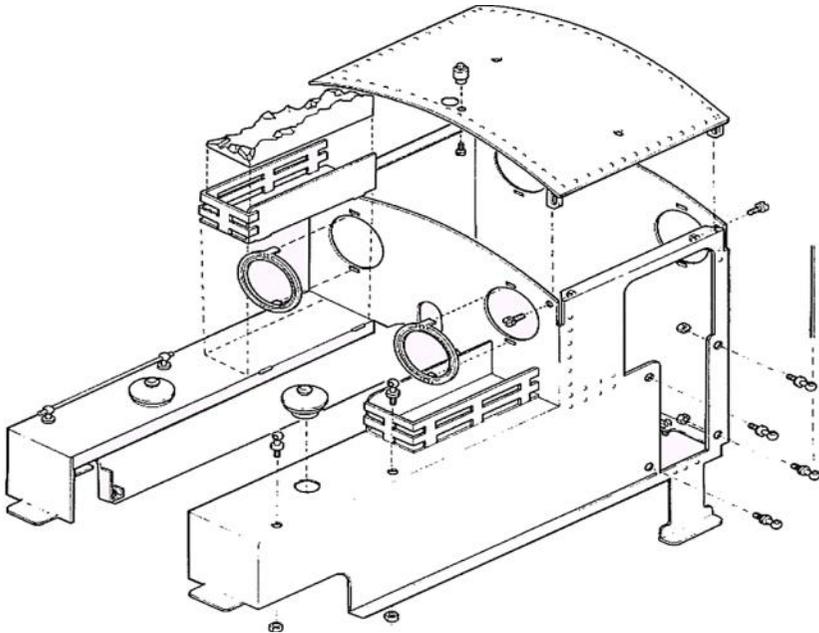




# Modular Locomotive System Instruction Manual *for* HBK6 Lady Anne Body Kit



**Roundhouse Engineering Co. Ltd.**  
Units 6-10 Churchill Business Park.  
Churchill Road, Wheatley.  
Doncaster. DN1 2TF. England.  
Tel. 01302 328035 Fax. 01302 761312  
Email. mail@roundhouse-eng.com

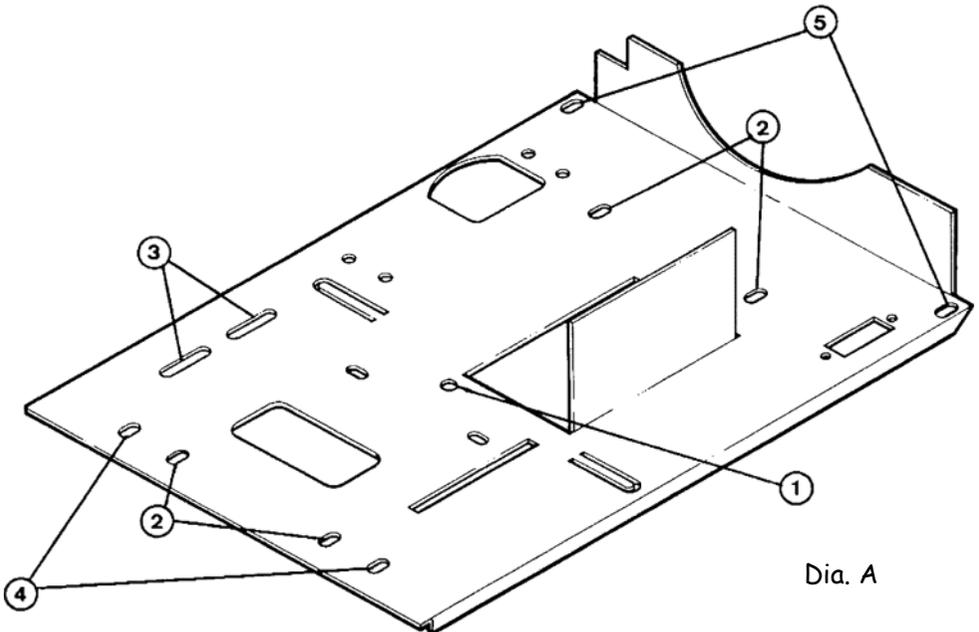
[www.roundhouse-eng.com](http://www.roundhouse-eng.com)

## HBK6 Lady Anne Body Kit Introduction

These instructions cover the construction of the body kit intended to fit the Lady Anne chassis and boiler kits.

The brass panels are photo etched to shape and all fold lines and holes are etched into the parts where necessary. Only a minimum of cleaning up is required and will normally simply mean running around the edges with a small file or emery cloth to remove any sharp edges or 'pips' that may be left due to the photo etching process. As a general rule, all folds should be 90 degrees with the etched lines on the inside of the angle except if specifically stated otherwise. The kit is designed for either manual or radio control operation and all fixing holes are provided for both versions.

The panels have been designed for assembly with soft solder, however, if preferred holes can be drilled at the joints and small rivets or screws used. If soldering, a small to medium butane blowtorch is ideal, as the large areas of brass work will dissipate the heat of a soldering iron too quickly unless a very powerful one is used. Use a suitable flux with the solder, Bakers fluid being



particularly good, though extreme care must be taken during use.

Follow the manufacturer's instructions on the packaging of any solder, fluids or glues at all times. Glue of any kind is not suitable for the main structure, but is required for the headlamp lens.

Refer to diagrams where necessary and hold parts together with small clamps such as toolmakers clamps or miniature G or C clamps, during soldering or drilling of joints. It is advisable to run through the full instructions identifying all parts and mountings and have a 'dry run' before soldering anything in place.

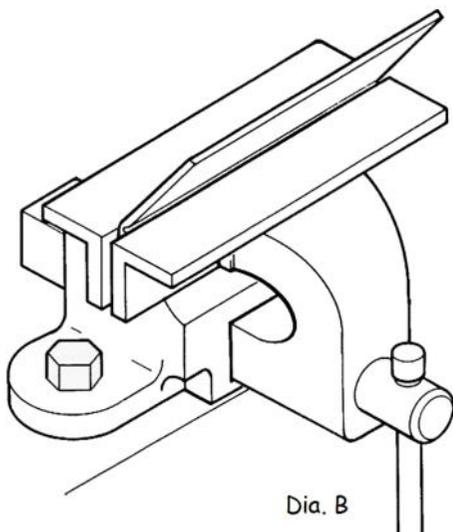
All painting is left to the builder and Acrylic paint is readily available in spray cans for a good finish. A good primer is essential and if available an etch primer should be used on brass parts. A good model shop will stock more specialised paints and should include etch primer in the range. Read carefully and follow the maker's instructions that appear on the can before using any paint. All parts must be thoroughly cleaned and rubbed down with fine wet and dry paper prior to painting.

At Roundhouse, we paint the dome the same colour as the bodywork.

### Construction

Fold up the cab floor/footplate as shown on the previous page, in the diagram (Dia. A).

When folding long sections, i.e. the side flanges, it is better to hold the flanges between two pieces of angle iron in a vice or clamps, as illustrated (Dia. B). In this way, all the flange is bent over in one go and the result is a much neater job.



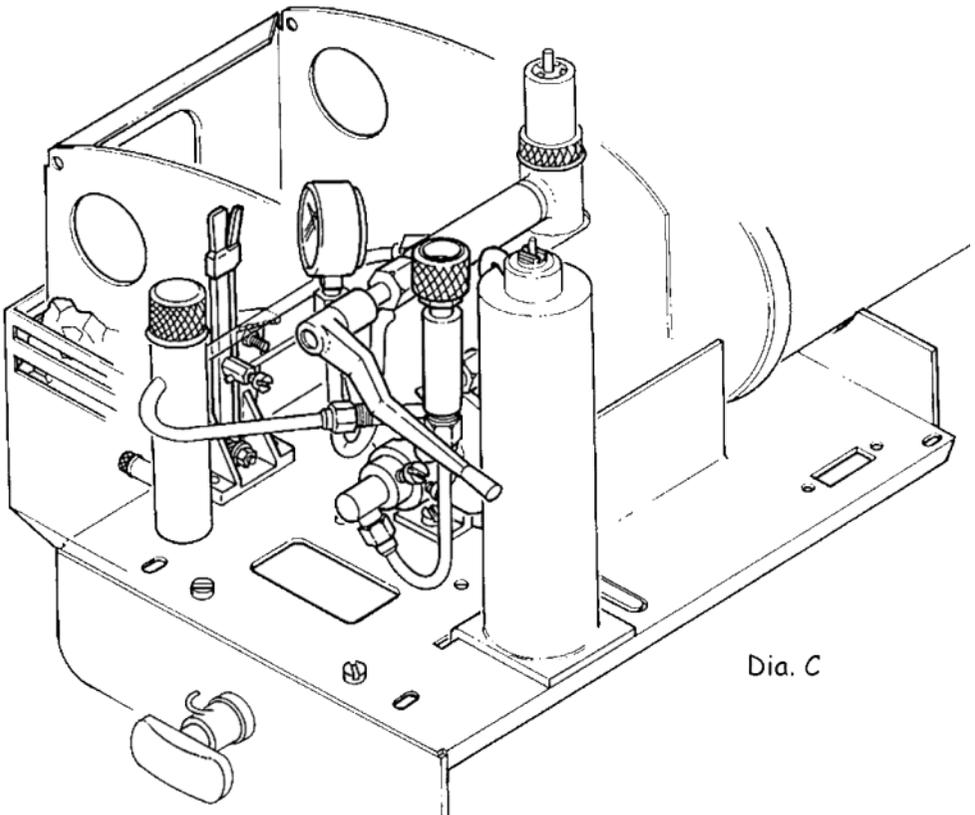
The floor can now be painted then fitted to the chassis as follows.

If the chassis/boiler unit is complete, it is necessary to remove the lubricator, gas burner and gas tank and the screw fixing the rear boiler mounting foot to the frame spacer.

Pull the boiler backwards about 20mm out of the smoke box then lift the rear end and slide the foot plate in place.

Reposition the boiler and fasten again with the screw through its mounting foot, this time also passing through the hole (1 Dia. A) in the foot plate. Do not tighten at this time.

Screw the four M3 brass foot plate mounting screws loosely into the frame spacers through the holes (2) marked in the diagram.



The mounting holes are slotted to allow the foot plate to be squared up to the buffer beam before finally tightening all five screws.

Replace the gas equipment and lubricator as before. Note that there is a slot in the foot plate for the gas tank mounting to pass through.

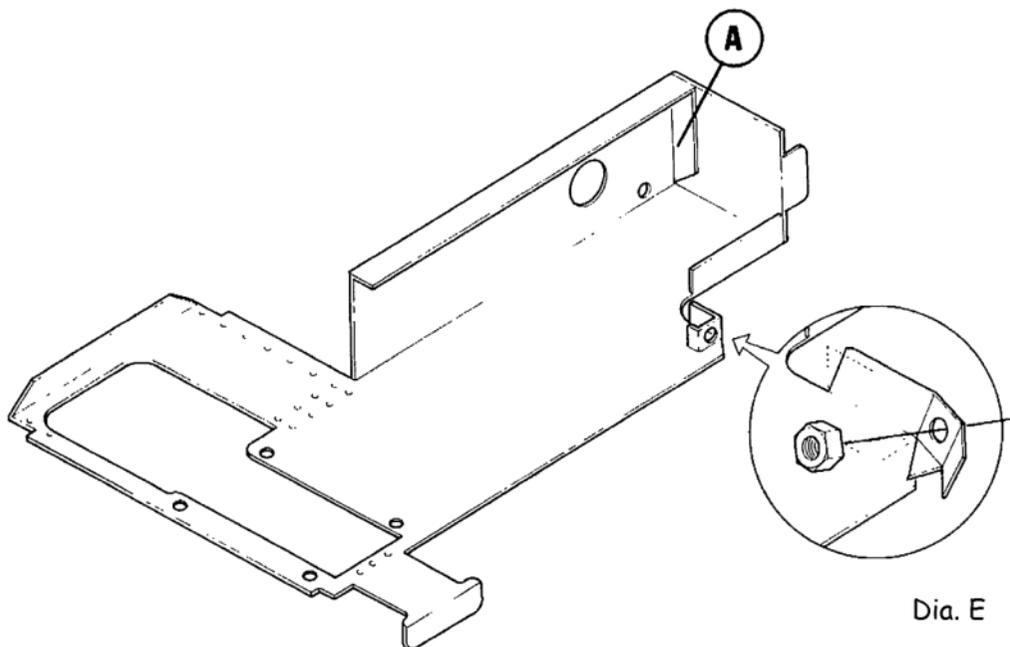
Two slots (3) are provided on the left hand side of the foot plate for mounting the manual reversing lever.

Diagram C shows the basic layout of controls and fittings on a manual control engine. Radio control versions differ slightly but this is covered in detail in the HBK10 (*Lady Anne R/C Fittings Only Kit*) instruction manual. Fold up left and right hand body sides as shown in Dia. E, ensuring that all folds are at 90 degrees. Clamp together tab A and the tank front and solder the two together making sure that the tank top is at 90 degrees to the tank side. The front body mounting is formed by folding up the series of small tabs as shown in the insert diagram and soldering a 6BA nut into the pocket thus formed. At a later stage, this sits down onto the footplate and a screw passes up into the nut and holds the front of the body in place. Fold up the cab front and back as shown in dia. F.

Note that all three flanges bend the same way on the back panel, i.e. facing into the cab interior however, only the side flanges on the front panel face into the cab. The two that attach to the tank tops are bent to face the opposite way and sit up under the tank tops.

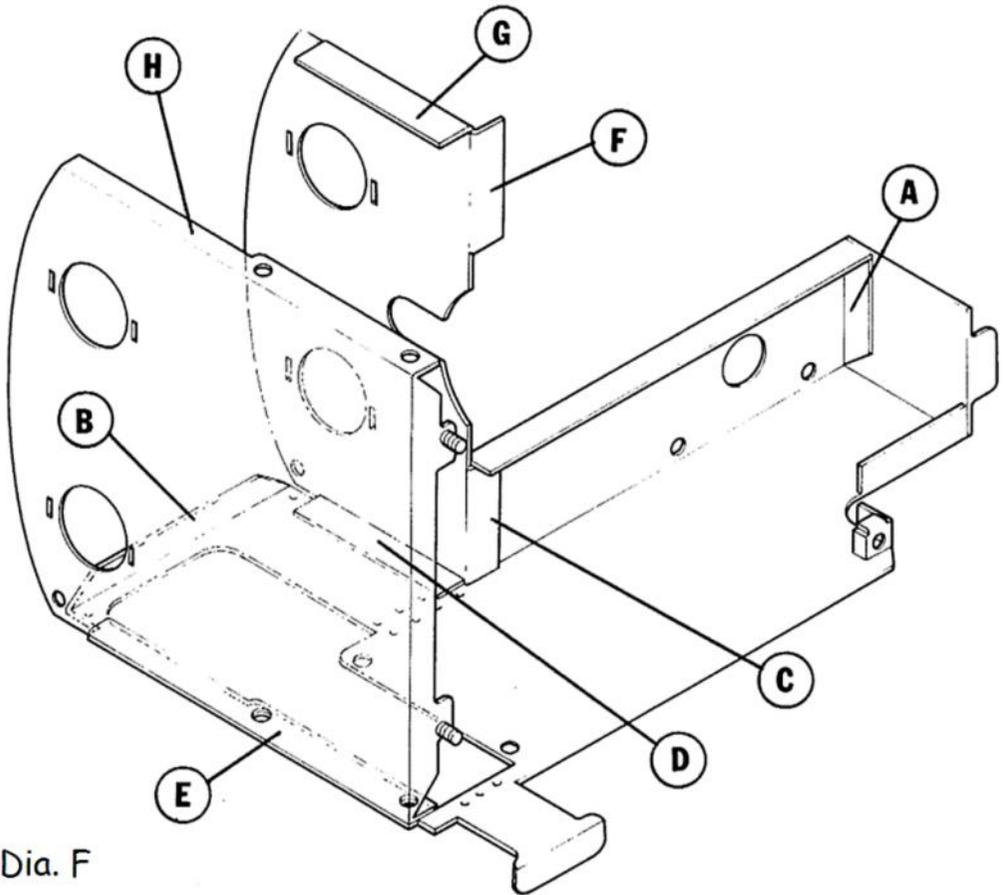
Clamp tab D on the cab front to one of the side panels ensuring that the front face is parallel to the front edge of the cab and that tab C is right up under the tank top. Place a second clamp to hold tab C to the underside of the tank top and check that all joints are held squarely before soldering. Now repeat the same procedure for the other side, tabs F and G. On the left-hand side, a slot is left at the top corner of the cab for the roof hinge. Before attaching the

cab back, solder the two 6BA brass screws into the holes on the bottom flange. These are the rear body mounts when it is attached to the footplate.



Clamp tab E on the cab back to the cab side ensuring that the handrail holes line up and the back face is parallel to the back edge of the cab before soldering. Repeat for tab H. As with the front panel, a slot is formed in the top corner for the roof hinge.

If fitting the optional front coal bunkers, these should now be bent up as shown in Dia.G and tabs I soldered, though you have a choice of how to fix them to the body. Because they are not structural items they can, if you wish, be treated as separate parts and glued on after painting. For a more permanent job however, they can now be soldered on but care must be taken not to disturb the cab seams already soldered. A clamp holding both the coal bunker and the tank top/cab front seam (tabs C and F) all together will assist. To locate correctly, there are two small tabs (J) which sit in the



Dia. F

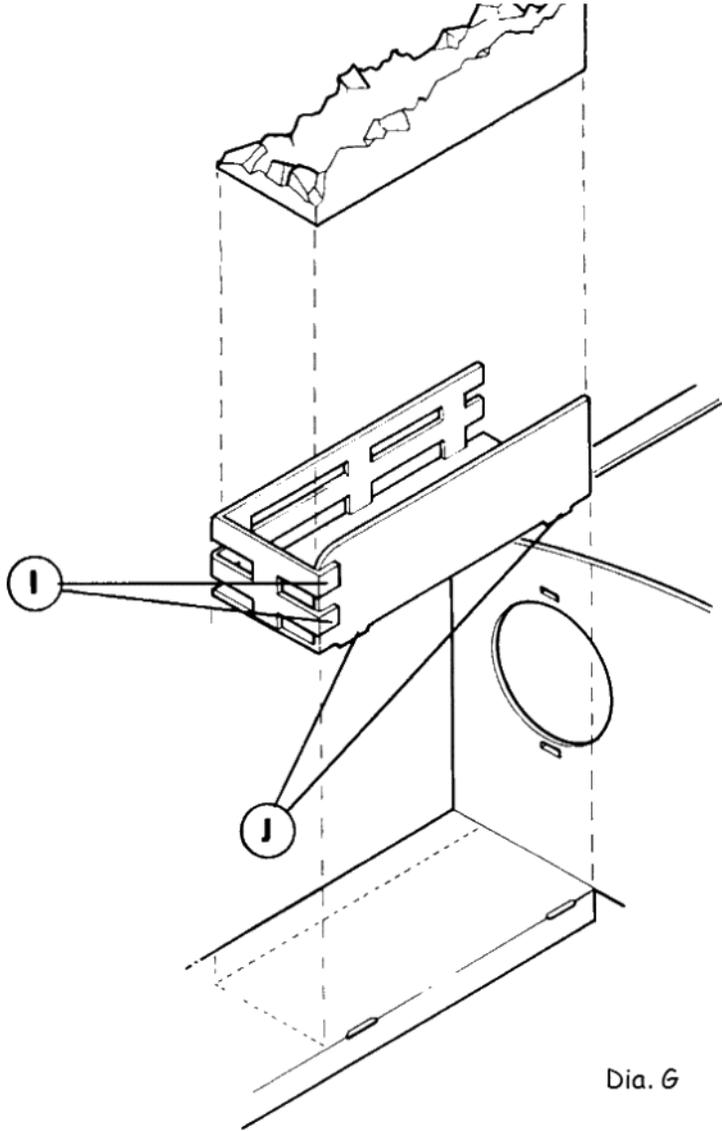
corresponding slots on the inside edge of the tank top.

Do not fit the dummy coal load at this time.

If fitting the optional rear bunker, this should now be folded up as shown in Dia.H.

Fold the lamp brackets as shown in the inset diagram and push the side tabs through the slots provided in the bunker rear. These can then be bent over on the inside before soldering. The completed bunker should not be fitted to the body at this time.

All assemblies and the brass dome can now be prepared and painted as outlined in the introduction. The three dummy coal loads should be checked for fit and filed to size - this should be done in a well ventilated area, preferably outside, as some dust is produced when filing. The rear one is held in place between the bunker and the cab back and should be a snug fit between the two. The coals can be painted black.

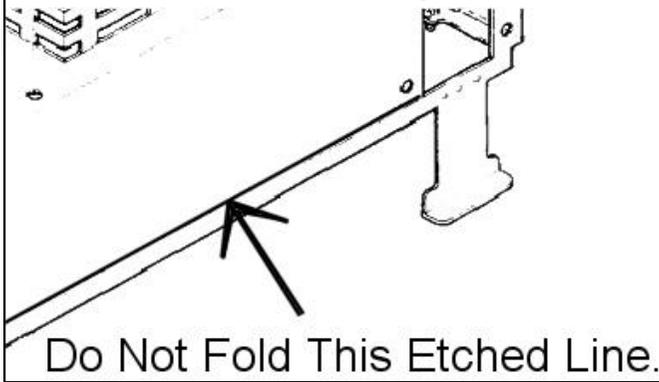


Dia. 6

When the painted items are thoroughly dry, all the handrails can be fitted using 8BA nuts. The dummy whistle is screwed to the cab roof using the screw supplied. If fitting the rear bunker, this is held in place by the rear cab door handrails, not forgetting the dummy coal load.

The front dummy coal loads can be glued in place, as can the dummy tank fillers. The spectacle rims are held in place by tabs

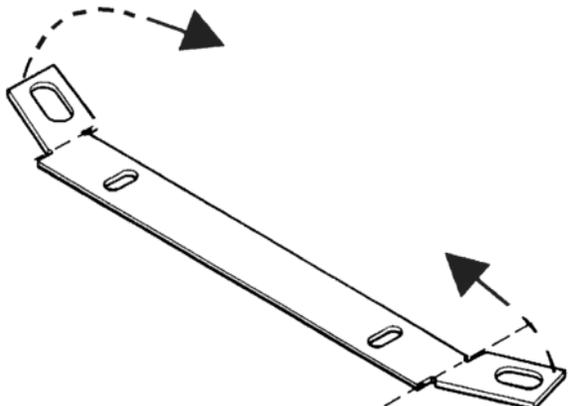
Note: The lower etched line on the outer side of both side tanks should not be folded. This line is purely decorative. See the diagram below.



which pass through the slots above and below the spectacles. Note that the top tab on each rim should be bent down inside the cab and the bottom ones bent up.

Finally, the cab roof is attached using the two M2 x 6 screws, washers and nuts. These screws pass through from the outside with the washers and nuts on the inside. Leave them slightly loose to allow the hinge to operate. A spot of 'Loctite' or, if this is not available, paint, on the threads will prevent the nut from coming off. The brass boiler band should be cleaned to remove any sharp edges and then polished and fitted over the front of the boiler wrapper and touching the rear of the smokebox.

The finished body is fastened down to the foot plate by two 6BA nuts under the rear, just in front of the buffer beam and two 6BA screws under the front corners of the side tanks.



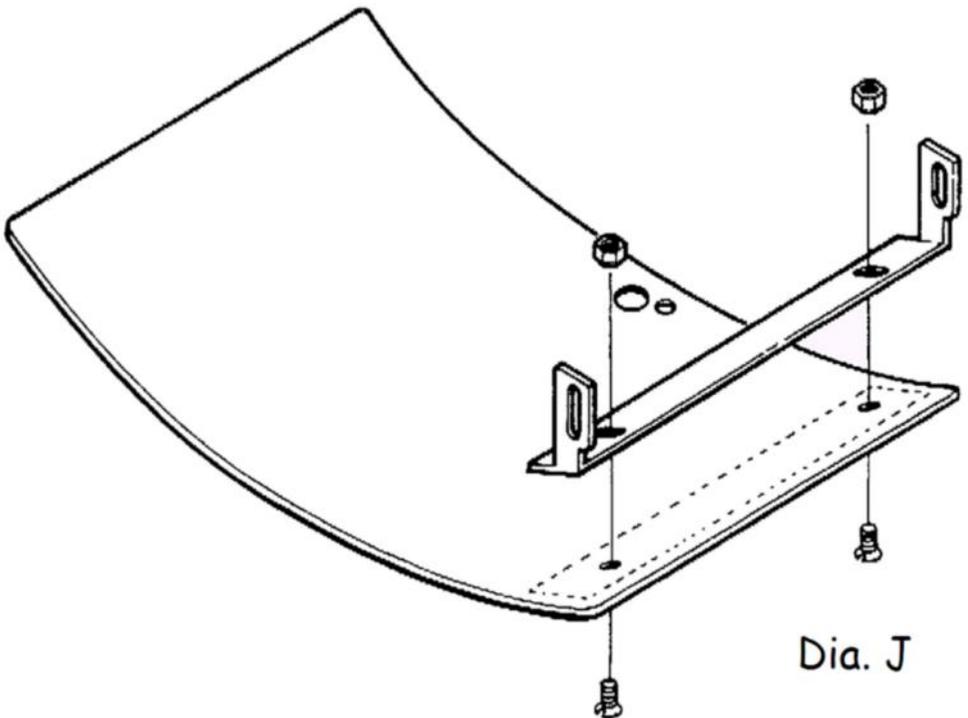
The dummy roof vent was originally used as the main

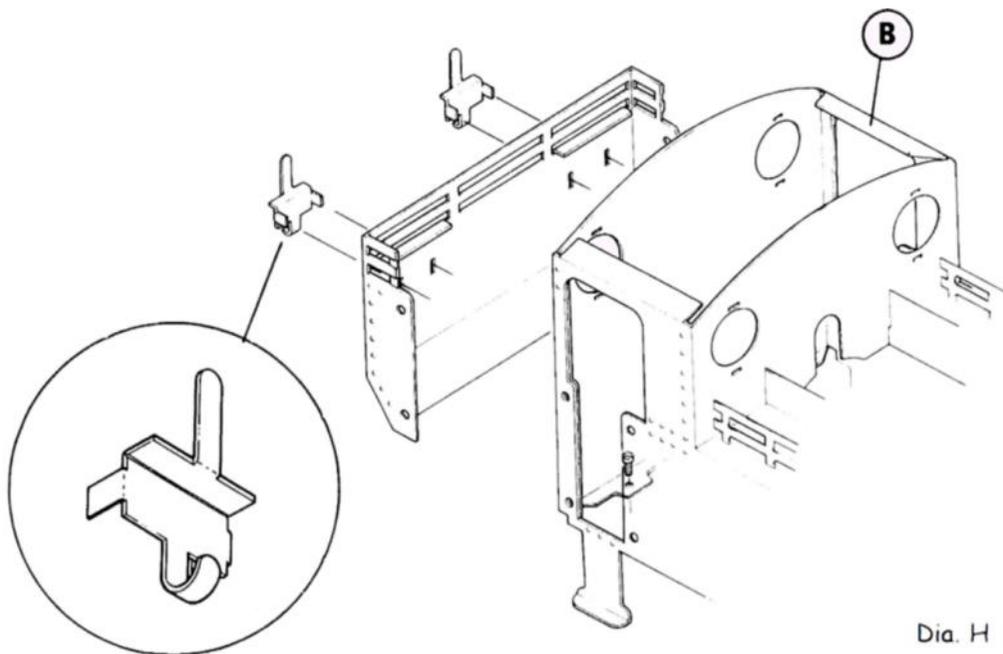
aerial. With the arrival of 2.4ghz Radio Control equipment it is no longer needed for this purpose, and is purely a cosmetic addition to the roof. If you are using 2.4ghz R/C, then the long tab is redundant and can be either folded underneath or removed.

If you are using 40mhz R/C then the aerial lead from the receiver will need to be soldered to this tab. The long tab should be bent over at 90 degrees so that it passes down through the large hole at the front of the roof next to the dummy whistle. Using the double sided sticky pads fix the vent to the cab. These pads are to insulate it from the roof, so ensure that there is no contact between any part of it and the roof. Check particularly where it sits over the heads of the battery clip fixing screws and round the dummy whistle.

Any metal to metal contact will short circuit the aerial and cause interference with the radio signal.

Finally, place the dome over the boiler filler plug.





Dia. H



# HBK6 Lady Anne Body Kit Checklist

## Loose items:-

- 1 Cab Floor.
- 1 Cab Front.
- 1 Cab Back.
- 1 Bunker.
- 1 Cab Roof.
- 1 Boiler Band with M2 Long Steel Screw & Nut fitted.
- 1 pair of Right and Left cab/side tanks.
- 1 Brass dome.
- 1 Dummy Roof Vent with sticky pads.

## Sealed Pack No.1

- 1 set of Dummy Coals(3 Pieces).
- 2 Lamp Brackets.
- 1 Cab Roof Hinge
- 1 pair of Right and Left Coal Rails.
- 1 Dummy Whistle with M2 screw fitted.
- 4 Spectacle Rims.
- 2 Dummy Tank Fillers.
- 1 set of Handrails (6 pieces, 2 long + 4 shorter).

## Sealed Pack No.2

- 12 Handrail Knobs
- 13 8BA Nuts
- 4 6BA Nuts
- 4 M3 x 6 Brass Screws - footplate Mounting Screws
- 4 6BA x 1/4" Screws
- 2 8BA x 3/16" Countersunk Screws
- 2 M2 x 6 Screws, Washers & Nuts



PARTS CHECKED