



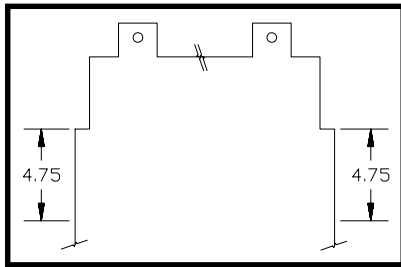
**BX3309 Installation Instructions**  
**1996-98 Saturn SL2, SW2**  
**1996-98 Saturn SL, SL1, SW1**  
**1996 Saturn SC1**

**Utilization of Blue Ox baseplates with any tow bar not approved by Automatic Equipment Mfg. Company invalidates the limited warranty.**

1. Read the General Instruction Sheet included with this baseplate.
2. The baseplate mounts behind the grill in the lower part of the front bumper. It attaches to the upper frame just below the headlights and to the lower sub-frame just behind the sway bar mounts.
3. Remove the headlight assemblies. They are accessed through the engine compartment. Each assembly is attached with two bolts. Use a 10mm Socket. Unplug the wiring and set the assembly aside.
4. Remove the four bolts that hold the headlight mounts to the frame. Remove the mounts and set them aside.
5. It will be easier to install the baseplate if the whole plastic bumper is removed. There are three plastic rivets on the top center of the bumper and seven along the bottom edge of the bumper. In the fender well on each side there are three screws (7mm wrench) to remove. There are two bolts on each side that bolt the top outer edge of the bumper to the fender. From under the bumper you will need to reach up inside with a 10mm socket on a long extension and loosen these bolts. The bumper can then be pulled forward and removed.
6. The black plastic center piece which is bolted to the bottom of the aluminum bumper should also be removed. There are three bolts that mount this to the bumper.
7. Look directly below the headlight mount areas. Note the fabricated sheet metal tube assemblies which come forward on each side. The ends of these tubes serve as the attachment points for the silver colored internal aluminum bumper channel. The left and right frame mount brackets (Items 2 & 3) will be attached to these tubes in a later installation step.
8. Remove the plastic belly pan. It is attached to the chassis below the engine by screws and plastic rivets (four rivets on 1996 and newer). Use a 10mm socket and a flat screw driver. The air dam, which is attached to the belly pan, should be removed by unhooking the mounting springs.
9. The baseplate (Item 1) will install just in front of the radiator. The baseplate will bolt to the frame mounts (Items 2 & 3). The frame mounts are different for driver's and passenger's side. The drivers side bracket (Item 2) is notched to clear an air conditioning line. The "C" shape of the mount fits around the top, inside, and bottom of the rectangular tube assemblies identified in Step #10.
10. Note that there are long bumps and depressions that run around the perimeter of the frame tubes. The frame mounts (Items 2 & 3) should attach to the frame tube just to the rear of these bumps and depressions. Slide the frame mounts into their approximate position. Mark on the radiator shroud the approximate location for the baseplate so it will be the proper height to bolt to the frame mounts. Note: The baseplate bolts to the front of the frame mounts. Remove the frame mounts.

**Automatic**

- Figure 1 gives measurements for the vertical locations of the holes in the shroud for the baseplates access. Compare these measurements to the marks you made in Step #13. The measurements in Figure 1 are to the center of the hole. The front-to-back location of the access hole is just ahead of the back edge of the shroud. Do not cut the shroud completely out the back, as that will considerably weaken it. With the hole located, use a utility knife to cut a 1 1/4" square in the shroud on both sides. If you have a small drill and an 1 3/8" hole saw, you may be able to mark the hole on the inside of the shroud and drill a round hole from the inside of the shroud.

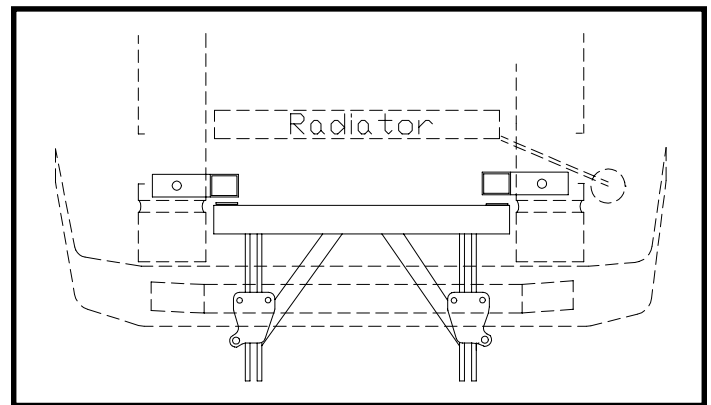


**Figure 1**

- Place the baseplate so that the braces on each set of attachment tabs are positioned at the center of the cross frame as shown in Figure 2. Clamp the baseplate to the frame.
- One side at a time, install the frame mounts. Using the 3/8-16 x 2 1/4" bolts and 3/8" hex nuts ( passenger side only), lock washer and flat washer (Items 10, 15, 16 & 13) loosely bolt the frame mounts (Items 2 & 3) to the ends of the baseplate (Item 1). The driver side frame mount (Item 2) uses 3/8" wire nuts (Item 4) because of the condenser. If the shroud interferes with the proper location of the cross mount, remove it temporarily until the frame mounts are bolted to the frame mount. The frame mounts are properly positioned when the mount is located just to the rear of the depressions/bulges and the vertical leg of the frame mount is tightly up against the inside vertical wall of the frame tube. You may need to reposition the baseplate so the frame mounts are in the correct position.
- Using the frame mounts as a template, transfer punch center marks, pilot drill, and finish drill the 3/8" holes on each frame mount. Note that these holes should be drilled through the flange on the outside of the frame tube. Apply Loctite to the two 3/8 x 1 3/4" bolts (Item 12) and bolt the frame mounts to the

frame tube on each side. Insert the upper and lower frame doubler (Items 5 & 6), as shown on the main diagram on the last page. Use a 3/8 nut and the flat & lock washers (Items 13, 16 & 15) on each bolt.

- With the frame mounts and baseplate bolted together, center punch and drill the holes for each brace of the baseplate. Use the 3/8-16 x 1 1/4" bolt and lock washer with the 3/8" wire nuts (Items 11, 16 & 4). Be sure to use Loctite on each bolt and tighten.
- Replace the radiator shroud if you removed it along with the belly pan, air jam and bumper. You will need to notch the black plastic center piece to clear the attachment tabs.
- Replace headlight assemblies.

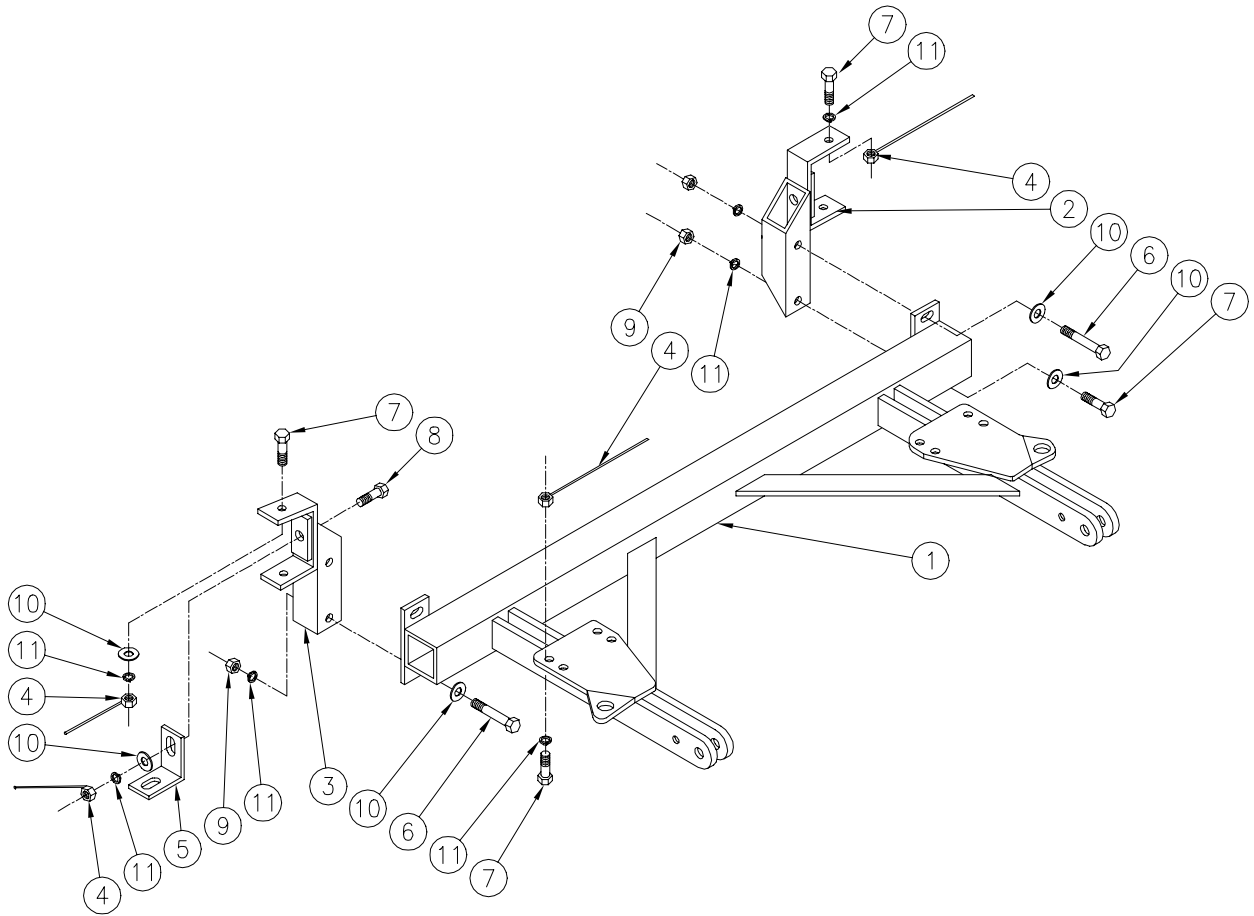


**Figure 2**

- The dimensional variations between otherwise identical cars can be considerable. While the location and size of the holes in the baseplate were designed to allow for easy installation, it may be necessary to file a hole slightly to allow a bolt to clear.
- Install the tow bar and safety cables according to the instructions included in their packages.
- Do not substitute other devices if the tow bar pin and clip are lost.
- DEALER OR INSTALLER: BE CERTAIN THE USER RECEIVES THE INSTRUCTION SHEET.**

## Tools Required

7mm Wrench	10mm Wrench	9/16" Wrench
Medium Flat Screwdriver	13/32" Drill Bit	Loctite
Utility Knife	Drill	C Clamps



## Parts List

Ref. No.	Qty.	Part No.	Description
1	1	61-4974	Baseplate, BX3309
2	1	61-4897	Driver's Side Frame Mount
3	1	61-4898	Passenger's Side Frame Mount
4	7	61-4978	3/8" Wire Nut
5	2	102-5136	Lower Frame Doubler
6	3	201-0332	3/8-16 x 2 1/4 Hex Bolt, Grade 5
7	9	201-0368	3/8-16 x 1 1/4 Hex Bolt, Grade 5
8	2	201-0404	3/8-16 x 1 3/4 Hex Bolt, Grade 5
9	10	202-0003	3/8-16 Hex Nut
10	10	203-0003	3/8 Flat Washer
11	14	203-0010	3/8 Lock Washer