

Ford Ranger / Bronco II

Set Part # 21013

Rev B 6-04



Step 1: Prior to Installation:

- A) **Fit:** Verify the fit of the flares to vehicle. (Some filing, sanding, or cutting may be necessary to ensure proper fit).
- B) **Painting:** (Optional) if paint is desired it must be done prior to installing flares on the 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.
Paint flares using a high quality enamel, or polyurethane automotive paint. (Application of a primer coat is optional)
If painting edge trim (not recommended), use a flex additive.
- C) **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.
- D) **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)
- E) **Metal Protection:** All exposed fasteners and bare metal should be treated with red oxide primer BEFORE installing flares.

TOOLS FOR EASY INSTALLATION

- 3/8" Drill
- 3/16" Drill Bit
- 5/16" Drill Bit
- Pop Rivet Gun
- Sheet metal Cutting Tool (Hacksaw, Sabersaw, Air Chisel, Metal Nibbler, or Air Saw)
- Crescent Wrench
- Grease Pencil or Marking Pen
- Jack and Jack Stands (2)
- Right and Left Hand Aviation Tin Snips
- C-Clamps (2) or Vise Grips (2)
- Tube of Silicone

FLARE INSTALLATION PROCEDURES

Step 2: Preparing the Work Area (Front)

- A) Raise, Support, and remove tire using jack and jack stand.
- B) Remove factory wheel well trim and molding, if vehicle 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.

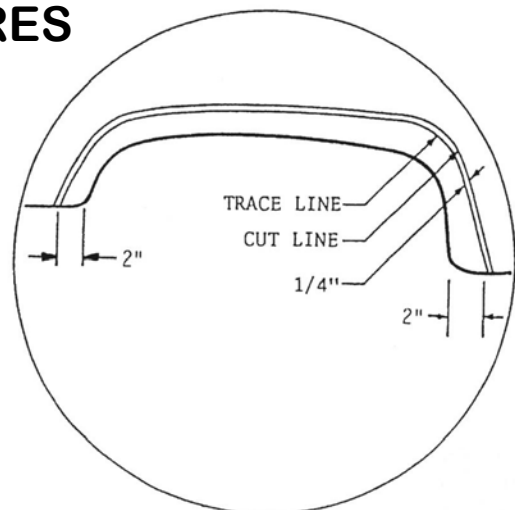


Illustration #1

Step 3: Cutting Sheet Metal (Front) (See Illustration #1)

- 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. Make sure flare 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 the wheel well). This will be the cut line.
- E) Cut along line drawn in Step 3D and save sheet metal flange.

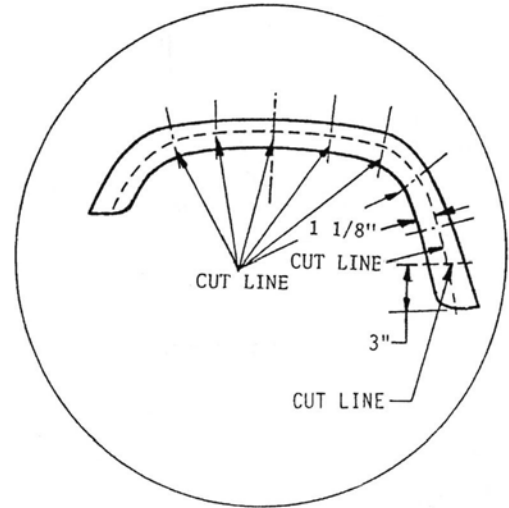


Illustration #2

Step 4: Reattach Flange (Front) (See Illustrations #2, #3, and #4)

- 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 steel rivets with back-up washers. **See Illustrations #3 and #4.**

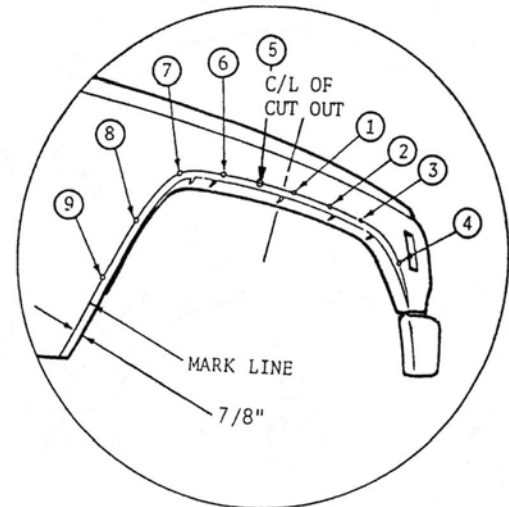


Illustration #3

Step 5: Trim and Attach Wheel Well Liner (Front) (See Illustrations #5 through #8)

- 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 filler strip (provided) 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.** Use six steel rivets and back-up washers to attach filler strip to liner. Rivets should be inserted from inside of wheel well with washers on outside.
- C) 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

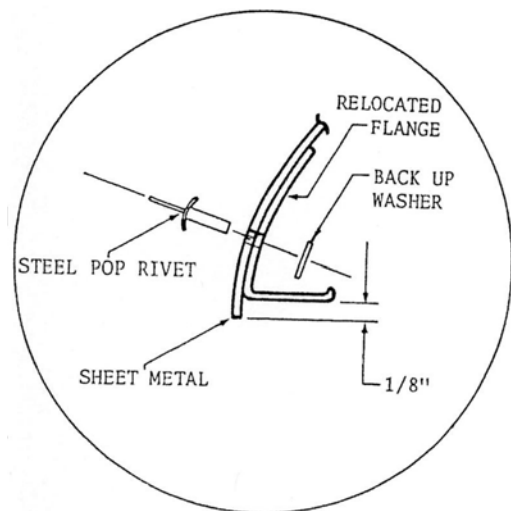


Illustration #4

two metal screws (supplied) through filler strip into flange at both front and rear. Filler strip should protrude beyond wheel well opening. **See Illustration #8.**

- D) Remove wheel well liner with filler strip and cut filler strip 1/8" inside of tape line.
- E) Reinstall wheel well liner and trimmed filler strip into fender opening using original screws and supplied rivets. Be sure filler strip is behind and flush with sheet metal. Attach filler strip to flange using eleven equally spaced pop rivets beginning at center of wheel well opening and alternating rivets left and right until completed. Holes used for sheet metal screws can be used for pop rivet attachment.

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.

Step 6: Flare Attachment (Front) (See Illustrations #9, #10, and #11)

- A) With flare off the truck: Pre-drill all of the pop rivet locating indents with either a 5/32" or 3/16" drill bit. Be careful to avoid damaging the flare with drill motor chuck when drilling. A tape wrapped depth stop on drill bit will serve as a safety stop. **See Illustration #9.**
- B) 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 9/64" holes in fender sheet metal. Again the wrapped tape depth stop will prevent damage to flare by drill chuck when drilling through sheet metal.
- C) Pop rivet flare to fender side using aluminum rivets in the sequence shown in **Illustration #10**. Rivets with "cap washers" are only required at pocket locations. Press trim caps onto outer flare rivet washers.
- D) Trim body side molding (if so equipped) to fit flush with flare and reattach.
- E) Reinstall all wire clips, coil, or vacuum canister on wheel well liner.

Step 7: Disassemble (Rear)

- A) Raise, support and remove tire using jack and jack stands.
- B) Remove lower front and rear fender support bracket fasteners.
- C) Remove both wheel well liners.

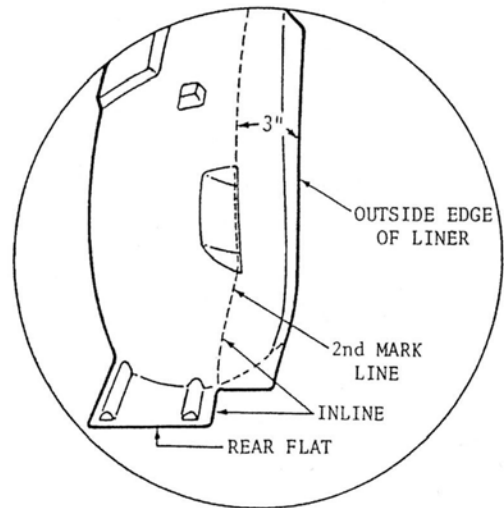


Illustration #5

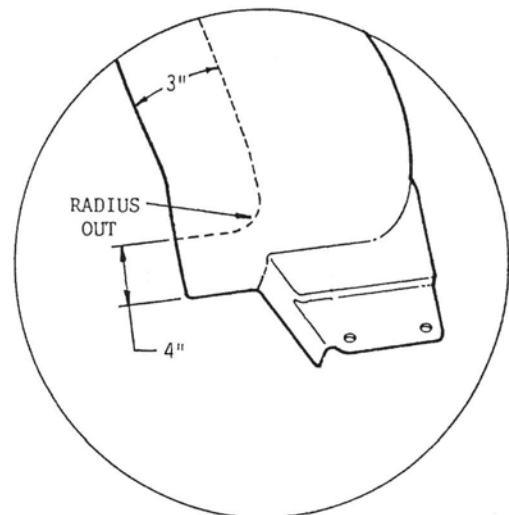


Illustration #6

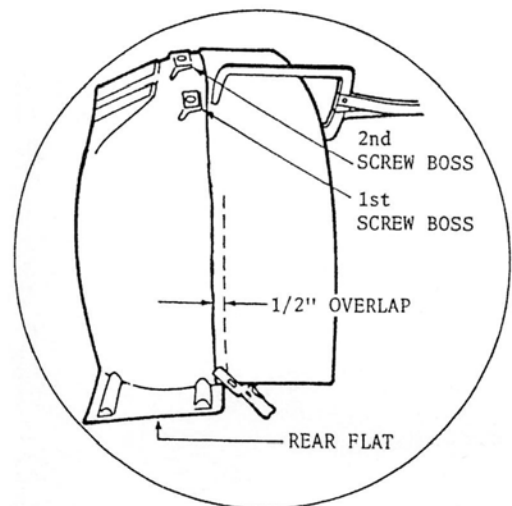


Illustration #7

Step 8: Cutting Sheet Metal (Rear) (See Illustration #1)

- A) Mark a point on the lower edge of the fender 1-1/2" in front and behind the wheel well edge. **See Illustration #1.**
- B) Place appropriate flare on fender and line up inside edge of flare with marks. Make sure flare ends are properly positioned.
- C) Mark a line on around the fender using the inner edge of the flare as a guide.
- D) Remove flare and mark a cut line 1/4" further out from the line drawn in Step 8C.

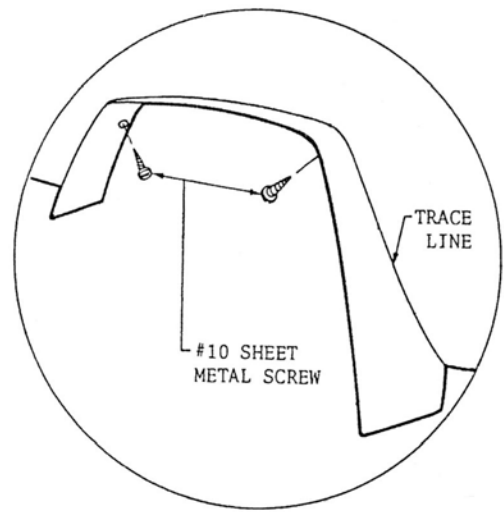


Illustration #8

Step 9: Reattach Inner and Outer Body Panels (Rear) (See Illustrations #12 and #13)

Cutting away the rear wheel rim will separate inner and outer fender panels. The methods used to reattach these panels are different for the Bronco II and the Ranger.

Ranger (21008)

- A) Inner and outer body panels will be separated at the top. Verify that the inner panel has been cut flush with outer panel.
- B) Drill from inside of wheel well through the triangular shaped flat area on each end of inner panel.
- C) Attach inner to outer panel using steel rivets and back-up washers. **See Illustration #12.**

Bronco II (21010)

- D) Inner and outer body panels will be separated at the top and front.
- E) Drill inner and outer panels at two locations along the leading edge of the cut line.
- F) Fill the area between inner and outer panels with silicone sealant.
- G) Secure using steel rivets with backup washers. **See Illustration #13.**

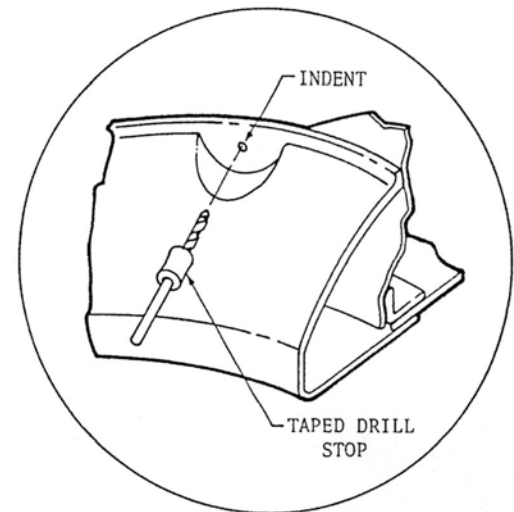


Illustration #9

Step 10: Flare Attachment (Rear 21010)

- A) Check fit of flare in wheel well opening and trim if necessary.
- B) Bend front and rear fender supports to new locations inside fender cut line and reattach using original fasteners. Check to be sure liner can be positioned behind flare lip.
- C) Follow Steps 6A through 6D for flare attachment procedure.
- D) Trim body side moldings (if so equipped) to fit flush with flare and reattach.

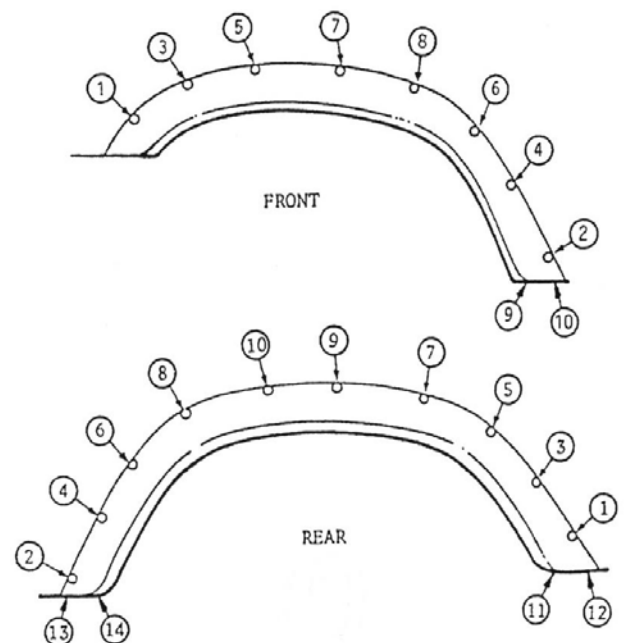


Illustration #10

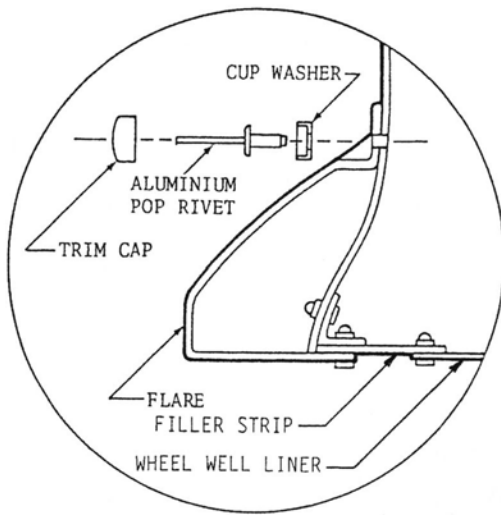


Illustration #11

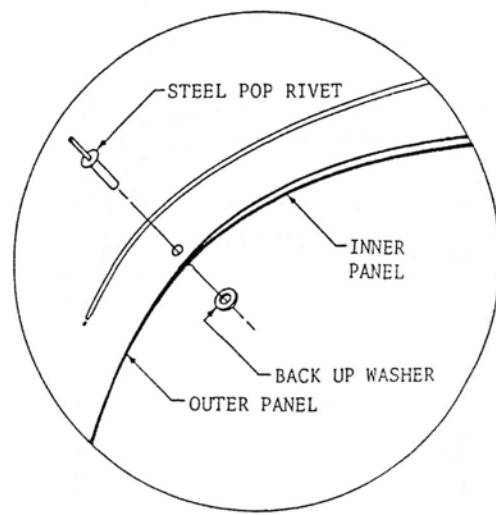


Illustration #12

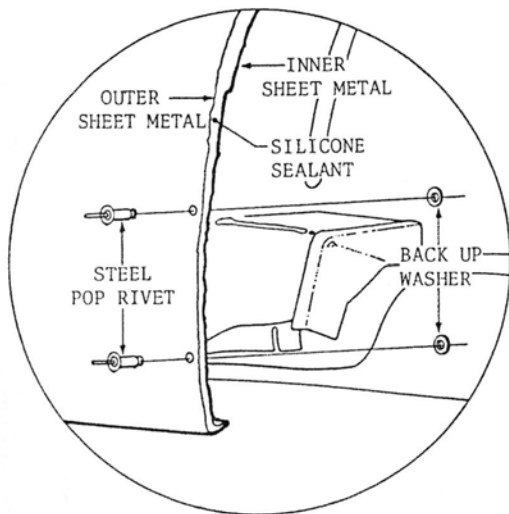


Illustration #13



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ATTENTION:

To help benefit the consumer, Bushwacker fender flares are now supplied with drill tip screws in place of aluminum rivets. If you receive the fastener kit including drill tip screws, use the instructions provided with the following exceptions:

Fender flare attachment

1. Hold flare in place on fender.
2. Applying moderate pressure to outside surface of flare, fasten with kit supplied drill tip screws using indents in flare as a guide. Drill through the plastic into the sheet metal. Take care not to strip out the sheet metal.