



## **BX2120 Installation Instructions 1995 Mercury Grand Marquis**

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

1. Read the General Instruction Sheet included with this baseplate.
2. The baseplate mounts to the car using six bolts, all of which are provided with the baseplate package.
3. Use an 8mm socket to remove the six bolts that attach the belly pan to the bottom of the car. There are four in the front and two in the back, along with a plastic push pin that will need to be removed with a flat screwdriver. There are also two push pins in the upper front. Remove these push pins and set the belly pan aside.
4. The bumper will also need to be removed for installation. Begin by raising the hood. Notice the large black plastic radiator cover. Remove the eight plastic push pins with the screwdriver and set this cover aside.
5. Remove the two parking lights from the front of the bumper. Use a phillips screwdriver to remove the two screws on each end. Pull out on the light, unplug the wires from the back, and set the light aside. The turn lights (outside of the headlights) will also need to be removed. Remove the phillips screw on the back end. There is also a nut on the front of the light that will need to be removed. The bolt on the light points toward the center of the car and the nut can be seen at the ends of the radiator. Use an 11mm socket to remove this nut and pull the turn lights out. Screw out the two bulbs from the back of the light and set it aside.
6. At each end of the bumper, in front of the tire, there are two phillips screws that need to be removed. Also use the 8mm socket to remove the bolts on the bottom end of the bumper.
7. Notice the small vertical bolt that was exposed when removing the turn lights. Use the 8mm socket to remove this bolt and then use the socket and a long extension to remove the horizontal bolt just behind this one. The long extension and socket can be inserted in front of the tire between the bumper and the splash guard.
8. Have an assistant pull lightly forward on the front of the bumper. From underneath the car, find four plastic tabs on the top of the bumper that fall through slots on the aluminum bumper. Use the flat screwdriver and pry these tabs up. The bumper should then be free. Pull straight forward on the bumper as you pull the ends out, and set the bumper aside. Use a tape measure to take measurements of the location of the aluminum bumper so it can be returned to its original position later in the installation.
9. Notice where the bumper mounts to the frame of the car at each end. There is a round bar that inserts into the end of the frame rail. This bar is secured inside the frame rail with a horizontal bolt running parallel with the bumper. Remove this bolt on each side with a 15mm wrench and 18mm socket.
10. Notice the two holes in the bottom center of the aluminum bumper. These holes are one inch in diameter and seven inches apart. Above these large holes are smaller holes that need to be drilled out with a 13/32" bit.
11. When the holes are drilled out, hold the baseplate into position with the help of an assistant. The upper mounts should go outside of the frame rails. Apply Loctite to the bolt threads of the 12mm x 80mm bolts and start the bolts into the upper mount slots and through the frame rails. Secure the bolts with the nut removed in Step #9, but do not tighten yet.
12. 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.
13. Start the spacer tubes into the large holes in the bottom of the bumper and start the 3/8 x 2 bolts through the baseplate, spacer, and the just drilled bumper holes. Reach through the end of the bumper and secure the two bolts with the 3/8 hex whiz nuts. Use Loctite on these bolts and tighten with a 9/16" socket and wrench.
14. Use a 19mm wrench and 18mm socket to snug the bolts started in Step #11. Use the tape measure and move the bumper back to its original position, and fully tighten the bolts.

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15. The holes in the outside rear supports should be sitting flat on the bottom of the frame rails. Use the baseplate as a template and drill a hole through each frame rail with a 17/32" bit. Start the welded nut plate through the large slot above the 12mm bumper bolt. Bend the wire so the plate sits flat over the just drilled hole. Apply Loctite to the threads of the 1/2 x 2 bolt and start it, along with a 1/2 lock washer, into the nut plate. Repeat on the other side and fully tighten each bolt with a 3/4" socket.
16. The plastic bumper can now be reinstalled onto the car. The attachment tabs and convenience links should protrude through the long horizontal opening in the bottom of the bumper. Slide the bumper over the baseplate and secure it with the three bolts and two screws on each end.
17. Reattach the turn lights and parking lights and check them to be sure they work. The plastic radiator cover and belly pan can now be secured with the push pins and bolts.
18. Install the tow bar and safety cables according to the instructions included in their packages.
19. Do not substitute other devices if the tow bar pin and clip are lost.
20. DEALER OR INSTALLER: BE CERTAIN THE USER RECEIVES THE INSTRUCTION SHEET.

### Tools Required

8mm Socket	11mm Socket	15mm Wrench
18mm Socket	19mm Wrench	3/4" Socket
9/16" Wrench	9/16" Socket	13/32" Drill Bit
Flat Screwdriver	Phillips Screwdriver	17/32" Drill Bit
Loctite Blue	Tape Measure	

### Parts List

Ref. No.	Qty.	Part No.	Description
1	1	61-4678	Weldment, Baseplate, BX2120
2	2	61-3799	Weldment, Nut Plate
3	2	107-1941	Spacer Tube, BX2120
4	2	201-0283	1/2-13 x 2 Hex Bolt, Grd 5
5	2	201-0591	12mm-1.75 x 80mm Hex Bolt, Grd 8.8
6	2	201-0444	3/8-16 x 2 Hex Bolt, Grd 5
7	2	203-0012	1/2 Lock Washer
8	2	202-0071	3/8-16 Hex Whiz Nut
E	2		Existing Nut

