



2265 Crosswind Drive • Prescott, AZ 86301  
(928) 636-3175

# JEEP WRANGLER, RUBICON, UNLIMITED (TJ, TJL) AUTOMATIC TRANSMISSION BRACKET INSTALLATION INSTRUCTIONS 2003-2006 **KIT# 8210**

## Before Starting Installation

**NOTE**  
Kit parts are prefaced by the word **kit** and appear in **bold print**.

1. Carefully read all warnings and instructions completely before beginning.
2. Verify all parts have been received in this kit by checking the parts list at the end of this document.

**NOTE**  
If parts are missing from kit, please be prepared to provide the following information:  
1. **Name** of purchase location  
2. **Bar Code** on side of box  
3. **Date** above bar code  
4. **Date** inside box cover  
5. **Inspector #** from inside box cover

3. **Only install this kit on the vehicle for which it is specified.** If anytime during the installation you encounter something different from what is outlined in the instructions, call technical support at (928) 636-3175.
4. Special tools and parts needed:
  - a. Die grinder or tool capable of cutting metal
5. Park vehicle on a clean, dry, flat, level surface and block tires so vehicle cannot roll in either direction. Set steering wheel and wheels straight ahead.

**NOTE**  
Adhere to recommendations when replacement fasteners, retainers and keepers are called out in the factory service manual. When re-assembling the vehicle it is recommended by the vehicle manufacturer that certain fasteners are replaced in order to maintain proper retention characteristics. This system may not include all replacement hardware as recommended by the factory service manual. Additional replacement hardware should be obtained prior to installation of this system to meet the requirements of the factory service manual.

**NOTE**  
Performance Automotive Group recommends using the Loctite® supplied in the kit on the threads of all kit nuts and bolts unless specified otherwise in these instructions.

**⚠ WARNING**  
Before you install this kit, read and understand all instructions, warnings, cautions, and notes in this instruction sheet and in the vehicle owner's manual.

**⚠ CAUTION**  
Proper installation of this kit requires knowledge of the factory recommended procedures for removal and installation of original equipment components. We recommend that the factory shop manual and any special tools needed to service your vehicle be on hand during the installation. Installation of this kit without proper knowledge of the factory recommended procedures may affect the performance of these components and the safety of the vehicle. We strongly recommend that a certified mechanic familiar with the installation of similar components install this kit.

**⚠ WARNING**  
Always wear eye protection when operating power tools.

**⚠ WARNING**  
Before you install this kit, block the vehicle tires to prevent the vehicle from rolling.

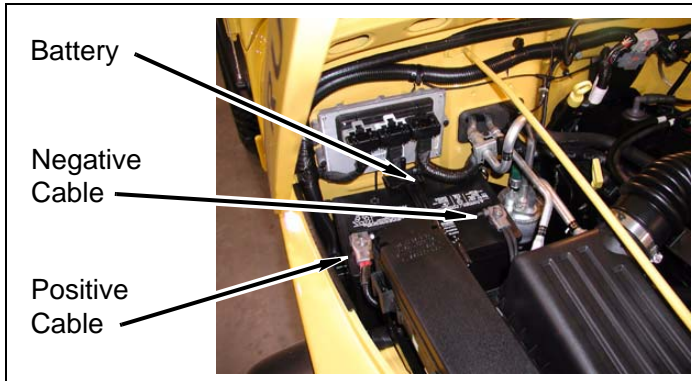
## Torque Specifications

See factory service manual for torque values when re-using OE fasteners.

<b>Bolt Size</b>	<b>Grade 5 (ft.-lbs.)</b>	<b>Grade 8 (ft.-lbs.)</b>
1/4"-20	10	10
1/4"-28	10	12.5
5/16"-18	17	22.5
5/16"-24	20	25
3/8"-16	30	40
3/8"-24	35	45
7/16"-14	50	65
7/16"-20	55	70
1/2"-13	75	100
1/2"-20	55	70
9/16"-12	105	135
9/16"-18	115	150
5/8"-11	150	195
5/8"-18	160	210
3/4"-16	175	225

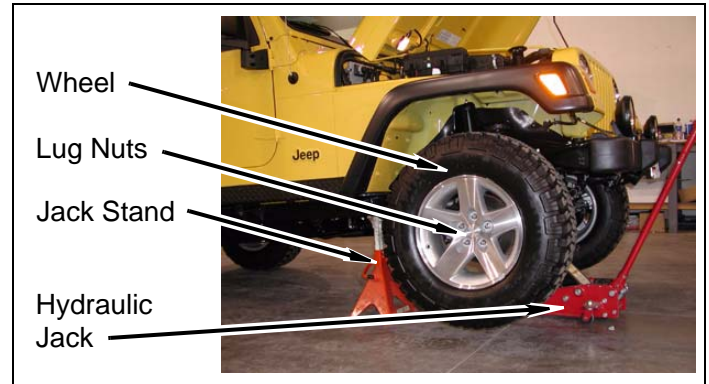
## Engine Compartment

1. Disconnect both battery cables. Disconnect negative cable first, then positive cable.



## Prepare to Install Auto Trans. Bracket

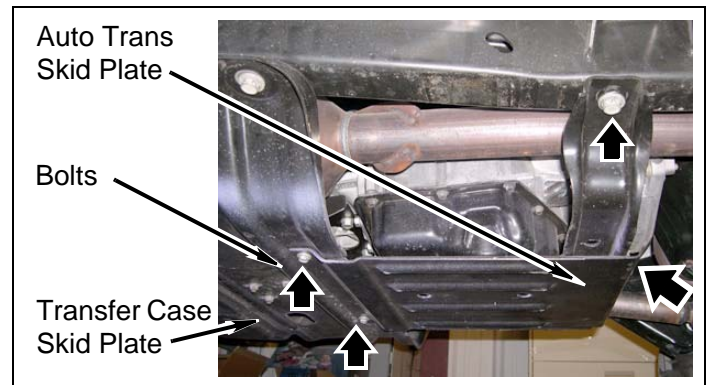
1. Loosen, but do not remove, lug nuts on each front wheel.
2. Using a hydraulic jack, slowly lift front axle until front tires are 3-5" off ground. Position jack stands under frame behind lower control arm perches. Lower vehicle onto jack stands while maintaining hydraulic jack pressure underneath front axle.



### ⚠ WARNING

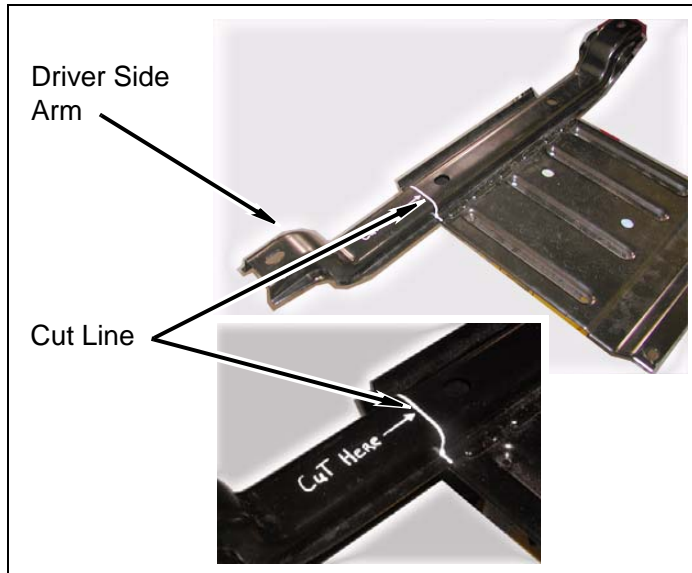
Use extreme caution when lifting vehicle from ground. To prevent serious personal injury, ensure the lifting device is securely placed.

3. Remove four bolts and automatic transmission skid plate from frame and transfer case skid plate.



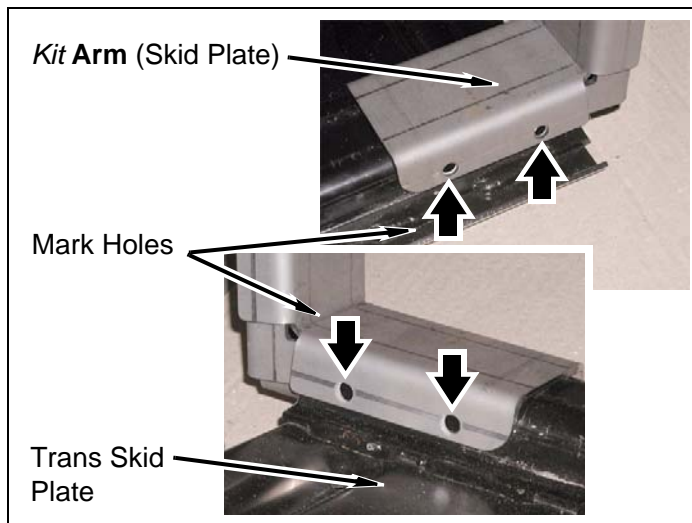
# Install Auto Trans. Bracket

1. Mark cut line on driver side arm as shown.



2. Cut along line, flush with skid plate, and remove driver side arm from skid plate.

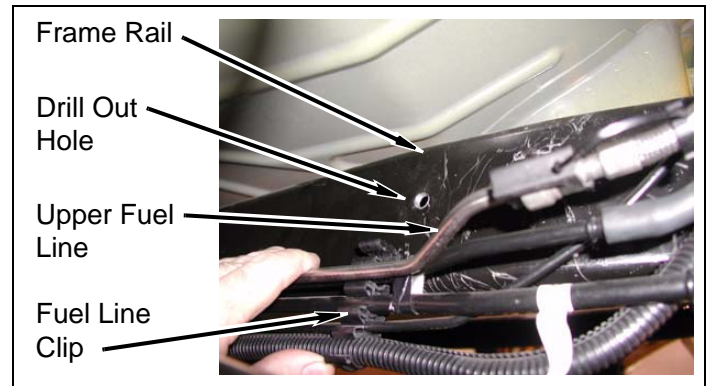
3. Using *kit arm* (skid plate) as a template, position *kit arm* (skid plate) onto skid plate and mark four holes as shown.



4. Remove *kit arm* (skid plate) from skid plate and drill four 5/16" holes at marked locations in skid plate.

5. Lower front axle as far as possible.

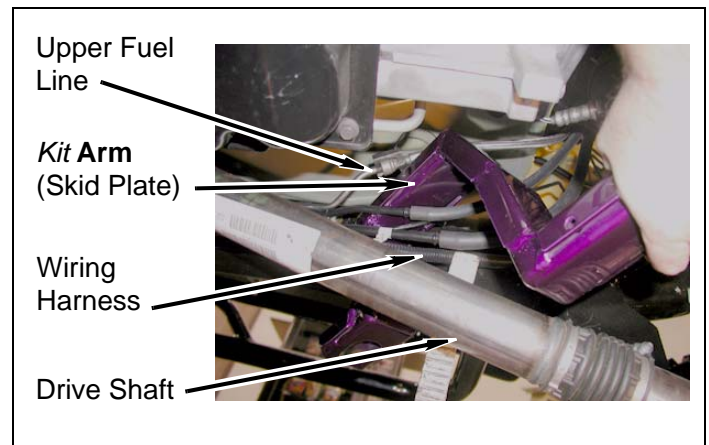
6. Remove upper fuel line from fuel line clip along frame rail.



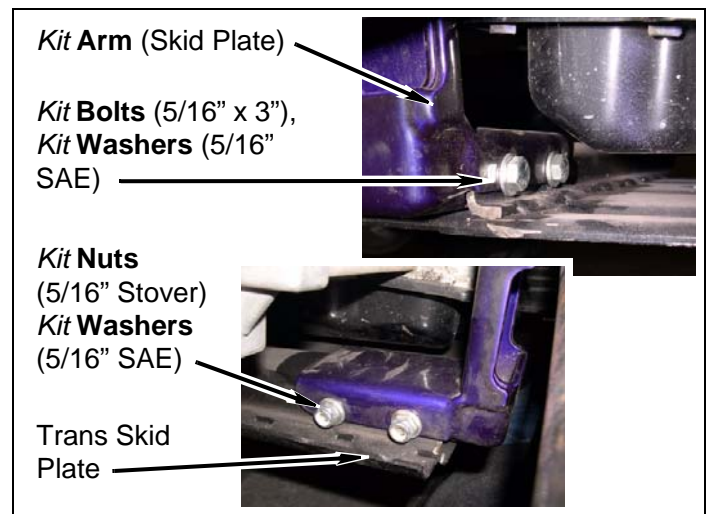
7. Remove fuel line clip from frame rail.

8. At fuel line clip location, drill out hole with 5/16" drill bit.

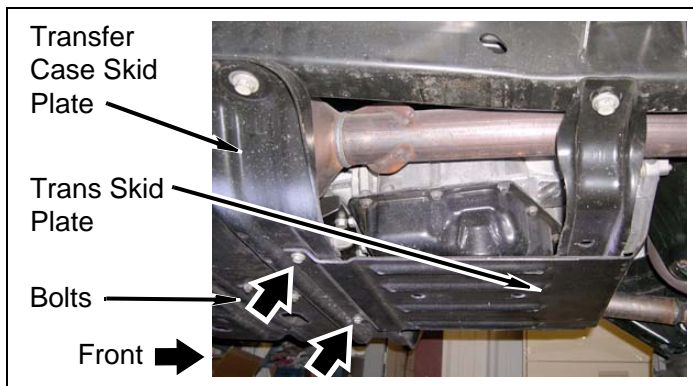
9. Install *kit arm* (skid plate) over front drive shaft, fuel lines and wiring harness. Ensure upper fuel line is positioned above *kit arm* (skid plate).



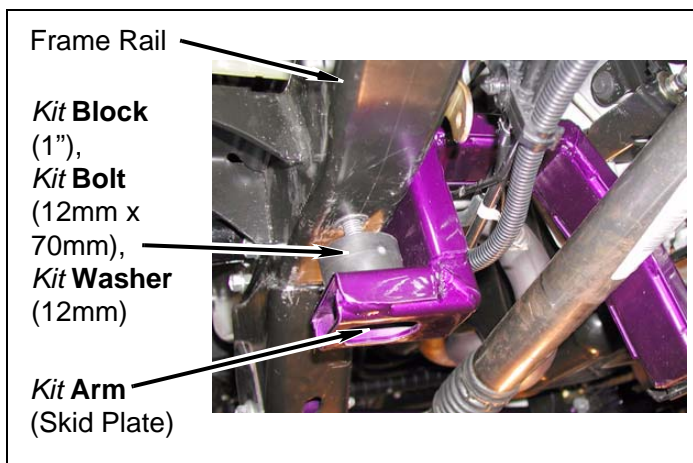
10. Install *kit arm* (skid plate) onto skid plate with two *kit bolts* (5/16" x 3"), four *kit washers* (5/16" SAE) and two *kit nuts* (5/16" Stover). DO NOT TIGHTEN.



11. Install automatic transmission skid plate on transfer case skid plate with two bolts.

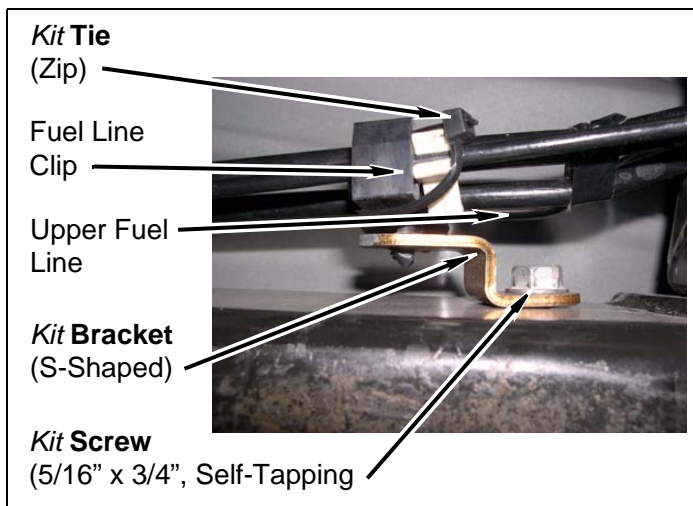


12. Install automatic transmission skid plate onto frame rails with two **kit blocks** (1"), two **kit bolts** (12mm x 70mm) and two **kit washers** (12mm). TIGHTEN bolts to 55 ft. lbs.



13. TIGHTEN two **kit bolts** (5/16" x 3").

14. Install **kit bracket** (S-shaped) onto frame rail with **kit screw** (5/16" x 3/4", self-tapping).



15. Install fuel line clip onto **kit bracket** (S-shaped).

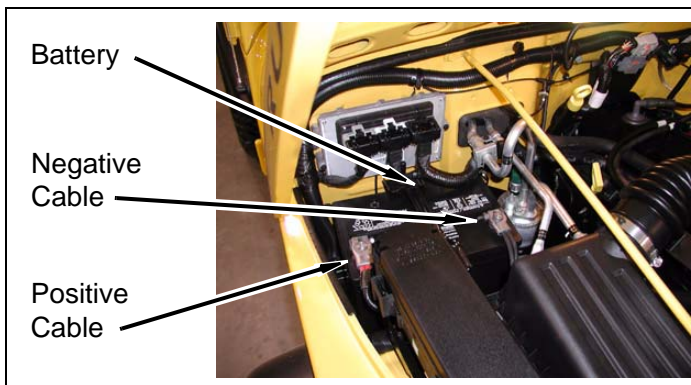
16. Secure upper fuel line onto **kit bracket** (S-shaped) with **kit tie** (zip).

17. Using hydraulic jack, raise front of vehicle and remove jack stands. Lower front of vehicle onto ground.

## After Completing Installation

### Engine Compartment

1. Connect both battery cables. Connect positive cable first, then negative cable.



### Miscellaneous

1. Check all fasteners to ensure they are tight.
2. Ensure all wires, hoses, cables, etc. are properly connected and there is ample slack.

**⚠WARNING**

Retorque all fasteners after 500 miles and after off road use. All suspension lift components should be visually inspected and fasteners retorqued during routine vehicle servicing.

**NOTE**

All warranty information, instruction sheets, and other documents regarding the installation of this product must be retained by the vehicle owner. Information contained in the instructions and on the warranty card will be required for any warranty claims. The vehicle owner needs to understand the modifications made to the vehicle and how they affect vehicle handling and performance. Failure to provide the customer with this information can result in damage to the vehicle and severe personal injury.

# Kit Parts List

## Qty. Description

1	<b>Arm</b> (skid plate)
2	<b>Block</b> (1" x 2")
2	<b>Bolt</b> (12mm x 70mm)
2	<b>Bolt</b> (5/16" x 3")
1	<b>Bracket</b> (S-shaped)
1	<b>Instruction</b> sheet
1	<b>Loctite®</b> (6mL bottle)
2	<b>Nut</b> (5/16" Stover)
1	<b>Screw</b> (5/16" x 3/4" self-tapping)
2	<b>Washer</b> (12mm)
4	<b>Washer</b> (5/16" SAE)

### NOTE

Depending on the vehicle configuration (automatic or manual transmission, 2WD or 4WD, cab length, bed length, etc.), some parts may not be used.