, reinstall the propeller shaft assy to the the transmission / transfer case.
- Reinstall the 4 washers and 4 nuts, then torque to spec. (*4WD Only*)

Torque Spec: 88.2 N·m (899 kgf·cm, 65 ft·lbf)

- Reinstall the center support bearing to the frame as shown in the illustration with 2 washer and 2 bolts, then torque to spec. (*3-Joint Type Only*)

Torque Spec: 36.2 N·m (369 kgf·cm, 27 ft·lbf)

- Referencing the matchmarks, reinstall the propeller shaft assy to the rear differential with 4 bolts, 4 washers and 4 nuts, then torque to spec.

Torque Spec: 88.2 N·m (899 kgf·cm, 65 ft·lbf)

57. REINSTALL THE FRONT PROPELLER SHAFT ASSY

- Referencing the matchmarks, install the front propeller shaft assy to the transfer case and the front differential with 4 bolts, 8 washers and 8 nuts, then torque to spec.

Torque Spec: 88.2 N·m (899 kgf·cm, 65 ft·lbf)

58. REINSTALL THE FOLLOWING PARTS

- Spare Tire
- Wheels

59. REMOVE THE FRAME FROM THE LIFT

- Remove the ratcheting tie down strap from the frame.
- Lower the frame to the ground.

G. REINSTALL THE CAB BODY ASSY

NEW Replacement Parts			
Part #	Part Name	Kit #	Qty
47313-04190	Tube, FR Brake No. 3**	10	1
47313-04200		11	1
47315-04160	Tube, FR Brake No. 5**	10	1
47315-04170		11	1
47323-04160	Tube, RR Brake No. 3	NA*	1
47323-04170	Tube, RR Brake No. 3	11	1
47324-04120	Tube, RR Brake No. 4	NA*	1
47324-04130	Tube, RR Brake No. 4	11	1

*Individual Part(s)

**Only 1 part used, part number varies by vehicle type.

1. INSTALL THE NEW ENGINE COMPARTMENT BRAKE TUBES

- Install the **NEW** No.3 and **NEW** No.5 front brake tubes.
- Install the **NEW** No.3 and **NEW** No.4 rear brake tubes.
- Torque all brake tubes to spec.

Torque Spec: 15.2 N·m (155 kgf·cm, 11 ft·lbf)

2. REINSTALL THE CAB BODY ASSEMBLY

- Raise the cab assy high enough so that the top of the engine clears the lowest point of the cab.
- Push the frame under the cab assy and line the tires up with the alignment marks.
- Lower the cab assy slowly, making sure it does not interfere with anything.
- Adjust the vehicle's frame as needed to align the cab mounts with the cab assy bolts.
- Once the cab assy is set on the mounts, secure it to the frame with 6 bolts, 6 nuts, 6 washers and torque to spec.

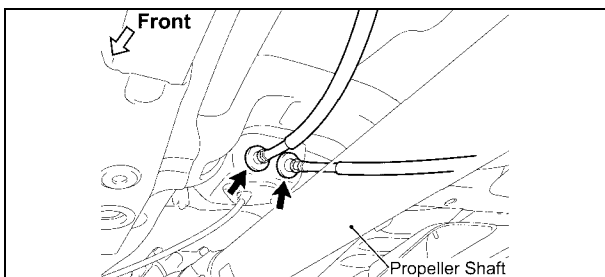
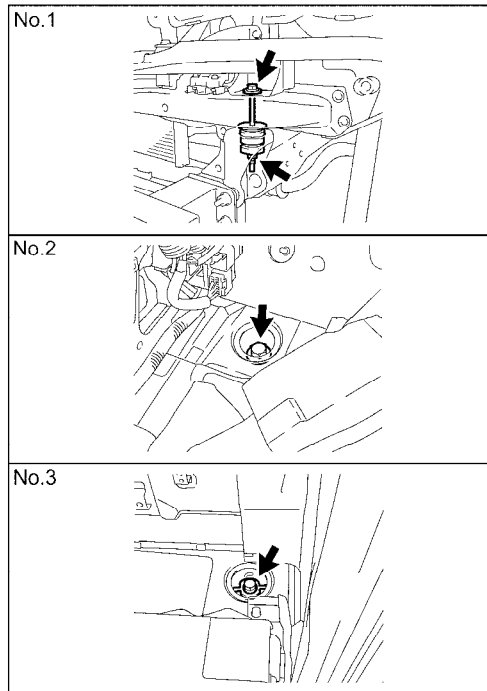
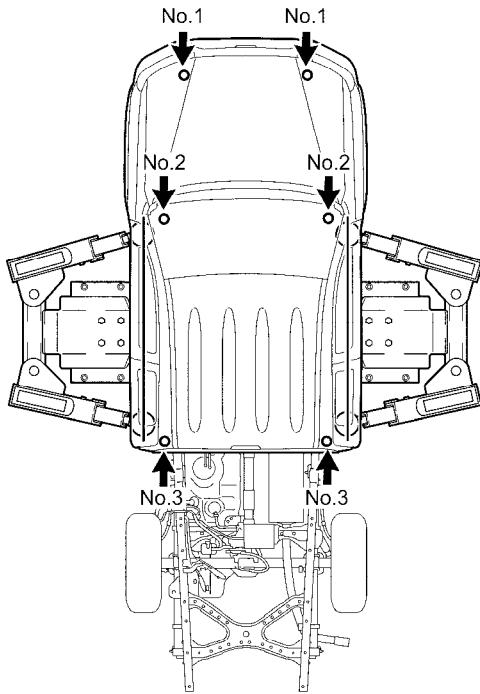
Torque Spec:

No.1 - 37.5 N·m (382 kgf·cm, 28 ft·lbf)

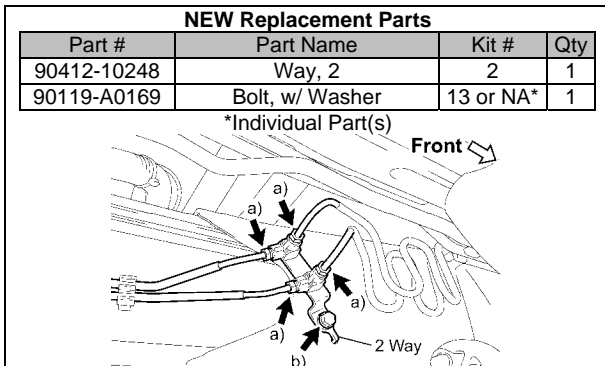
No.2, No.3 - 45 N·m (459 kgf·cm, 33 ft·lbf)

NOTE:

- DO NOT work directly underneath the vehicle when pushing the frame under the cab assy.
- Slowly lower the cab assy making sure the wire harness, steering shaft & hoses don't interfere.
- With 2 to 3 people checking for interference, slowly lower the cab body assembly to the frame.



3. RECONNECT THE PARKING BRAKE CABLE



NEW Replacement Parts

Part #	Part Name	Kit #	Qty
90412-10248	Way, 2	2	1
90119-A0169	Bolt, w/ Washer	13 or NA*	1

*Individual Part(s)

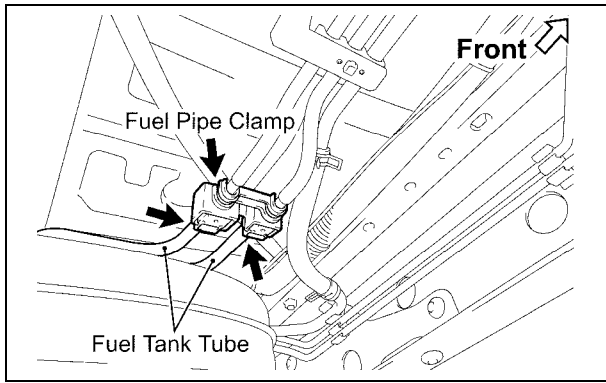
4. RECONNECT THE REAR BRAKE TUBES

- Temporarily install the 4 rear brake tubes and **NEW** 2 way.
- Install the **NEW** bolt to the 2 way and torque to spec.

Torque Spec: 32 N·m (326 kgf·cm, 24 ft·lbf)

- Reconnect the 4 rear brake tubes and torque to spec.

Torque Spec: 15.2 N·m (155 kgf·cm, 11 ft·lbf)

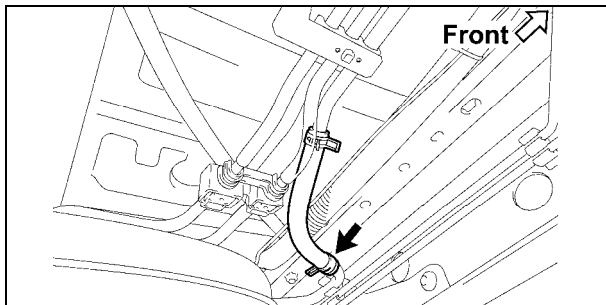


5. RECONNECT THE FUEL TANK TUBES

- Reconnect the 2 fuel tank tubes.
- Reinstall the fuel pipe clamp.

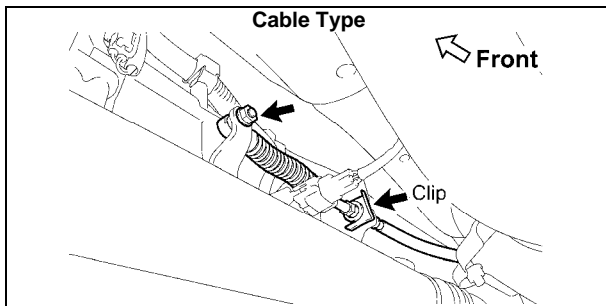
NOTE:

- Align the connector with the pipe, and push into the connector until the connector makes a "click" sound. If the connection is tight, apply a little amount of fresh engine oil on the tip of the pipe.
- Ensure the pipe and the connector is securely connected by pulling them.



6. RECONNECT THE NO.2 FUEL HOSE

- Reconnect the No.2 fuel hose with the clip



7. RECONNECT THE SHIFT CABLE (AUTO TRANS ONLY)

Cable Type:

- Reconnect the shift cable with the nut and torque to spec.

Torque Spec: 14 N·m (143 kgf·cm, 10 ft·lbf)

- Reinstall the clip.

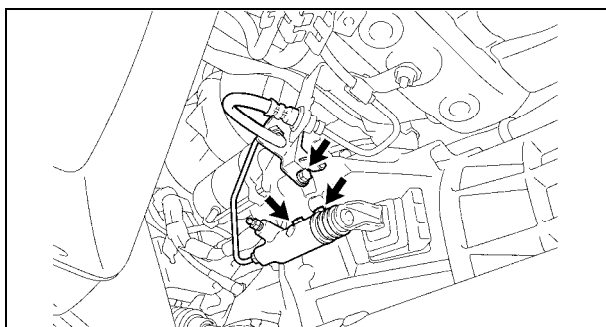
Rod Type:

- Reconnect the shift cable with the **NEW** pin and **NEW** clip.

NEW Replacement Parts (Rod Type)

Part #	Part Name	Kit #	Qty
90240-08054	Pin, W/ Hole	NA*	1
90468-14033	Clip	NA*	1

*Individual Part(s)



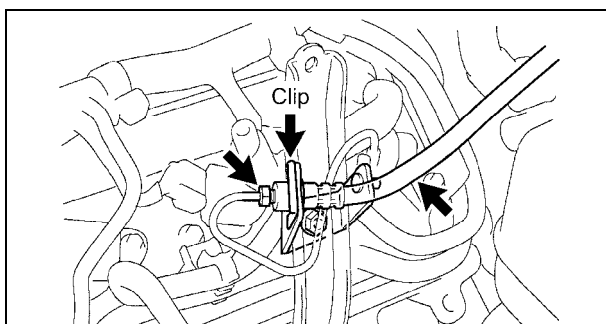
8. CONNECT THE CLUTCH RELEASE CYLINDER ASSY (2TR-FE MANUAL TRANS ONLY)

- Reconnect the clutch release cylinder with the 2 bolts and torque to spec.

Torque Spec: 11.8 N·m (120 kgf·cm, 9 ft·lbf)

- Reconnect the clutch hose with the bolt and torque to spec.

Torque Spec: 37 N·m (377 kgf·cm, 27 ft·lbf)



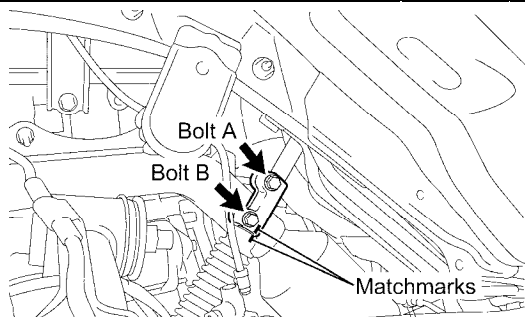
9. RECONNECT THE NO.1 CLUTCH HOSE (1GR-FE MANUAL TRANS ONLY)

- Reconnect the clutch hose with the clip.
- Reconnect the clutch release cylinder tube to the clutch hose.

Torque Spec: 15.2 N·m (155 kgf·cm, 11 ft·lbf)

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
90080-11555	Bolt, w/ Washer	2	2



10. RECONNECT THE STEERING SLIDING YOKE

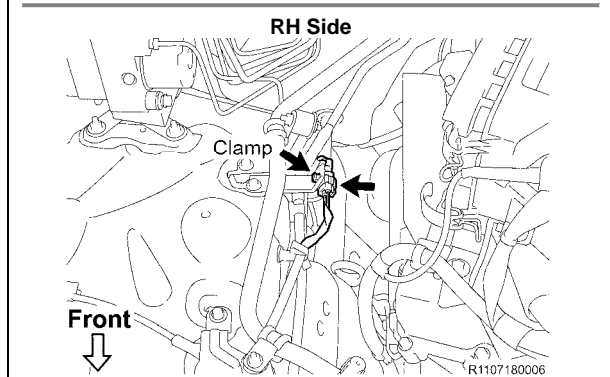
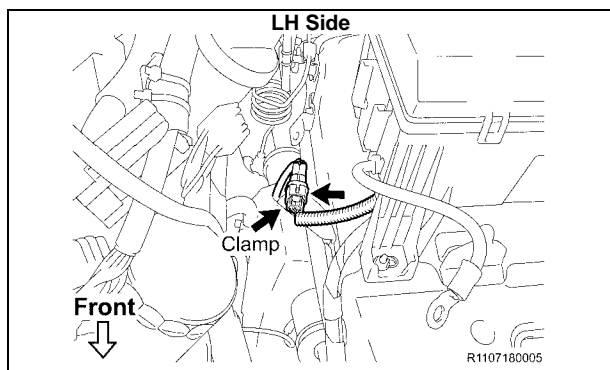
- Make sure the front wheels are in a straight-ahead position and the steering wheel is centered.
- Referencing the match marks, connect the steering sliding yoke to the control valve shaft with the **NEW** bolt (B).
- Remove bolt (A) and install the **NEW** bolt (A).
- Torque all bolts to spec.

Torque Spec: 35 N·m (357 kgf·cm, 26 ft·lbf)

- Disconnect the seat belt that is holding the steering wheel.

11. RECONNECT THE FRONT SKID CONTROL SENSOR WIRE HARNESS

- Reconnect the harness clamp and front skid control sensor connector.
- Repeat the procedure on the opposite side.

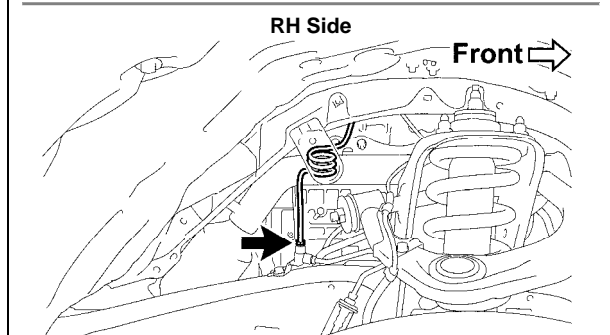
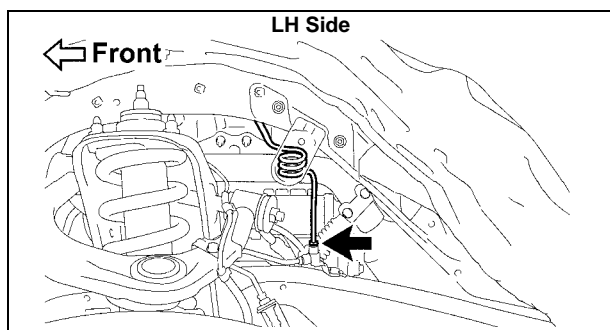


12. RECONNECT THE FRONT BRAKE TUBES

- Reconnect the front brake tube and torque to spec.

Torque Spec: 15.2 N·m (155 kgf·cm, 11 ft·lbf)

- Repeat the procedure on the opposite side.



NEW Replacement Parts

Part #	Part Name	Kit #	Qty
90210-A0002	Washer, Seal	2	1
90210-A0004		2	1

13. RECONNECT THE AIR CONDITIONING DISCHARGE AND SUCTION HOSES TO THE COMPRESSOR

- Install a **NEW** o-ring to the A/C discharge and suction hoses.
- Reconnect the A/C discharge and suction hoses to the compressor, then torque to spec.

Torque Spec: 19 N·m (194 kgf·cm, 14 ft·lbf)

- Reconnect the cooler bracket with the bolt and torque to spec.

Torque Spec: 7.5 N·m (76 kgf·cm, 66 in·lbf)

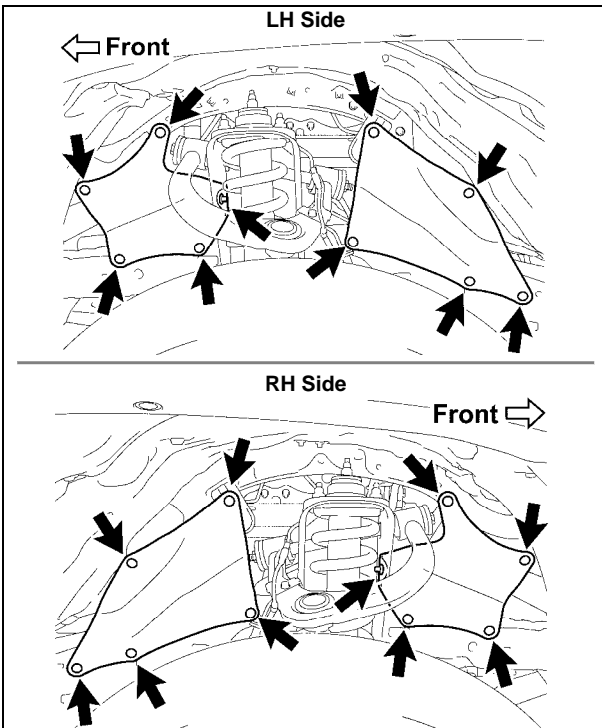
14. REINSTALL THE FRONT FENDER APRON SEAL

4WD, Pre-Runner Only (Shown):

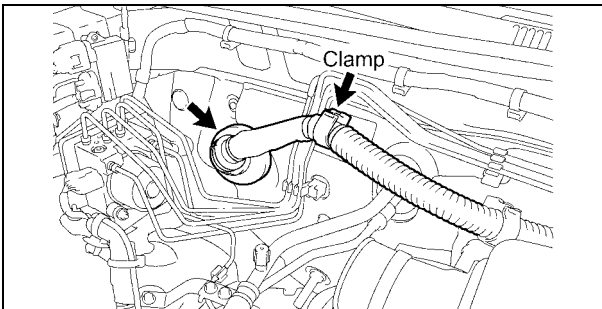
- Reinstall the 4 front fender apron seals with the 20 clips.

2WD Only:

- Reinstall the 4 front fender apron seals with the 22 clips.

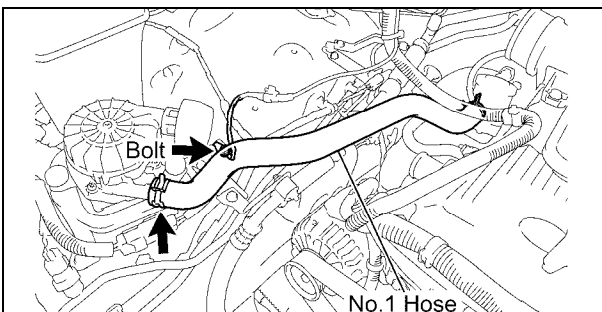


15. RECONNECT THE WATER / HEATER HOSES, ENGINE SIDE



16. RECONNECT THE ENGINE WIRE HARNESS

- Reinstall the engine wire harness container to the cowl panel.
- Reconnect the clamp.



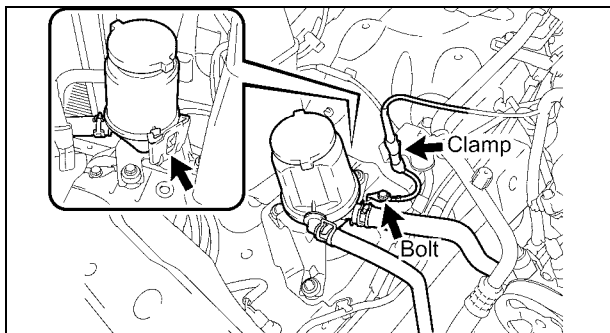
17. RECONNECT THE NO.1 HOSE (2TR-FE ONLY)

- Reconnect the No.1 hose.

18. RECONNECT THE GROUND WIRE (2TR-FE ONLY)

- Reconnect the ground wire with the bolt.

Torque Spec: 8.3 N·m (85 kgf·cm, 73 in·lbf)



19. RECONNECT THE POWER STEERING PUMP RESERVOIR ASSY (1GR-FE ONLY)

- Reconnect the power steering pump reservoir assy.

20. RECONNECT THE GROUND WIRE (1GR-FE ONLY)

- Reconnect the ground wire with the bolt.
- Reconnect the clamp.

Torque Spec: 8.3 N·m (85 kgf·cm, 73 in·lbf)

21. REINSTALL THE FAN SHROUD

22. REINSTALL THE RADIATOR

- Install the **NEW** o-ring to the drain plug.
- Tighten the radiator drain plug.
- Reinstall the radiator with 4 bolts and torque to spec.

Torque Spec: 18 N·m (184 kgf·cm, 13 ft·lbf)

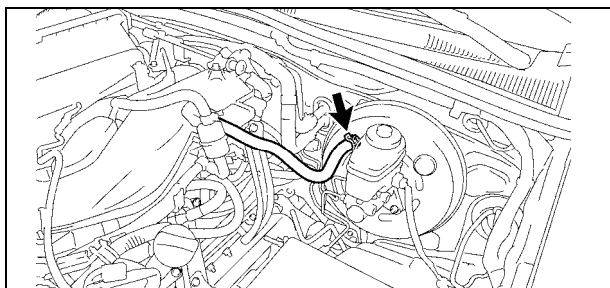
- Reinstall the automatic transmission cooler lines (*Auto Trans Only*).
- Reinstall the fan shroud with the 2 bolts.

Torque Spec: 5.0 N·m (51 kgf·cm, 44 in·lbf)

23. REINSTALL THE SUPPORT TO FRAME SEAL

24. RECONNECT THE VACUUM HOSE

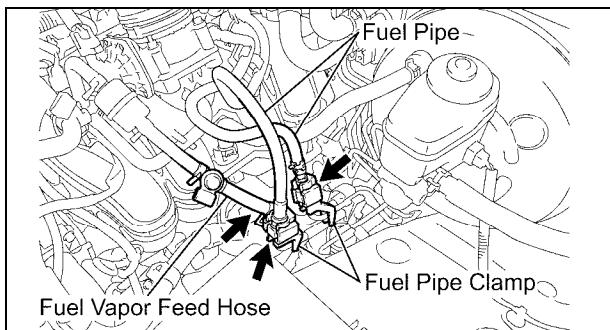
- Reconnect the vacuum hose.



25. RECONNECT THE FUEL PIPES

- Reconnect the No.1 and No.2 fuel pipe.
- Reinstall the 2 fuel pipe clamps.

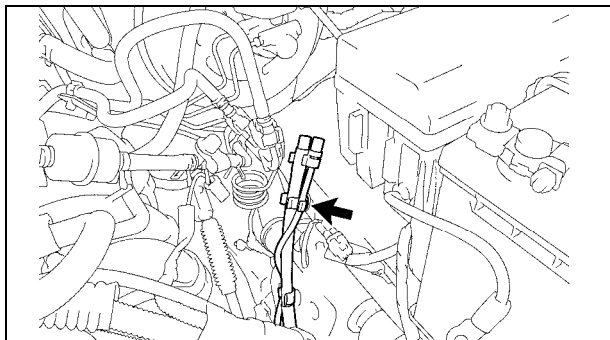
26. RECONNECT THE FUEL VAPOR FEED HOSE

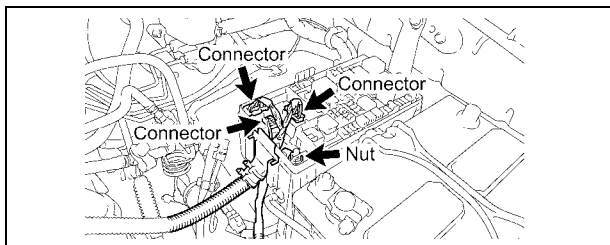


27. RECONNECT THE FRONT DIFFERENTIAL BREATHER TUBES (4WD ONLY)

- Reconnect the front differential breather tubes.

NOTE: There may be 2 different breather tubes depending on the vehicle spec.





28. RECONNECT THE NO.2 ENGINE WIRE HARNESS

- Reinstall fuse box wire harness with the nut and torque to spec.

Torque Spec: 12.7 N·m (130 kgf·cm, 9 ft·lbf)

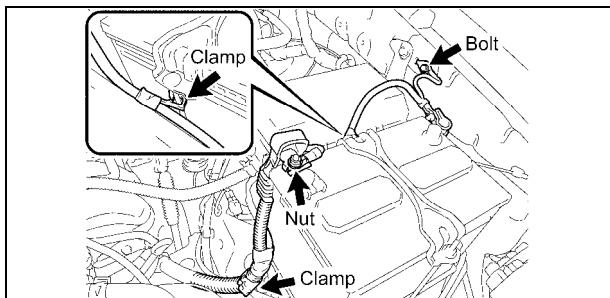
- Reconnect the 3 connectors.
- Reinstall the No.1 upper relay block cover.

- Reconnect the No.2 engine wire harness to the clip.
- Reinstall the (+) positive battery cable with the nut and torque to spec.

Torque Spec: 12.7 N·m (130 kgf·cm, 9 ft·lbf)

- Reinstall the ground wire with the bolt and torque to spec.

Torque Spec: 8.3 N·m (85 kgf·cm, 73 in·lbf)

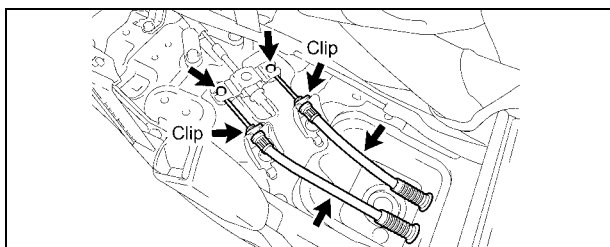


29. REINSTALL THE FOLLOWING PARTS

- Air Cleaner Hose and Air Cleaner Assy (*1GR-FE Only*)
 - Torque Spec:**
 - Air Cleaner Assy - 8.0 N·m (82 kgf·cm, 71 in·lbf)
 - Air Cleaner Hose - 12 N·m (122 kgf·cm, 9 ft·lbf)
- Air Cleaner Hose and Air Cleaner Assy (*2TR-FE Only*)
 - Torque Spec: 12 N·m (122 kgf·cm, 9 ft·lbf)**
- V-Bank Cover (*1GR-FE Only*)
 - Torque Spec: 7.5 N·m (76 kgf·cm, 66 in·lbf)**

30. REINSTALL THE FOLLOWING PARTS

- Rear Floor Side Service Hole Cover LH/RH (*Access Cab*)
- Seat Floor Box (*Access Cab*)
- Floor Board No.1/No.2 (*Access Cab*)
- No.1 w/ Box Speaker Assy (*If Equipped*)
- Luggage compartment Side Tray (*Double Cab*)



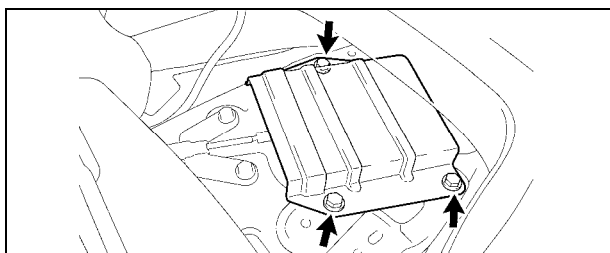
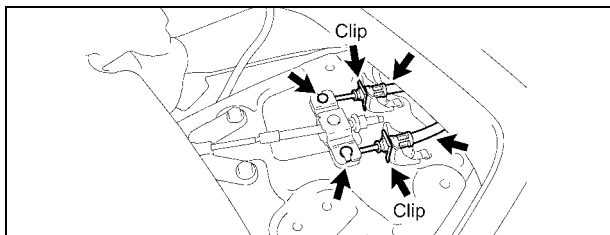
31. RECONNECT THE PARKING BRAKE CABLES

For Separate Seat Type:

- Reconnect the 2 parking brake cables.
- Reinstall the 2 clips.

For Bench Seat Type:

- Reconnect the 2 parking brake cables.
- Reinstall the 2 clips.



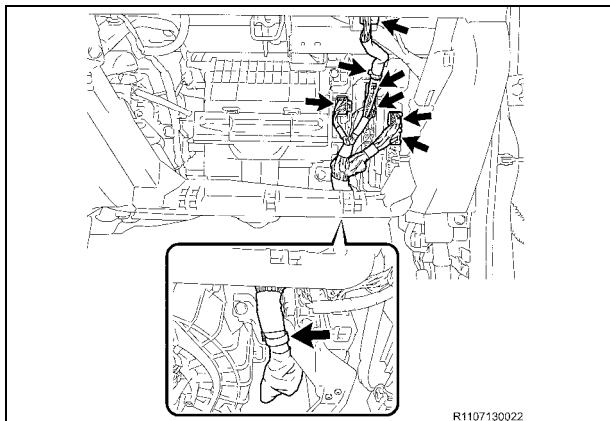
- Reinstall the parking brake cable joint protector with the 3 bolts and torque to spec.

Torque Spec: 12.5 N·m (127 kgf·cm, 9 ft·lbf)

- Turn back the floor carpet.

- Manual Transmission Shift Lever (*Manual Trans*)
- Voltage Inverter Assy (*If Equipped*)
- Front Console Box

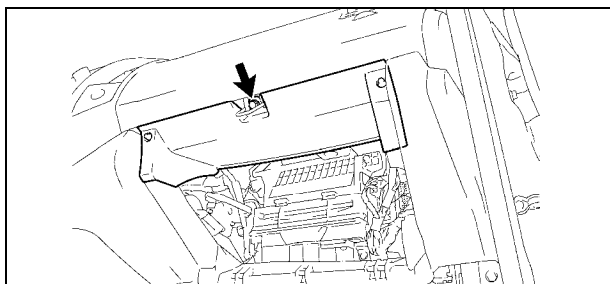
- Front Console Box
- Rear Console Box *(for Separate Seat Type)*



33. RECONNECT THE ENGINE WIRE HARNESS

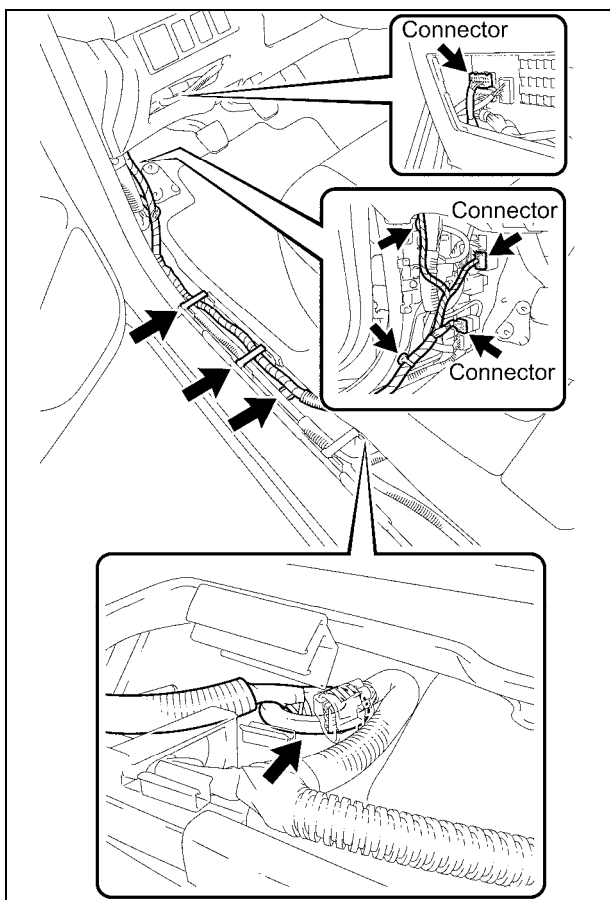
- a) Reconnect each connector and clamp to the ECM and engine wire harness.

NOTE: The number of connectors may differ depending on the model.



34. REINSTALL THE GLOVE BOX AND THE LOWER INSTRUMENT PANEL FINISH PANEL

- Reinstall the lower instrument panel finish panel with the bolt.
- Reinstall the glove box.



35. RECONNECT THE FRAME WIRE HARNESS

- Insert the frame wire harness into the cab assy.
- Reinstall the frame wire harness grommet to the cab assy.
- Reconnect the 3 connectors.
- Reconnect the 3 harness clamps.
- Reconnect the 2 clamps.

36. REINSTALL THE FOLLOWING PARTS

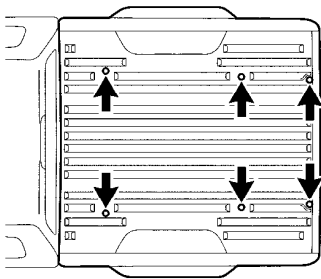
- Instrument Panel Box
- Cowl Side Trim Board LH/RH

NEW Replacement Parts

Front No.2 Bumper Extension Sub-Assy LH/RH

Part #	Part Name	Kit #	Qty
90176-A0044	Nut, Flange	2	6

H. REINSTALL THE BED ASSY



1. REINSTALL THE BED ASSY

- a) Using a Torx® T55 Socket, reinstall the bed assy Torx® bolts and torque to spec.

Torque Spec: 49 N-m (500 kgf-cm, 36 ft-lbf)

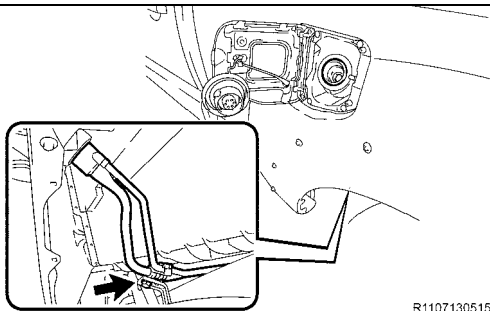
NOTE:

- Use 4 or more people to lift the bed assy.
- Evenly support the bed assy when reinstalling it.
- Be careful not to damage or hit the fuel inlet pipe when reinstalling the bed assy.

2. REINSTALL THE FUEL INLET PIPE SUB-ASSY

- a) Reinstall the fuel inlet pipe sub-assy with the 2 nuts and torque to spec.

Torque Spec: 20 N-m (204 kgf-cm, 15 ft-lbf)

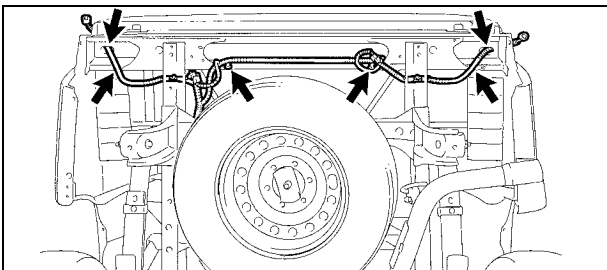


3. RECONNECT THE FRAME WIRE HARNESS

- a) Reconnect the 6 wire harness clamps to the bed assy.

NOTE:

- The number of connectors will differ depending on the vehicle spec.
- Use new clamps if the original ones are damaged.



NEW Replacement Parts

Left Rear Wheel Well Liner

Part #	Part Name	Kit #	Qty
90189-A0002	Grommet, Screw (X-Runner)	9	6
90189-A0002	Grommet, Screw	8	8

Quarter Panel Wheel Opening Molding

Part #	Part Name	Kit #	Qty
75395-35070	Clip, Outside Molding, No. 1	8	3
75396-35020	Clip, Outside Molding, No. 2	8	7
90189-A0002	Grommet, Screw	8	2

Body Rocker Panel Molding Assy LH

Part #	Part Name	Kit #	Qty
75395-35070	Clip, Outside Molding, No. 1	9	2
75396-35020	Clip, Outside Molding, No. 2	9	1
90189-A0002	Grommet, Screw	9	1

Outside LH Back Door Molding Sub-Assy

Part #	Part Name	Kit #	Qty
75395-35070	Clip, Outside Molding, No. 1	9	2
75396-35020	Clip, Outside Molding, No. 2	9	1
90189-A0002	Grommet, Screw	9	1

Rocker Panel Molding LH/RH

Part #	Part Name	Kit #	Qty
75395-04010	Clip, Outside Molding, No. 1	9	4
75396-04010	Clip, Outside Molding, No. 2	9	14

Rear Bumper Assy

Part #	Part Name	Kit #	Qty
90119-A0192	Bolt, w/ Washer	2	6

4. REINSTALL THE FOLLOWING PARTS

- Left Rear Wheel Well Liner
- Quarter Panel Wheel Opening Molding LH
- Body Rocker Panel Molding Assy LH *(If Equipped)*
- Outside LH Back Door Molding Sub-Assy *(If Equipped)*
- Side Step Assy LH/RH *(If Equipped)*
- Rocker Panel Molding LH/RH *(If Equipped)*
- Rear Mudguard LH/RH *(If Equipped)*
- Rear Tail/Combination Light LH/RH
- Rear Bumper Assy
 - Reinstall the rear bumper assy with the 10 bolts and torque to spec. *(Trailer Hitch Equipped Vehicles Only)*
 - Reinstall the rear bumper assy with the 6 **NEW** bolts and torque to spec.
 - **Torque Spec: 90 N-m (918 kgf-cm, 66 ft-lbf)**

I. FINAL ASSEMBLY

1. REINSTALL THE NEGATIVE (-) BATTERY TERMINAL

2. REFILL THE FOLLOWING FLUIDS

NEW Replacement Parts

Front Differential

Part #	Part Name	Kit #	Qty
12157-10010	Gasket, Drain Plug	3	1
90430-24003	Gasket	3	1

- Brake Fluid
 - Remove the brake tubes from the master cylinder.
 - Refill with Toyota Dot 3 Brake Fluid.
 - Bleed the master cylinder.
 - Reinstall the brake tubes to the master cylinder and torque to spec.
 - **Torque Spec: 15.2 N·m (155 kgf·cm, 11 ft·lbf)**
 - Refill with Toyota Dot 3 Brake Fluid.
 - Bleed the brake system at each wheel and torque the bleeder screws to spec.
 - **Torque Spec: 10.8 N·m (110 kgf·cm, 8 ft·lbf)**
 - Clutch Fluid (*1GR-FE Manual Trans Only*)
 - Refill with Toyota Dot 3 Brake Fluid.
 - Bleed the clutch system and torque the bleeder screws to spec.
 - **Torque Spec: 10.8 N·m (110 kgf·cm, 8 ft·lbf)**
- NOTE: 2TR Manual Trans uses master cylinder reservoir for clutch.**
- Coolant
 - Refill with Toyota Long Life Coolant.
 - Bleed the cooling system.
 - Front Differential
 - Install **NEW** drain plug washer and torque to spec.
 - **Torque Spec: 64.7 N·m (660 kgf·cm, 48 ft·lbf)**
 - Refill with Hypoid Gear Oil API GL-5 75W-90.
 - Install a **NEW** filler plug washer and torque to spec.
 - **Torque Spec: 39.2 N·m (400 kgf·cm, 29 ft·lbf)**

3. START THE VEHICLE AND INSPECT THE FOLLOWING FOR LEAKS

- Fuel System
 - Start the engine and let it run for 5 seconds, then stop the engine and inspect for leaks.
 - If there are no leaks, restart the engine and re-inspect.
- Cooling System
- Brake System
- Clutch System (*1GR-FE Manual Trans Only*)
- Front Differential System

4. RECHARGE THE A/C SYSTEM AND CHECK FOR PROPER OPERATION AND REFRIGERANT LEAKS

5. CHECK THE OPERATION OF THE FOLLOWING SYSTEMS AND ADJUST AS NEEDED



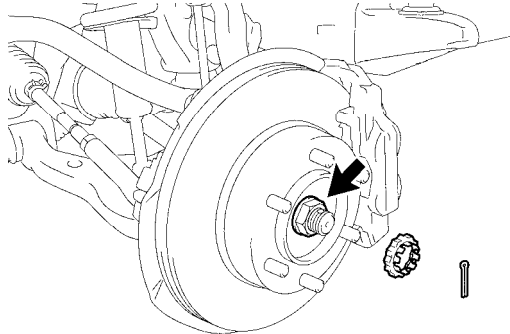
Make sure to follow the procedure outlined in the appropriate repair manual for the vehicle you are working on when checking, and if needed, adjusting the operation of the systems listed below. This is an important step, and must be performed thoroughly to ensure proper operation of these systems.

- Parking Brake Travel
- Shift Control Lever (*Automatic Transmission Vehicles Only*)
- Clutch Pedal (*Manual Transmission Vehicles Only*)

6. CHECK ALL FLUID LEVELS AND ADJUST AS NEEDED

NEW Replacement Parts

Part #	Part Name	Kit #	Qty
43514-28010	Cap, FR Hub Grease	3	2
95381-04045	Pin, Cotter	3	2



7. TORQUE THE FRONT AXLE NUT (4WD ONLY)

- Remove the front wheels.
- Torque the front axle nut to spec.

Torque Spec: 235 N·m (2396 kgf·cm, 173 ft·lb)

- Reinstall the lock cap with the **NEW** cotter pin.
- Reinstall the **NEW** grease cap.
- Repeat the procedure on the opposite side.
- Reinstall the front wheels and torque to spec.

Torque Spec: 113 N·m (1152 kgf·cm, 83 ft·lb)

NOTE: If the holes for the cotter pin are not aligned, tighten the axle nut further, up to 60°.

8. PERFORM A WHEEL ALIGNMENT

9. CHECK THE HEADLIGHT AIM AND ADJUST AS NEEDED

NEW Replacement Parts

Part Number	Part Name	Kit #	Qty
90080-11373	Bolt, w/ Washer	8	8

10. REINSTALL THE ENGINE UNDER COVERS

- Reinstall the engine under cover with 8 **NEW** bolts and torque to spec.

Torque Spec: 30 N·m (306 kgf·cm, 22 ft·lb)

11. CHECK FOR DTC'S AND REPAIR AS NEEDED

12. PERFORM INITIALIZATION

13. FINAL INSPECTION

- Check the operation of the following systems:

- 4WD System (**4WD Only**)
- Interior Lights
- Exterior Lights
- HVAC System
- Audio System
- Power Windows
- Power Door Locks
- All Gauges, Indicators and Warning Lights
- Cooling Fans
- Etc.

14. TEST DRIVE THE VEHICLE

V. APPENDIX

As required by Federal Regulations, please make sure all recalled parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused. Adequate time has been provided in the repair time to cut up and dispose of the perforated frame.