



BX3304 Installation Instructions 1995-96 Saturn SC2

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 air dam 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. The baseplate mounts to the vehicle with 16 bolts, all of which are provided in the baseplate package.
4. To allow for installation of the baseplate, the headlights, belly pan, shroud, and bumper insert will have to be removed from the car.
5. To remove the headlights, the first three or four bolts holding the top of the fenders on will have to be removed to allow access to one of the headlight mount bolts on each side. The other mount bolts are accessible from the top.
6. Look directly below the headlight mount areas. Note the fabricated sheet metal rectangular tubular 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 will be attached to these tubes in a later installation step.
7. Remove the plastic belly pan which holds the vertical air dam with four springs. There are four plastic push pins to remove with a flat screwdriver; two in front and two in the back.
8. Next remove the plastic bumper insert piece. With a 10mm socket, remove the three nuts from the top of the piece. There is a nut in the center and one on each end. Also remove the plastic, vertical shroud at this time. There are two bolts in the bottom of the shroud to remove with the 10mm socket. Open the hood and remove the two plastic push pins at the top of the shroud and it should come straight down.
9. The baseplate will mount in front of the radiator. The ends of the cross tube will extend through the sides of the shroud in front of the radiator. Once through the sides of the shroud the baseplate will bolt to the frame mounts. The frame mounts are different for driver's and passenger's side. The d-side bracket 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 #6.
10. Notice the splash guards at the ends of the bumper under the front fenders. At the upper front of the splash guard there is plastic push pin that attaches it to the bottom of the frame member. Remove this pin and move the tab out of the way. It may be helpful to remove the screw in the bottom of the splash guard on the bumper.
11. The hole for the just removed push pin will be used for the bottom bolt on the frame mounts. Hold the proper mount over the frame tube and line up the bottom holes if possible. If the holes do not match, hold the mount tight against the inside of the tube and line the holes up as best as possible. Use a 13/32" and 17/32" transfer punch to mark the two hole locations on the top of the mount.

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12. Remove the mount and use a 13/32" and 17/32" drill bit to drill out the two top holes. Bend one of the 1/2 nut wires so the flange side of the whiz nut lies over the inside of the just drilled holes. This can be done by inserting the nut through the large opening in the OUTSIDE of the frame tube. On the driver's side mount, insert two 1/2 x 1 1/2 hex bolts in the vertical holes pointing forward and then place the mount over the frame tube. The air conditioner hose on this side will not permit the installation of the bolts after the mount is attached. Place a 1/2 lock washer on a 1/2 x 1 1/2 hex bolt, apply Loctite to the threads, and start the bolt into the whiz nut. Also start a 3/8 x 1 hex bolt through the outside hole and start a 3/8 lock washer and nut. Use Loctite here also. When both bolts are started they may be fully tightened. Repeat for the passenger's side.
13. Using the frame mount as a template, drill out the bottom hole with a 17/32" bit. Bend a 1/2 nut wire and insert it through the same opening as before. Apply Loctite to the threads of a 1/2 x 1 1/2 bolt and start the bolt, along with a 1/2 lock washer, into the whiz nut, and fully tighten.
14. Hold the baseplate into position in front of the radiator and start the four 1/2 x 1 1/2 bolts through the vertical holes on the frame mounts and into the mounting plates on the baseplate. The attachment tabs should point forward and protrude out of the horizontal opening in the fender. Start a 1/2 nut on the two bottom bolts to hold the baseplate in place.
15. The shroud and the bumper insert will need to be trimmed and reinstalled before the baseplate is secured. Begin by holding the shroud under the baseplate. Notice the vertical pieces at each end. A small notch approximately 1 1/2" by 1 1/2" will need to be trimmed out of the front of these pieces about halfway up to allow the baseplate tube to come through.
16. Now hold up the bumper insert and notice the vertical flat pieces. The ends of these flats will need to be trimmed off to allow access for the baseplate tube. Hold the piece upside down and mark where the bottom of the insert will need to be notched out for the bottom support pieces of the baseplate. After all trims have been made, remove the baseplate and reinstall the shroud and bumper insert. Replace all plastic push pins, and fully tighten all nuts and bolts at this time.
17. Remount the baseplate by starting the four 1/2 x 1 1/2 bolts. Apply Loctite to the threads and start a 1/2 lock washer and nut on each bolt. Do not tighten at this time.
18. Remove the air dam from the plastic belly pan by unsnapping the four springs. Replace the belly pan with the four plastic push pins.
19. Hold the air dam up in position where it will be mounted on the belly pan. Extending down from the baseplate main tube are two mounting brackets. These brackets should be sitting just ahead of the air dam. Two slots will need to be cut in the air dam to allow the rear mounts to come through the air dam. The slot will need to be about 1/2" high and 2" long. Mark the air dam for the slots just below each of the brackets from the main cross tube. Remove the air dam and cut the slots with a utility knife. Mount the air dam to the belly pan with the springs.
20. The rear mounts attach to the lower brackets on the baseplate cross tube and to the bottom of the frame just behind the sway bar mounts.
21. Just behind each sway bar mount is a 5/8" diameter hole. This hole will be the mount hole for the rear mount. Behind this hole is a larger hole. The larger hole gives access for the 5/8 nut wire. Fish the nut wire into the frame and align the nut over the hole with the flange side of the nut against the frame. Slide the front end of the rear mount through the air dam until the rear hole in the mount aligns with the hole in the frame. Start a 5/8 x 1 3/4 bolt through the rear mount into the frame. Place two 5/8 flat washers between the frame and the rear mount so the rear mount will clear the bottom of the sway bar mount. Be sure to include a 5/8 lock washer on the bolt head and apply Loctite to the threads. Repeat on the other side but do not tighten yet.

22. Apply Loctite and start four 1/2 x 1 3/4 bolts and lock washers through the front holes in the rear mount into the brackets on the baseplate cross tube. When all bolts are started, tighten completely.
23. Tighten the 5/8 bolts as well as the 1/2 bolts started in Step #17.
24. Replace headlight assemblies.
25. 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.
26. Install the tow bar and safety cables according to the instructions included in their packages.
27. Do not substitute other devices if the tow bar pin and clip are lost.
28. DEALER OR INSTALLER: BE CERTAIN THE USER RECEIVES THE INSTRUCTION SHEET.

Tools Required

10mm Socket	3/4 Socket	3/4 Wrench
9/16 Socket	9/16 Wrench	15/16 Socket
17/32 Transfer Punch	13/32 Transfer Punch	17/32 Drill Bit
13/32 Drill Bit	Flat Screwdriver	Loctite Blue
Utility Knife		

Parts List

Ref. No.	Qty.	Part No.	Description
1	1	61-4533	Weldment, Baseplate, BX3304
2	2	61-3992	Weldment, Rear Mount
3	1	61-4534	Weldment, Frame Mount, DS
4	1	61-4535	Weldment, Frame Mount, PS
5	4	61-4029	Weldment, 1/2 Nut Wire
6	2	61-3997	Weldment, 5/8 Nut Wire
7	4	201-0068	1/2-13 x 1 3/4 Hex Bolt, Grd 5
8	8	201-0051	1/2-13 x 1 1/2 Hex Bolt, Grd 5
9	2	201-0286	5/8-11 x 1 3/4 Hex Bolt, Grd 5
10	2	201-0443	3/8-16 x 1 Hex Bolt, Grd 5
11	4	202-0005	1/2-13 Hex Nut
12	2	202-0003	3/8-16 Hex Nut
13	12	203-0012	1/2 Lock Washer
14	4	203-0006	5/8 Flat Washer
15	2	203-0013	5/8 Lock Washer
16	2	203-0010	3/8 Lock Washer

