

## 2001-07 Toyota Highlander Installation Instructions

Serial Number

Please read BOTH these Installation Instructions and the General Towing Instructions before attempting to install or operate this equipment.

- Blue Ox® towing products and accessories are intended to be installed by Blue Ox® Dealers who are familiar with our products and have the equipment and knowledge to do "fit work." When necessary, Blue Ox® Dealers can be found at www.blueox.com or by contacting our Customer Care Department at (888) 425-5382.
- 2. Many Blue Ox® Baseplates are designed to use existing holes and hardware to mount the baseplate to the towed vehicle. Even though bolts are there, do not assume they are adequate for baseplate mounting. Always use hardware supplied in the hardware kit or existing hardware specified in the Baseplate Towing Installation Instructions.

Confirm the towability and pre-towing procedures for your vehicle with the owner's manual or contact the vehicle's manufacturer for specific towing procedures.



Attachment Tab Height: 15 1/4"

Attachment Tab Width: 19 1/2"

## **Bolt Torque Specifications**

Torque in Foot-Pounds for Metric Bolts

<b>Bolt Size</b>	Grade 8.8	Grade 10.9
6MM	6	8
8MM	16	22
10MM	31	40
12MM	54	70
14MM	89	117

## **Bolt Torque Specifications**

Torque in Foot-Pounds for Inch Bolts

<b>Bolt Size</b>	Grade 5	Grade 8
1/4"	10	14
5/16"	19	29
3/8"	33	47
7/16"	54	78
1/2"	78	119
5/8"	154	230

# **WARNING**

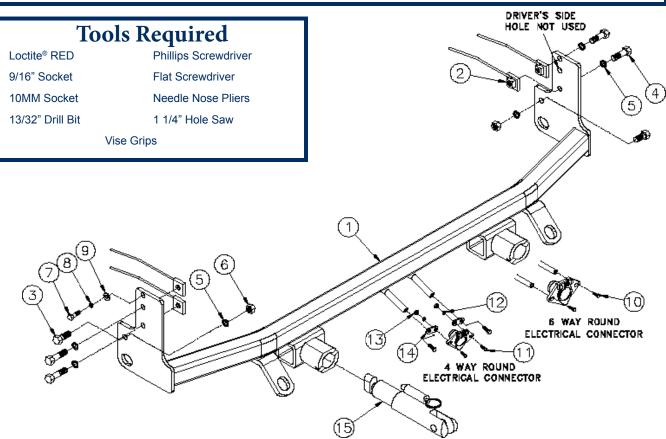
Failure to read and follow these instructions could result in separation of the towed vehicle from the tow bar, causing property damage, loss of towed vehicle, personal injury or death.

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### **Installation Instructions**

		Parts List				
Ref. No.	Qty.	Part #	Description			
1	1	61-6433	WLDM'T, BASEPLATE, BX3775			
2	4	61-5208	WLDT, NUT PLT, 1/4X1X1, 3/8" BLT WIR			
3	2	201-0443	3/8-16 X 1 HEX BOLT GRD.5, ZP			
4	4	201-0368	3/8-16 X 1 1/4" HEX HEAD BOLT,GRD. 5			
5	6	203-0010	3/8" LOCK WASHER, ZP			
6	2	202-0003	3/8-16 HEX NUT, ZP			
7	1	201-0655	6MM-1.0 X 30MM HEX BOLT, GRD8.8,ZP			
8	1	203-0008	1/4" LOCK WASHER, ZP			
9	1	203-0001	1/4" FLAT WASHER, ZP			
10	2	201-0979	#12-14 X 1" SELF DRILLING SCREW, ZP			
11	2	201-0192	10-32 X 1/2" SLOT, RD. HD. SCREW			
12	2	203-0054	#10 LOCK WASHER			
13	2	202-0047	#10-32 HEX NUT			
14	2	101-5822	ADAPTER, 4 WAY CONNECTOR			
15	2	62-3468	ATT TAB ASSY, REM, SF/SB, 1 HOLE			
	2	226-0049	BASEPLATE SAFETY CABLE, 36" CL IV (Not Shown)			
	4	229-0512	QUICKLINK, 1/2, ZP (Not Shown)			
	2	290-0437	RECEIVER, CAP PLUG (BLK) (Not Shown)			



**Important:** 

Use only genuine factory replacement parts on your baseplate. Do **NOT** substitute homemade or non-typical parts. If a bolt is lost or in need of replacement, for your safety and the preservation of your baseplate, be sure to use a replacement bolt of the same grade (In most cases it will be Grade 5, please reference the parts list above). Replacement parts may be ordered through your nearest Blue Ox® Dealer or Distributor.

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### **Vehicle Weight:**

The weight of this vehicle is near the Class III, 5,000 lb. rating limitations. Some models, depending on options, may well exceed this 5,000 lb. rating. Be sure to confirm the weight of your individual vehicle before towing. As of 1999, the Aventa® II is now 10,000 lbs. and either the Aventa® II or the Aventa® LX tow bar must be used for these applications.

Tow Bar Adapters are NOT to be used with vehicles weighing over 5,000 lbs.

Installation Notes: The fascia metal bumper and air baffle are removed and reinstalled during installation of the baseplate. Drilling is required. Trimming of the fascia is required.

The dimensional variations between otherwise identical vehicles can be considerable. While the baseplate was designed for easy installation, it may be necessary to tailor the baseplate slightly to compensate for auto manufacturer's tolerances. These minor adjustments may include filing a hole slightly, bending electrical rods and/ or bending end plates.

The BX8869 Bulb and Socket Wiring Kit is recommended for this vehicle.



3. Using a 10MM socket, remove one metric bolt from inside front wheel well on fascia's upper corner. Repeat for both sides of vehicle. Set bolts aside to be reinstalled later.

### **Installation Instructions:**



 Using a flat screwdriver, remove four plastic push pins from the top of the fascia. Set push pins aside to be reinstalled later.



 Using a flat screwdriver, remove two screws just forward of the front tire, on wheel well.
 Using the flat screwdriver, turn the push pin 90° and lift push pin out. Repeat for both sides of the vehicle. Set screws aside to be reinstalled later.



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### **Installation Instructions**

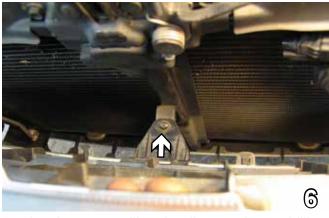




4. Using 10MM socket, remove six metric bolts from lower edge of fascia. Do this around the front of the vehicle.



5. On the passenger side behind the front corner beside the headlight, using a needle nose pliers squeeze the push pin together and pop the front out. Do this on both sides.



 Just between grill and radiator, using a phillips screwdriver remove the screw. Pull fascia corners out to the side of vehicle on both sides then forward. Set fascia and styrofoam aside for later reinstallation.

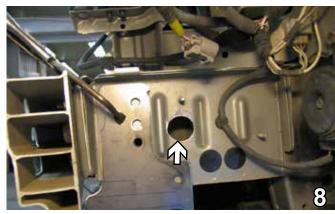




7. On the passenger side, using a 10MM socket, remove three metric bolts from washer reservoir. Unplug and set aside water reservoir and bolts for later reinstallation.

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#### **Installation Instructions**



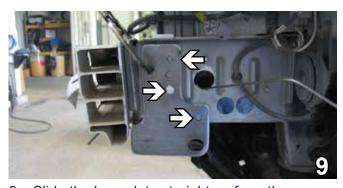
8. On the drivers side, below the stud is a tape covered hole, drill an 1 1/4" hole to get the wire nuts through. (Driver's side shown.) Do this on both sides.

Using a good quality paint, spray cut edges of frame to prevent rusting.

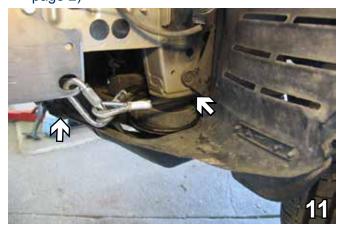
BE SURE TO USE LOCTITE® RED ON ALL BOLTS
BEFORE TIGHTENING. TIGHTEN ALL BOLTS
ACCORDING TO THE TORQUE CHART ON THE
FRONT PAGE OF THESE INSTRUCTIONS OR ON
PAGE 3 OF THE BASEPLATE TOWING GENERAL
INSTRUCTIONS.



- 10. On the passenger side, reinstall the washer reservoir. On the right side (grey arrow), reattach with a 6MM-1.0 x 30MM hex bolt and 1/4" lock and flat washers. Reconnect all hoses and electrical connections.
- 12. Reinstall the styrofoam and bumper. Reinstall fascia, bolts and push pins.



Slide the baseplate straight up from the bottom, push up as far as possible, adjust to a level position with the vehicle and clamp with a vise grip. Align passenger's side with existing hole in frame for washer reservoir (see grey arrow step 10). In the existing hole, start a 3/8"-16 x 1 1/4" hex bolt with 3/8" lock washer attached to 1/4" x 1" x 1" nut plate. Do this to both sides. Some vehicles may have tape over the existing hole that will need to be removed. Using the baseplate as a template, with a 13/32" drill bit drill the other two holes. In the top hole, insert 1 1/4" hex bolt. In the bottom, use a 3/8"-16 x 1" hex bolt with 3/8" lock washer and hex nut. Do the same on the other side. Tighten with Loctite Red. Please note bolt locations on passenger's side. (See page 2)



11. Attach baseplate safety cables, wrap around the lower frame extension twice, or as close as possible. If you are unable to place safety cables in this position, position the cables around a solid piece of the frame. 226-0046 base plate safety cables and 229-0359 quick links are recommended. Be sure the safety cables do not rub against any hoses or moving parts.

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#### **Installation Instructions**





Be sure that **ALL** electrical connections are plugged in properly and functioning **BEFORE** installing the fascia.

DEALER or INSTALLER: Be certain the user receives the instruction sheets for their products.

Install the tow bar and safety cables according to the instructions provided in their packages. When demonstrating to customer, be sure to include all original content and packages. Do **NOT** substitute other devices if the tow bar pins and clips are misplaced.

#### CUSTOMER SERVICE COMMITMENT

Blue Ox is committed to providing you with exceptional customer care throughout your lifetime with our products. Our team is here to assist you with any questions you may have regarding the performance of your product. Simply call 1-800-228-9289 and you can speak with our customer care team.

Additionally, please visit our website to see which rallies our Destination America team will be attending. For a nominal fee, our service technician will service your towing system to ensure it's in proper working condition. Also as a commitment to our customers, should you visit our factory you can stay at our full service Blue Ox campground at no charge along with enjoying a factory tour.

Again thank you for being our customer and for the confidence you have shown in the performance of our products. It is because of customers like you we enjoy the success we have today.



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### **General Information**

- 1. Ensure that your product(s) are registered online at www.blueox.com. It is crucial to register your product(s) so that you may be alerted of product offerings, updates, upgrades, maintenance and safety bulletins, and/ or recalls.
- 2. It is the owner's responsibility to inspect all towing equipment for cracked welds, missing or worn parts and loose bolts before each towing trip. Be sure to use Loctite® Red on all bolts and tighten to the recommended specifications.
- 3. It is the owner's responsibility to hook up all towing equipment per manufacturer's instructions/recommendations.
- 4. Remove the attachment tabs when not in use (if applicable).

## **Notice To Baseplate Installer**

- 1. It is YOUR responsibility to watch for:
  - Oil cooler and air conditioner lines
  - Electrical wires and hoses
  - Missing parts or attaching points on the frame
  - \*\* If the baseplate is improperly installed and is against a wire or hose, it could cause fluid leaks or electrical shorts some time after the actual baseplate installation.

#### Permanent Baseplate Safety Cable Installation

Permanent baseplate safety cables are strongly recommended when towing a vehicle with a tow bar. The principle function of the permanent baseplate safety cables is to prevent the towed vehicle from breaking loose in the event the connection between the frame of the towed vehicle and the baseplate fails or becomes disconnected. The cables must be connected from the baseplate to the frame rail or cross member of the vehicle's frame. The illustrations below show the possible arrangements recommended by Blue Ox®. Each permanent baseplate safety cable must have an adequate weight rating for the towing system. The weight rating of the two (2) cables together will not qualify.

#### Do not mount the permanent baseplate safety cables against wires, hoses or brake lines.

These permanent baseplate safety cables should remain installed as long as the baseplate is installed on the vehicle. Permanent baseplate safety cables are to be used in conjunction with, and NOT a replacement for legally required safety cables attaching the towed vehicle to the towing vehicle.

