



BUSHWACKER®

IN1-20021

SPORT TRUCK EQUIPMENT

CUT OUT FLARES

INSTALLATION INSTRUCTIONS FOR

20021, 20022**F150-F250-F350 P.U. & Bronco**

Tools Required for Installation:

- | | |
|--------------------------------|-------------------------------------|
| (A) Pop Rivet Gun | (K) Drill Motor |
| (B) Reciprocating Saw | (L) Tape Measure |
| (C) Jack | (M) China Marker or Erasable Marker |
| (D) Jack Stands | (N) Masking Tape |
| (E) Tin Snips | (O) 180 Grit Wet/Dry Sandpaper |
| (F) Rustoleum Red Oxide Primer | (P) C-Clamps or Spring Clamps |
| (G) Small Paint Brush | (Q) Clean Wiping Rags |
| (H) Flat File | (R) Dupont #3919S Prep-Sol Solvent |
| (I) 5/32" Drill Bit | (S) Isopropyl (Rubbing) Alcohol |
| (J) 1/64" Drill Bit | |

Note:

- 1) Adhesive Performance:
Skin Time—45 Minutes
Tack Time—100 Minutes
Thorough Cure—36 Hours
- 2) Above performance rated at 72° Fahrenheit and 50% relative humidity.
- 3) Clean up any excess adhesive immediately after application. Cured adhesive is difficult to remove without damaging the surface it is applied to.
- 4) No direct contact of exhaust gases or exhaust system on this product. A minimum of 4" clearance required. Exhaust pipe modifications may be necessary.
- 5) Sheet metal cutting required to install these flares. These modifications will affect your vehicle manufacturer's warranty. Turning radius of vehicle may be increased.
- 6) Tire & wheel size that can be accommodated without a lift kit.
WHEEL—8" or 10" wide with 3½" to 4" back spacing
TIRE—Radial type (rounded shoulder)
 - a) Stock front bumper—stock position 32" tire/8" rim
 - b) Stock front bumper—moved forward 3" -35" tire/10" rim

Step 1: Painting

- optional*
- (A) Painting your flares prior to installation is recommended. Adhesion promoting primer or flex additive to color coat is NOT necessary, but can be used if desired. Sanding is optional before painting. Clean outer surface with a quality degreaser (Dupont #3919S Prep-Sol or equivalent). DO NOT USE lacquer thinner or enamel reducer as a degreaser. Wipe outer surface thoroughly with a tack rag prior to painting. A lacquer, enamel, or urethane automotive paint can be used. The use of a primer coat is optional.

Step 2: Disassembly (Front)

- (A) Jack up vehicle and use jack stands.
- (B) Remove wheel and tire.
- (C) Remove wheel well trim, if so equipped.
- (D) Remove wheel well liner attachment screws around roll-under lip of fender. This will allow movement of liner when cutting sheet metal.

Step 3: Cutting Sheet Metal (Front)

- (A) Mark a point 2½" back from bottom of rear leg of wheel opening. Draw a line from marked point to a point tangent to wheel opening.
- (B) Mark a point 1" forward from bottom of front leg of wheel opening. Draw a line from marked point to a point tangent to wheel opening. See photo No. 1.
- (C) Cut along marked lines.
- (D) On rear leg of opening, trim lower portion of wheel well liner and pull back so liner is slightly behind cut out area. Drill and secure using stock liner screws.
- (E) On front leg of opening, trim plastic skirting to angle forward and continue arc of cut out. Cut sheet metal behind skirting to be in-line with previous cut. Trim wheel well liner so it can be pulled forward and re-attached. Liner should be in-line with sheet metal cut. See photos No. 2 and 3.
- (F) Using inside edge of bumper as a guide, mark a line down and forward to inside edge of spoiler. Mark a line from a point on the inside edge of the bumper (forward of the spoiler attachment point) back to inside edge of spoiler. Make sure cut line doesn't remove spoiler attachment fastener. Make cuts along marked lines. Depending on the wheel and tire you are using, it may be necessary to cut more of the bumper and spoiler to gain adequate clearance. See photos No. 4 and 5.

(G) Place flare into opening and check fit. Inner flange of flare should fit smoothly into cut areas without binding or bowing inward. Trim more sheet metal if required. A slight gap ($\frac{1}{8}$ "- $\frac{1}{4}$ ") between flare and cut sheet metal is acceptable. If your truck is equipped with side molding, place flare into opening and mark a line across molding where flare intersects. Remove flare. Warm molding with a heat gun or hair dryer. This will aid the following steps: Very carefully work a wide blade putty knife between molding and sheet metal. This will act as a shield to prevent cutting into paint while trimming molding. Using a utility knife with a NEW blade, cut molding on long side of marked line at a slight back angle. Place flare back into opening and check fit. See photos No. 6 and 7.

(H) Using a flat file, smooth off any sharp edges or burrs on the sheet metal and bumper cuts. Coat all raw metal edges with red oxide primer or equivalent.

At bottom rear leg of opening, measure up $3\frac{1}{2}$ " and in $\frac{3}{8}$ "; mark a point. Drill thru two thicknesses of sheet metal with a $\frac{1}{16}$ " bit. Secure with a small flange/long shank pop rivet. Cut 12" edge protector strip into 1" pieces. Slip two pieces of edge protector over cut sheet metal. This will protect inside of flare from being abraded by edge of sheet metal. See photo No. 8.

Step 4: Pre-Attachment (Front)

- (A) Place flare in opening and hold in position. Using a china marker or marker that can be erased, mark a line onto sheet metal using edge of flare as a guide. Remove flare. Mark a line $\frac{1}{4}$ " down from line previously drawn. This will be the "SAND TO" line. Apply a length of masking tape to the TOP SIDE of the "SAND TO" line. This will act as a mask to prevent sanding above adhesive area. Lightly sand a $\frac{1}{2}$ " wide band below entire taped area using 180 grit wet/dry sandpaper or a 3M brand Scotch-Brite pad. Sand just enough to break surface gloss. IT IS NOT NECESSARY TO SAND THRU TO PRIMER OR BARE METAL.
- (B) Sand top inside edge of flare (where adhesive is to be applied) with 180 grit wet/dry sandpaper or Scotch-Brite.
- (C) Pre-drill all of the pop rivet locating indentations with a $\frac{5}{32}$ " drill bit.
- (D) Clean top inside edge of flare (where adhesive is to be applied) with Dupont #3919S Prep-Sol degreaser. Dry with a CLEAN cloth before solvent evaporates. Wipe down same area with a solution of 50% water and 50% isopropyl alcohol (rubbing) and dry with a CLEAN cloth.
- (E) Remove masking tape from the side of truck. Wipe off marked lines. Wipe down sanded area using same procedure as in step 4D.

Step 5: Attachment (Front)

- (A) Place flare into opening. Make sure flare contour matches sheet metal contour. Using two pre-drilled holes in center area as a guide, drill sheet metal with a $\frac{9}{64}$ " bit (supplied). Remove flare. Apply a bead ($\frac{1}{4}$ ") of adhesive to top inside edge of flare previ-

ously sanded. Carefully place flare into opening and align to sheet metal. Using large headed pop rivet, secure two places in center area previously drilled. Make sure flare is tight against sheet metal when securing rivets. Drill and secure the remaining pre-drilled holes.

- (B) Clean up any excess adhesive that may have squeezed out around outside edge. Use masking tape to help hold flare in place while adhesive sets up. Allow adhesive to set up for two hours before moving vehicle.

Step 6: Disassembly (Rear)

- (A) Jack up vehicle and use jack stands.
- (B) Remove wheel and tire.
- (C) Remove wheel well trim, if so equipped.
- (D) Remove fender bracket fasteners at front and rear of opening. Pull wheel liner out and drape over top of the fender brackets. Secure both brackets back to sheet metal using stock fasteners. This will get liner out of the way when cutting and prevents sheet metal from flexing.

Step 7: Cutting Sheet Metal (Rear)

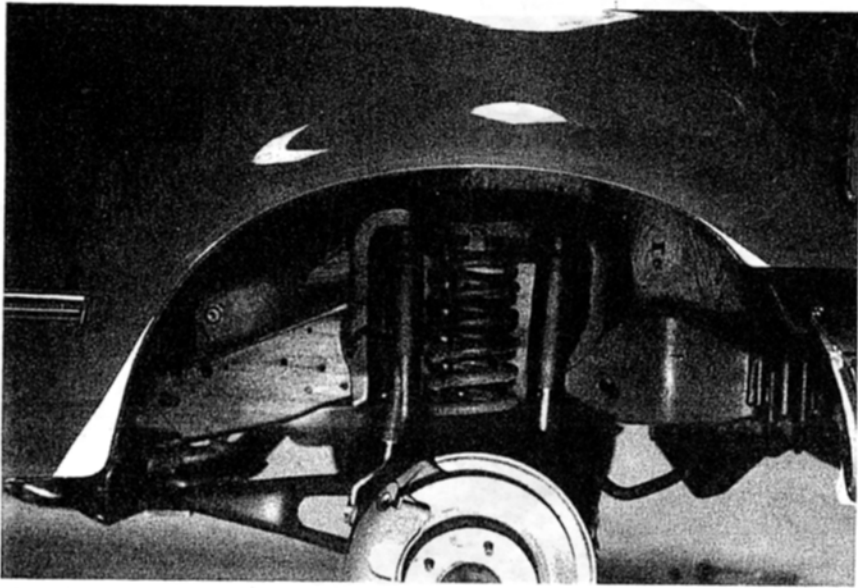
- (A) Mark a point 3" back from bottom of rear leg of wheel opening. Do the same at the bottom front leg of the wheel opening. Draw a line from the marked point to a point tangent to wheel opening. Do the same for the opposite leg. The tangent point should be in the area where two panels are spot welded together. See photo No. 9.
- (B) Cut along marked lines. Fender bracket fasteners should not be disturbed by cut.
- (C) Remove fender bracket fasteners. Place flare into opening and check fit. Inner flange of flare should fit smoothly into cut out area without binding or bowing inward. Trim more sheet metal if required. A slight gap ($\frac{1}{8}$ "- $\frac{1}{4}$ ") between flare and cut sheet metal is acceptable. NOTE: Rear outside edge of flare will go over gap at lower front corner of gas door. Check gas door clearance to flare in the open position. If necessary trim a little more sheet metal off the front leg and move flare forward just enough to clear gas door.
- (D) If your truck is equipped with side moldings, follow step 3G for trimming. Mark fender bracket hole locations onto flare and drill clearance hole for fasteners.
- (E) Use a flat file and smooth off any sharp edges or burrs on the sheet metal cuts. Coat all raw metal edges with red oxide primer or equivalent. Apply two 1" segments of edge protector to each cut leg of opening.

Step: Pre-Attachment (Rear)

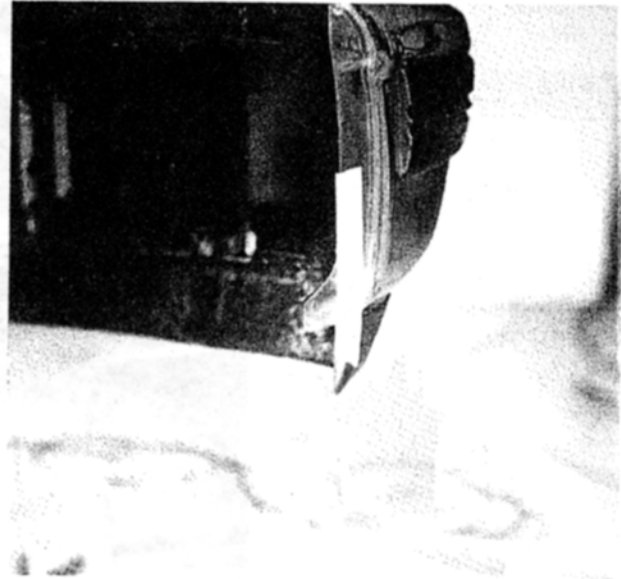
- (A) Follow procedures in step 4 for pre-attachment.

Step: Attachment (Rear)

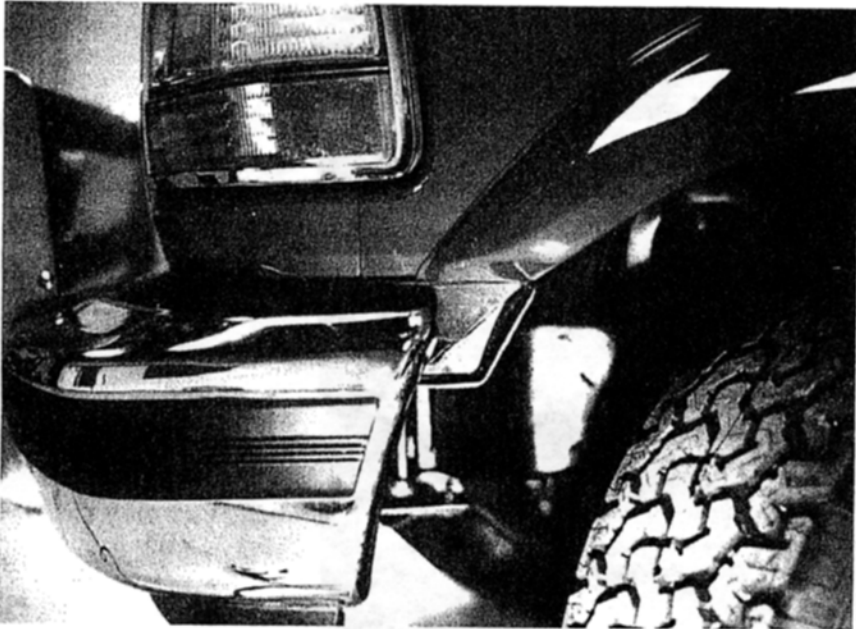
- (A) Follow procedures in step 5 for attachment.



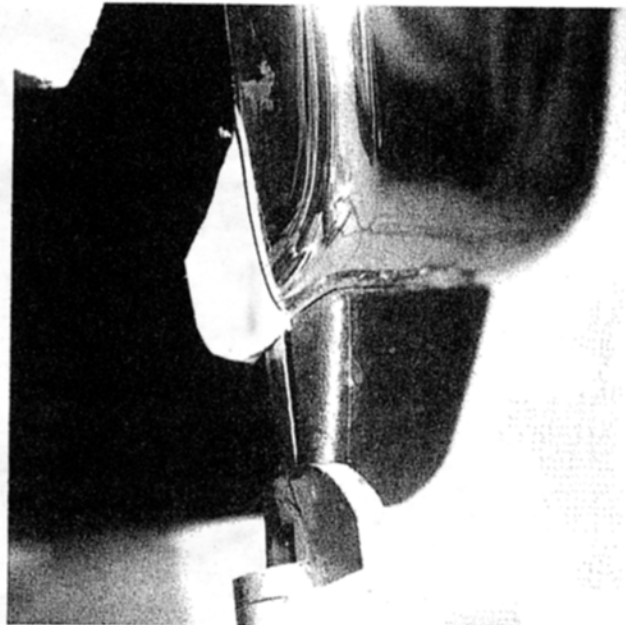
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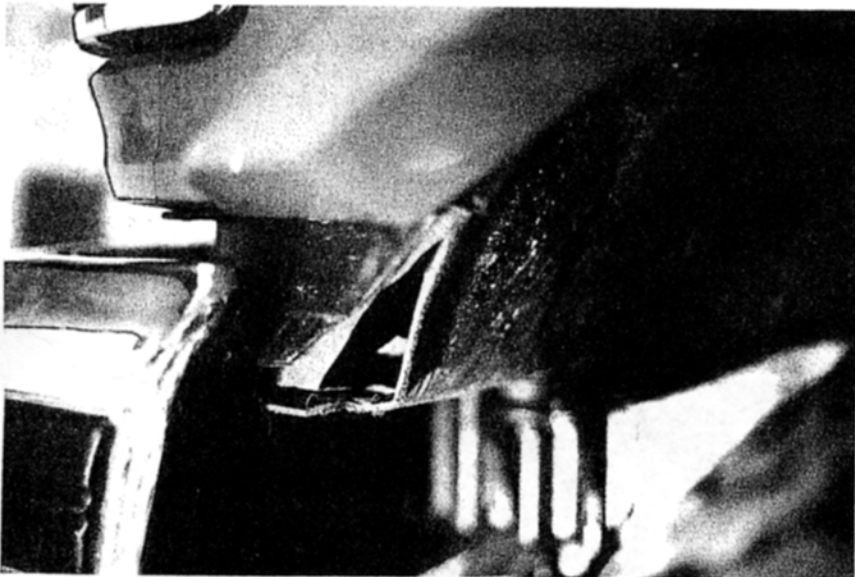
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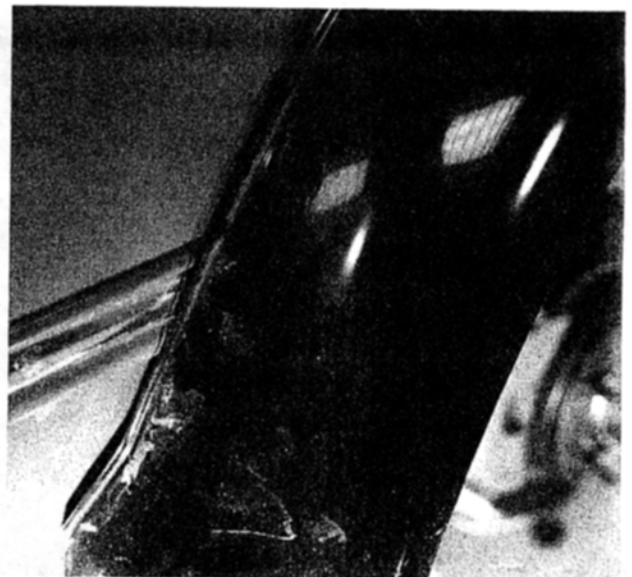
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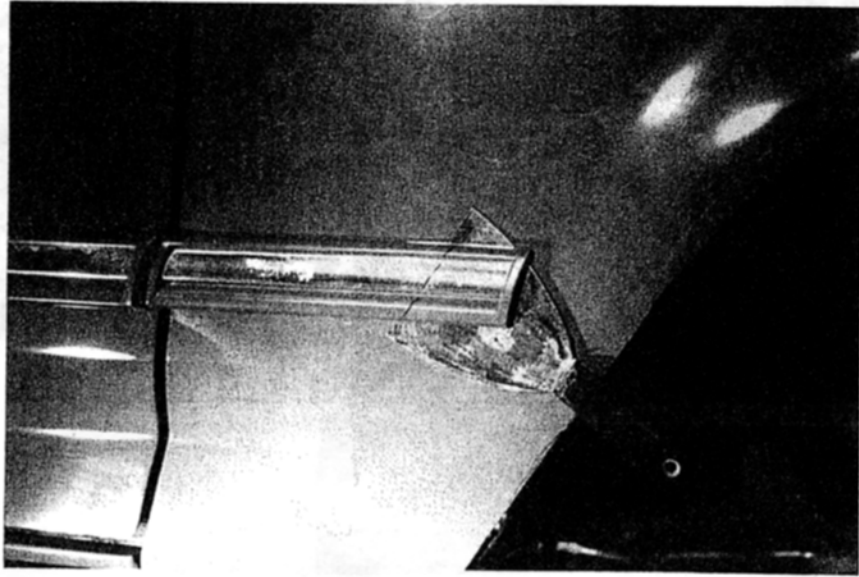
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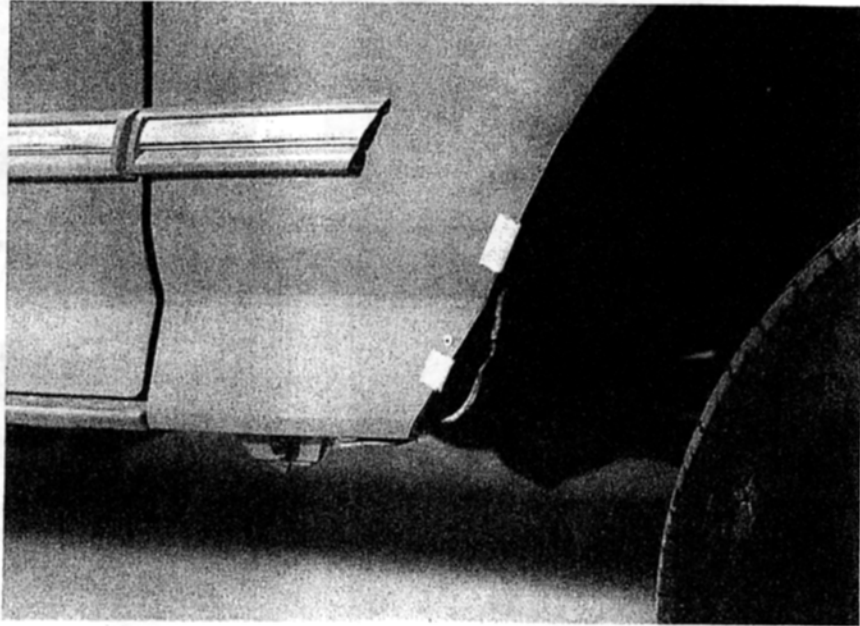
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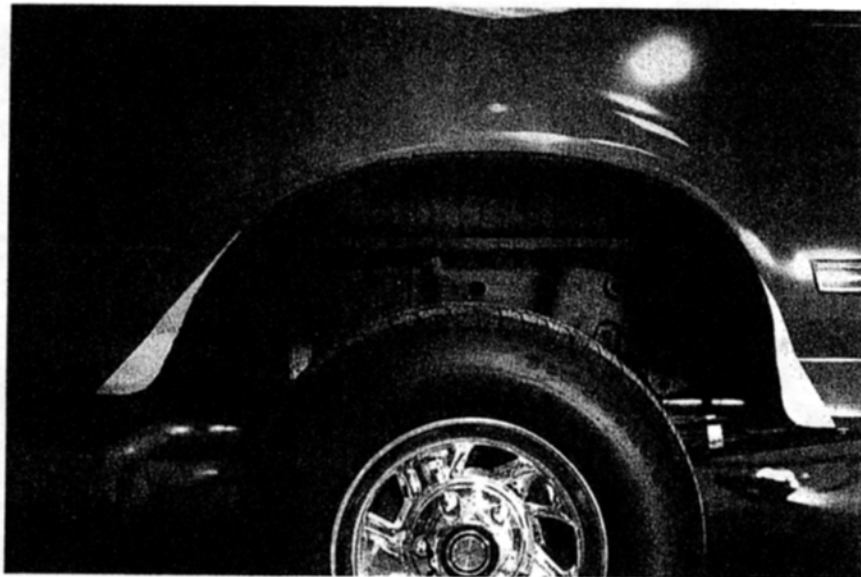
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