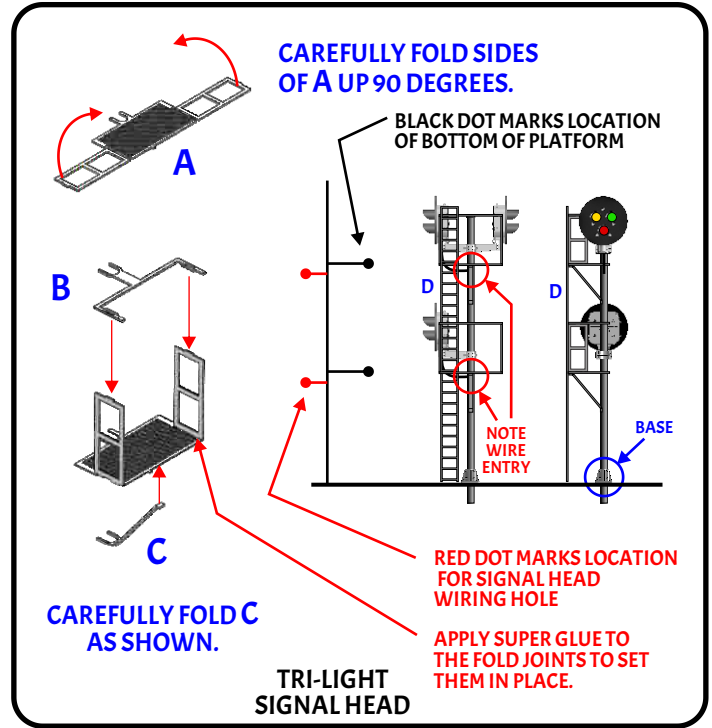
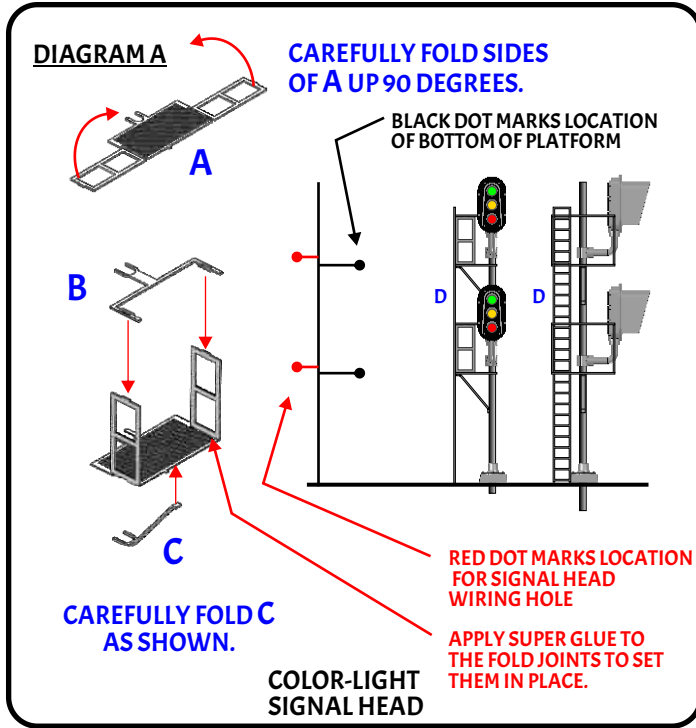


PARTS

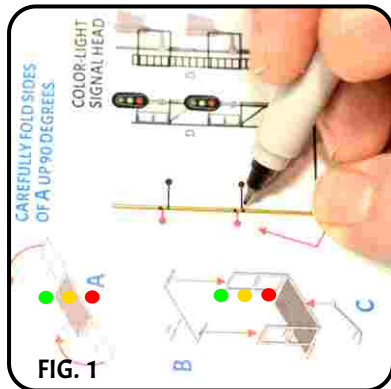


BASE

MAST TUBE



SUGGESTED ASSEMBLY

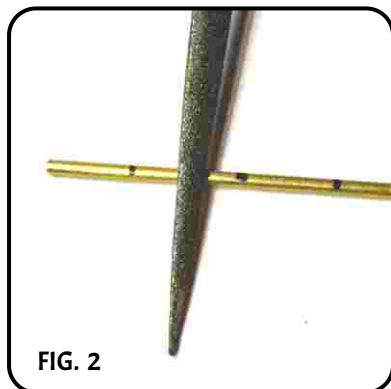


WE RECOMMEND THAT YOU READ THROUGH THE ASSEMBLY STEPS AND STUDY THE DIAGRAMS CLOSELY TO FAMILIARIZE YOURSELF WITH OUR SUGGESTED ASSEMBLY METHOD.

LAY THE BRASS MAST/TUBE DIRECTLY ON THE SUPPLIED DRAWINGS FOR USE AS A TEMPLATE AND MARK THE LOCATIONS OF EACH OF THE ASSEMBLY COMPONENTS (FIG. 1) INCLUDING THE LOCATION(S) FOR THE SIGNAL HEAD.

THE DRAWINGS ABOVE ARE IN N SCALE (1:160) AND CAN BE USED AS A PATTERN FOR MARKING.

THESE ARE ONLY SUGGESTED LOCATIONS SINCE DIFFERENT RAILROAD LINES MAY HAVE DIFFERENT CONFIGURATIONS FOR THE LADDER/MAST ASSEMBLIES.

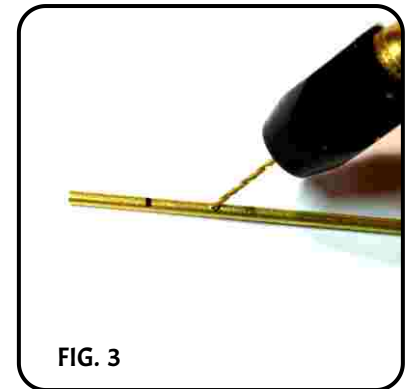


USING THE EDGE OF A DIAMOND NEEDLE FILE, SCRIBE THE LOCATION FOR THE SIGNAL HEAD WIRES TO ENTER THE MAST (FIG. 2). THIS WILL MAKE IT EASIER TO DRILL THROUGH THE ROUND BRASS TUBE.

DRILL THROUGH WITH A .020" DRILLBIT.

USE THE DRILL BIT AS A REAMER AND SMOOTH THE INSIDE EDGES OF THE DRILLED HOLE TO HELP PREVENT DAMAGE TO THE INSULATION OF THE WIRE (FIG. 3).

SIGNAL HEADS CAN BE ATTACHED AFTER LADDER ASSEMBLY IS COMPLETE



APPLY SEVERAL DROPS OF SUPER GLUE (THE GEL TYPE CA GLUE MAY WORK BEST FOR ASSEMBLY) TO A PLASTIC SURFACE FOR A RESERVOIR AND USE A SHORT LENGTH OF FINE WIRE TO DIP OUT A TINY DROP OF GLUE (FIG. 6).

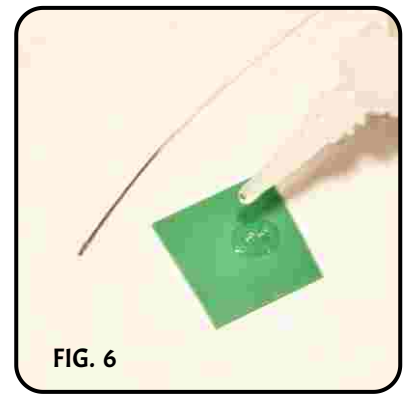


FIG. 6

ASSEMBLE THE LADDER PLATFORM AS SHOWN IN DIAGRAM A BY CAREFULLY FOLDING THE SIDES OF THE PLATFORM (PART A) UP 90 DEGREES USING FLAT PLIERS OR A PHOTO-ETCH BENDING TOOL. ONCE THE SIDES ARE CORRECTLY FOLDED, TOUCH THE FOLDED JOINT BETWEEN THE PLATFORM SIDES AND THE PLATFORM BASE WITH TINY DROPS OF SUPER GLUE TO MAKE THE FOLD RIGID.

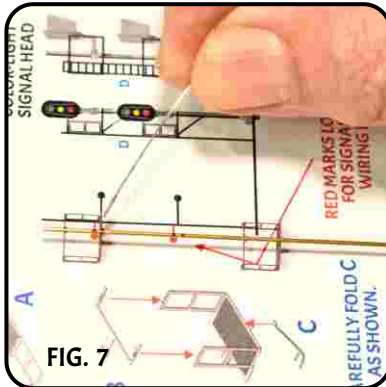


FIG. 7

LAY EACH LADDER PLATFORM ASSEMBLY ON THE DIAGRAM STARTING WITH THE TOP PLATFORM AND LAY THE MARKED TUBE IN THE MOUNTING SLOTS OF THE PLATFORM (FIG. 7).

IF THE ASSEMBLY TIPS BECAUSE OF THE LENGTH OF THE TUBE, SLIDE THE BOTTOM PLATFORM ASSEMBLY DOWN TOWARD THE BOTTOM OF THE TUBE TEMPORARILY TO HOLD THE TUBE IN POSITION.

TOUCH EACH CONTACT POINT OF THE TOP PLATFORM ASSEMBLY AND THE TUBE WITH A TINY DROP OF CA GLUE USING THE WIRE AND RESERVOIR.

ALLOW THIS TINY GLUE JOINT TO HARDEN. WHILE NOT REALLY RECOMMENDED, A CA ACCELERATOR CAN BE USED TO SPEED THE CURE OF THE GLUE IF NECESSARY.

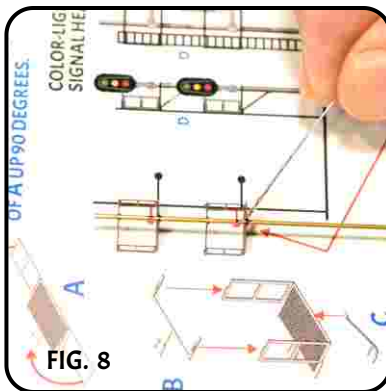


FIG. 8

ONCE THE GLUE HAS CURED ON THE TOP PLATFORM ASSEMBLY, SLIDE THE BOTTOM PLATFORM ASSEMBLY INTO POSITION (FIG.8).

REPEAT THE STEPS ABOVE TO ADD THE BOTTOM PLATFORM ASSEMBLY TO THE TUBE MAST.

IF THE TUBE STILL TIPS, USE A SMALL PIECE OF MODELERS CLAY TO HOLD THE BOTTOM OF THE TUBE IN PLACE. (FIG.9)

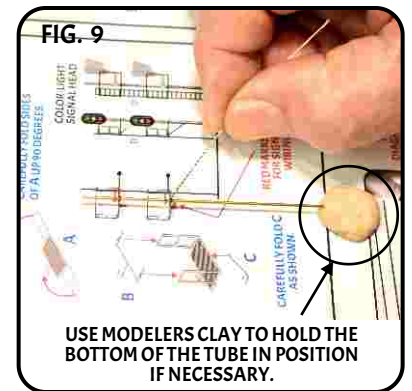


FIG. 9

USE MODELERS CLAY TO HOLD THE BOTTOM OF THE TUBE IN POSITION IF NECESSARY.

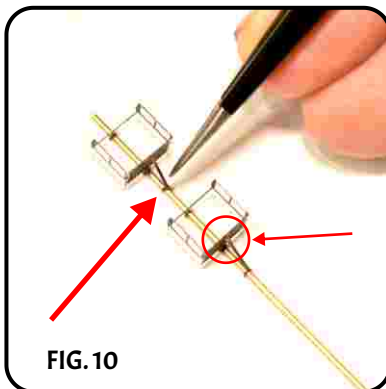


FIG. 10

BEND THE PLATFORM BRACE (PART C) AS SHOWN IN DIAGRAM A, DIP THE "U" END OF C IN THE CA GLUE DROP AND APPLY AS SHOWN.

ONCE THIS GLUE POINT HAS DRIED, APPLY A TINY DROP OF GLUE WHERE THE OPPOSITE END OF PART C TOUCHES THE BOTTOM OF EACH PLATFORM.

AGAIN USING A TINY DROP OF SUPER GLUE, CAREFULLY TOUCH EACH JOINT AND ALLOW TO DRY (FIG. 10).

TO HELP SUPPORT THE LADDER IF YOU ARE USING A SINGLE PLATFORM AND SIGNAL HEAD, USE THE REMAINING PLATFORM BRACE BY GLUEING IT TO THE MAST AND THE LADDER CLOSER TO GROUND LEVEL. IF THE BRACE IS TOO LONG, SNIP IT OFF ONCE IT HAS THOROUGHLY DRIED.

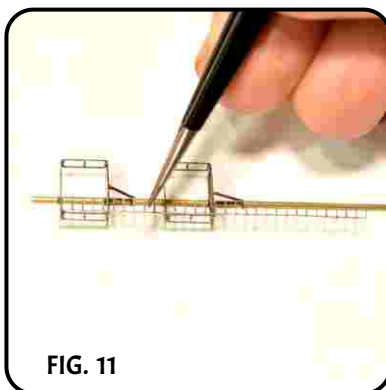


FIG. 11

ONCE THIS INITIAL GLUEING HAS DRIED, ATTACH THE LADDER (PART D) TO BOTH PLATFORMS (FIG. 11).

ONCE THE INITIAL GLUING HAS DRIED, YOU CAN GO BACK AND APPLY TINY DROPS OF SUPER GLUE TO THE CONTACT POINTS TO STRENGTHEN THE JOINTS.

CAREFULLY CUT THE LADDER TO LENGTH (IF NECESSARY).

FINALLY, PRIME AND PAINT THE ASSEMBLY. WE RECOMMEND A LAQUER BASED PRIMER AND A SPRAY APPLICATION OF THE FINAL COAT OF SILVER OR ALUMINUM PAINT.