

## 2229 - CCU Articulation Unit Assembly Instructions

Please read the instructions and familiarise yourself with the parts and options before bending, gluing or soldering anything. These units have been designed to allow MJT Coach Compensation Units to be used on articulated sets. Any number of vehicles can be articulated and each features full three point suspension. The articulated set can be easily divided into separate vehicles for storage and transport and reassembled when required. One articulation unit is required for each articulated bogie on the prototype; a twin uses one, a triplet two and a guad three.

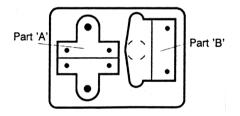


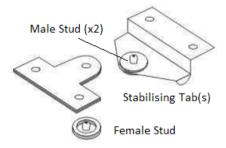
When using MJT CCUs on a conventional coach (A), stabilisation of the body is achieved by the etched semi-circular 'triangulation tabs' on one of the bogies. The other bogie is free to pivot in any direction. With an articulated set (B) this principle must be replicated throughout all the vehicles. The articulated bogie must act as the 'free' bogie for one vehicle and the stabilising bogie for the next.

Remove the items from the fret and clean off any remaining half etched tabs. Fold the two halves of Part 'A' through 180 degrees with the half etched fold line on the outside of the bend. Take the female half of the press stud and solder it to part 'A'. If it is expected that the coaches will be repeatedly separated, remove the wire 'spring' from the female half of the press stud with a fine pair of tweezers. The assembled part 'A' will provide the free pivot function to the coach body.

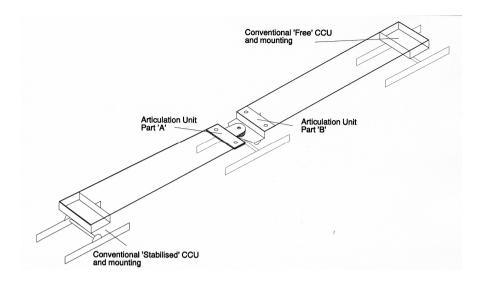
Take part 'B' and bend all fold lines through 90 degrees with the half etch on the inside of the bend as shown on the diagram. It is advised that these bends are strengthened with a fillet of solder. Take the male half of the press stud supplied and the male half from the press stud supplied with the CCU and solder them back to back either side of part 'B' using the half etched markings as a guide.

This process may be made easier by clamping the pieces together with a wooden clothes peg whilst soldering. The completed part 'B' provides the stabilising bogie mounting.





To assist in describing where the individual components go it will be assumed in the following text that the coach bodies are ready to receive the components. In practice it may be necessary to remove or file the drawbeams on the inner coach ends to provide clearance for the articulated join. This is certainly the case if the unit is used with lan Kirk kits. It may also be necessary to 'pack' the mountings to give the vehicles the correct ride height. This packing should then be consistent throughout the set. Forewarned is forearmed!



Take the individual bodies and arrange them in the required running sequence. Start with one of the outer coaches and fix one of the original CCU mounting plates to take a conventional outer bogie. The left hand end in the diagram. To this is fitted a stabilising CCU - with the half round tabs folded up. To the other end of the coach is fitted a part 'A' free pivot such that the female press stud is on the underneath of the etch when the vehicle body is the right way up. If a belt and braces approach is favoured two holes are provided in the etch to allow the components to be bolted to the vehicle floors. The part 'B' stabilising pivot is now attached to the inner end of the adjoining coach such that the half round tabs point down when the vehicle body is the right way up. A free pivoting CCU (without half round tabs) is attached to the lower of the two male press studs on this assembly. The second coach body is now stabilised (by he downward pointing half round tabs) so a free pivoting bogie is needed at the other end. This can either be a conventional CCU – for an articulated twin - or a further part 'A' from an articulation unit – for a longer set. Each coach body can be treated in turn throughout the set.

Note: Only the first CCU in the set needs the half round stabilising tabs that come with them to function - this function is subsequently carried out by the articulation unit - so for the remaining CCUs the half round tabs can be left flat.

## Dart Castings

17 Hurst Close Staplehurst Tonbridge Kent TN12 0BX

www.dartcastings.co.uk

© DART CASTINGS 2008