FordPass Connect TCU Authorization Thru FORScan, Ford/Lincoln Vehicle Retrofit. TCU-J_K_L Series.

> **Important:**
> Before attempting to authorize the TCU, you must remove the vehicle from FordPass. Delete the app on the phone to clear the app cache. It is best to do this the day before, as this action needs to process through the Ford system. You will install the app later in this process. It is recommended to perform a Master Reset on the APIM beforehand and re-pair your phone as necessary. In some cases, it may be necessary to manually remove the vehicle from the Ford Owner account, especially if the vehicle was not equipped with FordPass Connect from the factory.

NOTES:
- The following activation process must be done with the vehicle running.
- DO NOT use Android Auto or CarPlay during the activation process.
- Setting up the TCU in FORScan for the authentication process requires your patience. Ensure each step is completed before moving to the next or the procedure will fail.
- Disregard the ignition status and FORScan version in the pictures below.

1. In FORScan set up the TCU monitoring PIDs as shown in the images below.
2. While monitoring the TCU PIDs in real time, there's a PID labeled 'TCU Authstate' which tells you the current authorization status of the module. To begin the process of activating or authorizing the TCU, change the value of 754-01-01 in FORScan to the value below.
   > For Sync 3:
   > 754-01-01: B100 0000 xx
   > (Ignore the xx value and accept the write process. This is the checksum value FORScan will calculate automatically.)
   > For Sync 2:
   > 754-01-01: A100 0000 xx
   > (Ignore the xx value and accept the write process. This is the checksum value FORScan will calculate automatically.)

   This changes the region to unconfigured, gas vehicle, OCS state to 'Not Configured'.
3. …wait a few minutes. Check that the TCU Auth state says, 'Factory Mode', then set it back to the original value. See the TCU asbuilt database for additional values.
4. While monitoring the Authorization Status PID (TCU_AUTHSTATE), it will progress through several stages as shown in the images below. (Factory Mode, Unprovisioned Mode, Waiting for Authorization Mode).

First panel

Name	Value	Description
CELL_SIGNAL	0	Cell Phone Signal Strength
Country Identity_TCU	310	Country Identity
KEYPOS		Ignition Key Status
Network Identity_TCU	410	Network Identity
SELTESTDTC	0	Diagnostic Trouble Codes
TCU_AUTHSTATE	Factory Mode.	Telematics Control Unit Authorization Status
TCU_STATE	Operational	Module state
VPWR_TCU	12.10 Volt	Module supply voltage

Dashboard | Oscilloscope | Table

TCU — 11.79/11.79 s — 1:1

Interface: ■ Vehicle: ■ Live data streaming...

Second panel

Name	Value	Description
CELL_SIGNAL	0	Cell Phone Signal Strength
Country Identity_TCU	0	Country Identity
KEYPOS		Ignition Key Status
Network Identity_TCU	0	Network Identity
SELTESTDTC	0	Diagnostic Trouble Codes
TCU_AUTHSTATE	Unprovisioned Mode	Telematics Control Unit Authorization Status
TCU_STATE	Operational	Module state
VPWR_TCU	12.10 Volt	Module supply voltage

Dashboard | Oscilloscope | Table

TCU — 4.99/4.99 s — 1:1

Interface: ■ Vehicle: ■ Live data streaming...

5. Once you are in the 'Waiting for Authorization' mode, install the FordPass app on your phone and add your vehicle. Once your vehicle is added successfully, **SIGN OUT OF THE APP** and quit the app on the phone to clear the app cache. Start the app again, log in, and check that your vehicle is present and that you can activate a vehicle.

6. Activate the vehicle now. DO NOT try to authorize the vehicle multiple times, this will just mess things up. Wait for the message in FordPass that says your authorization is pending. If you get a 'Unable to authorize' or 'Authorization not available' message, then the Ford servers have an issue and there is nothing you can do at this point. It usually takes a day for them to come back. (Weekends are the worst times for this.)

7. Once the message appears on the APIM to authorize, confirm you want to authorize. If the message takes more than about 5 minutes, turn off the vehicle and open and close the door to ensure that the APIM powers down. Restart the vehicle. Wait for the message… authorize the vehicle.

8. You should get a message in FordPass that the vehicle is now authorized. If you do not receive these messages then the process is failing on the FORD side, not the vehicle side. Sometimes the messages in FordPass will take several minutes. Once the vehicle authorizes, you will see the status in FORScan monitoring the TCU PID's.

Name	Value	Description	
CELL_SIGNA	180	Cell Phone Signal Strength	
Country Ider	310	Country Identity	
KEYPOS		Ignition Key Status	
Network Ide	410	Network Identity	
SELTESTDT	0	Diagnostic Trouble Codes	
TCU_AUTHS	Authorized Mode	Telematics Control Unit Authorization Status	
TCU_STATE	Operational	Module state	
VPWR_TCU	12.30 Volt	Module supply voltage	

Dashboard | Oscilloscope | Table

TCU   35.71/35.71 s   1:1

Interface: ■ Vehicle: ■ Live data streaming...