TECHNICAL INSTRUCTIONS

FOR

SAFETY RECALL 90M

FOR VEHICLES

ORIGINALLY SOLD IN OR CURRENTLY REGISTERED IN

CT, DE, IL, IN, KY, MA, MD, ME, MI, MN, NH, NJ, NY, OH, PA, RI, VA, VT, WI & WV

REAR FRAME CROSS MEMBER REPLACEMENT

ON

2000 THROUGH 2003 MODEL YEAR TUNDRA
I. OPERATION FLOW CHART

Verify Vehicle Eligibility
1. Check the VIN range.
2. Check the TIS Vehicle Inquiry System.

- Not Involved
  - No further action required.

- Involved
  - Perform initial pre-hoist frame inspection.
    - Remove the spare tire and visually inspect...
      - The rear frame cross member and fuel tank mounting cross members for rust perforation.
      - AND
        - The fuel tank straps, Load Sensing Proportioning Valve (LSPV), spare tire carrier and surrounding components for corrosion damage.

  - Case 1: No or only minor perforation found on the rear frame cross member and fuel tank mounting cross members.
    - AND
      - No corrosion damage found on the fuel tank straps, LSPV, spare tire carrier and other surrounding components.

    - Reinstall the spare tire.

    - Replacement parts are unavailable.
      - In the event parts are not available, refer to the Technical Instructions for specific criteria and handling. Includes making a rental vehicle available based upon the inspection results.

    - Notify customer that Toyota is developing a corrosion-resistant compound to be applied to the area. Advise the customer that he or she will be advised when the compound is available and recommend that the customer bring the vehicle back to the dealership at that time.

  - Case 2: Perforation found on the rear frame cross member and/or fuel tank mounting cross member(s).
    - AND/OR
      - Corrosion damage found on the fuel tank strap(s), LSPV, spare tire carrier and/or other surrounding components.

    - Replace the rear frame cross member and/or the component(s) with corrosion damage.

    - Rear frame cross member replacement unsuccessful, due to the damage caused by the repair process.

    - Rear frame cross member cannot be replaced due to excessive rust perforation.
      - Fuel tank mounting cross member(s) have rust perforation.

    - Contact the Region Office for vehicle condition confirmation and customer handling procedure.
II. IDENTIFICATION OF AFFECTED VEHICLES

A. AFFECTED VIN RANGE

<table>
<thead>
<tr>
<th>Model</th>
<th>WMI</th>
<th>Year</th>
<th>VIN Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VDS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S001001 – S125840</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S001001 – S125901</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S001001 – S125894</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S001001 – S125878</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S001001 – S123980</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S001001 – S051314</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S001001 – S125833</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S001001 – S125859</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S001001 – S001003</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S001001 – S125904</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S001001 – S125897</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2001</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VDS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S125937 – S220312</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S125905 – S220327</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S064334 – S220350</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S126112 – S220343</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S064852 – S064852</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S090565 – S217964</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S125921 – S220297</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S125909 – S220341</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S125907 – S220347</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S064333 – S220345</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2002</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VDS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S220394 – S332707</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S219294 – S332720</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S219295 – S332685</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S220351 – S332714</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S220380 – S328382</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S220392 – S332706</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S220353 – S332719</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S220360 – S332721</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S220365 – S332666</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2003</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>VDS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S332744 – S434010</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S316368 – S439612</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S306031 – S439613</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S332745 – S436914</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S332818 – S414089</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S330788 – S439601</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S307943 – S436915</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S306032 – S439732</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>S308386 – S439716</td>
</tr>
</tbody>
</table>

NOTE:
- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Safety Recall, and that the campaign has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.
III. BACKGROUND

- On certain 2000 through 2003 model year Tundra vehicles operated in cold climate areas with high road salt use (Severe Cold Climate States) excessive corrosion may be exhibited on the rear cross-member of the frame. In the worst case, the spare tire stowed under the truck bed may become separated from the rear cross-member. Spare tire separation will create a road hazard for following vehicles and could cause a crash without prior warning. Eventually, excessive corrosion of the rear cross-member may also affect the functionality of the rear brake line at the proportioning valve. If this occurs, it can lead to the loss of the rear brake circuits, which will increase vehicle stopping distances and could cause a crash without prior warning.

- In addition, excessive corrosion may also be exhibited on the fuel tank mounting system, which includes two other cross-members and fuel tank straps. In the worst case, the fuel tank may drop to the ground and be dragged or separate from the vehicle. This may create a road hazard which could cause a crash without prior warning or possibly a fire.

- Exposure to cold climate and high road salt usage conditions are primary contributors. This is unrelated to, and separate from, normal surface rust which is commonly found on metallic surfaces after some years of usage and/or exposure to the environment.
IV. VEHICLE INSPECTION WORK PROCEDURE

A. INITIAL PRE-HOIST FRAME INSPECTION

1. INSPECT THE FRAME FOR RUST PERFORATION

   a) If NG (rust perforation found), use a drive on vehicle lift to inspect the frame cross members. **Do not lift vehicle by the frame.**
   
   b) If OK (no rust perforation), you may use a frame contacting vehicle lift to inspect the frame cross members.
   
   c) Proceed to frame cross member inspection below.

B. INSPECT THE REAR FRAME CROSS MEMBER AND FUEL TANK MOUNTING CROSS MEMBERS

1. REMOVE THE SPARE TIRE AND INSPECT THE REAR FRAME CROSS MEMBER FOR RUST PERFORATION

   **GUSSET AREA ONLY**

   NG Condition, Replacement Required:
   
   Any perforation in gusset area where the LSPV is installed.

   **ALL OTHER AREAS (EXCEPT THE GUSSET)**

   NG Condition, Replacement Required:

   Case 1: Perforation exceeds 30mm in diameter.

   ![Perforation Diagram]

   Case 2: 2 holes within 10 mm.

   ![Case 2 Diagram]

   Case 3: More than 3 perforated spots.

   ![Case 3 Diagram]

   For part number information, please reference Section V "PARTS INFORMATION"
2. INSPECT THE FUEL TANK MOUNTING CROSS MEMBERS FOR RUST PERFORATION

<table>
<thead>
<tr>
<th>Judgement Criteria</th>
<th>Result</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>A perforation (hole) of over 30 mm in locations A, B, C or D, see below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 perforations (holes) within 10 mm of each other in locations A, B, C or D, see below</td>
<td>NG</td>
<td>Replace the frame</td>
</tr>
<tr>
<td>More than 3 perforations (holes) in locations A, B, C or D, see below</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

None of the above conditions

OK

No action required

---

Location A

Location B

Location C

Location D
If parts are *NOT* available for the components requiring replacement (i.e. brake components, fuel tank straps, fuel lines, lspv, spare tire carrier, etc..) inform the customer and provide them with a rental vehicle. Contact the customer when parts become available.

Follow the Toyota Transportation Assistance Program (TTAP) guidelines for rentals.

C. INSPECT THE FUEL TANK STRAPS, LSPV, SPARE TIRE CARRIER AND SURROUNDING COMPONENTS

1. **INSPECT THE FUEL TANK STRAPS FOR CORROSION DAMAGE**

   a) Using a piece of cloth, clean the outside surface of the front and rear fuel tank straps to remove any dirt and debris.
b) Inspect the outside surface of the fuel tank straps, does the rust span the width (front to rear) of either fuel tank strap as shown.

**Inspection Area:**

- 30 mm (1.1811 in.) from folded strap edge
- Inspect for rust
- Center of corner
- 30 mm (1.1811 in.) from folded strap edge
- Inspect for rust
- Center of corner

**Inspection Standard:**

- Rusting occurs continuously along the entire width of the strap.
- Rusting does not occur continuously along the entire width of the strap.

**NG**

<table>
<thead>
<tr>
<th>Judgement Criteria</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>NG</td>
<td>Replace the fuel tank strap(s) For part number information, please reference Section V &quot;PARTS INFORMATION&quot;</td>
</tr>
<tr>
<td>OK</td>
<td>Replacement not required</td>
</tr>
</tbody>
</table>
2. INSPECT THE LSPV

a) If there are signs of excessive rust and brake fluid leakage on the LSPV, replace the damaged parts.

b) With one hand using minimal force, attempt to wiggle the valve bracket (b).
   - If the valve bracket is loose, replace the damaged part.

c) With one hand using minimal force, attempt to wiggle the valve body (c).
   - If the valve body and/or associated components are loose or show any signs of leakage, replace the damaged parts.
   - For part number information, please reference Section V "PARTS INFORMATION"

3. INSPECT THE SPARE TIRE CARRIER FOR DETERIORATION

a) Inspect the spare tire carrier lift plate as shown.

<table>
<thead>
<tr>
<th>Judgement Criteria</th>
<th>Result</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deterioration Found</td>
<td>NG</td>
<td>Replace the spare tire carrier</td>
</tr>
<tr>
<td></td>
<td></td>
<td>For part number information, please reference Section V &quot;PARTS INFORMATION&quot;</td>
</tr>
<tr>
<td>No Deterioration</td>
<td>OK</td>
<td>Replacement not required</td>
</tr>
</tbody>
</table>
4. INSPECT SURROUNDING COMPONENTS AND ADJACENT AREAS

a) Inspect the...

- Brake lines
- Fuel lines
- Exhaust pipe brackets
- Steering components and power steering lines
- Suspension mounts

NOTE:
- If there is perforation and/or breakage of the specified components or adjacent areas due to corrosion replace the damaged part(s).
- If there is fluid leakage of the specified components replace the damaged part(s).

V. PARTS INFORMATION

- **Rear Frame Cross Member**

<table>
<thead>
<tr>
<th>MY</th>
<th>Description</th>
<th>Part Number</th>
<th>Part Name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 – 2002</td>
<td>-</td>
<td>51209-0C010</td>
<td>Rear Frame Cross Member Sub-assembly</td>
<td>1</td>
</tr>
<tr>
<td>2003</td>
<td>-</td>
<td>51209-0C012</td>
<td>Rear Frame Cross Member Sub-assembly</td>
<td>1</td>
</tr>
<tr>
<td>All</td>
<td>-</td>
<td>90080-11288</td>
<td>Bolt</td>
<td>13</td>
</tr>
<tr>
<td>All</td>
<td>-</td>
<td>90178-A0082</td>
<td>Nut</td>
<td>13</td>
</tr>
</tbody>
</table>

- **Fuel Tanks Strap**

<table>
<thead>
<tr>
<th>MY</th>
<th>Description</th>
<th>Part Number</th>
<th>Part Name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>2WD</td>
<td>77601-34030</td>
<td>Fuel Tank Strap Sub-assembly No.1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4WD</td>
<td>77603-34070</td>
<td>Fuel Tank Strap Sub-assembly No.2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4WD</td>
<td>77601-34040</td>
<td>Fuel Tank Strap Sub-assembly No.1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4WD</td>
<td>77603-34060</td>
<td>Fuel Tank Strap Sub-assembly No.2</td>
<td>1</td>
</tr>
<tr>
<td>2001 – 2003</td>
<td>2WD Excep UCK30</td>
<td>77601-34030</td>
<td>Fuel Tank Strap Sub-assembly No.1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Off Road Package</td>
<td>77603-34070</td>
<td>Fuel Tank Strap Sub-assembly No.2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>4WD</td>
<td>77601-34040</td>
<td>Fuel Tank Strap Sub-assembly No.1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Includes UCK30 Off Road Package</td>
<td>77603-34060</td>
<td>Fuel Tank Strap Sub-assembly No.2</td>
<td>1</td>
</tr>
</tbody>
</table>

- **Load Sensing Proportioning Valve (LSPV)**

<table>
<thead>
<tr>
<th>MY</th>
<th>Description</th>
<th>Part Number</th>
<th>Part Name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 – 2002</td>
<td>WO/ABS</td>
<td>47910-34060</td>
<td>LSPV Assembly</td>
<td>1</td>
</tr>
<tr>
<td>2000 – 2003</td>
<td>W/ABS</td>
<td>47910-34070</td>
<td>LSPV Assembly</td>
<td>1</td>
</tr>
</tbody>
</table>

- **Spare Tire (Wheel) Carrier**

<table>
<thead>
<tr>
<th>MY</th>
<th>Description</th>
<th>Part Number</th>
<th>Part Name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>-</td>
<td>51900-0C010</td>
<td>Spare Wheel Carrier Assembly</td>
<td>1</td>
</tr>
</tbody>
</table>

NOTE:
- Depending on the vehicle condition, additional parts may be required.
- Correct parts number should be confirmed with the parts catalog.
VI. REAR FRAME CROSS MEMBER REPLACEMENT WORK PROCEDURE

A. TOOLS & EQUIPMENT

- Standard hand tools
- Torque wrench
- Torx ® T55H Tamper Resistant Socket
- Air hammer with...
  - Flat chisel bit
  - Tapered punch bit
- Steel tape measure
- Frame expansion bar*
- Protective eyewear
- Protective work gloves
- Ear plugs
- Dust mask

*NOTE:
One Frame Expansion Bar will be provided to each dealer in CT, DE, IL, IN, KY, MA, MD, ME, MI, MN, NH, NJ, NY, OH, PA, RI, VA, VT, WI & WV.

B. MATERIALS

- Black paint (chassis black or black anti-corrosive paint)
- Sandpaper 80 grit
NOTE:
Please follow all work procedure instructions and notes when tightening the bolts and nuts.

- Additional part
- New replacement part

\[ N \times m \text{ (kgf}\cdot\text{cm, ft-lbf)} \]: Specified torque
D. LOCATION AND TORQUE SPECIFICATIONS FOR SURROUNDING COMPONENTS IF REPLACED

Location reference diagram and torque values for replacing brake harness and LSPV.

E. REAR FRAME CROSS MEMBER REMOVAL

1. REMOVE THE LICENSE PLATE LIGHTS
2. REMOVE THE CENTER REAR BUMPER PAD
3. REMOVE THE REAR BUMPER ASSEMBLY
4. REMOVE THE TRAILER HITCH (IF EQUIPPED)
5. DISCONNECT THE FRAME WIRE HARNESS
   a) Disconnect the connectors.
   b) Disconnect the clips and the frame wire harness from the bed assembly.

   NOTE:
   • The number of connectors may differ depending on the vehicle specification.
   • Be careful not to damage the wire harness clips when removing them.

6. REMOVE THE REAR MUDGUARDS (IF EQUIPPED)

7. REMOVE THE FUEL TANK FILLER PIPE SHIELD

8. DISCONNECT THE FUEL INLET PIPE
   a) Remove the 2 nuts and disconnect the fuel inlet pipe.

9. REMOVE THE BED ASSEMBLY
   a) Using a Torx ® T55H Tamper Resistant Socket, remove the Torx ® bolts from the bed assembly
      - Regular Cab: 8 Torx ® bolts
      - Access Cab: 6 Torx ® bolts

   NOTE:
   • Use 4 or more people to remove the bed assembly from the frame.
   • Evenly support the bed assembly when removing it.
10. MEASURE THE DIMENSIONS OF THE REAR FRAME END

   a) Measure and record the distance between the left and right frame rails for the TOP and BOTTOM edges of the rear frame end as shown.

   TOP: ___________________________  BOTTOM: ___________________________

NOTE:
Make sure to measure and record the distances. These measurements will be used for adjustment purposes after the cross member has been installed.

11. REMOVE THE CLIP

12. DISCONNECT THE FRAME WIRE HARNESS

   a) Remove the 5 wire harness clips.

NOTE:
DO NOT damage the wire harness clip during removal.
b) Disconnect the ABS connector *(if equipped)*.

13. REMOVE THE SPARE TIRE CARRIER

a) Remove the 4 bolts and the spare tire carrier.

**NOTE:**
The edge of the spare tire carrier is sharp, take care when removing.

14. REMOVE THE EXHAUST PIPE HANGER

a) Remove the exhaust pipe hanger from the frame.

15. REMOVE THE REAR SHOCK ABSORBER LH

a) Remove the 2 nuts, bolt and the rear shock absorber LH.
16. DISCONNECT THE LSPV AND LOAD SENSING SPRING

a) Remove the nut, washer and bolt, and then disconnect the load sensing spring.
b) Remove the 2 washers and collar from the load sensing spring to prevent them from falling off.

c) Disconnect the brake line clip.
d) Remove the 3 bolts and disconnect the LSPV assembly.

NOTE:
• DO NOT damage the brake line clip during removal.
• Visually inspect the LSPV for any damage of fluid leakage. Replace the LSPV if damage or fluid leakage is found.

e) Suspend the LSPV with a rope this will protect the brake lines from damage and deformation.
17. REMOVE THE REAR FRAME CROSS MEMBER

a) Using an air chisel cut off the 13 rivet heads.

NOTE:
- Always wear protective eyewear, ear plugs and gloves when using an air chisel and air hammer.
- DO NOT allow personnel near the vehicle, as the rivet heads may fly off when cut.
- Cover the cab body to prevent damage from flying debris.

b) Position the air chisel in between the rivet and side member. **DO NOT** increase the angle the air chisel, doing so may damage frame side member.

c) When cutting the rivet head, alternate the position of the air chisel between 3 to 4 different spots.
d) Using an air punch remove the 13 rivets.

e) The rivet may expand preventing removal with the air punch.

- If the rivet is attached only to the cross member no further action is required.
- If the rivet is attached to the side and cross member, drill a hole in the rivet. Then use a hammer and punch to knock the rivet out.

f) Set the frame expansion bar on the vehicle with the groove ring on the left side of the vehicle.

NOTE:
- Verify that the threaded section of the frame expansion bar is properly greased.
- If grease is needed, apply disulfide molybdenum grease to the threaded section before use.
g) Push the expansion bar until both guide bars contact the frame.

h) Using the frame expansion bar, expand the ends of the frame rails by 4.33 in. (110 mm).

i) Push the rear frame cross member towards the left of the vehicle as shown.

j) Lower the right side of the rear frame cross member one notch as shown.

k) From the left side of the vehicle, slightly twist the rear frame cross member to the right and lift up to remove as shown.

NOTES:
- Use 2 people to remove the rear frame cross member.
- DO NOT remove the expansion bar.
F. REAR FRAME CROSS MEMBER INSTALLATION

1. PREPARE AND CLEAN THE BOLT MOUNTING SURFACE
   a) Using 80 grit sandpaper, remove any scratches and uneven areas from where the rivets were removed.
   b) Sand the surfaces until they are smooth and even.

NOTE:
- Any unevenness in the surface can cause the bolts to loosen.
- Make sure the surface is completely even before proceeding to the next step.

2. INSTALL THE \textit{NEW} FRAME REAR CROSS MEMBER
   a) From the left side of the vehicle, insert the \textit{NEW} rear frame cross member and set the right notches in the position shown.

NOTES:
Use 2 people to install the \textit{NEW} rear frame cross member.

b) Slightly twist the \textit{NEW} frame rear cross member and set the left side in the side member as shown.

c) Push the \textit{NEW} frame rear cross member towards the left and set the right side in the side member as shown.
3. INSTALL THE BOLTS AND NUTS

a) While shortening the frame expansion bar, align the side member and cross member holes and temporarily install 13 **NEW** bolts and nuts.

**NOTES:**
- DO NOT fully tighten the bolts and nuts at this time.
- For the lower section of the side member, insert the bolts from the bottom side.

b) After temporarily installing the bolts and nuts, measure the distance between the left and right frame rails for the **TOP** and **BOTTOM** edges of the rear frame end.

c) Compare the new measurements to the ones taken in step **“9. MEASURE THE DIMENSIONS OF THE REAR FRAME END”** during rear frame cross member removal process, and adjust the frame expansion bar until they match.

4. TIGHTEN THE BOLTS AND NUTS

a) In the order illustrated, **tighten each bolt to specification while holding the nut.**

   Torque Specification: 54 N·m (551 kgf-cm, 40 ft-lbf)

**NOTE:**
- DO NOT tighten the nut.
- Tighten the bolt while holding the nut.
5. RETIGHTEN THE BOLTS AND NUTS

a) In the order illustrated, **retighten each bolt to specification while holding the nut.**

   Torque Specification: 54 N·m (551 kgf·cm, 40 ft·lbf)

**NOTE:**
- DO NOT tighten the nut.
- Tighten the bolt while holding the nut.

b) Mark the tightened bolts as shown for verification.

c) Verify that every bolt has an X mark on the head.
d) Apply paint (chassis black or black anti-corrosive paint) to the top and bottom areas on the side member as shown.

NOTE:
Confirm all the bolts are tightened before applying paint to the side member.

6. RECONNECT THE LSPV AND LOAD SENSING SPRING

a) Remove the rope supporting the LSPV.

b) Reinstall the LSPV with the 3 bolts and tighten to specification.

**Torque Specification:** 29 N·m (296 kgf-cm, 21 ft-lbf)

c) Reconnect the brake line clip.
d) Reinstall the collar and 2 washers to the load sensing spring.
e) Reinstall the load sensing spring with the bolt, washer and nut, and then tighten to specification.

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

7. REINSTALL THE REAR SHOCK ABSORBER LH
   a) Reinstall the rear shock absorber LH with the bolt and 2 nuts, and tighten to specification.

Torque Specification:
Bolt – 87 N·m (887 kgf·cm, 64 ft·lbf)
Nut A – 20 N·m (204 kgf·cm, 15 ft·lbf)

8. REINSTALL THE EXHAUST PIPE HANGER
   a) Reinstall the exhaust pipe hanger to the frame.

9. REINSTALL THE SPARE TIRE CARRIER
   a) Reinstall the spare tire carrier with the 4 bolts, and tighten to specification.

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

NOTE:
The edge of the spare tire carrier is sharp, take care when installing.
10. RECONNECT THE FRAME WIRE HARNESS
   a) Reconnect the ABS connector *(if equipped).*

b) Reinstall the 5 wire harness clips.

**NOTE:**
If the clip(s) indicated for the frame wire harness is damaged or broken, cut off the damaged claw and replace it with part number 82711-26380 as shown above.

11. REINSTALL THE CLIP
12. REINSTALL THE BED ASSEMBLY

a) Using a Torx ® T55H Tamper Resistant Socket, reinstall the Torx ® bolts to the bed assembly and tighten to specification.
   - Regular Cab: 8 Torx ® bolts
   - Access Cab: 6 Torx ® bolts

   Torque Specification: 86 N·m (877 kgf·cm, 63 ft·lbf)

NOTE:
- If a Torx ® bolt is damaged or broken, use part number 64189-0C010. This part number is not listed in the parts catalog. Please note on side step bed vehicles, Torx ® bolt 64189-0C010 cannot be used to replace a damaged or broken bolt in location “A”, use the recommended part listed in the catalog.
- Use 4 or more people to reinstall the bed assembly from the frame.
- Evenly support the bed assembly when reinstalling it.

13. RECONNECT THE FUEL INLET PIPE

a) Reinstall the fuel pipe inlet with the 2 nuts and tighten to specification.

   Torque Specification: 27 N·m (275 kgf·cm, 20 ft·lbf)

14. REINSTALL THE FUEL TANK FILLER PIPE SHIELD
15. REINSTALL THE REAR MUDGUARDS (IF EQUIPPED)
16. REINSTALL THE SPARE TIRE
17. RECONNECT THE FRAME WIRE HARNESS

a) Reconnect the frame wire harness to the bed assembly with the clips.
b) Reconnect the connectors.

NOTE:
- The number of connectors and clips may differ depending on the vehicle specification.
- If the clip(s) indicated for the frame wire harness is damaged or broken, cut off the damaged claw and replace it with part number 82711-26380 as shown above.

18. REINSTALL THE TRAILER HITCH (IF EQUIPPED)

19. REINSTALL THE REAR BUMPER ASSEMBLY

20. REINSTALL THE CENTER REAR BUMPER PAD

21. REINSTALL THE LICENSE PLATE LIGHTS

22. TEST DRIVE THE VEHICLE

a) Test drive the vehicle and inspect for any issues, abnormalities, drivability concerns, etc.

VII. 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, unless requested for parts recovery return.