

11-3-2022 REV.B



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PART #	DESCRIPTION	
93500	F-SERIES IIC INSTALL KIT	

COMPONENTS INCLUDED			
(1) 254408 15-UP F-150 E-CONTROLLER MOUNT (1) 255600 IIC CONTROLLER (1) 255601 BLOCK OFF PLUG	(1) 255602 MAIN HARNESS IIC CONTROLLER (1) 255605-10 FUSE HOLDER 10 AMP (1) 255608 FUSE TAP MICRO2		
HARDWARE INCLUDED			
(1) 605033 1/4 - 14 X .750 SELF DRILLING/ TAPPING SCREW (2) 605052 1/4-20 NYLOCK NUT (4) 605053 1/4-FLAT WASHER (2) 605054 1/4-20 X .750 BOLT (2) 605069 1/4-20 X 1.25 HHCS GR8 YZINC FULLY THREADED (2) 605750 BUTT CONNECTOR, 18GA, HEAT SHRINK	(3) 605751 TERMINAL CONNECTOR 5/16", 18 GA, HEAT SHRINK (1) 605755 FUSE, 5 AMP MICRO2 (1) 605760 WIRE LOOM 1/4" X 6-FT (1) 605926 5-1/2 X 0.14 NYLON CABLE TIE, BLACK PACK OF 100 (2) 605984 RUBBER STRIP 1" X 3" X 1/32", ADHESIVE BACK		
F-150 SHOCK WIRES			
(1) 255604-06 6-FT WIRE (1) 255604-08 8-FT WIRE	(2) 255604-26 26-FT WIRE		
FSD SHOCK WIRES:			
(1) 255604-06 6-FT WIRE (1) 255604-14 14-FT WIRE	(2) 255604-20 20-FT WIRE (2) 255604-30 30-FT WIRE		
TOOLS REQUIRED			
FLUSH CUTS PHILLIPS HEAD SCREWDRIVER 1/4" DRILL BIT TORQUE WRENCH HEAT GUN	WIRE STRIPPER WIRE CRIMPER WIRE CUTTERS 8MM SOCKET / WRENCH 10MM SOCKET / WRENCH 7/16" SOCKET / WRENCH		

#### **WARNING!**

- \*\* READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE NOT PROPERLY FOLLOWED SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE!
- \*\* ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.
- \*\* ICON VEHICLE DYNAMICS RECOMMENDS ALL INSTALLATION TO BE PERFORMED BY A PROFESSIONAL SHOP/SERVICE TECHNICIAN. PRODUCT FAILURE CAUSED BY IMPROPER INSTALLATION WILL NOT BE COVERED UNDER ICON'S WARRANTY POLICY.

### **TECH NOTES**

- 1. FOR 15-UP F-150 IIC INSTALL KIT INSTALLATION, SKIP TO PAGE 7.
- 2. WIRE LENGTHS ARE MEASURED FOR A 4-DOOR SHORT BED.
- ${\it 3. GOLD WIRE COLOR IN FIGURES DENOTES BASIC WIRE PATH (FOR CLARITY)}.$
- 4. SEE PAGE 13 FOR FSD WIRE ROUTING DIAGRAM.
- 5. SEE PAGE 14 FOR F-150 WIRE ROUTING DIAGRAM.

#### **FUSE OPTIONS**

F-150 FUSE: POWER 3

FSD FUSE: SNOW PLOW

## 17-UP FSD IIC INSTALL KIT INSTALLATION

1. Disconnect the battery using a 10MM.



FIG.1

2. Remove the plastic clip from the cowl. Use the supplied 1/4" hardware (605069, 605053, 605052) through the existing hole to hold the mount in place. Snug the bolt using (2) 7/16" wrenches.

[FIGURE 1 & 2]



FIG.2

3. Make sure the bracket is sitting properly against the mounting surfaces and drill the upper bolt hole through the lip of the cowl using a 1/4" drill bit. Use the supplied 1/4" hardware (605054) with nuts and washers to fasten the mount to the cowl. Snug using (2) 7/16 wrenches. Mount the lower tab to the firewall using the supplied self-drilling screw. Tighten hand tight using a 3/8. Torque upper bolts to 50 in-lbs. [FIGURE 3 & 4]



FIG.3

FIG.5

FIG.7



FIG.4

4. Place the adhesive rubber strips (PN: 605984) as shown. Mount the IIC using the supplied bolts (PN: 605069) and torque to 50 in-lbs. [FIGURE 5 & 6]





FIG.6

5. Insert the block off plug in the grey port. Insert the main harness into the black port. [FIGURE 7 & 8]





FIG.8

6. Route the 2 black (GRD) wires down along the side of the battery. Trim as necessary. Strip the wires and crimp the supplied terminal connectors (PN: 605751) on. Activate the heat shrink using a heat gun. Connect the terminal connectors to the ground on the fender using an 8mm. [FIGURE 9]



**7.** Route the Red wire labeled (PWR) to the positive battery terminal. Trim as necessary. Strip the wire and crimp the supplied butt connector (PN: 605750) on. Crimp the supplied inline fuse (PN: 255605-10) to the butt connector. Crimp the supplied terminal connector (PN: 605751) to the inline fuse. Activate the heat shrink using a heat gun. Connect the terminal connector to the battery using a 10mm. PICS: [FIGURE 10 & 11]





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8. Remove the fuse box cover. Look up a diagram of the fuse box and locate the Snow Plow (10A) fuse. Insert the supplied 5A fuse (PN: 605755) in the top slot of the supplied fuse tap (PN: 255608). Remove the Snow Plow (10A) fuse from the fuse box and place in the lower slot of the fuse tap. [FIGURE 12]



FIG.12

9. Insert the fuse tap in the vacant Snow Plow slot of the fuse box. Connect the fuse tap to the red wire labeled (ACC) using the supplied butt connector (PN: 605750). Strip the wires and crimp to the butt connector. Activate heat shrink using a heat gun. Route the wire down to the side of the fuse box and put the cover on. Use supplied wire loom (PN: 605760) to protect wires. [FIGURE 13 & 14]



FIG.13



FIG.14

- 10. Connect the wires supplied in the shock kits to the main harness.
- 11. Connect the 14-FT wire (PN: 255604-14) to the Channel-4 plug. Write DF (Driver Front) on both wire plugs with a marker.
- 12. Connect the 6-FT wire (PN: 255604-06) to the Channel-3 plug. Write PF (Passenger Front) on both wire plugs with a marker.
- 13. Connect the 20-FT wire (PN: 255604-20) to the Channel-1 plug. Write PR (Passenger Rear) on both wire plugs with a marker.
- 14. Connect the 30-FT wire (PN: 255604-30) to the Channel-2 plug. Write DR (Driver Rear) on both wire plugs with a marker.

15. Route all 4 wires down next to the battery then down to the frame rail. Use the supplied zip-ties to fasten in place. [FIGURE 15 & 16]



FIG.15

FIG.17

**FIG.19** 



FIG.16

16. At the frame rail, the 6-FT (labeled PF) wire and 20-FT (labeled PR) wire splits off going rearward on top of the frame rail. Plug the 6-FT (labeled PF) wire into the passenger front CDE-Shock solenoid and zip-tie the remaining wire. Be sure to leave some slack in the wire to ensure there is freedom of movement and the ability to unplug the wire from the shock. [FIGURE 17 & 18]





FIG.18

17. Continue routing the 20-FT (labeled PR) wire down the passenger side frame rail following the factory wire loom. [FIGURE 19 & 20]





FIG.20

18. Continue following the wire loom above the frame rail and to the passenger rear shock. Plug the 20-FT (labeled PR) wire into the passenger rear CDE-Shock solenoid and zip-tie the remaining wire. Be sure to leave some slack in the wire to ensure there is freedom of movement and the ability to unplug the wire from the shock. [FIGURE 21]



19. Route the other 2 wires (14-FT & 30-FT) along the crossmember following the factory loom. Carefully route the wires among the factory loom around the steering box pitman arm. [FIGURE 22 & 23]



**FIG.22** 

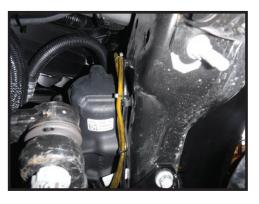
FIG.24

FIG.27



**FIG.23** 

**20.** The 14-FT wire (labeled DF) splits off. Continue following the factory loom up the inside of the frame rail to the coil bucket. [FIGURE 24 & 25]





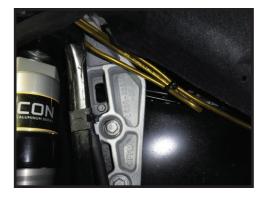
**FIG.25** 

21. Plug into the driver front CDE-Shock solenoid and zip-tie the remaining wire. Be sure to leave some slack in the wire to ensure there is freedom of movement and the ability to unplug the wire from the shock. [FIGURE 26]



FIG.26

22. Route the 30-FT (labeled DR) wire to the back of the wheel well and along the factory wire harness. [FIGURE 27 & 28]





#### 23. Follow the factory harness along the frame rail. [FIGURE 29 & 30]





FIG.30

**24.** Plug into the driver rear CDE-Shock solenoid and zip-tie the remaining wire. Be sure to leave some slack in the wire to ensure there is freedom of movement and the ability to unplug the wire from the shock. [FIGURE 31]



FIG.31

25. Connect the battery using a 10MM.

FIG.29

26. Download the ICON INTELLIGENT CONTROL App on your device. Open the app and turn on the vehicle.

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 100 MILES AND PERIODICALLY THEREAFTER.

### 15-UP F-150 IIC INSTALL KIT INSTALLATION

1. Disconnect the battery using a 10MM.

FIG.32

FIG.34

**FIG.36** 

**FIG.38** 

2. Remove the plastic clip from the cowl. Use the supplied 1/4" hardware (605069, 605053, 605052) through the existing hole to hold the mount in place. Snug the bolt using (2) 7/16" wrenches. [FIGURE 32 & 33]





FIG.33

3. Make sure the bracket is sitting properly against the mounting surfaces and drill the upper bolt hole through the lip of the cowl using a 1/4" drill bit. Use the supplied 1/4" hardware (605054) with nuts and washers to fasten the mount to the cowl. Snug using (2) 7/16 wrenches. Mount the lower tab to the firewall using the supplied self-drilling screw. Tighten hand tight using a 3/8. Torque upper bolts to 50 in-lbs. [FIGURE 34 & 35]





FIG.35

4. Place the adhesive rubber strips (PN: 605984) as shown. Mount the IIC using the supplied bolts 605069 and torque to 50 in-lbs. [FIGURE 36 & 37]





FIG.37

5. Insert the block off plug in the grey port. Insert the main harness into the black port. [FIGURE 38 & 39]





6. Route the 2 black (GRD) wires down along the side of the battery. Trim as necessary. Strip the wires and crimp the supplied terminal connectors (PN: 605751) on. Activate the heat shrink using a heat gun. Connect the terminal connectors to the ground on the fender using an 8mm. [FIGURE 40]



FIG.40

7. Route the Red wire labeled (PWR) to the positive battery terminal. Trim as necessary. Strip the wire and crimp the supplied butt connector (PN: 605750) on. Crimp the supplied inline fuse (PN: 255605-10) to the butt connector. Crimp the supplied terminal connector (PN: 605751) to the inline fuse. Activate the heat shrink using a heat gun. Connect the terminal connector to the battery using a 10mm. [FIGURE 41 & 42]





**FIG.42** 

8. Remove the fuse box cover. Look up a diagram of the fuse box and locate the Vehicle Power 3 (10A) fuse. Insert the supplied 5A fuse (PN: 605755) in the top slot of the supplied fuse tap (PN: 255608). Remove the Vehicle Power 3 (10A) fuse from the fuse box and place in the lower slot of the fuse tap. [FIGURE 43]



FIG.43

9. Insert the fuse tap in the vacant Vehicle Power 3 slot of the fuse box. Connect the fuse tap to the red wire labeled (ACC) using the supplied butt connector (PN: 605750). Strip the wires and crimp to the butt connector. Activate heat shrink using a heat gun. Route the wire down to the side of the fuse box and put the cover on. Use supplied wire loom (PN: 605760) to protect wires. [FIGURE 44 & 45]



**FIG.41** 





- 10. Connect the wires supplied in the shock kits to the main harness.
- 11. Connect the 8-FT wire (PN: 255604-08) to the Channel-4 plug. Write DF (Driver Front) on both wire plugs with a marker.
- 12. Connect the 6-FT wire (PN: 255604-06) to the Channel-3 plug. Write PF (Passenger Front) on both wire plugs with a marker.
- 13. Connect the 26-FT wire (PN: 255604-26) to the Channel-1 plug. Write PR (Passenger Rear) on both wire plugs with a marker.
- 14. Connect the 26-FT wire (PN: 255604-26) to the Channel-2 plug. Write DR (Driver Rear) on both wire plugs with a marker.
- 15. Route the wires down next to the battery then down to the front crossmember. Use the supplied zip-ties to fasten in place. Route the wires along the factory wire loom. [FIGURE 46 & 47]





FIG.47

16. At the crossmember, the 6-FT (labeled PF) wire splits off. Plug into the passenger front CDE-Shock solenoid and zip-tie the remaining wire. Be sure to leave some slack in the wire to ensure there is freedom of movement and the ability to unplug the wire from the shock. [FIGURE 48 & 49]





FIG.49

17. Route the 3 wires along the crossmember following the factory loom. At the driver side frame rail. The 8-FT wire (labeled DF) splits off. Plug into the driver front CDE-Shock solenoid and zip-tie the remaining wire. Be sure to leave some slack in the wire to ensure there is freedom of movement and the ability to unplug the wire from the shock. [FIGURE 50 & 51]



**FIG.46** 

**FIG.48** 





18. Route the 2 wires up the inside of the frame rail and over the shock bucket following the factory loom. [FIGURE 52 & 53]



FIG.52

FIG.54

FIG.56



FIG.53

19. Route the wires to the back of the wheel well and along the factory wire harness. [FIGURE 54 & 55]





FIG.55

20. Follow the factory harness and brake lines along the frame rail. [FIGURE 56, 57 & 58]









21. At the crossmember above the back of the gas tank, the wires separate. The 26-FT wire (labeled DR) continues along the driver side frame rail, then crosses over the top of the frame rail at the spare tire. [FIGURE 59 & 60]



**FIG.59** 

**FIG.61** 

FIG.63



FIG.60

22. Plug into the driver rear CDE-Shock solenoid and zip-tie the remaining wire. Be sure to leave some slack in the wire to ensure there is freedom of movement and the ability to unplug the wire from the shock. Drill a 1/4" hole in the side of the shock mount and zip tie the wire to the shock mount using the drilled hole. [FIGURE 61 & 62]





FIG.62

23. Route the 26-FT wire (labeled PR) across the crossmember at the back of the gas tank. Plug into the passenger rear CDE-Shock solenoid and zip-tie the remaining wire. Be sure to leave some slack in the wire to ensure there is freedom of movement and the ability to unplug the wire from the shock. [FIGURE 63 & 64]



FIG.64

- 24. Connect the battery using a 10MM.
- 25. Download the ICON INTELLIGENT CONTROL App on your device. Open the app and turn on the vehicle.

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

RETORQUE ALL NUTS, BOLTS AND LUGS AFTER 100 MILES AND PERIODICALLY THEREAFTER.

#### ICON VEHICLE DYNAMICS LIMITED LIFETIME WARRANTY

ICON Vehicle Dynamics warrants to the original retail purchaser who owns the vehicle on which the product was originally installed. ICON Vehicle Dynamics does not warrant the product for finish, alterations, modifications and/or installation contrary to ICON Vehicle Dynamics instructions. ICON Vehicle Dynamics products are not designed, nor are they intended to be installed on vehicles used in race applications, for racing purposes or for similar activities. (A "race" is defined as any contest between two or more vehicles, or a contest of one or more vehicles against the clock, whether or not such contest is for a prize). This warranty does not include coverage for police or taxi vehicles, race vehicles, or vehicles used for government or commercial purposes. Also excluded from this warranty are sales outside of the United States of America and Canada.

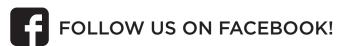
ICON Vehicle Dynamics' obligation under this warranty is limited to the repair or replacement, at ICON Vehicle Dynamics' discretion, of the defective product. Any and all costs of removal, installation or re-installation, freight charges and incidental or consequential damages are expressly excluded from this warranty. Items that are subject to wear are not considered defective when worn and are not covered.

ICON Vehicle Dynamics components must be installed as a complete kit as shown in our current application guide. Any substitutions or exemptions of required components will immediately void the warranty. Some finish damage may happen to parts during shipping and is not covered under warranty.

This warranty is expressly in lieu of all other warranties expressed or implied. This warranty shall not apply to any product that has been improperly installed, modified or customized subject to accident, negligence, abuse or misuse.

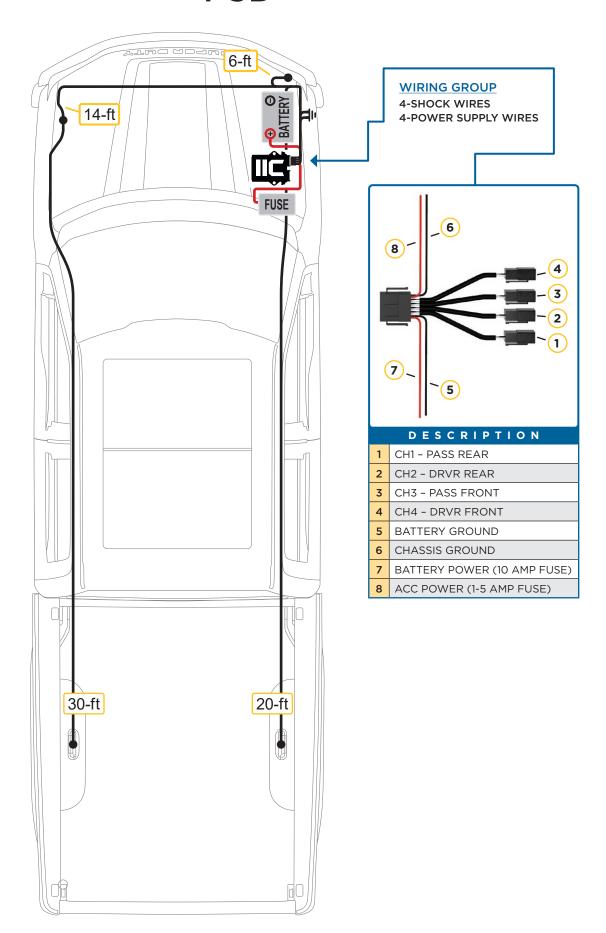


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# WIRE ROUTING DIAGRAM: FSD



# WIRE ROUTING DIAGRAM: F-150

