

INSTALLATION INSTRUCTIONS



COMPONENT: WELD-ON SPINDLE GUSSETS W/ SWAYBAR MOUNTS
PART #: 59698-SB



PARTS LIST:			
ITEM #	PART #	QTY	ITEM DESCRIPTION
1	TC59698-SB-A	1	Spindle Gusset w/ Sway Bar Mounts: Driver Side
2	TC59698-SB-B	1	Spindle Gusset w/ Sway Bar Mounts: Passenger Side
3	TC59698-SB-C	2	Spindle Gusset w/ Sway Bar Mounts: Thin Top Plate w/ Hole
4	TC59698-SB-D	2	Spindle Gusset w/ Sway Bar Mounts: Steering Arm Gusset
5	TC59698-SB-E	2	Spindle Gusset w/ Sway Bar Mounts: Thick Top Plate w/ Hole

REQUIRED TOOLS

- MIG or TIG Welder
- Pliers
- Channel locks
- Grinder or belt sander

IMPORTANT

- Before starting install, make sure the vehicle is supported securely on jack stands.
- Designed for use with TC uniball upper control arms. May not be compatible with other manufacturers' control arms and hardware.
- These spindles retain the use of the anti-swaybar. Factory offset wheels WILL NOT FIT without the use of 1.25" wheel spacers. .
- The factory Toyota manual is required for removal and re-installation of all factory components.
- Unlike most manufacturers who use cast spindles, Toyota/Lexus uses forged spindles which are not only stronger but have the ability to be welded on without any special procedures.

PRE-ASSEMBLY:

- **Step 1** Remove the front caliper and rotor.
- **Step 2** Remove all wheel speed sensors and related wiring from knuckle.
- **Step 3** Remove metal dust cap which will expose the axle nut.
- **Step 4** Remove cotter pin and remove axle nut (36mm socket).
- **Step 5** Break loose the four bolts (17mm) that hold the bearing assembly into the knuckle but do not fully remove. Just leave them loose.
- **Step 6** Remove the cotter pin from the upper ball joint and loosen the upper ball joint nut.
- **Step 7** Remove the cotter pin and loosen the tie rod nut.
- **Step 8** Separate both the upper ball joint and the tie rod from the knuckle.
- **Step 9** Remove the two 19mm bolts that attach the lower ball joint cradle to the knuckle.
- **Step 10** Support the knuckle in one arm as you use a dead blow hammer to knock the axle out of the hub assembly. At this point the knuckle should be free from the vehicle remove it and set it on the bench.



THESE STEPS BEGIN WITH THE SPINDLES REMOVED FROM THE VEHICLE.

STEP 1

Remove bearing housing and dust shield by un-bolting the (4) 17mm head hub bolts.



STEP 2

Unbolt and remove the ABS sensor from the spindle.



STEP 3

Remove the rear seal with a thin chisel or scraper. Replace if damaged (4WD models only).





STEP 4

Remove factory paint (sandblaster, wire wheel, etc) where the gussets will contact and be welded.



STEP 5

Mock-up the gusset to the spindle to make sure swaybar mount holes are aligned before tacking into place.

Grinding may be necessary on the lower portion of the gusset to get the holes to properly line up.

Once holes line up, put a 12mm bolt through the gusset body to prepare for tacking into place.



STEP 6

To tack the gusset parts in place, bolt the top plate to the bottom side of the upper ball joint area using a 9/16" or 14mm bolt. Due to variances in the thickness of the upper ball joint area on the spindle, we have supplied two different thickness top plates. Test fit both and use the correct thickness plate for your application. Put a 12mm bolt through the side of the gusset body and sway bar hole to hold the gussets in place for welding.





STEP 6 CONTINUED

To ensure the brake caliper mounting hole lines up, use pliers to bend the gusset back slightly as you tack it into place.

















STEP 7

Start by welding the 10 gauge gusset pieces to each other and then weld the gusset to the factory spindle. MIG welding is preferred but TIG can also be used.





STEP 8

Paint or powdercoat spindle after it has cooled off. Be sure to mask off the bearing area, all threaded holes and their mounting surfaces prior to coating.



STEP 9

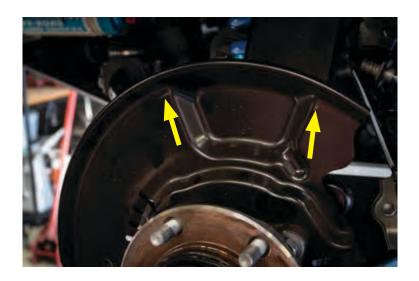
Re-install dust shield and hub onto the spindle. Torque bolts to 59 ft/lbs. Once complete, re-install the spindle/hub onto the vehicle.





STEP 10

The dust shield will contact the newly installed gusset and push outward into the rotor. To prevent this you will need to "form" the dust shield back around the gusset. Install the rotor and spin by hand to check for any interference (yellow arrows).

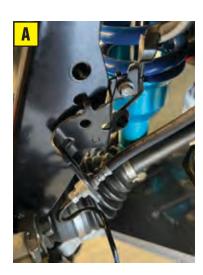


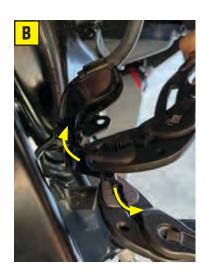
With the rotor off, strike the dust shield with a dead blow hammer where the shield contacts the rotor. Repeat this step until clearance is achieved and the rotor spins freely.



STEP 11

If the brake line and ABS wire bracket don't line up with the mounting hole (A), a slight bend may be required. Use pliers to bend the bracket outward (B). Test fit until the mounting holes line up (C).









CONGRATS! YOUR SPINDLES ARE READY TO GO!



FOR INSTALL QUESTIONS OR CUSTOMER SERVICE INQUIRIES:

Call 951.737.9682 or email info@chaosfab.com