

# Technical Information

## 09G/TF60-SN 09M/TF61-SN

## 09K/TF62-SN GA6F21WA

### Filter and Gasket Replacement

#### **TRANSAXLE DISASSEMBLY**

*Note: The illustrations provided in the Assembly and Disassembly section, are of a VW "09G" model with the integral cooler, but procedures are the same on "09K" and "09M" models.*

1. The transaxle should be steam cleaned on the outside, to remove any dirt and grease before disassembly begins.
2. This transaxle can be disassembled very easily on a work bench without the benefit of holding fixture for rotation.
3. Remove the torque converter from transaxle, as shown in Figure 1 .  
*Caution: Use care when removing the torque converter, to avoid personal injury and/or damage to converter, as it is heavy.*
4. Record the torque converter code letters, as shown in Figure 1 , for future reference.

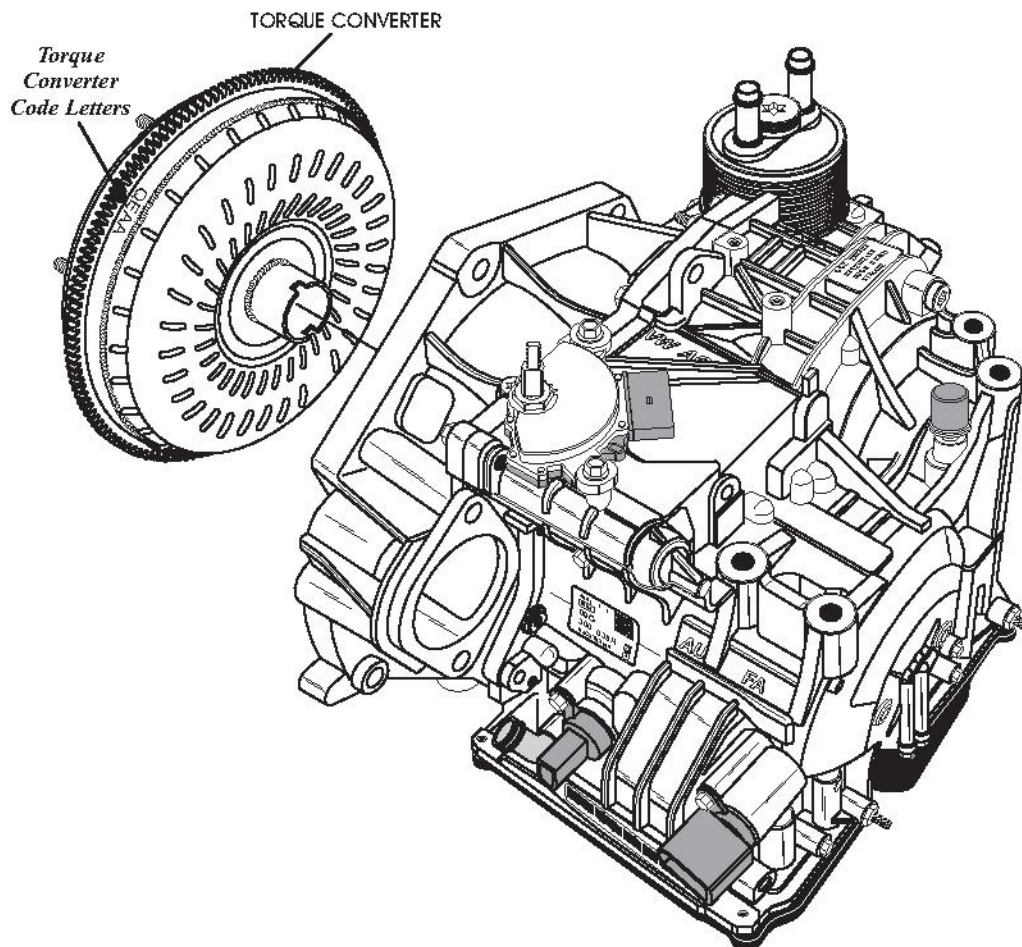


Fig.1

5. Remove the 2 transaxle range switch retaining bolts and range switch, as shown in Figure 51.  
*Note: The contact lever adjusting nut must not be loosened (See Figure 2).*
6. Remove the integral cooler (if equipped) and set aside for flushing.

7. Remove and discard the 2 filter seals (4) & (6), as shown in Figure 2.  
*Note: Notice that some models are equipped with a flow control distributor pipe in the supply side of cooler, as shown in Figure 2.*

- 2 TRANSAXLE RANGE SWITCH.
- 3 TRANSAXLE RANGE SWITCH RETAINING BOLTS (2 REQUIRED).
- 4 INTEGRAL COOLER TO CASE SPECIAL "O" RING SEAL.
- 5 INTEGRAL COOLER ASSEMBLY.
- 6 "O" RING SEAL.
- 7 FLAT WASHER.
- 8 CONE SHAPED LOCKING WASHER.
- 9 INTEGRAL COOLER RETAINING BOLT.
- 10 INTEGRAL COOLER FLOW CONTROL PIPE (SOME MODELS).

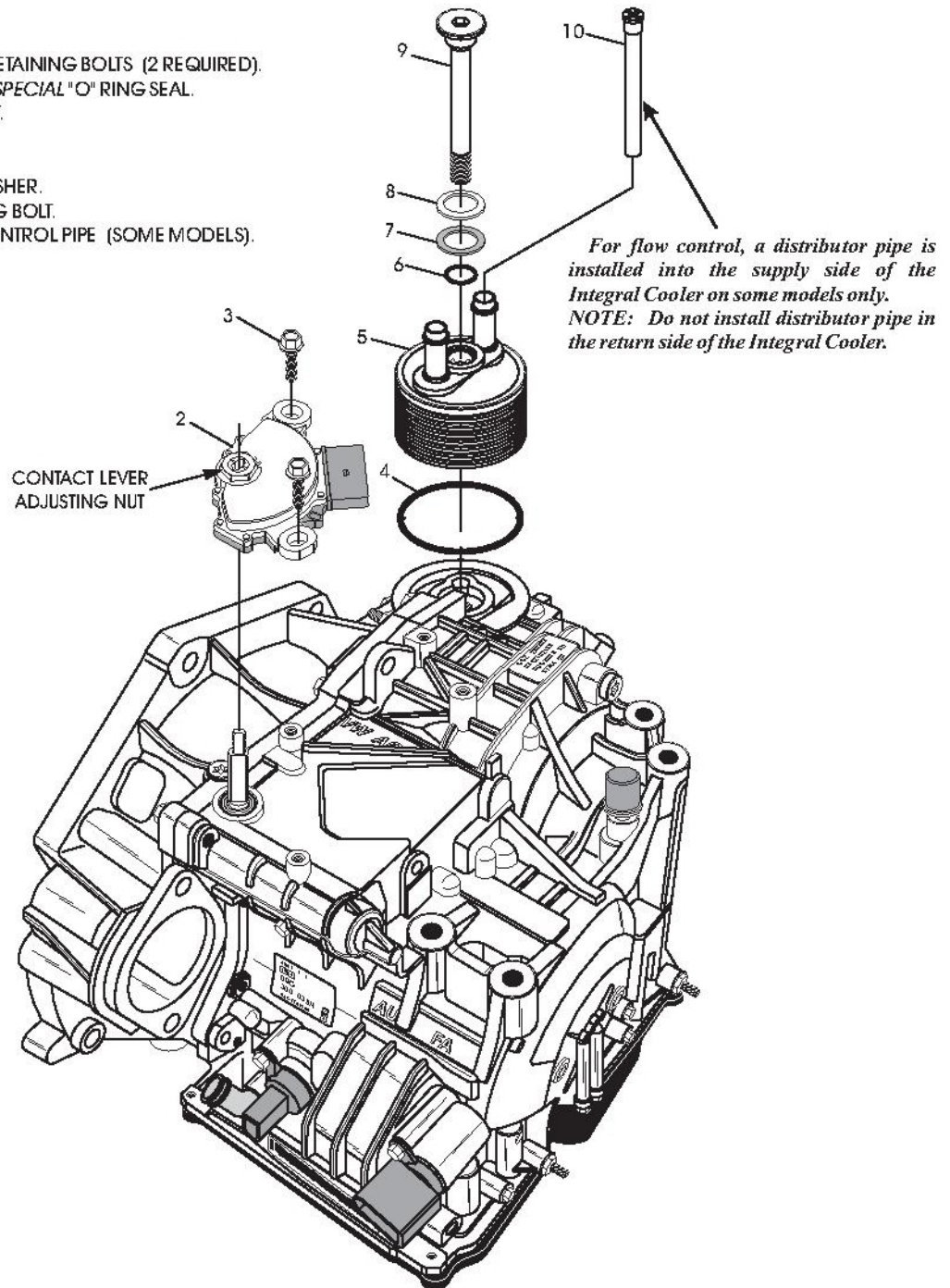
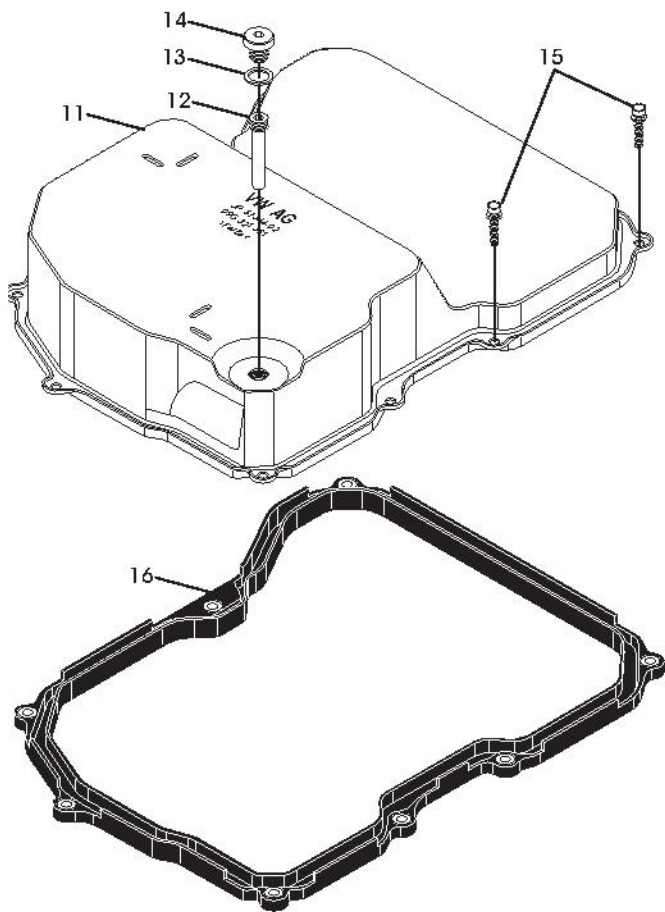


Fig.2

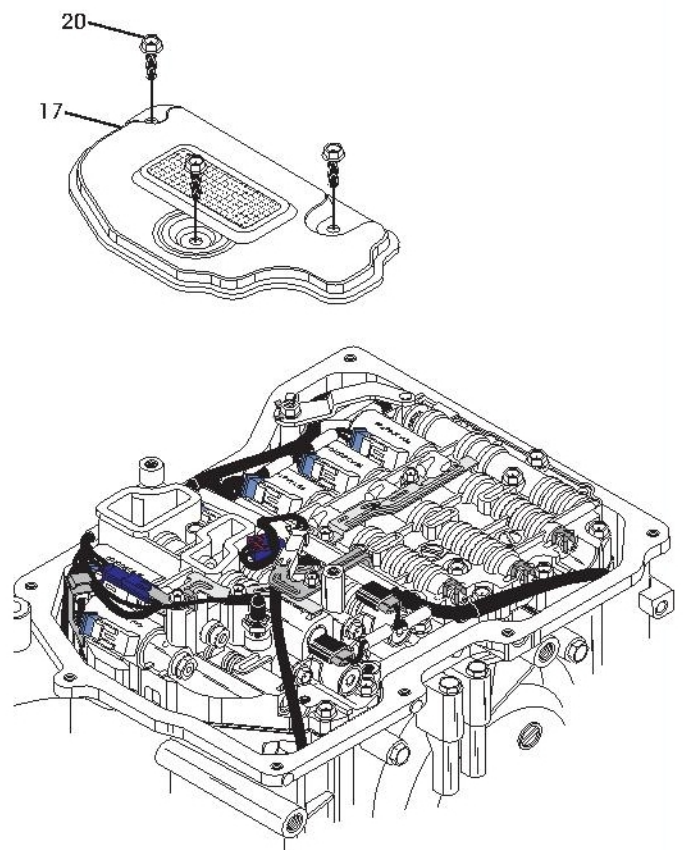
8. Remove the bottom oil pan bolts (8 on "09G") and remove the bottom oil pan, as shown in Figure 3.
9. Remove and discard the bottom oil pan gasket, as shown in Figure 3.
10. Remove the three oil filter retaining bolts and remove the oil filter, as shown in Figure 4.

11. If the filter is to be re-used, remove and discard the filter gaskets as shown in Figure 5, as the filter gaskets are included in SINS kit.  
*Note: Replacing the filter is recommended on every unit and the gaskets come with the new filter, already glued in place. If the filter is to be replaced, discard the entire filter.*



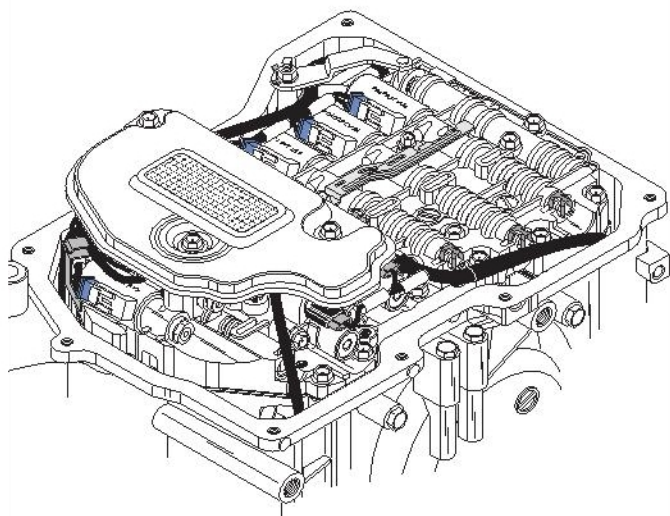
- 11 BOTTOM OIL PAN (MODEL DEPENDANT).
- 12 OIL PAN "STAND-PIPE" (MODEL DEPENDANT).
- 13 OIL LEVEL CHECK PLUG SEALING WASHER.
- 14 OIL LEVEL CHECK PLUG.
- 15 OIL PAN BOLTS (8 REQUIRED ON "09G").
- 16 OIL PAN GASKET.

Fig.3



- 17 OIL FILTER (MODEL DEPENDANT).
- 20 OIL FILTER RETAINING BOLTS (3 REQUIRED).

Fig.4



- 18 OIL FILTER GASKET.
- 19 OIL FILTER GASKET.

Fig.5

12. Install new oil filter, as shown in Figure 4 and torque the three bolts to 11 N·m (97 in. lb.).

13. Install new oil pan gasket to oil pan, as shown in Figure 3 .

**Note:** Pan gaskets have spacers incorporated in the gasket to prevent over-torque, and must be in place for all pan bolts.

14. Install oil pan and gasket on transaxle, as shown in Figure 3 and install oil pan bolts.

15. Torque the oil pan bolts to 7 N·m (62 in. lb.), as shown in Figure 6 .

16. Torque oil pan drain plug to 27 N·m (20 ft. lb.).

**CAUTION:** Now is the time to recheck all of the electrical connections, all harness' in their proper retainers, no pinched wires, filter in place, etc.....

**TORQUE OIL PAN BOLTS TO  
11 N·M (97 IN.LB.)**

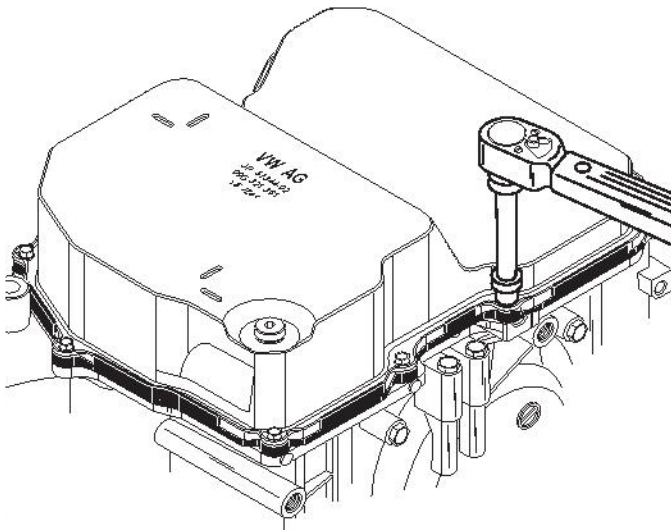
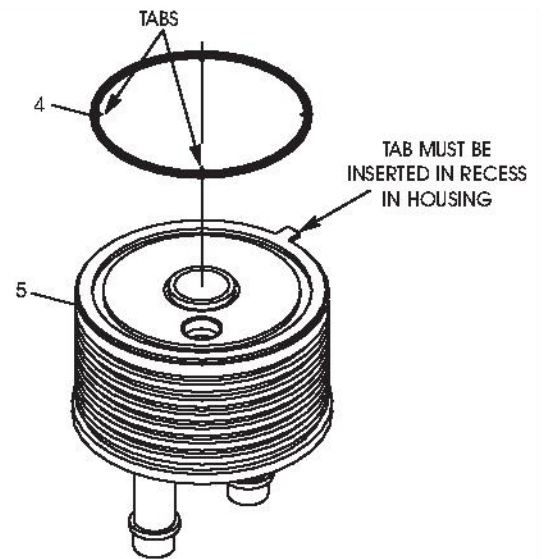


Fig. 6

- 11 BOTTOM OIL PAN (MODEL DEPENDANT).
- 12 OIL PAN "STAND-PIPE" (MODEL DEPENDANT).
- 13 OIL LEVEL CHECK PLUG SEALING WASHER.
- 14 OIL LEVEL CHECK PLUG.
- 15 OIL PAN BOLTS (8 REQUIRED ON "09G").
- 16 OIL PAN GASKET.



- 4 INTEGRAL COOLER TO CASE SPECIAL "O" RING SEAL.
- 5 INTEGRAL COOLER ASSEMBLY.

Fig. 7

17. Install the transaxle range switch, as shown in Figure 2, torque bolts to 11 N·m (97 in. lb.).
18. Install new special "O" ring seal on bottom of integral cooler, as shown in Figure 7, retain with small amount of SINS Product.  
*Note: This "O" ring seal has centering tabs cast into the inside diameter (See Figure 7).*
19. Install the integral cooler assembly on converter housing, as shown in Figure 2.  
*Note: Cooler has a tab that must be inserted in recess of converter cover. All models are not equipped with this recess (See Figure 2).*
20. Install flat washer on integral cooler retaining bolt first, then install cone shaped washer on the retaining bolt, as shown in Figure 2.
21. Install new "O" ring seal and install the integral cooler retaining bolt, as shown in Figure 2. Torque the integral cooler retaining bolt to 35 N·m (26 ft. lb.), using 10 mm allen socket..
22. Install the integral cooler flow control pipe into cooler inlet pipe, if used, as shown in Figure 2.  
*Note: For flow control, a distributor pipe is installed into the supply side of the integral cooler on some models only. Do not install flow control pipe in the return side of the integral cooler.*

**"09G" CONVERTER MEASUREMENT**

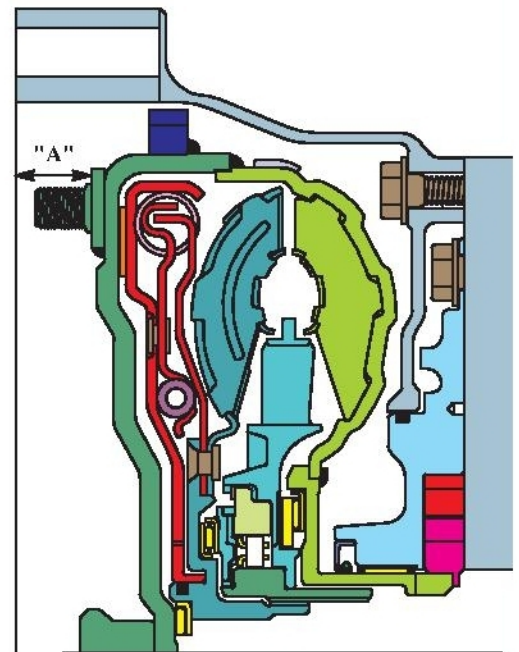


Fig. 8

23. Lubricate the outside diameter of the converter hub with small amount of SINS Product, and install torque converter, as shown in Figure 1.
24. Measure distance "A" from the torque converter pad to the face of converter housing, as shown in Figure 8.  
If converter is properly installed, distance "A" will be approximately 20.5mm (0.800").