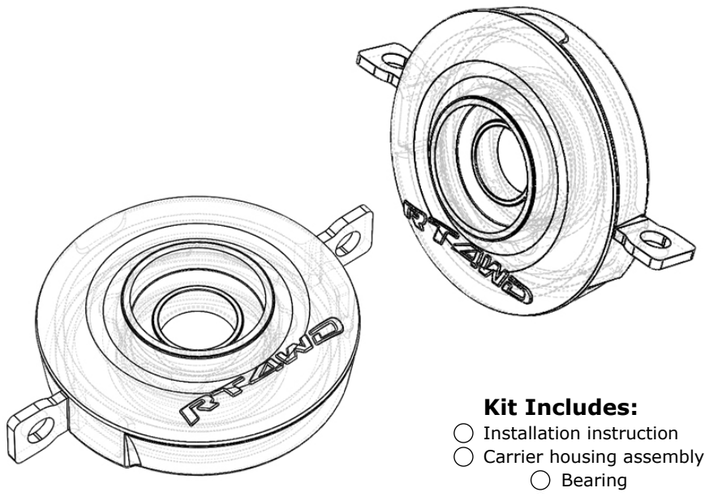
EFBOSS RT4WD Conversion
Carrier Bearing Install Instruction

Rev A 1Jun20



Kit Includes:

- ◯ Installation instruction
- ◯ Carrier housing assembly
  - ◯ Bearing
  - ◯ Circlip
- ◯ Carrier housing assembly
  - ◯ Bearing
  - ◯ Circlip

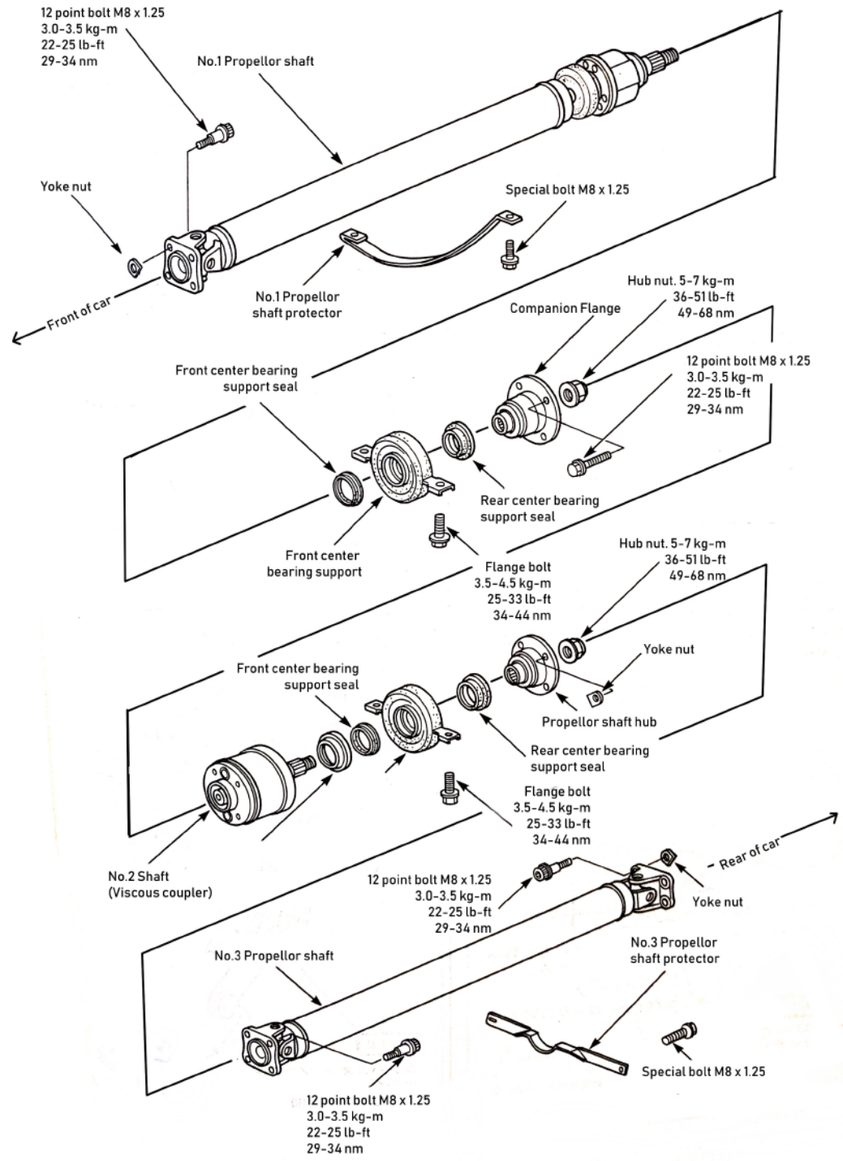
Notes before starting:

- Mark each connection point before disassembly and realign at the time of assembly. These are balanced parts from factory and not aligning them correctly may result in vibrations
- You will need to reuse your old carrier bearing housing seals (“Front centre bearing support seal” and “Rear centre bearing support seal” in the component overview). Be careful not to damage these seals when removing the OEM carrier bearing housings.
- Do not spray your new centre bearings with silicone spray, it may liquify the grease inside the bearings and cause it to leak out and prematurely fail.
- Do not hit the stub axles with a metal hammer, it will mushroom the stub and you will not be able to thread the hub nuts back on, potentially ruining your viscous coupler.
- Please read the instructions in their entirety before work begins.
- Don’t forget to run a safety strap for both front and rear prop shafts.
- RT4WD logo on your new center bearings should face the front of the car when installed

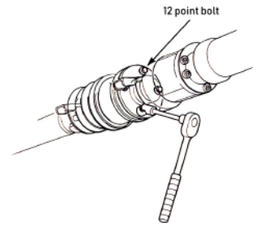
Items required:

- Texter / scribe for marking
- Ratchet
- Universal joint attachment
- Short extension
- Breaker bar
- 10mm 12 point socket
- 12mm socket
- 32mm socket
- Punch
- Hammer
- Small flat head screwdriver
- Plastic hammer
- Silicone spray
- Optional: bearing separator
- Optional: OEM special tool 07HAB-SD90100

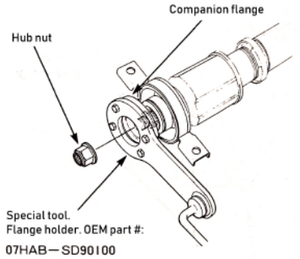
Component Overview



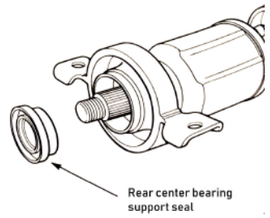
Procedure:



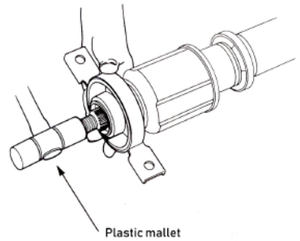
Step 1:
Remove the 4x12 point bolts with a 10mm 12 point socket and separate the Companion Flange on the No.1 Propeller Shaft from the Viscous Coupler.



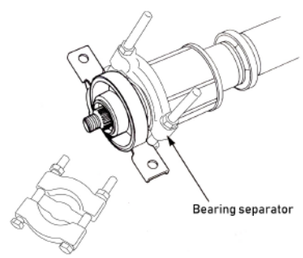
Step 2:
To remove the center bearing from No.1 Propeller Shaft, first mark the position of the Companion Flange in relation to the spline of the shaft. Secure the Companion Flange to prevent it from rotating and remove the hub nut using a 32mm socket and a breaker bar, or a rattle gun. Graphic shown with OEM special tool ‘Flange Holder’. I’d recommend drilling two holes in a piece of flat bar and bolting the Companion Flange to the flat bar to prevent the shaft from rotating while undoing the hub nut. If you use a vice to clamp the Companion Flange use soft jaws to prevent damaging the flange



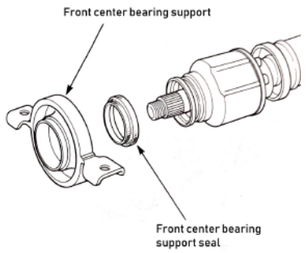
Step 3:
Remove the rear center bearing support seal by using a flat blade screw driver and carefully lever it out. You will be re-using this seal.



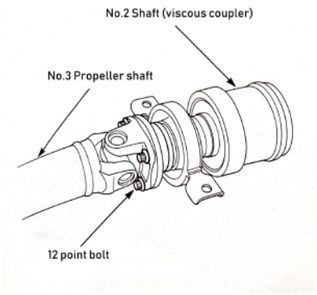
Step 4:
With some luck, the old center bearing support can be wiggled off, or by pulling while tapping the center spline of the stub with a plastic hammer. This is not a press fit bearing. Try applying some silicone spray and letting it penetrate before trying again. If this doesn’t work move to step 5. If it does, skip to step 6.



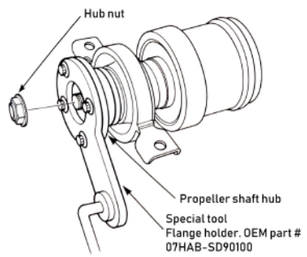
Step 5:
Using a bearing separator, tighten until the center bearing support separates from the stub.



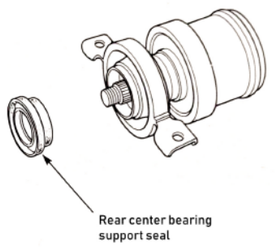
Step 6:
Remove the front center bearing support seal by using a flat blade screw driver and lever it out. You will be re-using this seal.



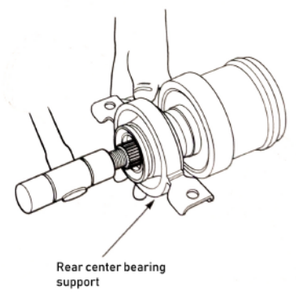
Step 7:
Remove the 4 x 12 point bolts using a 10mm socket securing the No.3 propeller shaft to the viscous coupler assembly



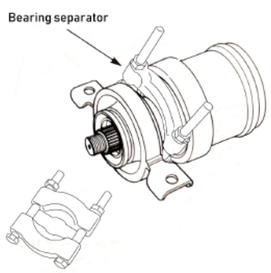
Step 8:
Secure the propeller shaft hub, mark the spline position and remove the hub nut with a 32mm socket



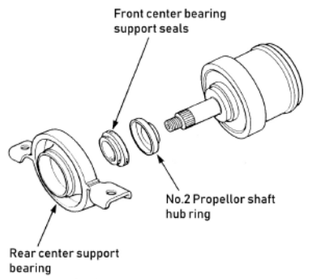
Step 9:
Remove the rear center bearing support seal by using a flat blade screw driver and carefully lever it out. You will be re-using this seal.



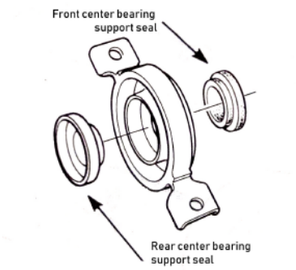
Step 10:
With some more luck, the old center bearing support can be wiggled off, or by pulling while tapping the center spline of the stub with a plastic hammer. This is not a press fit bearing. Try applying some silicone spray and letting it penetrate before trying again. If this doesn't work move to step 11. If it does, skip to step 12.



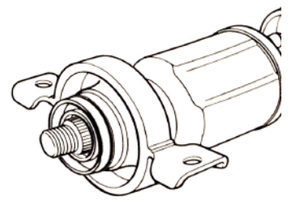
Step 11:
Using a bearing separator, tighten until the center bearing support separates from the viscous coupler.



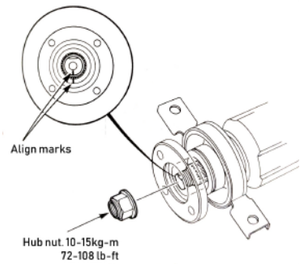
Step 12:
Remove the front center bearing support seal by using a flat blade screw driver and lever it out. You will be re-using this seal. Also ensure the No.2 propeller shaft hub ring remains in place.



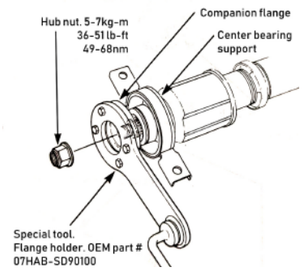
Step 13:
Assemble the front and rear center bearing support seals into your new center bearings.



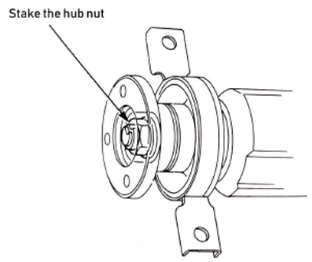
Step 14:
Slide the new center bearing onto the #1 Propellor shaft. Note the orientation of the center bearing.



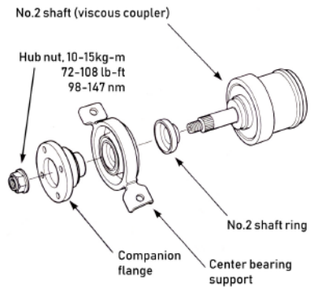
Step 15:
Align the spline marks you indicated earlier with the marks you put on the companion flange and slide onto No.1 Propeller Shaft. Secure the companion flange and torque the hub nut to 10-15kg-m. This ensures the bearing is seated correctly on the stub.



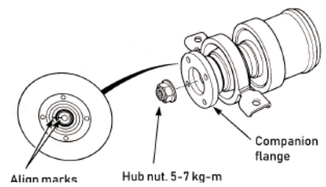
Step 16:
Undo the hub nut and re torque to 5-7kg-m.



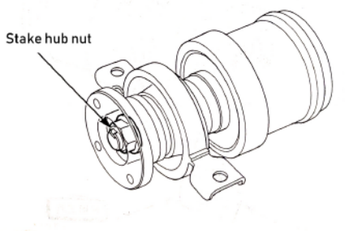
Step 17:
Stake the hub nut.



Step 18:
Assemble the second carrier bearing as shown onto the viscous coupler. Confirm that the front and rear center bearing seals have been reinstalled and the No.2 shaft ring is still in place. Note the orientation of the center bearing. Torque the hub nut to 10-15kg-m to seat the new bearing.



Step 19:
Undo the hub nut, confirm your alignment matches the marks you've put on the propeller shaft hub and the spline and re torque the hub nut to 5-7kg-m.



Step 20:
Stake the hub nut.

Step 21:
Begin the reinstallation of the driveline. Install is opposite of removal, follow steps 7 – 1 in reverse order. Check the component overview to confirm the torque values and the orientation of components.

NOTE:

For further support or comments please contact s.spoonerdesign@gmail.com. The illustrations and instructions are a combination of the "Honda RT4WD maintenance supplement" and my own edits, translations, component identification and torque values where suitable. This instruction is intended as a guide, and although all care has been taken in the design and fabrication, I will accept no responsibility from any injuries or damage caused during the installation of these parts or as a result of using these parts. Please do not re distribute this information without my explicit permission.
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