

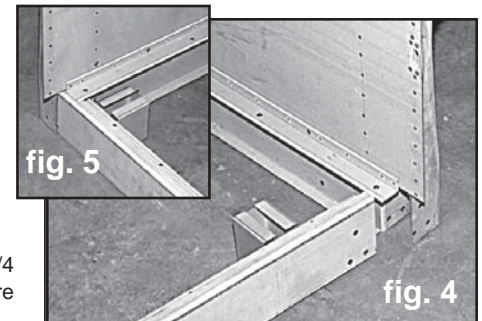
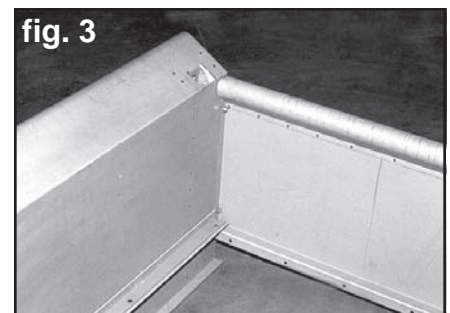
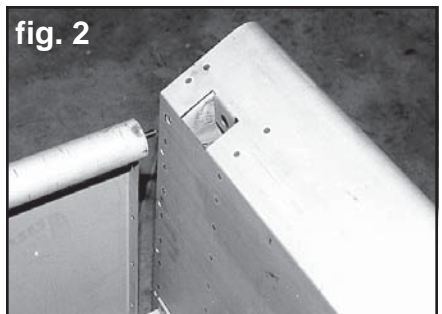
# MAR-K

RESTORATION AND CUSTOM PICKUP PARTS

## BED PARTS ASSEMBLY GUIDE 47-53 GM LONG STEPSIDE

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

1. Begin by installing a 5/16" flat washer, lock washer, and nut onto one end of the front panel tie rod. Stand the front bed panel on end and insert the tie rod end without hardware into the front bed panel curl plug. While looking down through the curl, align the tie rod with the opposite end curl plug of the front panel. See figure 1.
2. Insert the tie rod end without hardware through the top hole in the bed side. Secure with a 5/16" flat washer, lock washer, and nut. Bolt the front bed panel side flange to the inside of the bed side with (4) 1/4"-20 x 5/8" hex head bolts, lock washers, and nuts. See figure 2.
3. Remove the 5/16" hardware from the other end of the front panel tie rod. Install this end through the other bed side. Replace the 5/16" hardware.
4. Bolt the front bed panel to the other bed side with (4) 1/4"-20 x 5/8" hex head bolts, lock washers, and nuts. See figure 3.
5. Fit the rear cross sill into the lower portion of the rear stake pockets. The open side of the rear cross sill should be facing downward. See figure 4 and figure 5\*. The bracket and flanged side of the rear sill faces toward the front bed panel.
6. Using (10) 5/16"-18 x 3/4" hex head bolts, lock washers, and nuts, bolt the rear cross sill to the rear stake pockets. Leave the top two holes for tailgate hinges empty for now.

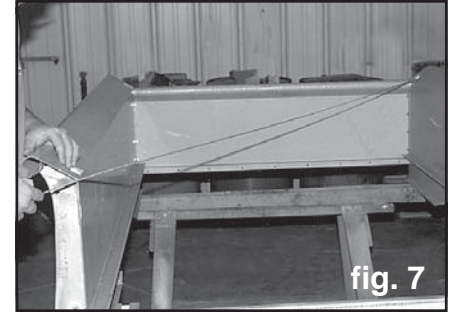


\*1/2 ton picture shown. On the 3/4 ton, the brackets will be slightly more toward the inside.

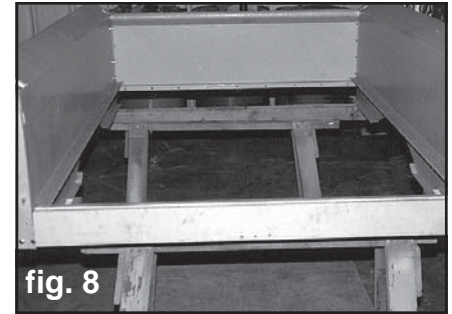
7. Once these four pieces of the bed are assembled, you will need to make sure your bed is square. Measure the bed width at the top and bottom of bed sides to ensure that the bed sides are straight up and down and are **50"** apart. See figure 6. Tighten rear cross sill bolts.



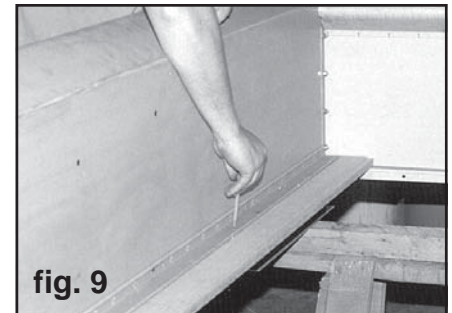
8. Also measure crosswise from the front of the bed to opposite rear of the bed on both sides. See figure 7. These measurements should be within 1/16" of each other to ensure bed squareness. Now tighten all bolts.



9. Place the assembly on supports horizontally to gain access to the top and bottom of the bed floor area. See figure 8.



10. Place the wood board that has only one bed strip groove (referred to as "edge boards") under the angle strip on the bed side. See figure 9. The non-grooved edge should be toward the bed side. Leave a 1/16" gap between the bed side and the board.



11. Mark all holes to be drilled into the wood boards through the angle strips square holes. See figure 9.

12. Remove these two boards and drill all holes marked using a 3/8" wood bit. Be careful not to splinter the other side of the board when drilling. Placing a scrap wood block behind the board where drilling will help prevent this. See figure 10.



13. Install the edge boards underneath the angle strips as in step #10. Place 5/16"-18 x 1-1/2" carriage bolts through the angle strips and through the boards. See figure 11. Leave off the lock washer and nut for now.
14. Slide the two center-hole cross sill brackets onto the front cross sill (identified by the hole pattern on the side leg of the cross sill), and attach the front cross sill to the first angle strip bolt from the front bed panel. This cross sill also bolts to the front bed panel with nine 1/4"-20 x 5/8" hex head bolts, lock washers, and nuts supplied with the front panel hardware. See figure 12.
15. Attach the second and third cross sills with cross sill brackets installed to the angle strip bolts approximately **26-3/8"** and **35-3/16"** from the front bed panel respectively. The fourth and fifth cross sills bolt to the angle strip bolts approximately **53-1/2"** and **63"** from the front panel. See figure 13. Install lock washers and nuts hand tight.
16. Install the second board on each side next to the edge board from step #13. Leave approximately a 1/2" gap between them. Place a bed strip between these boards on both sides. The end of the bed strip with the hole closest to the end should be at the rear cross sill. See figure 14. Bolt the bed strips down to the cross sills using the 1/4"-20 x 1-1/4" carriage bolts. *If using MAR-K's custom bed strips with hidden fasteners, follow the instructions supplied with the bed strips for correct installation.*

**Note:** The next step is to locate, drill, and countersink the locations for the bed-to-frame bolts and offset washers that sit on top of the wood surface. If wood is purchased with these holes predrilled, skip to step #26. If wood is purchased without these holes, the following steps will direct you through this process.

17. The first cross sill near the front bed panel is the first bed-to-frame bolt location. Mark the bottom of the second board from each side through the 1/2" diameter holes in the cross sill that are **36-5/8" apart for a 1/2 ton** and **33-3/4" apart for a 3/4 ton**. See figure 15.
18. The second cross sill back from the front bed panel is the next bed-to-frame bolt location. Mark the bottom of the boards through the 1/2" diameter holes in the cross sill that are **44-1/4" apart for a 1/2 ton** and **33-3/4" apart for a 3/4 ton**.



fig. 11

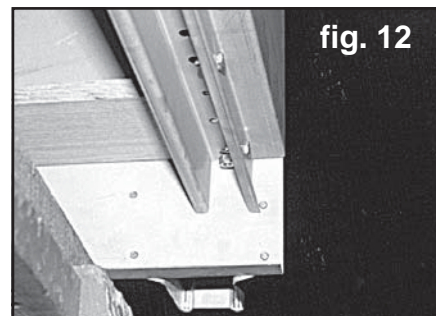


fig. 12

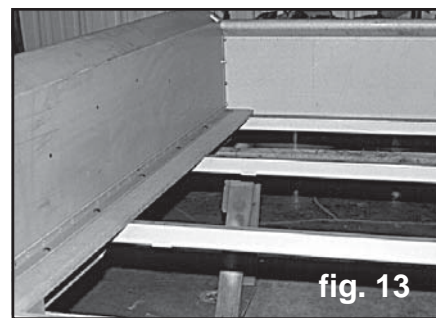


fig. 13

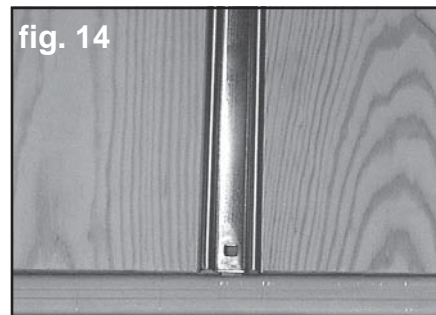


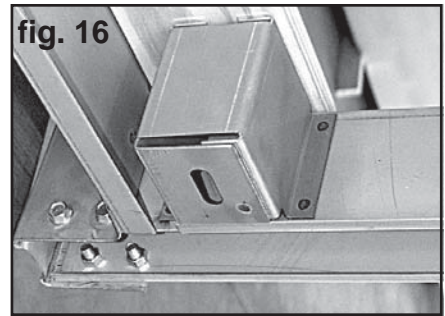
fig. 14



fig. 15



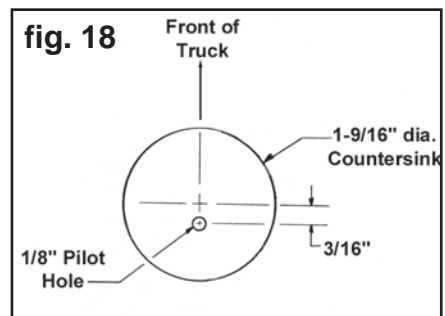
19. The fifth cross sill back from the front bed panel is the third bed-to-frame bolt location. Mark the bottom of the boards through the 1/2" diameter holes in the cross sill that are **44-1/4" apart for a 1/2 ton** and **33-3/4" apart for a 3/4 ton**.



20. Brackets welded to the rear cross sill serve as the rear bed-to-frame mounting locations. Mark the bottom of the boards through the brackets on the sill that are **44-1/4" apart for a 1/2 ton** (see figure 16) and **33-3/4" apart for a 3/4 ton** (see figure 17). The center of these marks should be **82-1/4"** from the front of the wood boards.



21. Make reference as to which end of each board is at the front of the bed. **For the 1/2 ton trucks**, remove the bed strips, cross sills and four boards. **For the 3/4 ton trucks**, remove just the bed strips and the two inner boards. The bottom side of these boards should now have 1/2" diameter round marks on them. Drill a 1/8" diameter pilot hole through the center of these marks completely through the boards.



22. On the top surface of the boards, measure toward the front from each hole 3/16" and mark the boards for the countersink. See figure 18.

23. Using a 1-9/16" diameter Forstner bit, a drill press if available, or a hand drill, countersink each location approximately 1/8" to 5/32". See figure 19.

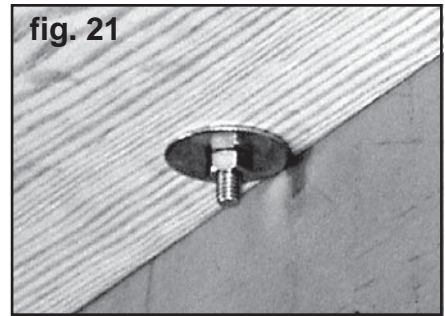


24. From the top surface of the boards, drill through the 1/8" pilot holes with a 1/2" wood bit to complete the bed-to-frame holes. See figure 20.

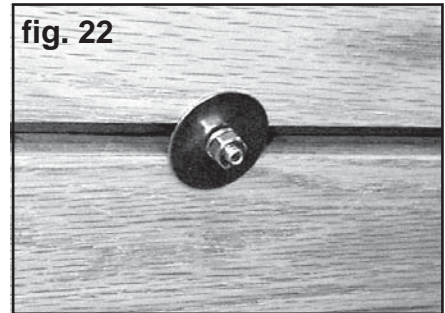


25. On the 1/2 ton trucks, reinstall the edge boards against the bed sides. Also replace the cross sills. This step is not necessary for the 3/4 ton.

26. Where there is not a cross sill attached to the angle strip bolts, install a 1-1/2" outside diameter flat washer with a 5/16" diameter hole on the bottom of the bolt before lock washer and nut. Tighten nut hand tight. See figure 21.

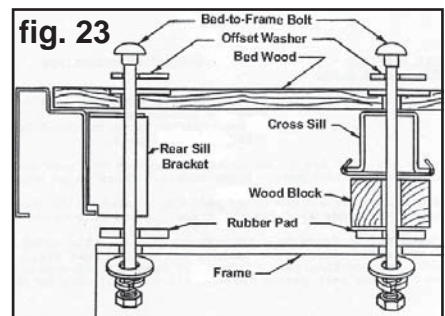


27. Replace the second board and bed strip on both sides. Where there is not a cross sill under the bed strip bolts, use a 1-1/2" outside diameter flat washer with a 1/4" diameter hole before the lock washer and nut. See figure 22. Tighten hand tight.



28. Continue installing boards and bed strips working from the bed sides toward the center. After adjusting spaces between boards and strips, tighten the bed strip bolts. Be careful not to tighten bolts too much. Broken bolts or damaged bed strips may be the result.

29. Install the bed assembly to the frame of the truck. This will enable you to double check the bed-to-frame mounting locations. The bed rests on rubber pads and wooden blocks. The sequence is as follows: truck frame, rubber pads, wood blocks, cross sill bracket/cross sill, and bed floor/assembly. See figure 23.



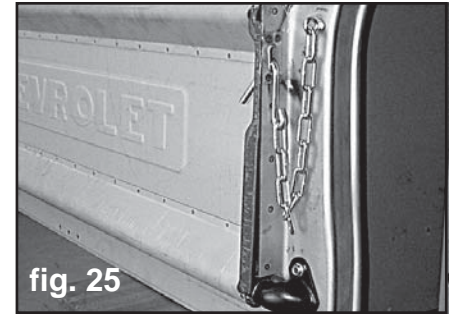
30. Insert the bed-to-frame bolts. These install through the offset washers, through the top of the wood surface, through the cross sills, blocks, rubber pads, and then through the frame. The long 3/8"-16 x 12" bed-to-frame bolts are used at the front pair of holes near the front panel.



31. After checking alignment of the bed-to-frame holes, install flat washers, lock washers, and nuts.

32. Bolt one hinge to the passenger bed side rear stake pocket with (2) 5/16"-18 x 3/4" hex head bolts. Place the tailgate end pivot area onto this hinge. Place the other hinge into the opposite end of the tailgate and bolt it to the driver stake pocket. See figure 24.

33. Install the tailgate chain eyebolts through the square hole near the top of the rear stake pockets. Secure with the 5/16" lock washers and nuts. this model has a left and right tailgate chain assembly. See figure 25.
34. You have assembled the entire bed. Check all parts for correct fit and alignment. Be sure the bolts are in place and that all dimensions are correct. Now remove the bed from the frame and disassemble the parts to prepare for painting.



## FINAL ASSEMBLY

After the parts are painted, the bed is assembled by the same procedure. By taking the time to assemble and test fit the bed before painting, you have reduced the chances for errors or problems in final assembly.



## 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 or 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 electro-galvanized steel. This means the metal is electroplated with a thin layer of zinc by the steel manufacturer. There are several reasons 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

1. 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.

©Copyright 2007 MAR-K Quality Parts L.L.C. All rights reserved.