

PART #	DESCRIPTION
64055	2017-UP FSD RADIUS ARM DROP KIT

# **COMPONENTS INCLUDED**

(1) 164038 17-UP FSD RADIUS ARM DROP (DRVR) (1) 164039 17-UP FSD RADIUS ARM DROP (PASS) (1) 64055H 17-UP FSD RADIUS ARM DROP

HARDWARE KIT

## HARDWARE INCLUDED

#### 64055H HARDWARE KIT

- (1) 164042 17+ FSD FRAME NUT PLATE (DRVR) (1) 164043 17+ FSD FRAME NUT PLATE (PASS)
- (4) 167029 SPACER 1.500 X .525 X .625 (1) 294008 WASHER 2.25 X .650 X .250 (4) 605230 7/16" FLAT WASHER
- (8) 605357 WASHER 1.50 X .531 X .042-51
- (2) 605518 5/8-11 X 1.500 BOLT (2) 605527 5/8" SPLIT LOCK WASHER
- (4) 605630 3/4" FLAT WASHER (2) 605821 M18-2.5 NYLOCK NUT (2) 605823 M12-1.75 NYLOCK NUT
- (2) 605831 M18 X 139.3 OAL OEM FORD BOLT
- (2) 605832 M18 FLAT WASHER

(2) 605601 3/4-10 X 5.500 BOLT

(2) 605620 3/4-10 NYLOCK NUT

(2) 605849 M12-1.75 X 180MM BOLT

### **TOOLS REQUIRED**

JACK
JACK STANDS
TORQUE WRENCH
3/8" 12PT SOCKET / WRENCH
1/2" SOCKET / WRENCH
15/16" SOCKET / WRENCH
11/16" SOCKET / WRENCH
11/18" SOCKET / WRENCH

8MM SOCKET / WRENCH 10MM SOCKET / WRENCH 13MM SOCKET / WRENCH 15MM SOCKET / WRENCH 18MM SOCKET / WRENCH 19MM SOCKET / WRENCH 24MM SOCKET / WRENCH 37MM SOCKET / WRENCH

### **TECH NOTES**

- 1. RADIUS ARM KIT INTENDED FOR USE WITH 4.5" OR 7" LIFTS. REFER TO BOX KIT INSTRUCTIONS (64050 OR 67030) FOR INSTALLATION.
- 2. ICON TRACK BAR (64038) REQUIRED FOR INSTALLATION.
- 3. EXTENDED BRAKE LINE KIT AVAILABLE (61110) AS AN OPTION INSTEAD OF BRAKE LINE DROP BRACKETS.



### **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 INSTALLTION TO BE PERFORMED BY A PROFESSIONAL SHOP/SERVICE TECHNICIAN. PRODUCT FAILURE CAUSED BY IMPROPER INSTALLATION WILL NOT BE COVERED UNDER ICON'S WARRANTY POLICY.

# INSTALLATION

FIG 1

- 1. Using a properly rated jack, raise the front end of the vehicle and support the frame rails with jack stands. The best positions to support the front of the truck are either the frame rails just behind the front bumper or on the body mounts just behind the front fenders. If lifting from the body mounts, be careful not to pinch the parking brake line on the driver's side. NEVER WORK UNDER AN UNSUPPORTED VEHICLE. Remove the front wheels.
- 2. Remove the sway bar links from the sway bar using an 18mm & 8mm. Leave them connected at the axle end. [FIGURE 1]



FIG.2

3. Disconnect the upper brake line brackets from the frame using a 13mm and lower brake line brackets from the axle using a 10mm. [FIGURE 2]

4. Remove the factory track bar using a 27mm and 30mm. (Refer to track bar #64038 instructions) [FIGURE 3]



FIG.3

- **5**. Support the axle using a jack and remove the front shocks. The shocks are limiting droop so make sure that the axle is well supported or it will fall when the shocks are removed. Only remove the lower bolt using an 18mm.
- 6. Slowly lower the axle until the coils unload from the mounts. Be careful not to stretch or damage any lines connected to the differential or radius arms. Remove the coils. [FIGURE 4]



FIG.4

- 7. Some trucks have a transfer case skid plate that must be removed first using a 15mm. Remove the nut clips from the frame.
- 8. Lift the axle enough to reconnect the shocks and then lower the axle back down. [FIGURE 5]



FIG.5

FIG.7



FIG.6

- 9. With both coils removed, the radius arms don't have much force on them and can be safely removed from the frame mount using a 24mm & 27mm. [FIGURE 6]
- 10. Once the bolts are removed from the radius arms, lift up on the tie rod to rotate the axle rearward which will then rotate the radius arms out of their pockets. [FIGURE 7]



FIG.8

11. Remove the outside crossmember bolt on both sides. [FIGURE 8]

12. Position the driver side radius arm bracket into the radius arm pocket. Loosely install the supplied M18 X 139mm bolt with washers in the forward hole. Loosely install the supplied rear 3/4" X 5.5" bolt with washers into the radius arm holes. [FIGURE 9]



FIG.9

Spacers, washers, and a longer 12mm bolt are supplied to mount the radius arm bracket to the crossmember using a 19mm. The washers are used to account for the variances in crossmember placement in relation to the radius arm pockets. Position the supplied spacers and washers between the crossmember and radius arm bracket. One spacer must go on the driver and passenger (also front and rear) sides of the crossmember. Position the shims as needed. Four shims must be used on each side of the truck. The shim positioning may vary from one side to the other. [Torque to 65 ft-lbs] [FIGURE 10 & 11]



**FIG.10** 

FIG.12



FIG.11

13. With both of the frame brackets installed loosely on the vehicle, tighten them to spec. Torque M18 bolts to factory spec using a 24mm & 27mm. Torque 3/4" bolts to 260 ft-lbs using an 1 1/8" & 1 1/16".

14. Slide the nut plate (164042) in the end of the crossmember and align over the hole. Using the supplied 5/8" bolts and lock washers, start the bolts in the nut plate mounting the radius arm bracket to the crossmember. Use the supplied 1/4" washer between the bracket and crossmember on the driver side only. [FIGURE 12]





FIG.13

15. Move the radius arms up into the pockets of the drop bracket and fasten with the factory bolt using a 24mm & 27mm. [Torque to factory spec] [FIGURE 13]

16. Remove the shocks and lower the axle enough to install the coil springs. [FIGURE 14]



FIG.14

17. Once the coils are in seated, install the shocks using an 18mm and 19mm. Be careful not to lift the truck off of its supports. [Torque to factory spec] [FIGURE 15]



FIG.15

FIG.17



FIG.16

- 18. Reconnect the sway bar links to the sway bar using an 8mm and 18mm. [Torque to factory spec] [FIGURE 16]
- 19. Install the ICON adjustable track bar (64038) using a 30mm. (Refer to track bar instructions) [FIGURE 17]





FIG.18

- **20**. Mount the upper brake line drop brackets using a 13mm and the factory hardware. [Torque to factory spec] [FIGURE 18] Extended brake line kit (61110) available from ICON.
- 21. Mount the brake line to the drop bracket with the supplied bolt and washer using a 1/2". [Torque to 13 ft-lbs] [FIGURE 18]
- 22. Mount the lower brake line brackets using the factory bolt and a 10mm. [Torque to factory spec]. [FIGURE 19]



**FIG.19** 

- 23. Install the wheels/tires and lower the vehicle to the ground. [Torque lugs to factory spec]
- 24. Center the front axle under the truck using the adjustable track bar. Center the steering wheel. Refer to track bar instructions.
- 25. Have the vehicle professionally aligned.

VERIFY ALL FASTENERS ARE PROPERLY TORQUED BEFORE DRIVING VEHICLE.

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