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## Small Car Bellhousing Installation

Part Numbers: BHV025

*Immediately upon delivery, open all packages and check the contents of the shipment. Report any issues directly to SCP within 15 days. After 15 days, SCP will not be responsible for missing or damaged items.*

### INSTALLATION INSTRUCTIONS

*These instructions apply to the Small Car Performance Manual Vanagon Transmission to Subaru Bellhousing Kit.*

#### [Small Car Bellhousing Installation Video](#)

#### [Small Car Slave Cylinder Installation Video](#)

1. Drain the transmission gear oil and remove the ten 8mm bolts holding the bellhousing to the transaxle.
2. Install the new input shaft seal into the SmallCar bellhousing using an appropriate tool.
3. For 1998 and earlier Subaru engines, install the provided insert into the threaded hole in the bellhousing for the lower starter bolt. The original stud or a bolt can be used in this position.
4. Install the oil drain plug into the new bellhousing.
5. We highly recommend using a Smallcar clutch and pressure plate. If you do not have this, check that the release bearing contact diameter is correct on your pressure plate. The maximum diameter for the pressure plate fingers - where the release bearing rides - is 2 1/8" or 55mm. Note: there may be other problems with certain brands of clutches. Recommended disc brand is OEM Sachs. Luk disc is known to cause interference with the throwout bearing.
6. Collapse the bearing portion of the hydraulic release bearing and place the nose into a container of brake fluid. Release the bearing and the slave cylinder will fill with brake fluid.
7. Install the release bearing assembly onto the bellhousing using the 6mm bolts and washers provided. A little Loctite® will ensure that the bolts will not loosen. Carefully tighten diagonally and in small stages. Torque all to 10 lb/ft. Replace the plastic plug on the hydraulic end to keep debris out of the assembly. Note: If your bellhousing received April-June 2015 it came with a release bearing support shim. Install the shim onto the bellhousing behind the bearing. If unsure whether your bellhousing needed a support and was purchased around that time please contact us.
8. Clean the transmission sealing surface and apply a thin coat of RTV or similar sealant.
9. Install the bellhousing onto the transaxle using the original bolts and washers. Torque these to 16-18 lb/ft.
10. The recommended amount of gear oil can now be added to the transaxle.
11. Make sure an alignment tool (a VW sized) is used to align the clutch disc when the pressure plate is installed onto the flywheel.
12. The release bearing assembly will create a small amount of resistance when mating the engine and transmission but the two parts should go together smoothly and completely.
13. Be sure to install and align with the two dowells located on the engine's mounting surface. These dowells should be smooth and without burrs or other damage.
14. The engine can now be bolted to the transmission using the stock Subaru 10mm bolts. Torque these bolts to 30 lb/ft.

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## **2WD FRONT BRAKE UPGRADE INSTRUCTIONS**

15. Install the engine and transmission into the Vanagon.
16. Attach the supplied hydraulic fitting onto the clutch line. This is best done prior to installing the fitting onto the release assembly.
17. Insert the snap ring into the supplied hydraulic fitting
18. Remove the protective cap from the release assembly and install the fitting onto the snout of the assembly.
19. If the hydraulic line needs to be removed or re-tightened after installing onto the bellhousing, be sure to stabilize the fitting with a wrench on both sides of this hydraulic connection.
20. Install the clutch master cylinder spacer. Installation Instructions
21. The hydraulic system should be bled using the bleeder screw located on the hydraulic fitting. Bleed only enough to achieve the desired amount of free play and release point. If the desired free play and release point cannot be achieved adjust the pedal push rod. If that fails replace the master cylinder.