

Part Number: PT228-48035
Section I - Installation Preparation

Kit Contents

Item #	Quantity Req'd.	Description
1	1	Hitch Assembly
2	1	Wiring Harness
3	1	Hardware Bag
4	1	Hitch Cover
5	1	DIO Installation Instructions
6	1	Ball Mount

Hardware Bag Contents

Item #	Quantity Req'd.	Description
1	13	M10 x 1.25 x 30mm Bolt (Black)
2	1	M10 x 1.25 Flange Nut

Additional Items Required For Installation

Item #	Quantity Req'd.	Description
1		

Conflicts

Note:

Recommended Tools

Safety Tools	
Safety glasses	
Vehicle Protection	Cloth (Shop Towel)
Blankets	
Special Tools	
L.E.D. Tester	S.S.T. 00002-62195
Installation Tools	
Ratchet	
Socket	12 mm - deep well
Socket	14 mm - deep well
Socket	15 mm - deep well
Extension	4 "
Extension	6 " min.
Torque wrench	0-50 lbf-ft reading
Panel Pry Tool #1	S.S.T. 00002-06001-01
Special Chemicals	
Body Sealer	3M™ Ultra-Pro Body Sealant

General Applicability






Note: All 2004- Lexus RX330
Towing capacity: 2,000 lb.

Recommended Sequence of Application

Item #	Accessory	
1	Receiver Hitch	
2	Wiring Harness Kit	
3		


*Mandatory

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.
	CRITICAL PROCESS: Proceed with caution to ensure a quality installation.
	GENERAL PROCESS: This highlights specific processes to ensure a quality installation.
	TOOLS & EQUIPMENT: Calls out the specific tools and equipment recommended for this process.


Section II - Installation Procedure


A. Protect Exhaust Pipe.

-  1. Cover exhaust pipe with clean shop towel. (Fig. A-1)


 **NOTE:** Muffler/Tail pipe may be sharp and/or hot.

B. Remove Tie-Downs & Hole Plugs.

-  1. Remove and discard tie-downs, four (4) bolts and seven (7) domed rubber plugs from vehicle. (Fig. B-1)


-  2. Remove any excess undercoating that inhibits the bracket from mounting flush to the frame rail. Protect any bare areas with 3M™ Autobody Sealant.

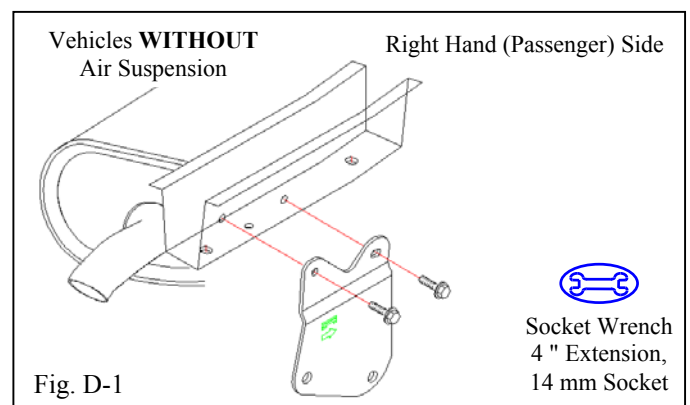
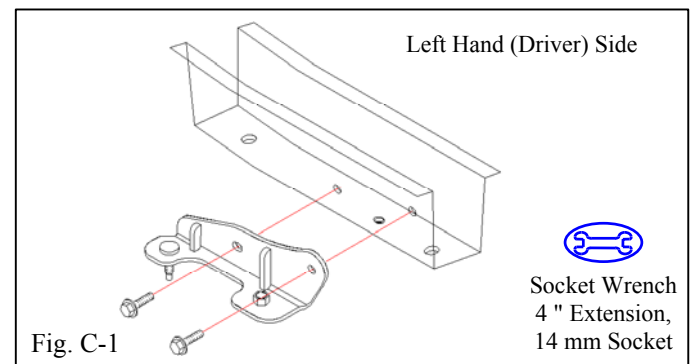
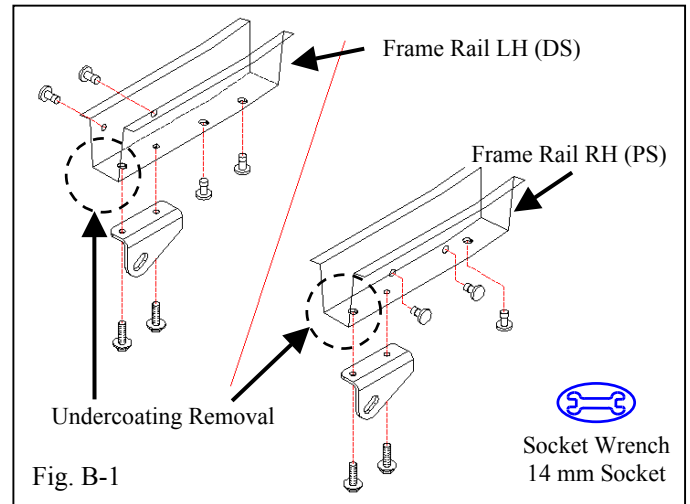
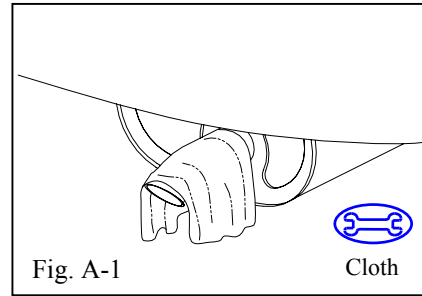
C. Attach Driver Side Support Bracket.

- 1. Install driver side support bracket in position (Fig. C-1.)
- 2. Install two (2) M10 bolts (provided in hardware kit) until part is flush with frame (Fig. C-1.)
-  3. Tighten the two (2) M10 bolts to 37 lbf-ft (50 N-m.) (Fig. C-1)






D. Attach Passenger Side Support Bracket.

FOR VEHICLES WITHOUT AIR SUSPENSION OPTION ONLY. (Steps D. 1. to D. 3..)



- 1. Install passenger side support bracket in position (Fig. D-1.)
- 2. Install two (2) M10 bolts (provided in hardware kit) until part is flush with frame.
-  3. Tighten the two (2) M10 bolts to 37 lbf-ft (50 N-m.)




E. Install Hitch into Position.

-  1. Slide hitch over muffler pipe into installed position. (Fig. E-1)
-  2. Be careful to avoid hitting the heat shield, muffler, and fascia. Hand start M10 bolts and nut (provided in hardware kit.)
-   i. Hand start first M10 bolt in datum hole (① .) (Fig. E-1)
- ii. Hand start the M10 nut on sub-datum weld bolt (② .) (Fig. E-1)
- iii. Hand start M10 bolts in remaining six (6) positions. (Fig. E-1)
-  3. Slide hitch towards the passenger side bracket to close or minimize any gaps.

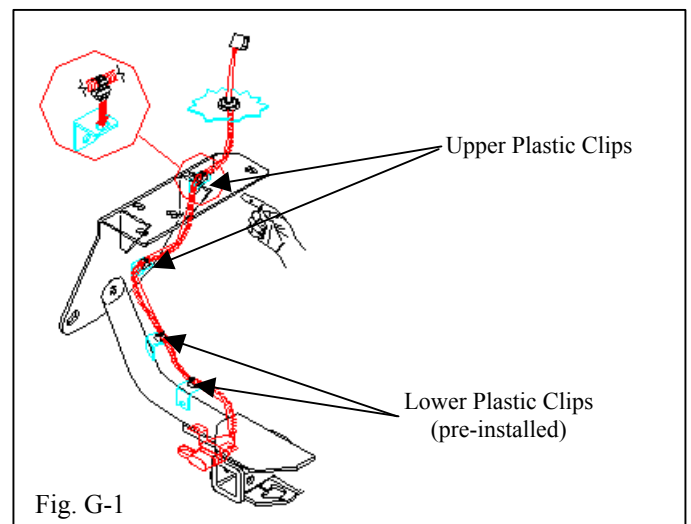
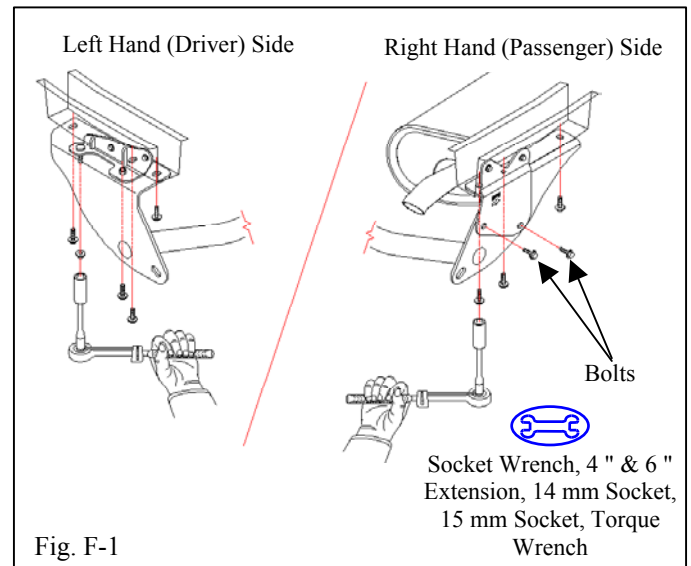
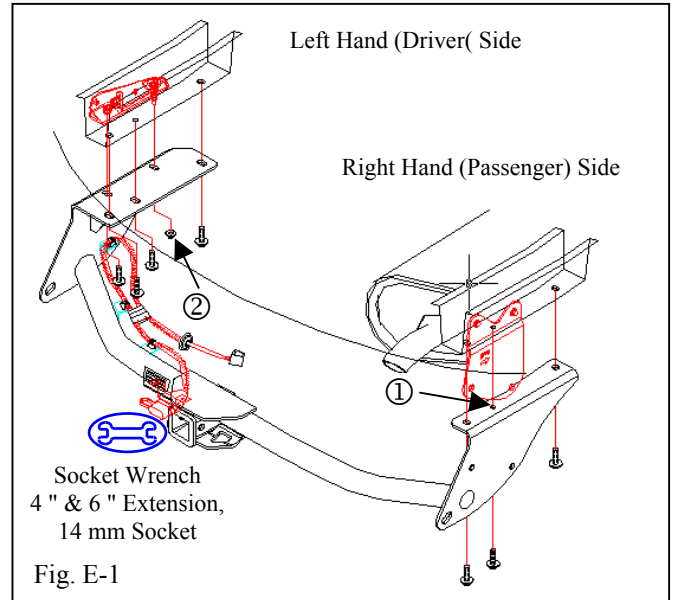
F. Tighten Remaining M10 Bolts.

-  1. Install two (2) M10 bolts through the passenger side support bracket. (Fig. F-1)
-  2. Tighten all nine (9) M10 bolts (14 mm) and the M10 nut (15 mm) to 37 lbf-ft (50 N-m.) (Fig. F-1)
- 3. Remove shop towel from exhaust pipe.

G. Install Wiring to Open Clip on Hitch.

-  1. Snap the two (2) upper plastic clips on the wire harness into the attachment points on the driver side hitch bracket. (Fig. G-1)

NOTE: The two (2) lower wire harness clips are preinstalled to the hitch.

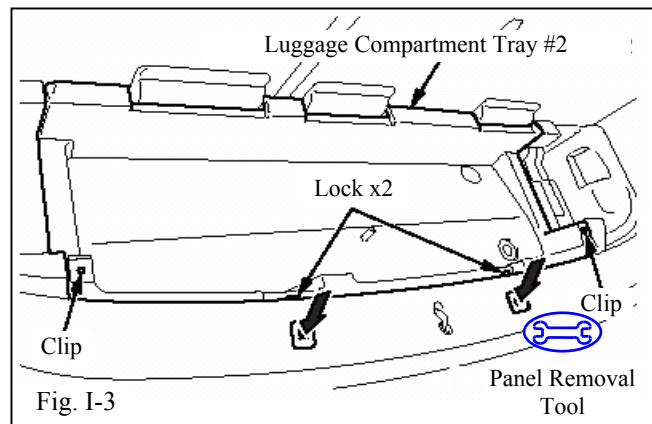
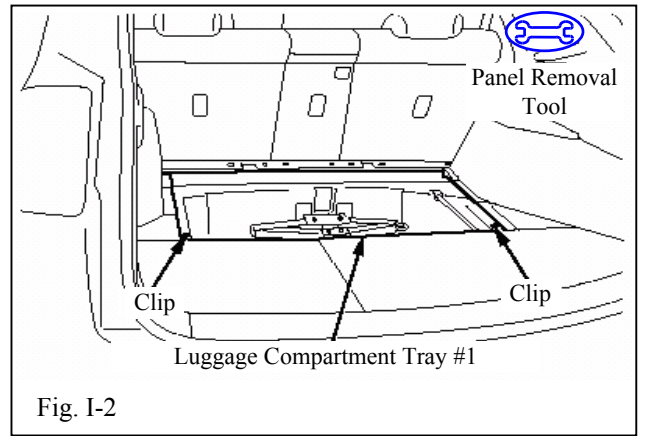
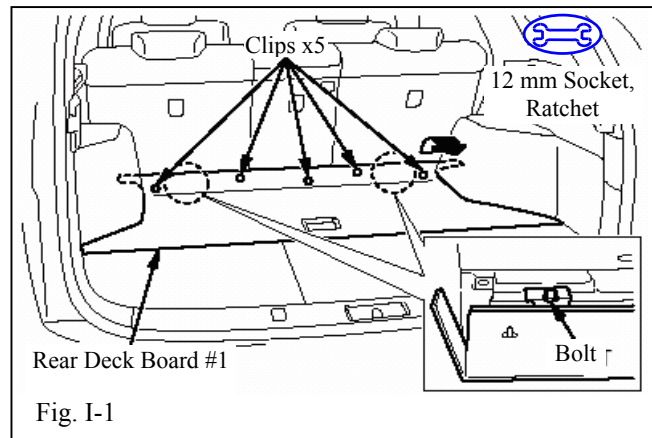
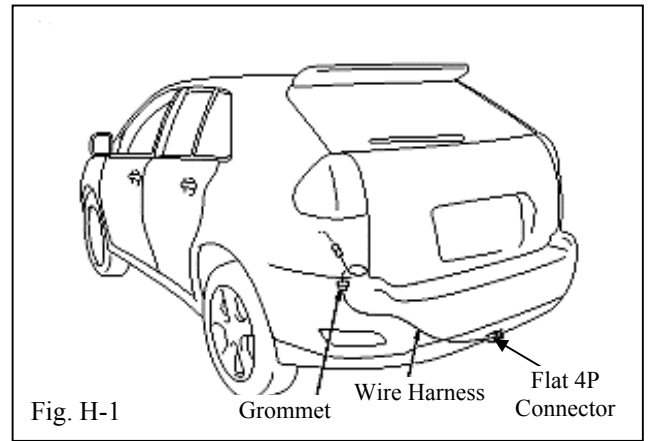


H. Wiring Installation Preparation.

1. Routing location and components of the wire harness are shown in Fig. H-1.

I. Parts Removal.

1. Rear deck board No. 1.
 - i. Remove rear deck board No. 1. (Fig I-1)
2. Luggage Compartment tray No. 1.
 - i. Remove luggage compartment tray. (Fig I-2)
3. Luggage compartment tray No. 2.
 - i. Remove luggage compartment tray No. 2 (Fig I-3)



4. Rear deck board No. 2.

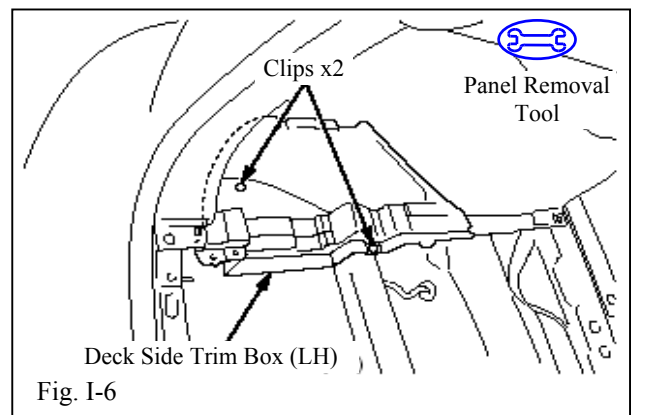
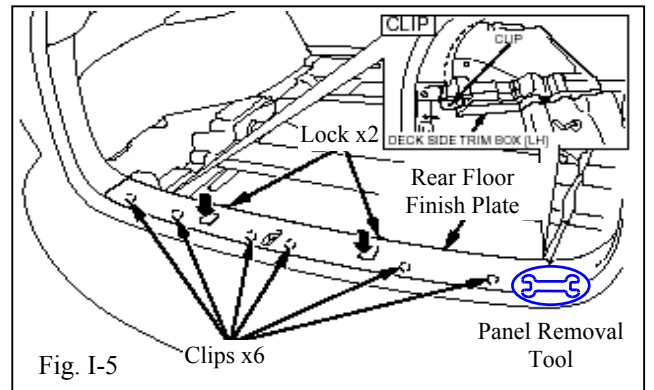
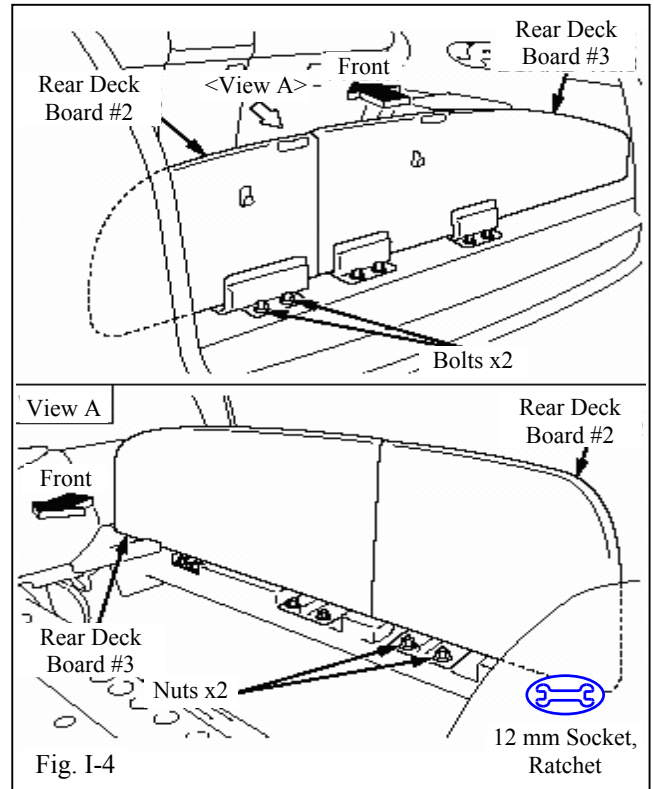
➡ i. Remove rear deck board No. 2. (Fig. I-4)

5. Rear floor finish plate.

➡ i. Remove rear floor finish plate. (Fig. I-5)

6. Deck side trim box (LH).

➡ i. Remove deck side trim box (LH).
(Fig I-6)



7. Grommet

- ➔ i. Remove vehicle grommet and discard. (Fig I-7)

J. Installation.

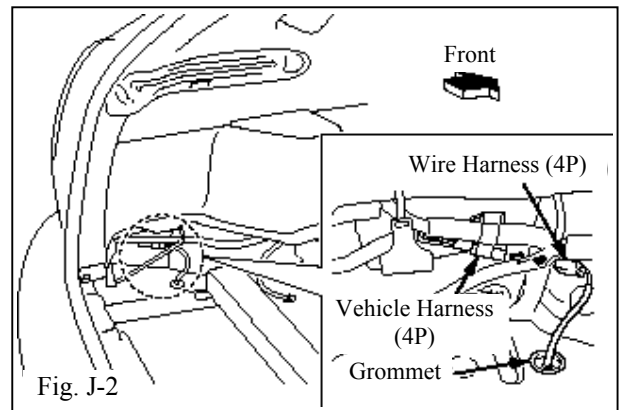
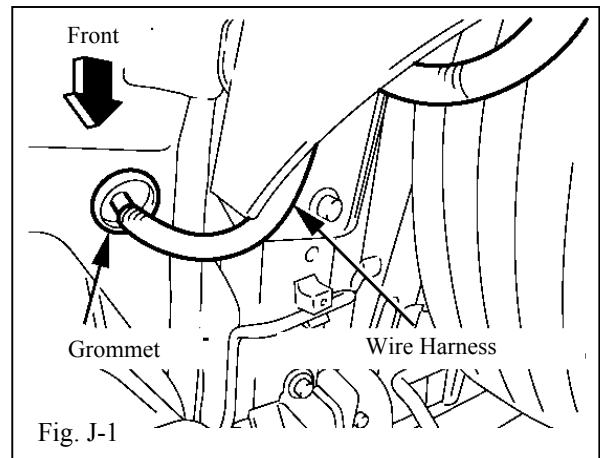
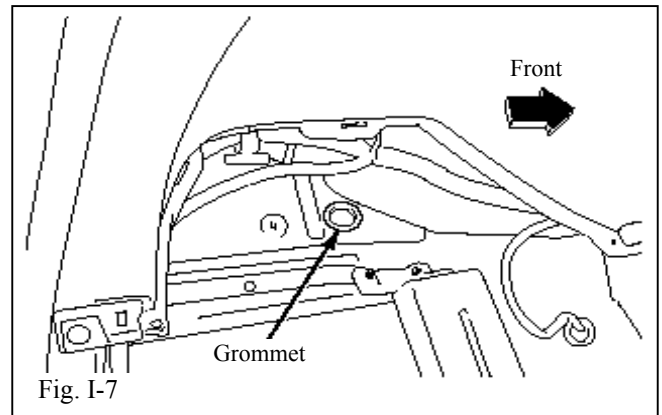
1. Fit and secure the wire harness grommet into the vehicle grommet hole. (Fig. J-1)
2. Vehicle side (4P) connector.
 - i. Connect the vehicle harness (4P) to the wire harness (4P). (Fig J-2)

K. Functional Tests.

- ➔ 1. Complete Functional Verification (Section III).

L. Reassembly.



1. Reinstallation.
 - i. After functional verification, reinstall all temporarily removed parts/panels.





Section III - Functional Verifications

Check:

-  **Caution:** Be sure the exhaust gas is completely ventilated when engine running.
-  **Caution:** Be sure the vehicle is in “Park” and that the parking brake is applied.

- Hitch Plug.
- Shop towel.

Accessory (Wire Harness) Function Checks

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:

The following checks are to be performed with the ignition switch on and the engine running.

- Turn on headlamps
- 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.
- Turn on hazard lights switch.
- With hazard light switch on, apply the foot brake.
- Turn off the hazard light switch, apply the foot brake.

Look For:

- Placed in glove box
- Removed from exhaust pipe

- Tail light on SST is lit.
- Left turn/stop light on SST is flashing.
- Right turn/stop light on SST is flashing.
- Left turn/stop light on SST is flashing and right stop/turn light on SST is lit.
- Right turn/stop light on SST is flashing and left stop/turn light on SST is lit.
- Both turn/stop lights on SST are flashing.
- Both turn/stop lights on SST are flashing.
- Both turn/stop lights on the SST are lit



Section III - Functional Verifications

Check:

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 light switch on, apply the foot brake.
- Turn off the hazard light switch, apply the foot brake.

Look For:

- Tail light on SST is lit.
- Left turn/stop light on SST is flashing.
- Both turn/stop lights on SST are lit.
- Left turn/Stop light on SST should not be lit.
- Right turn/stop light on SST should not be lit.
- Both turn/stop lights are lit and not flashing on SST.
- Both turn/stop lights are lit and not flashing on SST.
- Both turn/stop lights on the SST are flashing.

Vehicle Function Checks

The following checks are to be performed with the ignition switch on and the engine running.

- Turn on headlamps
- Turn on left turn signal.
- Turn on right turn signal.
- Check lamp failure light (on the dash).
- Turn on left turn signal and apply foot brake.

- Marker and tail lights are lit.
- Left turn/stop light is flashing.
- Right turn/stop light is flashing.
- The lamp failure light is NOT lit.
- Left turn light is flashing and both right and left stop lights are lit.

