

3651 N Highway 89 • Chino Valley, AZ 86323 (928) 636-7080 • www.p-a-g.net

# JEEP CHEROKEE, WAGONEER (XJ) HD FRONT BUMPER INSTALLATION INSTRUCTIONS 1984-2001 KIT# 83240 1984-2001 W/ HOOP KIT# 83241

#### **⚠ 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.

#### **A** 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**

Many states and municipalities have laws restricting bumper heights and vehicle lifts. Consult state and local laws to determine if the changes you intend to make to the vehicle comply with the law.

#### **△ 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.

#### 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.

# **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
- 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) 636-7080.

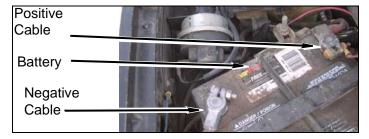
#### NOTE

OR-Fab HD front winch bumper will *ONLY* mount 8000lb (WARN M8000). "low profile" remote winches. 9500lb. winches will fit with minor modifications to the lower core support depending on size.

- 4. Special tools needed:
  - a. Die grinder or similar tool capable of cutting metal and plastic.
  - b. 7/32" drill bit

## **Engine Compartment**

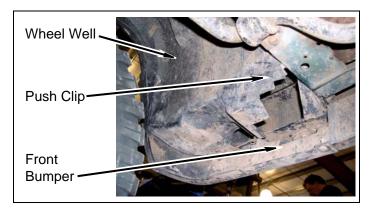
1. Disconnect both battery cables. Disconnect negative cable first, then positive cable.



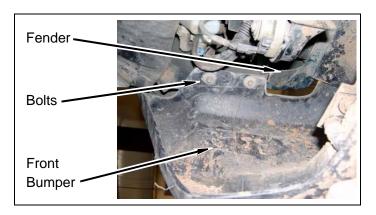
# Prepare to Install Kit

## **Front of Vehicle**

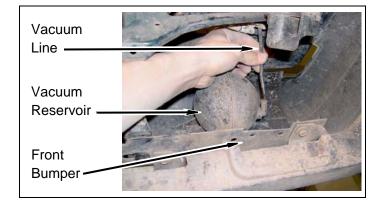
- 1. Bumper
  - a. **1997-2001 Models:** Remove push clips and pull back wheel well liner from front bumper.



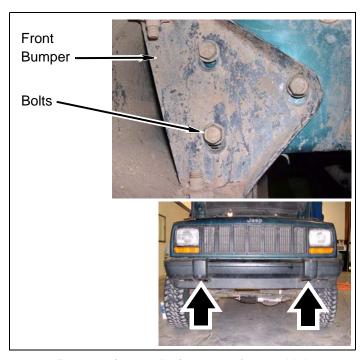
b. **1997-2001 Models:** Remove four bolts from front bumper and two fenders.



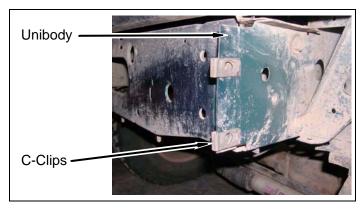
Disconnect vacuum line from vacuum reservoir.



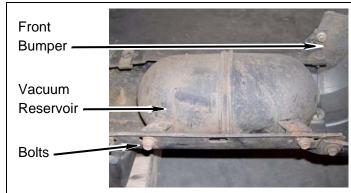
d. Remove six bolts and bumper from vehicle.



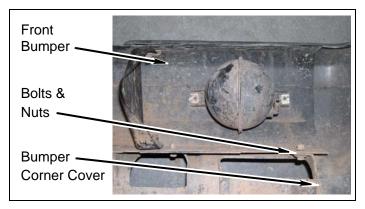
e. Remove four c-clip fasteners from vehicle.



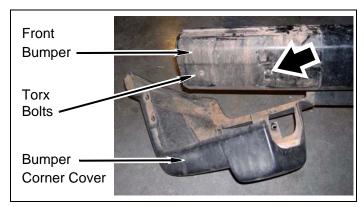
 f. 1984-1996 Models: Remove two bolts and vacuum reservoir from bumper.



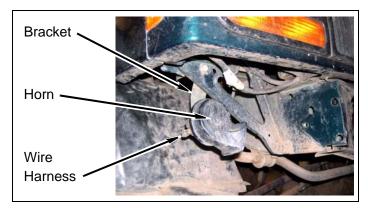
g. **1997-2001 Models:** Remove two bolts, two nuts, and bumper corner cover from bumper.



 h. 1997-2001 Models: Remove two torx bolts and vacuum reservoir from bumper.

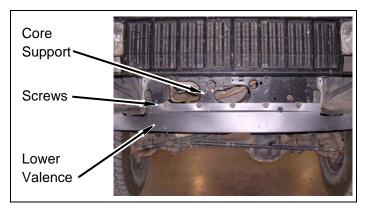


- 2. Horns
  - a. Disconnect two wire harnesses from two horns.

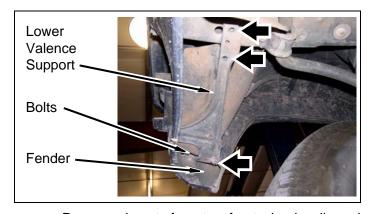


b. Remove two bolts, two brackets, and two horns from vehicle.

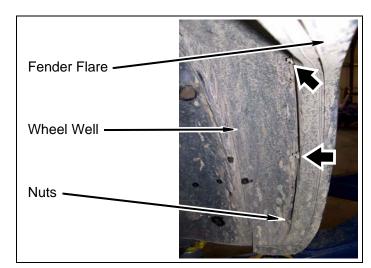
- 3. 1984-1996 Models: Lower valence & fender flares
  - a. Remove five screws from lower valence and core support.



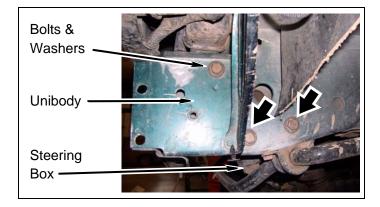
b. Remove eight bolts and two lower valence supports from two fenders and core support.



c. Remove six nuts from two front wheel wells and pull two fender flares away from front of fenders.



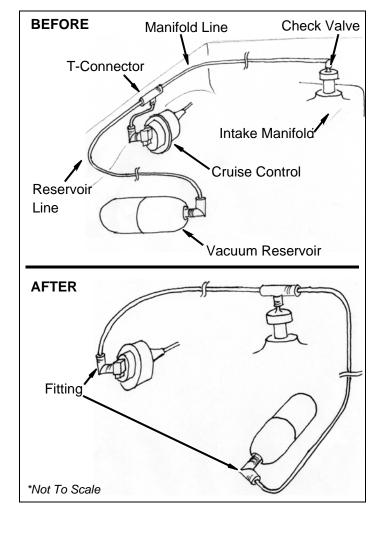
4. Remove three steering box bolts and washers from driver side unibody and steering box.



# **Install Kit**

# **Engine Compartment**

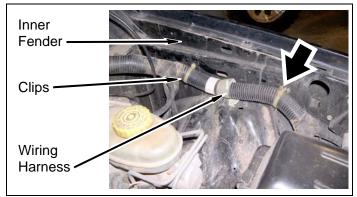
1. Cruise Control Models: Vacuum lines



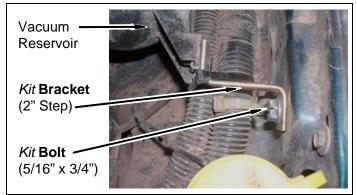
#### **WARNING**

Vacuum fittings and lines may have become brittle over time. Use care when handling fittings and vacuum lines. If necessary, use lengths of *kit* **line** (vacuum) in place of cracked or damaged vacuum line.

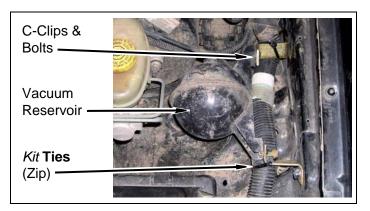
- a. Remove line from cruise control fitting and t-connector.
- b. Remove T-connector from reservoir line and manifold line.
- c. Trim manifold line, if necessary, and install onto cruise control fitting.
- d. Remove wiring harness and clips from driver side inner fender.



e. Install two *kit* **bracket** (2" step) onto driver side inner fender with two *kit* **bolts** (5/16" x 3/4" self-tapping). DO NOT TIGHTEN.



 f. Install vacuum reservoir onto two kit brackets (2" step) with two factory c-clips and bolts. DO NOT TIGHTEN.



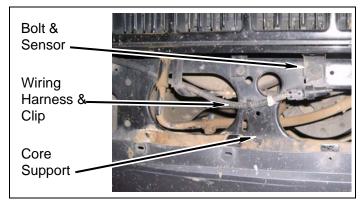
- g. Install wiring harness onto two *kit* **brackets** (2" step) with two *kit* **ties** (zip).
- h. TIGHTEN two *kit* **bolts** (5/16" x 3/4") and two factory bolts.
- i. Remove manifold line and fitting from check valve and intake manifold.
- Install T-connector onto check valve.
- k. Install manifold line into T-connector.
- Install vacuum reservoir line into T-connector and route vacuum reservoir line to vacuum reservoir.
- m. Trim vacuum reservoir line, if necessary. Install vacuum reservoir line onto vacuum reservoir with rubber fitting.

#### 2. Non-Cruise Control Models: Vacuum lines

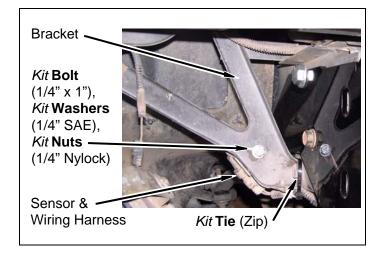
a. Repeat above steps, ignoring cruise control procedures.

#### Front of Vehicle

- 1. Air temp sensor
  - a. Remove bolt and sensor from core support. Install bolt back into core support.



- b. Disconnect wiring harness from sensor.
- c. Remove sensor wiring harness and clip from core support.
- d. Route wiring harness connector next to passenger side horn.
- e. Install sensor onto passenger side bracket with *kit* **bolt** (1/4" x 1"), two *kit* **washers** (1/4" SAE), and *kit* **nut** (1/4" Nylock).



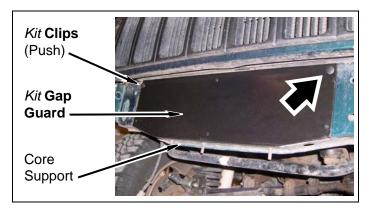
#### NOTE

Drill 1/4" hole into bracket, if necessary.

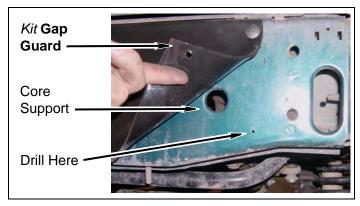
- f. Connect wiring harness onto sensor.
- g. Install wiring harness onto bracket with *kit* tie (zip).

#### 2. Gap guard

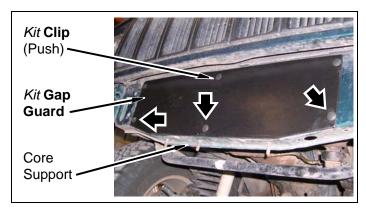
a. Install kit gap guard, dull side out, onto core support with two kit clips (push) through top driver and passenger holes of kit gap guard and corresponding holes in core support.



b. Drill four 7/32" holes into core support corresponding to *kit* **gap guard** holes.

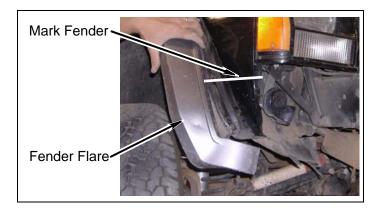


 c. Install 4 kit clips (push) into previously drilled holes.



1984-1996 Models: Driver fenders

 a. Position kit corner (driver) onto kit bumper (center) and using kit corner (driver) as a guide, mark fender approximately 1" below side marker.



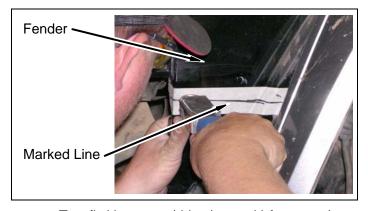
#### **NOTE**

For proper fender flare retention, attempt to cut fender flare and bracket BELOW fender flare bracket stud.

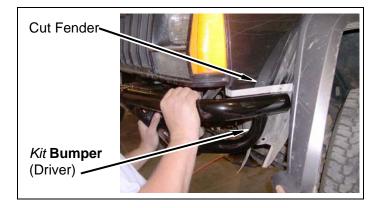
#### **NOTE**

Further trimming of the fender and fender flare may be required for desired fitment.

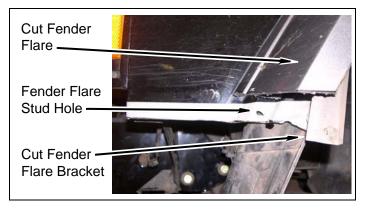
b. Cut fender along marked line.



c. Test fit *kit* **corner** (driver) onto *kit* **bumper** (center).



d. Mark and cut fender flare and fender flare bracket along marked line for desired fit. Remove lower valence along with cut portions of fender flares.



- e. Install fender flare and fender flare bracket onto fender with nut, if possible.
- f. Repeat above steps for *kit* **corner** (passenger)

# Winch

1. Install winch

## NOTE

OR-Fab HD front winch bumper will **ONLY** mount 8000lb. "low profile" remote winches. 9500lb. winches will fit with minor modifications to the lower core support.

Winch supplied mounting bolts may not be sufficient in length.

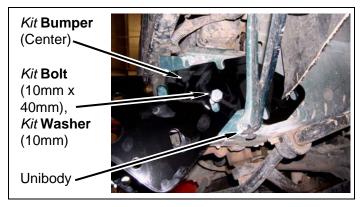
a. Mount winch prior to installing bumper onto XJ.

**Note**: Besure to mount winch with line feed on top

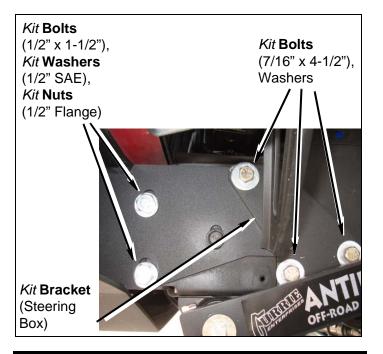


# **Bumper**

- 1. Installing bumper
  - a. Install kit bumper onto unibody with two kit bolts (10mm x 40mm), and two kit washers (10mm). DO NOT TIGHTEN.



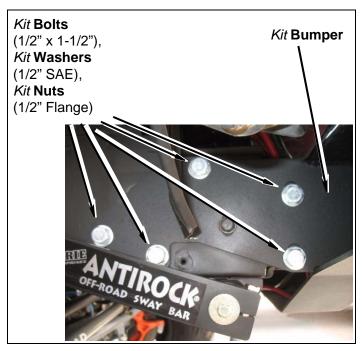
- b. Apply a small amount of kit Loctite® (6ml bottle) onto threads of three kit bolts (7/16" x 4-1/2") and install kit bracket (steering box), kit bumper, steering box, and steering box spacer onto unibody with three kit bolts (7/16" x 4-1/2") and three washers. DO NOT TIGHTEN.
- c. Install two *kit* **bolts** (1/2" x 1-1/2"), two *kit* **washers** (1/2" SAE), and two *kit* **nuts** (1/2" flange) onto *kit* **bumper** and drivers side unibody.



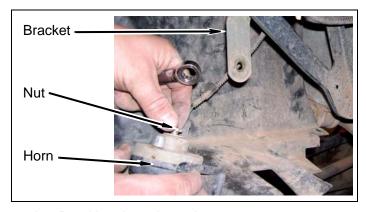
#### NOTE

A spacer exists between unibody and steering box. Ensure *kit* **bolts** (7/16" x 4-1/2") are installed through steering box spacer.

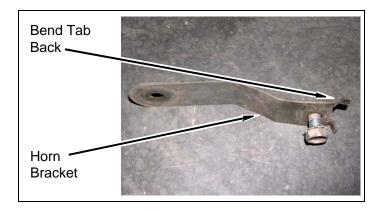
d. Install five kit bolts (1/2" x 1-1/2"), five kit washers (1/2" SAE), and five kit nuts (1/2" flange) onto kit bumper and passenger side unibody. Magnet may be used, through the front access hole, to feed kit flange nuts (1/2") into unibody. DO NOT TIGHTEN.



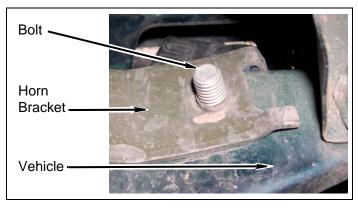
- 2. Driver side horn
  - a. Remove nut and bracket from horn.



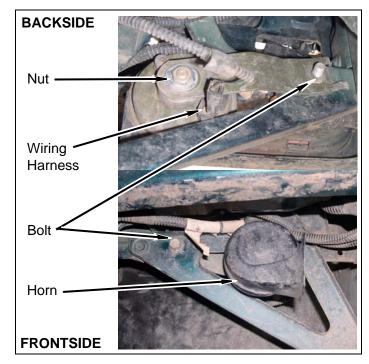
b. Bend bracket tab as shown.



 Install bracket onto vehicle with bolt. DO NOT TIGHTEN. Ensure bracket is positioned as shown.



d. Install horn onto bracket with nut. TIGHTEN bolt and bracket onto vehicle.

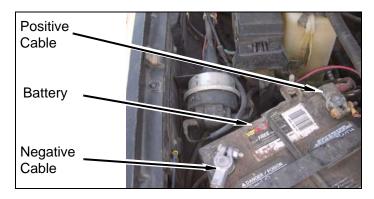


- e. Install wiring harness onto horn.
- f. Repeat above steps for passenger side horn.

# **After Completing Installation**

## **Engine Compartment**

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



#### **Miscellaneous**

- 1. Check all fasteners to ensure they are tight.
- Ensure all wires, hoses, cables, etc. are properly connected and there is ample slack.
- 3. Check vacuum system for leaks.

# **Dynamic Vehicle Check**

 Check steering and suspension in all positions to ensure that there is no bind and adequate clearance between all moving, fixed, and heated members. Check tire-to-bumper clearance and ensure no contact in any position. Check battery connections and electrical component operations. Test-drive vehicle. Check cruise control, if equipped, and all vacuum controlled vehicle systems. If vacuum leaks are found, correct immediately.

## **NOTE**

All warranty information, instruction sheets, and other documents regarding the installation of this product must be retained by the <u>vehicle owner</u>. 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.

#### **ACAUTION**

Performance Automotive Group does not recommend any particular wheel and tire combinations for use with its bumpers and cannot assume responsibility for the customer's choice of wheels and tires.





# **Kit Parts List**

# Qty. Description

#### Kit 83240 & 83241

- 1 **Bracket** (Steering Box)
- 1 **Bumper** (Main)
- 1 Gap guard
- 1 **Line** (Vacuum)
- 1 ZH83240 (Hardware Bag Kit)
- 2 Bracket (2" step)
- 2 **Bolt** (10mm x 40mm)
- 1 **Bolt** (1/4" x 1")
- 2 **Bolt** (5/16" x 3/4" self-tapping)
- 3 **Bolt** (7/16" x 4-1/2")
- 7 **Bolt** (1/2" x 1-1/2")
- 6 Clip (push)
- 1 **Loctite**® (6ml bottle)
- 1 **Nut** (1/4" Nylock)
- 7 **Nut** (1/2" flange)
- 4 **Tie** (zip)
- 2 Washer (10mm)
- 2 **Washer** (1/4" SAE)
- 3 **Washer** (7/16" USS)
- 7 **Washer** (1/2" SAE)

## NOTE

Depending on the vehicle configuration some parts may not be used.