

## Foutz Motorsports Ford Raptor Under Skid Plate kit.

The full under protection skid plate kit was designed and used on the 2017 Ford Raptor race truck that the team raced in all of the Best in the Desert off-road races in 2016, and also the Baja 1000. The easy-to-install skid plate kit provides extra protection to the undercarriage of the new 2017 Ford Raptor and was proven tough on the race truck.



1. Remove the stock under skid plate that is on the truck.
2. Remove the 2 bolts in the rear of the factory front skid plate. Remove the front bolts and remove the factory skid plate and keep all hardware for re-install later.
3. Remove the mid-section skid plate and set aside. Keep the hardware but the plate will not be re-installed.



4. Remove the skid plate mount cross support that was under the 2 long bolts. Keep the hardware, but the support will not be re-installed.
5. Remove the rear under transmission section skid plate. Keep the hardware but the plate will not be re-installed. When all removed you should have 3 sections. Square tube section, middle skid plate and larger rear skid plate. As seen in this photo.



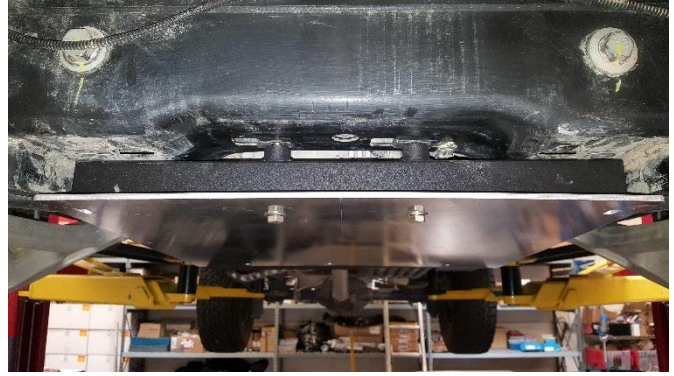
6. In the kit you will have new hardware and a new cross member to go under the front skid plate (cross member is not included if your skid plate is bent to fit an aftermarket bumper or if it is for a 1<sup>st</sup> Generation Raptor 2010-2014, as it is not necessary). You will also have an add-on mount plate that bolts through the transmission cross member bolts. See photo. Note the long bolts with nut clips are for the front cross member mount (also not included if the skid plate is bent to fit an aftermarket bumper or if it is for a 1<sup>st</sup> Generation Raptor). The short bolts will be needed to final install the rear skid plate to the add on transmission support section. One bolt is shorter and has a small jam nut. That bolt must be installed on the right side under the wires to minimize chance of damage to the wire loom.



7. Under the front factory skid plate you will find 2 square holes in the main frame cross member. Install the nut clips provided in these holes. These will line up with the square tube cross member later.



8. Locate the mid skid plate square section and the square tube cross member. Use the long bolts to attach the skid plate and square tube cross member. The aluminum plate has round holes and oval shaped holes. The oval holes go toward the front of the truck and these are the center holes you should use now. Put the long bolts in the 2 holes, but don't tighten yet. As you can see in the picture the square tube cross member has 2 spacers that are on the top when installed. Remember that a 1<sup>st</sup> Generation Raptor Kit and an aftermarket bumper kit do not use this part. You will notice the front section of the skid plate is bent differently for these scenarios.



9. Now locate the larger steel part that is installed over the transmission cross member. Remove the nuts off the transmission cross member bolts and slide the plate over the exposed bolts. Re-install the nuts and tighten to secure the cross member and the plate. When installing make sure the plate is aligned as it is in the photos.



10. Locate the transfer case guard. The L shaped bent aluminum panel. Position this so it fits in the opening of the trans cross member section you just installed. The bolts line up with the factory nut clips. Don't put bolts in the cross member now. Find the factory hardware and put the bolts in the frame mount side to hold the plate in place. Snug, but don't tighten yet.



11. Now locate the large aluminum section and hold it up under the truck. Make sure this plate is slid under the front plate back edge and align the holes. You might need to use a floor jack to hold this up and position on the truck. Using the stock bolts, put the 2 bolts through the large skid plate and the transfer case guard that share the bolt hole to start. Again don't tighten any of the bolts yet.



12. Move the large skid as needed until front and rear holes line up well. Re-install the factory bolts in the front section where the mid square skit plate matches up with the larger rear skid plate. You will only use the 2 outside holes even though this plate may have 3 holes. The center hole is left blank on this application.



13. Locate the small bolts provided with the kit. You should have 3 of these. One is shorter and has a special short jam nut. Install the short bolt in the far right (passenger) side with the nut up. This bolt must be in the correct location so it will not rub on the wire loom that crosses over here. Put the other 2 bolts into the other 2 rear most holes.



14. Now that all bolts are in go through and tighten all bolts for final assembly.
15. Re-install the front factory skid plate that matches the factory front bumper. Re-using the factory hardware you removed earlier.

