

Thunderstruck Motors

Volkswagen Adapter Plate

Includes: Aluminum adapter plate with four flat head screws, large aluminum spacer ring, taper lock hub and bushing with three socket head screws, 1/4" machine key.

Congratulations on your purchase of a Thunderstruck Motors VW adapter plate! There are a few things to know that will make your installation as easy as possible.

This adapter kit retains use of the clutch to give you optimum performance of your drive system. Before you remove the flywheel and clutch assembly from the gas engine, take a measurement from the face of the engine (where the transmission face would touch) to a few points on the flywheel and clutch assembly. This is necessary so that you can be sure to get the parts transferred over to the proper position on the electric motor shaft. This is a good time to inspect or replace the clutch. Note that even though you won't need to idle the motor like a gas vehicle, some people still prefer to use the clutch while accelerating from a stop to smooth out the drive. This is more likely on cars with touchy throttles.

When installing the taper lock hub onto the motor shaft, note that the clutch assembly should end up the same distance to the face of the adapter plate as the measurement you took to the transmission face. The taper lock hub works by compressing on the shaft as the three screws are tightened. **First** tighten the three screws to 95 in/lbs, then the set screw. Over-tightening the set screw on the keyway or having a slightly oversized key can make the assembly slightly off-center which translates into wobble at the flywheel.

You'll need to install the motor spacer ring and adapter plate to the motor with the provided flat head socket screws before attaching the flywheel to the motor shaft hub.

It is recommended that you check the run-out (wobble) on the flywheel with a dial indicator. The more wobble you have, the more vibration there will be once the motor spins up. Less than .002" is a good amount.

Once you're happy with the motor assembly, installing it onto the transmission should be easier (and less messy) than installing the gas engine would be. We like to support the motor with straps from a motor jack, or if you don't have one, invite a few friends over and hang the motor from a cross bar over the engine bay.

Check that the clutch feels ok and you'll probably still need to fabricate a support for the rear of the motor. When you're ready to spin up the motor, listen to be sure there's no abnormal noises and that the motor isn't getting abnormally hot. It's also a good idea to try pushing the vehicle when it's turned off, on flat level ground, to confirm there's no unnecessary drag (from misaligned tires for example) which will sap your power and range.

We appreciate any feedback you may have that will make our product better, or your installation easier. Send us a photo of your install, or a video of your bug doing a burnout!

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