

# **BLUE OX**° 2005-07 Saturn Relay

Baseplate Installation Instructions

**Installation Instructions** 

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

- 1. 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 necessary 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 (402) 385-3051.
- 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 and existing hardware specified in the Baseplate 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.



16" Attachment Tab Height:

24" Attachment Tab Width:

### **Bolt Torque Specifications**

Serial Number

Torque in Foot-Pounds for Metric Bolts

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|--|-----------|------------|--|--|
| <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

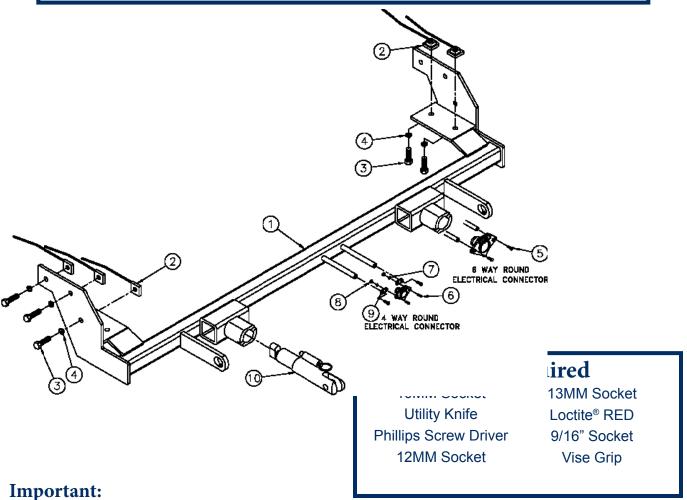
| <b>Bolt Size</b> | Grade 5 | Grade 8 |  |
|------------------|---------|---------|--|
| 1/4"             | 10      | 14      |  |
| 5/16"            | 19      | 29      |  |
| 3/8"             | 33      | 47      |  |
| 7/16"            | 54      | 78      |  |
| 1/2"             | 78      | 119  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

# **Installation Instructions**

| Parts List |      |          |  |  |
|------------|------|----------|--|--|
| Ref. No.   | Qty. | Part #   | Description                                    |  |
| 1          | 1    | 61-6158  | Weldment, baseplate, BX3326                    |  |
| 2          | 10   | 61-5208  | Weldment, 3/8" Nut Plate, w/14" Wire           |  |
| 3          | 10   | 201-0368 | 3/8"-16 x 1 1/4" Hex Bolt, Grd 5, ZP           |  |
| 4          | 10   | 203-0010 | 3/8" Lock Washer, ZP                           |  |
| 5          | 2    | 201-0979 | #12-14 x 1" Self Drilling Screw, ZP            |  |
| 6          | 2    | 201-0192 | #10-32 x 1/2" x 1/2" Slot, Rd.Hd. Screw        |  |
| 7          | 2    | 203-0054 | #10 Lock Washer                                |  |
| 8          | 2    | 202-0047 | #10-32 Hex Nut                                 |  |
| 9          | 2    | 101-5822 | Adapter, 4 Way Connector                       |  |
| 10         | 2    | 62-3468  | Attachment, Assembly, SF/SB (R)                |  |
|            | 2    | 226-0046 | Baseplate Safety Cable, 36" CL III (Not Shown) |  |
|            | 4    | 229-0359 | Quicklink, 3/8, ZP (Not Shown)                 |  |
| 11         | 2    | 290-0437 | Cap Plug, Black (Not Shown)                    |  |



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, or call our Customer Care Team at (402)385-3051. Failing to follow and/or altering these installation instructions in either installation or required equipment will void the manufacturer's warranty.

### **Installation Instructions**

### **Attachment Tabs:**

The weight of this vehicle is near the Class III 5,000 lb rating limitations. Some models, depending on options, may well exceed this 5000 lb rating. The 10,000 lb rated Aventa III or Aventa LX tow bars must be used for these applications. Tow bar adapters are not to be used with vehicles weighing over 5,000 lbs.

### Instructions:

The front fascia, fascia brace and metal bumper are removed for the baseplate installation. Drilling is required. The tow hooks and tow hook covers are removed and not reinstalled on the vehicle. Installer, be sure the tow hooks, covers and push pins are returned to the customer.

Some vehicles fascia's may need trimming. 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 manufactures' 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.



1. Remove 5 push pins from the top of the fascia. (All 5 are shown in picture above.) Set these push pins aside as they will need to be reinstalled.



2. Remove 3 Phillips screwdriver from just forward of the front tires, in the wheel well. This needs to be done on both sides of the vehicle. (The driver's side is shown.) Set these screws aside as they will be reinstalled.



 Just forward of the front tire, on the lower edge of the fascia are two Phillips head screws that need to be removed with a Phillips screw driver. This needs to be done on both sides. (The driver's side is shown.)

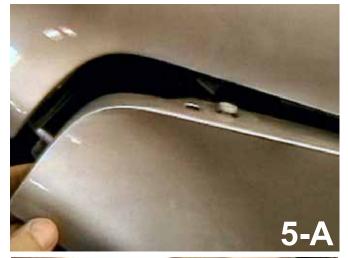
Handling of some cosmetic parts when installing this product may require the use of protective covers, rags, specialty tools, etc. to prevent damage.

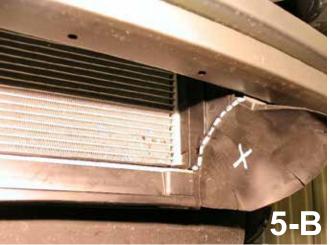
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# **Installation Instructions**



4. Pull driver's side wheel cover away from fascia edge, this will be just forward of the front tires, remove the metric hex nut (top arrow) and loosen the two metric hex nuts (2 lower arrows) with the 10MM socket, this will be done to both sides. (The driver's side is shown.)





- 5A. Pull the fascia corner forward and down to release it on both sides of the vehicle, then pull the forward and set aside.
- 5B. Using the utility knife, cut and remove the cupped portion of the air dam, this is done on both sides of the vehicle. Cut and remove upper portion of the air dam just below the metal bumper, this is done on both sides of the vehicle. This is to open the area for baseplate installation. (The driver's side is shown.)



6. Remove metric bolt from the horn bracket using a 13MM socket, unplug the horn and set aside, this is done on both sides of the vehicle. (The driver's side is shown.)



 Just below the radiator there are four metric bolts to remove on lower air dam with the 10MM socket, set these bolts aside as they will need to be reinstalled.

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### **Installation Instructions**



8. Align the front hole of the baseplate with lower existing home in frame as shown in Step 6. This is located on both sides. (The driver's side is shown.) Insert the nut plate into opening on the top side of the frame to align with the lower existing hole inside the frame, hand tighten 3/8"-16 hex bolt and lock washer wit the 6/16" socket. This will also need to be done on both sides of the vehicle.

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.



9. Using the baseplate as a template, drill two holes in the bottom side of the frame with the 13/32" drill bit. Insert the nut plate into the opening on the top side of the frame to align with lower drilled holes inside the frame. Tighten the 3/8"-16 hex bolts and lock washers with the 9/16" socket, on both sides of the vehicle.



10. Before these holes are drilled, be sure that the baseplate is level with the vehicle. Using the baseplate as a template drill two remaining holes with the 13/32" drill bit, this needs to be done on both sides of the vehicle. (The driver's side is shown.) Insert the nut plate into the opening of the frame to align with the drilled hole. Then tighten 3/8"-16 hex bolts and lock washers on both sides of the vehicle.

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



11. Reinstall the horn brackets, lower air dam and the fascia.

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### **Installation Instructions**

- 12. Install the tow bar and safety cables according to the instructions when demonstrating this to the customer. Be sure to include all the contents and packages.
- 13. Do **NOT** substitute other devices if the tow bar pins and clips are misplaced.

#### **DEALER or INSTALLER:**

Be certain the user receives the instructions sheets for their products.



### **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 (402) 385-3051 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.





© 2005, 06, 11 Blue Ox One Mill Road, Industrial Park Pender, Nebraska 68047 Phone: (402) 385-3051 Fax: (402) 385-3360 www.blueox.com

### **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.

