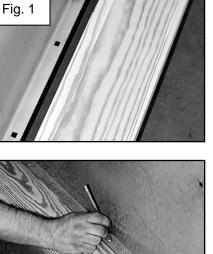


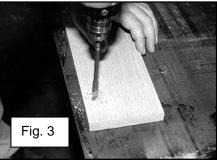
## BED PARTS ASSEMBLY GUIDE 80-87 FORD SHORT FLARESIDE

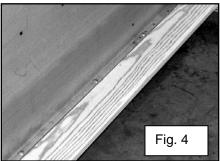
If you have not yet disassembled your original bed, make notes or sketches and take pictures of part locations to aid in the assembly process. Use the following steps to assemble the entire bed to test fit all parts.

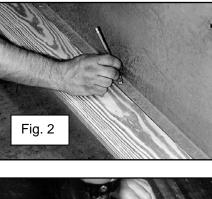
- 1. Begin with one bed side and the front bed panel. Bolt the front panel side flange to the inside of the bed side with (5) 5/16"-18 x 3/4" or 1" indented hex bolts, (4) lock washers, and (4) nuts. The bolt heads should be on the outside and the lock washers and nuts on the inside of the bed. The fifth bolt goes through the bed side into the curl of the front bed panel. There is a nut fixed inside this curl and may need a longer bolt here.
- 2. Mount the other bed side in the same manner. Leave all bolts slightly loose for now.
- 3. Attach the rear cross sill to both bed sides with (8) 5/16"–18 x 3/4" indented hex head bolts, lock washers, and nuts. There are (4) bolts per side and only two are visible from outside of the bed sides. These two go through the front spot-weld flange of the rear stake pocket. The rear cross sill mounts with the open side facing towards the ground. Leave these bolts slightly loose also.
- 4. Raise the assembly off the ground to gain access to both the top and bottom side of the floor area.
- 5. The front cross sill attaches to both the front bed panel lower vertical lip and the bed sides at the lower front area of the stake pocket. Bolt the front cross sill (Mar-K part #120170) to the front bed panel with (7) 5/16"-18 x 3/4" indented hex bolts, lock washers, and nuts. The bolt heads should be visible from the outside with the lock washers and nuts on the inside of the cross sill.
- 6. The cross sill has end brackets that bolt to each bed side with (2) 5/16"-18 x 3/4" indented hex bolts, lock washers, and nuts per side. Again, the heads of the bolts should be on the outside.
- 7. It is important to make sure the bed is square and not scissored before going any further. Measure the bed across from one corner to the opposite corner on the other end. Repeat this for the other diagonal measurement and compare. These measurements should be within 1/16" of each other to ensure the bed is square.

- 8. Install the outer-most boards (grooved side up) under the lip of the bed sides at the floor area. See figure 1. Each of these two boards in the wood kit is 5-9/16" wide and has an inner fender shape cut out of them. The holes that attach the bed side to the floor need to be marked on these two boards. The wood boards should be on top of the front cross sill and the rear cross sill but under the bed side lip. The machined groove should be on top. Leave a 1/16" gap between the outer edge of the wood and the bed side sheet metal for expansion. Make the gaps at the front bed panel and the rear cross sill to the end of the wood boards the same.
- 9. Mark all holes through the bed side lower lip onto the wood boards. See figure 2. Remove these two boards and drill each location through with a 3/8" wood bit. See figure 3. Back up the boards with a piece of scrap wood to keep the boards from splintering on the bottom side.
- Replace the wood boards under the bed sides. Insert 5/16"-18 x 1-1/2" carriage bolts through the bed sides and wood boards at each location. See figure 4. Install lock washers and nuts to only the bolts that go through the front bed panel and the rear cross sill from the wood.
- 11. Attach cross sill #2 (Mar-K part #120173) to the bed side bolts that are approximately 25" from the front bed panel on each side. This cross sill is 48" long and 1-1/2" tall. Install lock washers and nuts.
- 12. Attach cross sill #3 (Mar-K part #102669) to the bed side bolts that are approximately 47-3/8" from the front bed panel. This cross sill is 48" wide and just under 1" tall. The larger holes in the top surface of the sill should be offset to the front of the bed with relation to the bed strip holes. Install lock washers and nuts.
- 13. Attach cross sill #4 (Mar-K part #120175) to the bed side bolts that are approximately 67" from the front bed panel. This cross sill is 53-3/4" long and just under 1" tall. Secure to bed sides and bottom of wood boards with lock washers and nuts.
- 14. The next two boards to be installed on each side are 9-1/8" wide overall. Place these boards next to the outer boards but leave a 1/2" gap between them and the outer boards. Again make sure they are grooved side up.

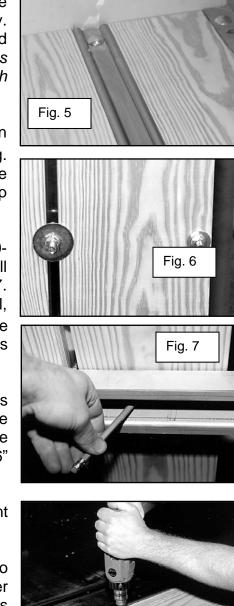








- 15. Place a bed strip in the grooves between these boards. The front of the bed strip has a hole at 1-7/8" approximately. Holes in the bed strip should line up with the cross sills and the rear sill. See figure 5. *If using MAR-K's custom bed strips with hidden fasteners, follow the instructions supplied with the bed strips for correct installation.*
- 16. Insert the 5/16"-18 x 1-1/2" carriage bolts through all holes in the bed strips. A few of the bolts will not line up with anything. These bolts will get a 1-1/2 outside diameter washer on the bolt before the lock washer and nut. This bridges the gap between the boards on the bottom side. See figure 6.
- 17. The bed-to-frame holes will need to be drilled in these two 9-1/8" wide boards. Transfer the locations from the cross sill large holes onto the bottom of the wood boards. See figure 7. The front cross sill, second cross sill, and the rear cross sill, all have a frame spacing of 35". Mark the boards through the holes that are 35" apart. The third cross sill spacing is different and is 33-7/8" apart.
- 18. Remove these boards and two strips. Drill these two boards to accept the bed-to-frame bolts and special washers that are recessed in the top surface of the wood. The holes should be 5/8" diameter and the countersink should be 1-15/16" diameter and 3/16" deep. See figures 8 and 9.
- 19. Replace these wood boards and strips. Check the alignment of the bed-to-frame holes.
- 20. There were bolts from the bed sides that did not line up to anything on the bottom. These will get a 1" outside diameter washer installed before the lock washer and nut. This keeps the lock washer and nut from crushing into the wood. See figure 6.
- 21. The three wood boards in the center of the floor are all 7-1/8" wide overall. These should be installed in the floor, again with 1/2" gaps between all boards.
- 22. Install the remaining four bed strips between these boards and the mounting hole boards using the 5/16"-18 x 1-1/2" carriage bolts, lock washers, and nut. Again, remember to use the 1-1/2" diameter flat washers under the wood boards before the lock washer and nut where there is not a cross sill.



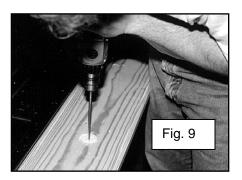


Fig. 8

- 23. At this point, most of the box has been assembled loosely. Check the assembly to be sure it is still square like you did in step #7. At his point tighten all assembly and floor bolts.
- 24. Bolt a tailgate hinge to either side of the truck in the rear. The bolt size is a 1/4"-20 x 5/8" or 3/4" length hex bolt and should thread into a nut fixed on the inside of the rear stake pocket. Fit the hinge loose enough where you can align the tailgate to the other side.
- 25. Slide the bottom curl of the tailgate onto the fixed hinge on the bed side. Install the second hinge inside the opposite end of the tailgate. Align the holes in the second hinge to the holes in the rear stake pocket and attach with the 1/4"-20 x 5/8" or 3/4" hex bolts. Support the tailgate in the open position.
- 26. The eyebolt of the chain assembly fits through the rear stake pockets upper square holes. The eyebolt should be installed with the eye horizontal. The tailgate chain latch bar should have the side with the rubber bumper facing the tailgate. Secure the eyebolts to the stake pockets with the 3/8" lock washers and nuts.
- 27. All of the cross sills on this truck use a wooden block between them and the frame of the truck. Please refer to the instructions for each pair of blocks and install them with the wood screws in the block kits. The front and rear cross sill wood blocks fit inside these cross sills. The second, third, and fourth cross sill blocks rest directly on the frame. You may wish to use a rubber pad between all mounting points of the box to the frame. These pads are available from Mar-K.
- 28. Test fit the box assembly on the frame. Check the alignment of all bed to frame mounting areas. The bed is held to the frame with (8) 1/2"-13 x 5" Phillips drive countersunk bolts that sit in special washers. These washers sit in countersunk holes in the wood. Secure the bed-to-frame hardware with 1/2" flat washers, lock washers, and nuts.
- 29. Information regarding the installation of the steps and fenders is not available at this time.

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## FACTS ABOUT OUR PARTS

**Stainless Steel:** Bed strips, angle strips, and stainless mouldings are made of type 430 or 434 bright stainless steel, selected because of its color. It is a magnetic grade of stainless formulated for automotive stainless steel trim. When it is polished and buffed, its bright color looks similar to chrome plating. Stainless hardware items such as bolts, nuts, tailgate chain parts, and bed-to-frame washers are made of nonmagnetic stainless selected for superior resistance to rust and corrosion.

**Care of Stainless / Rusting:** With proper care, stainless steel will remain bright and smooth for long periods of time. It may be cleaned with liquid polish intended for stainless of chrome. DO NOT use steel wool, a steel wire brush, or a buffing wheel which has been used on steel or other metals. Bright stainless parts should be coated with a good nonabrasive wax for maximum protection. Stainless steel will rust or corrode under certain conditions, especially when contaminants such as salt water, battery acid, or steel particles and moisture are present. Frequent washing and waxing are a great protection against damage to stainless steel surfaces.

**Electro-galvanized Steel:** Many of the sheet metal parts MAR-K manufactures are made of electrogalvanized steel. This means the metal is electroplated with a thin layer of zinc by the steel manufacturer. There are several reason for selecting this steel for our product.

- 1. Electro-galvanized steel is clean and dry.
- 2. The zinc protects our parts from rusting during our processing and while on the shelf.
- 3. After the parts are painted, the zinc under the paint helps prevent loss of paint adhesion or rusting if the paint surface is scratched or damaged.

**Preparing Parts for Painting:** The objectives of painting a part are to protect the metal and to provide a beautiful colored surface. No matter how beautiful the paint, if it doesn't stick to the surface, it will not be satisfactory. Excellent paint adhesion to a metal surface depends mainly on two things, the quality and characteristics of the primer used, and how well the surface is cleaned and prepared for painting. Prepare the surface as follows to help the paint have the best adhesion possible.

## Steps for Excellent Paint Adhesion on MAR-K parts

The following steps are a general guideline to obtain excellent paint adhesion to your new parts

 Select the primer product with the best adhesion properties within the paint system you are using. Products such as PPG "DPLF Epoxy Primer", Sherwin Williams G.B.P. Etching Filler or Etching Primer, and DuPont Variprime 615S/625S Self-Etching Primer will provide excellent adhesion to MAR-K metal parts that have been properly prepared for painting.

- 2. Wipe the part with solvent such as PPG DX330 Wax and Grease Remover, Sherwin Williams R7K156 Solvent Cleaner, or DuPont 3919S Prep-Sol to remove grease and lubricants from the manufacturing process.
- 3. Scrub all surfaces of the part with mild detergent in hot water. Rinse well and wipe dry with a clean dry cloth.
- 4. Wipe the part again with solvent as in step 2 above. The surface must be absolutely clean before sanding to prevent the sanding process from spreading the contaminants or imbedding them into the surface.
- 5. Scuff sand all areas to be painted using progressively finer grit to about 240 grit paper. Do not try to completely remove or sand through the zinc plating, but the complete part must be thoroughly sanded for best paint adhesion. Use a "DA" sander for broad flat areas and hand sanding for areas that can't be reached with the power sander.
- 6. Wash and rinse away all sanding residue. Use compressed air to blow the rinse water out of all seams and dry the parts with a clean towel. If the rinse water beads up anywhere on the surface, it is not clean and the solvent wipe and water washing steps must be repeated and additional sanding may be required in that area.
- 7. Wipe with solvent such as PPG DX330, Sherwin Williams R7K158, or DuPont 3901S to remove any traces of contaminants or sanding residue. Wipe the surface dry with a clean cloth. Do not allow the solvent to evaporate dry on the surface. Wet it again if it should evaporate dry.
- 8. The parts should be ready for prime painting. PPG recommends a final wipe with a clean damp cloth to remove any residue left from evaporation of the solvent. A quick wipe with a tack rag right before priming helps remove any remaining dust.
- 9. Immediately after cleaning and drying the parts as above, apply the primer according to the manufacturer's instructions for the products you are using. The recommended drying time between coats is especially important.

## Some other helpful hints for a successful paint job.

- 1. Be sure to use fresh paint products that are top quality from a reputable manufacturer. Do not try to economize by using inferior or leftover paint materials.
- 2. Select all the products for a paint job from a single manufacturer and do not mix different systems within a brand of paint. Use only products that are intended to be used together.
- 3. Do not use the same air hoses on your paint gun that are also used with air tools such as sanders and air wrenches. Oil in the air tools will find its way into the hose and be a source of contamination for the paint. New hoses contain oils and other contaminants and should be cleaned before use on a paint gun.
- 4. Wear clean latex or nitrile gloves to prevent fingerprint oils from contaminating the surfaces of your cleaned parts.
- 5. Plan to prime the parts immediately after cleaning and sanding to prevent any bare steel areas from developing surface rust or the parts from becoming contaminated again.
- 6. Obtain a technical data sheet for each product being used and read and follow the instructions. The manufacturer's data sheet will provide specific instructions that apply to the product being used. These are available on-line or from your paint supplier.

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