
# SDI E-CLIK PRO F-53 RV SHOCK INSTALLATION GUIDE

# SDi E-CLIK Ford F-53 Electronics Installation Manual

## E-CLIK Electronics Package Content

1. ECU and Hardware
2. IMU + Bracket and Hardware
3. Touch Screen Controller + Bracket and Hardware
4. Wiring Harnesses + Zip Ties
    a. ECU Main Plug
    b. Power Harness
    c. Data Harness
    d. Front Shocks Harness
    e. Rear Shocks Harness

## Required Tools

1. Ratchet
2. 10mm Wrench
3. 10mm Socket
4. 4mm Allen Key
5. Power Drill + ¼" Drill Bit + 1 ¼" Step Drill Bit
6. Small Pliers
7. Cutting Pliers
8. Utility Knife

## Estimated Installation Time

1-2 hours

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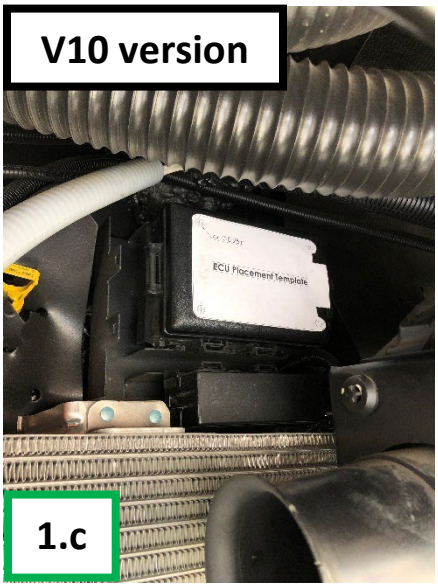
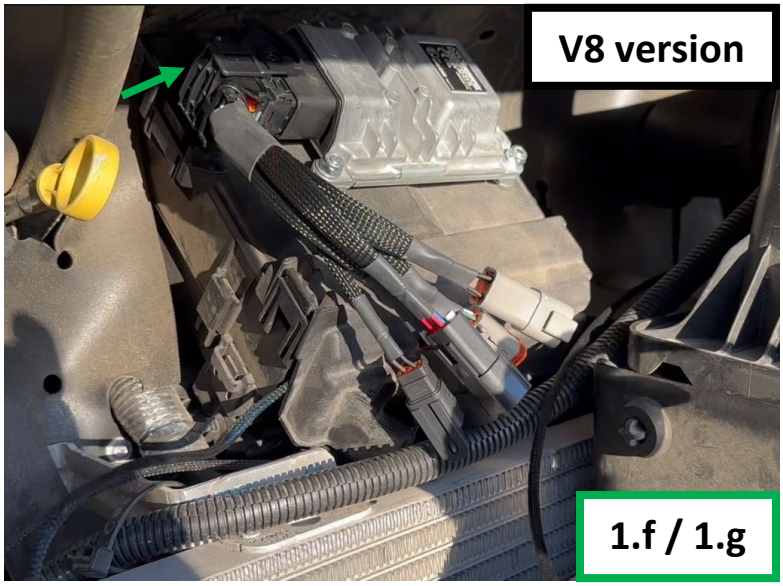
## 1. ECU

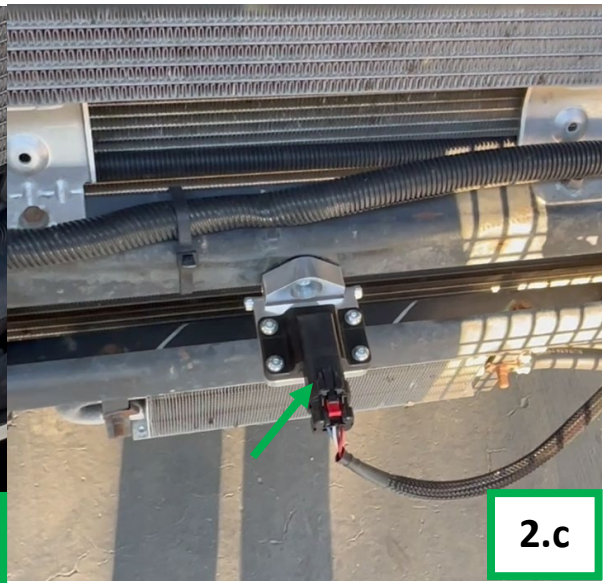
a. Open the vehicle hood.
b. Remove the stock fuse box cover, clean to remove dust and oil.
c. Apply the ECU Placement pattern template.
d. Drill the 4x designated hole on the fuse box cover with a power drill and ¼“ drill bit or step bit.
e. Mount the ECU on the fuse box cover using the supplied hardware with 4mm Allen key and 10mm socket.
f. Reinstall the stock fuse box cover.
g. Secure the ECU Main Plug in the ECU receptacle and lock it.



## 2. IMU Sensor

a. Open the vehicle hood.
b. Locate the hole at the center of the crossbar.
c. Place IMU as shown, IMU connector must face forward.
d. Use the 10mm socket and wrench to install and secure the IMU bracket in place using the supplied hardware.

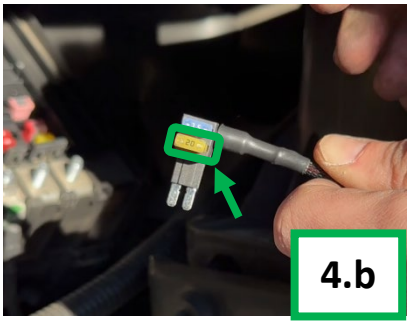



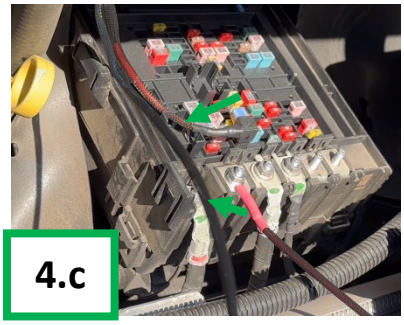

## 3. Touch Screen

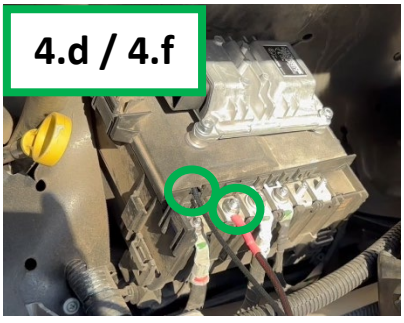
a. Select a mounting location for your ECLIK Touch Screen.
b. Apply the Touch Screen Placement Template on the selected location.
c. Drill the 5x designated holes with a power drill, ¼“ drill bit and step bit.
d. Mount the Touch Screen using the supplied hardware with 4mm Allen key and 10mm socket.
e. Make sure the Touch Screen Home Button is oriented down.

# 4. Power Harness

a. Under the hood, remove the Fuse box cover.
b. Cut notch using a utility knife.
   - For 2019 - 6.8L V10:
     - Remove the stock 10A fuse from the fuse slot #5 using small pliers.
     - Plug the previously removed stock fuse in the bottom slot of the E-CLIK fuse holder.
   - For 2023 - 7.3L V8:
     - Remove the stock 20A fuse from fuse slot #32 using small pliers.
     - Plug the previously removed stock fuse in the bottom slot of the E-CLIK fuse holder.
c. Plug the E-CLIK fuse tap in the fuse slot #32 or #5.
d. Route the fuse tap harness out of the fuse box through the notch cut previously.
e. Mount the GND wire (Black) to the GND battery connector using a 10mm socket.
f. Mount the +12V wire (Red) to the +12V battery connector using a 10mm socket.
g. Reinstall the fuse box cover with the E-CLIK ECU on it.
h. Route the Male Black/Orange 4-pin Power connector towards the ECU, and connect it to the mating Female 4-pin Black/Green connector of the ECU Main Harness.
i.

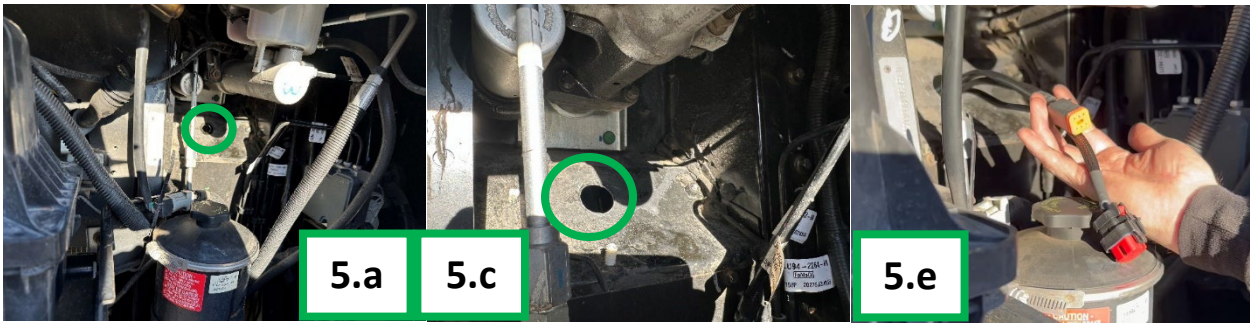


## 5. Data Harness

a. Under the hood, locate the stock firewall grommet located under the Brake Master Cylinder.
b. Remove the stock firewall grommet.
c. Drill a 1 ¼" hole using a drill and step bit.
d. From the inside out, feed the Black/Orange 6-pin Data connector and the Black/Red IMU 6-pin connector through the hole previously drilled.
e. Route the Male Black/Orange 6-pin Data connector towards the ECU, and connect it to the mating Female Black/Orange 6-pin connector of the ECU Main Harness.




**IMU SENSOR:**

f. Route the Black/Red connector from the ECU, following stock wiring harnesses until the IMU sensor.
g. Connect the Black/Red connector to the IMU sensor.
h. Secure the connection by pushing the red lock tab.

**TOUCH SCREEN:**

i. From inside the cab, under the dashboard, route the Touch Screen connector (Black/Silver) from under the dashboard to the Touch Screen.
j. Connect (Screw) the Touch Screen connector to the Touch Screen.

**VEHICLE DATA:**

k. From inside the cab, under the dashboard, Connect the OBD2 connector (Black) to the stock OBD2 connector.

## 6. Front Shocks Harness

a. Connect the Male 4-pin Grey/Orange connector to the mating Female 4-pin Grey/Green of the ECU Main Harness.
b. Route the Front Left Shock harness under the driver's side wheel liner until the Front Left Shock connector.
c. Plug the E-CLIK Front Left Shock connector (FL) to the Front Left Shock.
d. Route the Front Right Shock harness under the passenger's side wheel liner until the Front Right Shock connector.
e. Plug the E-CLIK Front Right Shock connector (FR) to the Front Right Shock.

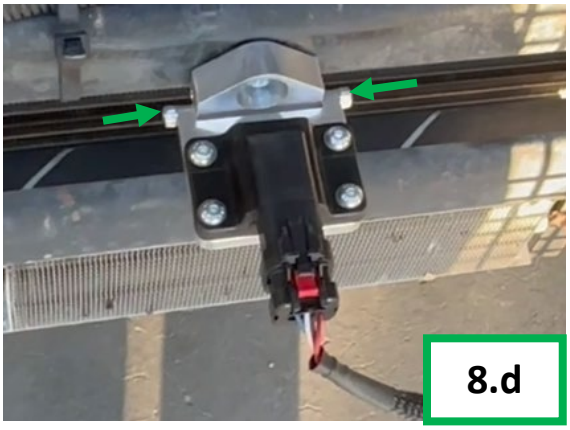
## 7. Rear Shocks Harness

a. Connect the Female 4-pin Grey/Green connector to the mating Male 4-pin Grey/Orange of the ECU Main Harness.
b. Route Rear Right and Rear Left Shock harnesses under the driver's side wheel liner.
c. Route Rear Right and Rear Left Shock harnesses along the vehicle frame until the driver's side shock connector.
d. Plug the E-CLIK Rear Left Shock connector (RL) to the Rear Left Shock.
e. Route the Rear Right Shock harness along the vehicle frame from the driver's side to the passenger's side shock connector.
f. Plug the E-CLIK Rear Right Shock connector (RR) to the Rear Right Shock.

## 8. Final Set Up

a. Place the vehicle on a leveled surface, and turn on the vehicle Ignition.
b. Go to the tilt angles display screen of the E-CLIK system.
c. Adjust the IMU sensor orientation using a 4mm Allen key until pitch and roll angles display 0 degrees.
d. Secure the IMU orientation using a 4mm Allen key.
e. Secure and zip-tie every harness, then close the vehicle hood.

8.c


8.d

# Wiring Harness Color Chart

| Start | Wire Color | Function | End | Wire Color | Destination |
|---|---|---|---|---|---|
| 4-Pin Male |  | Power | Ring Terminal |  | Battery + |
| | | | Ring Terminal |  | Battery - |
| | | | Fuse Tap |  | Ignition |
| 4-Pin Male |  | Front Shocks | 2-Pin Male |  | Front Left Shock |
| | | | 2-Pin Male |  | Front Right Shock |
| 4-Pin Female |  | Rear Shocks | 2-Pin Male |  | Rear Left Shock |
| | | | 2-Pin Male |  | Rear Right Shock |
| 6-Pin Male |  | Data | 6-Pin Male |  | IMU Sensor |
| | | | 5-Pin Male |  | Touch Screen |
| | | | 16-Pin OBD-II |  | OBD-II Diagnostic Port |
| 2-Pin Male |  | NOT USED | 2-Pin Male |  | - |
| 2-Pin Female |  | NOT USED | 2-Pin Male |  | - |
| 2-Pin Female |  | NOT USED | Push Button |  | - |

| ERROR CODE CHART | | | |
|---|---|---|---|
| **Error Code** | **Source** | **Error Description** | **Action** |
| **1014** | ECU | Battery Low | 1. Check vehicle's battery |
| **1015** | ECU | Battery High | 1. Check vehicle's battery |
| **1016** | ECU | Temperature Low | - |
| **1017** | ECU | Temperature High | - |
| **5000** | IMU | Disconnected / Malfunction | 1. Check connection between ECU and IMU<br>2. Replace IMU Harness |
| **9000** | Front Left Shock | Open Circuit | 1. Check connection between ECU and Front Left Shock,<br>2. Replace Front Shocks Harness |
| **9001** | Front Left Shock | Short Circuit to Power | 1. Check connection between ECU and Front Left Shock,<br>2. Replace Front Shocks Harness |
| **9002** | Front Left Shock | Short Circuit to Ground | 1. Check connection between ECU and Front Left Shock,<br>2. Replace Front Shocks Harness |
| **9003** | Front Left Shock | Deviation of Current | 1. Check connection between ECU and Front Left Shock,<br>2. Replace Front Left Shock Solenoid Coil |
| **9004** | Front Right Shock | Open Circuit | 1. Check connection between ECU and Front Right Shock,<br>2. Replace Front Shocks Harness |
| **9005** | Front Right Shock | Short Circuit to Power | 1. Check connection between ECU and Front Right Shock,<br>2. Replace Front Shocks Harness |
| **9006** | Front Right Shock | Short Circuit to Ground | 1. Check connection between ECU and Front Right Shock,<br>2. Replace Front Shocks Harness |
| **9007** | Front Right Shock | Deviation of Current | 1. Check connection between ECU and Front Right Shock,<br>2. Replace Front Right Shock Solenoid Coil |
| **9024** | Rear Left Shock | Open Circuit | 1. Check connection between ECU and Rear Left Shock,<br>2. Replace Rear Shocks Harness |
| **9025** | Rear Left Shock | Short Circuit to Power | 1. Check connection between ECU and Rear Left Shock,<br>2. Replace Rear Shocks Harness |
| **9026** | Rear Left Shock | Short Circuit to Ground | 1. Check connection between ECU and Rear Left Shock,<br>2. Replace Rear Shocks Harness |
| **9027** | Rear Left Shock | Deviation of Current | 1. Check connection between ECU and Rear Left Shock,<br>2. Replace Rear Left Shock Solenoid Coil |
| **9028** | Rear Right Shock | Open Circuit | 1. Check connection between ECU and Rear Right Shock,<br>2. Replace Rear Shocks Harness |
| **9029** | Rear Right Shock | Short Circuit to Power | 1. Check connection between ECU and Rear Right Shock,<br>2. Replace Rear Shocks Harness |
| **9030** | Rear Right Shock | Short Circuit to Ground | 1. Check connection between ECU and Rear Right Shock,<br>2. Replace Rear Shocks Harness |
| **9031** | Rear Right Shock | Deviation of Current | 1. Check connection between ECU and Rear Right Shock,<br>2. Replace Rear Right Shock Solenoid Coil |