ELECTRONICS
INSTALLATION GUIDE

FORD F-150 (2021-2023)
FORD F-150 (2024-ON)

FACTORY RACE SERIES 3.2 LIVE VALVE

803-02-252 - Kit: Connected Suspension Electronics, 21-23 F-150 ORAM
803-02-250 - Kit: Connected Suspension Electronics, 24-ON F-150 ORAM

605-01-454 REV A

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INTRODUCTION

Thank you for choosing FOX electronics for your vehicle. FOX products are designed, tested, and manufactured by the finest professionals in the industry.

FOX recommends that you become completely familiar with the handling characteristics of your modified vehicle before operating it under rigorous conditions, helping to avoid potential rollover situations and other loss of control events. FOX further recommends that you use appropriate protective equipment at all times when operating your vehicle.

To achieve the best performance and product longevity, periodic service and maintenance is required. Please refer to the Service and Upgrades section for more information.

IN THE BOX

- Live Valve Kit
- Supplied Hardware
- QR Code For Installation Guide

TOOLS NEEDED

- Small Phillips screwdriver
- 1.125 inch drill bit
- 0.25 inch drill bit
- 10 mm socket
- 13 mm socket
- 18 mm socket
- 12 inch long socket extension
- Flush cutter
- Scissors

SUPPLIED PARTS (803-02-250 and 803-02-252)

SHOCK ASSEMBLY			
FOX PN	**DESCRIPTION**	**QTY**	**NOTES**
026-01-323	MOUNTING HARDWARE: F-150 ECU/IMU BRACKET	1	MATES WITH 218-02-070 & 218-02-036
803-02-253 / -251	Kit: STW Controller, Connected Suspension	N/A	
218-02-070	ELECTRONIC PART: ECU, FOX CONTROLLER 8-VALVE, IP6K9K	1	MATES WITH 026-01-323
803-02-277	KIT: CABLE HARNESS ASSEMBLY, MOUNTING HARDWARE, 21-ON F150, CONNECTED SUSPENSION	N/A	
026-00-012	MOUNTING HARDWARE: CABLE TIE, .19" WIDTH X 11" LENGTH, BLACK	85	
026-01-298	MOUNTING HARDWARE: RUBBER PUSH-IN GROMMET, UNIVERSAL FIREWALL BOOT, FOR 1.250" HOLE, 0.0747" THK PLATE, BLACK	1	
218-02-052	CONNECTED SUSPENSION: TRUCK, CAN HARNESS	1	MATES WITH 218-02-083
218-02-083	CONNECTED SUSPENSION: TRUCK, MAIN HARNESS, SINGLE VALVE	1	MATES WITH 218-02-052
218-02-102	ELECTRONIC PART: DUST CAP, ATM SERIES 8-RECEPTACLE	1	PLUGS UNUSED CONNECTOR ON 218-02-083
218-02-103	ELECTRONIC PART: DUST CAP, JST 4-PIN	1	PLUGS UNUSED CONNECTOR ON 218-02-052
803-04-388	KIT: RAM MOUNT, B-SIZE BASE, ARM, AND 1/4-20 STUD	1	SECURES 803-34-006 TO VEHICLE
803-02-315	KIT: CONNECTED SUSPENSION TOUCHPOINT, WIRELESS	1	MATES WITH 803-04-388
803-02-190	KIT: ECU/IMU ASSEMBLY, MOUNTING HARDWARE, 24-ON F150, CONNECTED SUSPENSION	N/A	
218-02-036	ELECTRONIC PART: SENSOR, BOSCH MM7.10 IMU, 500 KBPS	1	MATES WITH 026-01-323
019-00-030	FASTENER, STANDARD (METRIC): NUT [M6 X 1.0] NYLON LOCKING, CLASS 8, ZINC PLATED	6	SECURES ECU/IMU TO MATING BRACKETS
019-00-036	FASTENER, STANDARD (METRIC): RIVET NUT [M8 X 1.25] 0.7-3.8MM GRIP RANGE, STEEL, CLEAR ZINC	2	SECURES 026-01-323, USE AS NEEDED
019-01-276	FASTENER, STANDARD (METRIC): HEX BOLT [M8 X 1.25 X 20MM] CLASS 8, ZINC	1	SECURES 026-01-323
026-01-331	MOUNTING HARDWARE: ECU SPACER, [.25 ID, .275 TLG] ALUMINUM, BLACK	4	MOUNTS BETWEEN 026-01-323 AND 218-02-070
218-02-068	VEHICLE CAN READER HARNESS	1	

⚠WARNING

SAFETY INSTRUCTIONS

- FOX direct-replacement shocks and associated hardware are designed to fit and allow proper clearance with the stock suspension. If aftermarket suspension components are installed it is the customer's responsibility to ensure that interference between the FOX components and other vehicle components does not occur at any point in the shock stroke.
- FOX direct-replacement shocks and associated hardware should always be installed as a set for maximum performance.
- Proper installation and service procedures are essential for the safe and reliable operation of the suspension components, requiring the experience and tools specially designed for this purpose. Installation and maintenance procedures for this product must be performed by a qualified service technician, to avoid potentially unsafe vehicle handling characteristics, which may result in SERIOUS INJURY or DEATH.
- Modifying your vehicle's suspension will change the handling characteristics of your vehicle. Under certain conditions, your modified vehicle may be more susceptible to loss of control or rollover, which can result in SERIOUS INJURY or DEATH. Thoroughly familiarize yourself with the modified vehicle handling characteristics before any rigorous vehicle operation. Wear protective body gear and a helmet when appropriate. Installation of vehicle roll bars or cage is highly recommended.
- Any attempt to misuse, misapply, modify, or tamper with any FOX product voids any warranty and may result in SERIOUS INJURY or DEATH.
- DO NOT install any FOX product without the necessary special tools and expertise or you will subject yourself to the risk of SERIOUS INJURY or DEATH. Ensure that the vehicle is (1) on level ground, and (2) that all tires on the ground during installation are blocked to prevent vehicle movement. NEVER get under the vehicle until you have checked to ensure that the vehicle will be stable during installation.

REAR SEAT REMOVAL

REAR PASSENGER SEAT

1. Use a 13 mm socket to remove the seatbelt anchor bolt and move the seatbelt aside (Fig. 1, Fig. 2, Fig. 3).

2. Pull the loop strap on the seat bottom to unlock the seat cushion, and raise the seat up (Fig. 4).

3. Use a 13 mm socket to remove the two front bolts (Fig. 5).



Fig. 1: Remove the seatbelt anchor bolt.



Fig. 2: Remove the seatbelt anchor bolt.



Fig. 3. Move the seatbelt aside.



Fig. 4. Raise the seat up.



Fig. 5. Remove the two front bolts.

4. Pull the loop strap on the backrest and fold the seat back down (Fig. 6).

5. Remove the vehicle jack (Fig. 7, Fig. 8).

6. Disconnect the 3 connectors (Fig. 9, Fig. 10).



Fig. 6: Fold the seat down.



Fig. 7: Remove the vehicle jack.

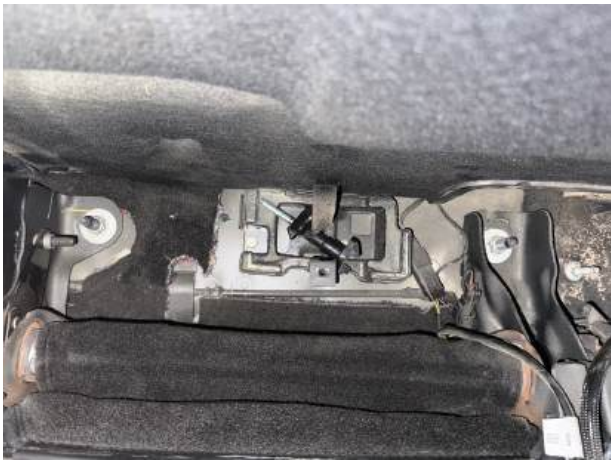


Fig. 8: Remove the vehicle jack.



Fig. 9: Disconnect the 3 connectors.



Fig. 10: Disconnect the 3 connectors.

7. Use an extension with an 18 mm socket and a 15 mm socket to remove the remaining 3 nuts (Fig. 11).

8. Remove the rear seat out of the vehicle (Fig. 12).

REAR DRIVER SEAT

1. Remove the seatbelt anchor bolt and move the seatbelt aside (Fig. 13, Fig. 14).

2. Pull the tab to unlock the rear seat cushion and raise it up (Fig. 15).



Fig. 11: Disconnect the 3 connectors.



Fig. 12: Remove the rear seat.



Fig. 13: Remove the seatbelt anchor bolt.



Fig. 14: Remove the seatbelt anchor bolt.



Fig. 15: Raise the seat up.

3. Use a 13 mm socket to remove the two front bolts (Fig. 16, Fig. 17).

   NOTE: The driver side seat backrest latch is ONLY accessible when the seat cushion is raised.

4. With the rear seat cushion raised, pull the latch upwards behind the rear driver side headrest (Fig. 18, Fig. 19, Fig. 20). Then pull the loop strap on the side of the seat to lower the seat backrest and seat cushion (Fig. 21).



Fig. 16. Remove the front bolts.



Fig. 17. Remove the front bolts.



Fig. 18. Pull the latch.



Fig. 19. Pull the latch.

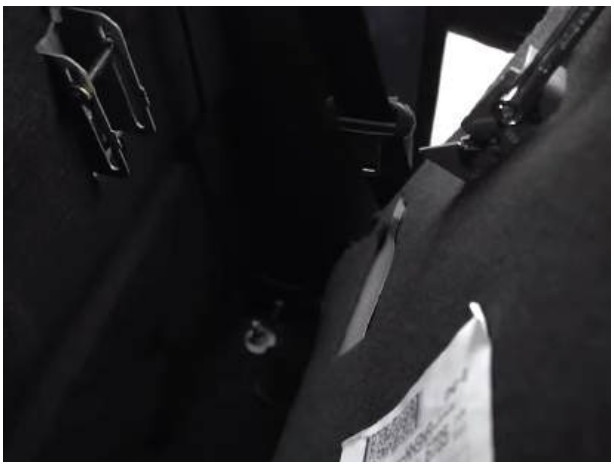


Fig. 20. Pull the latch.

5. Unplug the 2 connectors on the back of the seat (Fig. 22). Pull the connector/harness out from seat back fabric (Fig. 23 and Fig. 24).



Fig. 21. Pull the loop strap on the side of the seat.



Fig. 22: Unplug the 2 connectors.



Fig. 23. Pull the connector/harness.



Fig. 24. Pull the connector/harness.

6. Use an 18 mm socket to remove the last 2 nuts holding the rear seat in (Fig. 25, Fig. 26, Fig. 27). NOTE: Bolt shown in Fig. 25 secures the middle seat belt for reference.

7. Remove the bolt and 2 nuts securing the rear subwoofer in place. Disconnect the subwoofer connector (if applicable).

8. Near the middle seatbelt, disconnect the connector (Fig. 26, Fig. 28).

9. Pull the middle seatbelt bracket through the seat and place out of the way (Fig. 29).

10. Confirm all cables are disconnected. Then, remove the seat from the vehicle.

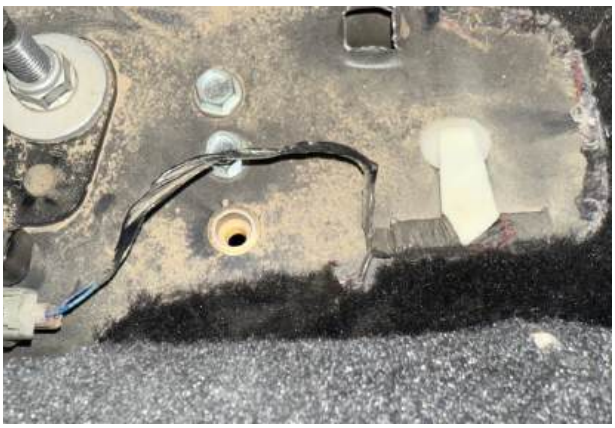


Fig. 25: Remove 2 nuts holding rear seat.



Fig. 26: Remove 2 nuts holding rear seat. Disconnect the connector.



Fig. 27: Bolt shown secures the middle seat belt.



Fig. 28: Disconnect the connector.



Fig. 29: Pull middle seatbelt bracket through the seat.

ECU/IMU INSTALLATION

PREPARATION

1. Ensure double-sided adhesive (P/N 007-05-392) is placed on the bottom side of the bracket. Make sure to apply two layers of double-sided adhesive on the side of the bracket by the IMU (closest to the front of the vehicle) and only one layer of the adhesive on the side of the bracket closest to the rear of the vehicle (Fig. 30).

2. Pull the carpet back and identify the location for the ECU/IMU bracket on the cab floor underneath and behind the rear seat (Fig. 31).



Fig. 30: Apply adhesive on the bracket.



Fig. 31: Identify location for ECU/IMU bracket.

BRACKET LOCATION AND ORIENTATION

1. Orient the bracket with the PEMS studs facing upwards and the slotted hole in the bracket toward the passenger side. The bracket will be in the same general location on all mounting variations but will change slightly in exact measurements/mounting locations (Fig. 32).

IMPORTANT: Although the location of the bracket is the same on all mounting variations, the mounting points vary between F-150 models and trim packages. **See the next section to identify the variation for your vehicle.** If you cannot identify the correct mounting variation or need help understanding these instructions, reach out to a verified dealer or contact our service center at 1.800.FOX.SHOX (1.800.369.7469).

ECU/IMU BRACKET MOUNTING

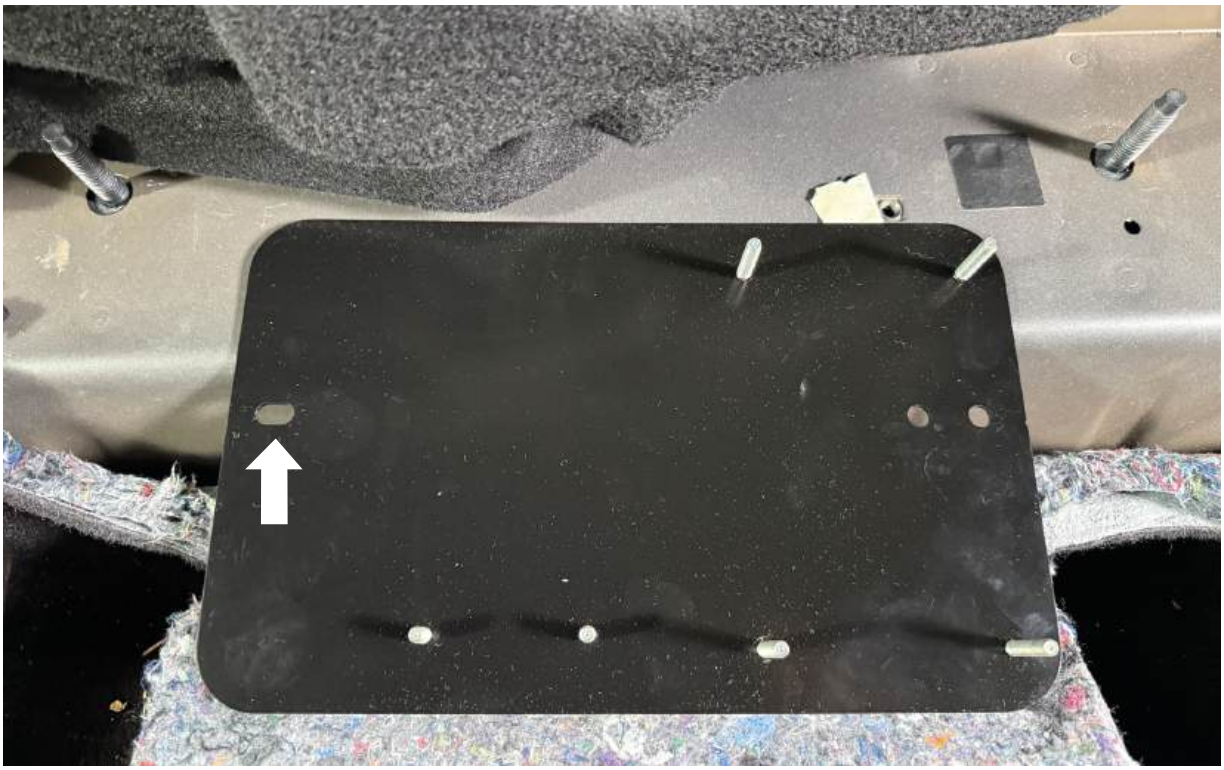


Fig. 32: Location of the bracket with PEMS studs facing upward and slotted hole (arrow) toward the passenger side.

2. Use the following descriptions to identify the correct mounting variation for your vehicle.
   - **VARIATION 1** - Both bracket mounting locations exist in the vehicle already. No rivet nut (drilling) required (Fig. 38). Continue below.
   - **VARIATION 2** - Only one OEM hole exists. Rivet nut installation and drilling required. No OEM subwoofer present. Continue on page 13.
   - **VARIATION 3** - Only one OEM hole exists. Rivet nut installation and drilling required. OEM subwoofer on driver side. Continue on page 15.

VARIATION 1 – Both bracket mounting locations exist in the vehicle already. No rivet nut or drilling are required.

- This variation has an existing mounting location which may have a threaded stud (Fig. 38 left arrow, and Fig. 39) and a second mounting location/threaded hole covered with tape (Fig. 38 right arrow, and Fig. 40).
- The bracket will be mounted using the existing mounting holes that are 10.5 inches apart.
- Remove the threaded stud (if applicable) from the first mounting location (Fig. 39).
- Remove the tape covering the second mounting location (Fig. 40)
- Align the bracket with the mounting locations and secure the bracket to the cab floor using the provided FOX hardware/bolt (Fig. 41). **NOTE:** If you removed a threaded stud from the passenger side, reinstall that instead of the FOX hardware. You will still use the FOX bolt.

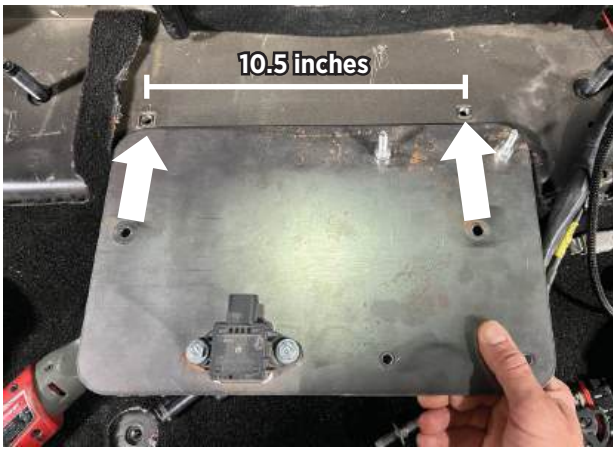


Fig. 38: **VARIATION 1** - two existing mounting locations 10.5 inches apart.



Fig. 39: Remove the threaded stud from the existing mounting location on the left (passenger side).

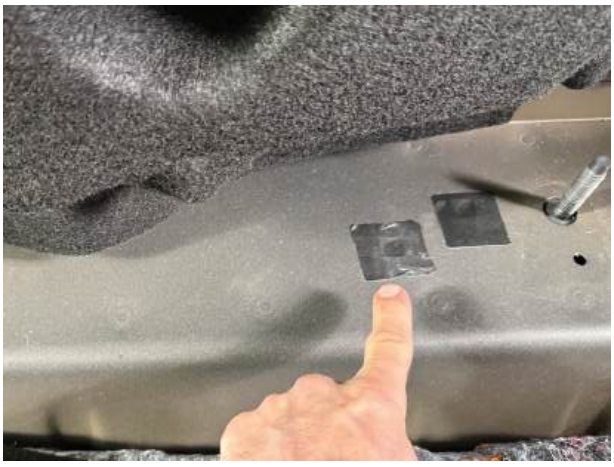


Fig. 40: Remove the tape covering the existing mounting location on the right (driver side).

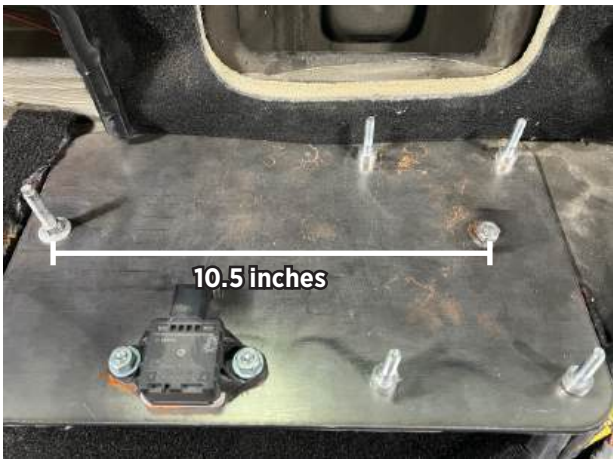


Fig. 41: Secure the bracket to the cab floor.

VARIATION 2 – Only one OEM mounting location exists. Rivet nut installation and drilling are required. No OEM subwoofer present. This variation has one pre-existing threaded hole on driver side, similar to the image shown (Fig. 42). Your model may differ in appearance, all images are examples only. If you have any doubts or need help, reach out to a verified dealer or contact our service center at 1.800.FOX.SHOX (1.800.369.7469).

- Ensure the double-sided adhesive is correctly applied to the bottom of the bracket as described on page 10 (Fig. 30).
- The bracket will be mounted using holes that are 10.5 inches apart. Use the measurements below to verify the correct placement in relation to the studs that are used to mount the seat belt brackets (Fig. 42). Make sure to measure from the center of each hole. Continue to the next page.

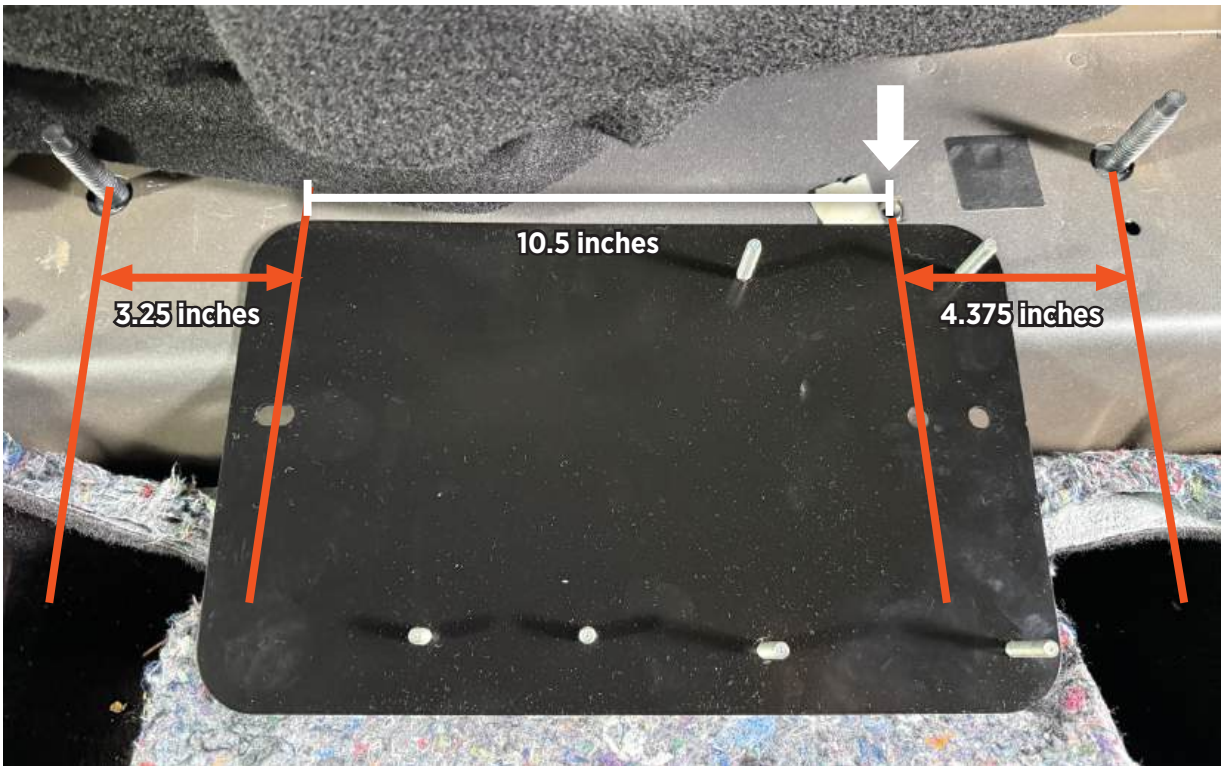


Fig. 42: Example of **VARIATION 2** - one mounting location present (arrow).

- Loosely secure the driver side of the bracket using the provided bolt (Fig. 43, right arrow).
- Align the bracket so the two mounting holes are equidistant from the wall on the back of the cab.
- Using a punch, mark the center of the slot where the rivet nut will be installed (Fig. 43, left arrow) then remove the bracket.
- Using a 13.50 mm or 0.531 inch drill bit, drill a hole for the rivet nut (Fig. 44, arrow).
- Install the provided M8x1.25 rivet nut (019-00-036) in the cab floor (Fig. 45, arrow).
- Secure the bracket to the cab floor with OE and/or FOX provided hardware (Fig. 46).

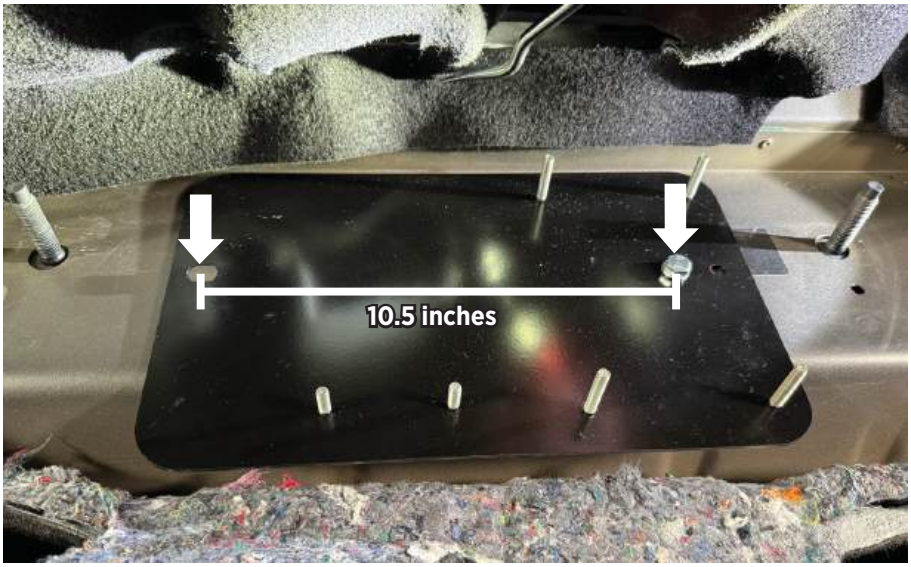


Fig. 43: Bracket in position to mark placement of drilling for rivet nut.

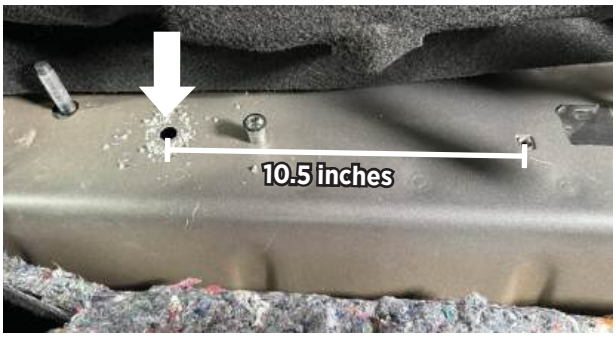


Fig. 44: Drill hole for rivet nut.

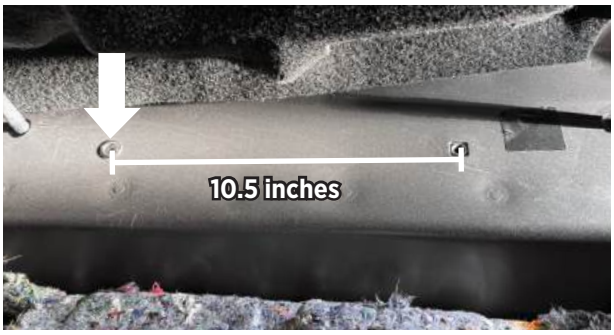


Fig. 45: Rivet nut installed.

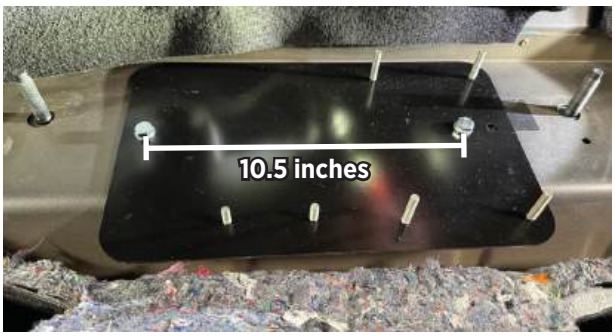


Fig. 46: Bracket and hardware installed.

VARIATION 3 – Only one OEM hole exists. Rivet nut installation and drilling are required. OEM subwoofer is present on driver side. Your model may differ in appearance, all images are examples only. If you have any doubts or need help, reach out to a verified dealer or contact our service center at 1.800.FOX.SHOX (1.800.369.7469).

- Ensure the double-sided adhesive is correctly applied to the bottom of the bracket as described on page 10 (Fig. 30).
- This variation has one pre-existing threaded mounting hole (Fig. 47, arrow)
- The bracket will be mounted using holes that are 11.5 inches apart. Use the measurements below to verify the correct placement in relation to the studs that are used to mount the seat belt brackets (Fig. 47). Make sure to measure from the center of each hole. Continue to the next page.

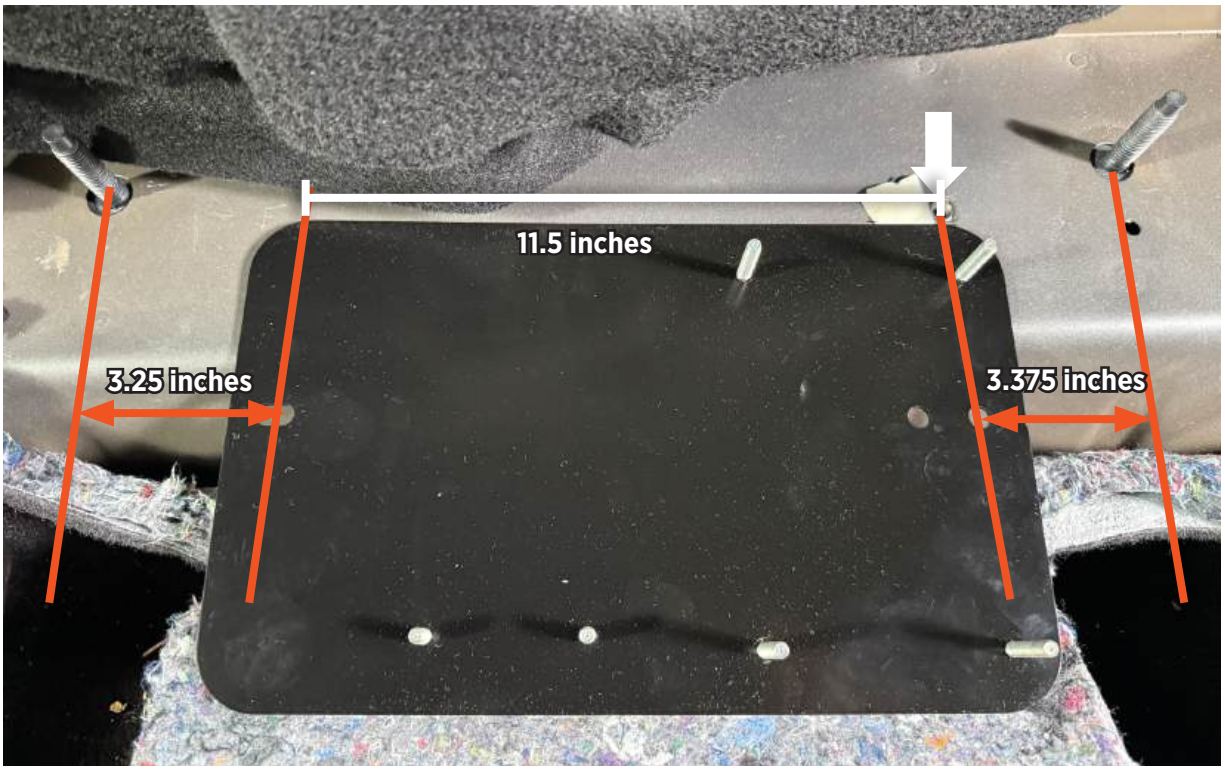


Fig. 47: Example of **VARIATION 3** - one mounting location present (arrow).

- Loosely secure the driver side of the bracket using the provided bolt (Fig. 48, right arrow).
- Align the bracket so the two mounting holes are equidistant from the wall on the back of the cab.
- Using a punch, mark the center of the slot where the rivet nut will be installed (Fig. 48, left arrow) then remove the bracket.
- Using a 13.50 mm or 0.531 inch drill bit, drill a hole for the rivet nut (Fig. 49, arrow).
- Install the provided M8x1.25 rivet nut (019-00-036) on the cab floor (Fig. 50, arrow).
- Secure the bracket to the cab floor with OE and/or FOX provided hardware (Fig. 51).

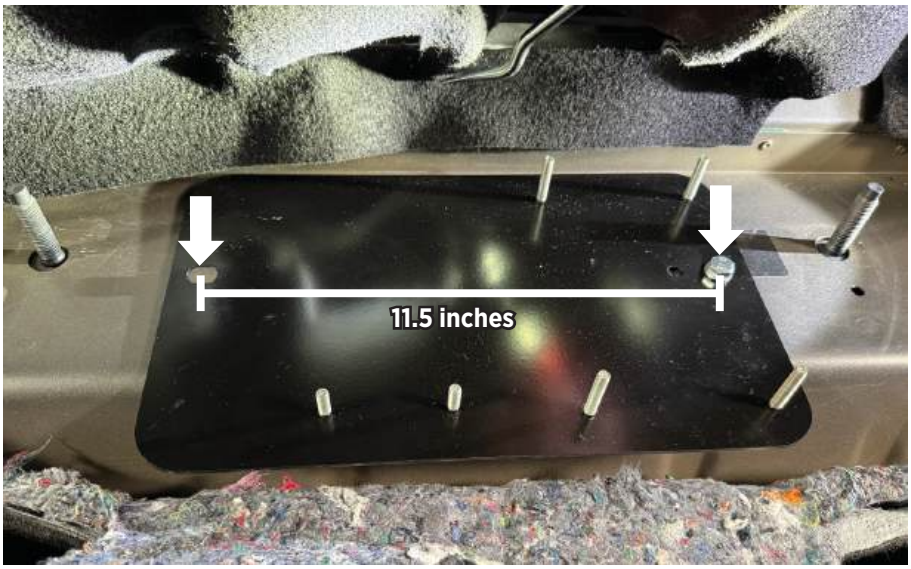


Fig. 48: Bracket in position to mark placement of drilling for rivet nut.

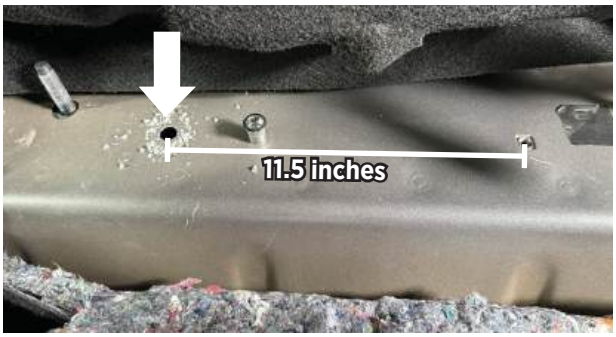


Fig. 49: Drill hole for rivet nut.

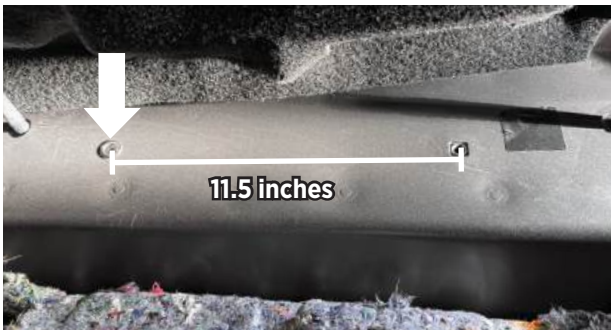


Fig. 50: Rivet nut installed.



Fig. 51: Bracket and hardware installed.

ECU/IMU MOUNTING:

1. Place one ECU Spacer (026-01-331) on each of the 4 PEMS studs for the ECU (Fig. 52).

2. Align the IMU (218-02-036) with the PEM studs on the bracket (026-01-351), as shown (Fig. 53).

   NOTE: Pay close attention to the IMU orientation. The connector must be facing the rear of the vehicle, and the white cover on the bottom of the IMU must be facing the ground when installed.

3. Use the (2) provided nuts (019-00-030) to install the IMU onto the bracket. Torque to 70 in-lb.

4. Align the ECU (218-02-070) with the PEM studs on the ECU bracket (026-01-323), as shown (Fig. 53). Use the (4) provided nuts (019-00-030) to install the ECU onto the bracket. Torque to 70 in-lb.



Fig. 52: Place one ECU spacer on each PEMS stud.



Fig. 53: Align the IMU with the studs on the bracket. Align the ECU with the studs on the bracket.

GROMMET INSTALLATION

1. With the ECU bracket mounted already, drill a 1.125 inch diameter hole through the cab floor for the harness to pass through (Fig. 54, Fig. 55).

   NOTE: On hybrid models, the battery is beneath the cab floor in this area. Be careful when drilling more than 1.5 inches beyond the cab floor. There is a sufficient gap and an additional metal panel between the hybrid system, so it is still safe to drill in this area.

   NOTE: The harness should pass through the hole in the cab floor just to the driver side of the ECU bracket (Fig. 56).

2. The grommet (026-01-298) must be modified to fit this application. Cut off the end as shown (Fig. 56, Fig. 57).



Fig. 56: Modification of grommet. Zip tie area will be referenced later in the procedure (page 25).

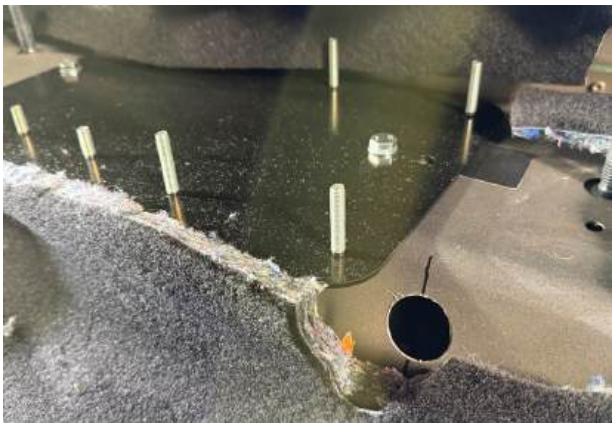


Fig. 54: Hole through cab floor.



Fig. 55: Hole through cab floor (ECU not shown).



Fig. 57: Modified grommet.

3. On the 12V power harness branch, remove the cover and tree plug from the fuse block. This will make it easier to install the grommet and route the harness through the vehicle to the engine bay (Fig. 58, Fig. 59).

4. Route the wires (power, ground, ignition, and all four 2-pin connectors) of the main harness (218-02-083) through the larger opening of the grommet (Fig. 60).

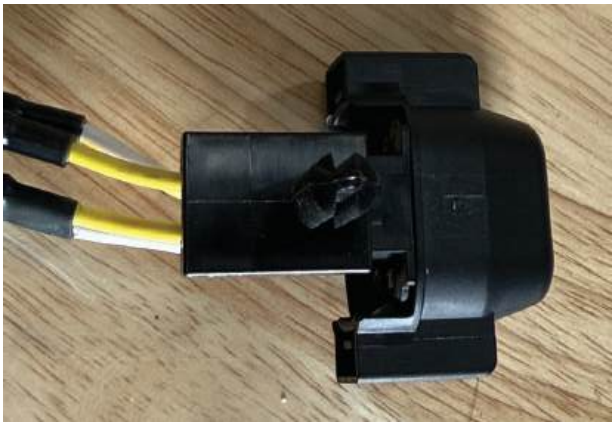


Fig. 58: Fuse block with cover and tree plug.

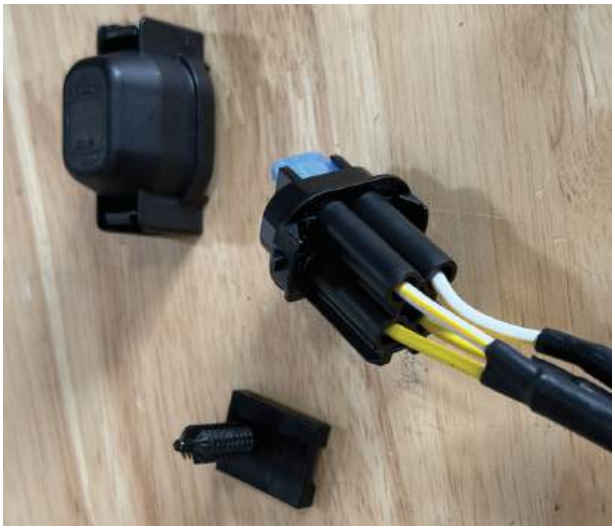


Fig. 59: Fuse block with cover and tree plug removed.

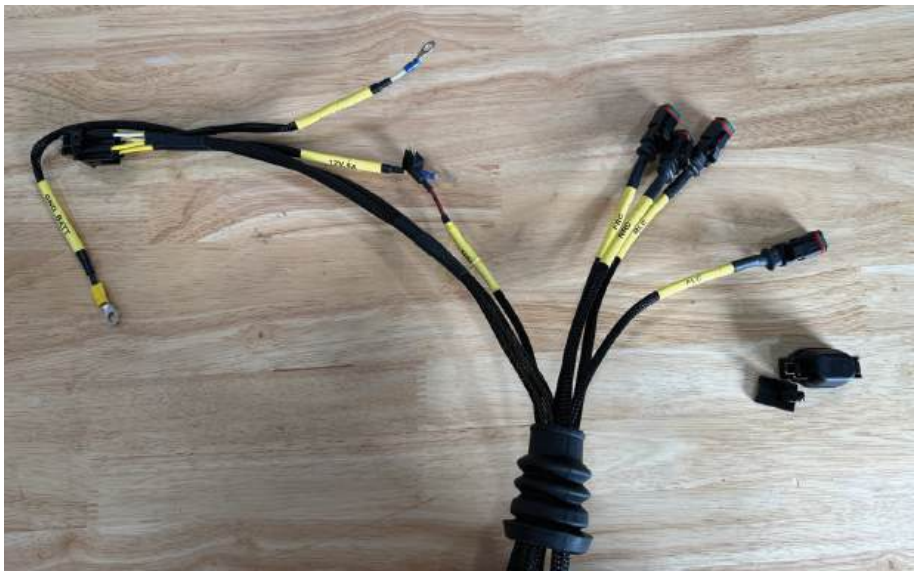


Fig. 60: Route the main harness wires through the grommet.

5. Route the wires (power, ground, ignition, and all four 2-pin connectors - FLC, FRC, RLC, RRC) through the hole in the cab floor. Install grommet in the cab floor (Fig. 61).

   NOTE: Only the power, ground, ignition, and the four valve connectors will be routed outside of the vehicle. The CAN harness (218-02-052) routes entirely inside the vehicle. The sensor "ROTARY" branch of the main harness is unused in this application.

6. Connect the 48-pin connector from the main harness (218-02-083) to the ECU. Ensure the latch is engaged (Fig. 61).

7. Secure the ECU_GND ring terminal near the 48-pin connector to the ECU foot as shown (Fig. 61 and Fig. 62).

8. Pull any excessive slack through the cab floor, leaving just enough to secure the harness as needed.



Fig. 61: Route the wires and install the grommet through the hole in the cab floor. Connect the 48-pin connector to the ECU.



Fig. 62: Secure the ECU_GND ring terminal to the ECU.

HARNESS INSTALLATION

NOTE: When routing the harnesses, use the provided zip ties to attach the looms to the existing OE harness paths as often as possible. It is recommended to secure zip ties every 6-8 inches. This will help to avoid damage to parts, such as interference with moving parts, or too much slack in the sheathing, which can result in friction and wear over time.

1. The “ROTARY” branch on the main harness (218-02-083) is not used in this application. Install the 8-pin dust cap (218-02-102) on the “ROTARY” branch 8-pin connector (Fig. 63).

2. Connect the CAN harness (218-02-052) to the main harness (218-02-083).

3. The “TOUCHPOINT” branch on the CAN harness (218-02-052) is not used in this application. Install the 4-pin dust cap (218-02-103) on the “TOUCHPOINT” white 4-pin connector (Fig. 64).

4. Coil up the CAN2_VEH branch of the CAN harness for now and set it aside. CAN Harness integration will be in a later section of this manual.

5. Route the harness branches labeled “FLC” and “RLC” along the frame cross member to the driver side of the vehicle. Secure the harness with zip ties along the OE harness and holes in frame as often as possible.

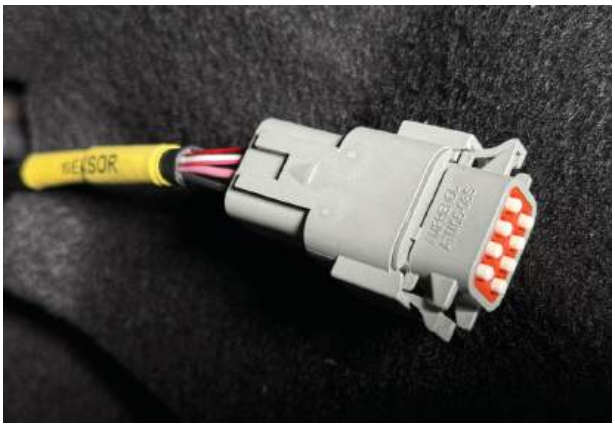


Fig. 63: Install the 8-pin dust cap on the “ROTARY” branch 8-pin connector.



Fig. 64: Install the 4-pin dust cap on the “TOUCHPOINT” 4-pin connector.

6. Route the FLC harness branch along the driver side frame rail toward the front driver side wheel well. Route as close to the reservoir as possible. Plug the “FLC” shock connector into the front driver side shock (Fig. 65, Fig. 66).

7. Route the RLC harness branch along the driver-side frame rail toward the rear driver-side wheel well. Route as close to the reservoir as possible. Plug the “RLC” shock connector into the rear driver side shock (Fig. 67, Fig. 68, Fig. 69).



Fig. 65: Plug the “FLC” shock connector into the shock.

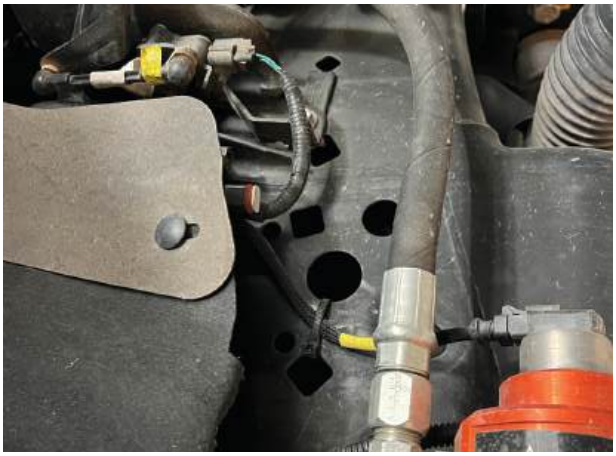


Fig. 66: Plug “FLC” shock connector into the shock.



Fig. 67: Plug “RLC” shock connector into the shock.



Fig. 68: Plug “RLC” shock connector into the shock.



Fig. 69: Plug “RLC” shock connector into the shock.

8. Route the harness branches labeled “FRC” and “RRC” with the power, ground, and ignition fuse tap along the frame cross member to the passenger side of the vehicle. Secure the harness with zip ties to the OE harness and holes in frame as often as possible.

9. Route the FRC harness branch, as well as power, ground and ignition branches along the passenger-side frame rail toward the front passenger-side wheel well.

   NOTE: Secure harness to existing holes or brackets on the frame. DO NOT secure zip ties to coolant lines, as the zip ties will fatigue over time.

10. From the wheel well, route the power, ground, and ignition cables into the engine bay at the firewall near the battery. Plug the “FRC” shock connector into the front passenger-side shock, routing it as close to the reservoir as possible (Fig. 70, Fig. 71, Fig. 72).



Fig. 70: Plug “FRC” shock connector into the shock.

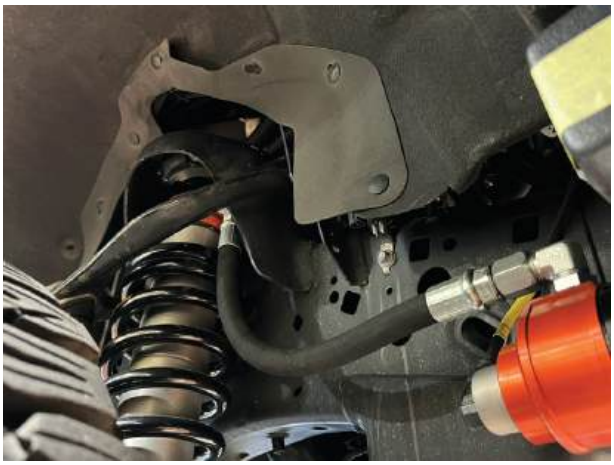


Fig. 71: Plug “FRC” shock connector into the shock.

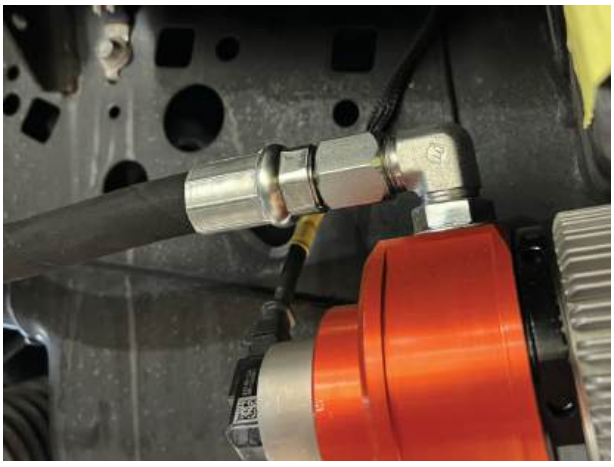


Fig. 72: Plug “FRC” shock connector into the shock.

11. Route the RRC harness branch along the passenger side frame rail toward the rear passenger-side wheel well. Route as close to the reservoir as possible. Plug “RRC” shock connector into the rear passenger-side shock (Fig. 73, Fig. 74).

12. Disconnect the negative terminal on the battery.

13. Connect the “12V 5A” and “12V 15A” ring terminals to the positive terminal of the battery, and the “GND_BATT” ring terminal to the ground terminal of the battery (Fig. 75, Fig. 76, Fig. 77).



Fig. 73: Plug “RRC” shock connector into shock.



Fig. 74: Plug “RRC” shock connector into shock.



Fig. 75: Connect the “12V 5A” and “12V 15A” ring terminals to the positive terminal of the battery.



Fig. 76: Connect the “12V 5A” and “12V 15A” ring terminals to the positive terminal of the battery.



Fig. 77: Connect the “GND_BATT” ring terminal to the ground terminal of the battery.

14. Reattach the cover and tree plug onto the 12V fuse block, near the power ring terminals. Using a ¼" drill bit, drill a ¼" hole to install the fuse block to the vehicle. Then, Secure the fuse block from 12V 5A and 12V 15A branches from underneath (Fig. 78, Fig. 79).

15. Use zip ties to secure the grommet and wire harness on the exterior of cab beneath the floor (Fig. 56 shows zip tie location).



Fig. 78: Reinstall the cover and tree plug onto the 12V fuse block. Drill a hole to install the fuse block.



Fig. 79: Reinstall the cover and tree plug onto the 12V fuse block. Drill a hole to install the fuse block.

FUSE TAP INSTALLATION

1. Remove the fuse box cover on the passenger side of the engine bay.
2. Identify and remove the 5A or 10A electric brake boost Micro2 fuse from slot #23 per owners manual diagram (Fig. 80 and Fig. 81). Set the fuse aside until a later step. **NOTE**: The fuse in slot #23 may be a 10A fuse on your vehicle.
3. Install the FOX provided 3A fuse into the upper slot of the fuse tap (Fig. 82).



Fig. 80: Remove the 5A or 10A electric brake boost Micro2 fuse from slot #23.

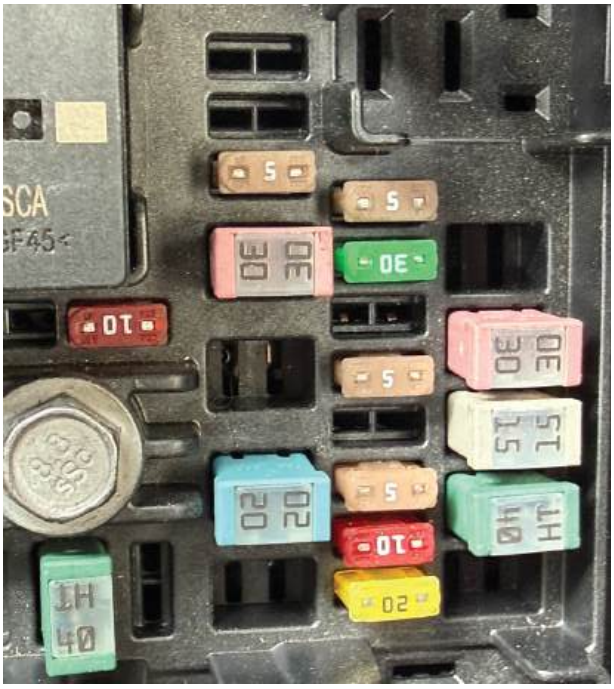


Fig. 81: Remove the 5A or 10A electric brake boost Micro2 fuse from slot #23.

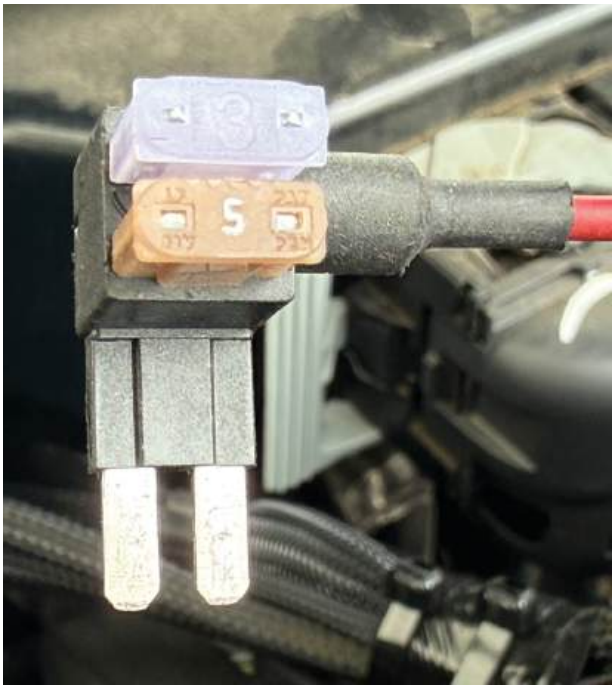


Fig. 82: Install 3A fuse into upper slot.

4. Install the fuse you removed from slot #23 (typically 5A or 10A) into the lower slot of the fuse tap (Fig. 83).

5. Assemble the fuse tap into the fuse box slot #23. Cut a small notch in the fuse box to allow the cable to exit. Route as shown (Fig. 84, Fig. 85).

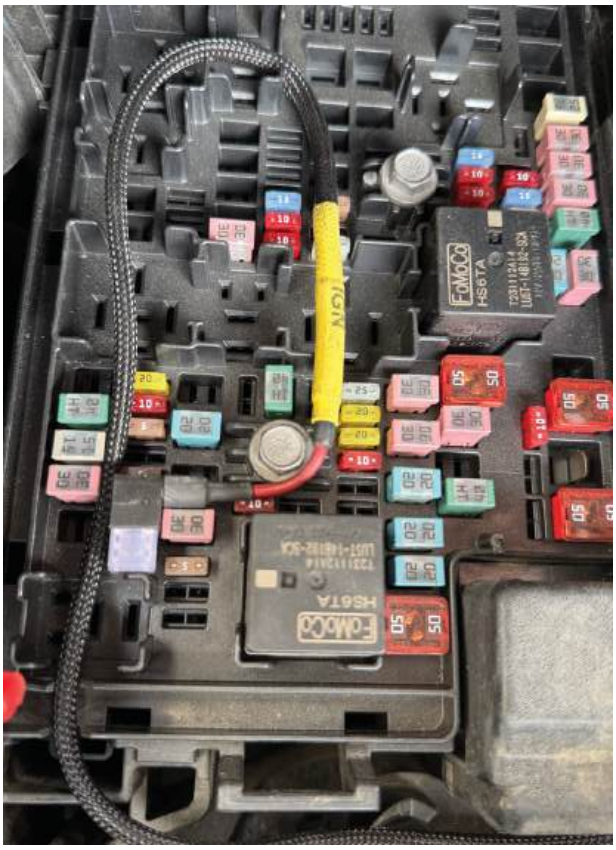


Fig. 83: Install the fuse from slot #23 into lower slot.



Fig. 84: Cut two small notches in the fuse box for the cable exit.

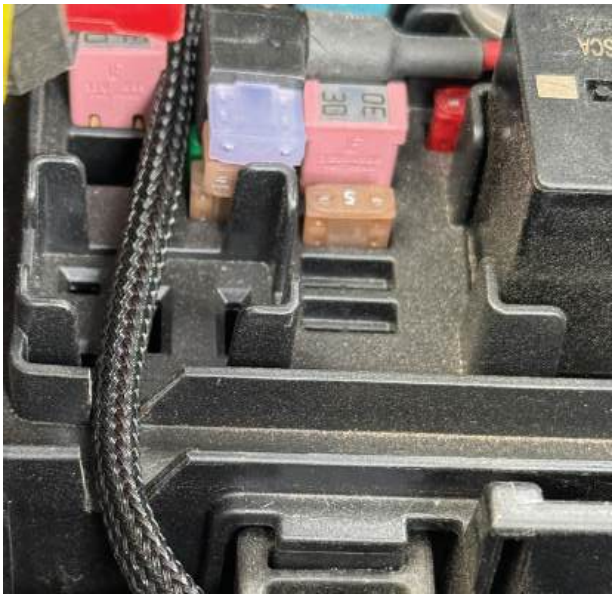


Fig. 85: Route the cable through the notches.

CAN HARNESS INSTALLATION

1. Locate and uncoil the CAN2_VEH harness that you set aside on Page 21, Step 4.

2. With the CAN harness (218-02-052) connected to the main harness (218-02-083), connect the IMU connector from the CAN harness (218-02-052) to the IMU (Fig. 86).

3. Coil up the “Touchpoint” branch of the CAN harness and secure out of the way, as this branch will not be used in this wireless application (Fig. 87).

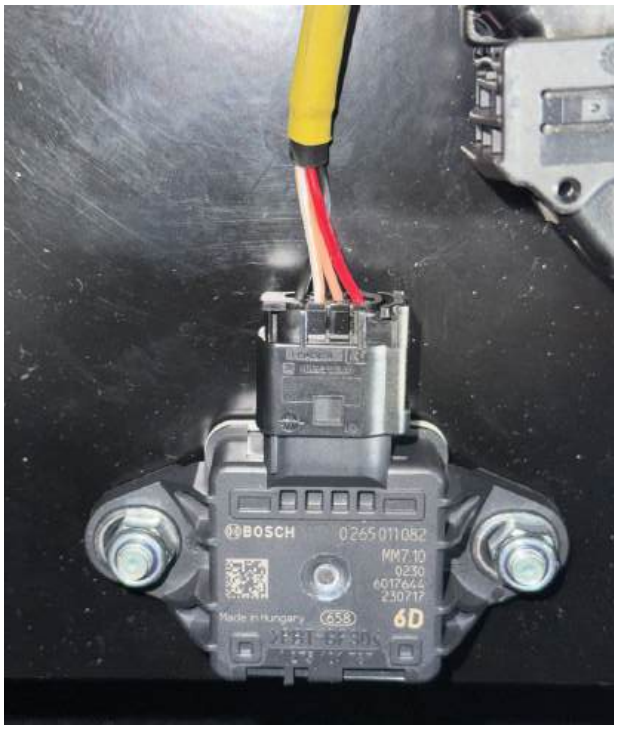


Fig. 86: Connect the IMU connector from the CAN Harness to the IMU.



Fig. 87: CAN harness “Touchpoint” branch, not in use.

4. Route the CAN2_VEH harness branch behind the interior trim and/or under the carpet to the driver side of the vehicle. Remove the door sill panels (and other trim, as needed) to route the CAN2_VEH branch under the carpet or vehicle trim to the driver side foot well. Route it past the hood latch lever and past the dead pedal (Fig. 88, Fig. 89, Fig. 90).

5. Secure zip ties around the FOX harnesses inside the cab to consolidate wiring.



Fig. 88: Route the CAN2_VEH branch under carpet or vehicle trim to the driver side foot well.



Fig. 89: Route the CAN2_VEH branch under carpet or vehicle trim to the driver side foot well.

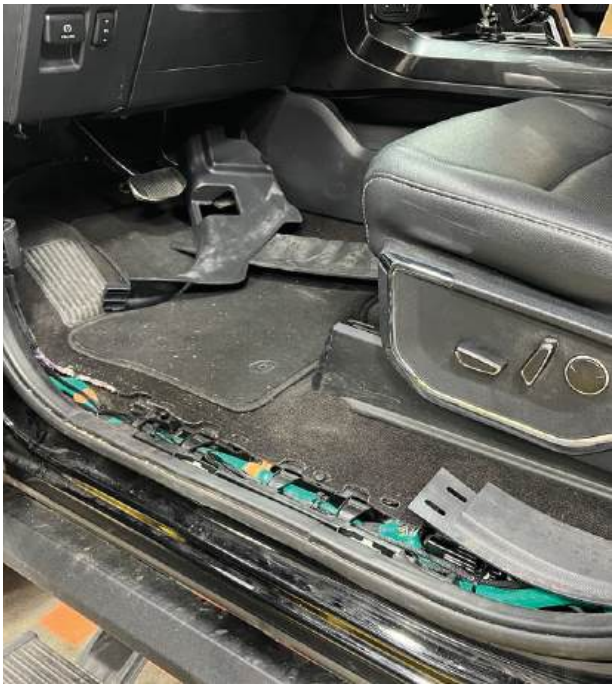


Fig. 90: Route the CAN2_VEH branch under carpet or vehicle trim to the driver side foot well.

VEHICLE CAN INTEGRATION

1. Locate the trailer module (TRM) underneath the driver side footwell, above the brake pedal/dead pedal (Fig. 91 and Fig. 92).
2. Identify and disconnect the black 14-pin connector (Fig. 93 and Fig. 94).
3. Carefully identify the following wires:
   - Pin # 6 (green with blue stripe) is CAN High
   - Pin # 7 (white with green stripe) is CAN Low
4. Peel back the sleeving/tape on the OE harness to expose approximately 3 inches of wire behind this connector (Fig. 94).



Fig. 91: Locate the TRM.



Fig. 92: Locate the TRM.

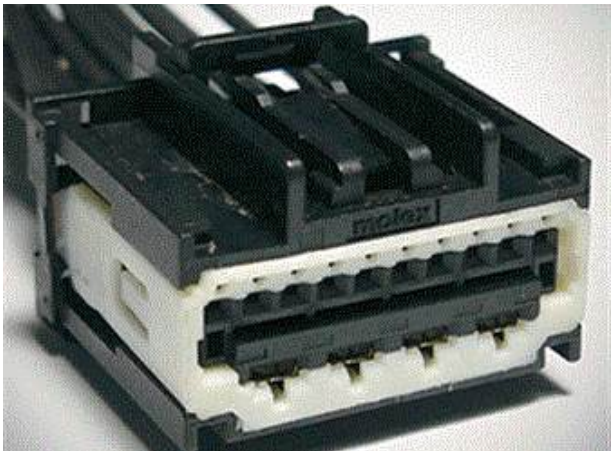


Fig. 93: Disconnect the 14-pin connector.



Fig. 94: Disconnect the 14-pin connector. Expose 3 inches of wire.

5. Locate the CAN reader harness (218-02-069).
6. Use a small Phillips screwdriver to remove the two screws on the back cover of the contactless CAN reader (218-02-069) (Fig. 95).
7. Install the green wire with blue stripe from the OE harness in the CAN High slot on the CAN reader (Fig. 96).
8. Install the white wire with green stripe from the OE harness in the CAN Low slot on the CAN reader (Fig. 96). **Note: these CAN wires may have twins that are twisted together and come out of the same connector location. Always use the two wires that are twisted together.**
9. Reinstall the two screws onto the back cover of the CAN reader (218-02-069), ensuring the wires stay in place (Fig. 95).
10. Use zip ties to secure the CAN reader and CAN reader harness (218-02-069) to the OE harness.
11. Reconnect the OE connector with CAN Reader installed to the TRM module (Fig. 97).
12. Route the 4-pin white CAN2_VEH connector to the CAN reader and connect it (Fig. 98).
13. Coil up the excess wire from the (218-02-052) CAN harness CAN2_VEH branch and zip tie it behind the trim near the dead pedal.



Fig. 95: Remove the two screws on the back cover of the CAN reader.



Fig. 96: Install the green wire with blue stripe in the CAN High slot. Install the white wire with green stripe in the CAN Low slot.



Fig. 97: Reconnect OE connector and CAN reader to OE harness.



Fig. 98: Connect 4-pin CAN2_VEH connector to CAN reader.

TOUCHPOINT INSTALLATION

1. Choose a location in the vehicle to mount your touchpoint (803-34-006).

   NOTE: Since this touchpoint is wireless, the "Touchpoint" branch of the main ECU harness (218-02-083) will be coiled and secured in a hidden location. Additional details are provided earlier in this manual.

2. Assemble the provided ball mount (803-04-388) and attach the touchpoint to it (Fig. 99). Then, mount the touchpoint and RAM mount assembly to the vehicle using the provided hardware or your own hardware. The following figures (Fig. 100, Fig. 101, Fig. 102) show example vehicle mounting locations.

   NOTE: Vehicle specific RAM mount accessories may be purchased separately.



Fig. 99: Assemble the ball mount and touchpoint.



Fig. 100: Example touchpoint mounting location.



Fig. 101: Example touchpoint mounting location.



Fig. 102: Example touchpoint mounting location.

VEHICLE REASSEMBLY

1. Connect the negative terminal on the vehicle battery. Torque to OE specification.
2. Ensure all wires/harnesses are secured and out of the way.
3. Secure the carpet back in place (if removed).
4. Reinstall the subwoofer (if applicable).
5. Reinstall the interior trim (if removed).
6. Reinstall the rear seats and reconnect all OE harnesses. Torque all bolts to OE specification.

TOUCHPOINT AND MOBILE APP

1. BASIC OPERATION



POWER ON

Press and release the auxiliary button located on the top-right corner of the Touchpoint to turn the device on.

POWER OFF

Press and hold the auxiliary button for approximately 5 seconds to turn the device off.

MODE SELECTION

- Left Paddle (Mode): Press UP or DOWN to cycle between ON-ROAD, OFF-ROAD, and CUSTOM modes.
- Right Paddle (Sub-Mode): Press UP or DOWN to select COMFORT, BALANCED, or SPORT within ON-ROAD and OFF-ROAD modes.

FACTORY RESET

To clear the vehicle connection and restore factory settings: With the Touchpoint powered on, simultaneously hold the left paddle DOWN and right paddle UP until the ON-ROAD mode indicator changes color (approximately 10 seconds).

2. STATUS INDICATORS

To charge the Touchpoint battery, connect a USB-C cable to the charging port located on the bottom of the Touchpoint.

TOUCHPOINT CONNECTIVITY STATUS



SYSTEM ERROR INDICATOR

NOTE: A flashing red backlight while connected to your vehicle indicates a system error (for example, a disconnected shock). Open the FOX mobile app while connected for diagnostic information.

TOUCHPOINT BATTERY STATUS

The battery status indicator light is centered at the top of the device.



3. PAIRING PROCEDURES

For this system to function as designed, the Touchpoint and a mobile phone should be paired to the ECU.

NOTE: The Touchpoint should be pre-paired to the ECU at the factory. However, with the vehicle ON, if the ON-ROAD mode icon flashes yellow when the Touchpoint is powered on, it still needs to be paired. It is helpful to pair the Touchpoint before a smartphone, as the FOX Touchpoint AUX light will illuminate solid blue when the vehicle (ECU) is in pairing mode and ready to pair.

For pairing the Touchpoint and smartphones, follow the pairing procedure on the next pages.

ENTERING ECU PAIRING MODE

IMPORTANT: Keep the engine OFF throughout this entire procedure.

1. Verify the ignition is in the OFF position (initial state) and that the driver's door is open
2. Wait 30 seconds for the ECU to power off.
3. With foot off the brake, press the START/STOP button 11 times. The ignition will cycle through the following sequence:

FROM OFF → ACC → RUN → OFF → ACC → RUN → OFF → ACC → RUN → OFF → ACC → RUN



4. After the 11th press, the ECU enters pairing mode. The ignition will be in the RUN position.

NOTE: The pairing mode procedure must be repeated each time you pair a new device to the ECU.

PAIRING THE TOUCHPOINT

NOTE: The Touchpoint is intended to arrive factory pre-paired. However, if the vehicle is ON and the Touchpoint's ON-ROAD mode icon flashes yellow continuously immediately after power-up, the Touchpoint is not paired and must be paired.

NOTE: Pairing order recommendation: Pair the Touchpoint before pairing a smartphone.

NOTE: Pairing-mode indicator: If the Touchpoint is paired before a smartphone, then when the vehicle (ECU) is in pairing mode and ready to pair, all Touchpoint LEDs will turn OFF.

Step 1: Power On the Touchpoint

Press and hold the auxiliary button to turn the Touchpoint on.

Step 2: Enter Pairing Mode

Simultaneously hold the left (Mode) paddle DOWN and the right (Sub-Mode) paddle UP until the ON-ROAD indicator turns blue (approximately 3 seconds).

Step 3: Verify Connection

- The ON-ROAD indicator will blink yellow, then dark blue, then green, confirming the connection.
- If a firmware update is required, all indicators on the Touchpoint may turn light blue during the update process.
- The Touchpoint is ready to use when all indicators turn white, with one orange indicator on each side showing the current mode and sub-mode selection.

PAIRING A MOBILE PHONE

Step 1: Download the FOX Mobile App

The FOX mobile app is available free of charge on the Google Play Store and iOS App Store.

Step 2: Create an Account

For full functionality, enable the following services during setup:

- **Location Services:** Enables GPS-based features
- **Notifications:** Enables system alerts and updates
- **Bluetooth:** ***Required*** for ECU communication

These services enable vehicle communication for diagnostics, tuning, and performance metrics.

Step 3: Pair Your Vehicle

1. Ensure the ECU is in pairing mode.
2. With the ECU in pairing mode, tap “PAIR NEW” in the mobile app garage.
3. When your vehicle appears, tap to add it to your garage.
4. Once paired, this procedure does not need to be repeated for this device.
5. Start your engine.
6. In the app garage, tap your vehicle and select “CONNECT” to begin.

Troubleshooting: Pairing Errors

If you see “UNABLE TO PAIR. No compatible vehicles found,” the ECU is not in pairing mode. Re-enter pairing mode using the procedure in Section 3, then tap “SCAN” in the app to retry.

Enjoy the FOX app and take control of your vehicle to the next level.

- Record your rides for optimal performance of your vehicle.
- Select and monitor real-time performance between multiple terrain modes.
- Enjoy live suspension telemetry, as well as ongoing features and improvements that are available through over-the-air updates.

DAILY USE

Once the Touchpoint is paired to the vehicle/ECU, the Touchpoint will stay connected until the vehicle turns off (thereby turning off the ECU). The Touchpoint will then go into SLEEP mode. During SLEEP mode, if the vehicle/ECU turns on again it will automatically reconnect and display an ORANGE backlight. After 2 hours in SLEEP mode, the Touchpoint automatically powers OFF to conserve battery power. To reconnect, turn the vehicle ON and then turn the Touchpoint ON. The ON-ROAD mode backlight will flash YELLOW to indicate it is scanning for paired ECUs. Then it will turn GREEN while establishing connection. Finally, the ON-ROAD mode backlight will turn ORANGE, indicating the current shock mode and sub-mode and that the system is ready for use.

NOTE: If you choose to connect the Touchpoint to a permanent power supply, rather than recharging, ensure that you only connect it to a traditional 5V USB-C power source to avoid a Touchpoint malfunction.

FOX POWERED VEHICLES APP

For more information, including installation FAQs and troubleshooting, plus additional features for when you're hitting the trail, download the FOX Powered Vehicles app.

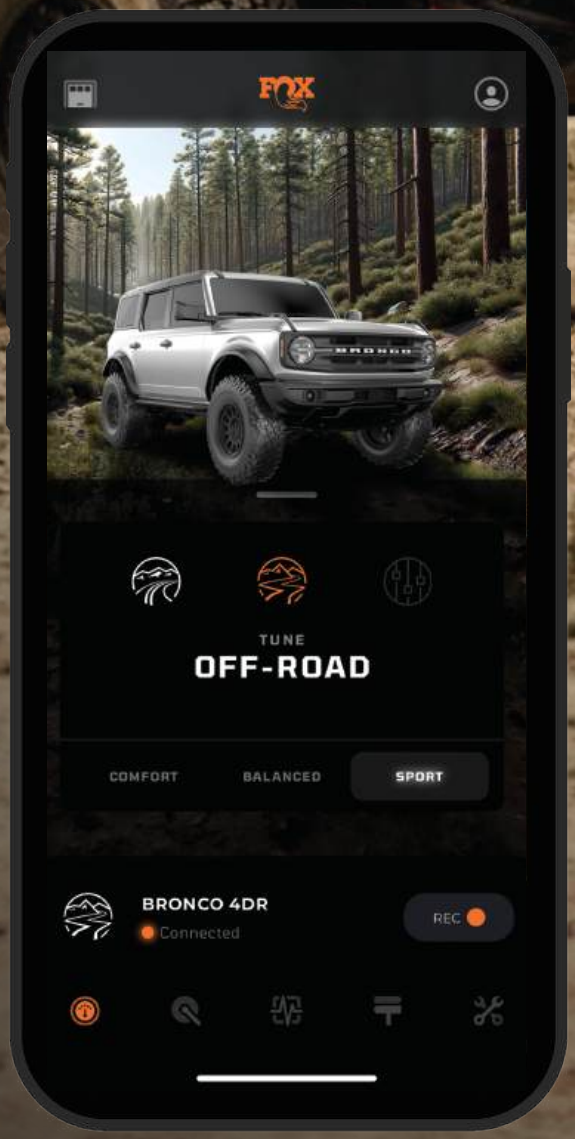
SOFTWARE UPDATES

If this kit is used with the FOX Powered Vehicles app, software updates to the ECU and/or Touchpoint may be requested through the app. When updates are available, the app will provide instructions to install them. Ensure the vehicle and Touchpoint are on, that the vehicle is in park, and that you have a reliable internet and Bluetooth connection with the app open. Depending on the state of the update process, the shocks will be in the last mode/sub-mode or in full firm if you decide to pause updates (ex. if vehicle starts moving).

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& control at your fingertips

TAME ANY TERRAIN.

FOX



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MAINTENANCE

PROPER INSPECTION AND MAINTENANCE IS ESSENTIAL TO MAINTAIN THE PERFORMANCE AND RELIABILITY OF YOUR SHOCK ABSORBERS.

NOTICE: To avoid corrosion, you should keep the shocks and springs clean and free of salt, debris and moisture. The wiper seal will clean deposits from the shaft, but the shock won't fully compress every time. This means you could accumulate debris at the bottom of the shaft and underneath the jounce bumper. Make sure you clean these areas completely to prevent shaft corrosion. Avoid using a high-pressure washer near the shaft seals or adjusters, as this could drive moisture inside the shock.

Make sure the ends of the spring and shock threads are clean and free of salt and debris before adjusting the preload ring. This will make the adjustment easier and reduce wear.

Ideally, the shocks should be clean around the adjusters. Use a small amount of contact cleaner before making adjustments will keep these parts clean and operating smoothly for years**.**

NOTICE: Keep the shock and spring clean and free of dirt or water to avoid corrosion. Keep the shock shaft clean and free of mud. Avoid using a high-pressure washer near the shaft seals and adjusters. Before adjusting preload or the crossover ring, clean the threads of the shock body for easier adjustment and mitigating wear.

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Subject to the limitations, terms and conditions hereof, FOX warrants, to the original retail owner of each new FOX 2.0 & 2.5 Performance Series (EXCLUDING SPORTS CAR SHOCKS & 2.0 PERFORMANCE SERIES REMOTE RESERVOIR SHOCKS) suspension product, that the FOX suspension product, when new, is free from defects in materials and workmanship. The Warranty covers the Products against factory defects in material and workmanship, other than finish and coatings, when used on passenger cars and or light duty trucks under normal use and operating conditions, on the vehicle application it was designed for (SEE TERMS OF WARRANTY).

LIMITED ONE (1) YEAR WARRANTY ON SUSPENSION PRODUCTS

Subject to the limitations, terms and conditions hereof, FOX warrants, to the original retail owner of each new FOX suspension product, that the FOX suspension product, when new, is free from defects in materials and workmanship. Unless otherwise required by law, this warranty expires one (1) year from the date of the original FOX suspension product retail purchase from an authorized FOX dealer or from a FOX authorized Original Equipment Manufacturer where FOX suspension is included as original equipment on a purchased vehicle. If law requires a warranty duration of greater than one (1) year, then, subject to the other provisions hereof, this warranty will expire at the end of the minimum warranty period required by such law.

LIFETIME WARRANTY ON UPPER CONTROL ARMS

Additionally, Fox Factory, Inc. offers a lifetime warranty except for (i) all serviceable components of the Upper Control Arms including spherical bearings, rod ends, other fabricated hardware and (ii) appearances and finishes based on issues with workmanship. Serviceable components and appearances/finishes are limited to a twelve (12) month warranty. Damage by use and abuse is not covered.
Please note that certain sounds, including those resembling a “race car” noises such as squeaks or creaks, may be normal for specific models or configurations. These sounds are often associated with the design and operation of the vehicle and do not necessarily indicate a mechanical issue. However, if you hear noises such as clunks or thuds please bring your vehicle to a qualified mechanic for review.
This warranty covers any repair or replacement necessary for defects in materials or workmanship, excluding sounds that result from standard operation of the vehicle’s performance features.

TERMS OF WARRANTY

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