A WHEEL PULLER FOR 0-4-0/4-4-0 TTR LOCOMOTIVES

The wheel puller to be described can be made from readily available materials and with average D.I.Y. workshop facilities.

The prototype was made with only a power drill, hacksaw, file, punch, vice and a ruler. A blowlamp or large soldering iron are useful but not essential.

PARTS REQUIRED:

1. 14swg (2mm) hardened or "blued" steel axle from TTR wagon or coach.
2. 0BA x 1" long (M6 x 25mm) bolt. Hexagon head is ideal.
3. 0BA or M6 half-nut. These are about 4mm thick. A full nut, usually 6mm thick, can be filed down if necessary.
4. Short length of 1" or 25mm square steel tube. This is widely used in self-assembly display shelving. Trade names include Dexion Speedframe.
5. Resin-cored solder or quickset two-part epoxy resin adhesive such as Araldite.

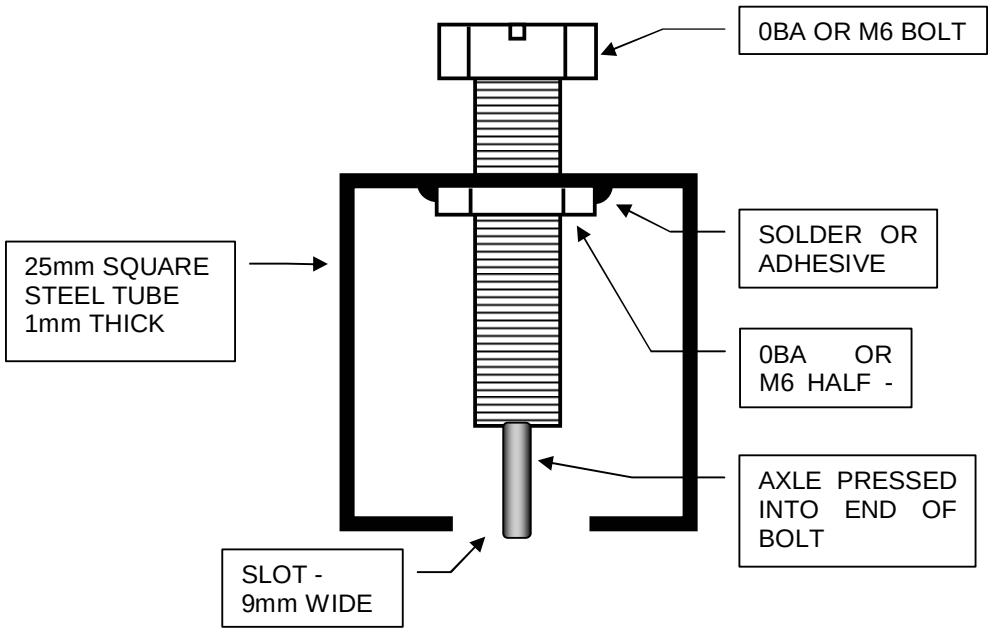
PROCEDURE:

Note that measurements should be as accurate as possible for a good result.

1. Cut a 13mm length from the steel tube as squarely as possible and remove all burrs with a file.
2. Examine the tube internally. One side will usually be seam-welded.
3. Mark the exact centre of the side opposite the weld with the centre punch.
4. Drill a pilot hole of about 3mm or $^1/_8$" on the centre punch mark.
5. Open the pilot hole out with drill of 6.3mm or ¼".
6. Mark out a slot, 9mm wide in the centre of the tube face opposite the hole.
7. Cut the slot out carefully and remove all burrs with the file.
8. Solder or glue the nut centrally over the hole on the inside face of the tube.
9. Cut a 14mm length from the TTR wagon or coach axle, removing any burrs with a file.
10. Make a centre-punch mark in the threaded end of the bolt and drill a 0.08" or 2mm hole into the end of the bolt to a depth of 6mm. This must be as straight as possible. A lathe or pillar drill would be ideal but with care it can be done without such luxuries.
11. Using the vice, press the axle, sawn end first, into the hole in the end of the bolt. The axle should now protrude from the end of the bolt by approximately 8mm.
12. Assemble the bolt into the puller frame.

WARNING:

The wheel puller may not be strong enough to remove the early post war German wheels which were pressed onto the axle with brass bushes. A separate note describes how to tackle this and other problems.



THE ASSEMBLED WHEEL PULLER SHOWN APPROXIMATELY TWICE FULL SIZE