



# INSTALLATION INSTRUCTIONS



**COMPONENT:**  
**2007-2021 TOYOTA TUNDRA 2.5" EXTENDED AXLE SHAFTS**

**PART #: 87300**

PARTS LIST:			
ITEM #	PART #	QTY	ITEM DESCRIPTION
1	87302	2	07+ Tundra 4340 Axleshaft (each)
2	16300024	4	Oetiker Clamp 33.6mm - 40mm
3	16300045	2	Oetiker Clamp 112mm - 120mm
4	16300046	2	Oetiker Clamp 106mm - 114mm

## REQUIRED TOOLS

- Oetiker Pliers
- Chop Saw w/ Metal Cutting Blade
- Table vise w/ soft jaws
- Hammer
- Diagonal Cutters (Dikes)
- Brass Punch
- Flat Head Screwdrivers
- Container to hold grease
- Safety Glasses
- Gloves
- Duct Tape
- Paper Towels/Rags

## IMPORTANT

- This procedure is VERY difficult. **DO NOT ATTEMPT** if you don't have decent automotive mechanical knowledge, proper tools or you don't pay attention to details. Before starting, read through the entire procedure thoroughly. If you feel competent enough to handle this, take your time and follow the instructions carefully. If you feel that you are not capable of completing any of the steps, call Total Chaos to assist you with other options to help you install these items.
- After performing this modification, you will NOT be able to reuse the factory axles again.
- Some procedures require the utmost attention to safety. All steps require the wearing of safety glasses or some form of eye protection.

## THESE STEPS BEGIN WITH THE STOCK AXLES REMOVED FROM THE VEHICLE.

### STEP 1

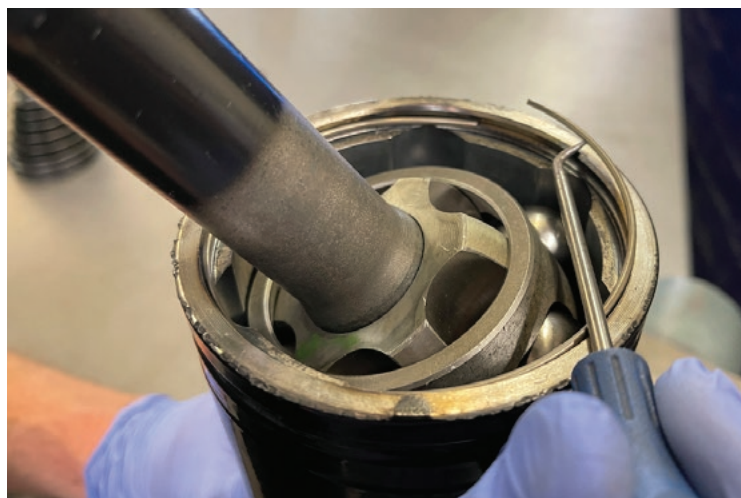
With the stock axle assembly removed from the vehicle, you will begin by removing the large CV boot clamp. Once the large clamp is removed, pull the boot away from the inner CV housing.

Be sure not cut the CV boots as they will be reused.



## STEP 2

On the inside of the housing you will find a large thin snap ring that keeps the inner CV from pulling out of the housing, use a pick to remove the snap ring and pull the inner CV out of the inner housing. NOTE: make sure you are in a clean area and do this over a pie tin because the CV balls will fall out once the CV is removed.



## STEP 3

You will find a snap ring on the end of the axle shaft that holds the inner star onto the shaft. Remove this snap ring, then remove the inner star (it may be necessary to use a brass hammer or dead blow to get the star to budge (second photo)).

With the inner star removed; remove the small inner boot clamp and slide the boot off of the axle shaft, salvaging as much cv grease as possible as you will be re using as much factory grease as possible.





## STEP 4

Remove both outer CV boot clamps and slide the outer boot off of the axle shaft again saving as much grease as possible. Once the boot is off rotate the axle in a circular motion and save as much grease out of the joint as possible because the next step may contaminate the existing grease.



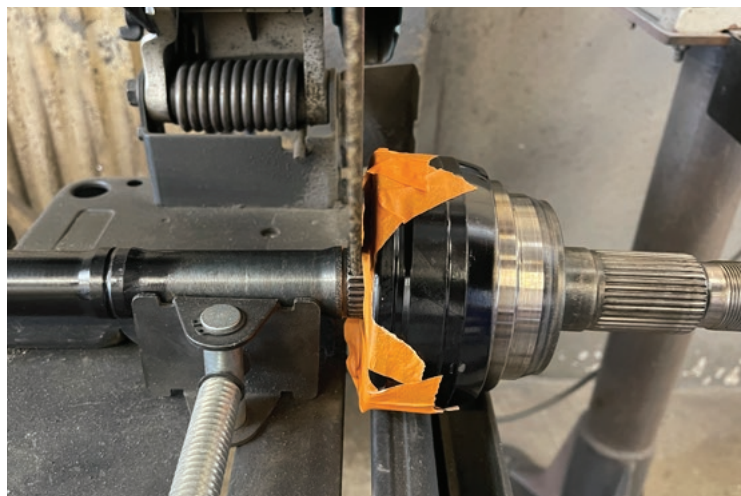
**STEP 5**

Use duct tape around the outer CV housing overlapping it around the axle shaft so there are no holes that will allow grinder dust into the joint.

**STEP 6**

With the CV taped off use a chop saw or cutoff wheel to cut the axle as close to the housing as possible without cutting the housing.

After cutting, remove the tape and remove any contaminated grease before moving the joint.





## STEP 7

With the joint decontaminated rotate the star back and forth removing four of the six balls leaving two balls on opposing sides of the housing. This will allow you to turn the star upside down and remove the snap ring that is holding the axle stub into the star.



## STEP 8

Flip the star back over and use some channel locks to pull the axle stub out of the star.



## **HERE MARKS THE BEGINNING OF AXLE RE-ASSEMBLY. FOLLOW THE STEPS BELOW.**

---

**Step 9:** Once the stub is out, rotate the star back and forth reinstalling the four missing balls into the joint.

**Step 10:** Fill the center of the star with the saved grease (and more if necessary). CV grease can be purchased at your local Toyota dealership or most auto parts stores.

**Step 11:** Install the factory snap ring onto the new axle shaft and use a dead blow to compress the snap ring and push it through the star until it expands on the other side of the star (make sure you're ready for this step because once its in, there is no removing the axle without cutting it). This is also a good time to confirm that all six balls are installed around the star.

**Step 12:** Add more grease to the top of the joint then use the factory boot and new clamps to install the outer boot.

**Step 13:** Install the small inner clamp and boot.

**Step 14:** Install the inner star onto the axle shaft and use the factory snap ring on the end of the axle.

**Step 15:** Fill the inner housing with grease and set it aside.

**Step 16:** Using grease, assemble the inner star, balls, and cage holding it all together with your hand (careful this is a frustrating step).

**Step 17:** Once all together, flip the axle over and insert it into the housing without losing any balls.

**Step 18:** Once in the housing re-install the thin large snap ring then the boot and clamps.

**Step 19:** Clean any excess grease from the axle and boots and install the axle onto the car.

**CONGRATS! YOUR AXLES ARE READY TO GO!**



**FOR INSTALL QUESTIONS OR CUSTOMER SERVICE INQUIRIES:**

Call 951.737.9682 or email [info@chaosfab.com](mailto:info@chaosfab.com)