## 2018 – 20XX JEEP JL FRONT TRAIL DOOR

## ASSEMBLY, INSTALLATION, AND MAINTENANCE INSTRUCTIONS



# SAFETY

Know Safety, no injury. Know injury, no safety. ~Author Unknown If there are any questions, call 1-855-HHTOUGH

#### <u>READ ALL SAFETY INSTRUCTIONS BEFORE INSTALLATION</u>

- o FOLLOW ALL INSTRUCTIONS FOR PROPER ASSEMBLY
- WEAR APPROPRIATE EYE PROTECTION
- o EXERCISE CARE WHEN LIFTING COMPONENTS
- USE APPROPRIATE TORQUE FOR BOLTS
- o BLUE THREAD LOCKING COMPOUND IS RECOMMENDED ON ALL BOLTS

#### SUGGESTED TORQUE VALUES FOR STEEL GRADE SAE 5 BOLTS

BOLT DIAMETER (INCH)	TREADS PER INCH	TORQUE (POUND-FEET)
1/4	20	7
5/16	18	14
3/8	16	25
7/16	14	40
1/2	13	60
9/16	12	88
5/8	11	120
3/4	10	200
7/8	9	302
1	8	466



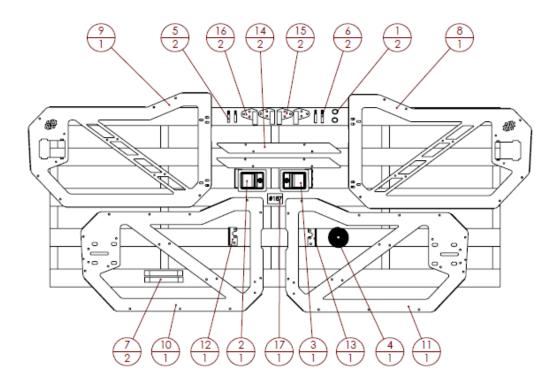
WARNING:

This product is for off-road use only. It is not intended to provide occupant containment or protection in the event of an accident or rollover. Always wear your seat belts and avoid sharp turns and other abrupt maneuvers. Always keep arms and body inside vehicle at all times and drive safely. Read and understand all manufacturer's warnings and product instructions before installation. These doors have not been certified or approved by any government agency, please check state and local laws before installation. All liability for the installation and use rests with the owner.

### I. PARTS LIST

ITEM NO.	QTY.	PART NUMBER	DESCRIPTION
1	2	443-02-3898	RUBBER COMPRESSION SPRING 10 LBS
2	1	601-56-3522	TRAIL DOOR LATCH LEFT
3	1	601-56-3523	TRAIL DOOR LATCH RIGHT
4	1	601-56-3744	3048MM LENGTH FOAM ROLL
5	2	601-56-3755	HINGE INSERT
6	2	601-56-3756	LONG HINGE INSERT
7	2	601-56-4539	TRAIL DOOR STRAP
8	1	601-56-4540	FRONT LEFT OUTSIDE
9	1	601-56-4541	FRONT RIGHT OUTSIDE
10	1	601-56-4542	FRONT LEFT INSIDE
11	1	601-56-4543	FRONT RIGHT INSIDE
12	1	601-56-4544	LATCH MOUNT 1
13	1	601-56-4545	LATCH MOUNT 2
14	2	601-56-4546	FRONT ACCENT PLATE
15	2	601-56-4548	LEFT HINGE
16	2	601-56-4549	RIGHT HINGE
17	1	60K-56-0187	HARDWARE KIT #187





#### REMOVE CONTENTS FROM BOX AND VERIFY ALL PARTS ARE PRESENT.

If there are any questions, call 1-855 HHTOUGH or email HHORDERS@hammerheadarmor.com

#### II. TOOL LIST

- 1. A Good Friend
- 2. Basic Tool Kit
- 3. 7/16" Wrench (Ratcheting Wrench Highly Recommended)
- 4. 13mm wrench
- 5. 3/8 socket
- 6. Torx 30
- 7. Torx 40
- 8. Torx 50
- 9. Phillips head screwdriver
- 10. pliers

## III. VEHICLE PREPARATION

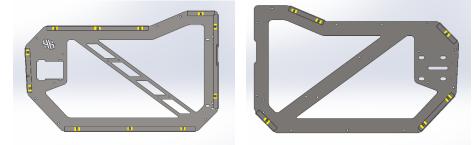
- 1. Start by rolling the window down on the door.
- 2. Using the torx 50 remove the 2 capture nuts on the doors hinges as shown below.
- 3. Using the torx 40 remove the bolt attaching the doors swing mechanism.
- 4. Remove the plastic around the plug for the door wires and detach the plug. Remove the door strap.
- 5. Do this for both sides.



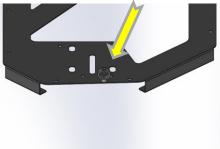
## IV.

## TRAIL DOOR ASSEMBLY

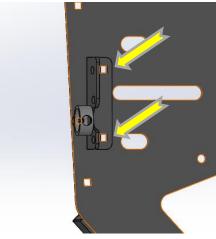
1. Start by installing foam on the inside and outside panel of the door as shown below. Apply a small strip on either side of each bolt hole.



2. Using a phillips head screw driver and the 3/8" socket, install the rubber compression spring and spacer on the inside door panel as shown below. Use the #10 screw, #10 washer, rubber compression spring, the 5/16" spacer, and the 3/8" nut in that order to install the rubber compression spring.

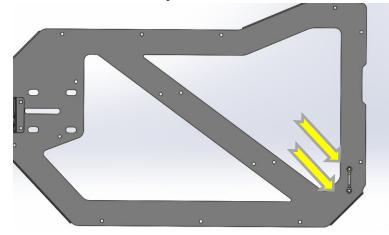


3. Using the 7/16" wrench install the latch mount on the door as shown below. You will use two 1/4" carriage head bolts and 1/4" nuts. FOR THE FRONT DOOR THE CUTOUT ON THE LATCH MOUNT SHOULD BE ORIENTED DOWNWARD

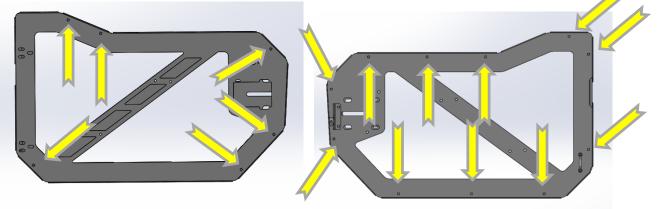




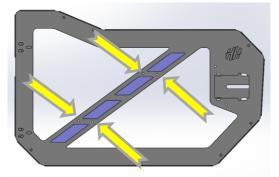
4. Using the Philips head screw driver and the 7/16" wrench install the footmans loop as shown below. You will use two 1/4" screws and 1/4" nuts. Make sure to install the provided door strap on the footmans loop before you install it on the inside door panel.



5. The inside and outside door panels interlock together to form the trail door. Using the 7/16" wrench, install seventeen 1/4" carriage head bolts and nylock nuts in the locations shown below.

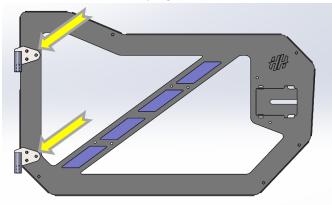


6. Use the 7/16" wrench and the Philips head screwdriver to install the accent plate as shown below. You will use four long 1/4" bolts, 1 1/8" spacers, 8mm nylon washers, and 1/4" black cap nuts. You can paint the accent plate whatever color you choose before install. There 8mm black nylon washers go between the accent plate and the door front. (do not confuse these washers with the 3/8' ones for the SS door pins)

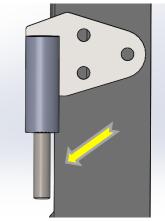




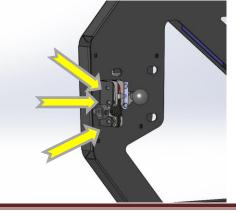
7. Using the torx 40 and the 13mm wrench, install both hinges as shown below. Use six torx 40 8mm bolts, 8mm washers, and 8mm nuts. Do not fully tighten bolts.



8. Using a pair of pliers, install the stainless steel pins in the hinges as shown below. Install the provided 3/8" nylon washers between the pins and the hinges. MAKE SURE TO USE LOCTITE ON THE HINGE PIN THREADS.

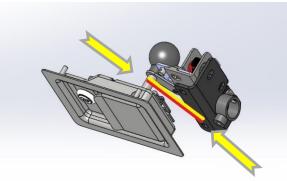


9. Using a Philips head screwdriver, install the rotary latch on the latch bracket as shown below. Use three 1/4" Philips head screws. Make sure to use the latch that matches the cutout in the latch mount. Do not fully tighten. MAKE SURE TO USE LOCTITE ON THESE SCREWS

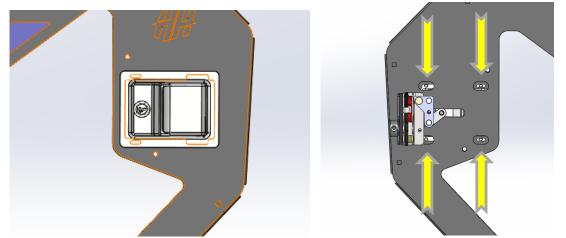




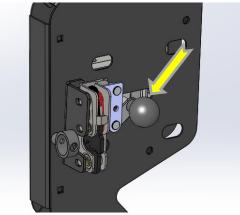
10. Install the spring inside the door, running from the bottom latch mount screw to the rod of the paddle latch as shown below. This is easier to do if done while installing the paddle latch as described in the next step.



11. Install the paddle latch with a 3/8" socket as shown below. Use four #10 nuts. Do not fully tighten yet.



12. Connect the paddle latch rod and the rotary latch lever with the provided latch knob as shown below. **MAKE SURE TO USE LOCTITE ON THE KNOB THREADS** 

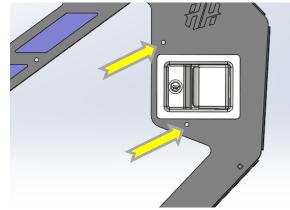


13. The rotary latch has in and out adjustment. Make sure there is no side load on the rotary latch lever and tighten the screws.

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- 14. The paddle latch has sideways adjustment. This sets the angle of the paddle latch opening when the rotary latch releases the striker. Set this to your preference.
- 15. Using the Philips head screwdriver and the 7/16" wrench, install two long 1/4" screws, 1 1/4" spacers, and cap nuts into the locations shown below.



16. Make sure all bolts and screws are tight.

## V. TRAIL DOOR INSTALL

- 1. Place the Trail Door on the OE hinges and close the door on the striker. Have a friend pick the door up at the hinge while you use a torx 40 and a 13mm wrench to tighten the hinge mounts on the door.
- 2. Test the door for appropriate operation and make sure that all screws and bolts are tight.

## VI. TRAIL DOOR MAINTENANCE

- 1. Inspect all bolts and integrity of door if they ever receive any impact.
  - a. Pay extra attention to hinges, hinge pins, and latches
- 2. Inspect all bolts and integrity of door every 3 months.
  - a. Pay extra attention to hinges, hinge pins, and latches
- 3. Apply lubrication to paddle and rotary latch every 3 months.



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Congratulations! Your Installation is now complete. Thank You for your purchase!