Toyota Hilux 4WD: Front Wheel Bearing Replacement

2005-2015 Toyota Hilux KUN 26 2005-2015 Toyota Hilux GGN 26

VACC's Technical Advisory Service regularly receives calls about the procedure to replace the wheel bearings in the 4WD versions of the Toyota Hilux from 2005. There seems to be some confusion as to how to press the bearings apart. This article will give you an overview of the two options you have to complete this task.

VACC's Times Guide recommends it would take 1.7 hours per side to replace the wheel bearings.

The Hilux has proven itself as a reliable unit, but wear and tear does add up, and wheel bearings will not last forever. We have covered the procedure for rear wheel bearings as there is a common

Steering Knuckle

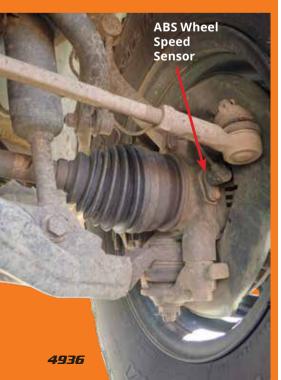


Diagram #1

The wheel bearing can be sourced as a complete assembly or as a bearing kit.

trap if you are not careful.

See Tech Talk May 2017, page 4328.

The Two Options

 You can purchase a bearing and hub which is fully assembled.
 See Diagram #1

 You can purchase a new bearing kit with a new 4 bolt flanged bearing, bolts and seals which you can fit your wheel hub into.
 NOTE: The wheel bearings are manufactured as a flanged bearing and cannot be pressed apart any further.

See Diagram #7

WARNING: If you are going to use a bearing kit, you should be aware that the hub is held in the bearings extremely tightly. In some cases, very high pressures are required to press the assemblies apart and together.

It is recommended that you read all of this article before starting this job and make up your mind as to which way you want to proceed, and whether you have the appropriate tools and skills to complete this task safely.

See Diagram #4

Depending on your bearing supplier, they may only have the assembled hub for the ABS models and the bearing kits for non-ABS versions. Allegedly you can buy a bearing kit for the ABS models which is why we have included the instructions for that variant.

Disassembly

- 1. Raise the front of the vehicle safely.
- 2. Remove front wheels.
- Remove the front wheel speed sensors by removing the two clamps for the wiring, then the single bolt which attaches the sensor to the steering knuckle.

See Diagram #2

- 4. Remove the bolt for the brake line bracket from the steering knuckle.
- 5. Remove the front brake caliper and tie it up out of the way.
- Slide the brake rotor off the hub. If it is seized, there are two threaded holes to help you remove the rotor.
- 7. Remove the dust cap from the middle of the hub using a chisel. Discard once removed.

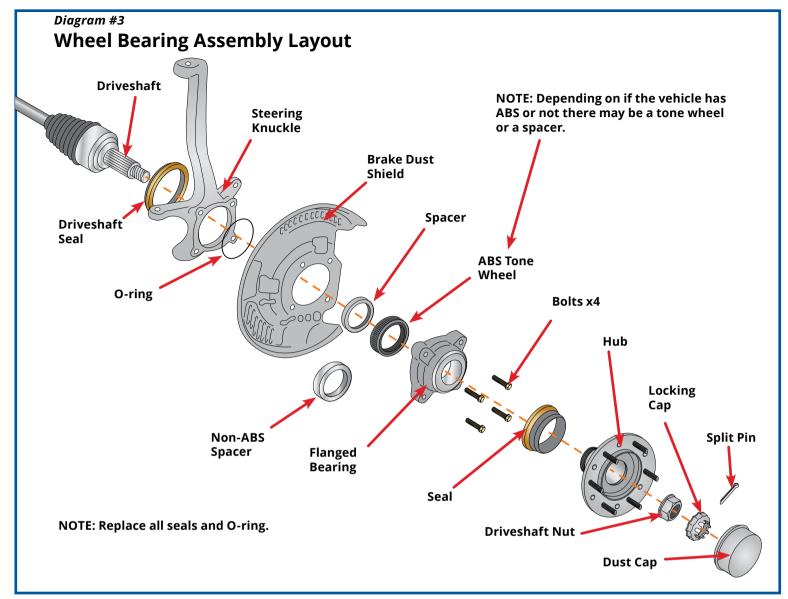
See Diagram #3

- Remove the split pin from the end of the driveshaft and discard.
- 9. Remove the locking cap.
- 10. Hold the hub with an appropriate tool and remove the driveshaft hub nut.
- Loosen the four bolts which attach the hub/wheel bearing assembly to

Tech Talk - October 2020







the steering knuckle.

12. Unwind these bolts until the hub is free of the knuckle, the bolts will be captive in the hub assembly.

See Diagram #1 and #3

- 13. The hub should slide off from the driveshaft. If not, you might have to use a puller to press the driveshaft from the hub. Please resist the urge to hit it with a hammer as you might damage the threads.
- 14. Remove and discard the O-ring from the rear of the hub.
- 15. If the vehicle has ABS, there will be one spacer. If the car does not have ABS, there will be two spacers, remove as required.

See Diagram #3

Diagram #4

Home Made Bearing Support Tool

Due to the high-pressure that might be required to press the hub from the bearing, many workshops make their own press tools. This example will allow them to bolt the flanged bearing onto the tool to stop it from escaping from the press.





16. If you are fitting a new preassembled hub, skip ahead to the reassembly section. If you are going to replace the bearing and reuse the hub, move on to the following hub disassembly section.

Hub Disassembly

- Mark all ABS tone wheels or spacers and the orientation of the bearing housing to assist in reassembly. It is possible to press these components together in the wrong order or direction.
- 2. Fit the hub assembly into a press, supporting the bearing housing.
- With an appropriate press tool, press the hub from the bearing housing.
 NOTE: Ensure you are only pressing on the hub shaft and not the inner race of the bearing.

See Diagram #5

NOTE: Some workshops have made their own press tools with the same bolt hole pattern as the steering knuckle. This allows them to hold the bearing assembly in the press safely while applying pressure.

See Diagram #4

4. Remove the bolts from the bearing housing.

NOTE: The bearings cannot be removed from the flanged housing. A new 4 bolt flanged bearing assembly is required.

See Diagram #7

Hub Reassembly

- 1. Lubricate the lips of the seal with grease.
- 2. Fit the seal to the new flanged bearing housing.
- 3. Fit the new bolts into the holes in the bearing housing. Ensure that the bolts have been fitted in the correct orientation. **See Diagram #1 & #6**
- Press the hub into the bearing.
 WARNING: Ensuring that you support the inner race of the bearing. Bearing damage will occur otherwise. See Diagram #5

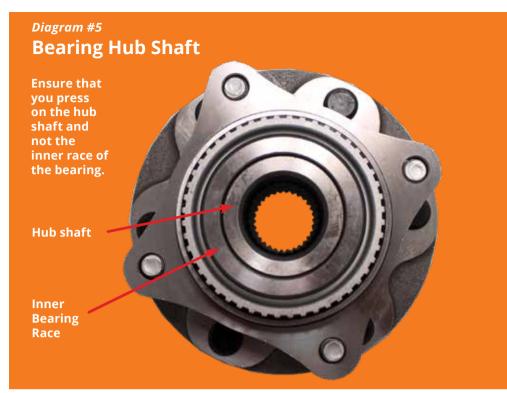


Diagram #6
Press or Puller Placement



4938 Tech Talk - October 2020









Diagram #7 Wheel Bearing Kit



The wheel bearing kit comes with one flanged bearing, two seals, one O-rings and four new bolts









The flat side of the bearing goes towards the steering knunkle side.

5. Then press the ABS tone wheel or spacer onto the hub tube.

Installation

- 1. Apply grease to the O-ring then fit the O-ring to the hub.
- Some bearing kits come with a new seal which fits to the rear of the steering knuckle to seal against the driveshaft. If so, remove the old seal and fit the new one and lubricate the seal's lips with grease.
- Apply grease or anti-seize to the splines on the driveshaft to

- prevent it rusting into the hub in the future.
- Slide the driveshaft into the hub, then fit the hub onto the knuckle and tighten the four bolts to 80 Nm.
- 5. Fit the driveshaft nut, then hold the hub with an appropriate tool and tighten the nut to **235 Nm**.
- Refit the locking cap and fit a new split pin through the hole in the driveshaft.
- Refit the brake rotor with some anti-seize applied to the hub to

- prevent it from rusting on.
- Refit the brake caliper and tighten the bolts to 123 Nm.
- Refit the brake line bracket and tighten the bolts to 32 Nm.
- 10. Refit wheel speed sensor and tighten the bolt to **8.5 Nm**.
- 11. Refit the wheels and tighten nuts to **105 Nm**.

For more information about the Toyota Hilux log onto VACC's MotorTech or call VACC's Technical Advisory Service.



We would like to thank the team from The 4WD shed for their assistance with this article.
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We would like to thank Travis from Bearing Wholesalers for his assistance with this article.
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Tech Talk - October 2020 4939