

ADDICTIVE DESERT DESIGNS

2010-2014 FORD RAPTOR BED CAGE INSTALLATION INSTRUCTIONS

PREPARATION STEPS

1. With the vehicle on level ground and the emergency brake set disconnect the negative terminal on the battery.
2. You will need the following tools:

- A. T50 Torx bit
- B. Cut off wheel
- C. Grinder
- D. ¾" wrench and socket
- E. 7/16" wrench and socket
- F. 10mm socket
- G. Ratchet
- H. Sharpie
- I. ½" drill bit
- J. 1" drill bit
- K. 1 1/8" holesaw
- L. Drill

3. Included in Kit:

- A. Bed Cage
- B. (4)-3" spacers
- C. (4)-1/2" spacers
- D. (4)-M12x1.75-110
- E. (4)-1/2" x 3"
- F. (2)-1/2" x 5"
- G. (2)-1/2" x 5 ½"
- H. (8)-1/2" lock nuts
- I. (20)-1/2" washers

INSTALLATION INSTRUCTIONS

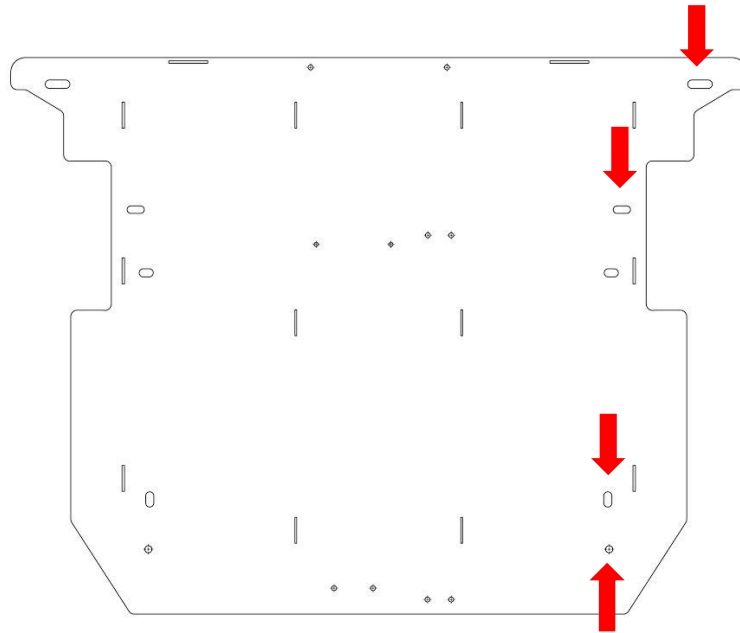
1. Remove the middle and front factory bed bolts using a T50 Torx bit.

2. Place bed cage in the bed of the truck in line with the factory bed bolt locations. Use (4) M12x1.75-110 bolts to fasten bed cage.
3. Using a sharpie, mark the cut out for the shock openings by following the edge of the bed cage base as shown in the following pictures.



4. Mark the center holes through the bed cage base (marked by the red arrow in the following picture).

5. Remove rubber piece from the top of the frame rail. This will be the hole that the bed cage bolts thru.



6. Drill these rear (2) holes per side thru the bed floor and into the top layer of the frame. The rear hole will be drilled thru the top layer of the crossmember as well. Be sure to drill as straight as possible.
7. Remove bed cage. Measure $3 \frac{3}{8}$ " inward from the bed side on top of the wheel well. A line parallel to the bedside will be drawn.



8. The front and rear partial lines (parallel to the back of the cab) should be extended till they meet the line drawn on top of the wheel well. Cut this entire section out.



9. Starting on the rear line at the point where the bed floor and the wheel well connect, measure back 1", connect this dot to the pinch weld seam. Measure upwards along the cutout 2". Connect these two dots together. Trim both of these new lines for additional shock clearance.



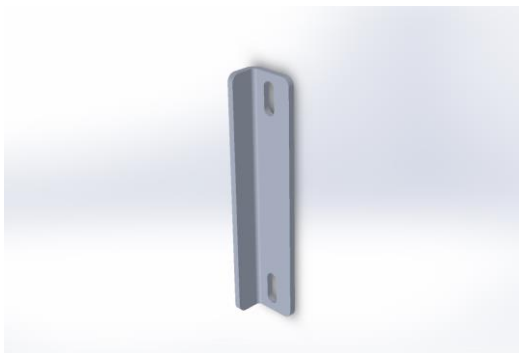
10. Use a 1" drill bit to enlarge the rear (4) holes previously drilled. Drill only through the bed floor with the 1" bit. Insert the (4) 3" spacers into the holes. Using masking or packaging tape, tape the (4) ½" spacers inline over the front (4) factory holes.
11. Install bed cage. Use (4) M12x1.75-110 and (4) ½" washers, 1 per bolt, start the 4 bolts thru the bed cage base, into the factory front and center mounting holes. Use the ½" x 5" bolts to fasten the forwardmost rear holes of the bed cage through the bed cage base, bed floor, spacer, and frame. Use the ½" x 5 ½" bolts to fasten the rearward rear holes of the bed cage through the bed cage base, bed floor, spacer, frame, and top layer of the crossmember. Place (1) washer and (1) nut per bolt. The washer and nut will be accessed through an access hole that needs to be drilled in the frame. Make a center mark 1" down from the top of the frame and centered with spacer/bolt combo. Drill hole using a 1 1/8" holesaw. Tighten all bolts at this time.



12. The rear shock will be installed with the reservoir facing the rear of the vehicle and the bypass tubes on the outside. Use the ½" x 2 ½" hardware to secure the shock in place. Feed the shock up through the bottom of the bed and into the bed cage. Secure the shock with the mentioned hardware. Unbolt the brake line mounting bracket from the frame using a 10mm socket and let it hang for now, it will be attached using a drop bracket later in the instruction. Jack the vehicle up until the bottom of the shackle is ¼" away from the shackle hanger. Bolt the raw lower shock mounts to the shocks using the supplied ½" x 2 ½" bolts, washers, and nuts. Measuring outwards from the leaf spring perch on the axle, make a mark at 2 ½". This will be where the outside edge of the inner plate of the shock mount will be welded. Prep and weld the mount to the axle. Use caution around the shocks while welding as spatter can cause damage to the shock shafts. Paint lower mounts and install shocks with mentioned hardware.



13. Attach drop bracket using factory hardware and 10mm socket. Use supplied $\frac{1}{4}$ " x 1" bolt, washers, and nut to fasten the brake line bracket to the drop bracket using $\frac{7}{16}$ " wrench and socket.



For additional support or technical questions,
please call 480.671.0820 or
email info@addictivedesertdesigns.com

ADDICTIVE DESERT DESIGNS
4840 E. JASMINE STREET SUITE 112
MESA, AZ 85205
WWW.ADDICTIVEDESERTDESIGNS.COM

