## The Palatine Models Alex Jackson Pivot Bending Jig

## Introduction

This jig has been designed to enable the user to produce a right angled bend in the correct plane to the coupling head to enable a pivoted Alex Jackson coupling to be made. If this bend is made incorrectly the coupling is completely ruined. This jig enables the correct bend to be made every time.

The pivoted Alex Jackson coupling is considered by many to be superior in operation to other variants of the coupling. It is undoubtedly more positive in operation and is more easily adjusted if misalignment occurs. However, the type of Alex Jackson coupling used is a matter of personal choice and users should choose whichever type of coupling suits them best.

## Construction of the jig.

Before cutting the parts from the fret carefully clean with a fibreglass pencil or appropriate liquid cleaner. This will assist with soldering the parts together.

Carefully cut out all the parts from the fret and remove any tags.

Place the jig front on a flat surface with the etched groove facing upwards. Take one of the two small oblong pieces and bend to shape so it matches EXACTLY an edge of the etched groove. Bend the other piece to a similar shape so the two pieces are a matching pair. Note the half etched line on one side of these pieces is to assist with this. It is recommended to keep the half etched lines to the outside of the channel being created which means that the bend in one of these pieces will have the half etched line to the inside of the bend and on the other piece it will be to the outside of the bend.

Solder one of the pieces at 90° to the edge of the etched groove on the jig front. DO NOT SOLDER THIS PIECE INTO THE ETCHED GROOVE. THIS GROOVE SHOULD REMAIN CLEAR OF SOLDER THROUGHOUT CONSTRUCTION OF THE JIG. Using a spacer of approximately 0.6mm – a filed down lolly stick or coffee stirrer is ideal but using a metal spacer will act as a heat sink – solder the other piece to the other side of the groove forming a parallel channel.

Fold in the wings of the jig front to form a 90° bend. Place the jig body face down on a flat surface and offer the front to it. If it sits correctly solder the front to the underside of the jig body.

Turn the jig over and the etched hole in the centre of the jig front should be just visible above the jig body. If it isn't it is quite likely the front was not sitting correctly prior to soldering.

Take the Clamp and fold the two outer parts through 180° with the etched line to the inside and solder flat. Do not use too much solder for this otherwise the guide will not sit correctly on the jig. If the guide does not slide freely up and down the jig clean up the soldered joints just made and also carefully dress the sides of the jig body with an oilstone. The jig is now ready for use.

## Using the jig

Before using the jig measure on the vehicle the coupling is to be fitted to the distance from the tail of the coupling to the point where a right angled bend is required to enter the pivot plate.

Feed the long shaft of the coupling through the hole in the front plate until the coupling head is engaged in the channel. Place the clamp over the shaft so the wire runs through the half etched groove on the underside of the clamp. At the measured location make a sharp bend using the side of the clamp.

Please note that if using the Palatine Models Pivot Plates the bend will be to the right of the clamp if looking from the rear of the jig!

Feed the wire out from the front of the jig and complete the bend to 90° using finger pressure only. The coupling is now ready to be threaded onto a pivot plate.

