

Part Number: PT228-48210

Kit Contents

Item #	Quantity Reqd.	Description
1	1	Trailer Hitch
2	1	Trailer Hitch Plug
3	1	LH Mounting Bracket
4	1	RH Mounting Bracket

Hardware Bag Contents

Item #	Quantity Reqd.	Description
1	13	M12 x 1.25 x 38mm bolt
2	1	M12 x 1.25 Flange nut
3	1	DIO Installation Instructions
4	2	French Label

Additional Items Required For Installation

Item #	Quantity Reqd.	Description

Conflicts

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Recommended Tools

Personal & Vehicle Protection	Notes
Safety Glasses	
Vehicle Protection	Cloth (shop towel)
Special Tools	Notes
Installation Tools	Notes
Torque Wrench	0 – 100 lb-ft. and 0-50 in-lb
½" Socket wrench	
½" Socket	8,14, 17 mm
½" x 6" socket extension	
3/8" Socket wrench	
3/8" Socket	10 mm
3/8" x 6" socket extension	
Small flat-head screwdriver	
Phillips head screwdriver	
Tin Snips	
6mm Allen socket	
½" x 3" socket extension	
3/8" x 3" socket extension	
Long needle nose pliers	

General Applicability

All Vehicles with tow package

Recommended Sequence of Application

Item #	Accessory

*Mandatory

Vehicle Service Parts (may be required for reassembly)

Item #	Quantity Reqd.	Description
1		
2		
3		

Legend



STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with.



OPERATOR SAFETY: Use caution to avoid risk of injury.



CAUTION: A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.



TOOLS & EQUIPMENT: Used in Figures calls out the specific tools and equipment recommended for this process.



REVISION MARK: This mark highlights a change in installation with respect to previous issue.



SAFETY TORQUE: This mark indicates that torque is related to safety.



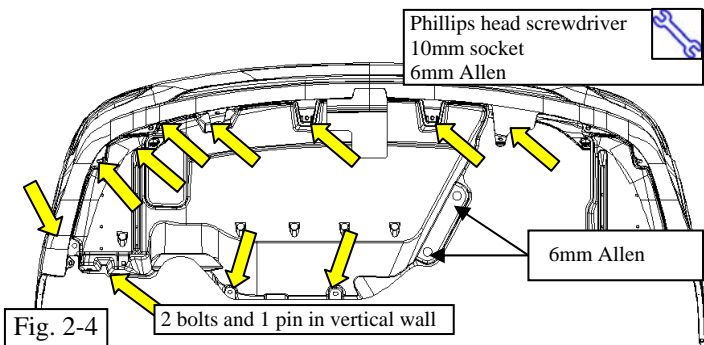
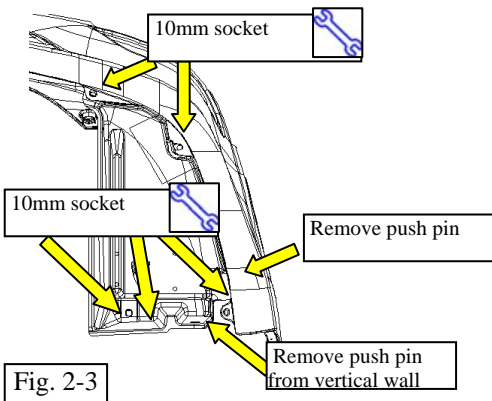
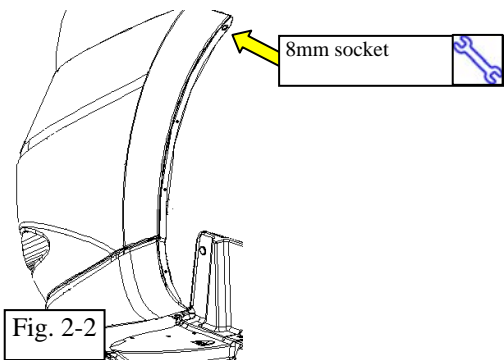
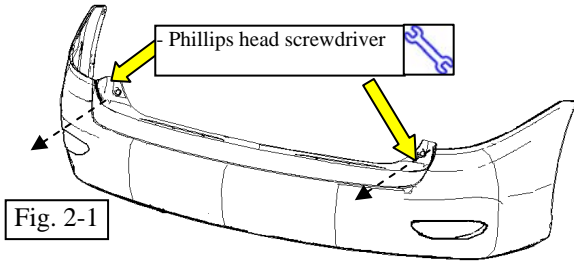
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:-

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

Please see your Lexus dealer for a copy of this document.



1. Preparing for Installation.



(a) Verify kit contents



(b) Wear Safety Glasses.



CAUTION: Muffler might be hot.

2. Preparing Vehicle for Tow Hitch Installation.

(a) Protect exhaust pipe with a shop towel.

(b) Remove and save RH/LH fascia attachments outboard of rear hatch using phillips screwdriver. (Fig. 2-1)

(c) Remove and save fascia attachment hardware in RH/LH wheel well area. 1 screw per side (Fig. 2-2)

(d) Remove and save lower RH cover and attachment hardware (5 bolts and 2 push pin pins).(Fig. 2-3)

(e) Remove and save lower LH cover and attachment hardware (8 bolts and 4 push pins).(Fig. 2-4)

(f) Remove one push pin after LH cover is removed that was hidden.

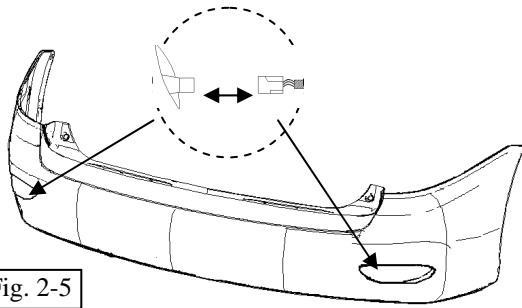


Fig. 2-5

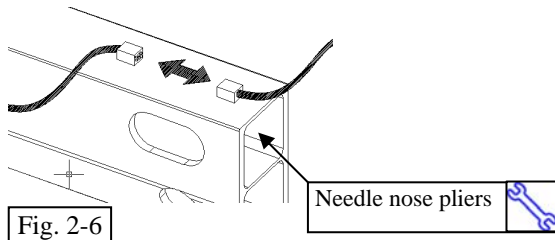


Fig. 2-6

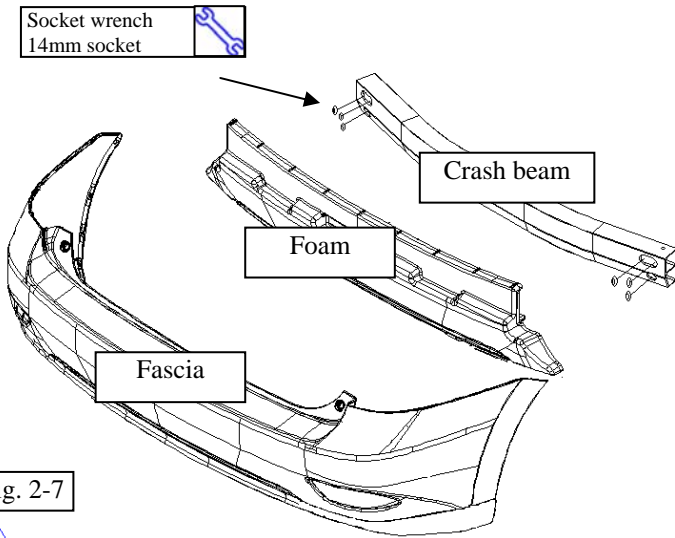


Fig. 2-7

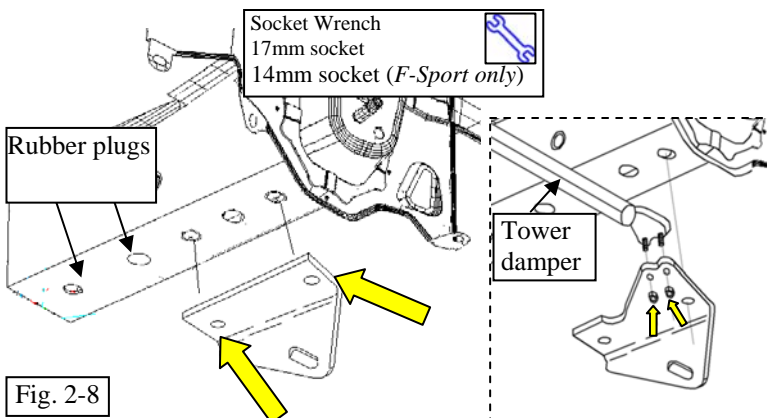


Fig. 2-8

For F-Sport only

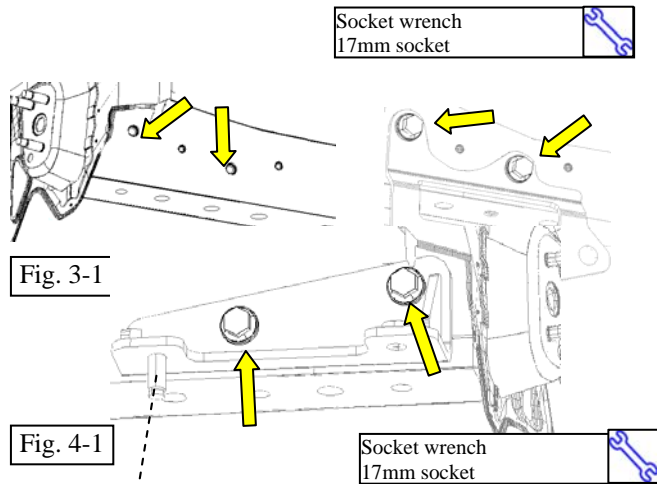
- (g) With lower panels removed, access fascia lamps and disconnect vehicle side connector RH/LH. (Fig. 2-5)
- (h) If vehicle is equipped with back up sensors, disconnect sonar wiring. (Fig. 2-6)
- (i) Starting at wheelwells, disengage fascia snaps and carefully remove fascia and save.
- (j) Remove foam support piece and save. (Fig. 2-7)
- (k) If vehicle is equipped with back up sensors, disconnect plug from beam using needle nose pliers to free clip. (Fig. 2-6)
- (l) Using a socket wrench and 14mm socket, remove nuts (6 places) and discard crash beam and nuts. (Fig. 2-7)

(m) ***For F-Sport Vehicles only***

Before removing the the tow hooks, it is necessary to remove the tower damper. Remove the 14mm nuts (4 places) connecting the LH/RH tow hooks to the tower damper. Lift it up and over the tow hooks and discard. Then remove the tow hooks from the vehicle frame as detailed in Step 2n. (Fig. 2-8)

⚠ NOTE: Discard the tower damper safely and appropriately according to local laws and regulations as it includes a gas strut.

- (n) Using a socket wrench and 17mm socket, remove and discard the RH/LH tow hooks and 4 M12 bolts. Remove and discard the rubber plug on RH/LH rails. (Fig. 2-8)



3. RH Bracket (51995-) Installation

- (a) Remove the 2 plugs from the outside of the RH frame rail. (Fig. 3-1)
- (b) Install RH Bracket using (2) M12 bolts to the side of frame rail. Tighten fasteners to 80N-M (60 FT-LB). (Fig. 3-1)

S Torque: 80N·m (60ft·lbf)

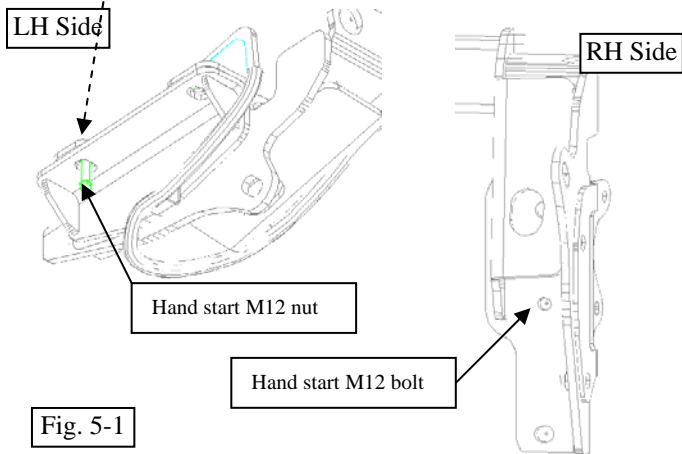
4. Installing LH (51996-) Mounting Bracket

- (a) Remove the 2 plugs stickers from the outside of the LH frame rail. Same locations as RH.
- (b) Install LH Bracket using (2) M12 bolts to the side of frame rail. Tighten fasteners to 80N-M (60 FT-LB). (Fig. 4-1)

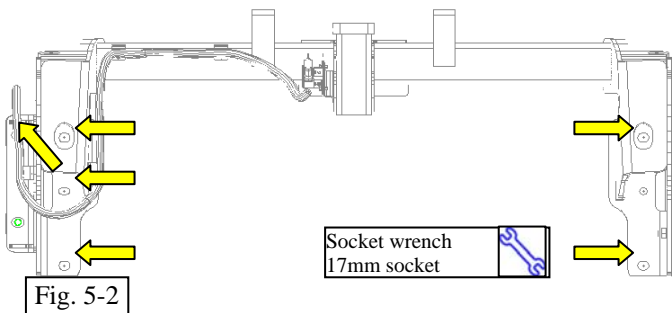
S Torque: 80N·m (60ft·lbf)

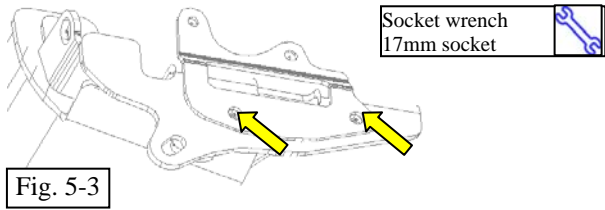
5. Installing Towing Hitch

- (a) Carefully raise hitch into position and hand start the M12 nut and bolt to secure hitch as shown (Fig. 5-1).

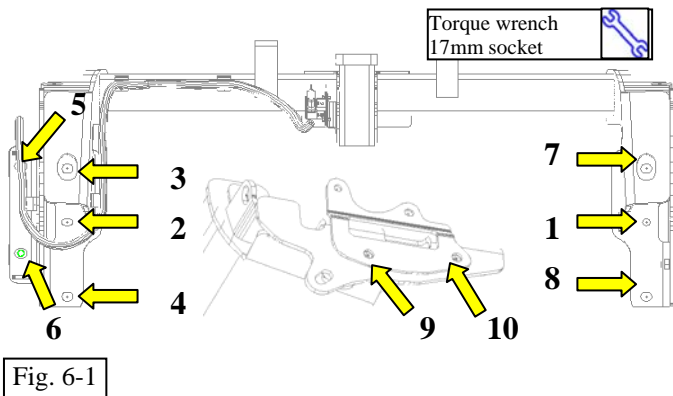


- (b) Loosely install 6 other M12 bolts until hitch contacts frame rail. (Fig. 5-2)





- (c) Fasten hitch to RH side bracket (2 places) using M12 bolts. (Fig. 5-3)
- (d) Slide hitch to RH side as much as possible. Gap to RH bracket may exist which is normal condition.

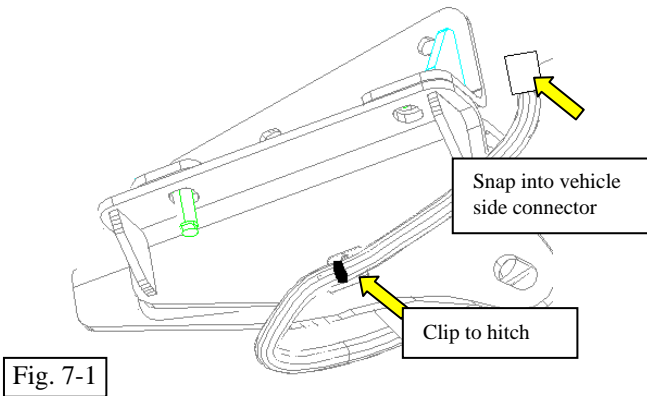


6. Tighten Bolts – Hitch to Frame

- (a) Tighten bolts/nut in order shown to 80 N-M (60 FT-LB). (Fig. 6-1)

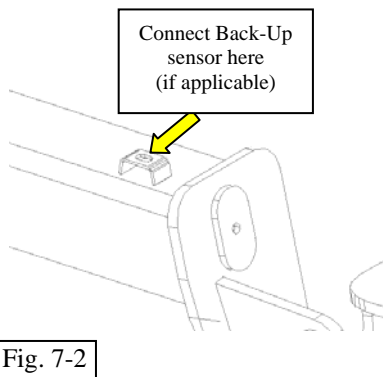
S Torque: 80N·m (60ft·lbf)

7. Connect Wiring



- (a) Detach wiring from break away tape and connect 4th clip to hitch as shown. (Fig. 7-1)
- (b) Remove cover from vehicle connector and connect wiring into vehicle side. Ensure connectors click and lock. (Fig. 7-1)
- (c) If vehicle had back up sensor option re-attach clip to provided location on hitch. (Fig. 7-2)

8. Re-install fascia



- (a) Install the foam support piece removed in step 2h onto the hitch.
- (b) Carefully move the fascia into position and re-attach all hardware removed in previous steps.
 - (1) Re-connect lamps. (Fig. 2-5)
 - (2) If vehicle had back up sensors reconnects wiring harness. (Fig. 2-6)
 - (3) Snap in RH/LH edges at wheelwells.

- (4) Re-install fasteners in wheel well from step 2c. Tighten screws.
- (5) Re-install fasteners outboard of rear hatch from step 2b. Tighten to 7.5 N-M (66 IN-LB)

Torque: 7.5N·m (66in·lbf)

9. Re-install RH Undercover

- (a) Re-install RH Undercover using all hardware removed in step 2d. Tighten all threaded fasteners to 7.5 N-M (66 IN-LB).

Torque: 7.5N·m (66in·lbf)

10. Trim LH cover

- (a) Locate scribe line on inside surface of part. Scribe perimeter shown as hatched area. (Fig. 10-1)
- (b) Using tin snips carefully cut along scribe line and discard trimmed piece.
- (c) Align LH under cover to hitch and verify clearance of hitch opening and wiring prior to step 11.

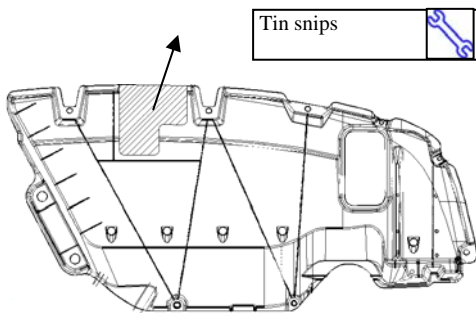


Fig. 10-1



11. Re-install LH Undercover

- (a) Re-install LH Undercover using all hardware removed in step 2e. Tighten all threaded fasteners to 7.5 N-M (66 IN-LB).

Torque: 7.5N·m (66in·lbf)

12. Place Receiver Cover in Glove Box

Checklist - these points **MUST** be checked to ensure a quality installation.

Check:	Look For:
<p><u>Accessory Function Checks</u></p> <p><input type="checkbox"/> Perform visual check of Trailer Hitch Hitch plug.</p>	<p>No visible gaps between mating parts or loose bolts</p> <p>Placed in glove box</p>
<p><u>Vehicle Function Checks</u></p> <p><input type="checkbox"/> Removed parts.</p> <p>With the Special Service Tool (SST) (Part Number 00002-62195) attached to the trailer sub wire harness plug and with the engine running, perform the following steps:</p> <p> CAUTION: Be sure the exhaust gas is completely ventilated.</p> <p> CAUTION: Be sure the vehicle is in "Park" and that the parking brake is applied.</p> <p><input type="checkbox"/> Turn on headlamps.</p> <p><input type="checkbox"/> Turn on left turn signal.</p> <p><input type="checkbox"/> Turn on right turn signal.</p> <p><input type="checkbox"/> Apply foot brake.</p> <p><input type="checkbox"/> Turn on left turn signal and apply foot brake.</p>	<p>Scratches or other damage</p> <p>Marker and tail lights on both SST and vehicle are lit.</p> <p>Left turn lights on both SST and vehicle are flashing.</p> <p>Right turn lights on both SST and vehicle are flashing.</p> <p>Stop lights on both SST and vehicle are lit.</p> <p>Left turn lights are flashing and right stop lights are lit on both SST and vehicle.</p>

Checklist - these points **MUST** be checked to ensure a quality installation.

Check:

- Turn on right turn signal and apply foot brake.
- Turn on hazard lights switch.
- With hazard lights switch on, apply the foot brake.
- Turn off the hazard lights switch, apply the foot brake.

The following checks are to be performed with the ignition switch off and the engine stopped.

- Turn on headlamps.
- Apply foot brake.
- Turn on left turn signal.
- Turn on right turn signal.
- Turn on left turn signal and apply foot brake
- Turn on right turn signal and apply foot brake.
- With hazard lights switch on, apply foot brake.
- Turn off the hazard light switch, apply foot brake.

Look For:

Right turn lights are flashing and left stop lights are lit on both SST and vehicle.

All turn signal lights are flashing on both SST and vehicle.

Both stop lights on the vehicle are lit, both turn/stop lights on the SST and the turn lights on the vehicle are flashing.

Both turn/stop lights on the SST and the stop lights on the vehicle are lit.

Marker and tail lights on both SST and vehicle are lit.

Stop lights on both SST and vehicle are lit.

Left turn lights are not lit on both SST and vehicle.

Right turn lights are not lit on both SST and vehicle.

Both stop lights are lit and not flashing on both SST and vehicle.

Both stop lights are lit and not flashing on both SST and vehicle.

All turn signal lights are flashing on both SST and vehicle.

Both stop lights on the vehicle and the turn/stop lights on the SST are lit, but not flashing.

Checklist - these points **MUST** be checked to ensure a quality installation.

Check:

Look For:

Vehicle Appearance Check

- After accessory installation and removal of protective cover(s), perform a visual inspection.

Ensure no damage (including scuffs and scratches) was caused during the installation process.

(For PPO installations, refer to TMS Accessory Quality Shipping Standard.)