FORD 4C key emulator

for ECU with external key reader based on TMS3705 chip

Purpose:

For FORD cars with external amplifier (transponder basestation with coil) based on TMS3705A chip. Emulates 4C key and amplifier itself. It allows to make Plug&Play ECU.
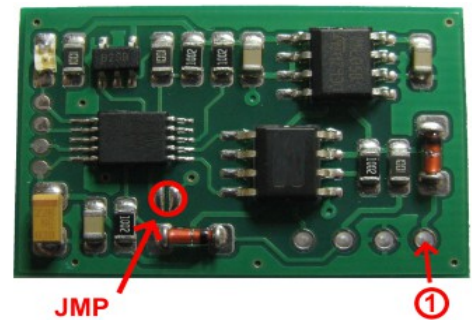
Installation:

Emulator is 1:1 pin compatible with original amplifier:

- pin1 **+12v**,
- pin2 **GND**,
- pin3 **data to** amplifier,
- pin4 **data from** amplifier (or K-line for configuration).

JMP settings:

- open - key data update via k-line allowed;
- short (solder joint placed) - update via K-line is prohibited.
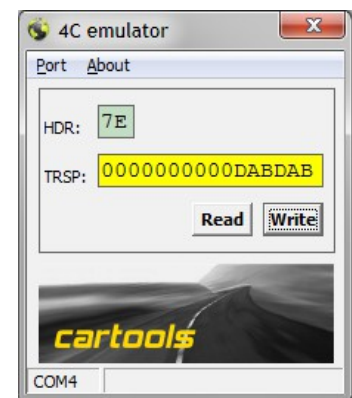
Alignment:

JMP must be open, copy existing 4C key data into emulator using any suitable K-line adapter connected to pin4 and configurator software. Then place solder joint (short JMP) to allow normal operation.

Things to know:

- HDR – header – use 7E by default.
- TRSP – key data stream (serial number) – must start with zeros, then data follow. In ECU dump it is usually placed in reverse order.

LED on emulator board:

Short bling at power-up, short blink each time when "RF field ON" - key is accessed.

If everything is OK and "key" is recognized as valid, you must see one or two short blinks when switching IGN ON. Long series of short blinks usually means "key" data is wrong or "key" not recognized by immo.

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