



700 Pine Ridge Road Golden CO 80403 Tel (303) 278 8287 1(888) 4X4 SLEE Fax (303) 278 7182

Slee Off-Road – [200 Series Aluminum Rear Bumper] (SOK2004) – Installation instruction 1



For 200 Series LC and LX570

Thank you for your purchase from Slee Off-Road! If you should you have any questions or concerns, please do not hesitate to contact us immediately at 1 888 4X4 SLEE or at sales@sleeoffroad.com.

Slee Off-Road strives to provide comprehensive installation instructions. However, in some circumstances minor inconsistencies may be encountered with instructions and or provided parts. If you encounter such an inconsistency, please notify us, as your input is important.

Slee Off-Road guarantees all parts free from defects for one year from the original purchase date. Slee Off-Road and Slee & Co under no circumstances will be held liable for any damages or injuries to the users of this product(s) and or their equipment as a result of the use of this information or parts obtained from Slee Off Road.

Slee Off-Road – [200 Series Aluminum Rear Bumper] (SOK2004) – Installation instruction 2

QTY	Parts Included
1	Slee Land Cruiser / LX570 Rear Aluminum Bumper
2	Main Frame Mount (Passenger and Driver sides)
2	Middle Cross Member Frame Mount (Passenger and Driver sides)
2	Forward Frame Mount (Passenger and Driver sides)
4	Slee Rear Sonar Sensor Adapter Ring
1	15" Sensor Extension Wire, 22ga/4 conductor
1	Roll Rubber Edge Trim, 60"
2	Side Shim Plate (M-Shape)
2	Bottom Shim Plate
4	1/2" x 1 3/4" Bolt
12	1/2" x 1 1/2" Bolt
24	1/2" USS Washer
14	1/2" Lock Washer
4	1/2" Nut
4	1/2" Stick Nut
8	3/8" x 1-1/4" Bolt
12	3/8" USS Washer
8	3/8" Lock Washer
4	3/8" Nut
2	3/8" Nut Plate
2	M10 x 1.5 x 30 Flange Head Bolt
2	M10 x 1.5 Rivet Nut Insert
2	M10 Thick Fender Washer
13	M8 - 1.25 x 30 Flange Head Bolt
5	M8 - 1.25 Flange Nut
1	M8 - 1.25 x 100 Bolt
15	5/16" USS Washer – (to be used with M8 hardware)
5	5/16" Lock Washer – (to be used with M8 hardware)
2	M6 - 1.0 x 25 Flange Head Bolt
2	M6 - 1.0 Flange Nut

Tools Required
Metric Tools
SAE Tools
Smooth Jaw Pliers or Adjustable Wrench to 2" capacity
17/32" Drill Bit (STF1112)
Drill
M10 Rivet Nut Tool (STF1051)
Grinder with Cutoff Disc
Body Saw and Rasp Plane
12v Wiring Tools
Masking Tape
Pen or Marker
Tape Measure or Ruler

01 Lower and remove the spare tire from the vehicle.

Hint: Further information can be found in the owners manual

02 Remove the top plate by prying up on the edge and popping it loose from the main bumper (Photo 2A).

Disconnect the black park sensor electrical connector (Photo 2B).

Remove the male side of the black park sensor electrical connector from its mounting bracket (Photo 2C).

Hint: Now is a good time to remove the electrical connector bracket as well.



Remove top plate (Step 2A)



Remove the electrical connector and the bracket (Step 2B, 2C)

03 Remove all the fasteners that hold the plastic cover.

Remove the fasteners from the upper bumper cover. These are located behind the top plate that was removed in step 2 (Photo 3A)



Remove the upper bumper cover (Step 3A)

Remove the bumper cover fasteners from the inside of the tailgate on passenger and drivers side (Photo 3B).



Remove bumper cover fasteners (Step 3B)

Remove the bumper cover fasteners on passenger and driver side from the underside of the bumper cover (Photo 3C)



Remove fasteners from under the vehicle (Step 3C)

Remove 2 M8 bolts on bottom near hitch receiver.

Remove the fasteners and the factory mud flap on passenger and drivers side from the inner fender (Photo 3D)



Remove the factory mud flap and bumper fasteners (Step 3D)

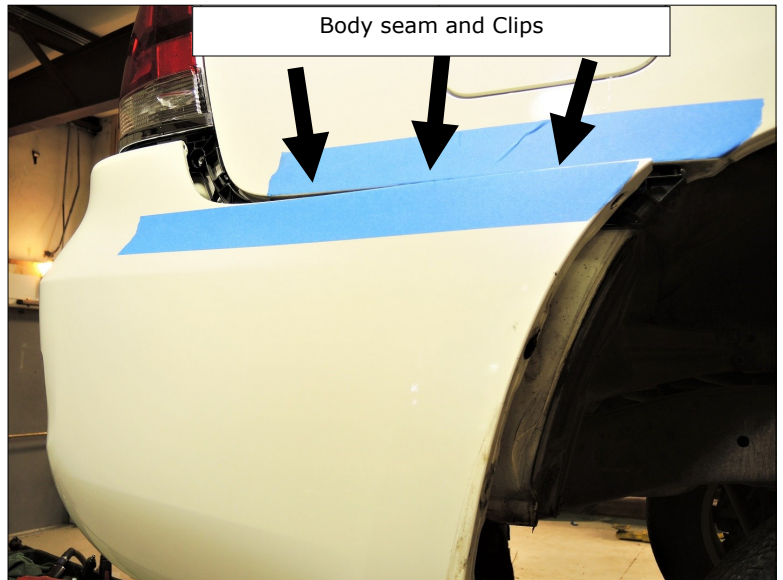
Hint: Hint; apply blue painters to vehicles painted surfaces on driver and passenger sides. This can be removed after Slee bumper has been installed to avoid any potential damage(s).

04 Remove the bumper from the truck and set it out of the way.

Gently pry the corners of the bumper cover outward from the inner fender

Remove the bumper cover from the body clips by gently pulling the bumper cover outward near the body and bumper cover seam (Photo 4A)

Hint: Be careful not to damage the bumper cover, a portion of it will be used later in the install. This is a job best done using one's hands.



Remove the bumper cover from the vehicle (Step 4)

05 Prep the bumper cover for removing the wiring harness and sensors.

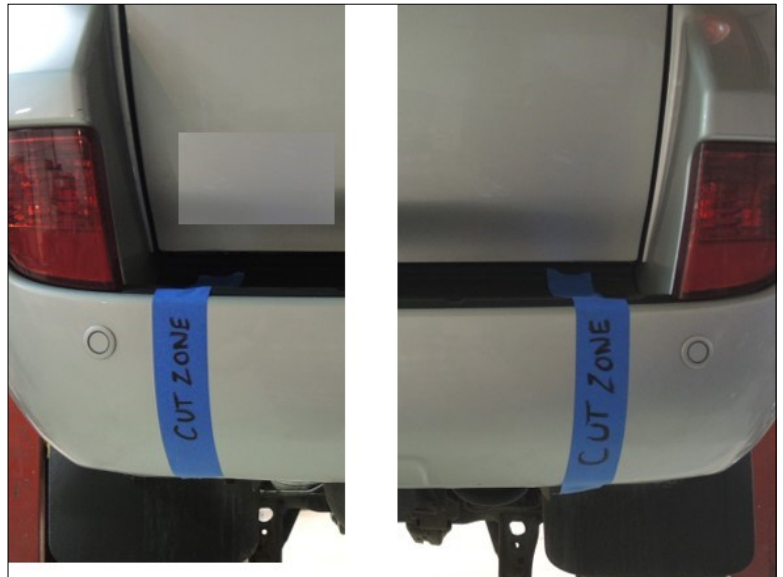
Detach the wire connectors from the back-up sensors. Move the wiring clear of the "Cut Zone."

With the bumper cover removed from the vehicle, cut the bumper into 3 sections. Only make cuts in the area marked "Cut Zone." (Photo 5A)

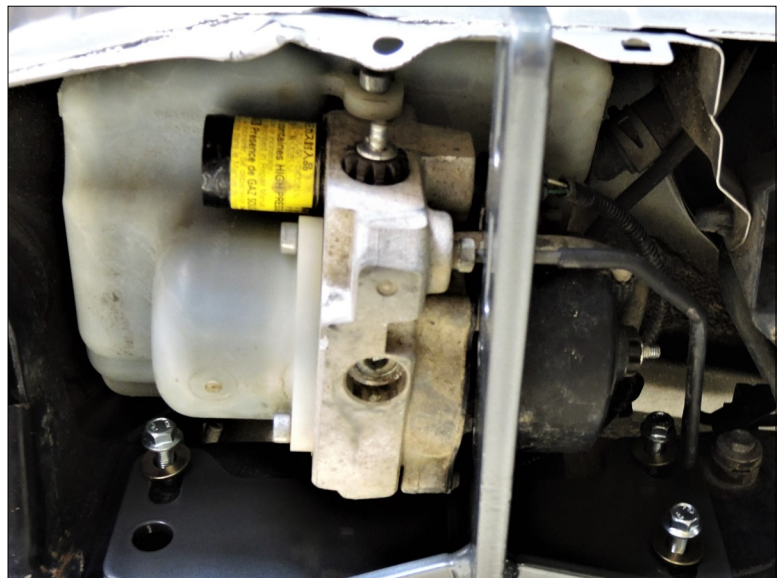
Hint: The new bumper reuses the wiring harness and the left and right sides of the factory bumper cover. Be careful not to scratch or damage the sides of the bumper cover. Be careful not to damage the sensors or wiring harness.

It may be helpful to look at step 6 to understand how to remove the connectors

If installing the bumper on a **Lexus LX570**, the AHC pump bracket will need to be removed (Do not remove pump). Support the pump until the new bracket is installed (Photo 5B).



Cut the bumper into more manageable sections (Step 5A)



Remove the factory AHC bracket (Step 5B)

06 Remove the backup sensors and sensor wiring harness (Photo 6A, 6B, 6C).

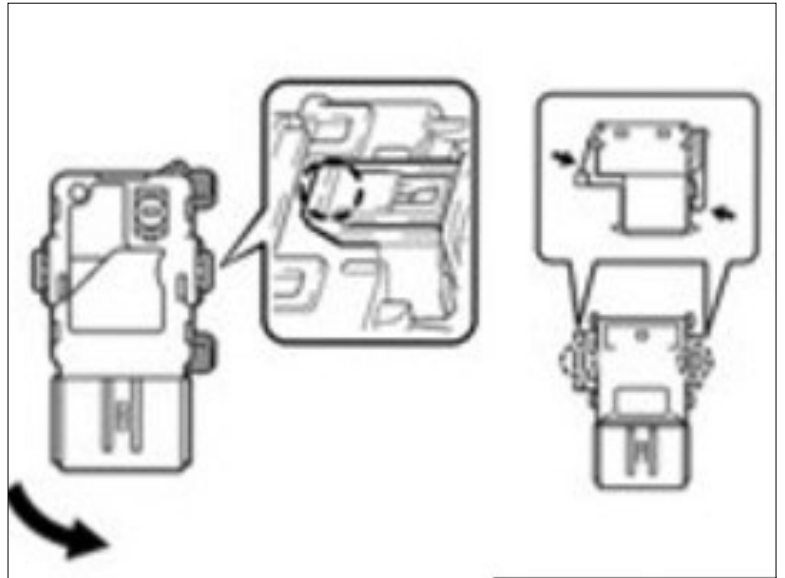
Sensor Removal methods changed from year to year. See photos.

Remove the wiring harness

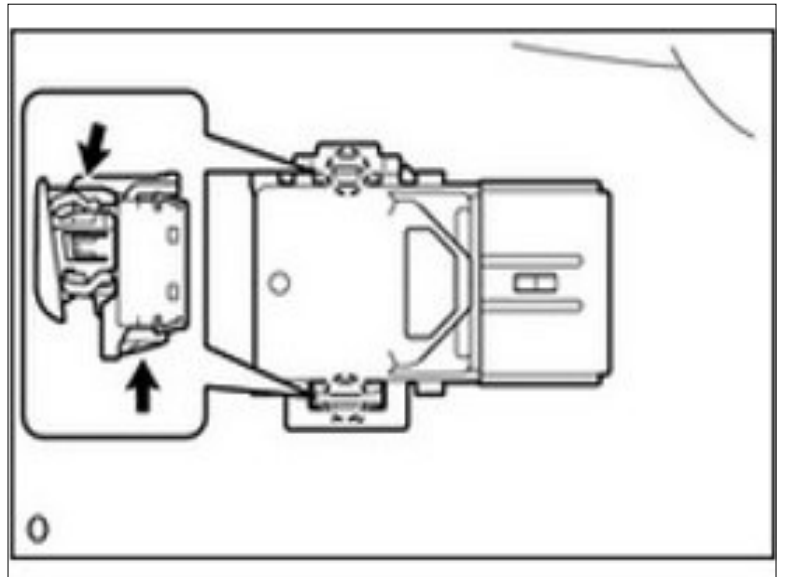
All sensors and wiring will be reused, be careful not to damage it.

The sensor retainers will not be reused

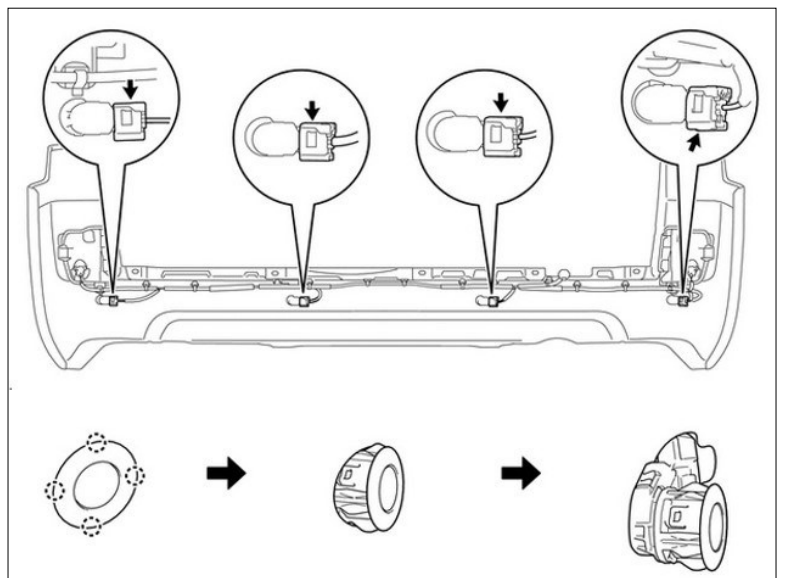
Hint: Some sensors have different clips on top and bottom. It's sometimes helpful to undo one side then the other.



2008-2011



2013-2015

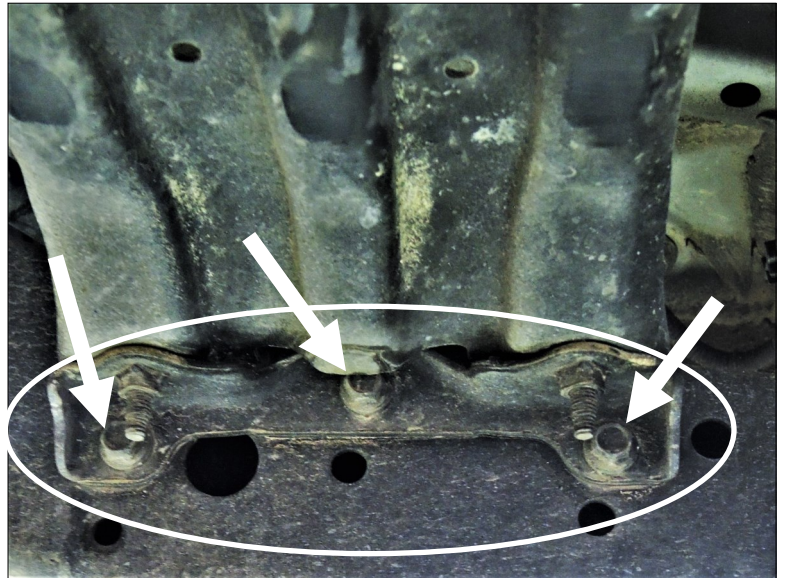


2016+

07 Remove the factory spare tire carrier.

Remove the 10 bolts holding the tire carrier mounting brackets to the inside frame rails; remove 3 bolts on the driver's side and 3 bolts on the passenger. Keep the spare tire carrier to reinstall later.

Hint: The new brackets have a provision for bolting the carrier back in the factory location. This omits the bracket circled– it can be discarded.



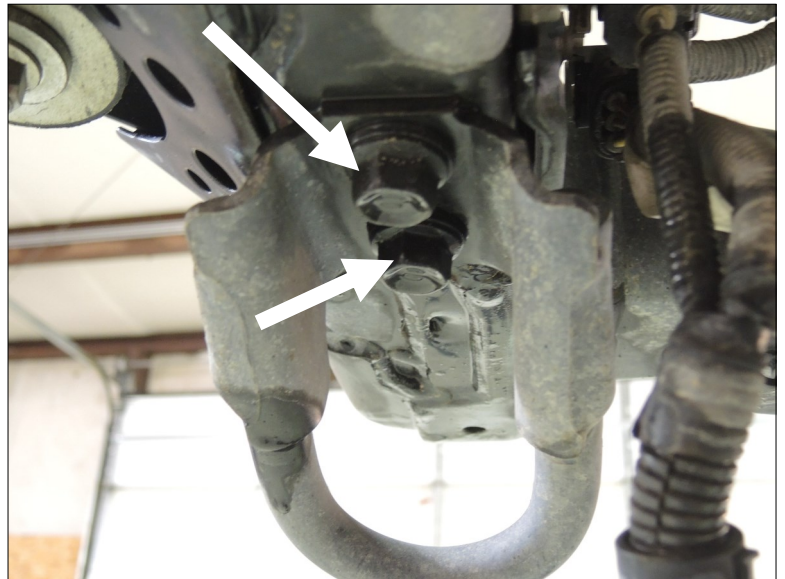
Remove the bolts from the tire carrier (Step 7)

08 Remove factory rear recovery and tiedown points.

A total of 4 bolts will be removed from driver and passenger side and saved for installing Slee bumper frame mounts.

Hardware:

Reuse 4 factory bolts



Remove the factory recovery point and tiedown (Step 8)

Intentionally left blank. Continue to the next page

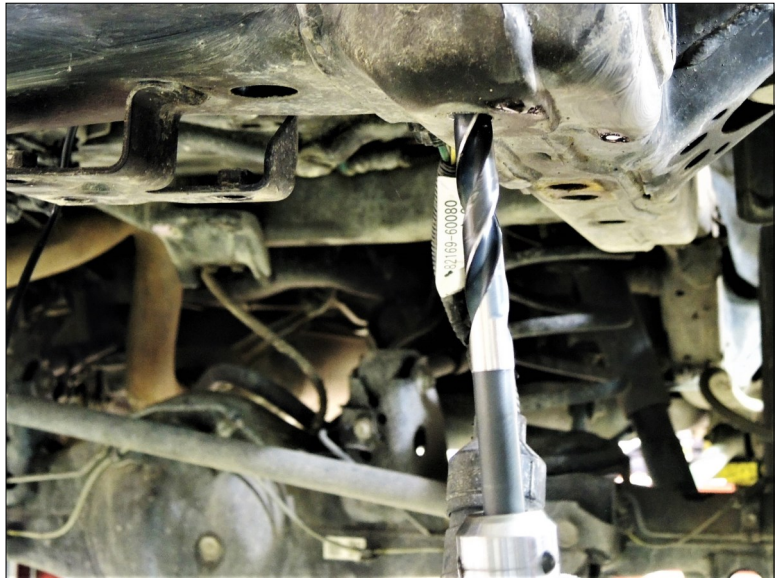
09 Install the supplied 10 mm rivet nuts with inserting tool kit STF1051 or equivalent, **sold separately**.

2 holes will need to be drilled out to a larger diameter. The holes are located on the ends of the right and left frame rails.

Rivet nuts installed on the bottom of the frame rails on each side. Install the Rivet nuts in the 2 locations using the proper tool.

Hardware:

(2) M10 x 1.5 Rivnut Inserts



Enlarge the frame hole for the rivnut (Step 9)

10 Install left and right middle cross member mounts

The flanges on the brackets face outwards.

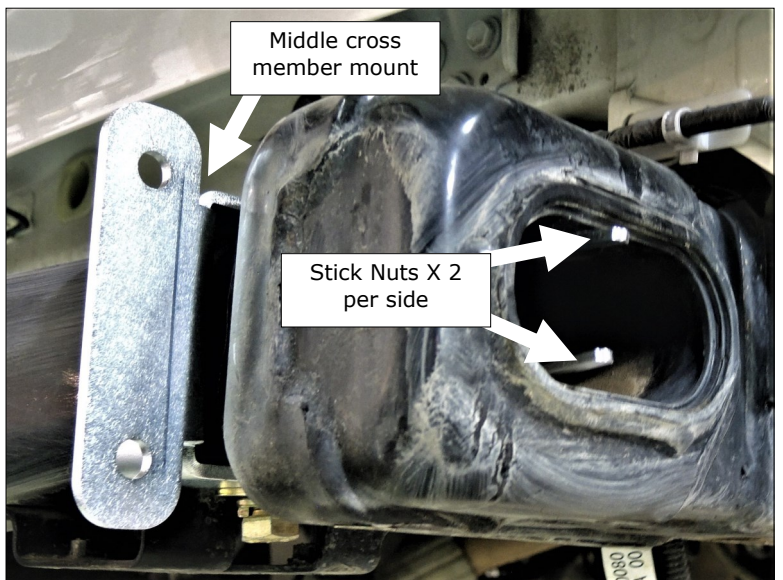
The top bolts do not receive lock washers and should be tightened enough to sit flush on bracket but not tightened all the way. This will allow the bumper to sit on the frame mounts properly.

Hardware:

- (4) 1/2" stick nuts
- (4) 1/2" x 1-1/2" bolts
- (4) 1/2" USS washers
- (2) 1/2" lock washers
- (4) 3/8" x 1-1/4 Bolts
- (4) 3/8 Nut
- (4) 3/8 Lock Washer
- (8) 3/8 USS Washers



Install the rivnut (Step 9)



Install left and right middle cross member mounts (Step 10)

11

Install the Passenger and driver main frame mounts.

Place the 2- 3/8 nut plates supplied with the kit into the body mounts. Align the nut plate with holes in the mount (Photo 11A)

Place the main frame mounts on the frame rail one at a time (Photo 11B)

Loosely install 2- 3/8 bolts, 2-3/8 lock washers and 2-3/8 USS washers in each nut plate

Hold the mount in place using one of the supplied M10x30mm bolt and washer. The bolt will use the previously installed rivet nut.

Insert shim plates between the main frame mounts and the body mounts (Photo 11B).

Attach the main frame mount to the middle frame mount. Fully tighten bolts on Main/Middle Cross Member Mount

(Photo 11C)

Tighten the bolts enough to ensure that the bracket is pulled up against the frame.

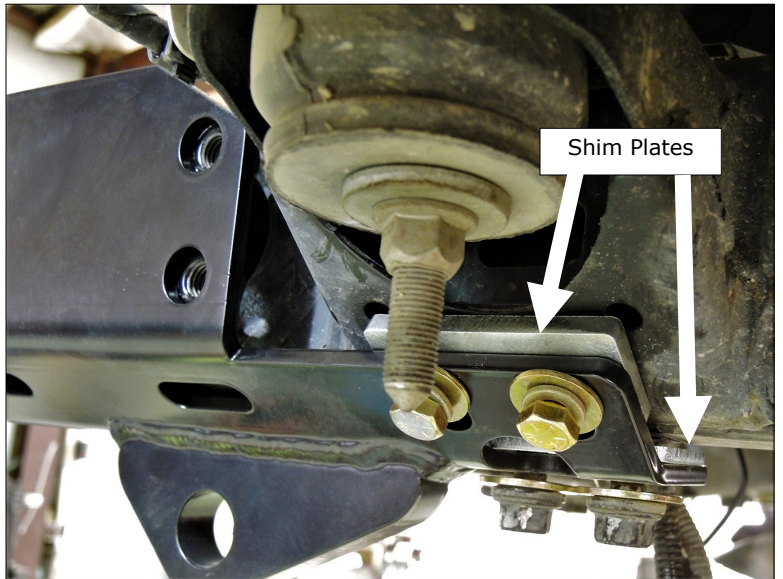
Hint: Pull the main frame brackets in towards the center of the vehicle as far as they will go. Lightly tighten all the fasteners to hold the brackets in place. This will aid in sliding the bumper shell onto the truck.

Hardware:

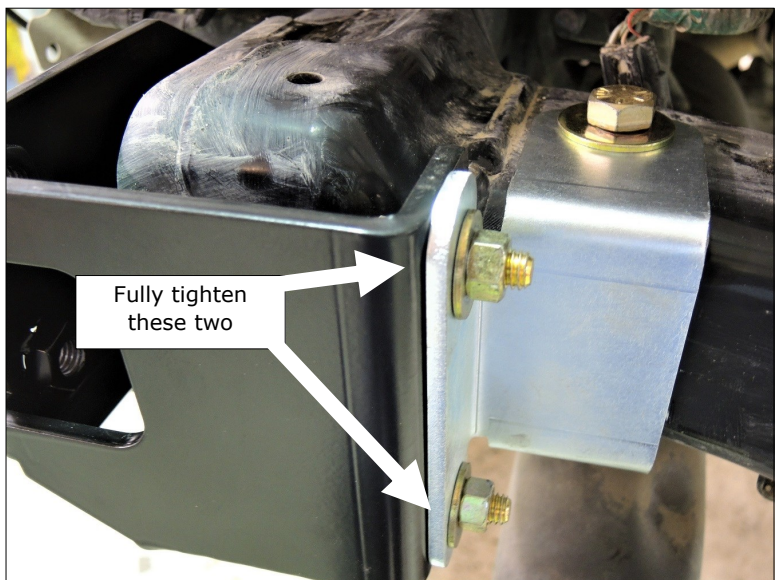
- (2) Side Shim Plates
- (2) Bottom Shim Plates
- (2) 3/8 nut plates
- (4) 3/8 x 1-1/4" bolts
- (4) 3/8 lock washers
- (4) 3/8 USS washers
- (4) 1/2" USS Washers (on factory bolts)
- (2) M10 X 30mm flange head bolt
- (2) M10 thick fender washer
- (4) Factory Recovery/Tie Down Bolts



Install nut plate (Step 11A)



Loosely install the bolts and spacers (Step 11B)



Attach main and middle frame mounts (Step 11C)

12 Install the forward frame mounts on the truck.

The mounts are not symmetrical and only go on one way. If installed on the wrong side, the holes will not align with the bracket

Install the driver side forward frame mount, Position the bracket to allow access to the holes used by the factory spare tire carrier (Photo 12A).

Push the forward frame mount up as far as it will go. Install the through bolt. Tighten all fasteners (photo 12B).

Install the passenger side forward frame mount, Position the bracket to allow access to the holes used by the factory spare tire carrier (photo 12B).

Install 3- M8x30mm bolts supplied with the kit into the threaded holes. Install the supplied M8x100mm bolt with 1-M8 nut, 1-M8 lock washer and M8 flat washer (Photo 12B).

Hint: the exhaust resonator needs to be gently pried out of the way. While holding the resonator out of the way slide the Forward Frame Bracket over the frame rail.

Hardware:

- (15) M8 x 30mm flange head bolts
- (1) M8 x 100mm bolt
- (1) M8 flange head nut
- (5) M8 lock washers
- (15) 5/16" USS washers

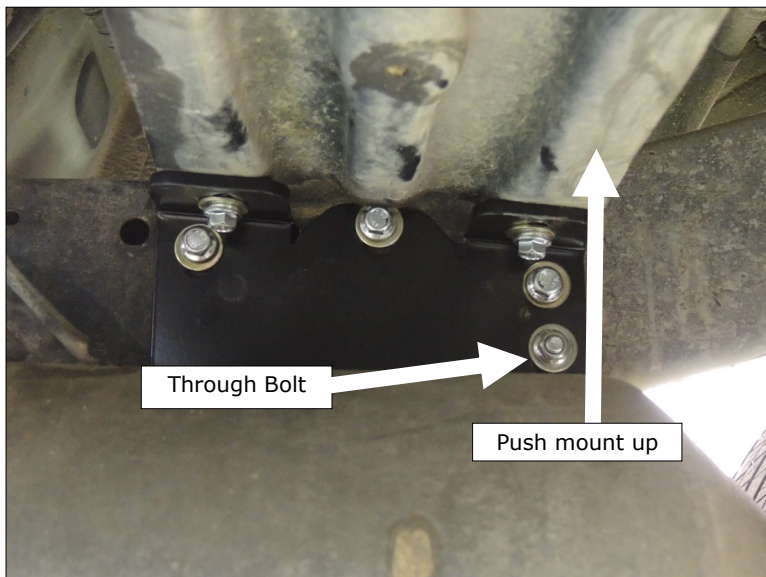
13 Install the 7 pin trailer receptacle into the rear bumper

Remove the 7-pin receptacle in accordance with the factory service manual. It is located at the right rear of the vehicle.

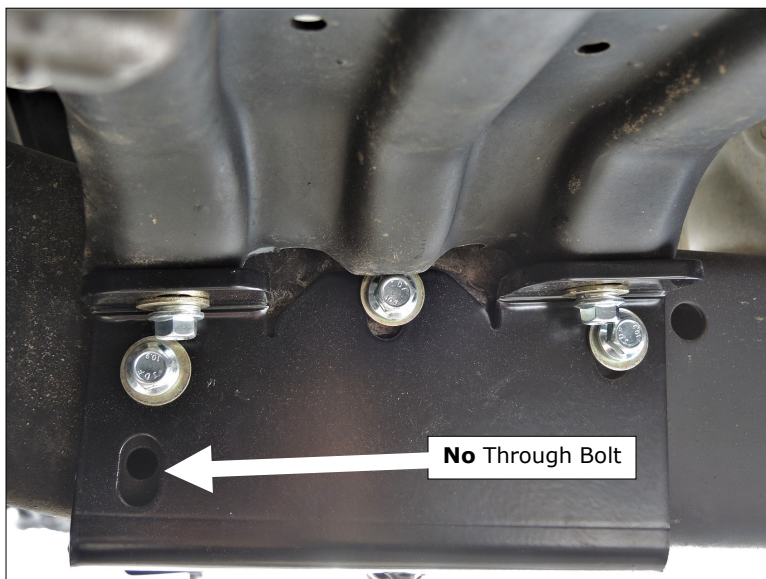
The receptacle is bolted onto the right side of the bumper. This is the location closest to the factory location.

Hardware:

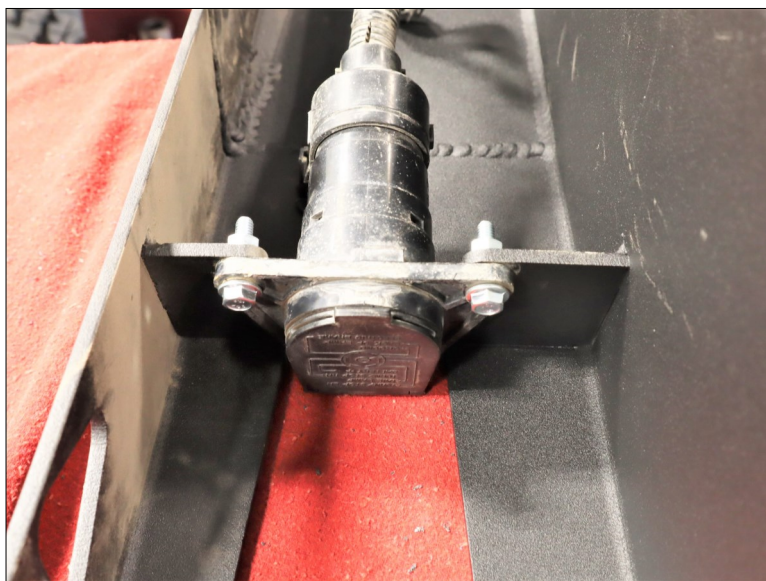
- (2) M6 x 25mm flange head bolts
- (2) M6 flange head nut



Install the driver side forward frame mount (Step 12A)



Install the passenger side forward frame mount (Step 12B)



Install the 7-pin receptacle into the bumper shell (Step 13)

14

Disconnect and relocate the wiring for the 7-pin trailer receptacle.

Disconnect the wiring, unclip it from its brackets, and drape it over the top of the rear crossmember.

It will be plugged back into the 7-pin receptacle after the bumper shell is placed on the vehicle.



R&R the 7-pin wiring over the cross member (Step 14)

15

Install the bumper shell onto the vehicle.

Using 2 or more people, install the shell onto the vehicle.

Install bolts into each of the bumper wing supports. The supports are part of the forward frame mounts.

Install the 8 bolts that secure the bumper shell to the frame mounts.

Tighten all fasteners. The top bolts in the middle cross member mounts will require a wrench to tighten.

Hint: Use the square hitch hole as an alignment reference.

If the bumper will not slide on, make sure that the main bracketry is pushed as close to the centerline of the vehicle as possible.

Hardware: A

(4) 1/2" X 1- 3/4" bolt

(8) 1/2" X 1-1/2" bolt

(16) 1/2" USS washers

(12) 1/2" lock washers

(4) 1/2" nuts



Slide shell onto the vehicle (Step 15)

16

Reconnect the 7-pin receptacle and tuck wiring up into bumper shell.

It's recommended that the wiring be secured with a zip tie or equivalent in the area circled.



Reconnect and tuck wiring up under the bumper shell (Step 16)

17 Take measurements for cutting the factory rear bumper cover.

Begin by taking several measurements from the body seam and tail light down to the Slee bumper.

The body seam is not straight/level, so the locations of each measurement **Must be noted**.



Take measurements from body seam to Slee bumper (Step 14)

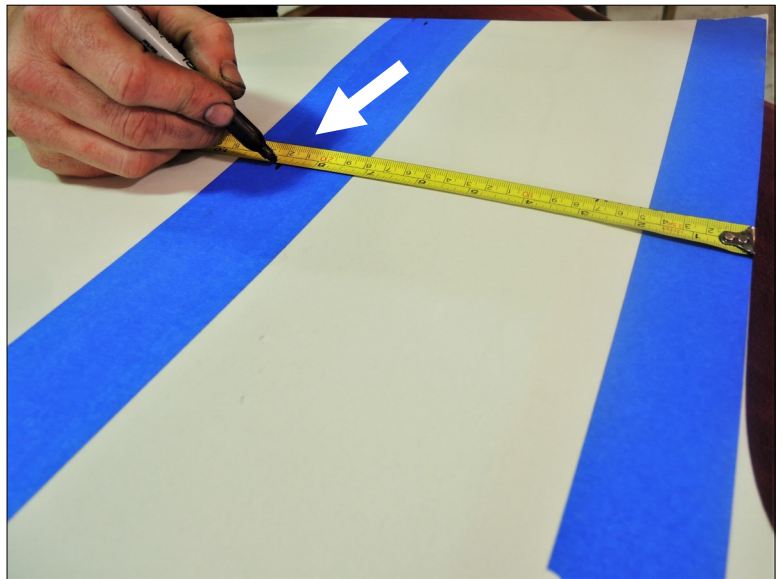
18 Transfer measurements to the factory rear bumper cover.

Transfer the measurements taken onto the factory rear bumper cover.

Subtract a minimum of 1/4 inch from each of the marks and make a new mark.

Connect each of the new marks making a continuous line. This line will be the cut line.

Hint: Using the body clips as the measurement location can help with the accuracy of transferring measurements.



Transfer measurements to the bumper cover (Step 15)

19 For all Land Cruisers, remove the reflector. Cut the reflector straight across, even with the bumper line. Use a cutoff wheel.

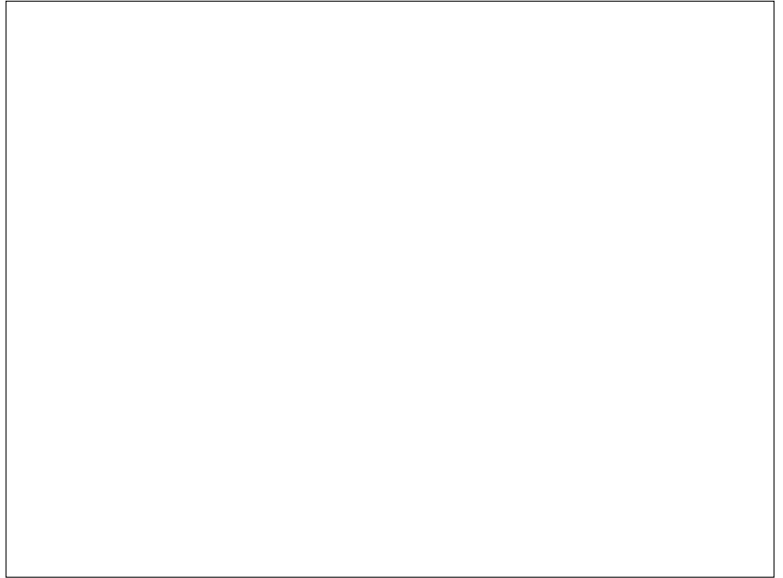
You may spray or paint the inside of the reflector with silver paint, block off the base of the reflector, or chose to leave it blank and open.

Reinstall the reflector assembly back into the bumper cover. Trim the cover and reflector with the supplied rubber trim strip.



Trim the reflector (Step 16)

20 [Intentionally Blank]



[Intentionally Blank]

21 Trim the factory mud flap. Cut the mudflap at the bumper cover and bumper joint.

Fit the mud flap to the bumper cover. This will provide rigidity and protect the components behind the bumper cover.



Trim top of Mud-flap (step 44)

22 For 2008-2015 vehicles, extend the wiring harness of the sensor that is closest to the driver (left) side.

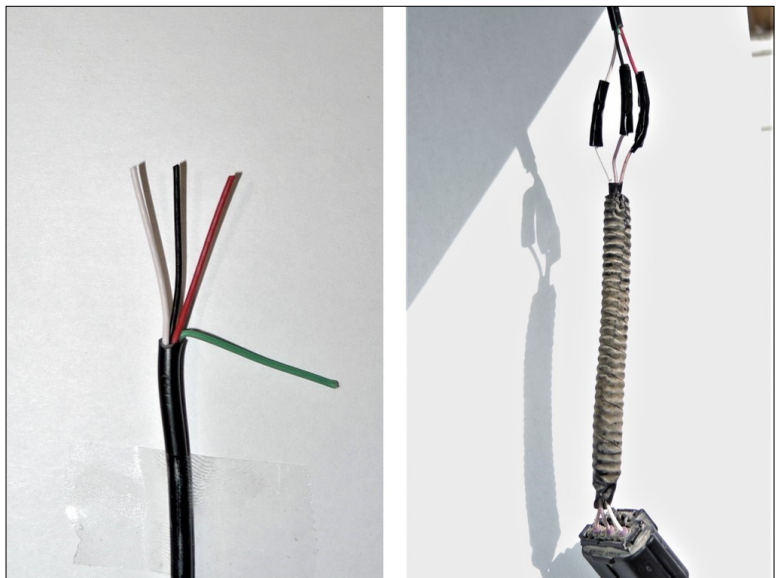
Trim the green conductor from the supplied wiring, It will not be used. Connect the following wires to extend the harness (Photo 35A).

2016-2021 vehicles should have sufficient wire length in the loom, it may need to be stretched out.

Factory Wiring	Supplied Wiring
White	White
Pink	Red
Purple	Black

Hardware:

- (1) wire harness extension



Extend sensor harness (Step 19)

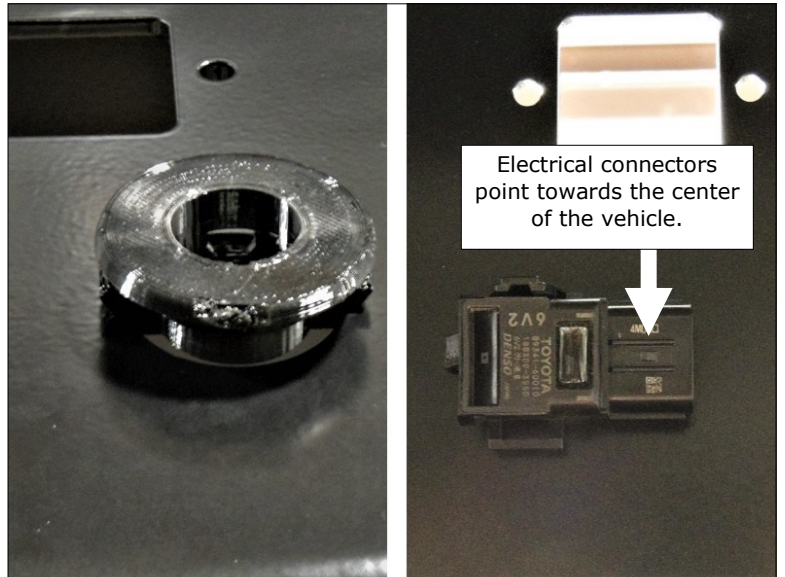
23 Install the grommets and backup sensors into the bumper.

The electrical connectors always point towards the center line of the vehicle.

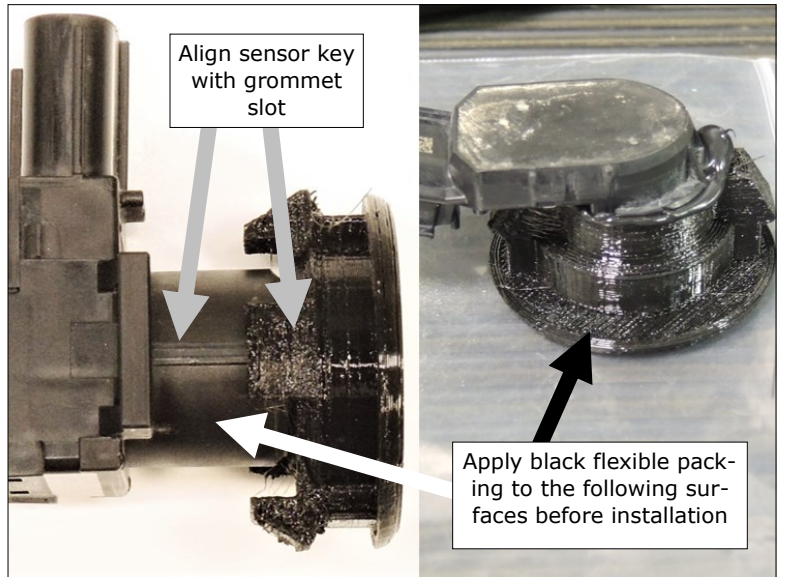
Verify that the grommet and sensor are oriented properly. Apply black flexible packing such as polyurethane flashing sealer to the surfaces shown. (Photo 36B).

Hardware:

(4) Rear sonar adapter gromets



Install sensors and grommets (Step 20)



Double check for proper orientation (Step 20)

This completes the installation of the Slee SOK2004 Aluminum bumper for 200 Series Land Cruisers.



Installation Complete

Additional photos of completed installation shown for clarity.



Install Complete—Mud Flap Area.



Install Complete—Rear Quarter



Install Complete—2016-21 Reflector Detail.