

VW MK4 Lower Control Arm Monoballs

Installation Instructions - [Click HERE to Shop](#)



Thank you for purchasing your new ECS Tuning monoballs, we appreciate your business!



These installation instructions have been broken up into several sections:

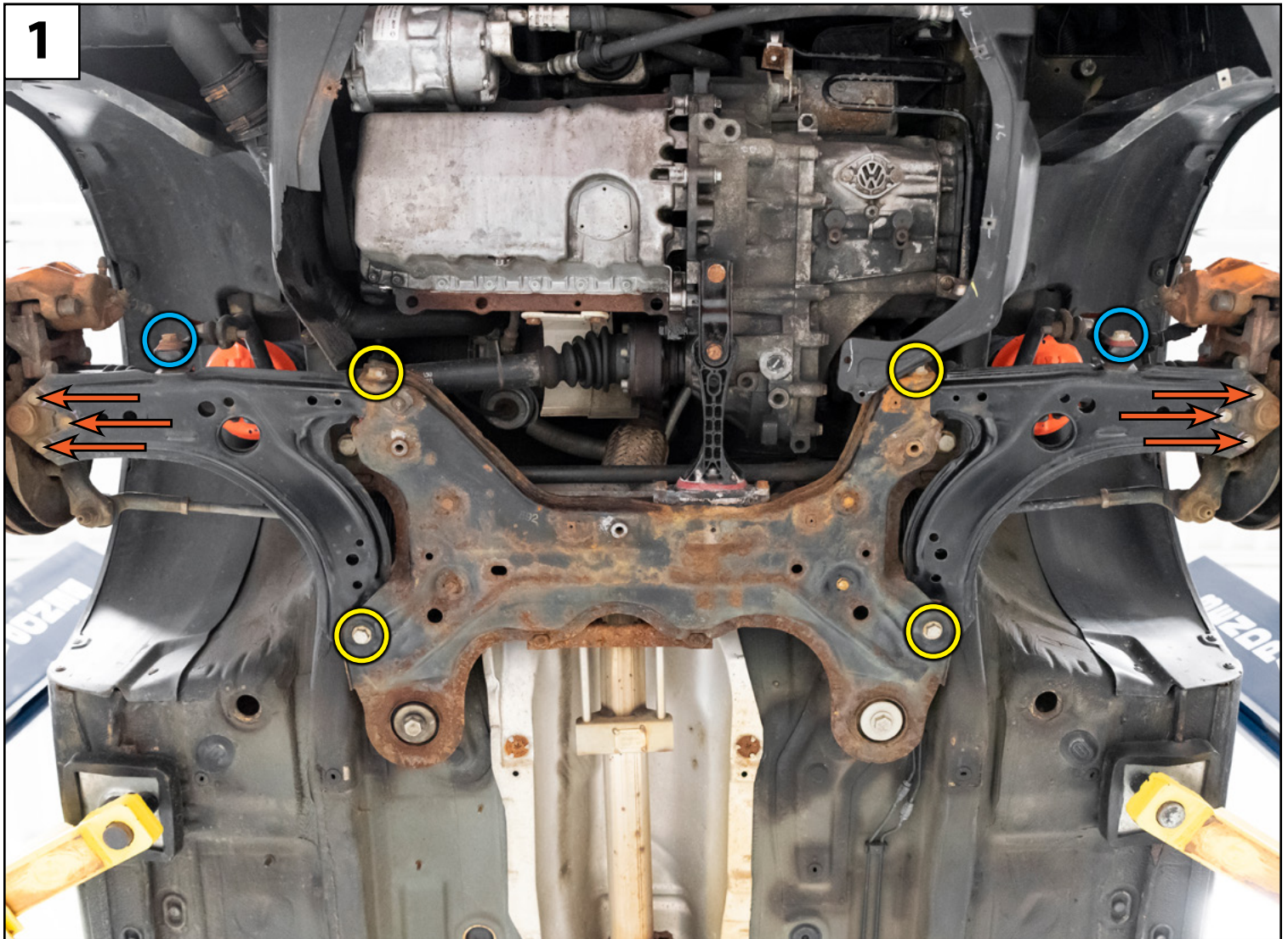
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Section 1: Removing the Control Arms

- Step #1** • Remove the six ball joint bolts (arrows), two sway bar end links bolts (circled in **BLUE**) and the four bolts and nuts (circled in **YELLOW**) which secure each lower control arm to the subframe, then remove the control arms and set them aside.



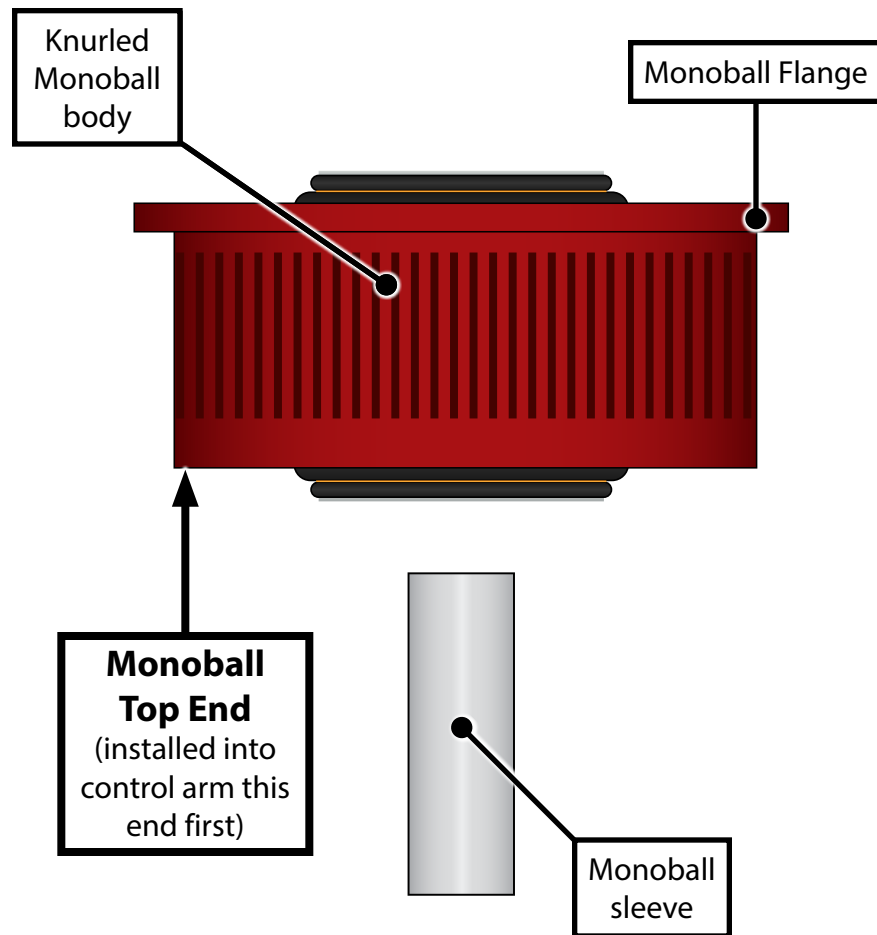
On vehicles equipped with an automatic transmission, the LH horizontal bolt cannot be completely removed due to the location of the transmission. You will need to unbolt the pendulum mount (replacement hardware available [HERE](#)) and swing the engine forward, or in extreme cases, loosen and lower the subframe in order to remove the control arm bolt.



Section 2: The Monoballs

- Take a moment and familiarize yourself with the monoball assemblies and their components.
- The side view of the monoball (shown on the right) illustrates where the monoball flange, knurled body, and sleeve are located. Be sure to note that the bearing sleeve must be in place prior to installation on the vehicle.
- Take note of the top end and bottom end of the bearing assembly. The bottom end is the flanged end. The top end will be pressed into the control arm until the flanged end bottoms out.

Now let's get to it!



Section 3: Installing the Monoballs

- Step #1** • Place a press cup onto one side of the bushing bore in the control arm as shown below. Proper placement is critical, we used a tool which is designed to hold the bushing bore from below during removal and installation.
- Step #2** • ***SLOWLY*** and ***CAREFULLY*** press the bushing out then clean any leftover bushing material from the control arm bore. Repeat this process to press the bushing out of BOTH control arms.



Section 3: Installing the Monoballs

- Step #3** • Remove the sleeve from the monoballs, place a press cup onto one side of the bushing bore in the control arm as shown. Again, proper placement is critical.
- Step #4** • **SLOWLY** and **CAREFULLY** press the new monoball into the control arm, ensuring that it remains square to the arm, **STOP** once any part of the bearing flange bottoms out against the arm.
- Remove any excess material from around the monoball after pressing and repeat for the other arm.
- Step #5** • Reinstall the sleeve (arrow) into the monoball as shown.
- Step #6** • Repeat the pressing procedure for the other arm. Remember, the second arm should be a mirrored (flipped) version of the first one (as shown).



Section 4: Reinstalling the Control Arms

- Step #1**
- Install the control arms back into the vehicle in reverse order of removal, being sure to replace all the hardware.
 - Torque the M12 bolts and nuts (circled in **YELLOW**) to 70 Nm (52 Ft-lbs) + 90 degrees.
 - Torque the ball joint bolts (arrows) to 20 Nm (15 Ft-lbs) + 90 degrees.
 - Torque the Sway Bar End Link Bolts (circled in **BLUE**) to 45 Nm (33 Ft-lbs).

Congratulations, your installation is complete!

