



4494 Raceway Drive Concord, NC 28027 (704)786-6400

**Kit #4 – AWD Mitsubishi 3000GT & Dodge Stealth
Polyurethane Subframe Mount Kit**

Attention: DO NOT press out the existing bushings if you intend to use this kit

Design Goals:

This kit has been designed to more easily replace worn and deteriorated rubber bushings with polyurethane bushings. The result is a stronger, longer lasting, and more geometrically correct suspension especially under high loads. Pressing out the old corroded bushings/sleeves is NOT required, saving a great deal of time and effort.

Parts Supplied:

See Attached Packing List for Complete Listing of all parts included.



Installation Procedure:

Take some time to double check the contents of your kit with the attached packing list. Familiarize yourself with each bushing and where it will be installed on the car. Always use the appropriate safety equipment. Follow good common sense practices and think safety at all times. We recommend a suspension alignment after installation. To minimize the amount of misalignment upon reinstallation of suspension components, mark the locations of alignment points on the suspension so that you can re-install all suspension arms as close to their original settings as possible.
Raise and support the vehicle.

Front Subframe:

The front subframe bushing install can all be accomplished without removing the suspension or even the wheels, especially if you are working on a lift. If you are working on the ground, (God, help you), we recommend removing the wheels for extra working space. Remove the front lower cross brace, that runs across the bottom of the radiator support, by removing the bolts on either side from the bottom and the bolt that runs through the rubber front lower motor mount. (Any accessories that are attached to this cross brace can remain in place, and should not be removed from the car.) At the frame mounting points, there will be 2 small rubber pieces to the top and 2 larger pieces that come up from the bottom. Neither are pressed in and can simply be replaced with the poly ones. If the larger ones from the bottom are sticking in the bores, simply tap them out from the top with a hammer and large punch. Clean these bores thoroughly, and be sure to apply the supplied grease to all mating surfaces. Do not reinstall this portion of the subframe until the remainder of the front subframe install has been completed.

This will familiarize you with the style of the front subframe bushing. Although a little harder to reach, the remainder of the front subframe bushings are similar in size, shape and style.

Next, remove the 4 nuts that secure the front subframe to the unibody. You must also remove the single bolt that goes through the rubber bushing within the front lower control arm mount to the rear. (See photo "A" below) At this point, the subframe should have lowered itself from the unibody a bit. The rubber bushings for the subframe are installed from the bottom and will need to be removed. These are NOT pressed in, but usually are stuck or corroded in place. If this is the case, you can use a small socket to ease their removal. One at a time, place the socket at the stud between the stuck bushing sleeve and the unibody. (You can reach in between the newly lowered subframe and the unibody with your fingers.) Using either a jack stand or a floor jack, depending upon whether or not you are using a lift, (*remove your fingers!*), contact and raise the portion of the subframe nearest the bushing you are working with. As the subframe tries to go back into place under the car, the bushing will contact the socket, forcing it out the bottom of the car. Do this to the 4 subframe mounts one at a time until all 4 bushings have fallen out of place. If they have not yet come out, remove the smaller rubber washers on top of each mounting point by pulling them through the hole in the subframe around each stud. (Needle nose pliers work well.) Clean all bushing bores thoroughly, (Scotch-Brite pads work well). Again, grease all mating surfaces, and install the new poly bushings, along with the supplied chromoly sleeves and washers. Raise the Subframe back up to its original position and reinstall all nuts & bolts. Now, install the front crossmember and motor mount bolt. The front subframe portion of the install should now be complete.

Rear Subframe:

Remove the rear axles, the rear differential, and the rear differential mounts. The driveshaft does not need to be removed, although it will give you a little more room to work, should you care to remove it. On AWS models, remove the rear power steering pump, leaving it attached to the rear differential. Simply undo the lines at the pump.

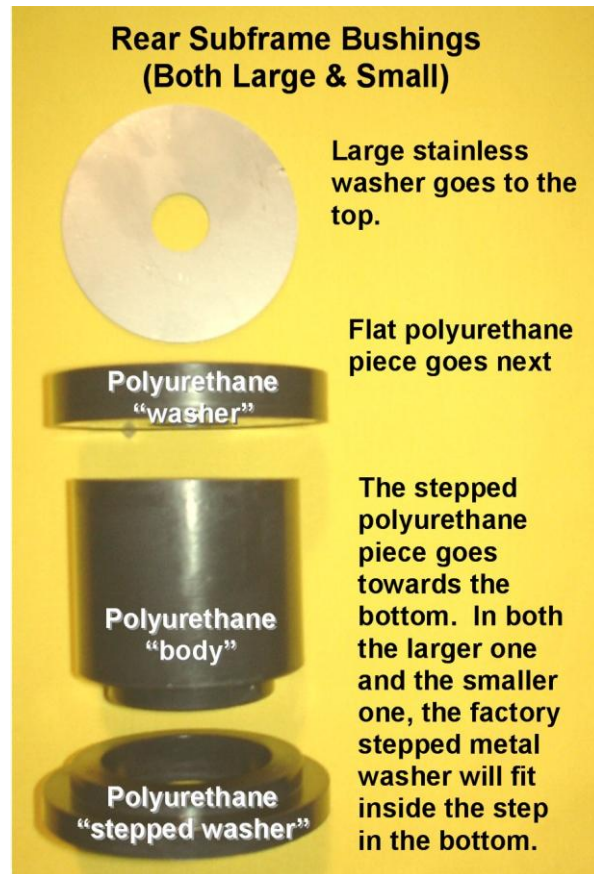
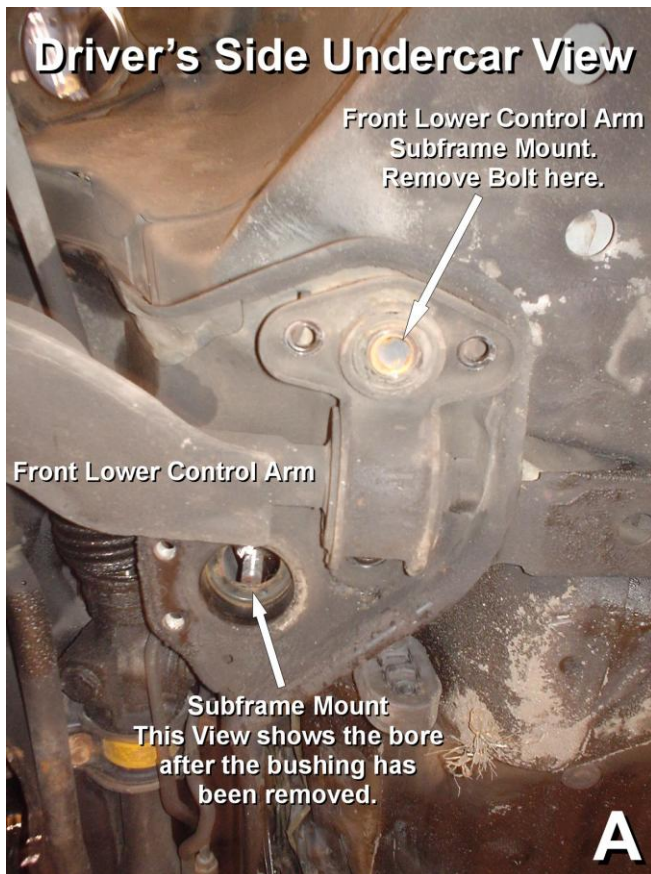
The entire rear subframe will need to be removed from the car. We recommend leaving the struts, rear hubs, brakes, brake lines, E-brake cables, wheels, etc. in place. Disconnect the control arms from the subframe, leaving them attached at the hub. Unplug the ABS lines on cars that are equipped with it, leaving the sensor in place at the wheels. At this point all of the control arms and rear hubs can hang from the rear struts.

On AWS models, disconnect the power steering lines where the subframe meets the unibody.

Remove the 4 main nuts that hold the rear subframe, taking off the smaller ones to the rear first. These 2 rearward mounting points will have a steel washer with a rubber ring around it to the bottom of the mount. Save this washer for later use. The 2 front mounting points have a metal plate, with a step in it, under the bushings. This will also be re-used. Lower the rear subframe from the car. Have a friend help carry the

subframe outdoors. Using a torch, burn the rubber out of the old bushings on the subframe. Although a propane torch will work, an oxyacetylene torch works best. Be careful not to melt the metal portions of the bushings or any component on the subframe. The rubber will burn and turn into ash, which can easily be removed. Clean all of the metal bushing sleeves, and bushing bores where the new poly bushings will be installed. All 4 sleeves will be re-used. The cleaner, the better. A Fine wire wheel works best. Install the new bushings (see the photos below to view the order in which they are installed), while applying the supplied grease evenly over all mating surfaces. The main “body” bushings are designed to be snug. Feel free to “persuade” them with a heavy rubber mallet.

Next, with the torch, carefully burn the rubber away from the metal washers, which were removed from the smaller rearward mounting points mentioned earlier. Clean these washers off, ensuring that all rubber has been removed. When complete, it will look like the third image on this page. The subframe can now be re-installed. Check the diagram/photo below to ensure correct bushing placement. The newly cleaned washers will be reinstalled in their original location under the rearward mounting points. The metal plates under the forward mounting points should also be cleaned, greased and re-used. Continue the installation in the reverse order of the removal. Double-check all bolts, and refill any fluids according to factory specifications. (AWS systems)



Kit # 4 - AWD Subframe Bushing Packing List

#	Description	Tag	Qty	Part	Measurements
1	Poly Bushing – front subframe (small – bushing)	F	4	10	1.35" high, 2.35" od
2	Poly Bushing – front subframe (small – “stepped washer”)	F1	4	12	.2" high, 1.85 od
3	Poly Bushing – front subframe (big – bushing)	E	2	11	1.35" high, 2.575" od
4	Poly Bushing – front subframe (big – “stepped washer”)	E1	2	13	.32" high, 2" od
5	Poly Bushing – rear subframe (small – bushing)	D	2	-	2.5." high, 1.98"od
6	Poly Bushing – rear subframe (small – “washer”)	D2	2	14	.25" high, 2.56" od
7	Poly Bushing – rear subframe (small – “stepped washer”)	D1	2	-	.71" high, 2.48"od
8	Poly Bushing – rear subframe (big – bushing)	C	2	17	2.58" high, 2.74" od
9	Poly Bushing – rear subframe (big – “washer”)	C2	2	15	.57" high, 3.25" od
10	Poly Bushing – rear subframe (big – “stepped washer”)	C1	2	16	.58" high, 3.38" od
11	Pin / Steel Sleeve - front subframe (small)	P2	4	-10	7/8"od,.56"id, .156"w, 1.89"L
12	Pin / Steel Sleeve - front subframe (big)	P4	2	-11	1"od, .68"id, .156"w, 1.89"L
13	Steel Washer - front subframe (small)	W5	4	-10	2.25" od, .55" id, .10" thick
14	Steel Washer - front subframe (big)	W7	2	-11	2.5" od, .68" id, .10" thick
15	Steel Washer - rear subframe (small)	W7	2	-14	2.5" od, .68" id, .10" thick
16	Steel Washer - rear subframe (big)	W8	2	-15	3.2" od, .77" id, .10" thick
17	Grease Packet	-	1	-	-
18	Instruction Sheet	-	1	-	-

*Should you require more grease than is supplied with this kit, we recommend a grey general purpose Moly grease, available at most hardware stores.