

Audi CVT Installation and Adaptation Instructions

Any time a CVT transmission is installed or serviced, it is important that you follow the exact maintenance and adaptation procedures. If not, serious transmission damage will occur! Adaptation procedures are mandatory on the CVT because an alternate a clutch resides within the transmission in place of a torque converter. If adaptation procedures are not performed after any repairs or fault deletions, drivability problems and transmission failures will follow. Note that these procedures do exist and must be performed for all replacements and service maintenance. To refill the transmission you must have the proper tool or build your own. The Audi CTV models not only have a clutch adaptation procedure, but also a special procedure for changing the fluid.

All four wheels must be off the ground a minimum of 20 centimeters (8 inches), and each wheel must be able to be rotated freely by hand. While observing the Tiptronic indicator, shift the CVT from its lowest ratio to its highest (six or seven speeds), accelerating moderately after each shift but never exceeding 56 kilometers (35 mph). Shift the transmission back down to 1st gear and gently apply the brake until the vehicle comes to a complete stop. Once the vehicle is stopped, place the transmission in Reverse, release the brake and moderately accelerate to a Reverse gear speed of 19 kilometers (12 mph). Once again, gently apply the brakes until the vehicle comes to a complete stop. Place the selector lever to Drive and repeat these steps five more times. When completed, place the selector lever in Park and turn the engine off. Lower the vehicle to the ground. Prepare for the relearning process for reverse and forward adaptation.

TCM Flash Software Check

Check the Table below to ensure the TCM software is at the latest data level.

| Old software Part Number | Old software version | Previous Software part Number | Previous Software Version | New software Part Number | New software Version |
|--------------------------|----------------------|-------------------------------|---------------------------|--------------------------|----------------------|
| 01J 927 156 CF | 2040 | 8E2 910 155 T | 2040 | 8E2 910 155 T | 3400 |
| 8E0 910 155 R | 3320 | 8E1 910 155 Q | 3350 | | |
| 01J 927 156 CE | 2030 | 4B1 910 155 S | 2040 | 4B1 910 155 S | 3400 |
| 01J 927 156 FD | 3011 | 4B1 910 155 T | 3220 | 4B1 910 155 T | 3400 |
| 4B0 910 155 E | 3130 | 4B1 910 156 | 3220 | 4B1 910 156 | 3261 |
| 4B0 910 155 R | 3320 | 4B0 910 156 K | 3350 | | |

Flash checks: VCDS can display the software version but a dealer level scan tool is required to update a flash unless there is a J2534 and programmer and VW/Audi subscription. Contact your dealer with the VIN and see if a flash is available. If the data level is lower, upload the latest TCM flash software. For flashing use update CD # 8E0-906-961J or the 7 disc update CD. Update the gearbox software via "Self Diagnosis" >>02 Gearbox>> Update programming.

WARNING! The battery must have a minimum no load charge of 12.5 Volts.

It is extremely important to connect the battery to a powered approved power supply.

[\(see Audi specifications or this link\)](#) for a 75A example and the 90A coming soon.

Turn off the Radio and all other accessories. Use vehicle specific entry to Guided Fault Finding or J2534 programmer. All fault codes in all controllers must be erased.

5052 IE: Select 02-Multitronic 01J Complaint report >> Power train >> Bucking when Accelerating from A Standstill. Follow the instructions on screen.

After flashing the TCM the vehicle is ready to perform an adaptation test drive.

Adaptation Forward and Reverse

NOTE! Complete each step to adapt the Transmission Control Module (TCM)
The engine must be running and the transmission oil temperature must be between 60° C and 90° C. Confirm that the ATF is at a minimum 65° C by checking data block 010 field 3.

This setup is adapted and completed with [Ross-Tech's VCDS](#)

Connect the VAG scan tool and enter address 02 Transmission Electronics. (Leave it connected)
There must be NO fault codes stored in engine and transmission control modules.
All driving and braking has to be done in partial load, avoid full throttle and braking!

Shift vehicle into position D

Drive forward in part load approximately 10 meters (33 feet), then apply brake pedal to a stop and continue to apply brake pedal for at least 10 seconds.

Repeat this step two to four times.

Shift vehicle into R and release brake pedal.

Drive backwards at part load approximately 10 meters (33 feet), then apply brake pedal to a stop and continue to apply brake pedal for at least 10 seconds.

Repeat this step two to four times.

Select address 02 Transmission Electronics and view Data Block Function 08 Group 010 and Go. Watch the second field in that block. The field must change from "ADP RUN" to "ADP OK"
The procedure may need to be repeated at least 3 times but possibly as many as 5 times, until the measuring values show APD OK.

If the second field displays APD OK push Done, Go Back.

Select address 02 Transmission Electronics and view Data Block Function 08 Group 011 and Go. Watch the second field in the block. The field must change from "ADP RUN" to "ADP OK"
The procedure may need to be repeated at least 3 times but possibly as many as 5 times, until the measuring values show APD OK.

If the second field displays APD OK push Done, Go Back.

"ADP" is the abbreviation for **Adaptation**. Adaptation means "adapting to an internally specified value". If for some reason the values don't switch to APD OK read the fault codes at Address 02 Transmission Electronics and repair those faults. Clear all faults **BEFORE** proceeding forward to any adaptations.

"TCM" is the abbreviation for **Transmission Control Module**

"CVT" is the abbreviation for **Continuously Variable Transmission**

"ATF" is the abbreviation for **Automatic Transmission Fluid**

"Data Block" is a common term relating to measured or live values

"Field" is a common term relating to one of the four data displays within a group

"Function" is a common term relating to an execution parameter built within the software

"Address" is a common term relating to a controller ie: 01 Engine, 02 Transmission, 03 ABS

VW and Audi training with technical support
Call 1-866-245-7602 Email: esatinc@esatinc.ca

[Copyright © Euro Systems Automotive Training Inc.](#)