INSTRUMENT PANEL CLUSTER TEST BENCH

- **Test bench** is specific machine or set of hardwares where you can simulate inputs of your electronic control unit (ECU) and monitor outputs of ECU.
- The hardware present in the Test bench are :

  - CANcaseXL
  - TestBox
  - Ignition Switch
  - Harness Wire
  - Ecu under test **(EX: INSTRUMENT PANEL CLUSTER)**
  - Power Supply

- **CANcaseXL:**

  CANcaseXL is used to transmit the signal to target. This is used to perform real time scenories.

- **CANc**

- In our project we are using 2 channel CANcaseXL .Some signals will be transmitted from Channel 1 and some signals are Transmitted from Another channel.

- Each channel contains RX , TX , ERR. If a signal is Receving then RX will blink.

  If a signal is Transmitting then TX will blink. If there is a error then ERR will blink.
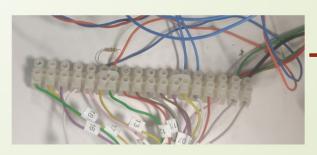

4 channel CANcase and 2 Channel

TEST BOX :

Each company have their text box. Some sample test box are shown below

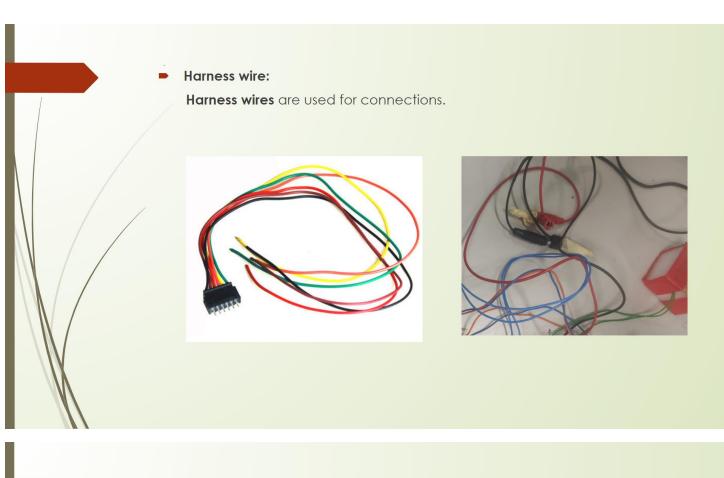→ In our project we are using This testbench.

IGNITION SWITCH :

Ignition switch is used to ON and OFF the ECU. Its work like a keyoff and Keyon.

Another way to perform the Ignition on and ignition off is by sending the . . Signal from the Canalyzer or CANoe

EX: BCM COMMAND.IGNITION STATUS = Ignition on (or) Ignition off

Harness wire:

Harness wires are used for connections.

ECU under test:

The ECU that we are testing that will be under Test. For example if we are . . Testing Ipc then Ipc will be under test.

Power supply :

OR

There are different types of power supply Equipment. We will give **13V** of power. **Power supply** Volts also depends on the Project. The volts may Vary

➥ Connections explanitation:

First By using usb cable , we will connect it to CANcaseXL (Laptop to CANcaseXL) from CANcasexl the output (2 channels) is connected to test box(CANcaseXL to testbox) from testbox the output is connected to ECU (Test box to ECU)

⟶Power supply is connected to the test box.

⟶The ignition Switch is connected to Test box.