



### Part # 11529595 - C2/C3 OEM Disc Brake Retention Kit



#### Recommended Tools



### C2/C3 OEM Disc Brake Retention Kit

# Installation Instructions

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THIS KIT IS DESIGNED TO RETAIN THE ORIGINAL 1965-1982 CALIPER & ROTOR WHEN USING THE RIDETECH TRUTURN SYSTEM FOR THE C2/C3 CORVETTE.

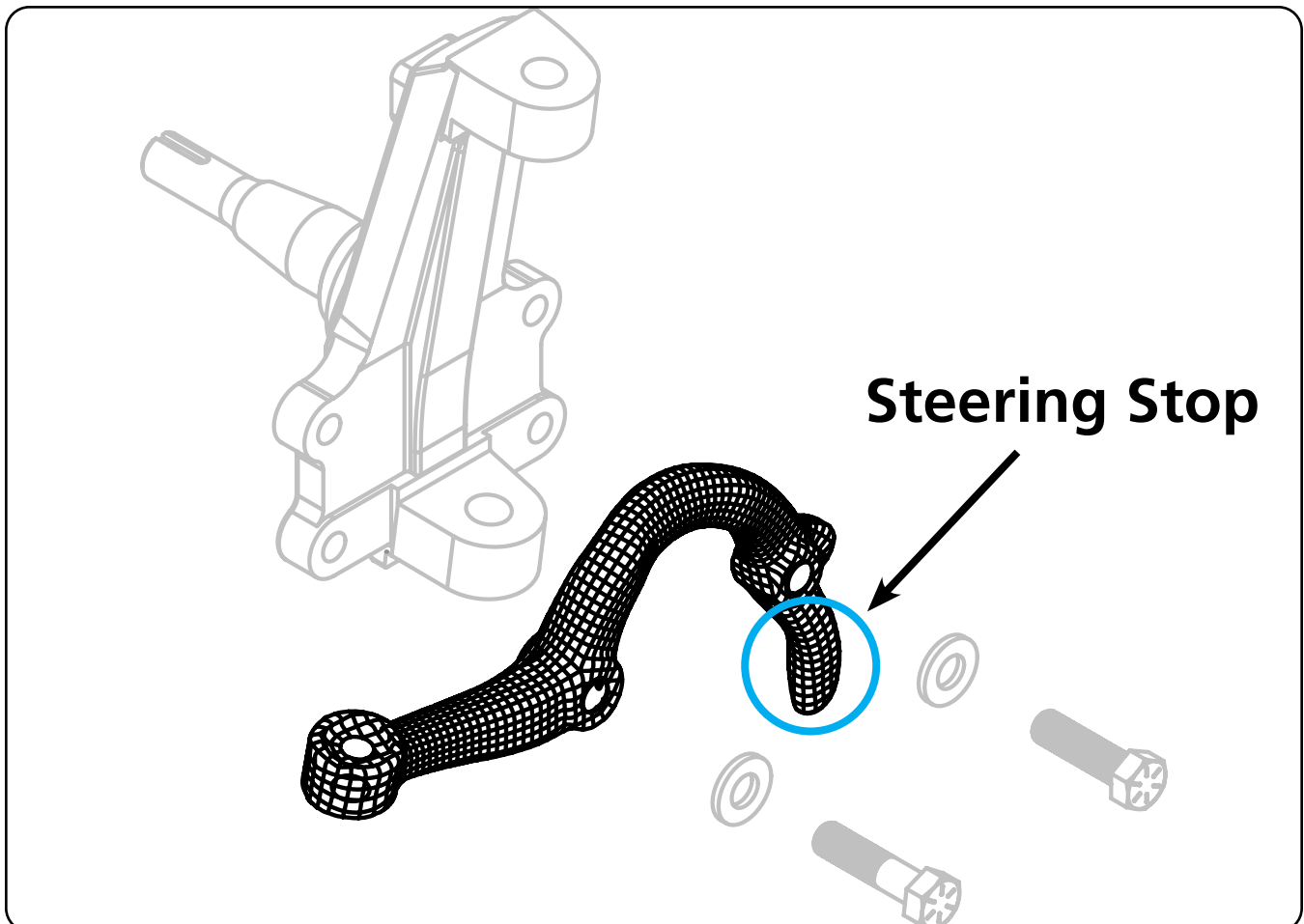


## PRE-INSTALLATION NOTES



### STEERING STOPS

If your steering arms have the steering stop “appendage” shown in the illustration below, you will not need to install the separate 90003187 and 90003188 steering stop “paddles” included in this kit. You may disregard any mention of installing the steering stops in the instructions below. This does not affect the hardware used or torque values listed.



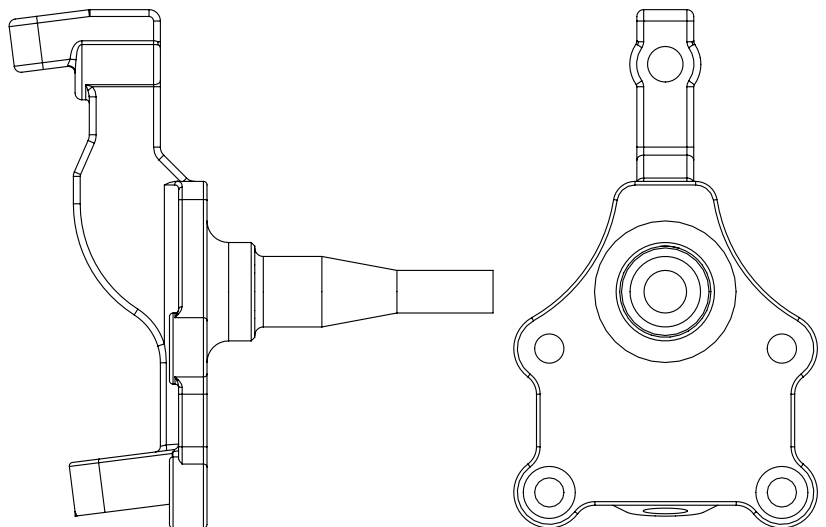


### Spindle Note!

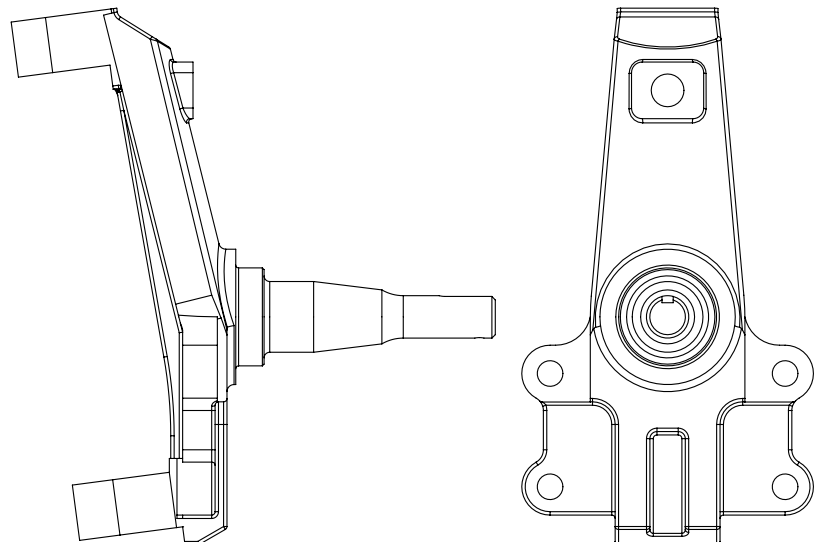
This kit is designed to be used in conjunction with Ridetech Spindles!

**We use 2 different spindle setups with this kit, you will need to make sure you are following the instructions for the correct spindle. The easiest way to determine which spindle you have is by looking at the 4 mounting holes on the face of the spindle. SMOOTH HOLE SPINDLE, all 4 holes are smooth with the bottom 2 being counter sunk from the spindle pin side. THREADED HOLE SPINDLE has 1/2"-20 threads in all 4 holes. See Diagrams below to help you identify your spindle.**

#### SMOOTH HOLE SPINDLE



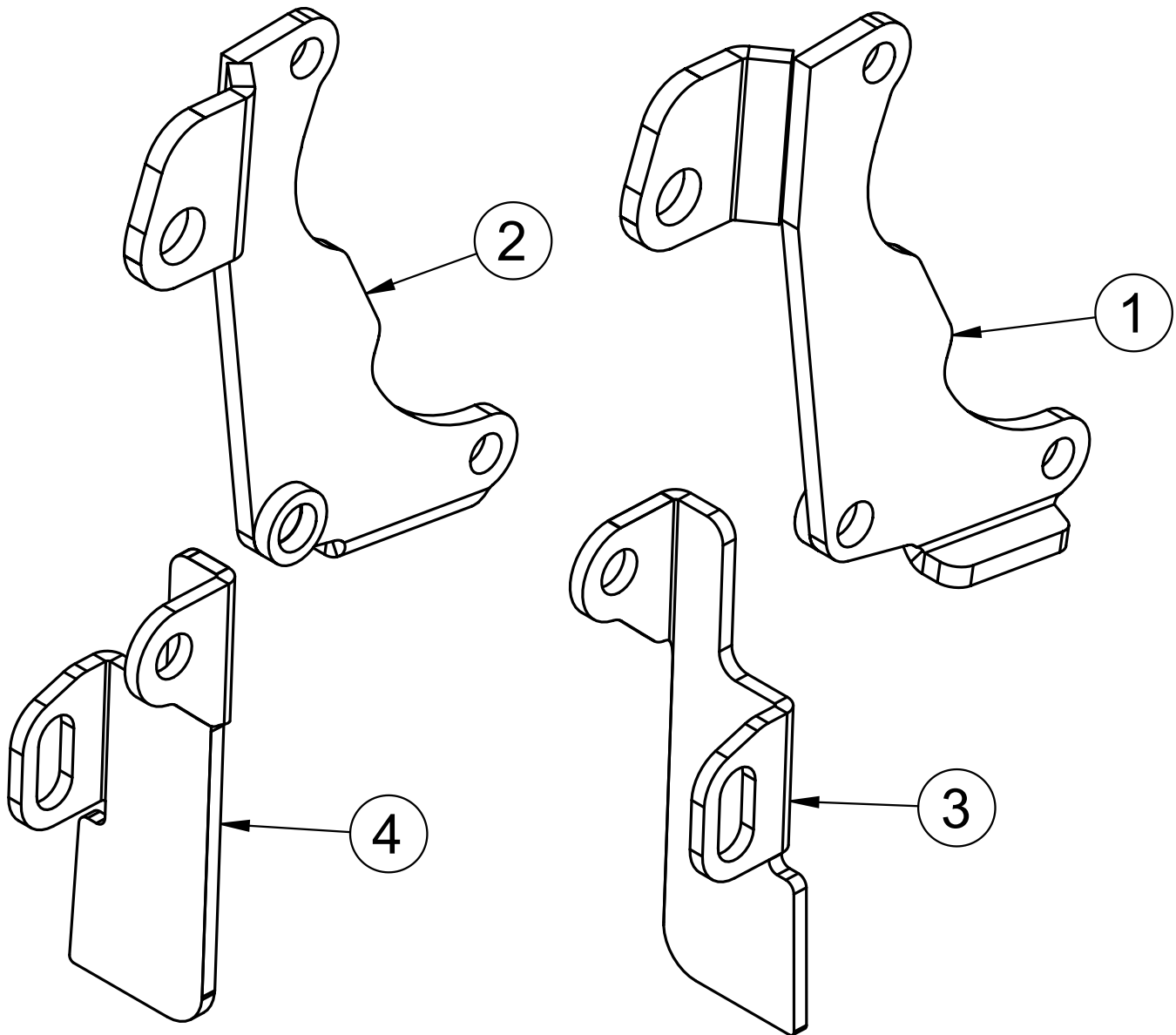
#### THREADED HOLE SPINDLE





### Major Components .....In the box

Item #	Part #	Description	QTY
1	90003185	Front Brake Bracket - Driver	1
2	90003186	Front Brake Bracket - Passenger	1
3	90003187	Steering Stop - Driver (Not used with "Appendaged" steering arms)	1
4	90003188	Steering Stop - Passenger (Not used with "Appendaged" steering arms)	1
5	90003122	Bearing Hub Assembly - includes bearings, seals, & dust cap - Not Shown	1





### Hardware List .....In the box (Kit# 99010100)

QTY	Part Number	Description
<b>CALIPER TO BRACKET - <i>Either Spindle</i></b>		
4	99431006	7/16"-20 x 1 1/4" Hex Bolt
4	99433003	7/16" Split Lock Washer
1	90002263	Red Loctite
<b>BRACKET &amp; STEERING STOP TO SPINDLE - <i>Smooth Hole Spindle</i></b>		
2	99501026	1/2"-13 x 2 1/4" Hex Bolt
4	99503014	1/2" SAE Flat Washer
2	99502009	1/2"-13 Nylok Nut
<b>STEERING ARM TO SPINDLE - <i>Smooth Hole Spindle</i></b>		
2	99501054	1/2"-20 x 2.5" Flat Head Caps Screw
<b>BRACKET &amp; STEERING STOP TO SPINDLE - <i>Threaded Hole Spindle</i></b>		
2	99502003	1/2"-20 Thin Nylok Nut
2	99621001	5/8"-18 x 1" Hex Bolt
<b>STEERING ARM &amp; STEERING STOP TO SPINDLE - <i>Threaded Hole Spindle</i></b>		
4	99501068	1/2"-20 x 2" Hex Bolt, FULLY THREADED
4	99503014	1/2" SAE Flat Washer

**THIS KIT WILL UTILIZE SOME OF THE HARDWARE THAT IS INCLUDED WITH THE SPINDLES.**

### Getting Started.....

Allows for the retention of the factory brake system when paired with Ridetech tall spindles.

**IF YOUR SPINDLE HAS THE STEERING ARM INSTALLED, THE BOLT OPPOSITE OF THE TIE ROD END WILL NEED TO BE REMOVED TO INSTALL THE BRAKE ADAPTER KIT.**



**1.**

**1.** Start by greasing the wheel bearings and installing the hubs on the spindle using the nut, washer, and cotter pin supplied with the kit.



### Attaching the Caliper Bracket - *SMOOTH HOLE SPINDLE*



2. Apply Red Loctite to the 5/8"-18 x 1" bolt supplied with the spindle. Using **Image 2** as a reference, line up the 5/8" hole of the bracket with the threaded hole near the top of the spindle. Insert the 5/8" bolt through the hole in the bracket and thread it into the spindle. Pictured is the passenger assembly, it positions the caliper on the front side of the spindle



3. Install a 1/2" flat washer on 1/2"-13 x 2 1/4" hex bolt and insert it through the bracket and spindle. This will help hold the bracket in position while tightening the 5/8" bolt. The welded on bung of the bracket should sit against the back side of the spindle. Torque the 5/8" bolt to 130 ftlbs.



4. Align the Steering Arm mounting holes with the 2 bottom holes of the spindle. The steering arm will be pointing the opposite direction of the caliper bracket. Again, this is the passenger side with the steering arm going to the rear of the car.



### Attaching Steering Stop & Steering Arm - *SMOOTH HOLE SPINDLE*



**5.** Insert (1) 1/2"-13 x 2 1/2" flat head socket cap screws through the spindle and steering arm. Install a 1/2"-20 nylok nut on the bolt closest to the end that attaches the tie rod.



**6.** Slide the Steering Stop in place. The top tab goes on the wheel side of the spindle, opposite of the caliper bracket. The bottom tab is positioned over the steering arm hole.



**7.** Align the steering arm and steering stop with the hole in the spindle.



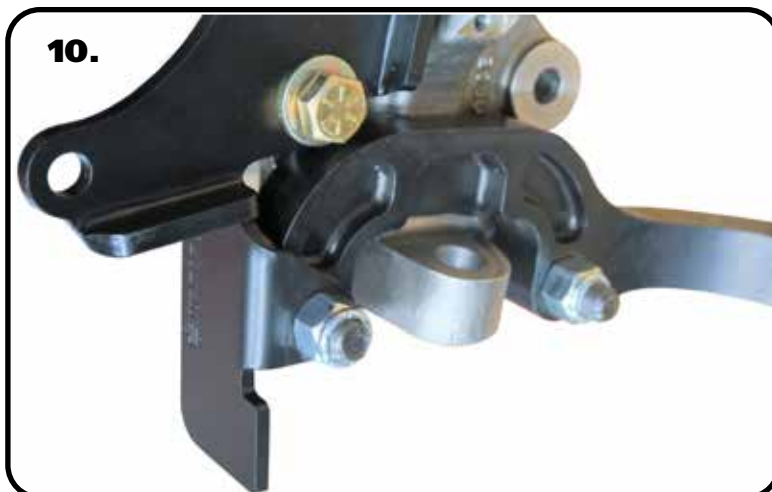
### Attaching Steering Stop & Steering Arm - *SMOOTH HOLE SPINDLE*



**8.** Insert a 2nd 1/2"-20 x 2 1/2" flat head socket cap screw through the spindle, steering arm, and steering stop. Install a 1/2"-20 nylok nut.



**9.** Push the 1/2"-20 x 2 1/4" bolt through the tab of the steering stop. Install a 1/2" flat washer, & 1/2"-20 nylok nut. Torque the 1/2" hardware to 90 ftlbs.

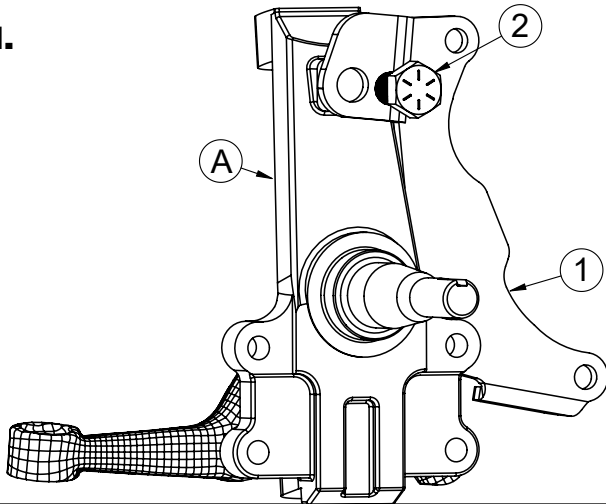


**10. Image 10** illustrates what the back of the passenger spindle should look like at this point.



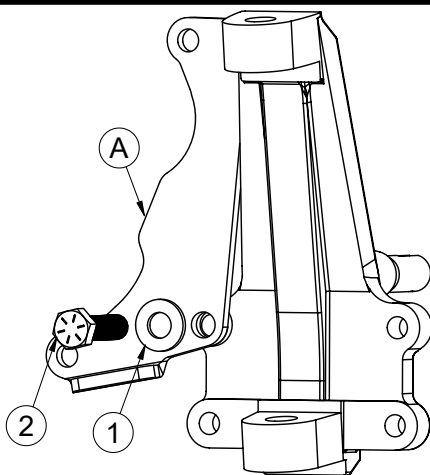
### Attaching the Caliper Bracket - *THREADED HOLE SPINDLE*

11.



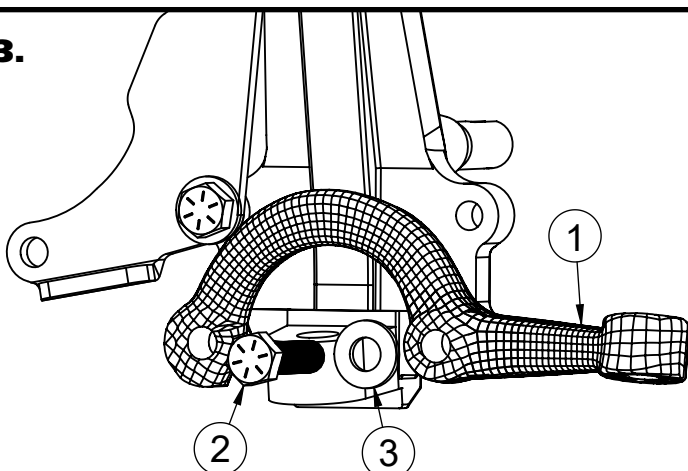
11. Apply Red Loctite to the 5/8" -18 x 1" bolt supplied with the spindle. Using **Image 11** as a reference, line up the 5/8" hole of the bracket with the threaded hole near the top of the spindle. Insert the 5/8" bolt through the hole in the bracket and thread it into the spindle. Pictured is the passenger assembly, it positions the caliper on the front side of the spindle. The steering arm is shown in this image as a reference. Notice the caliper bracket is on the opposite side as the tie rod end of the steering arm.

12.



12. Install a 1/2" flat washer(1) on 1/2"-13 x 2" **FULLY THREADED** hex bolt(2) and insert it through the bracket(A) and spindle. This will help hold the bracket in position while tightening the 5/8" bolt. The welded on bung of the bracket should sit against the back side of the spindle. Torque the 5/8" bolt to 130 ftlbs. Torque the 1/2" bolt to 75 ftlbs.

13.

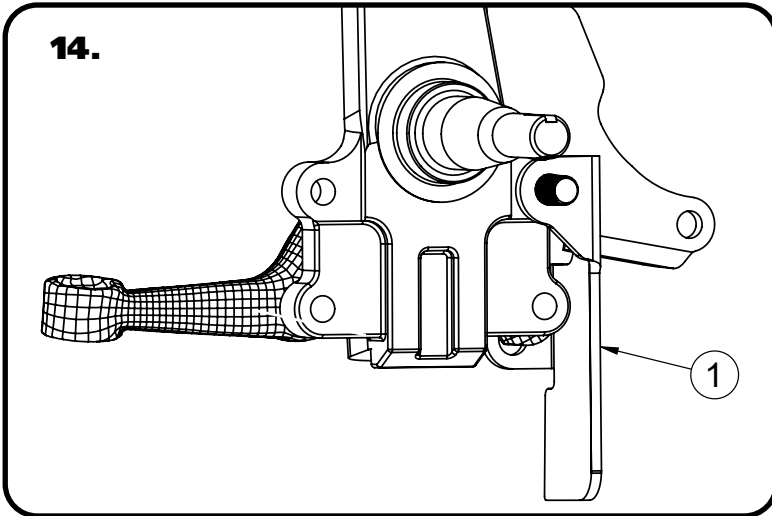


13. Align the steering arm(1) mounting holes with the 2 bottom holes of the spindle. The steering arm will be pointing the opposite direction of the caliper bracket. Again, this is the passenger side with the steering arm going to the rear of the car. The steering arm will be attached to the rear hole of the spindle. The bolt will be left out of the front hole at this time. The steering arm is attached with a 1/2"-20 x 2" hex bolt(2) and 1/2" flat washer(3). Apply red loctite to the threads of the bolt before threading it into the spindle. Leave the bolt loose, it will get torqued after the steering stop is in place.



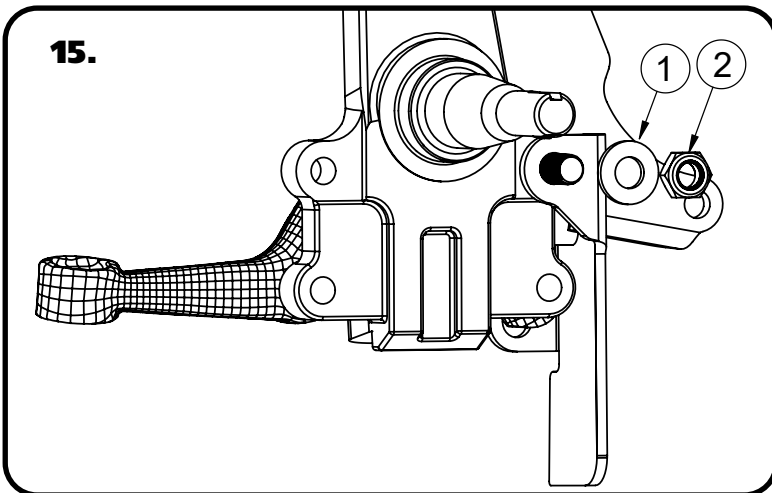
### Attaching Steering Stop & Steering Arm - *THREADED HOLE SPINDLE*

14.



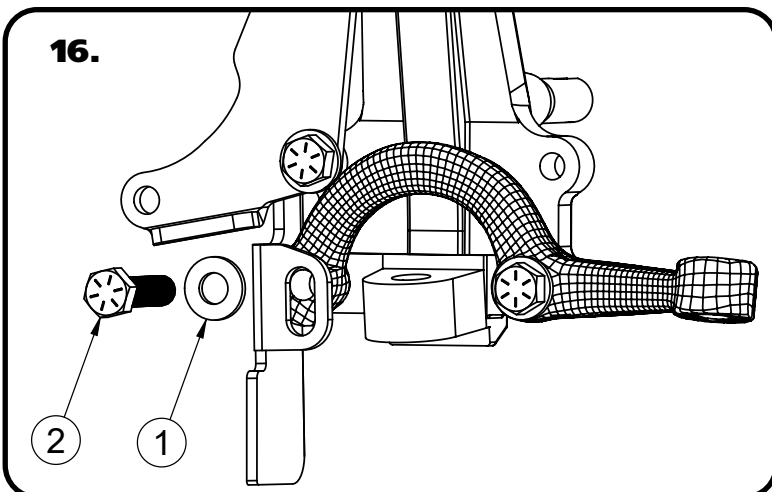
14. Slide the steering stop in place. The top tab goes on the wheel side of the spindle, opposite of the caliper bracket. It will slip onto the threads of the bolt that is sticking through the face of the spindle. The bottom tab is positioned over the steering arm hole.

15.



15. Install a 1/2" flat washer (1) and 1/2" thin nylok nut on the threads of the bolt sticking through the steering stop.

16.

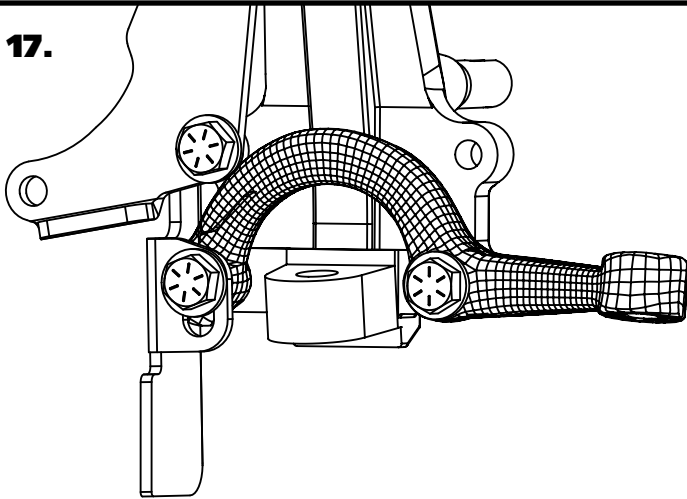


16. Align the steering stop and steering arm with the threaded hole of the spindle. They will be held in place with a 1/2" flat washer (1) on a 1/2"-20 x 2" hex bolt(2). Apply red loctite on the threads of the bolt.



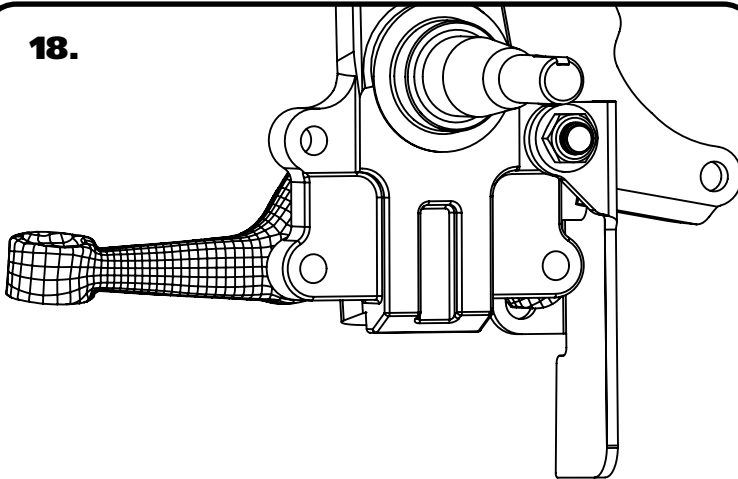
### Attaching Steering Stop & Steering Arm - *THREADED HOLE SPINDLE*

**17.**



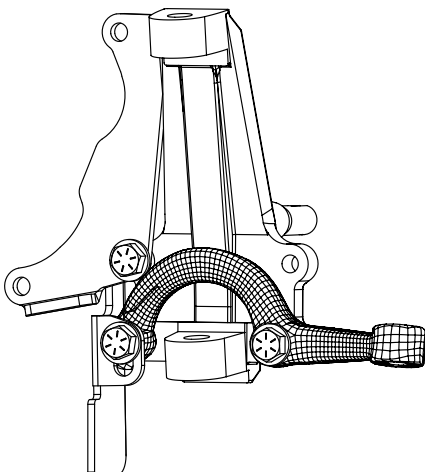
**17.** Insert the bolt/washer through the steering stop and steering arm. Thread the bolt/washer into the spindle. Torque the steering arm bolts to 100 ftlbs.

**18.**



**18.** Torque the steering stop nut to 22 ftlbs.

**19.**



**19.** Image 19 illustrates what the back of the passenger spindle should look like at this point.



### Installing Rotor - *BOTH SPINDLES*

**20.**



**20.** Image 20 illustrates the passenger spindle as viewed from the front.

**21.**



**21.** Install the OEM rotor onto the hub.

**22.**



**22.** To help ease caliper installation, thread a lug nut onto a stud to hold the rotor in place.



### *Attaching Caliper - BOTH SPINDLES*



**23.** Install the caliper in place, making sure you have the correct caliper on the correct side. The bleeder should be to the top of the caliper. Install a 7/16" split lock washer on each of (2) 7/16"-20 x 1 1/4" bolts. Line up the threaded holes in the caliper with the mounting holes in the caliper bracket. Insert the 7/16" bolts through the caliper bracket, threading them into the caliper. Torque bolts to 70 ftlbs.

**24.** Repeat the previous steps on the other side.

**25.** Install the brake pads.