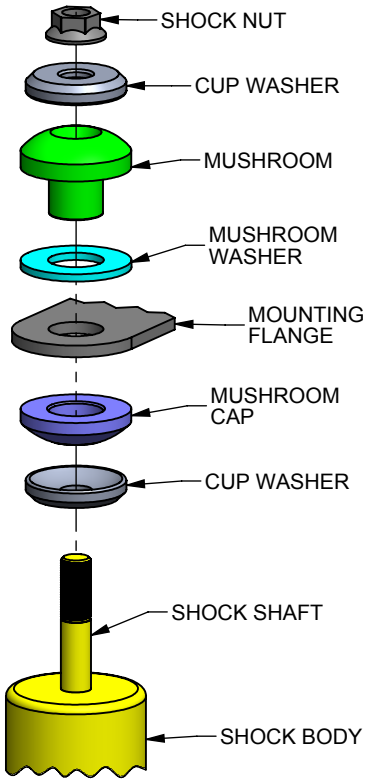
Use the procedures outlined in your GM service manual to disassemble your shock absorber from the suspension and remove the OE upper shock bushings.

Reassembling your shock and installing your new spherical upper mount will essentially be a stack up of the parts in the kit (see FIG 1). The mushroom and mushroom cap will install on either side of the mounting flange with the mushroom washer. These parts provide the low friction spherical surface that the cup washers will be in contact with. You will notice that the mushroom washer is a fabric reinforced rubber material. This material will compress and act as a spring (or lock washer) later in the installation. See notes 1 and 2 below for items of interest regarding the installation of the spherical surface.

FIG 1
(colors used to distinguish parts only)



NOTE 1: it makes no difference which side the mushroom, mushroom cap and mushroom washer go on. Typically the mushroom washer will go under the head of the mushroom which then gets installed in the mounting flange with the "stem" of the mushroom pointing down. The mushroom cap is then installed on the exposed end of the mushroom stem, completing the installation of the spherical surface. This technique helps keep the mushroom, mushroom washer and mushroom cap in place during the rest of the installation because the heaviest part (the mushroom) is supported by the mounting flange (see FIG 2). However, if your particular installation is eased by putting the mushroom on the bottom with the stem pointing upward, and/or putting the mushroom washer under the head of the mushroom cap, it is entirely permissible to do so.

NOTE 2: once the spherical surface is installed check to ensure that the stem of the mushroom is not protruding beyond the spherical surface of the mushroom cap (see FIG 3). This will cause the spherical surface to be irregular and will significantly reduce the effectiveness. If this is the case, simply shim one side (again it doesn't't matter which side the shim goes on) as shown in FIG 4 until the stem no longer protrudes beyond the spherical surface. Standard flat washers usually work well for this but the ID of the washer (the diameter of the through hole) needs to be at least 7/8" (yes, it's a big washer).

FIG 2
(colors used to distinguish parts only)

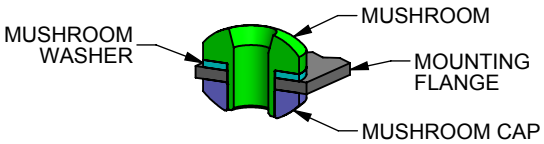


FIG 2A: TYPICAL INSTALLATION

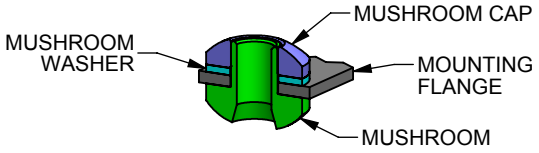


FIG 2B: ALTERNATE INSTALLATION

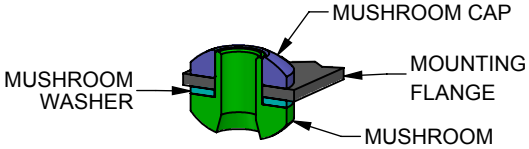


FIG 2C: ALTERNATE INSTALLATION

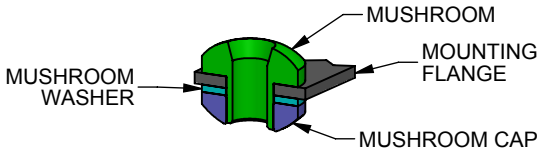


FIG 2D: ALTERNATE INSTALLATION

FIG 3
(colors used to distinguish parts only)

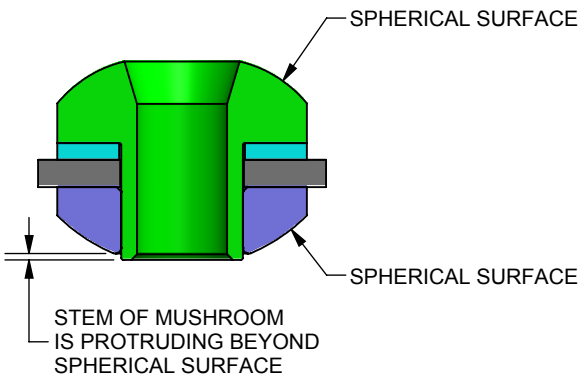
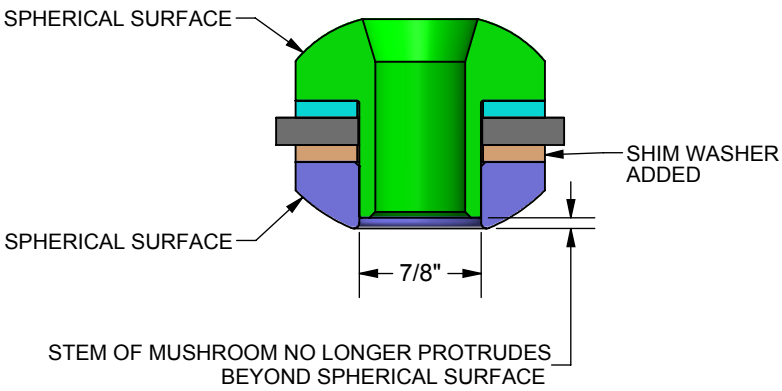


FIG 4
(colors used to distinguish parts only)



Next, insert the shaft of the shock absorber though the hole in the cup washer and slide it through the hole in the spherical surface (see FIGs 6 & 7). Place the other cup washer over the shaft of the shock that is sticking through the spherical surface and install a nut on the shaft.

Now you are ready to do the setup of the shock mount. Overall, the goal is to get the nut on the shock shaft tight enough so there is little or no play in the direction of the axis of the shock, but not so tight as to restrict the motion of the shock shaft and cup washers (see FIG 8). Because the nut will not be torqued you will need to secure the nut in another way. This can be accomplished by using a Nylock style nut, a bit of thread locker on the shock shaft or adding a jam nut.

Once you have installed the nut on the shock shaft and secured it with one of the methods above (the bottom of the shock should still be disconnected at this point) try to move the shock in the direction of the shaft. Check to see if there is any play and if so, adjust the nut accordingly. You should then be able to spin the shock freely around the spherical surface with little to no resistance.

Reconnect the bottom of the shock as outlined in your GM service manual.

Finally, repeat this procedure for the other three shocks.

Once installation of all 4 shocks is complete drive the car for 1 to 2 miles and check to make sure the nuts on the shock shaft are still the way you set them. If they have loosened you will need to adjust your locking technique. *IT IS RECOMMENDED TO OCCASIONALLY CHECK THE SHOCK SHAFT NUTS TO MAKE SURE THEY HAVE NOT LOOSENED OR MOVED.*

FIG 6

(colors used to distinguish parts only)

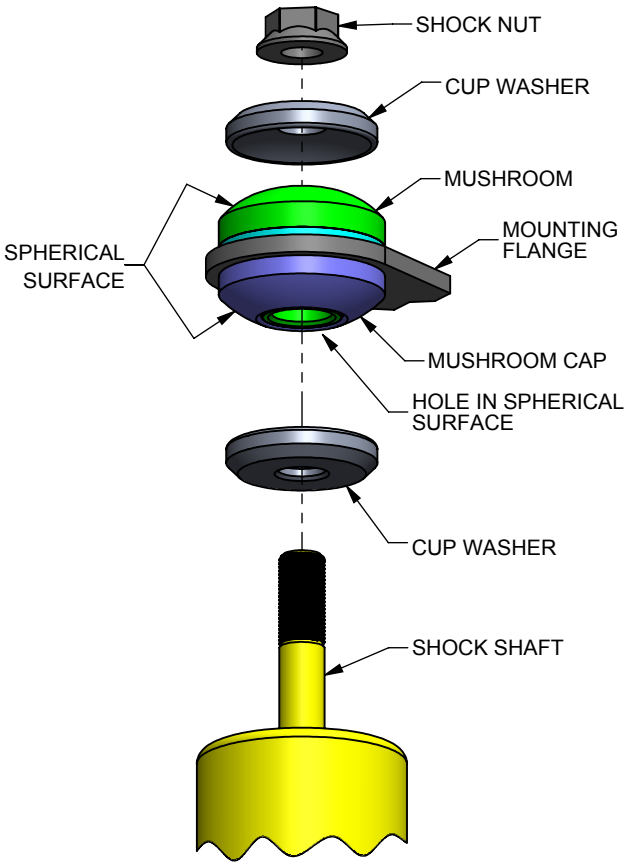


FIG 7

(colors used to distinguish parts only)

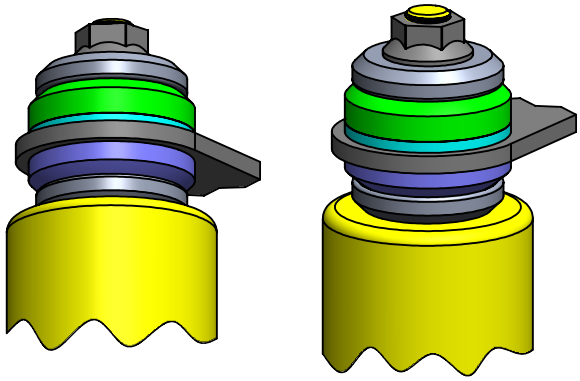


FIG 8

(colors used to distinguish parts only)