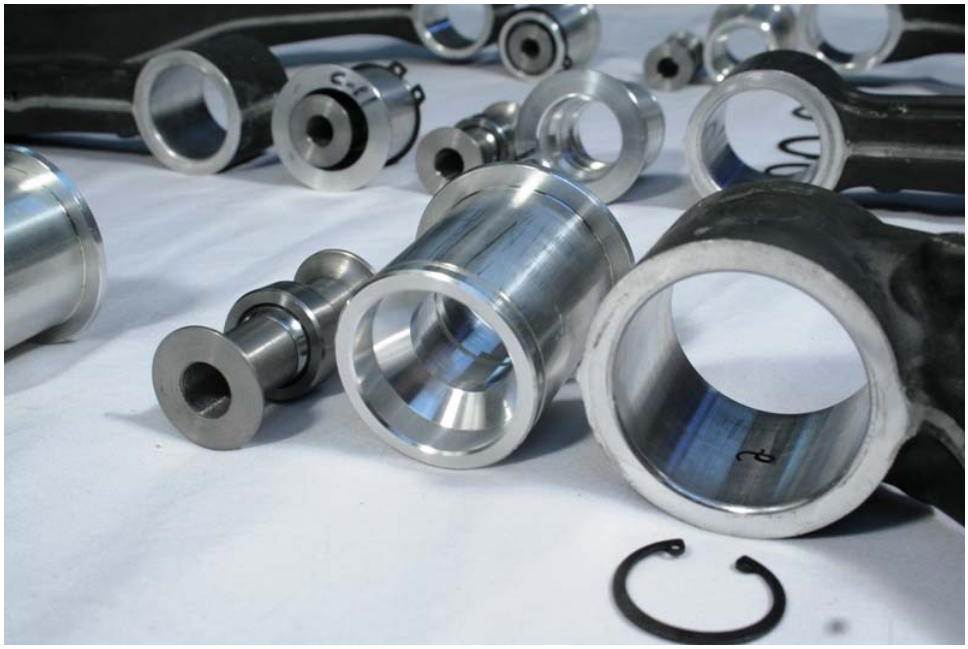
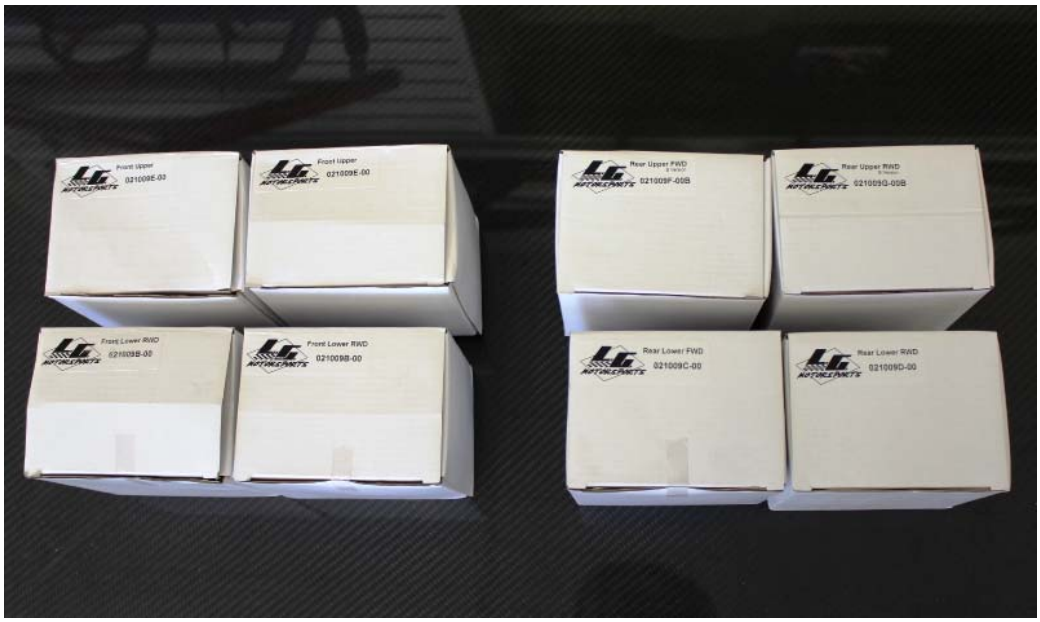
LG MonoBall Control Arms



Parts Inventory:

1. **Front upper bearing insert (4)**
2. **Rear upper bearing insert (4)**
3. **Front lower bearing insert (4)**
4. **Rear lower bearing insert (4)**
5. **External C Clips, one for each size (16)**
6. **Lower control arm spacer, long (12)**
7. **Lower control arm spacer, short (4)**
8. **Cross shaft, front upper (4)**
9. **Cross shaft, rear upper (4)* ZR1/Z06 only**
10. **Spacer, rear upper (8)* C5/C6 base only**

Your package will arrive to you, with the bearings and internal C-clips already installed and boxed as follows. Each box will contain one control arm set.



Optional:

1. **Completely assembled arms with bearings installed**

Instructions:

Prep:

Before starting this project you will need to make sure you have a few tools to do this job. You are going to need assorted hand tools to remove the control arms from your car. A vice or press will be needed to remove the factory control arm bushings from the arms. You will need a shop torch to heat the arms for install of the new bearing inserts, and a fridge or ice bag to cool the inserts before installing.

First step will be to raise the car, and support with jack stands or on a lift. Remove the wheels and control arms from the car. If your car has factory leaf springs, please see your owner's manual for proper safe removal of these units. If you have questions about the suspension removal please see your factory service manual.

Before you start to take your arms apart, take a moment to place your bearings in the freezer to start them cooling. This will help the insert into the control arm.

Once the arms are removed you will need to remove the factory bushings. Front upper arms are easy enough to do by holding the cross link in a vice and twisting the arm

(rear Z06/ZR1 arms can be done the same way). The lower arms will need to be pressed out. After the bushings are pressed out, you will notice a rubber residue on the control arm which will need to be cleaned before moving forward.

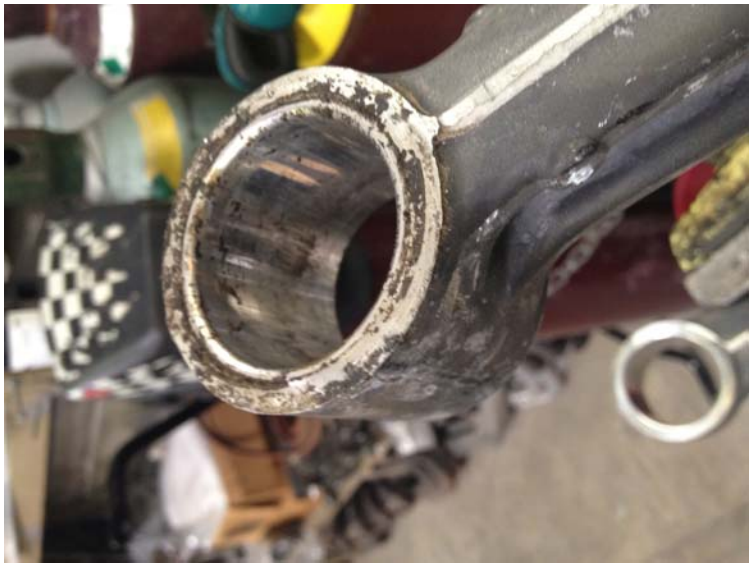


Figure 1: Bushing removed before cleaning

After all arms are free of their stock bushings you will need to clean the bores. This can be done simply with some brake clean, or acetone and Scotch Bright pads or SOS pads and water. Once the arms are clean they should look like Figure 2. You do not want to remove aluminum, just the debris left from the bushings.

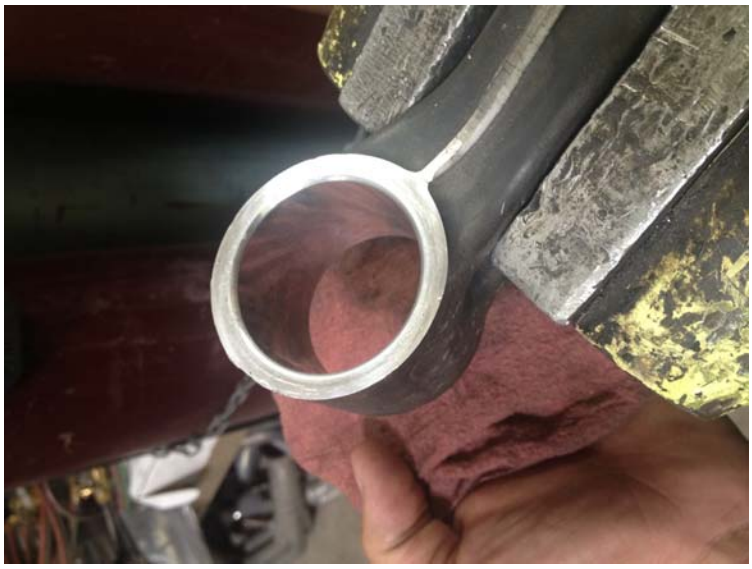


Figure 2: Cleaned control arm

Once you have all arms cleaned and ready for assembly you will need to hold the arm in a vice to start the install. You will need to heat the end of the arm with a torch to expand

the opening so the bearing housing will drop into place. All inserts will install in the arms from the outside going inboard, except for the front lower control arms. These will install from the inside moving outward (see completed photos below).

The front lower control arm bearing locations can vary in size. Before starting the install of the inserts on these locations make sure that the housing will protrude far enough to locate the c-clip. If not remove material on the outside end until you have enough room to secure the clip, see figures 3 and 4.

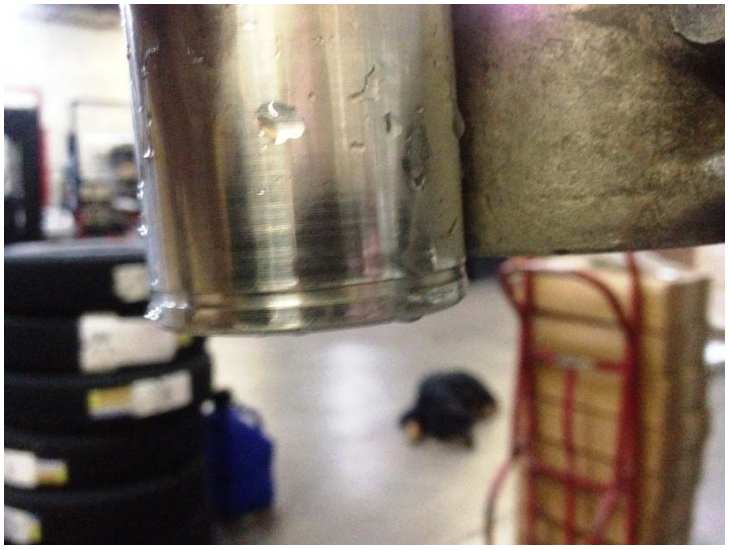


Figure 4: Checking for C-clip clearance

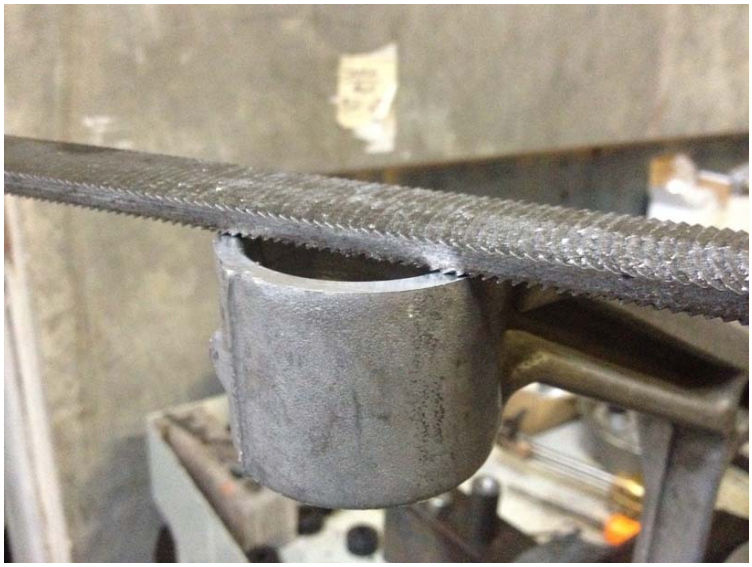


Figure 4: Removing material on flange end.

Once your inserts have been frozen, it maybe easier to bring them out a few at a time and keep in an ice bath to stay cool while you are working.

Figure 5: Ice bath

****IMPORTANT****
The front upper control arms can, and sometimes will distort from use on the track. A flapper wheel, or hone can make sure the bores are round again before inserting the bearing housing into the arm. You should check both the bore diameter and the insert diamters. The inserts should be no more than 0.0085" larger than the I.D. of the arm.

Once all of your arms are prepped and housings are cool you can proceed into the install. With a control arm in a vice, proceed to heating the location you are going to start with, doing only one at a time.

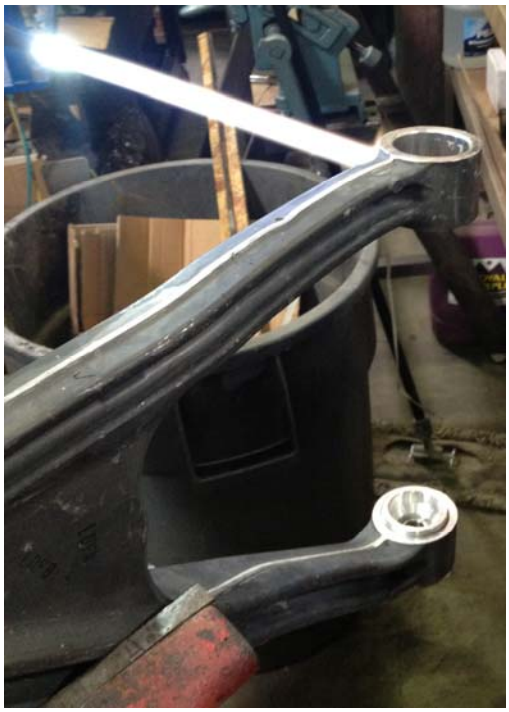


Figure 6: Heating control arm ends

Once the arm is heated completely around, you can start to drop in your cooled housing into the arm. You may find it easier to use a bolt through the bearing to use as a holder to guide the insert into place.

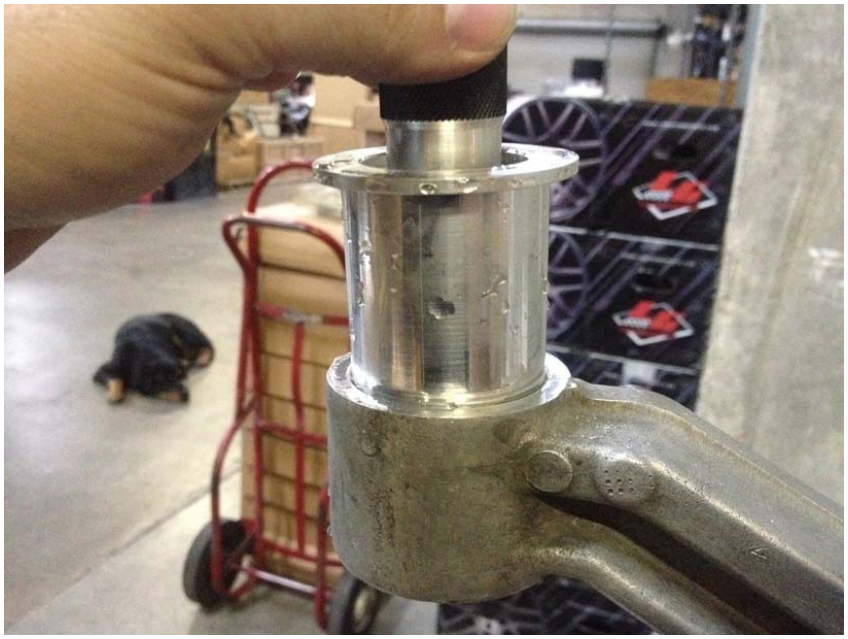


Figure 7: Installing into control arm.

If it does not feel like it will start, continue to heat the arm more. Install should be smooth but close. Once the housing is in place, cool with water to remove the risk of damage to the bearing. Now you can safely install the retaining safety C-Clip. After the

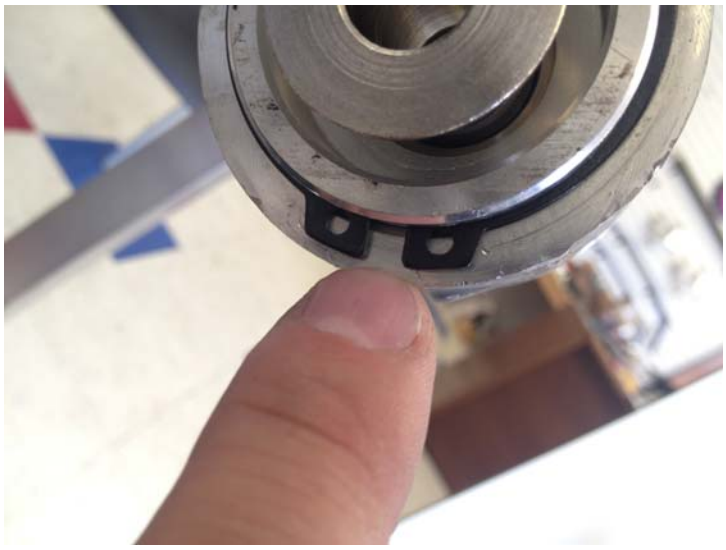


Figure 8: External C clip installed

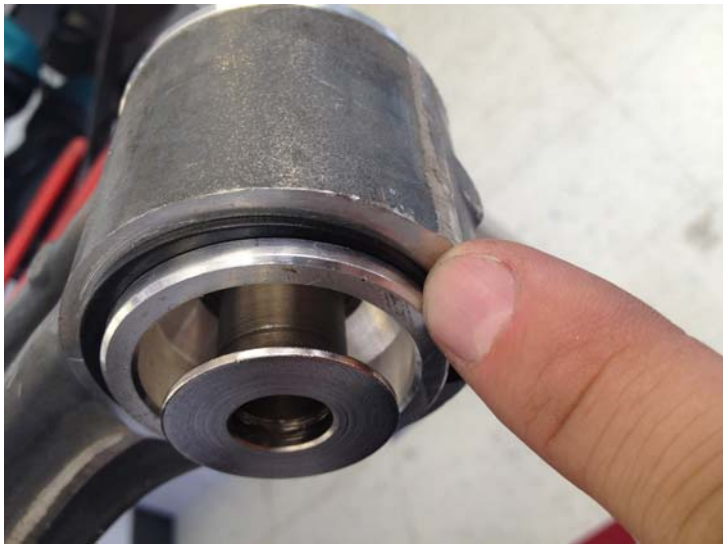


Figure 9: Make sure the clip is seated into the groove

Use this same method for all control arms. Once completed you can start installing them back on the car. See the below pictures for completed arms installed.

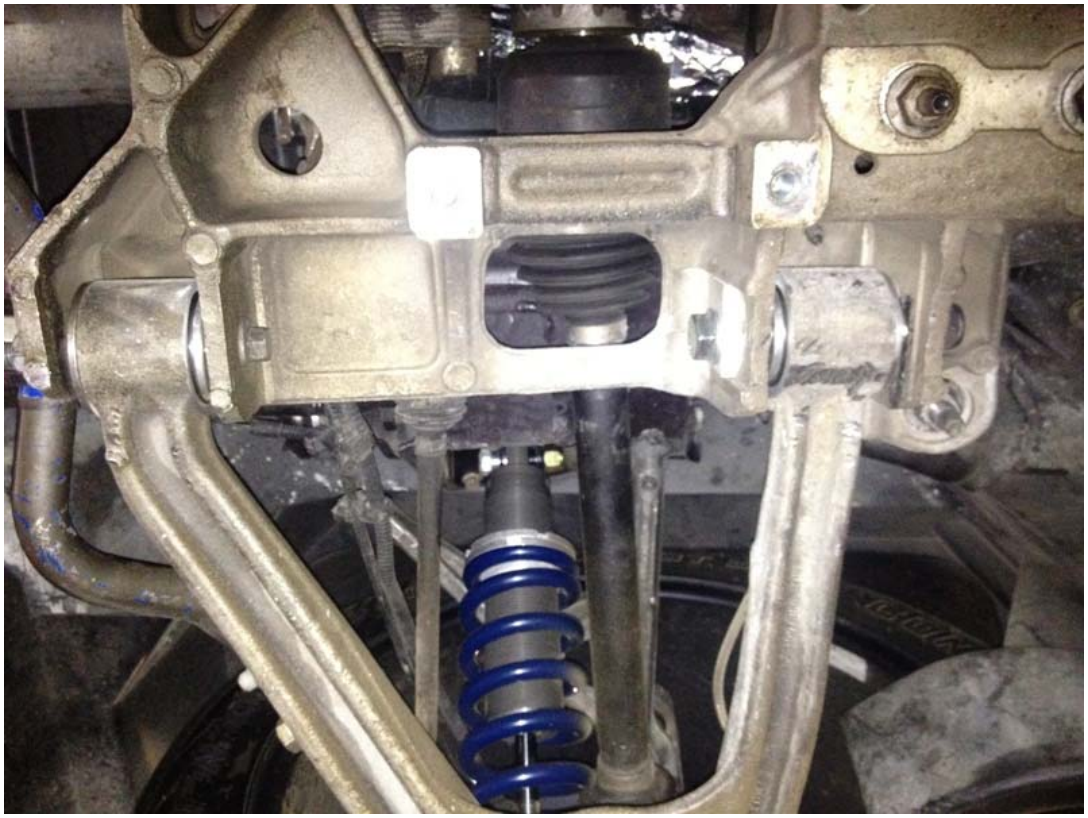


Figure 10: Rear lower arm finished and installed (notice inserts from outside in.)

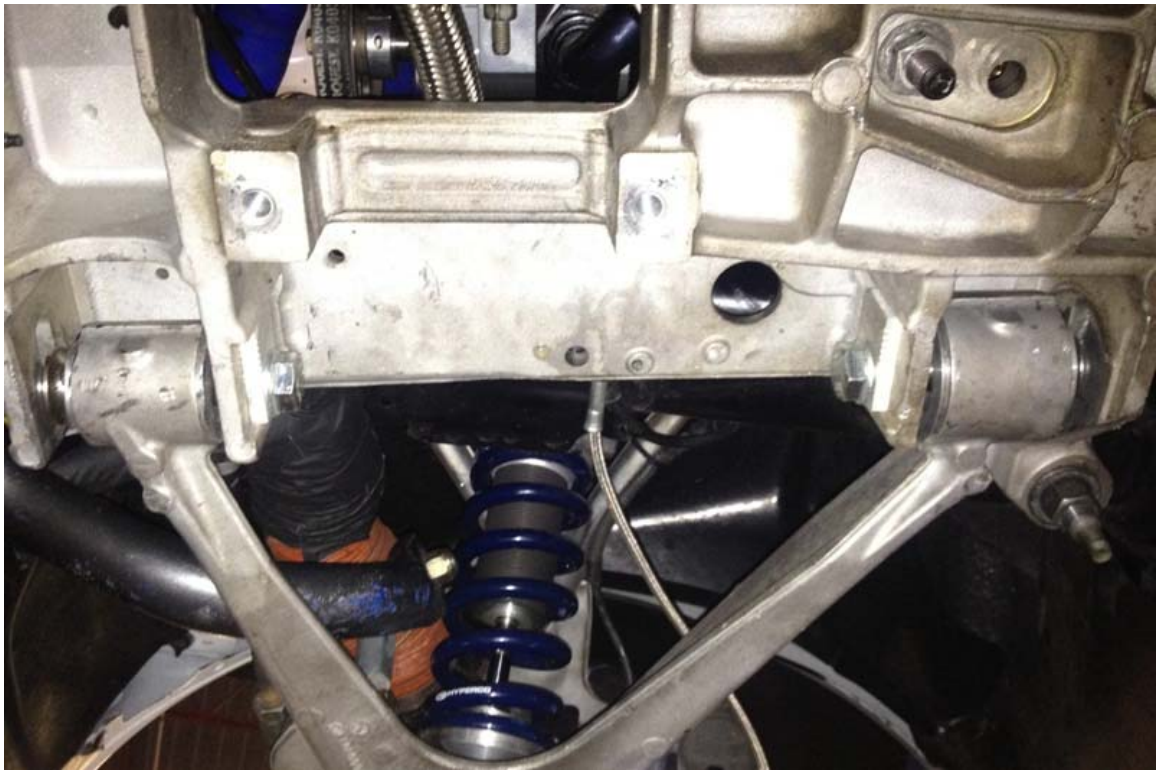


Figure 11: Front lower arm installed (notice housings inserted from the inside out)

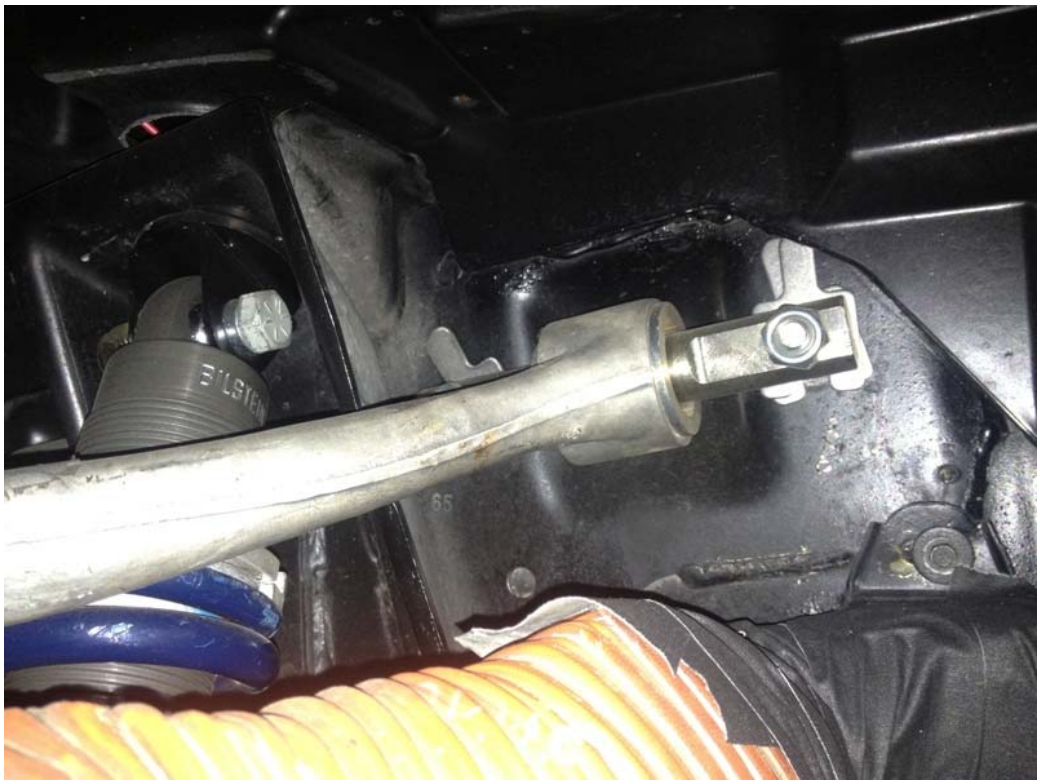


Figure 12: Front upper control arm installed

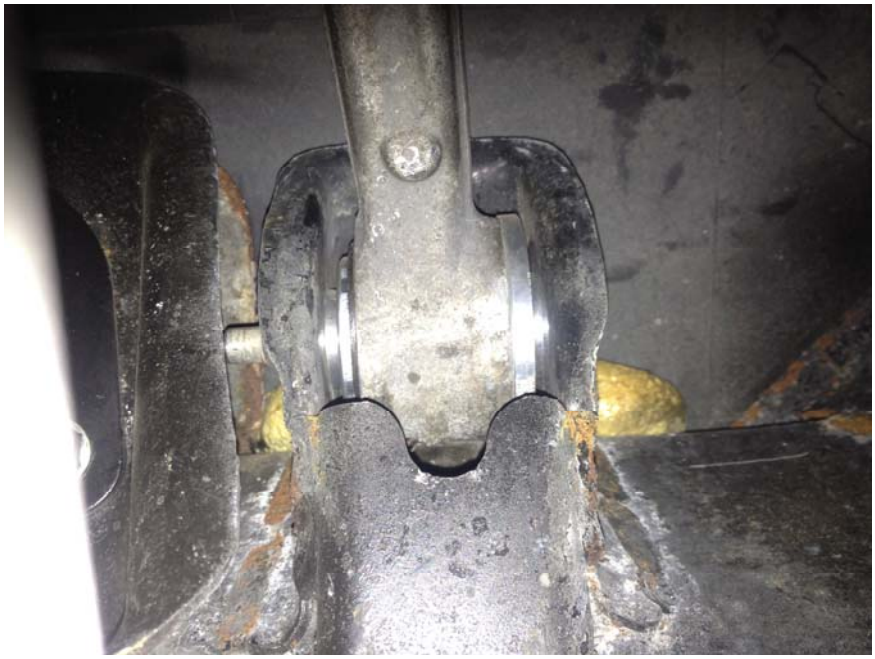
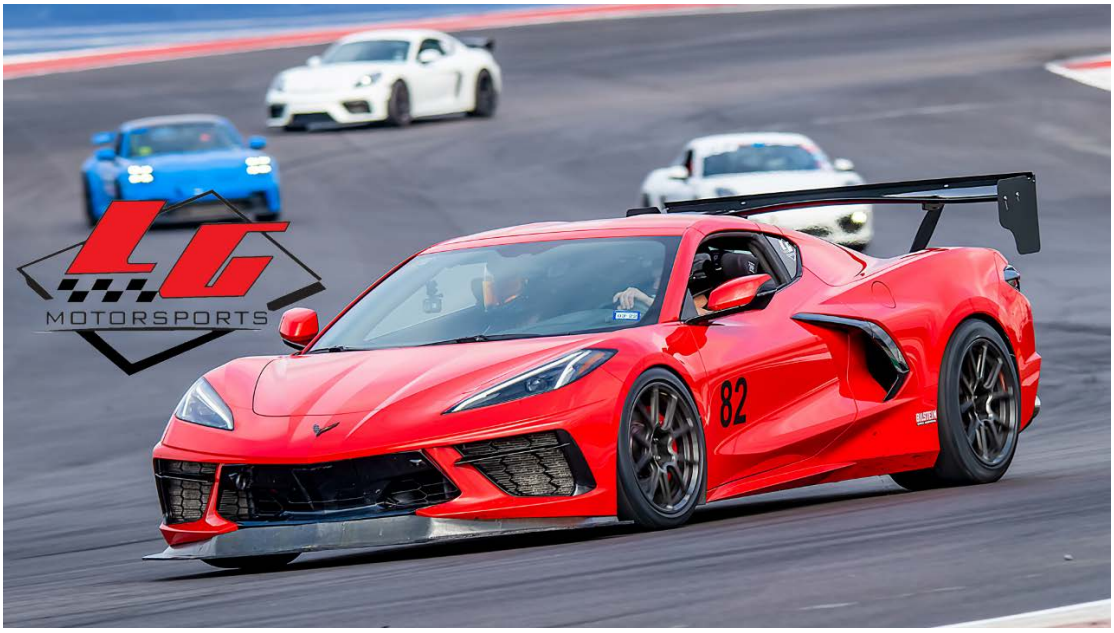


Figure 13: Rear upper arm installed

If you do happen to have a housing sick partially through the install, cool the assembly and heat with the housing facing the other direction. The heat will open the arm up for it to fall out. You may have to clearance the arm for install.

If you have any questions, or feel you would like LG Motorsports to do the install for you, please contact your sales person for details.

Sergio De La Torre
President LG Motorsports



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