

Installation Instructions for Engine/Transmission Skid Plate for 2007-Present Jeep® JK Wrangler

Thank you for purchasing your new Skid Row Offroad engine/transmission skid plate. It is designed to give you peace of mind while traversing even the toughest trails.

Your skid plate package should come complete with the following parts:

- 1. (1) Engine/Transmission Skid Plate
- 2. (1) Passenger Side Mounting Bracket
- 3. (1) Driver's Side Mounting Bracket
- 4. (1) Passenger Side Strut Rod
- 5. (1) Driver's Side Strut Rod
- 6. (2) 3/8-16 UNC x 3.0" Carriage Head Bolts
- 7. (7) 3/8-16 UNC x 1" Hex Head Bolts
- 8. (9) 3/8-16 UNC Hex Nuts

- 9. (9) 3/8" Lock Washers
- 10. (7) 3/8" Flat Washers
- 11. (2) 3/8" Large Flat Washers
- 12. (2) 3/8" Rubber Hose Cushions
- 13. (1) Exhaust Hanger Adjustment Tool

WARNING: Be sure to place jack stands under the vehicle before working underneath it!

Step 1: Automatic transmission models require the removal of the factory transmission skid plate and cross-member. This cross-member interferes with the driveshaft once you lift your Jeep or disconnect the front sway bar, so you don't want it anyhow.



Step 2: Place two 3/8-16x1" bolts with "small" flat washers through the holes in the bottom of the passenger side motor mount as shown in the photo at right. Install them from the top as shown or the one to the right in this picture will contact the motor mount and cause a vibration. It's a little tricky to slide in, but they will both fit.



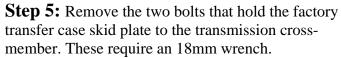


Step 3: Install the passenger side-mounting bracket using the bolts just inserted into the motor mount. The mounting tab faces the rear of the vehicle. It is shown with the strut rod attached in the photo to the left. Leave these bolts loose for now.



Step 4: The driver's side mounting bracket (shown at left by itself) is to be installed as shown in the photo at right. To do this loosen the motor mount bolt. Turn the nut all the way to the end of the bolt, but do NOT remove it. Take a hammer and tap the bolt toward the

rear of the vehicle. This allows the mounting bracket to be slipped under the head of the bolt. Then, using a 3/8-16x 1" bolt and a "small" flat washer, install the bracket. The bolt should be slipped into the bottom of the motor mount from above and the nut used on the bottom. Tighten the motor mount bolt to factory torque and then tighten the 3/8-16 bolt as well.



Step 6: Loosen the two remaining bolts (also 18mm) that hold the transfer case skid plate to the chassis and gas tank skid plate. This allows the engine/transmission skid plate to be slipped between the transfer case skid plate and the transmission cross-member as shown at right.







Step 7: Using a floor jack (or a friend) position the skid plate as shown at left.

Step 8: Using the two factory transfer case skid plate bolts removed in Step 5, loosely bolt the engine/transmission skid plate to the transmission cross-member.

Step 9: Install the passenger side strut rod as shown at left.



Step 10: Install the driver's side strut rod as shown at left. Make sure to place the strut rod within the skid plate as shown.

Step 11: Using the two carriage bolts provided, loosely bolt the engine/transmission skid plate to the passenger side of the transmission cross-member. **Note:** Manual transmission models will only use one carriage bolt. Make sure to use the "large" flat washers on top of the cross-member.

Step 12: Tighten all hardware once everything is fit together.

Step 13 : <u>Auto Trans Models Only:</u> Place the two pieces of 3/8" rubber hose over the automatic transmission cooler lines to prevent them from rubbing against the driver's side strut rod.

ALL MODELS NOTE: Due to variations in the installed height of the factory exhaust system, the skid plate may come in contact with the exhaust pipe that passes in front of the transmission cross-member. This will result in a rattle and/or a vibration. Follow the procedure below to adjust the exhaust system upward to clear the skid plate properly. You will need a 15mm box end wrench for the following steps.

Step 14: Loosen the exhaust clamp that holds the exhaust Y pipe to the straight pipe leading back to the muffler. It is situated just behind the transmission crossmember and is shown in the photo to the right. There is a 15mm hex nut on top.

Step 15: Loosen one of the bolts that holds the exhaust Y pipe to the exhaust manifold on the driver's side. We have found that the rearmost one is most easily accessed from above. There is no need to loosen both bolts. Be forewarned that the little cage that holds the nut on top of the manifold may break. If so, you will need a second wrench to hold the square nut on top.





Step 16: Loosen one of the bolts that holds the exhaust Y pipe to the exhaust manifold on the passenger side. We have found that the front-most bolt is most easily accessed from the inner fender area. Again, there is no need to loosen both bolts.



Step 17: Place the Exhaust Hanger Adjuster over the exhaust hanger pins as shown in the photo to the left. This "locks" the two pins together to facilitate bending the frame mounted pin upward in the next step.

Step 18: Using a floor jack and a block of wood, push the exhaust hanger adjuster upward. This will bend the upper exhaust hanger pin and raise the loosened exhaust system. Only raise the exhaust system until the center of the exhaust pipe that crosses in front of the transmission cross-member touches the transmission mount. An exact dimension is difficult since there is a lot of variation in exhaust height from the factory. Just don't go crazy trying to bend things. It doesn't take much to bend the pin.

Step 19: *Before lowering the jack*, tighten the three fasteners loosened above. *Then* remove the jack and the exhaust hanger adjustment tool. The exhaust system should not move downward much at all.

There should now be plenty of clearance between your exhaust pipe and the skid plate.



We hope you enjoy your new Skid Row Offroad engine/transmission skid plate! Sincerely,

The Staff at SFK Manufacturing, LLC



Annual Drawing to be held January 1st. Winner to be selected from all entries from prior year. All entries must be recieved by December 31st to be included in drawing. One entry per person per Skid Row Offroad product purchased.

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