

## **STEP 1 – PRIOR TO INSTALLATION**

- A) Bushwacker only approves installing the flares according to these written instructions with the hardware provided. WARNING: Failure to install according to these instructions will invalidate the warranty. This includes, but is not limited to using alternative installation methods, hardware, or materials. DO NOT USE: Loctite, SuperGlue, or similar products on the hardware or the flares.
- **B)** Fit: Verify the fit of the flares to vehicle. (Some filing, sanding, or cutting may be necessary to ensure proper fit).
- **C) Painting:** (Optional) if paint is desired it must be done prior to installing flares on vehicle. Clean outer surface with a good grade degreaser. DO NOT USE LACQUER THINNER OR ENAMEL REDUCER AS A DEGREASER. Wipe outer surface thoroughly with a tack rag prior to paint. Application of plastic adhesion promoter for ABS plastic as per your paint system manufacturer's recommendations is required. Paint flares using a high quality enamel, or polyurethane automotive paint. If painting edge trim (not recommended), use a flex additive.
- **D) Performance:** Using larger Tires may increase the area required to turn the vehicle. Some Tire/Rim combinations may require lowering bump stops and or installing steering stops to prevent tire from contacting flare.
- E) Exhaust System: Modifications may be necessary to maintain a minimum 4" clearance between flares and exhaust pipes. (Exhaust gases should not vent directly onto flares)
- **F) Metal Protection:** All exposed fasteners and bare metal should be treated with rust resistant paint BEFORE installing flares. Spray inner fender wells with undercoating AFTER flare attachments have been completed.
- **G)Decals:** Flares may interfere with existing decals on vehicle. If you wish, remove decals prior to installation of flares.

## Ford Cut-Out<sup>™</sup> Fender Flares Front Pair

Rear Part #21013-11 Rev-9 11/5/2013 For complete fitment info visit : www.bushwacker.com

## TOOLS FOR EASY INSTALLATION:

- 3/8" Drill
- 3/32" Drill Bit
- 5/16" Drill Bit
- Pop Rivet Gun
- Sheet metal cutting Tool
- Cresent Wrench
- Grease Pencil or Marking Pen
- Jack & Jack Stands (2)
- Right and Left Hand Aviation Tin Snips
- C-Clamps (2) or Vise Grips (2)
- Tube of Silicone

## LIMITED LIFETIME WARRANTY AGAINST ANY MANUFACTURING DEFECTS

• To claim a warranty, you must provide Proof of Purchase.

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## **Included in Hardware Kit:**

2.



1.

SW1-0066, #8 x 5/8" Phillips PH Drill Screw, 20 pcs

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3.

RV1-S001, 1/8" Dome Head Steel Pop Rivet, Ba 52 pcs



WA1-0001, 1/8" Steel Backup Washer, 52 pcs



SC1-0001, Black FF Snap Cap, 16 pcs



5.

SC1-0003, 3/32" FF Plastic Cup Washer,

16 pcs



SW1-0001.

#10 x 1-1/2" PH

Slotted Screw,

4 pcs



7.

GP1-0015, Gimp

1 pc

1

# **Flare Installation Procedures:**

### STEP 2 - Prepping Work Area (Front):

- A) Raise, support and remove tire using jack and jack stands.
- **B)** Remove factory wheel well trim and molding, if vehilce is so equipped.
- **C)** From inside of engine compartment, remove wire clips, coil, vacuum canister and air cleaner plastic from wheel well liner.
- **D)** Remove screws that attach wheel well liner to fender lip, inner sheet metal and front sheet metal flange.
- E) Remove entire wheel well liner.

## STEP 3 - Cutting Sheet Metal (Front):

- A) Mark a point 2" out from existing wheel well opening (both ends). See Illustration #1.
- **B)** Place appropriate flare on fender and line up with marks made, making sure that ends are flush against front and rear of wheel wells.
- **C)** Mark a line around the fender using the inner edge of the flare as a guide.
- **D)** Remove flare and mark a line 1/4" above line drawn in Step 3B (away from wheel well). This will be the cut line.
- E) Cut along line drawn in Step 3D and save sheet metal flange.

### STEP 4 - Reattach Flange (Front):

- A) Trim flange to 1-1/8" along the outside edge. See illustration #2.
- **B)** Beginning at top center, mark flange at points in 3" increments around face of flange. Cut "V" notches at points marked (on outside face only).
- C) Cut 3" off rear end of flange.
- D) Bend flange at cut marks to fit contour of fender cut-out.
- E) Reattach flange inside cut-out area with cut-out edge overlapping flange return lip by 1/8". Flange is connected using nine supplied Steel Rivets (RV1-S001) with supplied washers (WA1-0001). See Illustration #3 and #4

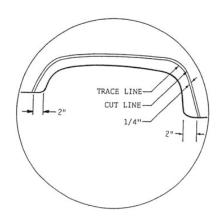


Illustration #1

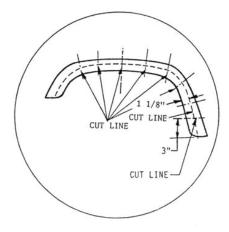
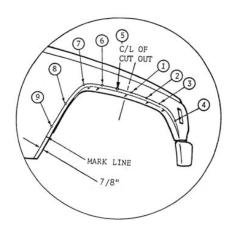


Illustration #2



**Illustration #3** 

2

#### STEP 5 - Trim and Attach Wheel Well Liner (Front):

- A) Mark a line starting at the rear flat of the wheel well liner progressing towards the front (at a distance 3" from the outside edge) to a point 4" from the front. Continue this line along a 2" radius 90 degrees to the liner edge. See Illustrations #5 and #6.
- B) Overlap (minimum 1/2") and clamp the supplied filler strip (GP1-0015) along the outside edge of the trimmed wheel well liner. The rear edge of the filler strip should begin at the lower rear of wheel well liner using the flat as a stop. The liner edge should be close to the rear wheel well liner screw boss and extend 1" beyond the front of the wheel well liner. See Illustration #7

#### C)

Use six provided Steel Rivets (RV1-S001) and provided washers (WA1-0001) to attach filler strip to liner. Rivets should be inserted from inside of wheel well with washers on outside.

#### D)

Install wheel well liner with filler strip and trace intersection of liner with fender. Wheel well liner is installed using two original screws at top center and to supplied screws (SW1-0015) through fill strip into flange at both front and rear. filler strip should protrude beyond wheel well opening. See **Illustration #8.** 

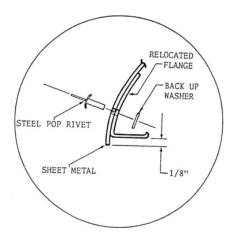
#### E)

Remove wheel well liner with filler strip and cut filler strip1/8" inside of tape line.

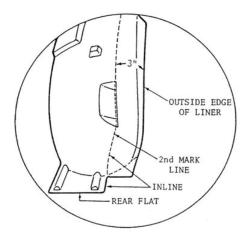
#### F)

Reinstall wheel well iner and trimmed filler strip into fender opening using oreginal screws and supplied Steel Rivets. Be sure filler strip is behind and flush with sheet metal. Attache diller strip to flange using eleven equally spaced Steel rivets beginning at center of wheel well opening and alternating rivets left and right until complete. Holes used for sheet metal screws can be used for Steel Rivet attachement.

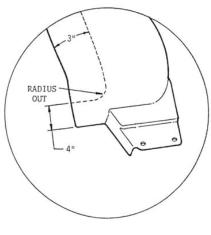
Note: Should it be necessary to gain additional tire clearance for full wheel turns the lower rear of the wheel well liner can be connected to the frame rail using scrap filler material. Use caution when drilling frame rail as brake, gas, or wiring lines may be inside.



**Illustration #4** 



**Illustration #5** 

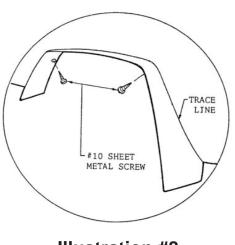


**Illustration #6** 

3

#### STEP 6 - Flare Attachment (Front):

- A) Fit flare tightly into fender well opening, making sure flare contour matches sheet metal contour. Use pre-drilled holes in flare to serve as drill guides to drill 3/32" holes in fender sheet metal. Again the wrapped tape depth stop will prevent damage to flare by drill chuck when drilling through sheet metal.
- B) Attach flare to fender side using Drill Screws (SW1-0066) in the sequence shown in Illustration #9. Screws with cup washers (SC1-0003) are only required at pocket locations. Press Black Snap Caps (SC1-0001) onto outer flare plastic cup washers. See Illustration #10.
- **C)** Trim body side moldings (if so equipped) to fit flush with flare and reattach.
- **D)** Reinstall all wire clips, coil or vacuum canister on wheel well liner.



**Illustration #8** 

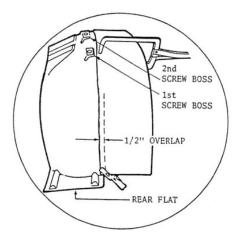
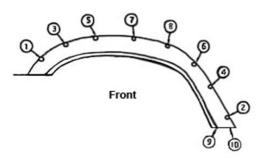


Illustration #7



**Illustration #9** 

