

ADDICTIVE DESERT DESIGNS

2010 - 2014 FORD RAPTOR RACE SERIES R FRONT BUMPER INSTALLATION INSTRUCTIONS

PREPARATION STEPS

1. Disconnect the negative terminal on the battery. With the vehicle on level ground and the emergency brake set.
2. You will need the following tools:
 - a. ½" drill bit
 - b. 1" 1/16 socket and wrench
 - c. ¾" wrench
 - d. ¾" Socket
 - e. Ratchet
 - f. 15MM socket and ratchet
 - g. Sharpie type marking pen
 - h. Center punch
3. Hardware Included:
 - a. 8 - ½" x 1 ½" Bolts
 - b. 8 - ½" Nuts
 - c. 16 - ½" Flat washers
 - d. Alignment cam kit included

INSTALLATION INSTRUCTIONS

1. Remove factory Front Bumper and front skid plate.
2. Fit the Bumper onto the truck and use the Sharpie to mark the frame horn to drill the ½" holes. The red arrows are the holes to be drilled, the blue arrows show the factory slots. Slots and holes will be opposite for the Drivers side.



If you purchased lights that fit behind the bumper, now is a good time to install those into the bumper

3. Fit the bumper back onto the truck and attach using the supplied $\frac{1}{2}$ " x $1\frac{1}{2}$ " Bolts (8 ea.), $\frac{1}{2}$ " Nuts (8 ea.) and $\frac{1}{2}$ " Flat Washers (16 ea.). Leave finger tight until all of the bolts are installed, then tighten to 70 ft./lbs. Make sure the alignment cam slot is over the lower control arm bolt.

The Upper outside holes will not be used and the holes will be kept open.

***Make sure the alignment cam provided is in the alignment slot, and tighten from the back.
(See Picture included)



4. Step back and enjoy your new A.D.D. bumper.



5. Check, and re-tighten if needed, all mounting bolts after 100 miles and periodically thereafter.