

## **Etched brass parts**

- 1/ main body.
- 2/ Sole plate.
- 3/ Under frame x 2.
- 4/ Buffer/coupling x 2
- 5/ Axle thrust washer x 5.
- 6/ Axle keeper plate x 3.
- 7/ Coupling bar x 3.

## This kit contains the following parts.

- 1 x etched brass frame sheet.
- 11 x long wooden plank.
- 6 x short wooden plank.
- 4 x wheel.
- 2 x 32mm gauge axle.
- 2 x 45mm gauge axle.
- 8 x steel self tapping screw.
- 4 x steel countersunk screws and nuts.
- 2 x coupling pin.



## 3PCW 3 Plank Wagon Kit



Roundhouse Engineering Co. Ltd.
Churchill Business Park
Churchill Road, Wheatley,
Doncaster. DN1 2TF.
Phone 01302 328035 Fax 01302 761312
www.roundhouse-eng.com

**Building Instructions.** 

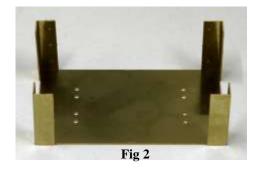
Carefully remove the etched brass parts from the fret by snipping the attachment tabs with a pair of thin nosed tin snips, then remove any remaining burrs with a fine modellers file.

All folds are made by bending along the half etched lines, keeping the etched line to the inside of the bend (unless otherwise stated). All bends should be to 90 degrees.

Taking the main body etch (item 1), first form the corner angles (fig 1) then fold the corner angles upwards from the floor (fig 2).



Fig 1



Fold the sole plate (item 2) into a rectangle and position on the underside of the floor. There are four small tabs on one side of the sole plate which locate into four corresponding slots in the floor.

Stand the assembly upside down, making sure that all four corners are square to the floor and either glue or solder up using soft solder with a small blow lamp or a good sized soldering iron. See fig 3.



Screw hole strengthening tabs.

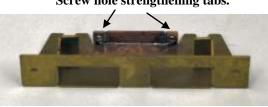


Fig 4



Fig 5

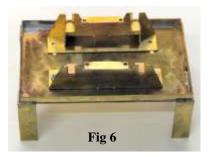
Fold up the two under frames (item 3) as shown in fig 4.

Note that there are two small tabs to give extra strength for attachment of the keeper plate screws. These are bent right back to double the thickness of the etch and will benefit from a spot of solder though this is not critical.

Fold up the two buffer/couplings (item 4) as shown in fig 5 and solder or glue the top joint and top reinforcing plate.

You can now paint all of these items if they are to be a different colour to the wooden planks. If the wagon is to be all one colour, wait until the planks have been fitted before painting. The under frames should be fitted before the planking and are fixed using the countersunk screws and nuts with the nuts to the underside of the wagon. Two sets of holes are provided in the brass floor to accommodate either 32mm or 45mm gauge. See fig 6.

The relevant holes in the brass floor can be countersunk to allow the screw heads to sit flush. These are then hidden when the floor planks are fitted.



Check the fit of the wooden planks in the frame and trim with a sharp craft knife if required.

The short end planks are fitted first and are full width of the wagon frame. The long side planks are then fitted and finally the floor planks. Epoxy adhesive or superglue can be used for this.



The wheel sets can now be assembled. Two axles for each gauge are supplied and the plastic wheels are pushed on each end. This is easily accomplished by pressing them on between the jaws of a small vice. Thin brass thrust washers are supplied on the fret (item 5) and two of these should be slid over each axle before the wheels are pressed on.

Once all painting is complete, fit the wheel sets as shown in fig 7, using the two keeper plates (item 6) and self tapping screws. It may be necessary to clean out with a small file, the slots in the under frames into which the axles fit. Slide a brass thrust washer to each end of the axle so that they sit between the back of the wheel and the outside face of the under frame when fitted.

Finally, fit the buffer/coupling to each end at a height to suite your other rolling stock and locomotives. They are each attached with two self tapping screws, screwed directly into the wooden end planks.

A pair of coupling pins are supplied and can be used with a three link chain or with the solid coupling bars (item 7) included on the brass etch fret.