

## 32 TORQUE CONVERTER

### TORQUE CONVERTER

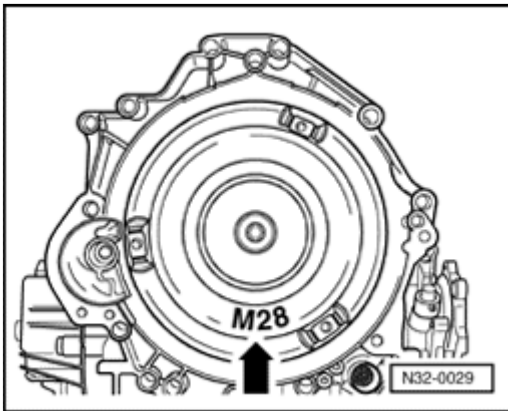
Torque converter

**CAUTION:** Before installing transmission check position of torque converter.

**NOTE:**

- Read the rules when working on the automatic transmission --> Read the rules.
- General repair instructions --> General repair instructions.
- Apply thin coat of ATF to seals. Other types of lubricant will cause the transmission hydraulics to malfunction.

Torque converter, identification



**Fig. 7: Torque Converter, Identification**

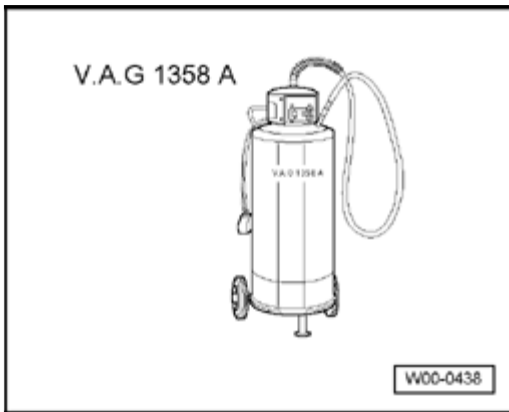
Courtesy of VOLKSWAGEN UNITED STATES, INC.

There are various types of torque converter. They are marked with code letters - **arrow** -.

Torque converter/transmission application --> Code letters, transmission application, ratios, equipment.

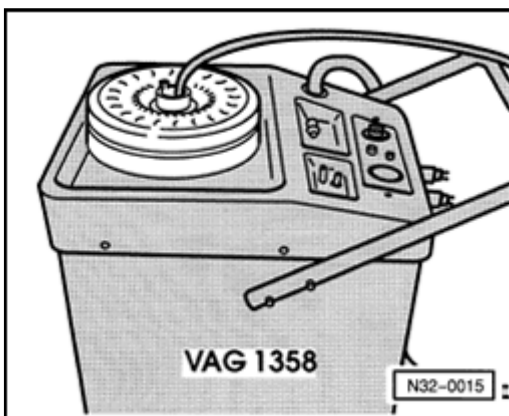
Torque converter, draining

Special tools, testers and auxiliary items required



**Fig. 8: Oil Extractor V.A.G 1358 A**  
Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Oil extractor V.A.G1358A
- Oil extractor probe V.A.G1358A/1



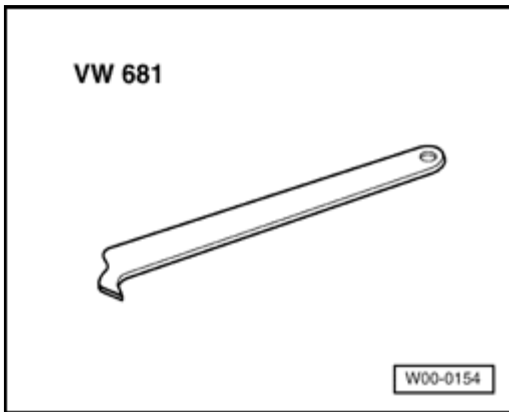
**Fig. 9: Extracting ATF From Torque Converter Using Oil Extractor V.A.G 1358 A And Oil Extractor Probe V.A.G 1358 A/1**  
Courtesy of VOLKSWAGEN UNITED STATES, INC.

If the ATF has become fouled by abrasion or when performing a major transmission overhaul, drain the torque converter as follows:

- Extract ATF from torque converter using oil extractor V.A.G1358A and oil extractor probe V.A.G1358A/1.

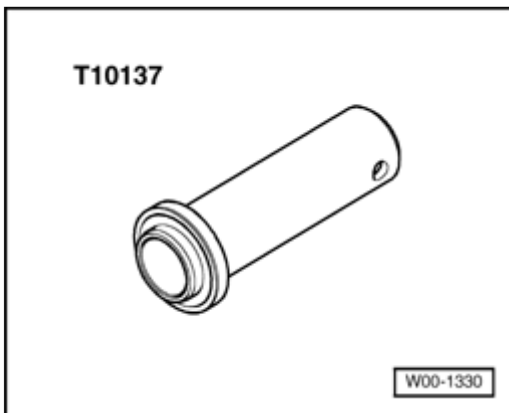
**Torque converter oil seal, replacing**

**Special tools, testers and auxiliary items required**



**Fig. 10: Special Tool - Oil Seal Extractor Lever VW 681**  
Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Extractor lever VW 681

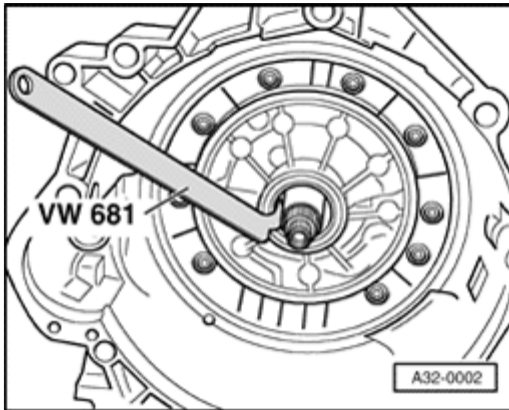


**Fig. 11: Thrust Piece T10137**  
Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Thrust piece T10137

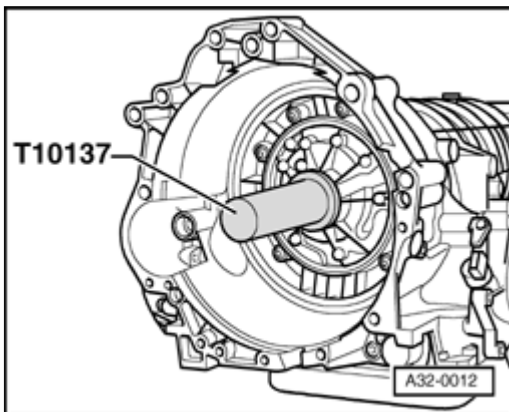
### Work procedure

- Remove transmission --> **Transmission on vehicles with 6-cyl. GDI engine, removing.**
- Mount transmission on assembly stand --> **Securing transmission to assembly stand.**
- Carefully pull out torque converter.



**Fig. 12: Applying Extractor Lever VW 681 Directly Behind Sealing Lip Of Oil Seal**  
Courtesy of VOLKSWAGEN UNITED STATES, INC.

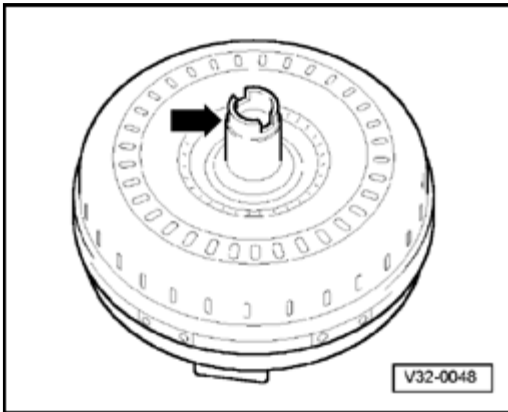
- Remove oil seal for torque converter using oil seal extractor VW681.
- Lightly lubricate outer circumference and sealing lips of oil seal with ATF.
- Installation position: open side of oil seal points toward transmission



**Fig. 13: Driving In Torque Converter Oil Seal With Thrust Piece T10137 Until Thrust Piece Reaches Stop**  
Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Drive in torque converter oil seal with thrust piece T10137 until thrust piece reaches stop.

**Torque converter, checking**



**Fig. 14: Inspect Torque Converter Hub For Irregular Grooves**  
 Courtesy of VOLKSWAGEN UNITED STATES, INC.

- Check hub - **arrow** - of torque converter for scoring.

**NOTE:**

- The torque converter is welded together and must be replaced as a complete unit in the event of any damage or faults.

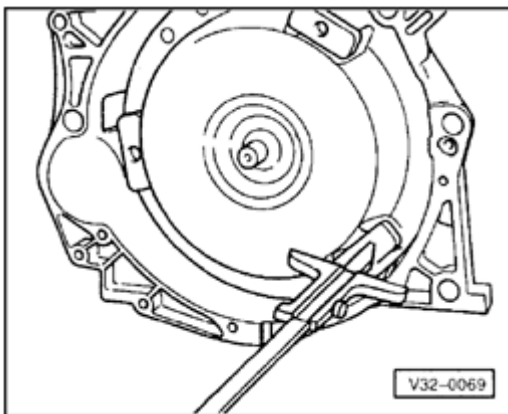
**Torque converter, installing**

**Special tools, testers and auxiliary items required**

- Depth gauge

**Installing**

- Press torque converter hub through oil seal as far as first stop.
- Lightly press torque converter inwards and turn until slots on torque converter hub engage in drive lugs on ATF pump gear and torque converter slides in a noticeable distance.



**Fig. 15: Checking Torque Converter Is Correctly Positioned**  
 Courtesy of VOLKSWAGEN UNITED STATES, INC.

### Installation depth

If the torque converter is correctly installed, the depth between the contact surface of the tapped holes on the torque converter and the contact surface of the torque converter bell housing is at least 19 mm.

**CAUTION: If the torque converter is not installed correctly, the torque converter drive lugs or the ATF pump will be seriously damaged when the transmission is joined to the engine.**

- Use new ribbed bolts to secure torque converter to drive plate.

When installing the transmission, adhere to the following instruction.

**CAUTION: Before and while you are tightening the bolts on the engine/transmission flange keep checking that the torque converter can still be rotated behind the drive plate. If the converter cannot be turned, it must be assumed that it has not been installed correctly and the drive lugs on the converter or the ATF pump will be damaged when the bolts are fully tightened.**