



SDI E-CLIK

***SDI E-CLIK PRO
Gen 3 Raptor
Installation Guide***

IMPORTANT NOTE ABOUT FORD OTA UPDATES

Updating your Truck with Ford OTA Updates:

1. Disconnect the OBD2 connector of the ECLIK system before bringing your vehicle to a dealer.
2. When applicable, turn off the automatic updates of your truck, then before starting an update, or bring your truck to a dealer:
 - a. For 2019-2020 Raptor GEN2, disconnect the 2x ECLIK connectors under the dashboard, and re-connect the 2x stock connectors to the factory Shock Control module
 - b. For 2021+ Raptor GEN3 and Bronco Raptor disconnect the ECLIK Adapter Box on the frame, and re-install and re-connect the factory Shock Control module to the frame.

SDi E-CLIK 2021+ Ford Raptor GEN3 Electronics Installation

E-CLIK Electronics Package Content

1. ECU and Hardware
2. ECU Placement Template
3. IMU + Bracket and Hardware
4. Touch Screen Controller + Bracket and Hardware
5. Wiring Harnesses + Zip Ties
 - a. ECU Main Plug
 - b. Stock ECU Adapter Harness

Required Tools

1. Ratchet
2. 10mm Socket
3. 11mm Socket
4. 4mm Allen Key
5. 10mm Wrench
6. Small Flathead Screwdriver
7. Power Drill + ¼" Drill Bit or Step Bit
8. Small Pliers
9. Cutting Pliers
10. Utility Knife

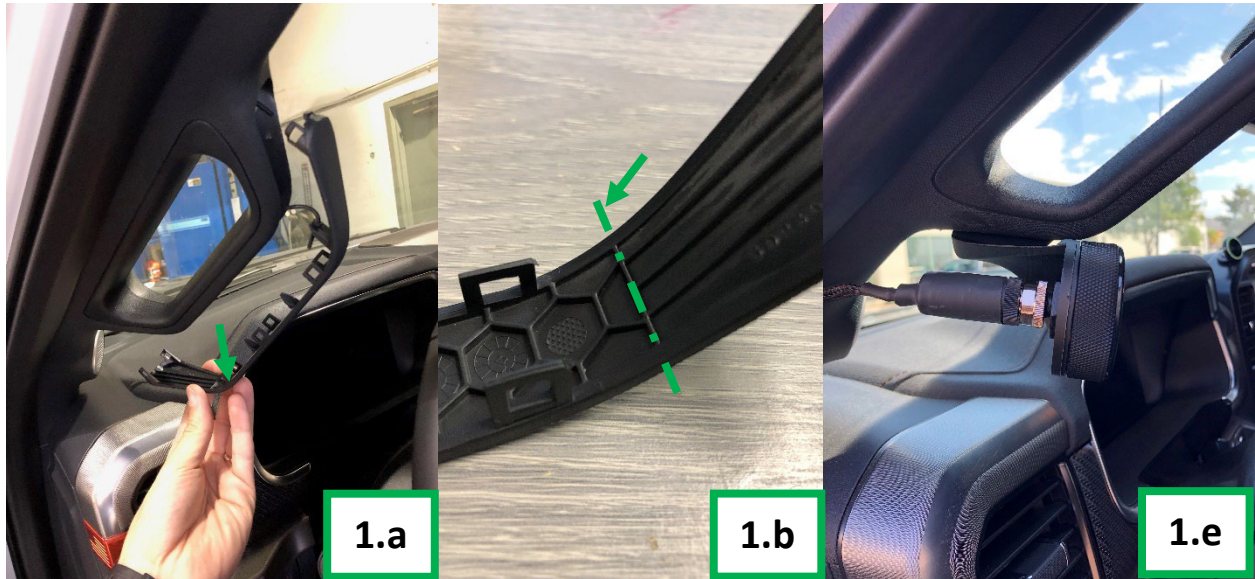
Estimated Installation Time

1-2 hours

SDi E-CLIK 2021+ Ford Raptor GEN3 Electronics Installation

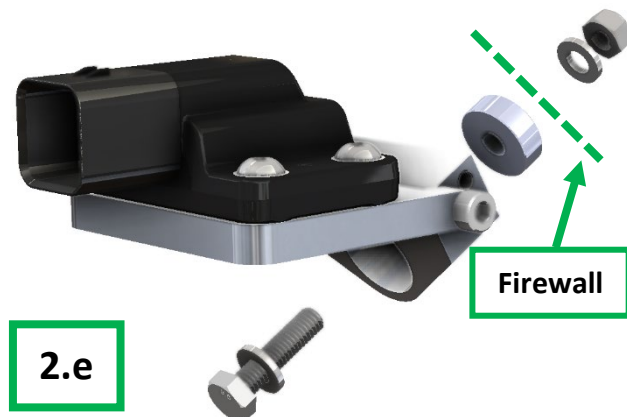
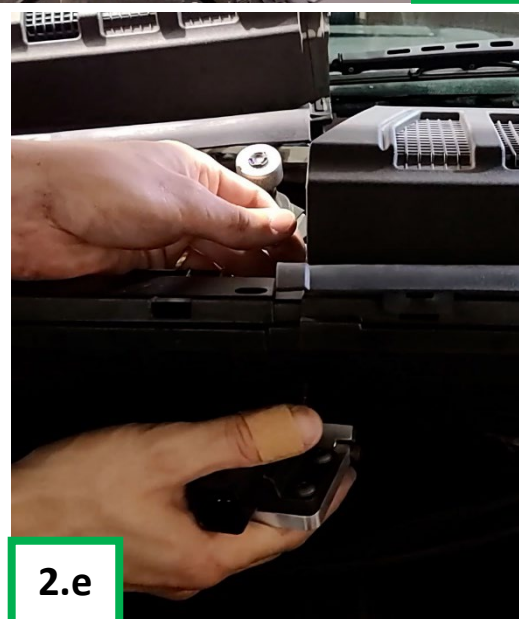
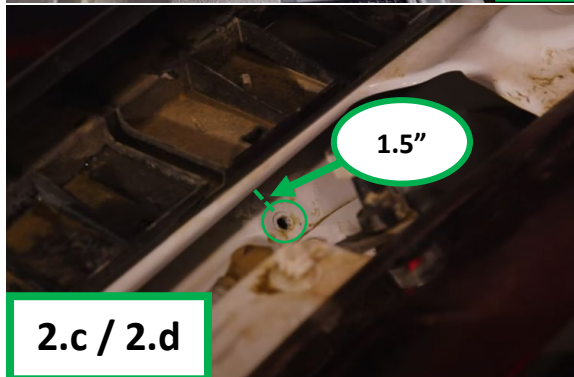
1. Touch Screen

- a. Unclip the driver side A-pillar handle cover.
- b. Unbolt the A-pillar handle bottom bolt using a 10mm socket.
- c. Cut the bottom end of the A-pillar handle cover using a utility knife.
- d. Reinstall the driver side A-pillar handle cover.
- e. Place the Touch Screen bracket and secure it with the supplied bolt using a 10mm socket.



2. IMU Sensor

- a. Unhook and remove the 2x windshield wipers.
- b. Open the hood and unclip the 2x plastic trims between the windshield and the engine bay using a small flathead screwdriver.
- c. Locate the center of the firewall, 1.5" away from the seam of the firewall **shown here**.
- d. Drill a hole using a power drill and a 1/4" drill bit.
- e. Install the IMU sensor using the supplied hardware, a 10mm socket and wrench.
- f. DO NOT reinstall the plastic trims as you will need to adjust the sensor orientation in the final steps.

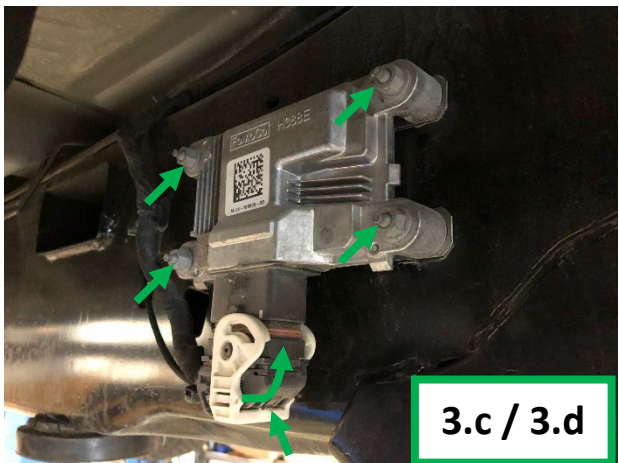
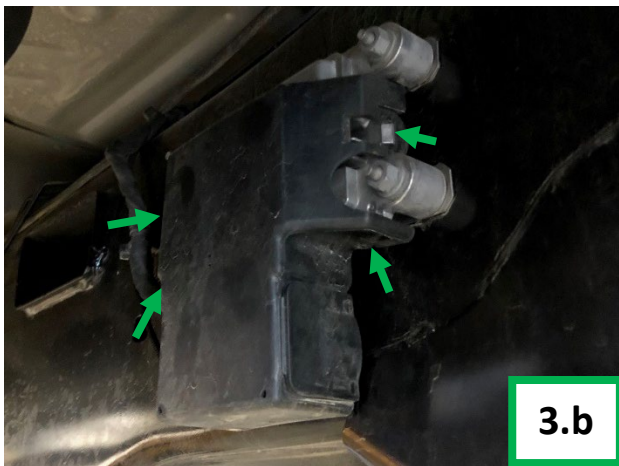


3. ECU Adapter

Make sure vehicle ignition is off.

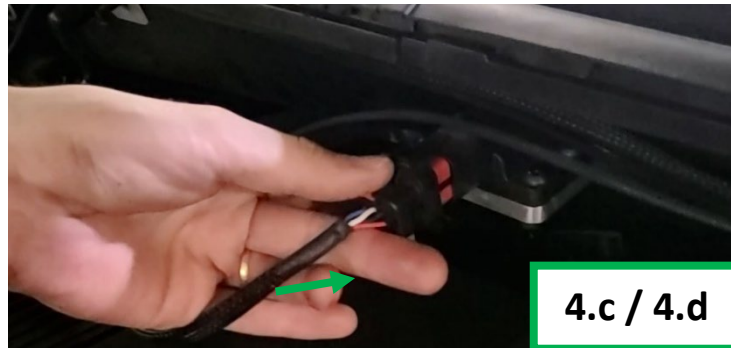
Note: We will secure all harnesses at the end once we make sure they are placed properly and functioning correctly.

- a. Locate the Factory Vehicle Dynamics Module, under the cab, mounted on the frame, near the driver side rear door.
- b. Unclip and remove the Factory Vehicle Dynamics Module cover.
- c. Disconnect the factory wiring harness connector by unclipping and rotating the white tab 90 degrees.
- d. Remove the 4x factory nuts using a 11mm socket.
- e. Place and mount the SDi E-CLIK ECU Adapter Box in place of the factory Vehicle Dynamics Module, with the 4x factory nuts previously removed using a using a 11mm socket.
- f. Plug the factory wiring harness connector into the SDi E-CLIK ECU Adapter Box bottom connector, by rotating the white tab 90 degrees until it clicks.



4. WIRING HARNESS ROUTING

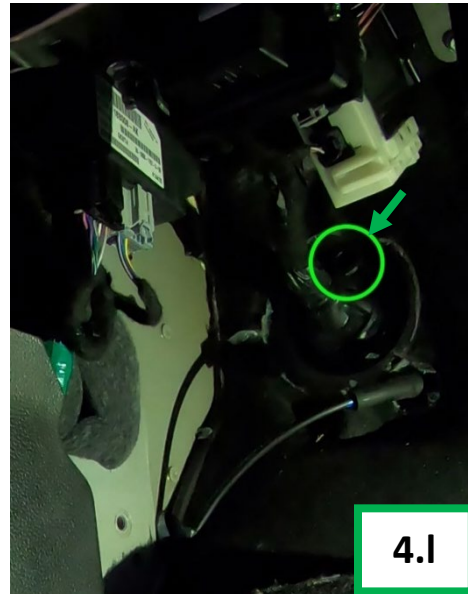
- a. Route the SDi E-CLIK ECU Adapter Box wiring harness along the vehicle frame and toward the front of the vehicle following the factory wiring harness, then up behind the driver side front wheel liner until the factory firewall grommet.
- b. Route the Black/Red 6-pin IMU connector along the firewall until the IMU sensor.
- c. Connect the Black/Red 6-pin IMU connector to the IMU sensor.
- d. Secure the connection by pushing the red lock tab.



- e. Route the blue wire and fuse tap, the black ring terminal and the red terminal of the power harness across the firewall, until the passenger side fuse box in the engine bay.
- f. Connect the black wire ring connector of the power harness to the black (-) pin of the vehicle battery with 10mm socket.
- g. Connect the red wire ring connector of the power harness to the red (+) pin of the vehicle battery with 11mm socket.
- h. Remove the fuse box cover.
- i. Remove the stock 20A fuse from the fuse slot #48 (Rear heated seats) using a fuse puller.
- j. Plug the stock 20A fuse in the bottom slot of the E-CLIK fuse holder.
- k. Plug the E-CLIK fuse tap in the fuse slot #48.
- l. Cut a notch on the edge of the fuse box cover using a utility knife.
- m. Reinstall the fuse box cover.



- n. Cut the stock firewall grommet from the engine bay side using a utility knife.
- o. Cut the stock firewall grommet from the dashboard side using a utility knife.



- p. Route the Black/Orange 4-pin Power connector inside the cab through the firewall grommet.
- q. Route the Grey/Orange 4-pin Front Shocks connector inside the cab through the firewall grommet.
- r. Route the Grey/Green 4-pin Rear Shocks connector inside the cab through the firewall grommet.
- s. Route the Black/Orange 6-pin Data connector inside the cab through the firewall grommet.
- t. Route the Touch Screen connector (Black/Silver) inside the cab through the firewall grommet.
- u. Unclip the side panel between the driver side door and the dashboard using a flathead screwdriver.
- v. Pull the driver side door seal.
- w. Route the Touch Screen connector (Black/Silver) from under the dashboard to the Touch Screen previously installed.
- x. Connect (Screw) the Touch Screen connector to the Touch Screen.
- y. Reinstall the driver side door seal and side panel.

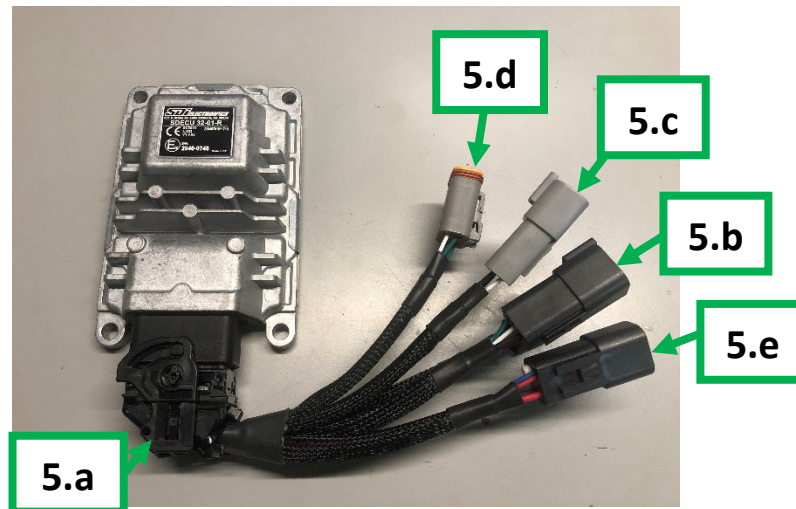


- z. Unclip the bottom driver's door panel inside the cab, and route the Black/Orange 6-pin connector, the Black/Orange 4-pin connector, the Grey/Orange 4-pin connector, and the Grey/Green 4-pin connector from under the dashboard to under the driver's seat.



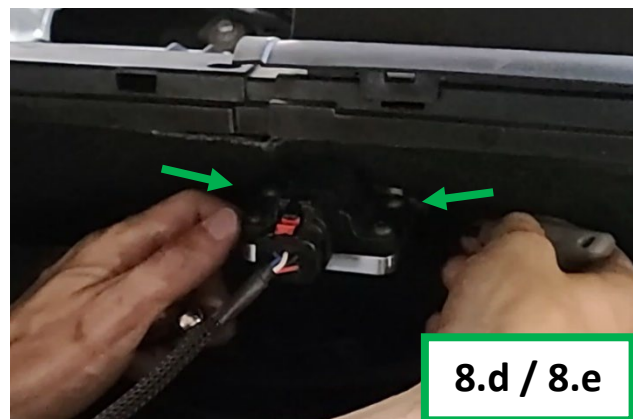
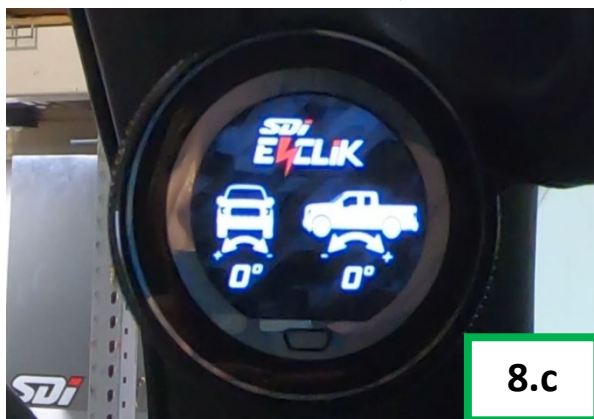
5. ECU

- a. Plug the E-CLIK ECU harness into the ECU.
- b. Connect the Black/Orange 6-pin connector to the E-CLIK ECU harness.
- c. Connect the Grey/Orange 4-pin connector to the E-CLIK ECU harness.
- d. Connect Grey/Green 4-pin connector to the E-CLIK ECU harness.
- e. Connect the Black/Orange 4-pin Power harness connector to the E-CLIK ECU harness.³
- f. Under the driver's seat, Install the ECU using the supplied zip-ties.
- g. Reinstall the bottom driver's door panel.

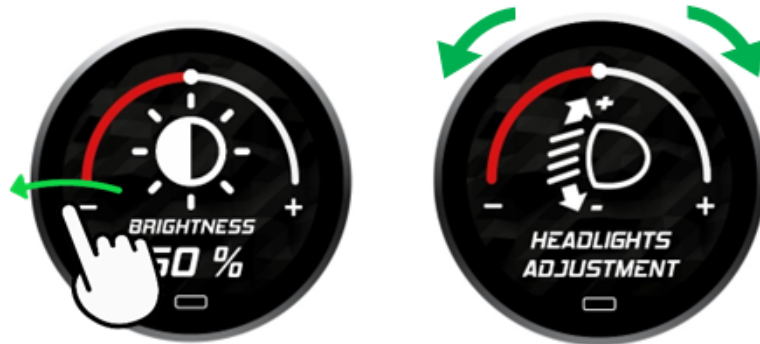


6. Final Set Up

- 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. Reinstall 2x plastic trims between the windshield and the engine bay.
- f. Reinstall the windshield wipers.
- g. Secure and zip-tie every harness, make sure all wires are zip-tied and not running close to the vehicle's exhaust, then close the vehicle hood.



h. Touse the “Headlights Adjustment” feature, go to the “Brightness Adjustment” menu on the main screen, and Swipe Left to reach the “Headlights Adjustment” screen. Turn the knob right or left to adjust the headlights height up or down



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 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 2. Replace IMU Harness
9000	Front Left Shock	Open Circuit	1. Check connection between ECU and Front Left Shock, 2. Replace Front Shocks Harness
9001	Front Left Shock	Short Circuit to Power	1. Check connection between ECU and Front Left Shock, 2. Replace Front Shocks Harness
9002	Front Left Shock	Short Circuit to Ground	1. Check connection between ECU and Front Left Shock, 2. Replace Front Shocks Harness
9003	Front Left Shock	Deviation of Current	1. Check connection between ECU and Front Left Shock, 2. Replace Front Left Shock Solenoid Coil
9004	Front Right Shock	Open Circuit	1. Check connection between ECU and Front Right Shock, 2. Replace Front Shocks Harness
9005	Front Right Shock	Short Circuit to Power	1. Check connection between ECU and Front Right Shock, 2. Replace Front Shocks Harness
9006	Front Right Shock	Short Circuit to Ground	1. Check connection between ECU and Front Right Shock, 2. Replace Front Shocks Harness
9007	Front Right Shock	Deviation of Current	1. Check connection between ECU and Front Right Shock, 2. Replace Front Right Shock Solenoid Coil
9024	Rear Left Shock	Open Circuit	1. Check connection between ECU and Rear Left Shock, 2. Replace Rear Shocks Harness
9025	Rear Left Shock	Short Circuit to Power	1. Check connection between ECU and Rear Left Shock, 2. Replace Rear Shocks Harness
9026	Rear Left Shock	Short Circuit to Ground	1. Check connection between ECU and Rear Left Shock, 2. Replace Rear Shocks Harness
9027	Rear Left Shock	Deviation of Current	1. Check connection between ECU and Rear Left Shock, 2. Replace Rear Left Shock Solenoid Coil
9028	Rear Right Shock	Open Circuit	1. Check connection between ECU and Rear Right Shock, 2. Replace Rear Shocks Harness
9029	Rear Right Shock	Short Circuit to Power	1. Check connection between ECU and Rear Right Shock, 2. Replace Rear Shocks Harness
9030	Rear Right Shock	Short Circuit to Ground	1. Check connection between ECU and Rear Right Shock, 2. Replace Rear Shocks Harness
9031	Rear Right Shock	Deviation of Current	1. Check connection between ECU and Rear Right Shock, 2. Replace Rear Right Shock Solenoid Coil