TOTAL CHAOS
FABRICATION

INSTALLATION INSTRUCTIONS

COMPONENT: STOCK LENGTH EXPEDITION SERIES LOWER CONTROL ARMS

PART #: 87505-E

FITS: 2008-2020 TOYOTA LAND CRUISER 200 SERIES

PARTS LIST:			
ITEM #	PART #	QTY	ITEM DESCRIPTION
1	87553L	1	LEFT LOWER CONTROL ARM
	87553R	1	RIGHT LOWER CONTROL ARM
2	WSSX16T-1	2	1" UNIBALL
3	30604	2	1" SNAP RING
4	10342	2	BOLT: 3/4"-16 X 4.25"
5	10034-C	2	1"-3/4" HIGH MISALIGNMENT SPACER
6	10034-TUN	2	HIGH MISALIGNMENT SPACER TAPERED ADAPTER
7	12304	2	WASHER: 3/4" SAE
8	11302	2	NUT: 3/4"-16 C-LOCK
9	10005	5	ZERK FITTING
10	60893	2	LONG BUSHING
11	60892	6	SHORT BUSHING
12	69704	2	LONG INNER SLEEVE
13	69705	2	SHORT INNER SLEEVE

REQUIRED TOOLS

- 10mm Wrench
- 19mm Wrench
- 22mm Wrench
- 24mm Wrench
- 5/8" Allen Wrench
- 1 1/8" Wrench
- Hammer

IMPORTANT

- Before starting install, make sure the vehicle is supported securely on jack stands.

- Refer to the owners manual for how to disable the KDSS system. We recommend loosening the two 10mm head bolts three rotations each on the control valve underneath the inside of the driver's side of the frame.

STEP 1

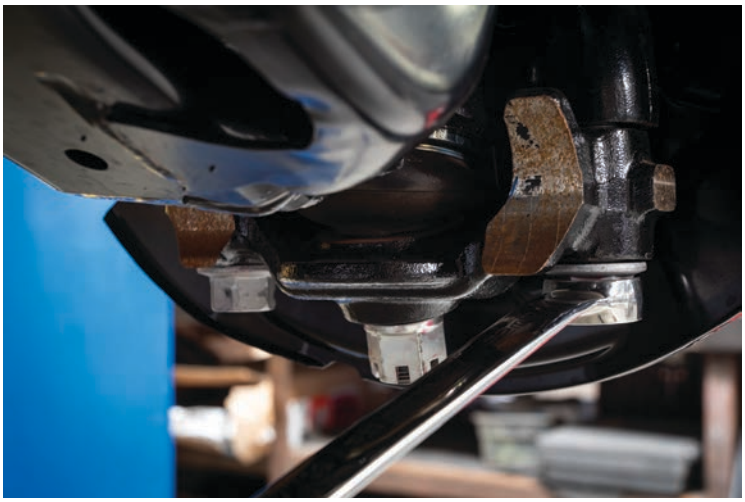
Loosen the lower control arm cam bolts using a 24mm wrench or socket.

STEP 2

Loosen the lower shock bolt using a 22mm wrench or socket.

STEP 3

Loosen the two ball joint cradle bolts using a 22mm wrench or socket.



STEP 4

Remove the cotter pin then loosen the castle nut using a 24mm wrench or socket.

STEP 5

Loosen the two sway bar link bolts using a 19mm wrench or socket.

STEP 6

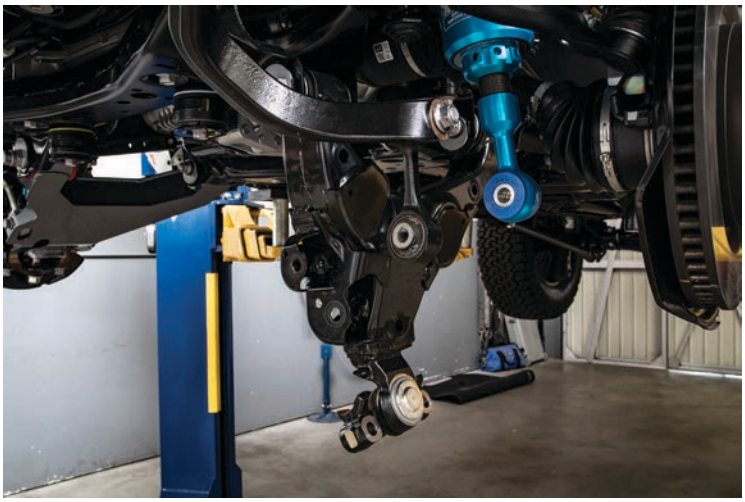
Remove the lower shock bolt.

STEP 7

Remove the sway bar link hardware.

STEP 8

Remove the ball joint cradle bolts and let the stock lower control arm swing down and hang from the pivot bolts.



STEP 9

Remove the pivot bolts and remove the stock lower control arm from the truck.

STEP 10

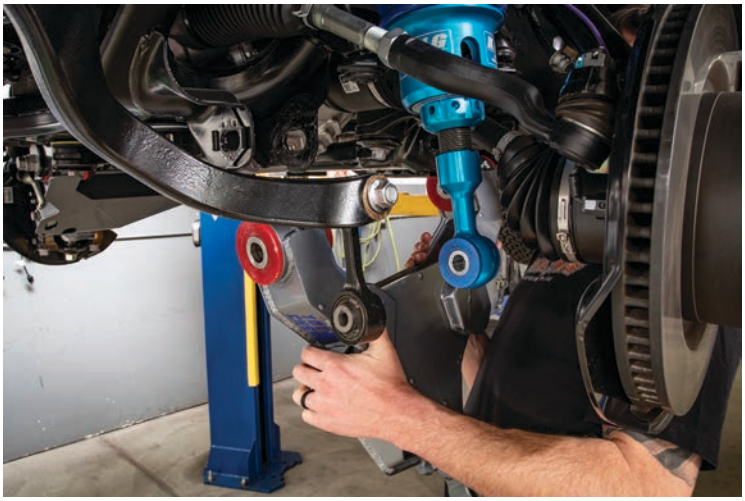
With the stock control arm on the ground, use a hammer to strike the cradle until the ball joint taper breaks free from the cradle.

STEP 11

Before installing the TOTAL CHAOS control arm, use Superlube® or equivalent and grease the inside of the frame where the control arm bushings will be pivoting.

STEP 12

After installing and properly lubing the bushings and inner sleeves* as well as installing the zerk fittings**, insert the TOTAL CHAOS lower control arm into the frame and insert the factory pivot bolts.



* Apply generous amounts of grease to the outside of sleeves, outer face of urethane bushings and I.D. of the urethane bushings prior to install.

** When installing the zerk fittings take care not to over tighten them as they are hollow and can snap off. When fully installed they will not sit all of the way flush with the pivot, just insert them two or three rotations until they are snug. Don't forget to have them pointing in the right direction so you can get a grease gun onto them once the arms are installed onto the vehicle. If excess powder coat is in the zerk holes, re-tap using a 1/4"-28 tap to clean up the threads.

STEP 13

Insert the 3/4" bolt through the custom short misalignment spacer, uniball, tapered misalignment spacer, ball joint cradle, 3/4" washer, then into the c-lock nut.

STEP 14

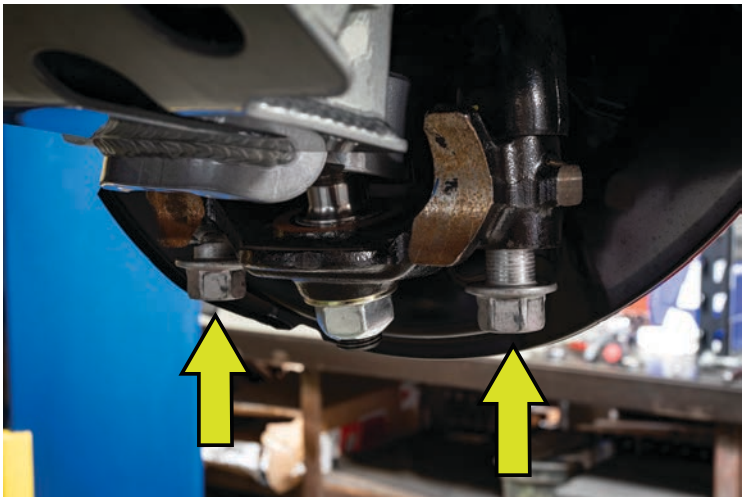
Using a 5/8" allen wrench and a 1 1/8" wrench or socket, torque the nut to 200 ft/lb.

STEP 15

Swing the lower control arm up and install the shock bolt which will hold the arm in place.

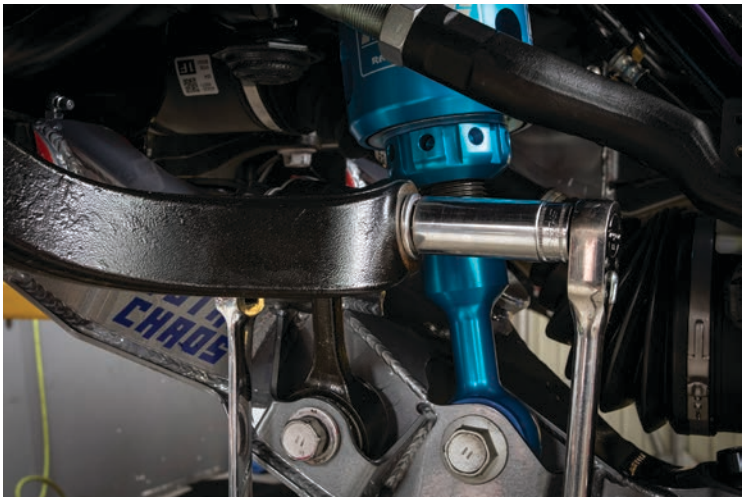
STEP 16

Line up the ball joint cradle bolt holes with the steering knuckle and install the two bolts, then tighten the bolts using a 22mm. Tighten to 220 ft/lbs.



STEP 17

Install and tighten the stock sway bar link and hardware. Tighten to 89 ft/lbs.

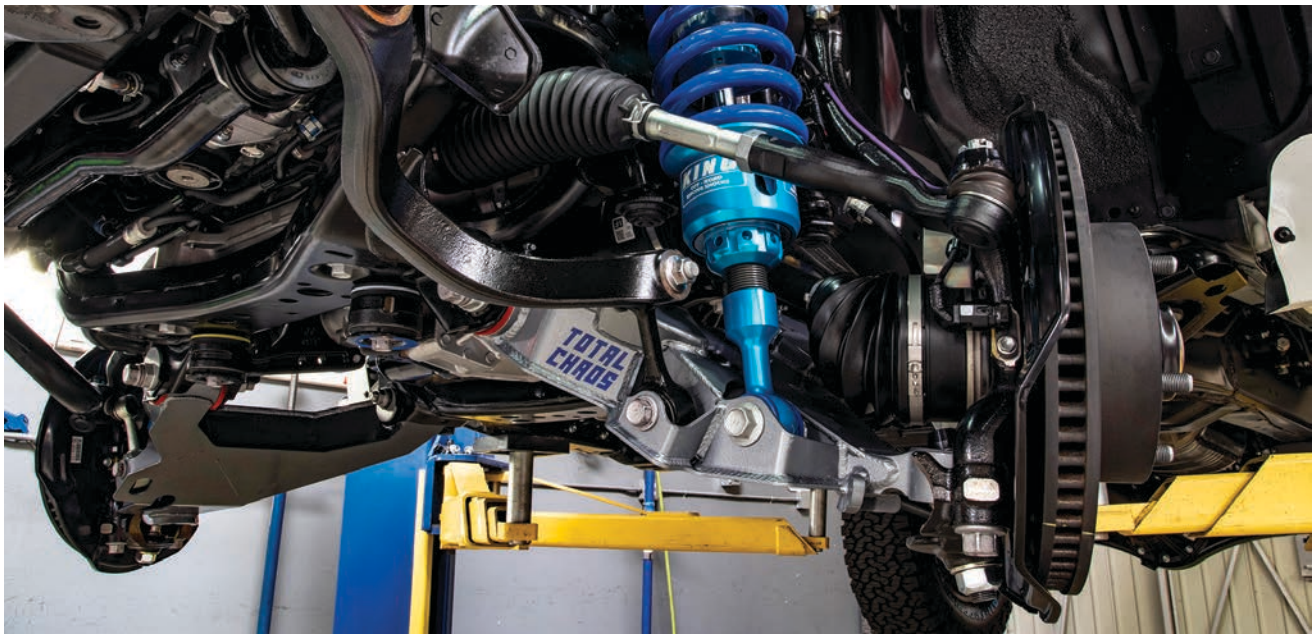


STEP 18

Tighten the lower shock bolt to 140 ft/lbs.

STEP 19

Center and tighten the alignment cam bolts before taking the vehicle to a trusted alignment shop.



LOWER CONTROL ARM INSTALLATION IS NOW COMPLETE!

- Get an alignment done at a qualified facility and re-torque all hardware after 500 miles.
- You MUST grease the bushings with a grease gun upon the completion of install.
- Re-greasing is required every 3,000-5,000 miles to maximize bushing life and keep noise down.
- You DO NOT need to loosen lower control arm cam bolts when greasing the bushings.

FOR INSTALL QUESTIONS OR CUSTOMER SERVICE INQUIRIES:

Call 951.737.9682 or email info@chaosfab.com

LOWER CONTROL ARM INSTALL TIPS

The following tips are intended to make installation of your TOTAL CHAOS Fabrication lower control arms smoother. We try to answer some of the frequently asked questions that we get during an LCA installation.

PIVOT POCKET ADJUSTMENT

If the LCA pivots are not aligning you may need to use a large crescent wrench or rubber mallet to open up the frame pockets where the lower control arm will mount.

CAUTION: Only a small adjustment may be necessary. You will not need to bend it very much.

GREASE THE PIVOT POCKETS

Greasing the control arm pockets where the bushings pivot on the frame will help when installing the LCA. This will also provide a layer of grease on the flat shoulder side of the bushing.

GREASE THE PIVOT POCKETS CONTINUED

BUSHING PREP AND INSTALLATION

Apply generous amounts of grease to the inside of the lower control arm pivots. Then install the bushings using a dead blow hammer.

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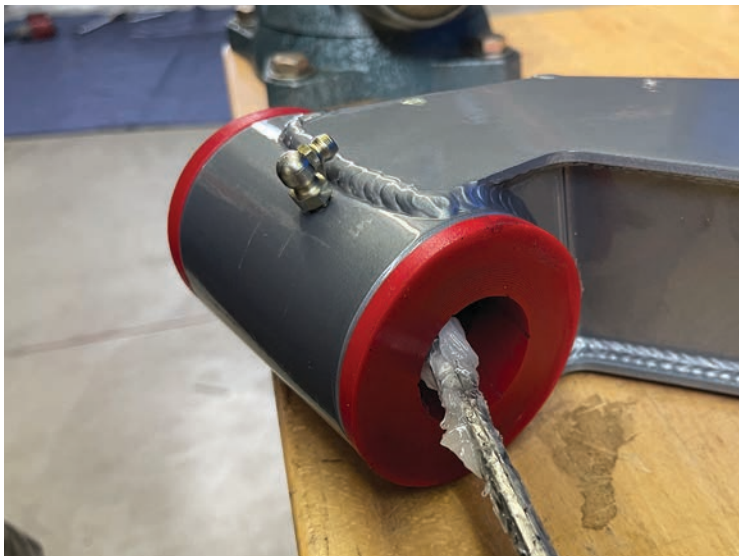
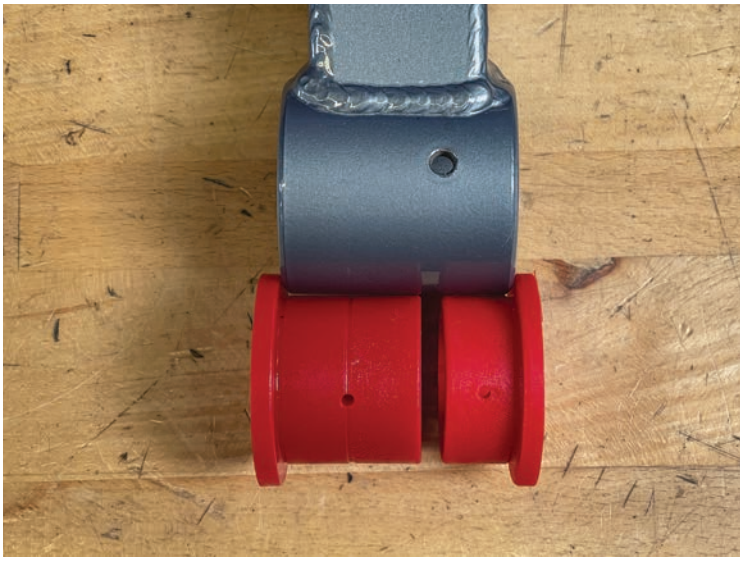
BUSHING PREP AND INSTALLATION

Apply grease to the inner bushing and insert the inner sleeve. It will be a tight fit so a deadblow hammer will be necessary.



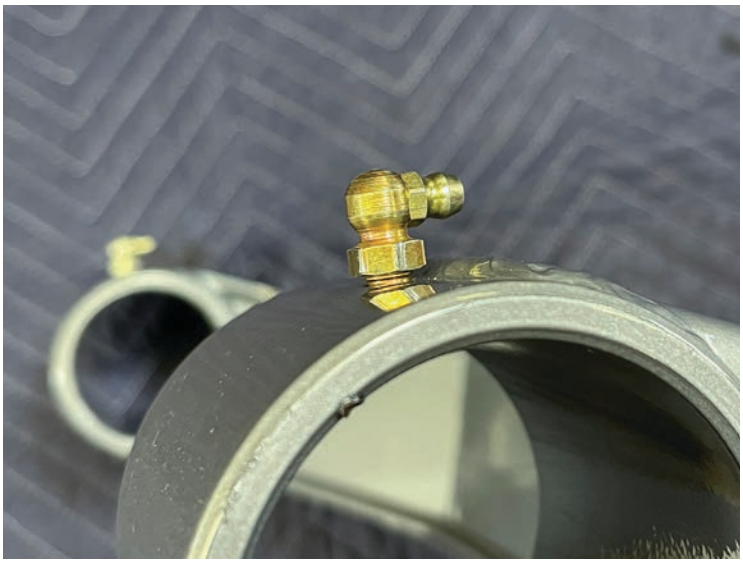
BUSHING ALIGNMENT

Some lower control arm pivots have an offset zerk fitting hole. Be sure to install the bushings in the correct orientation where the gap lines up with the zerk hole.



ZERK FITTINGS

Powder coat can build up in the threaded holes – run a ¼"-28 tap through it to chase it when needed. When tightening the zerk, DO NOT tighten the zerk to the bottom of the thread. Stop when it gets snug. Then rotate as needed to make the fitting accessible for a grease gun.



UNIBALLS

Brand new uniballs are designed to be much tighter to rotate than a ball joint. Rotating the uniball will not be as easy as the ball joint you just removed. You may also notice this when driving the vehicle, especially at low speeds – a heavier steering wheel feel and it may not return to center as fast. If you are replacing a set of worn out ball joints, a new uniball might feel tighter than you were anticipating. There is a break in period associated with these new parts. They will begin to loosen up as break in occurs. Mileage of break in can vary.

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