



BX1931 Installation Instructions 1997-99 Mitsubishi Mirage

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

Installation of this baseplate requires removing the headlights, the small in the middle of the upper bumper and the bumper molding itself. Holes will need to be drilled in the vehicle's frame.

1. Read the General Instruction Sheet included with this base plate.
2. Remove the head lights so that the bumper molding can be removed. The head lights consist of two separate pieces. Remove the bolt and nut on the inside piece of the headlamps and the one bolting the two pieces together. When the nuts and bolts are removed, slide the outside piece out first.
3. The small grill located in the middle of the upper bumper can be removed by pulling back the small locking tabs on the back side of the grill. Now remove the 10mm bolts and braces on the top of the molding.
4. Remove all the screw rivets and bolts that are on the lower part of the bumper. Remove two of the small Phillips screws that hold the bumper molding to the fender well (the ones directly in front of the tires). There are two bolts that hold the molding to the quarter panels. One is located behind the outside head lamp area and the other is located behind the fender well molding directly in front of the tires. Now the molding can be removed.
5. Dimensional variations between otherwise identical cars can be considerable. While the location and size of the holes in the base plate were designed for easy installation, it may be necessary to file a hole to allow a bolt to clear.
6. The baseplate will mount to the upper and lower frame (in front of the radiator and below it) of the car. There are four 1/2" holes on the bottom of the cross frame which is directly in front of the radiator. Bolt the baseplate (Item 1) to the frame. Use the 1/2" bolts (Item 4), flat washer and lock washer (Items 5 and 6) and the wire nuts (Item 2) provided in the base plate kit. Insert the wire nuts (Item 2) through the holes on the back side of the frame. Be sure to use Loctite Blue with each bolt. Hand tighten the bolts.
7. The 3/8" bolts (Item 7), the flat and lock washers (Items 8 and 9) and the 3/8" wire nuts (Item 10) will be used on the lower brace of the baseplate (Item 1). Holes need to be drilled using a 7/16" drill bit in the frame of the car, use the slotted holes of the brace as a guide when drilling. Use Loctite blue with each bolt. Tighten all the bolts in steps 5 and 6.
8. Before the bumper molding can be replaced, it will need to be trimmed. With a helper place the bumper as close to its original position as possible. Mark the molding where it will need to be notched. Be careful not to notch the bumper too much. After the bumper is notched, replace the bumper, head lights and center grill.
9. Install the tow bar and safety cables according to the instructions included in their packages.
10. Do not substitute other devices if the tow bar pin and clip are lost.
12. **DEALER OR INSTALLER: BE CERTAIN THE USER RECEIVES THE INSTRUCTION SHEET.**

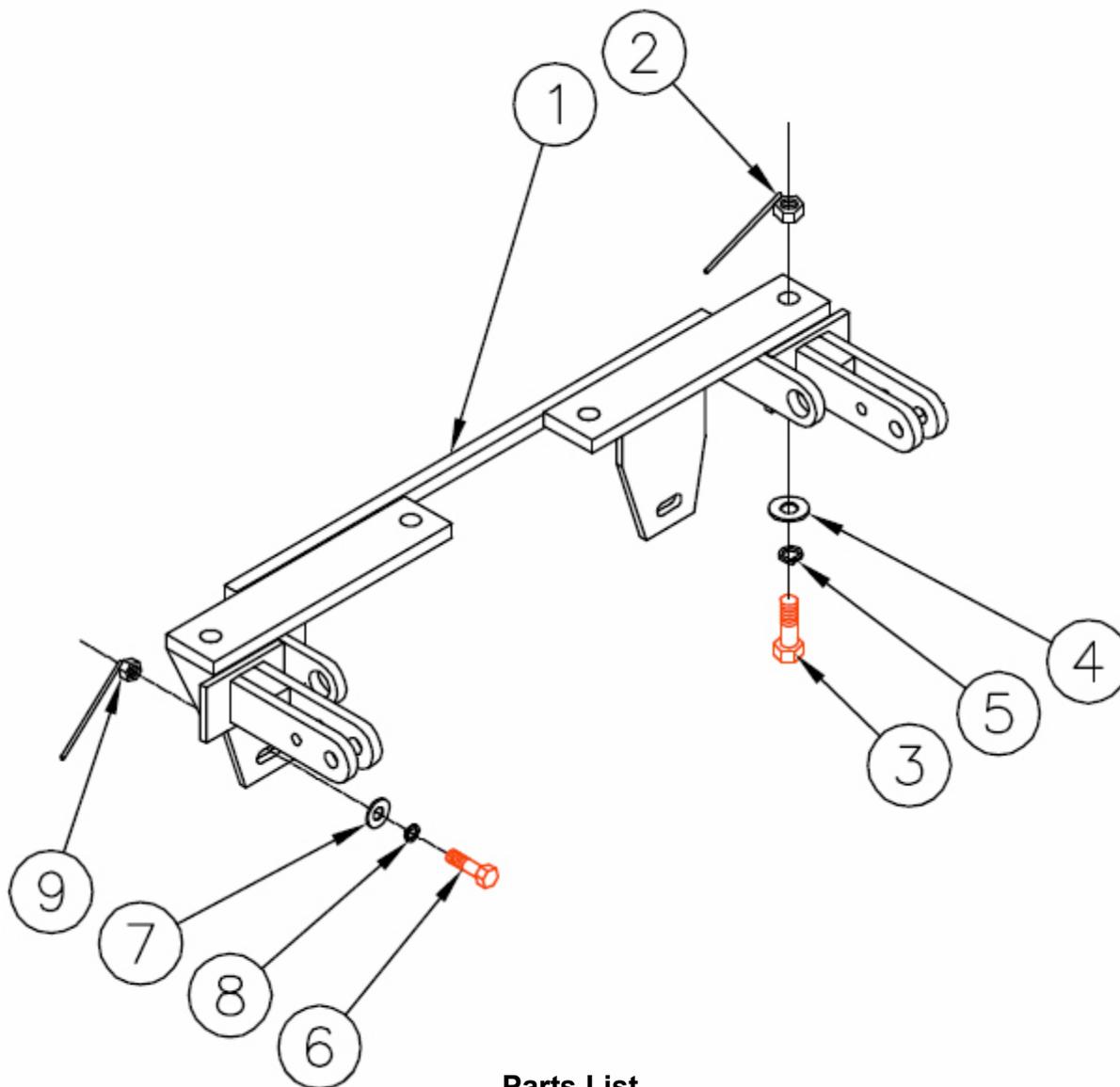
Automatic

Tools Required

1/2" Wrench
7/16" Drill Bit
C -Clamps

3/4" Wrench
Drill
Utility Knife

Loctite Blue
Phillips Screwdriver



Parts List

Ref. No.	Qty.	Part No.	Description
1	1	61-4992	Weldment, BX1931
2	4	61-4029	1/2" Wire Nut
3	4	201-0068	1/2 - 13 x 1 3/4", Hex Bolt
4	4	203-0005	1/2" Flat Washer
5	4	203-0012	1/2" Lock Washer
6	2	201-0440	3/8 x 1 3/4", Hex Bolt
7	2	203-0003	3/8" Flat Washer
8	2	203-0010	3/8" Lock Washer
9	2	61-4978	3/8" Wire Nut

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

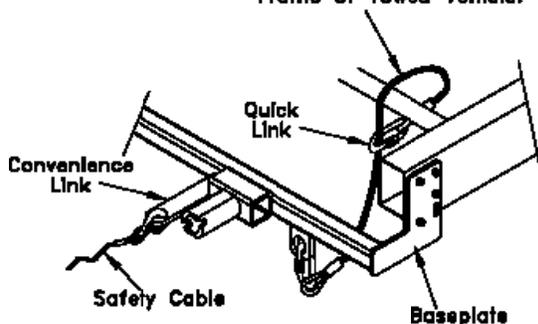
Permanent baseplate safety cables are strongly recommended when towing a vehicle with a tow bar. The principle function of the permanent baseplate safety cables is to prevent the towed vehicle from breaking loose in the event the connection between the frame of the towed vehicle and the baseplate fails 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.

OPTION #1

Permanent Baseplate Safety Cables to Cross Member or Frame of Towed Vehicle.



OPTION #2

Permanent Baseplate Safety Cables to Cross Member or Frame of Towed Vehicle.

