X3 Bombproof Shock Mount Installation Instructions

Parts list:

Billet Aluminum Upper Shock Mount

3-piece Frame Support Bracket (lower brace, two arms marked driver & passenger)

(See Fig 1 for proper configuring)

Hardware list:

(2) 1/2"-13x1.25" bolts

(2) 1/2" flat washers

(2) 1/2" flange nuts

(2) 3/8"-16x1" bolts

(2) 3/8"-16x1" carriage bolts

(6) 3/8" flat washers

(4) 3/8"-16 lock nuts

(2) 5/16"-18x1" bolts

(4) 5/16" flat washers

(2) 5/16"-18 lock nuts

(2) 1/4"x20-1" bolts

(4) 1/4" flat washers

(2) 1/4"-20 lock nuts



Step 1: To remove the front hood/grill assembly, pop out the small cover in front of the shocks, it's held on by grommets. Disconnect 2 headlight plugs on each side of the vehicle. Remove the small T20 torx screw (2020 and earlier) 8mm screw (2021 and newer) holding the headlight adjuster screws. Gently pull the adjusters back so they slide off when hood is removed. Using a T30 torx remove 4 bolts on the lower plastic, 2 at the top of the radiator, 4 (2 each side) underneath the sides of the hood located at the firewall. 2 screws at the headlights have a 10mm nut on the back. 2 screws on each side located by the a-pillar one behind gas cover. The top plastic cover has 2 blind plastic clips (Fig 2), these easily pop up with gentle force. There are two metal clips (one on each side) visible from underneath. These can be carefully be slid off their tabs by gently opening them. The hood assembly can be gently removed and set aside (Fig 3).

Step 2: Remove the radiator mounting bolts, if you have a friend around have them hold the radiator out of the way long enough, or set the radiator out of the way enough to install the frame support bracket. If you don't have an extra set of hands, use a large screwdriver or pry bar to hold the radiator in an upright position (Fig 4 & 5). Unplug the Smart Shox sensors and unclip the plug from the mounting bracket to prevent damage to them (Fig 6, 7 & 8).

Step 3: With the vehicle properly supported and rear wheels chocked you can now start removing the factory shock mount and shocks. It isn't necessary to remove lower shock bolts unless for ease or for doing the optional reservoir flip (see last page for details). With the shock mount and bolts removed the shocks can be rested against the chassis (make sure to protect the shock from being damaged by wrapping with cloths, towels, etc.).

Step 4: With the radiator out of the way, place the lower portion of the Shock Mount Brace on the nose of the chassis. NOTE* NOTH 10mm Factory upper control arm brace bolts must be removed (Fig 9)! Place the radiator lines in their original position. Install the (2) 5/16" bolts, washers and lock nuts in the middle two holes of the frame support brace but do not tighten or snug. Install the 1/4" bolts, washers and lock nuts on each lower side of the frame support brace (see below) into the holes in the chassis that line up with the holes in the brace but do not tighten or snug yet. Once all hardware is installed, tighten the (2) 5/16" upper bolts to the chassis then do the same with the 1/4" bolts on the sides. (Fig 10) These bolts should be tight at this point but do not need torque specifications. You will not have to come back to these later so ensure they are secure.

Step 5: Lower the radiator down and let it rest on the bulkhead or bumper but take care to protect any powdered or painted surfaces with a towel or cloth. With the radiator lowered down, you can now install the upper shock brace arms. They are stamped with "D" and "P" to indicate DRIVER and PASSENGER side to avoid confusion. Pushing the radiator to either opposite side will ease installation of the arms. Make sure the arms are IN FRONT of the lower brace (Refer to Fig 1). Insert the 3/8" carriage bolts (from the center of the car outward – Fig 11). The hex head 3/8" bolts can now be inserted on each side and lock nuts can be threaded lightly but DO NOT tighten yet. (Fig 12)

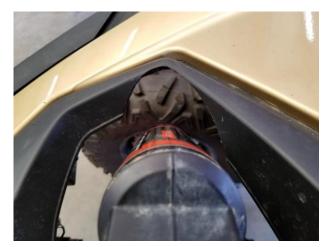
Step 6: Attach the frame support bracket arms to the billet upper shock mount via the 1/2" bolts with flange lock nuts. Use a washer behind the head of the bolt. (Fig 13) Get the bolt started by a few threads but do not tighten. Then loosely secure the billet aluminum upper shock mount to the chassis using the factory long bolts, place them through the billet piece, through the shock eyelets and into the chassis. (Fig 14) Once again, do not tighten or snug, just get a few threads on to hold everything in place.

Step 7: Tightening everything needs to be done in a certain order. Start with the upper shock bolts, tighten to 80 ft/lbs. Next you will tighten the 1/2" bolts that connect the support bracket arms to the billet upper shock mount, also tighten these to 80 ft/lbs. Next you will tighten the 3/8" carriage bolts to 30 ft/lbs, then move to the 3/8" bolts and lock nuts also tighten to 30 ft/lbs. Using the factory bolts that you removed in disassembly, attach the radiator. The upper bolts mount into the slots in the billet shock mount (Fig 15).

Step 8: Reattach sensors and secure to mounting bracket as you removed in Step 2. Reinstall the plastics in the order that they came off.

(Optional) If you choose to run your shocks with the reservoir toward the outside of the car owners will have to modify the plastic hood piece. (see pics below for reference)





If you have any questions, please call us at 704.684.5618

Figure 1 Figure 2 Figure 3 Figure 4

Figure 5 Figure 6 Figure 7 Figure 8

Figure 9



Figure 10

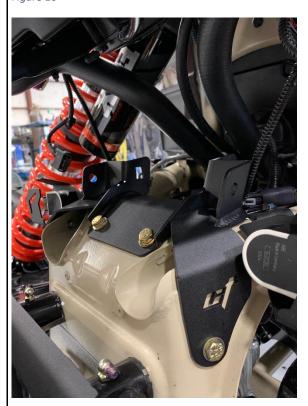


Figure 11

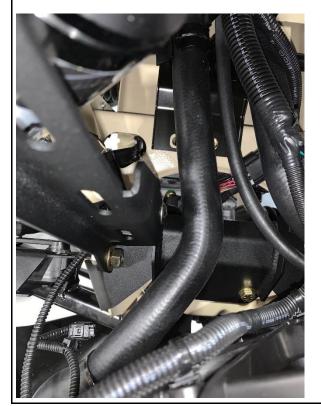


Figure 12

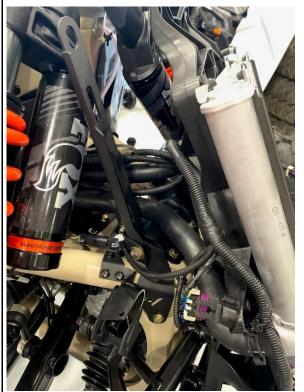


Figure 13 Figure 14 Figure 15