

VW Passat B6 / B7 Hitag-2 (keyless) esl emulator, v2



Usage:

VW Passat cars, coverage from 2005 and up to 2015.

Emulates electronic steering lock module which incorporates steering lock module itself and key reader (base station) for Hitag-2 keys (keyless version). Emulator replaces both. Must store IMMODATA, ESL_ID, KEY_ID and KEY_P3 before usage. Side effect – car can be started without valid transponder key at all by pressing START/STOP button. At first start attempt after battery reconnection any suitable keyblank which fits key slot may be necessary.

Configuration:

- Power emulator from 12v power source, attach K-line adapter, launch configurator software. • JMP must be OPEN for configuration,
- IMMODATA, KEY ID and KEY_P3 you can extract from CCM module eeprom dump using 3rd party software. Note that some online services can display ESL MAC in reverse order (swap).
- ESL_ID you can read from matched original ESL (broken one which you are going to replace) using K-line adapter and ESLID read utility, use same connection diagram as for ESL emulator.
- Store IMMODATA and any registered KEY ID / P3 into emulator. All three LEDs must go ON and then OFF not simultaneously, ESL status at first, then KEY auth (take attention!).
- Place solder joint to short JMP. Emulator is ready for installation on car now.

LED:

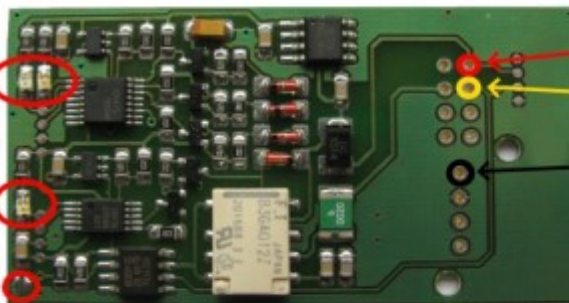
ESL status



KEY auth



JMP →



Installation:

Use standard 2.54 mm pitch pin headers or solder wires directly.

LEDs on emulator board: • ESL status: - two LEDs: GREEN: ESL unlocked, RED: ESL locked. LEDs go off after 1s of inactivity on LIN network. Otherwise ESL status is displayed. • KEY auth: - one RED LED, goes on when key authorization takes place.