

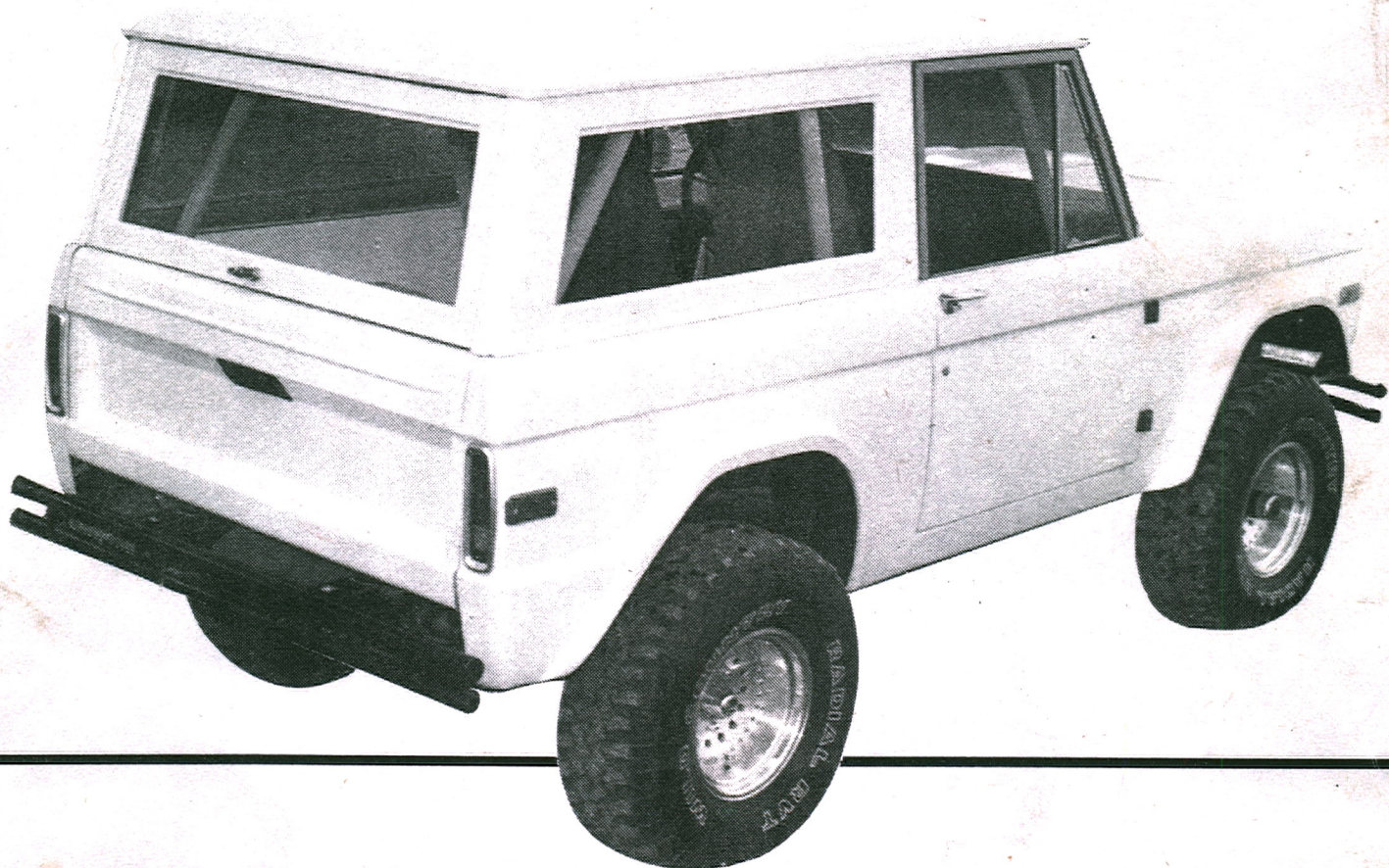
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# **ASSEMBLY & INSTALLATION INSTRUCTIONS**

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**BRONCO FIBERGLASS REPLACEMENT  
FOR 1966-1977**

# **FORD BRONCO**



**KENIROIL INC.**

Stainless Steel Accessories • P.O. BOX 3304 YOUNGSTOWN, OHIO • U.S.A. • 44513

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**ASSEMBLY & INSTALLATION INSTRUCTIONS  
FOR  
1966-77 REPLACEMENT FIBERGLASS BRONCO BODY**

**Important Note:** We recommend that you have a general knowledge of automobile mechanics and some understanding of vehicle wiring.

**PLEASE NOTE BEFORE BEGINNING**

1. **DO NOT** bolt any parts of the front end permanently until after alignment of doors, hardtop, and windshield frame.
2. **DO** save all hinges, lights, complete dash, complete door, window tracks, all mechanisms, nuts, bolts, and rubber molding from old metal body, which will be necessary for reassembly. If you need to replace bolts, use grade 5 or better automotive bolts.
3. **DO** tag and mark the vehicle wiring that is disconnected. "Wire Tags" are available at any electrical supply store.
4. **DO** take photos or make sketches as you remove parts from your old metal body.
5. **DO** note dimensions and measurements **LEAVE NOTHING TO MEMORY.**
6. **DO NOT** dispose of the metal body until the completion of your fiberglass unit.
7. **DO drain all gas from the gas tank.**
8. Tag and mark all bolts removed. It is necessary to bag these bolts, example: Door Hinge Bolts, Fender Bolts, Windshield Bolts, etc.. This will improve your ability to find and reuse existing bolts. We have a complete line of **Stainless Steel Bolts** which can be substituted, but you still need to keep track of the diameter and length.
9. If you are going to paint the inner fenders and radiator "U" support, do so before final assembly.

**TOOLS REQUIRED BEFORE STARTING THIS JOB**

1. Electric Drill
2. Drill bits in various diameters 1/8" to 1/2"
3. Screw Drivers
4. Sabre saw, hack saw, holes saw
5. Hand wrenches in various sizes
6. Measuring tape (rule)
7. Marking pens (crayons or magic markers)
8. Small hand level
9. Assorted sockets and ratchets
10. Small air or electric grinder
11. One length of mounting rubber - SEE INSTALLATION OF BODY - Or Kentrol Body Mounting Kits
12. Pop rivet gun and various size rivets
13. Taps and dies, various sizes
14. Kentrol carries a complete line of Stainless Steel Fasteners for your Bronco - See Stainless Steel Fasteners on your price sheet.



## REMOVAL OF OLD METAL BODY

The first step we recommend is to remove your hardtop, soft top, or half cab. Next, remove the doors, seats, tailgate, and hood. Disconnect the battery, and unplug the wiring to all lights and unbolt any components attached to the inner fenders (voltage regulator, cellonoid, etc.). **DO NOT** unplug voltage regulator or cellonoid as these units can be left on the wiring harness. Remove your battery, washer bottle, and brackets bolted to inner fenders. Now, remove the upper radiator support, brackets and the radiator. Remove the front end as a unit (fenders, inner fenders, and grill). **DO NOT** discard any pieces. You will need the parts from this unit. Remove the outside heater duct and cold air duct. Disconnect the steering column, master cylinder, transmission and gas pedal linkage, and any other items bolted to the firewall of the old unit. Unplug the wiring harness from under the dash which connects to the engine compartment wiring, including lights, but **DO NOT** disconnect wiring from the dash panel itself.

Remove the steering column cover, then the column itself. Unbolt the dash and remove, taking care to disconnect your heater, defroster cables, and ducts at the heater unit. Unplug the heater electrical plug.

With dash removed, you can now remove the heater, swing pedals, gas pedal, and any remaining parts bolted inside and outside of the firewall.

Disconnect everything from the underside of the vehicle which bolts or fastens to the body itself (gas tank, filler necks, aux. gas tank, rear wiring, etc....). Remove the body mounting bolts. With help, lift and remove the body tub from the frame.

Thoroughly clean the frame by removing all grease and rust. Inspect all brake and fuel lines for damage from rust. If necessary, replace these parts now, it is easier while the body is off. We recommend that you give the frame a new paint job. Also check your body mounting material and replace if necessary (see Kentrol's Part #5000 & 5003).

Now is the time to repair, rebuild, or replace the drive train, brakes, drive shafts, "U" joints, and to check all fluid levels or fix all leaking seals, etc...

**NOTE:** Before mounting the body on your frame, measure the rectangular hole for the transfer case shifting lever from existing body. Mark and cut the hole in your fiberglass body. **SEE PHOTO #1**

Using your old steel body, make a cardboard template of the existing holes in the firewall. This can be done by placing a 14" x 24 1/2" piece of cardboard on the outside driver side and marking all holes in the cardboard. Align the cardboard on the fiberglass body and mark all holes in the fiberglass.

Take a piece of cardboard approx. 13" x 22" long and do the same thing on the passenger side. Bend cardboard to body shape and contour of the existing steel body to ensure proper alignment.

With all holes transferred to the fiberglass, drill, grind or cut with a saber or hole saw all marked holes. You may have to adjust the holes a little.

## INSTALLATION OF FIBERGLASS BODY

**NOTE:** If you change the thickness of the body mounting rubber, you may encounter problems later.

Set the new fiberglass body on your frame. We recommend that you install new rubber body mounts. Call us for rubber mounting material, we sell it in 24" lengths. We also sell the body mounting kits, which include bolts, washers, lock washers, hex nuts, flat washers, and standard thickness mounting rubber.

**ALWAYS START WITH THE BODY TUB FIRST.** Center the body by measuring the distance from the frame rails to the lower edge of the new body. Make sure body is in the proper location before drilling the body mounting holes. (Approximately 14")

Using your electric drill with a 1/2" diameter drill bit, drill your body mounting holes. Install the new body bolts of the correct length to go through the body, rubber mount and frame. Use a large washer on the inside floor of the body which will help spread the load on the fiberglass. Install the body bolts but do not over-tighten the rear body bolts as this may cause the tailgate opening to flex outward at the top of the quarter panel.

**NOTE:** Before tightening the middle and front body mounting bolts, a check must be made to insure that the door opening is properly maintained (SEE PHOTO SK-001). It may be necessary to loosen or tighten the middle and front body bolts to ensure holding the correct door opening dimensions.

## INSTALLATION OF DOORS

**!!!ALIGNMENT OF THE DOORS WITH THE WINDSHIELD FRAME AND HARDTOP IS VERY CRITICAL!!!**

### FIBERGLASS DOORS

Mounting the door hinge to the door. You will need to trim the hinge opening (door) to get the hinge to lay flat inside of the door. Drill the three mounting holes in the door with a 3/8" drill bit and bolt the hinge in place. Repeat this process for each hinge (SEE PHOTO)

With help hold the door and bolt to body door post using 5/16"-18NC bolts. Doors have to be adjusted up and down, in and out to get a proper fit with respect to the quarter panel, hardtop, windshield frame, and outer fenders.

Set your hardtop or half cab in place on the quarterpanel with the rubber weatherstrip in place and clamp this to keep it from moving. You will bolt it down later. Check alignment with the door frame. You should have about 1/2" clearance around the door. This will be taken up with weatherstrip molding later.

Take the steel windshield piece provided with the body tub and place it on top of the cowl center. Drill and temporarily bolt into place. Place the windshield frame on the steel section, (SEE INSTALLATION OF WINDSHIELD) hold in place and align the windshield frame with the door upper window vent track. Make sure the windshield is set at approximately a 30 degree angle. Clamp the upper part of the windshield frame to the hardtop.

**NOTE:** A weatherstrip seal goes between the top and windshield frame.

At this time check alignment of the doors. Example: The gap around the hardtop and windshield. Keep in mind that you will have weatherstripping on both the hardtop and windshield frame. When the gap looks even all around the door upper frame, drill two holes in steel windshield section and bolt it to the top of the cowl. You will put more bolts to hold steel windshield section to the cowl. At final assembly you will fiberglass the steel section to the cowl so it will become a permanent part of the body tub.

### INSTALLATION OF THE FRONT END

**NOTE:** The door post has 5/16" nut certs for mounting the outer fenders.

Place the outer fenders in place over the door post. Mark and drill the mounting holes. Hand tighten two bolts per side to hold outer fenders in place. Check the alignment of the door with respect to the front outer fenders. Make any adjustments if necessary. You will be removing the outer fender as soon as the inner fenders are bolted in place.

Take the inner fenders and radiator core support. Bolt the three pieces together. With this unit bolted together, slide the inner fenders past the outer fenders and clamp the inner fender to the lip of the outer fenders. Check at this time for any interference which will not let the inner fenders lay flat to the outer fenders. If you have any interference, correct it at this time. Place the front body mounting rubber on the body mount. Position the steel radiator brace on top of the rubber mount and clamp the steel support to the radiator core support. Drill small temporary holes thru the outer fender, inner fender to hold these in place.

Drill small holes to hold the inner fenders to the body tub. Make sure inner fenders are secure then. Remove the clamps holding inner and outer fenders together. Drill holes thru steel radiator braces and fiberglass core support, and bolt these together. Drill up thru the front frame mount and bolt the core support to the frame.

Remove the outer fenders and start assembly of the grill to the outer fender. It is easier to assemble these while fenders are off the vehicle. Position the grill and clamp it to the outer fenders. Make sure alignment is correct. Drill and bolt the grill to the outer fenders. After this unit is assembled, slide the outer fenders in place over the door post and re-align with the inner fender. Bolt the outer fenders in place.

### INSTALLATION OF THE HOOD

Attach the hood hinge to the hood and fasten in place. With help place the hood in position and bolt the hood hinge to the steel cowl plate. Lower the hood and check the gap and alignment with the outer fenders and grill. Make the needed adjustments by raising or lowering the hood hinge to the steel cowl plate. Also, move side to side for clearance to the fenders.

## INSTALLATION OF THE TAILGATE

Remove all mechanisms from your old tailgate and body tub. You will need these for reassembly. Place the pivot pins in the tailgate. Position the tailgate in the opening of the body tub and hold this position. Mark with a magic marker the lower hole of the pivot pin bracket on both sides of the tailgate opening. Remove the tailgate and drill the holes you just marked. Put the tailgate back in place and, using the tapped back up plates provided with your body tub, bolt the pivot pin bracket in place. Lower the tailgate and mark the upper holes. Drill and fasten. Install the cross latch mechanisms and handle into the tailgate. With the tailgate in the down or open position, put the side bracket supports on and position the mounting bracket on the body tub. With the side bracket support fully extended drill and tap the two holes per side. Slide the two latch brackets on the cross slide mechanisms. Close the tailgate with help. Hold the latch bracket in place, and release the handle and open the tailgate. Mark the holes, drill and tap, and fasten the brackets to the body.

## INSTALLING YOUR HARDTOP OR HALF CAB

You have clamped the hardtop in place initially when you were hanging your doors. At this time, mark and drill the holes for the hardtop sides. Keep in mind that there is a weatherstrip which goes between the top of the quarterpanel and hardtop side. Fasten the hardtop, making sure you use large fender washers both on top and bottom to spread the load against the fiberglass.

Match and drill the holes in the front of the hardtop to windshield frame and bolt this in place. Again, use large fender washers against the fiberglass to spread the load on a larger area.

## INSTALLATION OF THE WINDSHIELD FRAME

The windshield frame must be centered and aligned with the hardtop and doors before installation. There is a hinge on the steel windshield frame which can be bolted to the steel support provided with the body tub, or you can weld it to the steel support.

If you elect to bolt the windshield hinge, follow this procedure:

Lay out and mark the hinge so that you will have a total of five holes. (SEE SKETCH) Drill the hinge using a 9/32" drill bit thru the holes you laid out. Transfer these holes onto the steel support and drill five holes in the support. You can now bolt using a 1/4" x 20" x 3/4" 1g 82 degree countersunk head bolt, nut, f.w., and lockwasher. If you are using our fiberglass windshield frame, you will have to drill both sides of the hinge. Stagger the holes so that bolts are **not** in the same location or on top of one another. You can transfer the holes onto the windshield frame and using nut certs, install 1/4" nut certs in the fiberglass. Keep in mind, that there is a rubber weatherstrip which goes between the hinge.

It is recommended that you do a complete assembly even though you will disassemble all components for painting.

Install the air vents, heater, swing and gas pedals, bulk head wiring connector, and all parts which mount to the firewall. Put the dash in place and fasten to the steel windshield section. Mount your seats and seat belts.

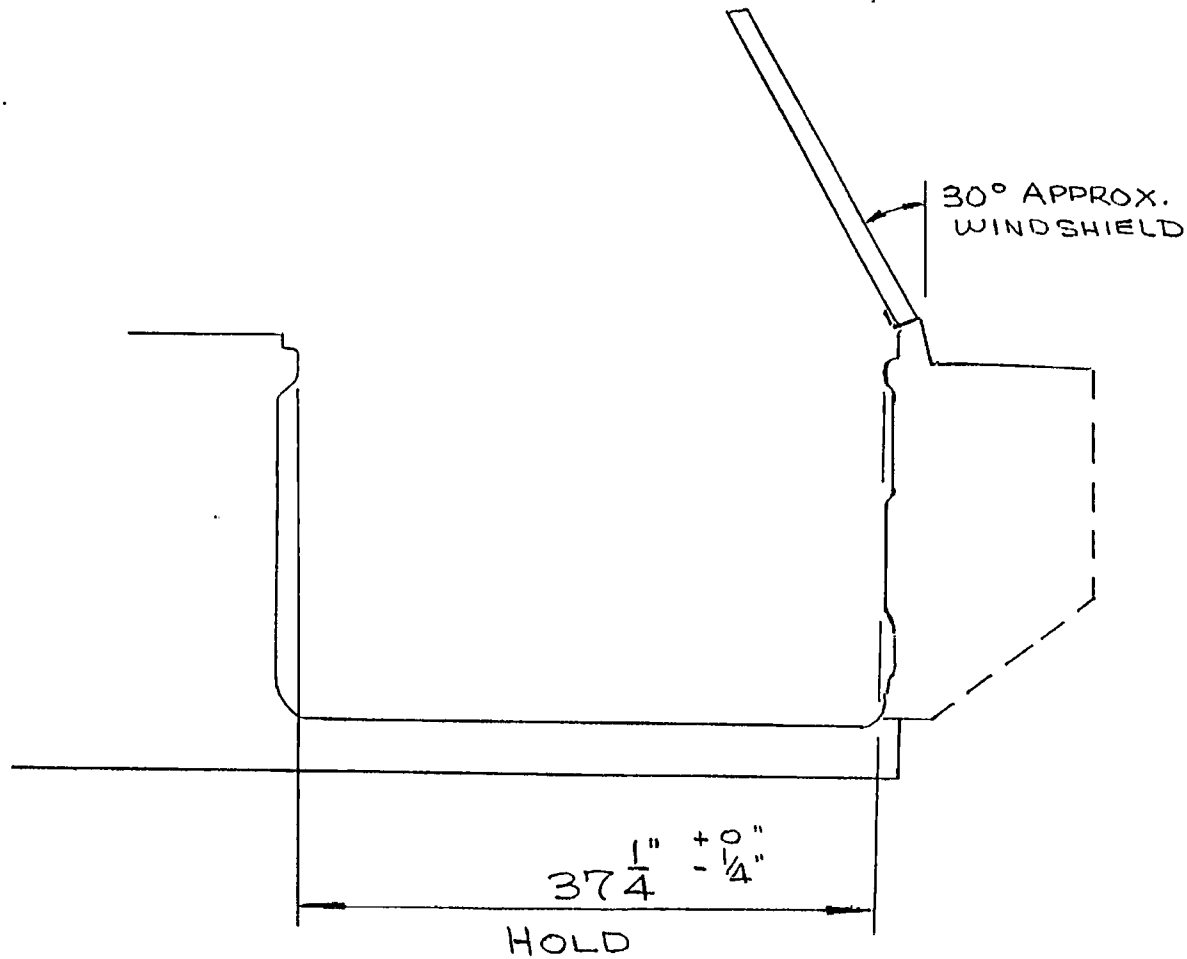
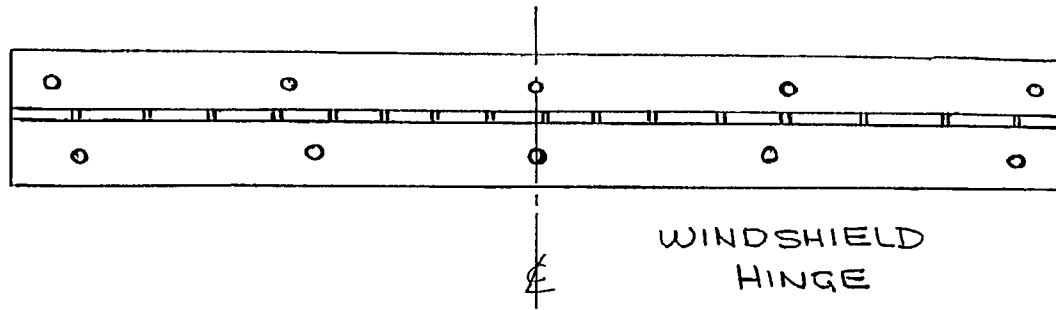
Mount all component pieces which bolt to the inner fenders. Mount all lights, keeping in mind that fiberglass is not a conductor of electricity. You will have to run ground wires to all electrical components which fasten to the fiberglass and dash.

Once you have completed final assembly, you can start preparations for sanding and painting. The reason for assembly is to get all holes drilled before the paint is applied.

It is recommended that you sand every component piece with a 150 grit sand paper. If you do not sand the primer gel coat completely, the primer will not stick to this surface, nor will the paint. Sand again with 220 grit paper.

You should use a good grade of primer. We recommend a primer surfacer. After painting with primer surfacer, you should sand with 320 grit. Then, repaint all component pieces with a regular primer. Follow your primer manufacturer suggestions on final sanding before painting.

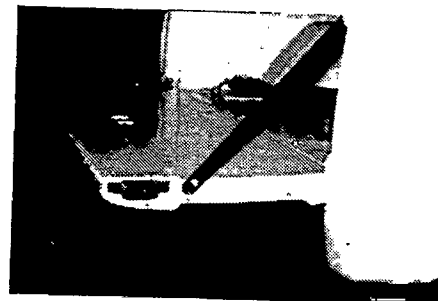
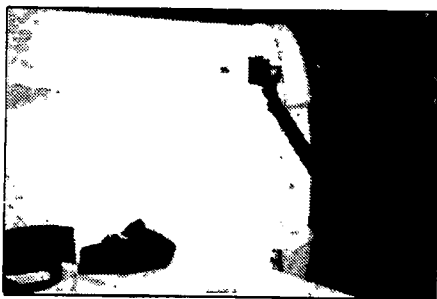
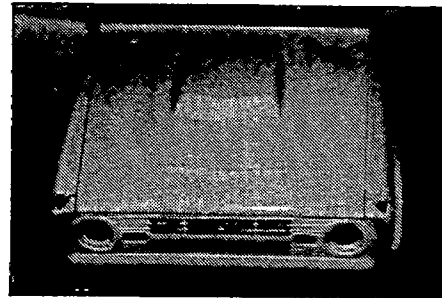
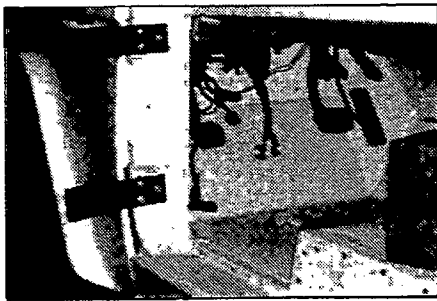
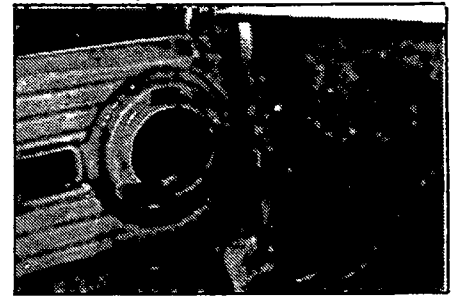
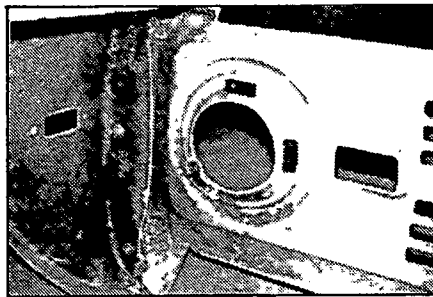
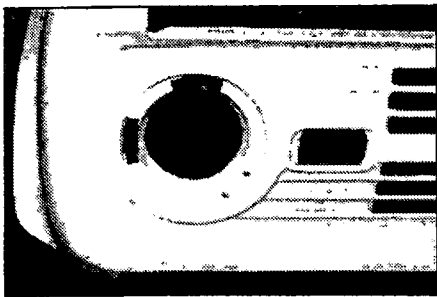
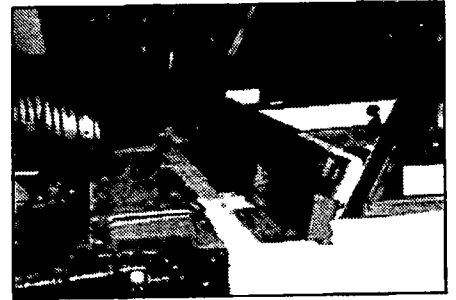
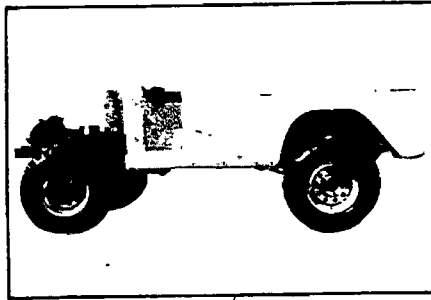
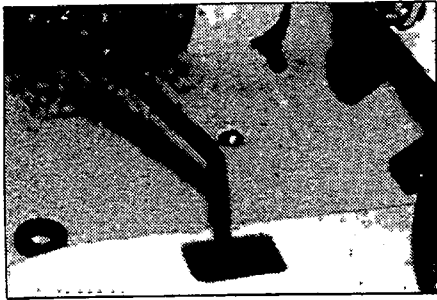
You can paint top coat, or final coat, with any type of paint. Follow the manufacturers instructions.

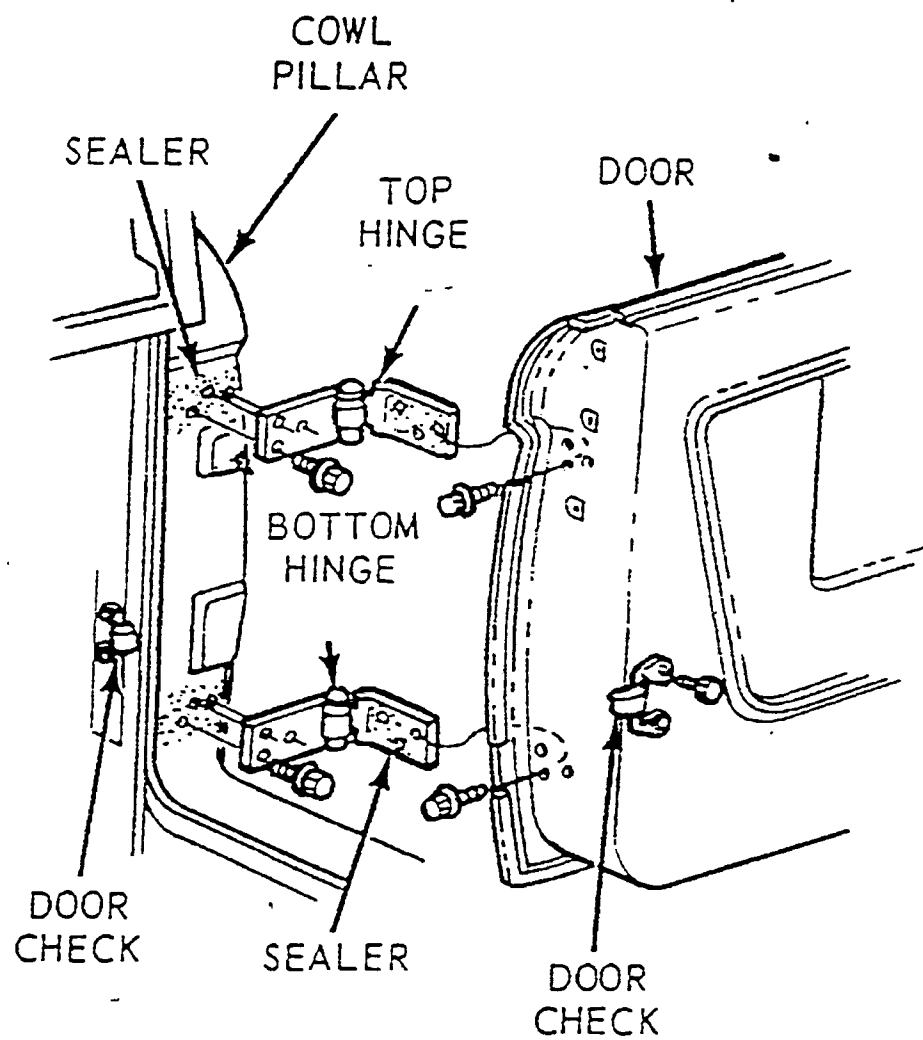


BRONCO DOOR OPENING

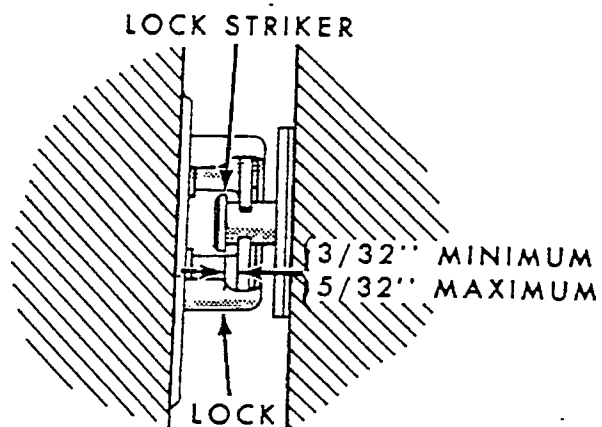
SK-001







**—Door Hinge**



**—Door Lock Striker**

## Doors and Windows

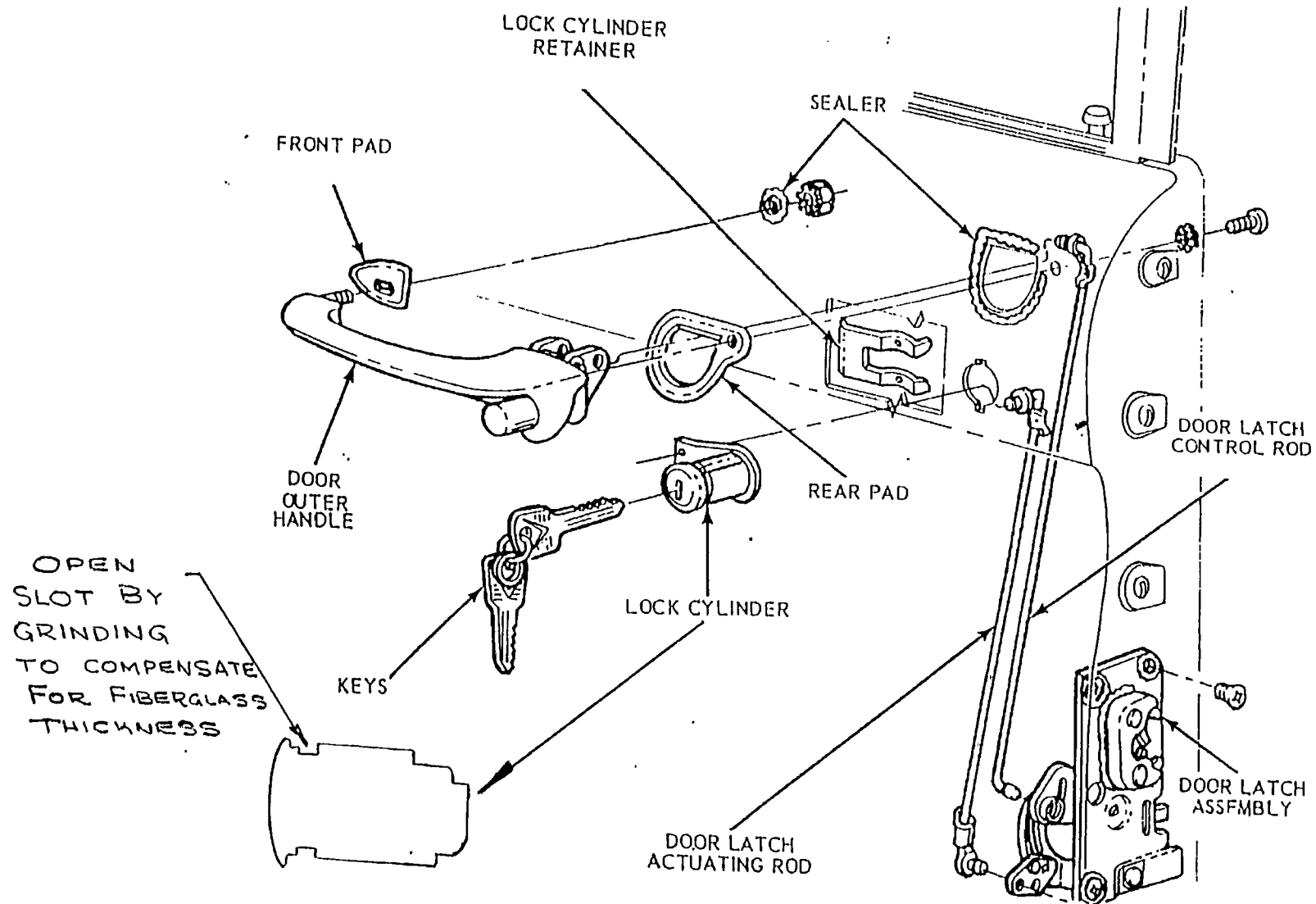


FIG. —Outer Door Handle and Locking Mechanism

## Bronco Doors and Windows

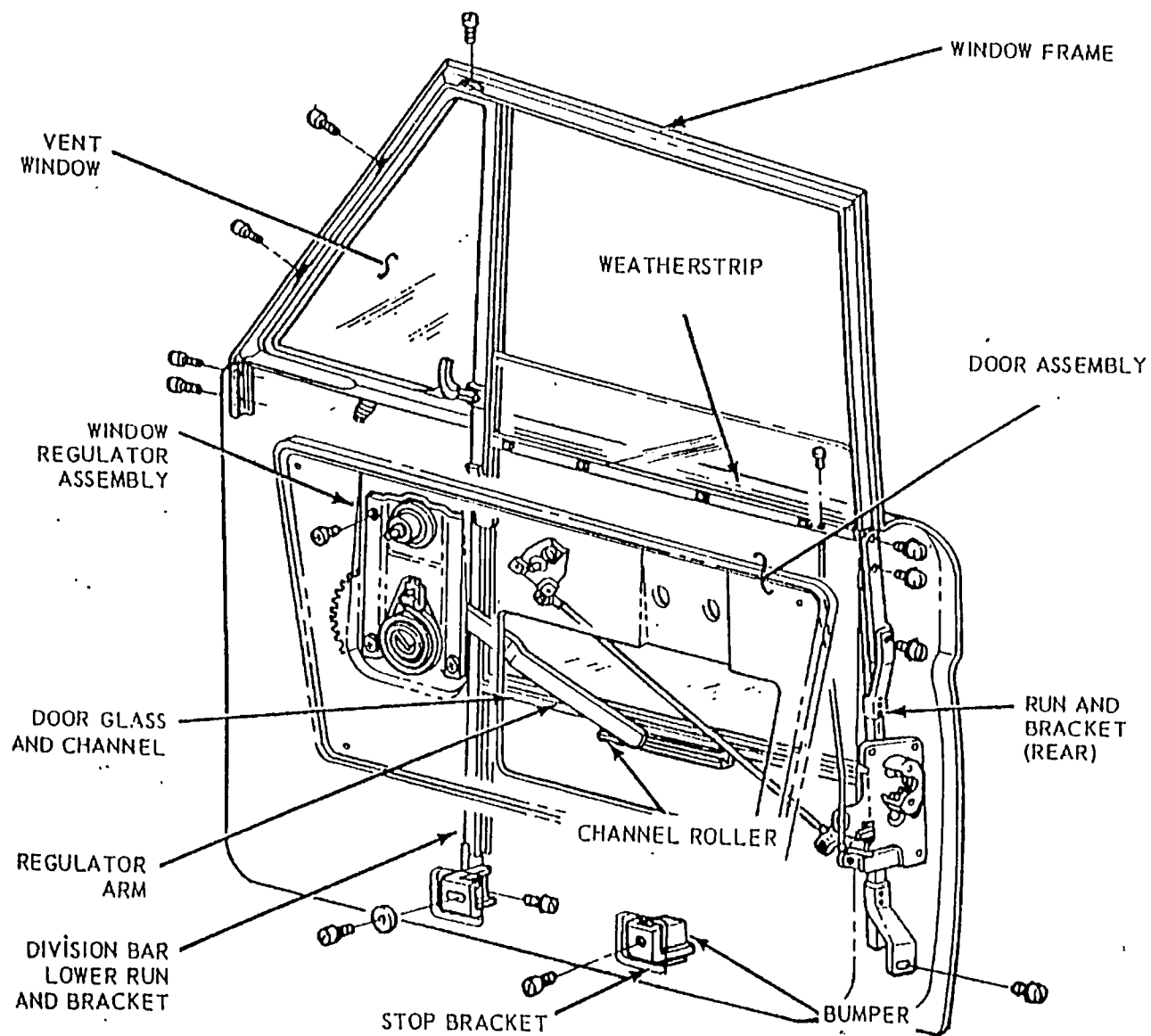
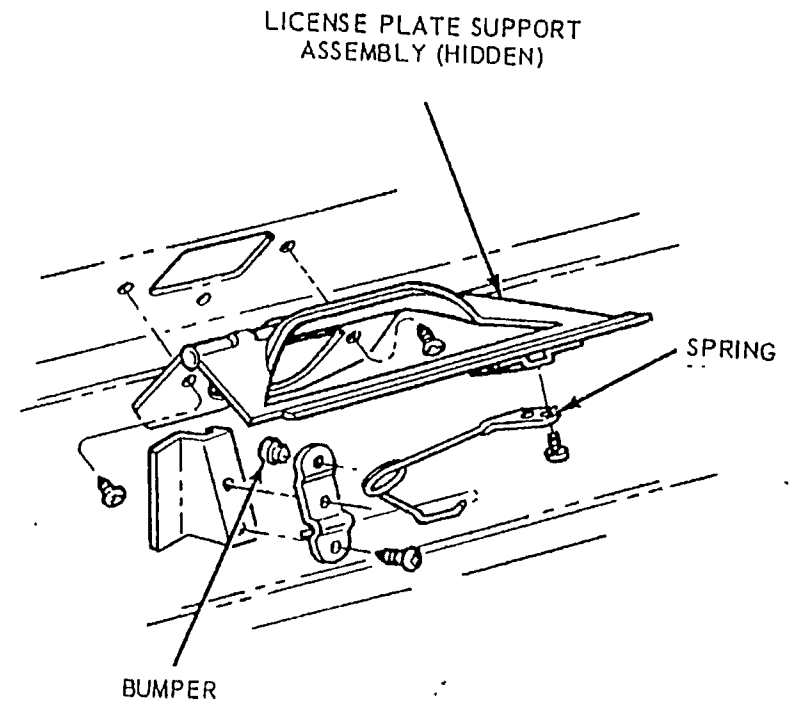
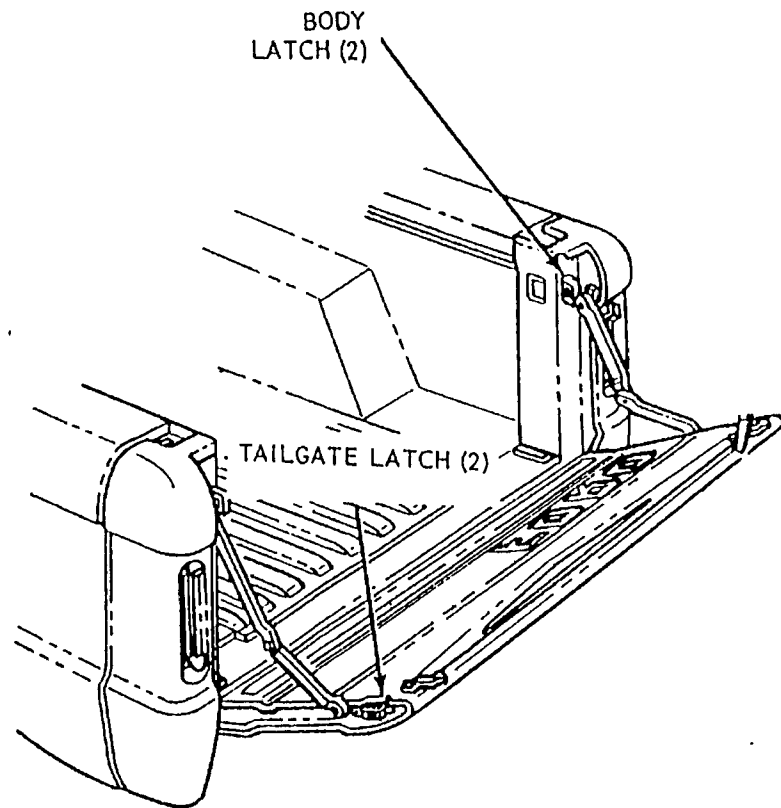
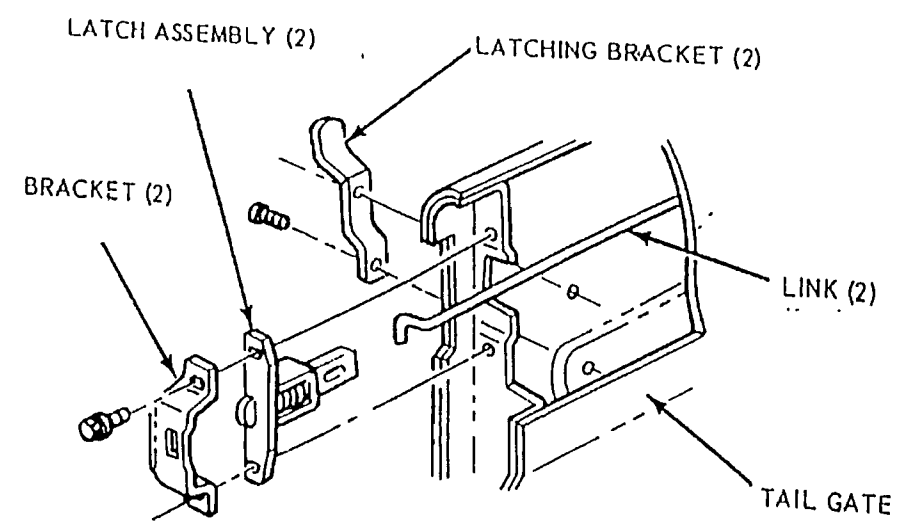
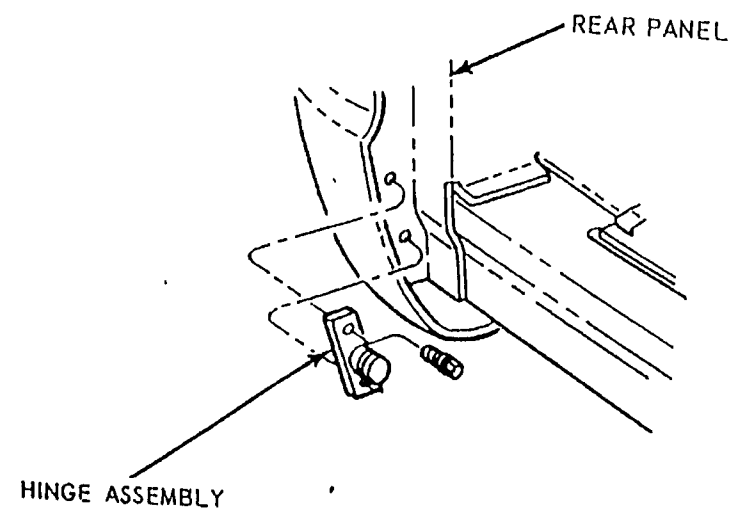
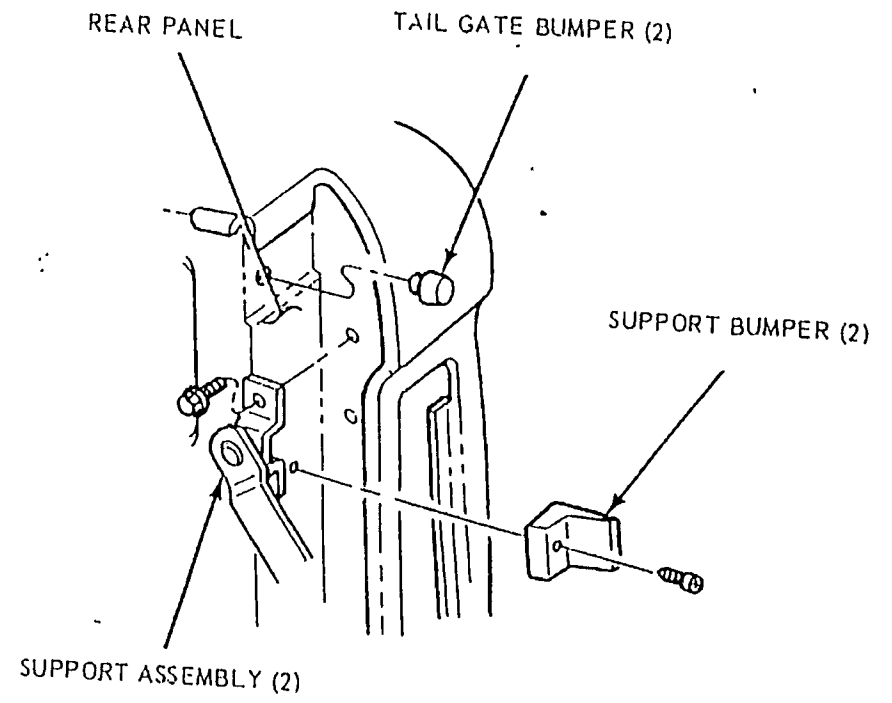
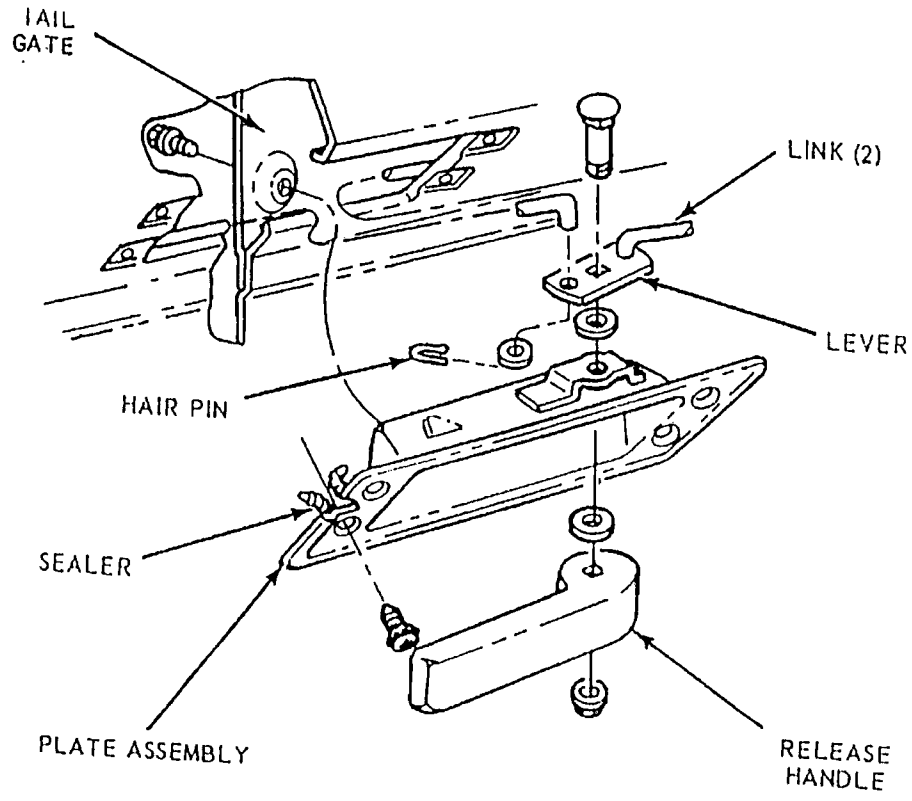


FIG. — Window Mechanism

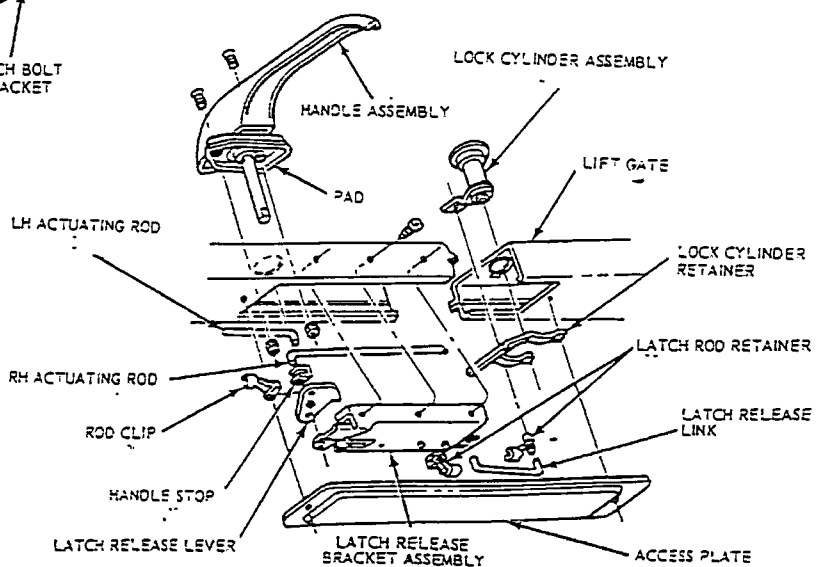
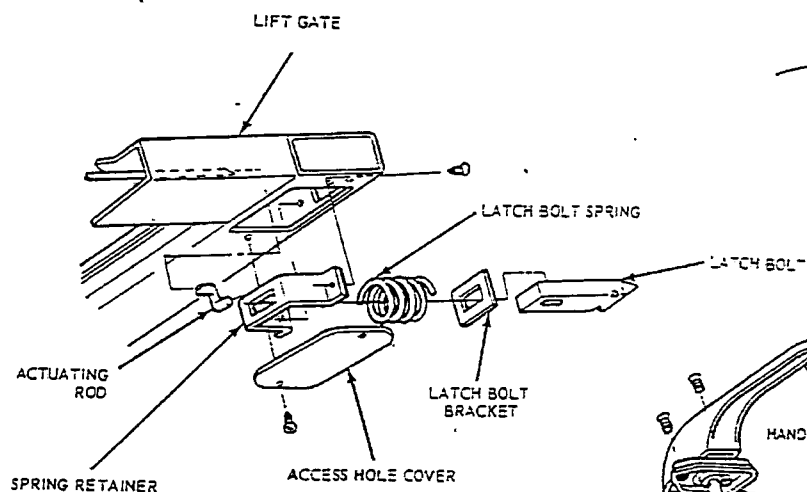
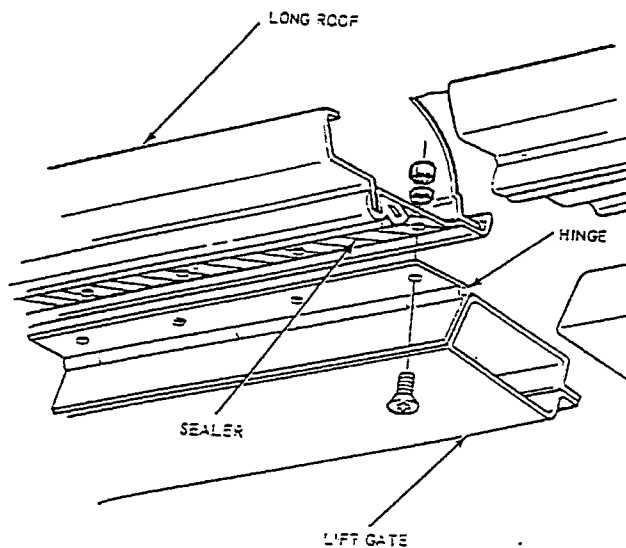
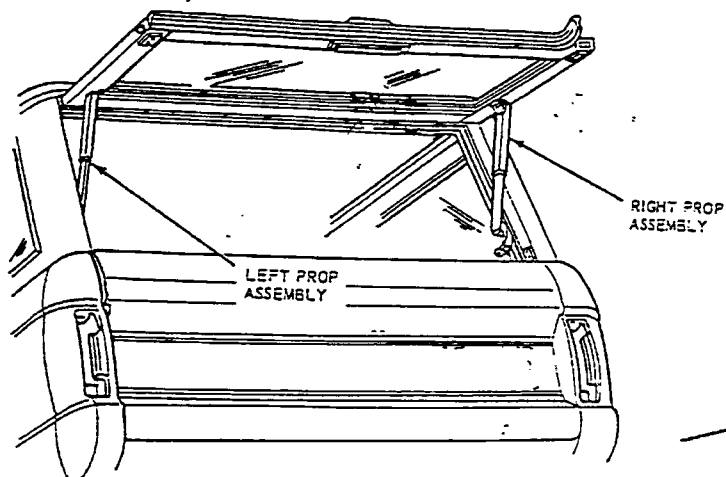
## Body, Doors and Windows





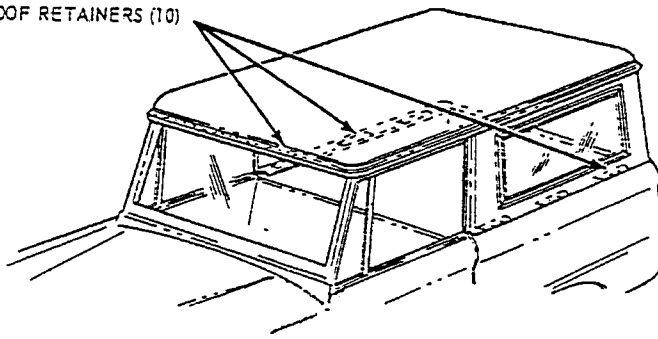


Tailgate and License Bracket Installation



—Liftgate Installation

LONG ROOF RETAINERS (10)



LONG ROOF  
SIDE PANEL

WEATHERSTRIP

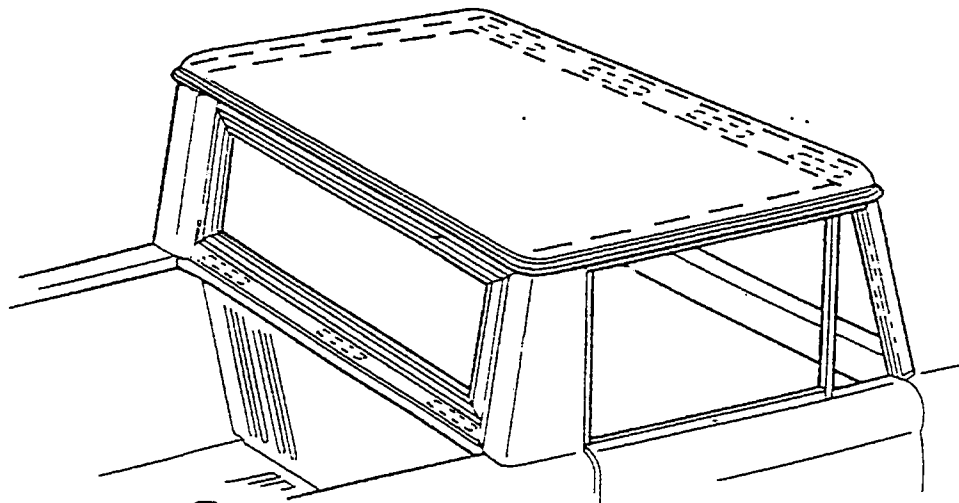
BODY SIDE  
PANEL

VIEW A-A

RETAINER

CAPTIVE NUT

### -Long Roof Installation



WEATHERSTRIP

BODY  
SIDE  
PANEL

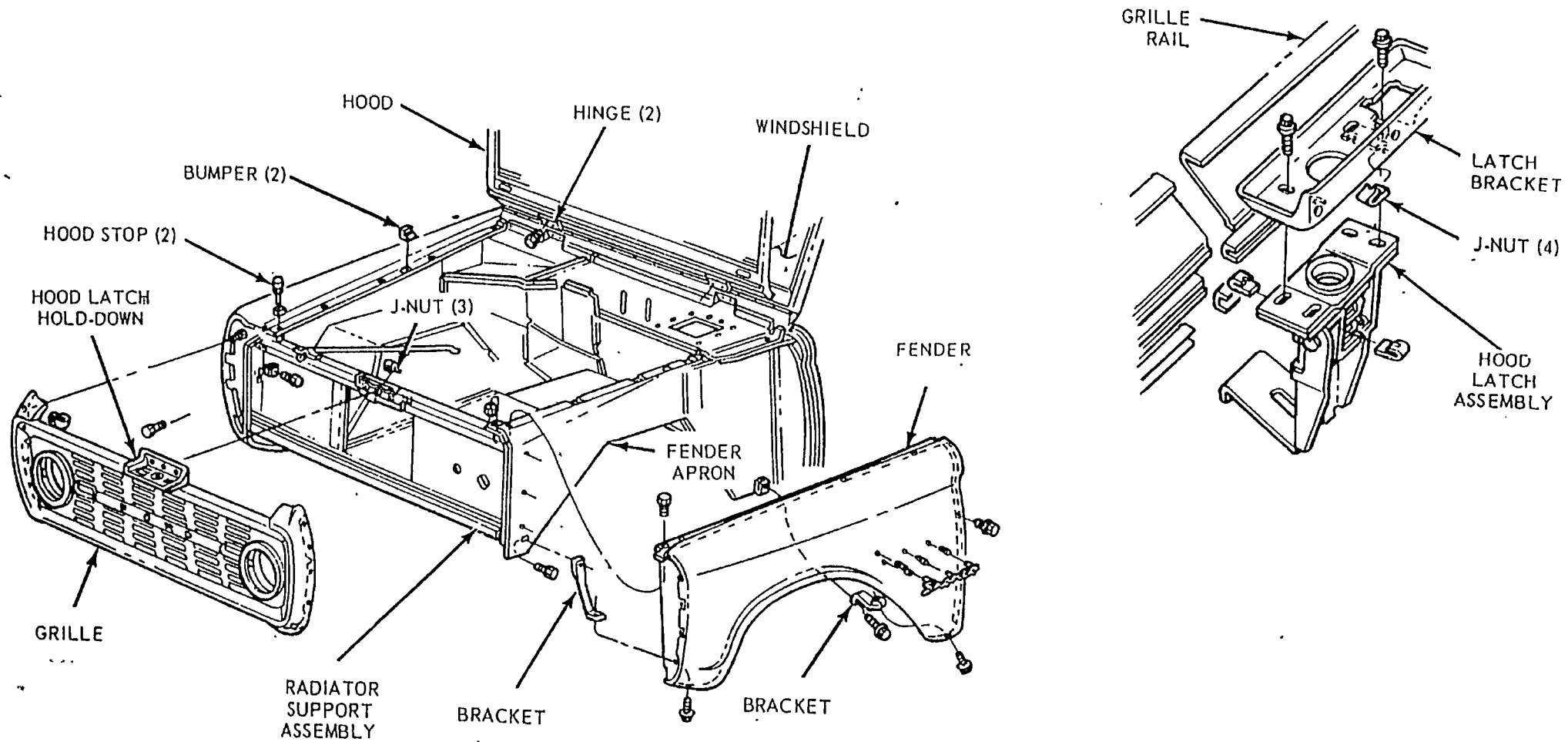
VIEW A-A

SHORT ROOF

WEATHERSTRIP

### -Short Roof Installation

## GROUP 17 — BODY, DOORS AND WINDOWS



**FIG. —Grille, Fender and Hood Installation**