



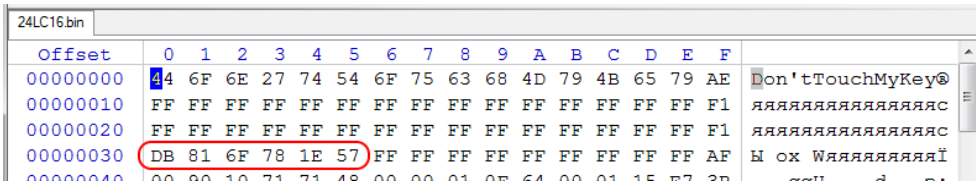
JEEP Cherokee KL

SCL emulator, CAN bus

JEEP Cherokee KL
JEEP Compass
FIAT 500X
etc.

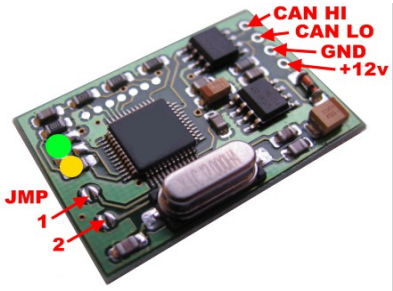
Purpose:

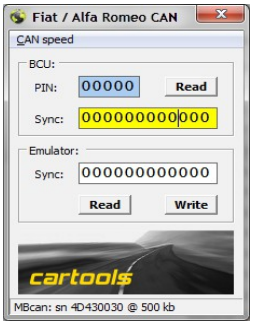
- JEEP Cherokee KL **E**lectronic **S**teering **C**olumn **L**ock emulator, CAN, 2014 and up;
- Supports FIAT architecture: BCM + RFHUB + SCL, SCL is connected to CAN-C1 or CAN-C2.
- **NOT** Plug&Play, must store **SYNC** (6 bytes) into emulator, you can get it from BCM or SCL dump. Below: SCL dump, SYNC location is highlighted:



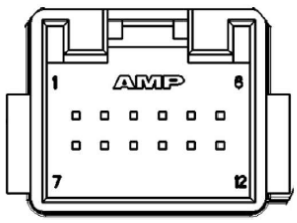
How to store SYNC:

- JMP1 and JMP2 both open (configuration mode enabled);
- Using CAN logger: connection speed 500 kB, STD ID (11-bit), must send following frames:
  - To request stored SYNC: **770 7 DD 00 00 00 00 00 00** ;
  - To store SYNC: **770 7 CC xx xx xx xx xx xx** where xx are 6 bytes of SYNC;
  - Response from emulator: **771 7 EE xx xx xx xx xx xx** where xx are 6 bytes of SYNC...
- Using MBcan: use FIAT configurator software, Read or Write emulator.
- Finally place solder joint(s) to short JMP1 and JMP2 (any or both, no matter) to prohibit SYNC updates by accident.





ESL Module Pinout



1 - +30
2 - not connected
3 - +15 (INT)
4 - not connected
5 - Earth
6 - not connected
7 - not connected
8 - not connected
9 - C-CAN H ESL
10 -C-CAN L ESL
11 - not connected
12 - VSO signal

Installation on car:

- connect emulator directly to +BAT, GND, CAN-Hi CAN-Lo wires (SCL pins 1,5,9,10 accordingly);
- early JEEP-KL: CAN-C1 (powertrain CAN) is wired directly to OBD plug (pins 4,5: GND, pin6: CAN-Hi, pin14: CAN-Lo, pin16: +BAT), you can use it for testing purposes.

LED on emulator board:

- **ORANGE** or **RED**: SCL is in locked state,
- **GREEN**: SCL is unlocked, correct authorization and unlock request received.
- No LED means no activity on CAN (sleep / off).

(c) RobinDAB '2021 - 2026

cartools