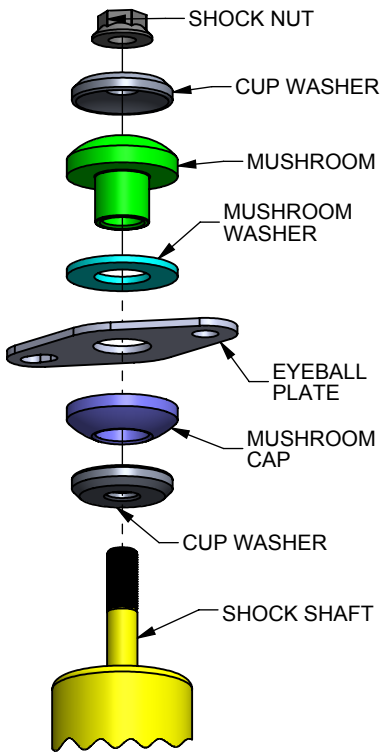


Use the procedures outlined in your service manual to disassemble your rear shock absorber from the suspension and remove the OE upper shock bushings.

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 eyeball plate 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 eyeball plate with the "stem" of the mushroom pointing down (see FIG 2). The mushroom cap is then installed on the exposed end of the mushroom stem, completing the installation of the spherical surface.

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 situation simply shim one side (again it really doesn'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)

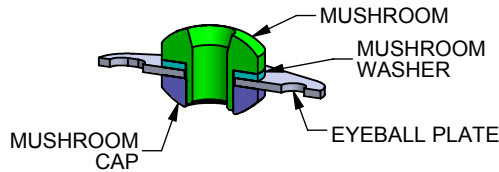


FIG 2A: TYPICAL INSTALLATION

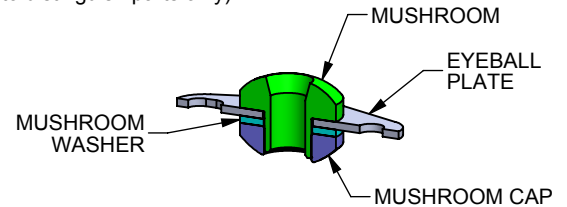


FIG 2B: ALTERNATE INSTALLATION

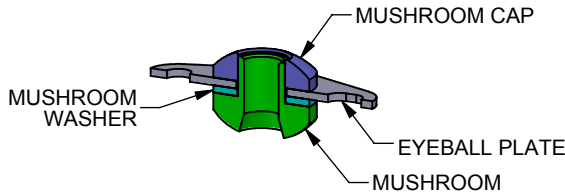


FIG 2C: ALTERNATE INSTALLATION

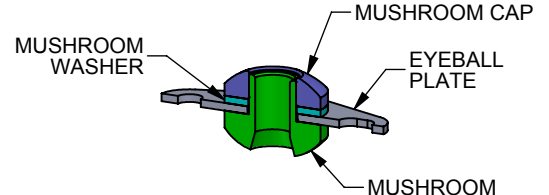


FIG 2D: ALTERNATE INSTALLATION

FIG 3

(colors used to distinguish parts only)

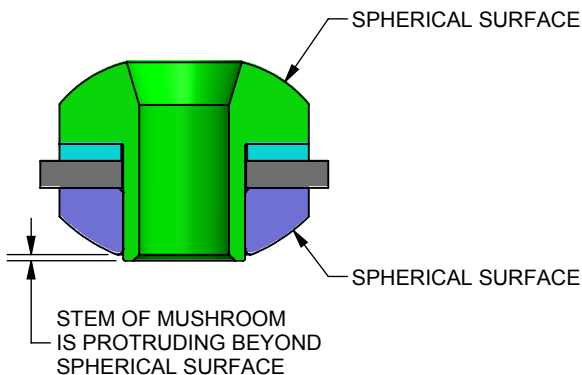
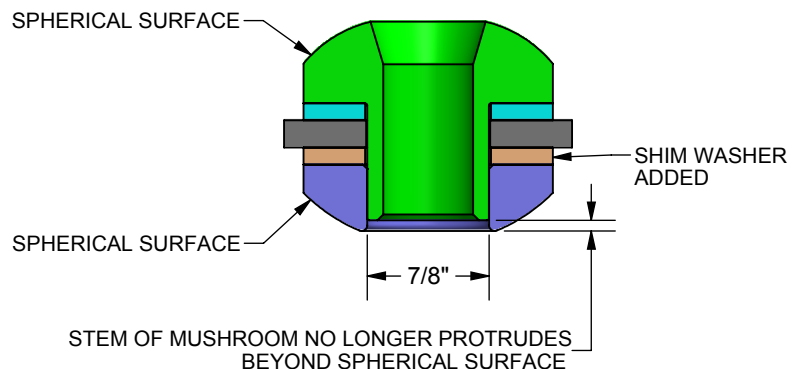


FIG 4

(colors used to distinguish parts only)



1st GENERATION CTS-V Pin Top Shock Mount Installation

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Next, insert the shaft of the shock absorber through the hole in the cup washer and slide it through the hole in the spherical surface (see FIGs 5 & 6). 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 7). 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 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.

Lift the shock and eyeball plate assembly up towards the OE mounting point of the frame. The new eyeball plate uses the same mounting points as the OE shock mount. Install the provided 10 mm hardware and torque as specified in your GM service manual (see FIGs 7 & 8).

Reconnect the bottom of the shock as outlined in your service manual. Repeat for the other rear shock.

Once installation of both 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 5

(colors used to distinguish parts only)

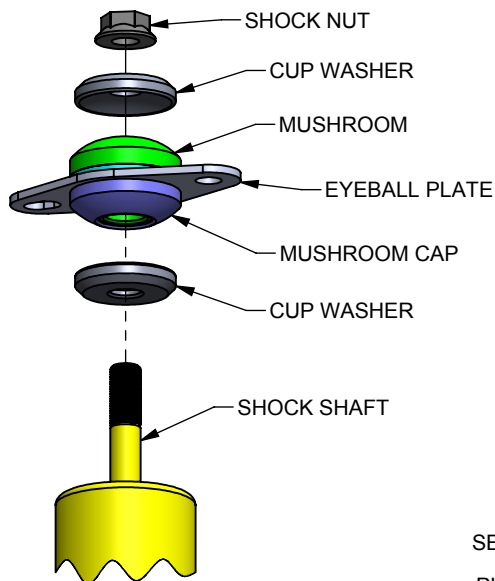


FIG 7

(colors used to distinguish parts only)

SET THE NUT SUCH THAT THE SHAFT CAN FREELY ROTATE AROUND THE SPHERICAL SURFACE.

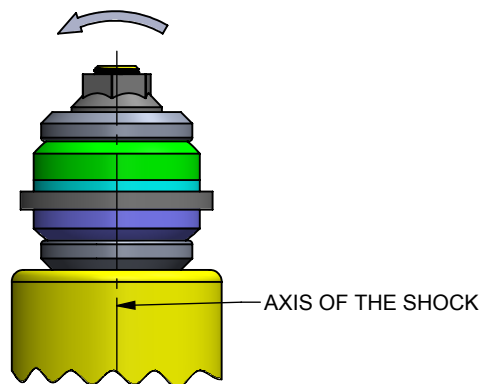
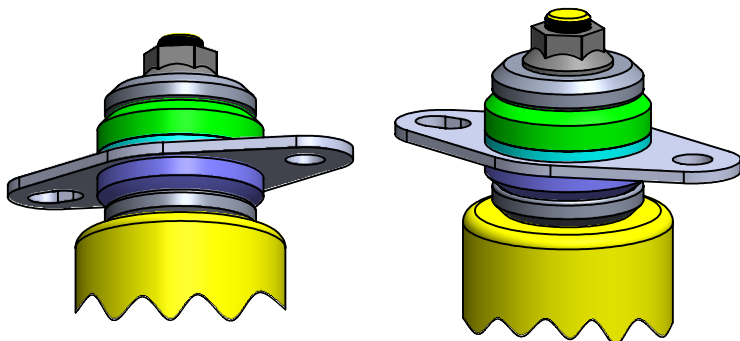


FIG 6

(colors used to distinguish parts only)



1st GENERATION CTS-V Pin Top Shock Mount Installation

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Lift the shock and eyeball plate assembly up towards the OE mounting point of the frame. The new eyeball plate uses the same mounting points as the OE shock mount. Install the provided 10 mm hardware and torque as specified in your service manual (see FIGs 8 & 9).

Reconnect the bottom of the shock as outlined in your service manual. Repeat for the other rear shock.

Once installation of both 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.**

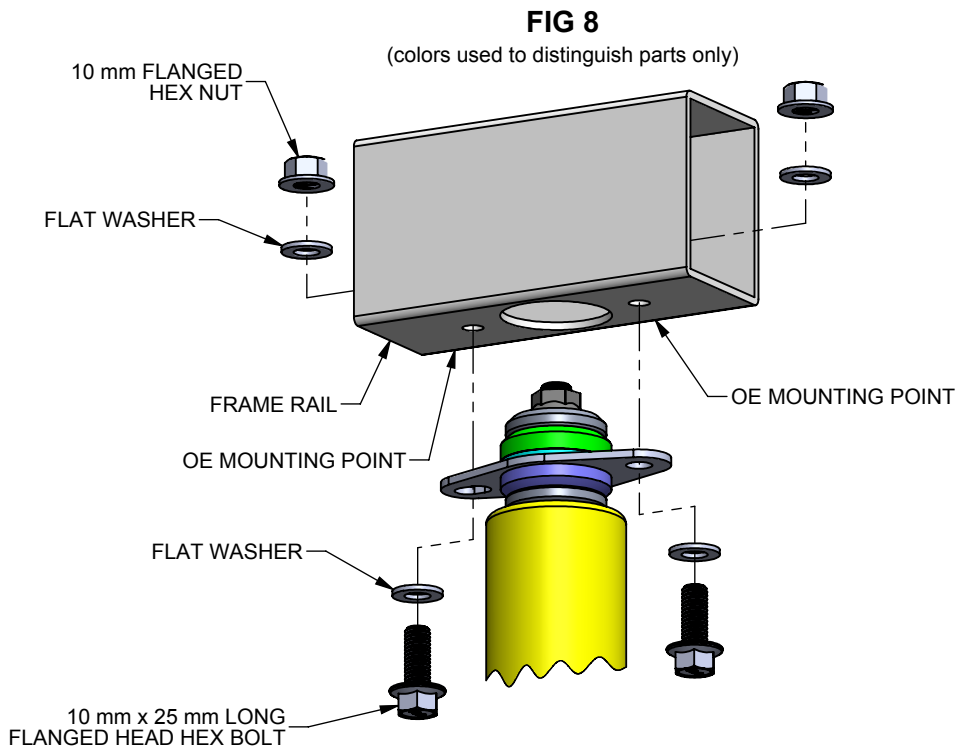


FIG 9
(colors used to distinguish parts only)

