# *Upper Control Arm Kit*3<sup>rd</sup> Gen Toyota Tundra P/N: 460-72T005-R



Est. Install Time: 3 hrs.

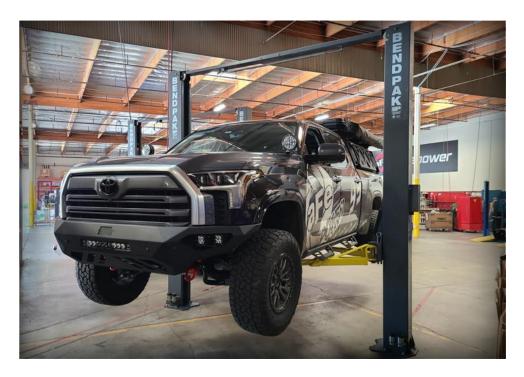
Note: aFe Control UCA's will work with factory offset wheels and OE shocks. To take advantage of more useable travel and adjustable ride height, we suggest adding a Sway-A-Way Front Coilover kit P/N: 101-5600-20 with this UCA kit.

#### **Tools & Supplies Required**

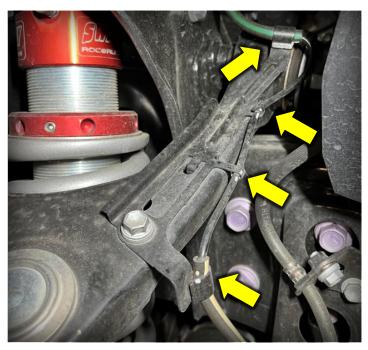
Jack, Jack Stands, Needle Nose Pliers, Hammer, ball joint puller (optional) 10mm, 12mm, 19mm, 22mm Sockets & Wrenches, 12mm Allen Socket, 3mm Allen, 1-5/16" Wrench for 7/8 jam nuts.

#### **Upper Control Arm Installation:**

Raise the truck with a 2-post lift (preferable), or floor jack. If using a floor jack, place jack stands in the factory designated jack points. Remove the front wheels.

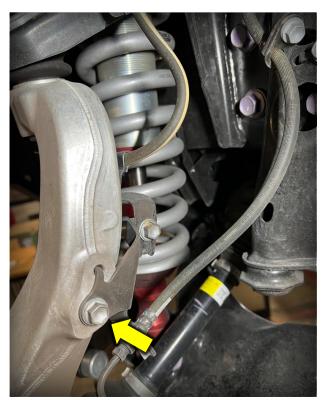


Disengage the ABS line from the factory upper control arm retention clips. Use a slotted screwdriver and carefully pry the clamps open.



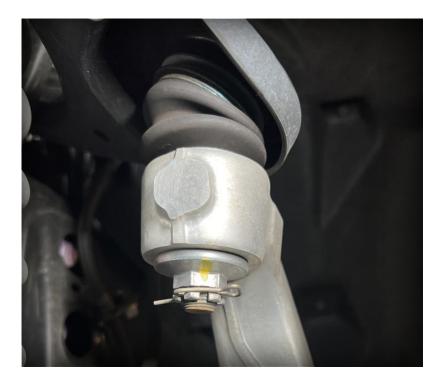


3 Unbolt the brake line brackets from the steering knuckle and frame.





Remove the factory cotter pin using a pick. Loosen but do not remove the castle nut. Leave about a 1/4" of gap between the upright mount and nut.



Use a hammer and hit the upright as shown below. The ball joint tapered stud should pop loose after 4-5 hits. If the stud is being stubborn and does not want to break loose, you can use a ball joint puller tool. Using the puller in conjunction with a couple of smacks with the hammer should pop it loose.





Once loose, leave the castle nut on for the time being.

Undo the splash covers in the wheel well to gain access to the upper control arm cross bolt. Needle noise pliers work well to disengage the pop clips.



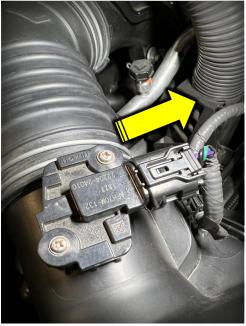


In order to get the cross bolt out on the **LEFT** (**DRIVER**) side, you must remove the intake airbox and ECU.



Open the hood and disconnect the negative terminal on the battery. Next, locate the intake airbox and disconnect MAF sensor.





Loosen the hose clamp. Unclip the airbox top and move out of the way.

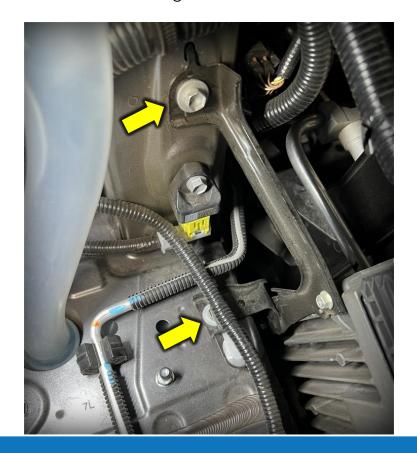




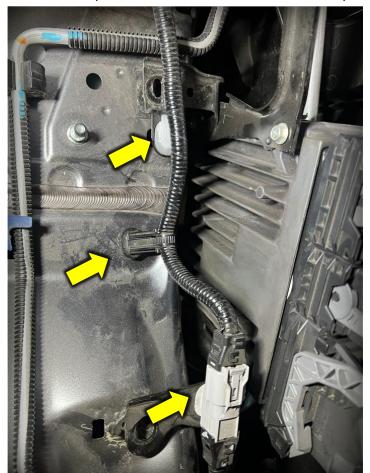
Pull the air box housing up and out of the vehicle to expose the ECU mounting bracket.



7 Unbolt the ECU bracket mounting.



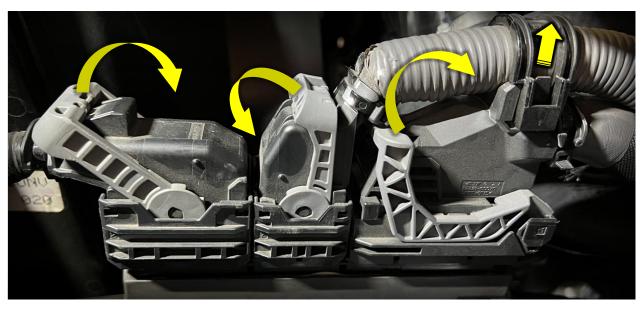
Unclip the wire harness from the body & ECU mounting bracket.

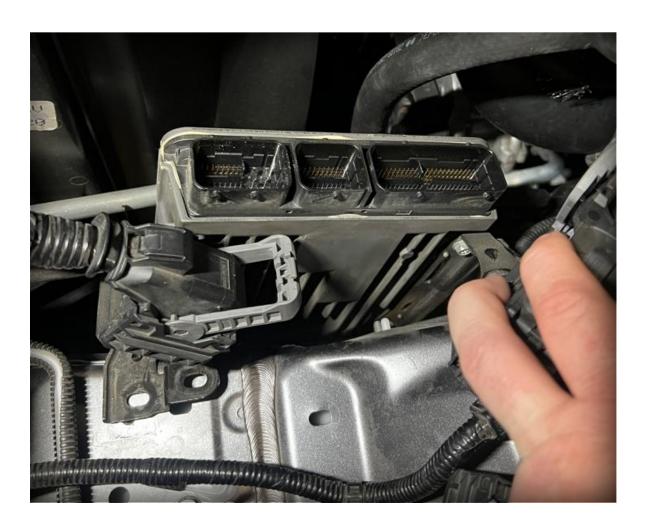






Unclip the (3) main connectors from the ECU and move the ECU out of the way.





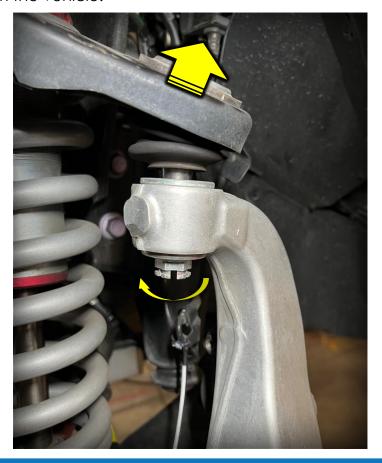
With the ECU out of the way, loosen and remove the cross bolt towards the front of the truck (22mm wrench/socket).







All that is left is to spin the ball joint castle nut off and remove the factory arm from the vehicle.



9 Getting the cross bolt out is much easier on the **RIGHT** (**PASSENGER**) side. Remove the covers with needle nose pliers.



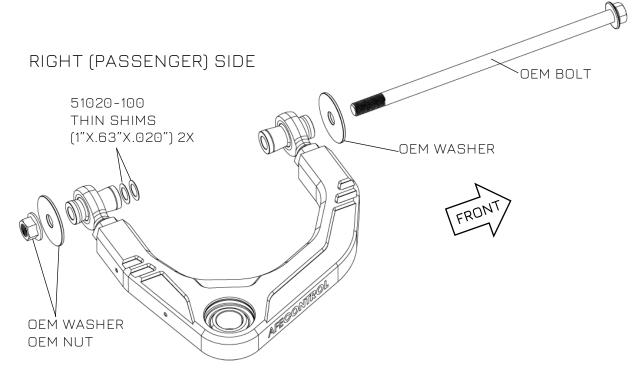


There is only one wire harness mount that needs to be unbolted to allow the cross bolt to come out towards the front. Repeat step 8 for this side and the arm will be out.



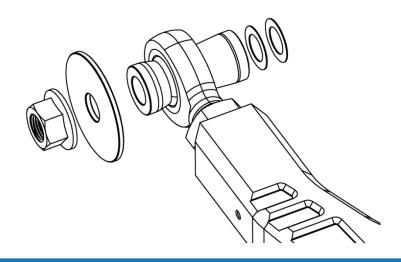
#### HWWHC AFECONTROL

Install the aFe Control UCA in the same manner as factory removal. You will need to use the provided spacers and shims as shown in the diagram below. Reuse the OEM M16 bolt and tighten to 130 ft·lbs. Repeat for other side.



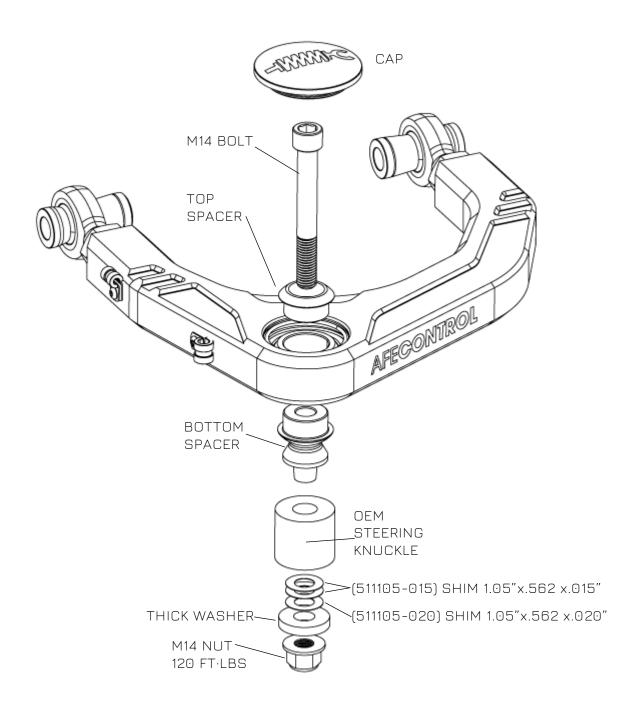
Note: Due to variances between trucks we include (2)thin shims per side to make up any gap between the mounts and UCA bushings. If (2) shims fit, then install two. If you only have room to add (1) shim, then only add one shim. The goal is to make the fit as snug as possible. If there is too much gap, when you tighten the cross bolt the hiem joints will be preloaded too much which can lead to excessive wear. Only add shims on the rearward side of the mount.

SHIM AS NEEDED



#### HWWHC AFECONTROL

Once the inboard mounts are installed, we will assemble the outer joints. Install the top spacer and the M14 bolt. Insert the bottom spacer into the spherical bearing and guide the end of the bolt into the steering knuckle. Underneath the knuckle mount, add (2) 1.05"x.562 x.015" shims and (1) 1.05"x.562 x.020" shim. Finally fasten everything with the thick washer and M14 nylock nut. Tighten to 120 ft lbs. Cover the top of the bearing with the included cap. See Diagram



12 Attached the ABS line using the included line clamps and button heads screws. Inboard clamp is the smaller size. Note orientation.





#### HWWHC AFECONTROL

- Reinstall the front wheels and torque to factory specs. You're finished with the installation. It is imperative to get an alignment as soon as possible.
- 12 Alignment Notes

Suggested Street Alignment Specification:

Front Caster: As much as possible

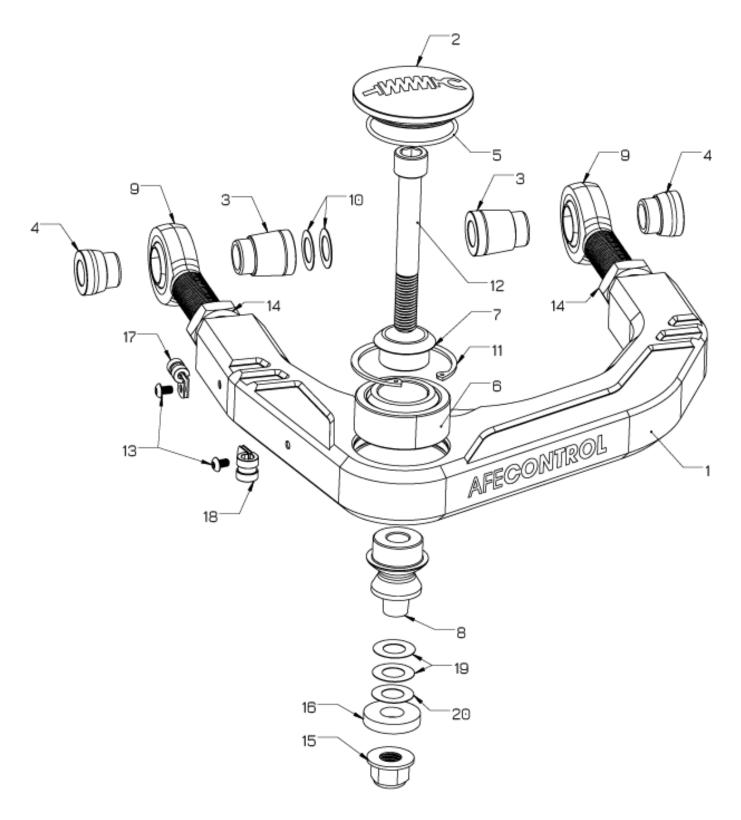
Front Camber: 0° to -0.5°

Front Toe: 0 to 1/16" Total Toe IN

To achieve our suggested target specs, you will need to adjust the <u>lower</u> control arm factory eccentric bolts to maximize positive caster. i.e. adjust front eccentric inboard and rear eccentric outboard. This will give a good starting point.

Fine tune your camber and caster with the aFe Control UCA's. If you need large amounts of adjustment for caster, adjust the factory lower control arm. It is not recommended to have drastic front to rear opposing adjustment in the upper control arm adjusters (e.g. front bushing all the way in and rear bushing all the way out or vice versa.) Try to keep the difference in adjustment within 3/8" of each other.

#### Parts List Diagram



See List Next Page

Kit Contents			
Item #	Part #	Description	Qty.
1	00P-0P2657-R	UCA, Left Body	1
1*	00P-0P2658-R	UCA, Right Body (Shown)	1
2	00P-0P2654-B	Cap, Ball Joint Black	2
3	00P-0P2652-B	Inner Misalignment Spacer	4
4	00P-0P2653-B	Outer Misalignment Spacer	4
5	00P-0C1711-A	O-Ring, 53mm ID x 2.5mm W	2
6	00P-0C1757-A	Bearing, Spherical COM-20T	2
7	00P-0P2655-A	Spacer, Top 1.25"	2
8	00P-0P2656-A	Spacer, Bottom 1.25"	2
9	00P-0C1754-A	Rod End, 7/8" Male RH Thread	4
10	51020-100	Shim, .020 X 1.00 X .629	4
11	00P-0C1755-A	Ring, Retainer 2-3/8"	2
12	00P-0C1756-B	Bolt, M14-2X110 SHCS 12.9 Blk Zinc	2
13	00P-0C1772-A	Bolt, 10-32x5/16" BHCS 18-8 SS	4
14	00P-0C1773-A	Nut, Jam 7/8"-14	4
15	00P-0C1764-A	Nut, M14-2 Nylock	2
16	00P-0C1774-A	Washer, 15 mm ID, 36 mm OD, 6.6 mm Thick	2
1 <i>7</i>	00P-0C1775-A	Clamp, Adel 3/16" ID	2
18	00P-0C1771-A	Clamp, Adel 5/16" ID	2
19	511105-015	Shim, 1.05 X .015 X .562	4
20	511105-020	Shim, 1.05 X .020 X .562	2