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53504 INSTALLATION INSTRUCTIONS

11-3-2022 REV.B

PART #

53504

DESCRIPTION

10-UP 4RUNNER IIC INSTALL KIT

COMPONENTS INCLUDED		
(1) 255600 IIC CONTROLER (1) 255601 BLOCK OFF PLUG	(1) 255602 WIRE HARNESS (1) 254405 IIC MOUNT 5TH GEN 4-RUNNER	
HARDWARE INCLUDED		
(2) 605984 RUBBER STRIP 1" X 3" ADHESIVE BACK (2) 605069 1/4-20 X 1.25 BOLT (3) 605807 M8-1.25 X 16MM BOLT (3) 605016 5/16 FLAT WASHER (3) 605751 5/16 TERMINAL CONNECTOR (2) 605750 BUTT CONNECTOR	(1) 255607 LOW PROFILE MINI FUSE TAP (1) 605753 LOW PROFILE MINI FUSE 2 AMP (1) 255605-10 INLINE ATO FUSE HOLDER W/ 10 AMP FUSE (1) 605760 WIRE LOOM 1/7" X 6FT (1) 605926-BLK-100 5-1/2 X 0.14 NYLON CABLE TIE, BLACK, 100PK	
SUPPLIED WITH SHOCKS		
(1) 255604-04 4-FT WIRE (1) 255604-10 10-FT WIRE	(1) 255604-14 14-FT WIRE (1) 255604-18 18-FT WIRE	
TOOLS REQUIRED	·	
WIRE STRIPPER WIRE CRIMPER WIRE CUTTERS HEAT GUN	TORQUE WRENCH 12MM SOCKET / WRENCH 13MM SOCKET / WRENCH 7/16 SOCKET / WRENCH	WARNING! ** READ ALL INSTRUCTIONS THOROUGHLY FROM START TO FINISH BEFORE BEGINNING INSTALLATION! IF THESE INSTRUCTIONS ARE
TECH NOTES		NOT PROPERLY FOLLOWED SEVERE FRAME, SUSPENSION AND TIRE DAMAGE MAY RESULT TO THE VEHICLE!
1. WIRE LENGTHS MEASURED FOR 4.0L V6. 2. GOLD WIRE COLOR IN FIGURES DENOTES BASIC WIRE PATH (FOR CLARITY). 3. SEE PAGE 8 FOR WIRE ROUTING DIAGRAM.		** ICON VEHICLE DYNAMICS RECOMMENDS THAT YOU EXERCISE EXTREME CAUTION WHEN WORKING UNDER A VEHICLE THAT IS SUPPORTED WITH JACK STANDS.
FUSE OPTIONS		** ICON VEHICLE DYNAMICS RECOMMENDS ALL INSTALLATION TO BE PERFORMED BY A PROFESSIONAL SHOP/SERVICE TECHNICIAN.
ENG	INJ	PRODUCT FAILURE CAUSED BY IMPROPER INSTALLATION WILL NOT BE COVERED UNDER ICON'S WARRANTY POLICY.

INSTALLATION

FIG.1

1. Disconnect the battery using a 12mm.

2. Connect the mounting plate to the driver side fender near the brake master cylinder/booster using supplied M8 bolts (PN: 605807). [Torque to 15 ft-lbs] [FIGURE 1 & 2]



3. Stick the adhesive rubber to the top of the mount in 2 strips as shown.



4. Connect the IIC to the mounting plate as shown using 1/4" hardware (PN: 605069) and a 7/16. [Torque to 50 in-lbs] Plug in the block off plug (PN: 255601) to the grey port of the IIC. [FIGURE 3]



5. Plug in the Wire harness (PN: 255602) to the black port of the IIC. [FIGURE 4]

FIG.3



FIG.4

6. Plug the 4-FT wire into the Channel-4 plug. Mark on both sides of the wire DF (Driver Front) on the connector. Feed the 4-FT wire between the fuse box and the driver fender. Feed it down between the battery/fuse box and the engine into the wheel well. Zip-tie as necessary. [FIGURE 5]

FIG.5



7. Plug the 4-FT wire into the front driver side CDE-Shock solenoid and zip-tie the remaining wire up. 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 6]



8. Plug the 10-FT wire into the Channel-3 plug. Mark on both sides of the wire PF (Passenger Front) on the connector. Run the 10-FT wire along the factory wire loom across the top of the firewall to the passenger side. [FIGURE 7 & 8]



FIG.7

FIG.9



FIG.8

9. Run the wire under the air cleaner and feed it down into the passenger side wheel well. [FIGURE 9 & 10]



FIG.10

10. Plug the 10-FT wire into the passenger side front CDE-Shock solenoid and zip-tie the remaining wire up. 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 11]



- *11.* Plug the 14-FT wire into the Channel-2 plug. Mark on the connector on both sides of the wire DR (Driver Rear).
- 12. Plug the 18-FT wire into the Channel-1 plug. Mark on the connector on both sides of the wire PR (Passenger Rear).
- 13. Zip-tie the 14-FT wire & 18-FT wire together in 12 inch increments. Leave the last 18 inches of the 10-FT wire free. [FIGURE 12]



FIG.12

14. Feed the 2 wires down the back side of the driver front fender. From the wheel well, feed the 2 wires back behind the shroud and along the top of the driver side frame rail. [FIGURE 13 & 14]



FIG.14

15. Ziptie to the brake lines or brake line brackets on the inside of the frame rail. Zip-tie to the parking brake cable on the outside of the frame rail. [FIGURE 15 & 16]



FIG.15

FIG.17



FIG.16

16. Once past the parking brake, follow the factory wire harness on the inside of the frame rail. [FIGURE 17 & 18]





FIG.18

17. Plug the 14-FT wire into the rear driver side CDE-Shock solenoid and zip-tie the remaining wire up. 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 19]



18. Continue feeding the 18-FT wire rearward across the top of the frame rail. Run the wire over the cross member for the spare tire. [FIGURE 20 & 21]



FIG.20



FIG.21

19. Plug the 18-FT wire into the rear passenger side E-Shock solenoid and zip-tie the remaining wire up. 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 22]



FIG.22

20. Use the supplied wire loom (PN: 605760) to hold the 2 black "Ground" wires and the Red "PWR/BATT" wire together. Slide the loom up close to the connector of the IIC. Route the loom between the fender and the fuse box. Trim as needed. **[FIGURE 23]**

Fuse Box Cover

FIG.23



22. Run the red PWR/BATT wire to the positive battery terminal and cut to length. Strip the end of the Red PWR/BATT wire and crimp a butt-connector (PN: 605750) on. Strip 1 side of the inline fuse (PN: 255605-10) and crimp the inline fuse to the Red PWR/BATT wire. Strip the other side of the inline fuse and crimp a terminal connector (PN: 605751) on. Use a heat gun to heat shrink the butt-connector and terminal connector. Check to make sure the fuse in the fuse holder is a 10 amp fuse. [FIGURE 24]



23. Use a 12mm wrench to connect the red wire to the positive (+) battery terminal post. Use a 12mm wrench to connect the 2 black wires to the negative (-) battery terminal post. [FIGURE 25]



24. Remove the Fuse box cover and locate the INJ fuse using the fuse diagram on the back of the fuse box cover. [FIGURE 26]



FIG.26

FIG.25

25. Route the red ACC wire down from the IIC controller under the various things mounted to the fender. Using a piece of excess wire or a string, feed the wire down and out the bottom of the fuse box as shown. Connect the red ACC wire to the wire that is running through the fuse box. Using the wire, pull the red ACC wire up through the fuse box. [FIGURE 27]



26. Remove the INJ Fuse and place it in the lowest slot of the fuse tap (PN: 255607). Insert the supplied 2 AMP fuse (PN: 605754) in the upper slot. [FIGURE 28 & 28B]



27. Insert the fuse tap in the original location of the INJ fuse. [FIGURE 29]

FIG.29



28. Once the red AAC wire is routed properly into the fuse box, cut the excess wire. Strip the end of the red ACC wire and crimp the butt-connector on. Strip the end of the fuse tap wire and crimp the butt connector on. Use a heat gun to seal the crimp connection with heat shrink. [FIGURE 30]



FIG.30

29. Reconnect battery terminal using a 12mm.

30. Download the ICON INTELLIGENT CONTROL App on you 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.

WIRE ROUTING DIAGRAM: 4Runner



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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