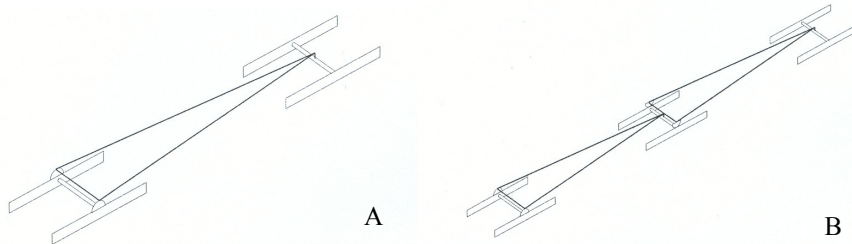


Instructions for the use of the MJT Part 2229 CCU Articulation Units

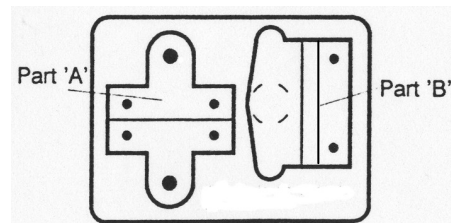
These units have been designed to allow our Coach Compensation Units to be used on coaches built with articulated bogies. Any number of vehicles can be articulated and all feature full three point suspension throughout. The articulated 'set' can be easily broken down into separate vehicles for storage and transport and reassembled when required. You will require one articulation unit for each articulated bogie on the prototype e.g.. a twin uses one, a triplet two and a quad three.



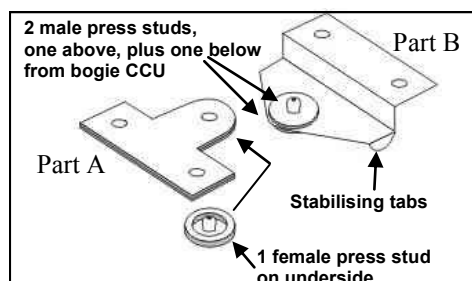
When using our CCUs on a conventional coach (A above), triangulation of the body is achieved by the etched semi-circular stabilising 'tabs' on one of the bogies. The other bogie is free to pivot in any direction as required.

With an articulated set (B, above) this principle must be replicated throughout all the vehicles but the articulated bogie must act as the 'free' bogie for one vehicle and the sta-

Remove the items from the fret and clean up any remaining half etched tabs. Identify part 'A' from the diagram and 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 you expect to repeatedly separate the individual vehicles 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.

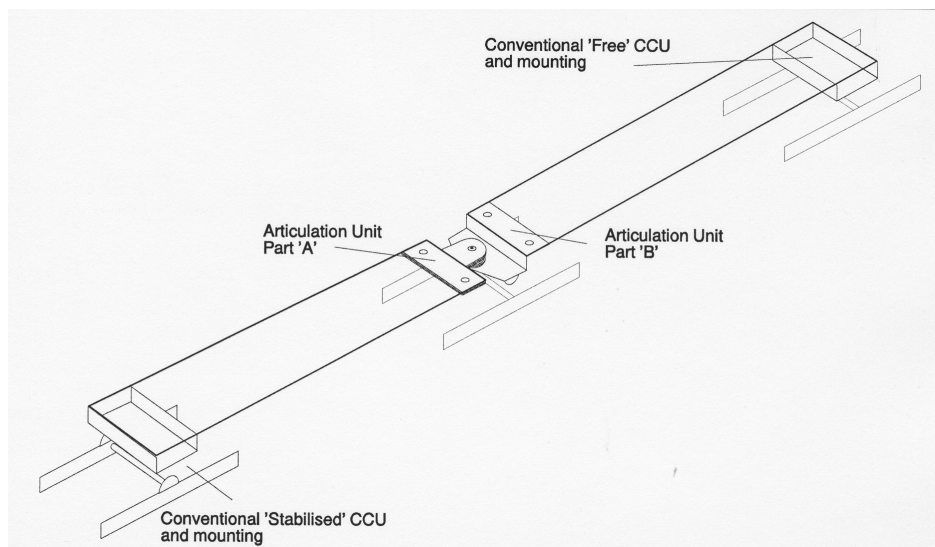


Take part 'B' and bend through 90 degrees at all crease lines with the half etch on the inside of the bend as shown on the diagram. We would advise that these bends are strengthened with a fillet of solder. Take the male half of the press stud supplied and the male half from the press stud supplied with the CCU and solder them 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.

The difficult part is now describing where the individual components go in, so we will assume 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 joint. This will especially be true if used with Ian Kirk kits. It may also be necessary to pack out the mountings to give the vehicles the correct ride height. This packing should then be consistent throughout the set. Forewarned is forearmed!

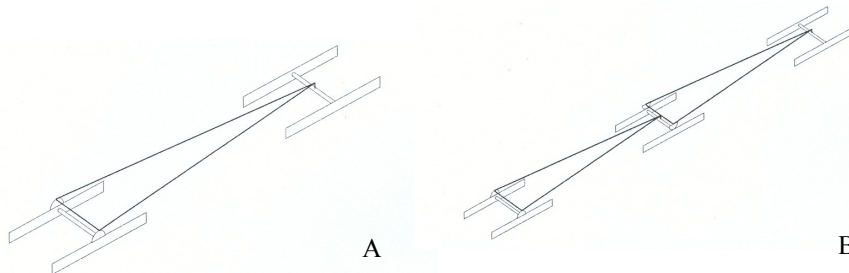


Take the individual bodies and arrange them in the required running sequence. Start with one of the outer coaches and fix one of the original CCU mounting plates to take a conventional outer bogie. To this is fitted a stabilising CCU (i.e.. with the half round tabs). To the other end is fixed a part 'A' free pivot so that the female press stud is on the underneath of the etch when the vehicle body is right-way-up. Two holes are provided in the etch to allow the components to be bolted to the vehicle floors if you want the belt and braces approach. The stabilising pivot (part 'B') is now mounted to the adjoining coaches inner end so that the half round tabs point down when the vehicle body is right-way-up. To this mounting a free pivoting CCU is attached (i.e.. one without the half round tabs) to the lower of the toe male press studs. Our second coach body has now been stabilised so we need a free pivoting bogie the other end. This can either be a conventional CCU mounting or a further part 'A' from an articulation unit. In this way 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, or broken off.

Instructions for the use of the MJT Part 2229 CCU Articulation Units

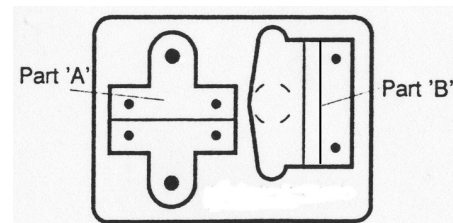
These units have been designed to allow our Coach Compensation Units to be used on coaches built with articulated bogies. Any number of vehicles can be articulated and all feature full three point suspension throughout. The articulated 'set' can be easily broken down into separate vehicles for storage and transport and reassembled when required. You will require one articulation unit for each articulated bogie on the prototype e.g.. a twin uses one, a triplet two and a quad three.



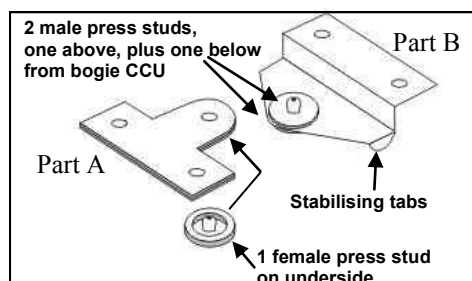
When using our CCUs on a conventional coach (A above), triangulation of the body is achieved by the etched semi-circular stabilising 'tabs' on one of the bogies. The other bogie is free to pivot in any direction as required.

With an articulated set (B, above) this principle must be replicated throughout all the vehicles but the articulated bogie must act as the 'free' bogie for one vehicle and the sta-

Remove the items from the fret and clean up any remaining half etched tabs. Identify part 'A' from the diagram and 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 you expect to repeatedly separate the individual vehicles 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.

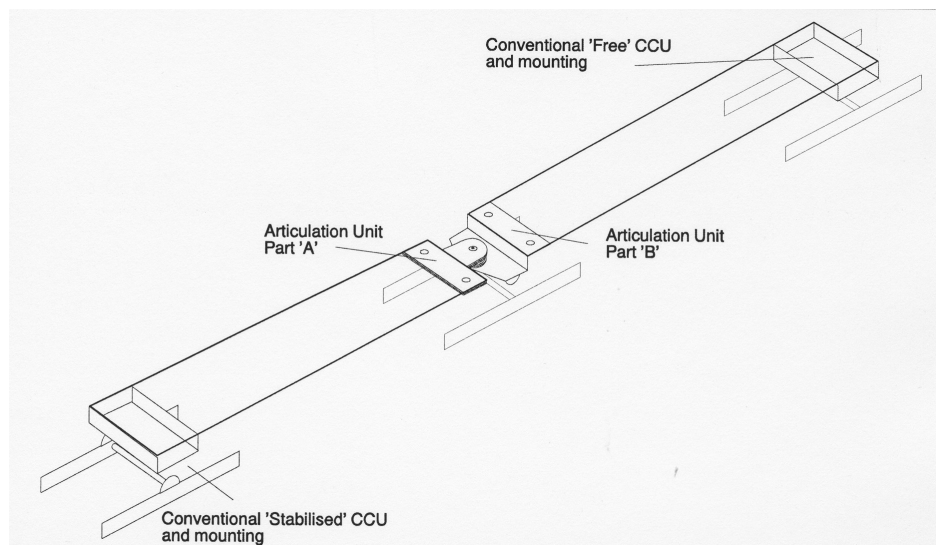


Take part 'B' and bend through 90 degrees at all crease lines with the half etch on the inside of the bend as shown on the diagram. We would advise that these bends are strengthened with a fillet of solder. Take the male half of the press stud supplied and the male half from the press stud supplied with the CCU and solder them 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.

The difficult part is now describing where the individual components go in, so we will assume 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 joint. This will especially be true if used with Ian Kirk kits. It may also be necessary to pack out 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. To this is fitted a stabilising CCU (i.e.. with the half round tabs). To the other end is fixed a part 'A' free pivot so that the female press stud is on the underneath of the etch when the vehicle body is right-way-up. Two holes are provided in the etch to allow the components to be bolted to the vehicle floors if you want the belt and braces approach. The stabilising pivot (part 'B') is now mounted to the adjoining coaches inner end so that the half round tabs point down when the vehicle body is right-way-up. To this mounting a free pivoting CCU is attached (i.e.. one without the half round tabs) to the lower of the toe male press studs. Our second coach body has now been stabilised so we need a free pivoting bogie the other end. This can either be a conventional CCU mounting or a further part 'A' from an articulation unit. In this way 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, or broken off.