



## BX3303 Installation Instructions 1993-94 Saturn SC2

1. Read the General Instruction Sheet included with this baseplate.
2. To allow for installation of the baseplate, the headlights, blinker lights, belly pan, air dam, and bumper cover will have to be removed from the car.
3. 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.
4. Remove the blinker lights, and air dam.
5. The bumper cover wraps around all the way back to the wheel well. Unbolt the cover from the wheel well. There are two bolts on each side of the car near the wheel well where the bumper cover bolts to the fender. These bolts are inside the wheel well. They will have to be removed using a long 18"-24" extension on a 10mm socket. The rest of the bolts on the bumper cover are accessible from the top or bottom of the cover.
6. In front of the radiator there is a shroud that covers the radiator and stretches out to the bumper cover. Remove the two bolts and two plastic rivets that mount the shroud to the car and pull the shroud down and off the car.
7. Note that there is an aluminum bumper bolted to the end of the frame rails. Attached to the front of the bumper is a gray "honey-combed" piece of plastic. The baseplate wraps around the bumper and the tow bar attachment tabs will be about 1 1/2" above the bottom of the bumper. The gray plastic will interfere with baseplate and must be notched to allow clearance. Measure 12" either side of the center of the bumper. Using a utility knife, cut out a 2" x 2" square of the plastic all the way back to the bumper. The bottom of the square should be even with the bottom of the bumper.
9. The frame mounts (Items 3 & 4, p. 3) mount to the inside of the frame rails. To locate the mounts along frame rail, hold the main mounts up under the bumper, with the large notch in the top of the main mounts around the bumper. Center the bumper in the notch. Hold the frame mount around the frame rail and slide it up against the back of the main mount. Note the location of the frame mount. Set the main mount aside and repeat the procedure for the other side.
10. With the frame mounts positioned in the locations found in Step 9, use 13/32" and 17/32" transfer punches to mark the centers of the holes which will be drilled in the frame rail. Center punch the marks and drill the holes.
11. Using 3/8" x 1" bolts, nuts, and lock washers and 1/2" x 1 1/2" bolts, lock washers, and nut wires, loosely bolt the frame mounts to the frame rails. Apply Loctite to the 1/2" bolts before starting. Apply Loctite to the 3/8" bolts just before final tightening.
12. Loosely bolt the main mounts to the frame mounts on each side using a 1/2" x 1 1/2" bolt, nut, and lock washer and a 3/8" x 1 1/2" bolt, nut, and lock washer.
13. Loosely bolt the cross bar between the main mounts using four 3/8" x 1 1/2" bolts, nuts, and lock washers. Note: The back two nuts are welded to the main mount.
14. Reattach the air dam to the belly pan. The main mounts extend down to meet the rear mounts. The rear mounts will need to come through the air dam to get to the main mounts. The air dam will need to have a 1/2" tall by 2 1/2" wide slot cut for clearance. Estimate the position of the slot from the bottom of the main mount and cut the slots.

# Automatic

15. Just behind the sway bar mount is a 5/8" diameter hole. This hole is the attachment hole for the rear mount. Behind this hole is a slightly 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 5/8" hole. Slide the front end of the rear mount through the slot in the air dam until the hole in the rear of the mount aligns with the hole in the frame. Place two 5/8" flat washers between the mount and the frame so the mount will clear the bottom of the sway bar mount. Start a 5/8" x 1 3/4" bolt and lock washer through the mount into the frame. Apply Loctite, but do not tighten yet. Repeat this step for the other side.
16. Start four 1/2" x 1 3/4" bolts, nuts, and lock washers through the rear mounts into the main mounts. Apply Loctite, but do not tighten yet.
17. On the inside of each main mount there is a bracket that should be up against the bottom of the aluminum bumper. Use the hole in the bracket as a template and drill a 13/32" hole into the bottom of the bumper. Start a 3/8" x 1 1/2" bolt and lock washer into a 3/8" nut wire inside the bumper. Apply Loctite, but do not tighten yet.
18. With all bolts aligned, apply Loctite where necessary and tighten all bolts. Start with the cross bar bolts first.
19. Replace the radiator shroud. The shroud may have to be bent to clear the baseplate, but should miss the baseplate when back in its proper position.
20. The bumper cover must have openings cut in it to allow the tow bar attachment tabs to stick through. The tabs come through the cover just below the seam between the bottom and top half of the bumper cover. There is a depression with a plastic insert in this area. Both the cover and the plastic insert will have to be cut. From the center of the cover measure 12" either side of center and cut a 1 3/4" x 1 3/4" square in middle of the depression. Test fit the cover and adjust the size of the squares as needed. If the baseplate is ever removed, a new insert can be purchased to cover the holes in the bumper cover.
21. Replace the bumper cover, blinker lights, and headlights.
22. 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.
23. Install the tow bar and safety cables according to the instructions included in their packages.
24. Do not substitute other devices if the tow bar pin and clip are lost.
25. DEALER OR INSTALLER: BE CERTAIN THE USER RECEIVES THE INSTRUCTION SHEET.

### Tools Required

7mm Socket	10mm Socket	3/4 Socket
9/16 Socket	9/16 Wrench	15/16 Socket
17/32 Transfer Punch	17/32" Drill Bit	13/32" Transfer Punch
13/32" Drill Bit	Utility Knife	Loctite Blue
Medium Flat Screwdriver		

## Parts List

Ref. No.	Qty.	Part No.	Description
1	1	61-4089	Weldment, Cross Brace, BX3303
2	2	61-3992	Weldment, Rear Mount
3	1	61-3994	Weldment, Frame Mount, D-Side
4	1	61-3995	Weldment, Frame Mount, P-Side
5	1	61-4090	Weldment, D-Side Main Mount, BX3303
6	1	61-4091	Weldment, P-Side Main Mount, BX3303
7	4	61-4029	Weldment, 1/2" Nut Wire
8	2	61-3997	Weldment, 5/8" Nut Wire
9	2	61-4902	Weldment, 3/8" Nut Wire
10	4	201-0068	1/2-13 x 1 3/4 Hex Bolt, Grd 5
11	6	201-0051	1/2-13 x 1 1/2 Hex Bolt, Grd 5
12	4	202-0005	1/2-13 Hex Nut
13	2	202-0072	1/2-13 Whiz Flange Lock Nut
14	8	203-0012	1/2 Lock Washer
15	2	201-0286	5/8-11 x 1 3/4 Hex Bolt, Grd 5
16	4	203-0006	5/8 Flat Washer
17	2	203-0013	5/8 Lock Washer
18	8	201-0440	3/8-16 x 1 1/2 Hex Bolt, Grd 5
19	2	201-0443	3/8-16 x 1 Hex Bolt, Grd 5
20	10	203-0010	3/8 Lock Washer
21	6	202-0003	3/8-16 Hex Nut
	2	226-0046	Baseplate Safety Cable, 36" CL III (Not Shown)
	2	229-0359	Quicklink, 3/8, ZP (Not Shown)

