

Advanced Automotive Engineering

TRANSAXLE CONVERSION **SUBARU 5-SPEED**

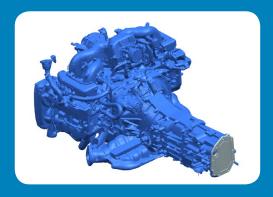






Figure 0.0

Step 0 - Kit and Transmission Selection

Bremar Automotion 5 speed transaxle conversion kit is designed for conversion of late model Subaru manual transmissions only.

Remove contents of conversion kit, confirm completeness and compare the cover plate bolt pattern with that of the output shaft housing. (Figure 1.0)



Figure 1.0

Step 1 - Preparation of AWD Gearbox

Drain all transmission oil and support securely on bench or transmission stand



Figure 2.0

Step 2 - Remove Shift Mechanism Linkage

Supporting the selector shaft as appropriate, ease the roll pins out as illustrated (Figure 2.0).

Remove (slide) shift mechanism joint from the selector shaft - it is strongly suggested that this part be retained and re-used for transaxle shift linkage connection.



Dutput Shaft Figure 3.0

Step 3 - Remove Output Shaft Housing

With the transmission supported, remove the housing bolts (as designated in Figure 2.0). Retain these bolts for re-use.

Remove output shaft housing.



Figure 4.0

Step 4 - Remove Centre Differential

Remove entire centre differential section from gearbox by sliding rearward off splined shafts (Figure 4.0)

With the centre differential removed, both the input shaft and front diff pinion shaft should be visible (Figure 5.0)







Step 5 - Complete Disassembly

Finally remove the retaining nut (Figure 5.0), noting that this has a torque retention feature. In order to remove nut, front output shafts will need to be locked - refer to figure 5.1 for example reaction part.

Do Not Discard this nut - it is required for reassembly.



Figure 6.0



Figure 6.1

Step 6 - Installation of Bremar Locking Sleeve

Slide the locking sleeve (Figure 6.0) over both smaller and larger diameter splines. Some relative movement may be required to align splines during assembly.

Once the locking sleeve is in place, re-install the nut removed in Step 5. Re-engage the original torque retention feature on the nut.

If locking sleeve does not appear to fit, check that spline adapter has been removed (as per Figure 6.1)



Figure 7.0

Step 7 - Installation of Bremar Rear **Cover Plate**

Check that the rear portion of the transaxle is clean and clear of debris.

Clean the sealing surfaces of both the rear housing and the Cover Plate (Figure 7.0), ensuring that both are smooth, flat and free of debris or imperfections.

Using an appropriate liquid gasket compound, apply seal and locate the rear plate with the original bolts. After the installation of all bolts, increase the torque gradually while working in an even pattern of every second bolt.

Install gear shift linkage as appropriate (original components may be useful for a customised mechanism)

