

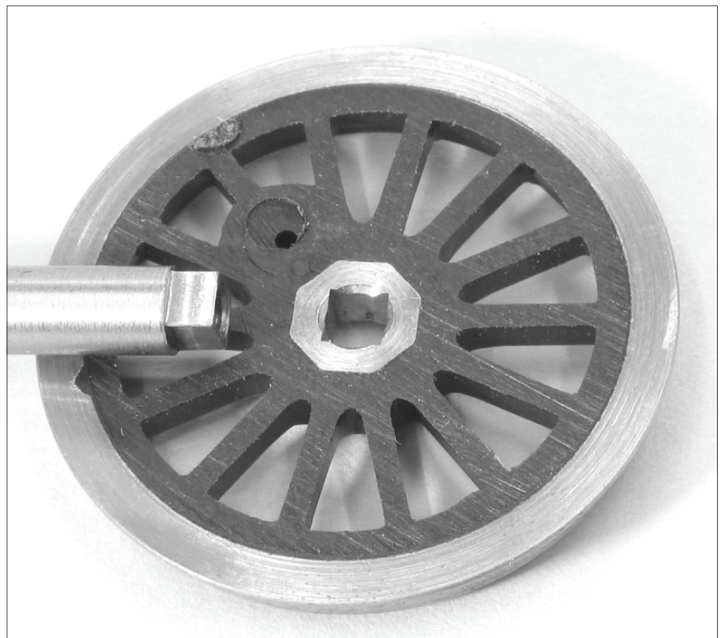
Connoisseur Models On Line Catalogue

Print Off Hints & Tips Sheet For Slater's Wheels

As with most components a little time spent preparing Slater's wheels will be rewarded by preventing potential problems. Remove any plastic flash or moulding pips from the backs of the wheel by rubbing them flat on a piece of fine emery cloth (this flash can sometimes interfere with the plunger pickups). The crankpin screw head needs to be flush with the back of the wheel (it may interfere with the shoulder of the bearing otherwise) so it will be necessary to drill a countersink hole. Use a 2.5mm drill in a hand held pin chuck. Drill gently and keep checking with the head of the screw until the hole is the correct depth. The screw is designed to self tap into the plastic and then lock itself. I don't trust this and prefer to screw it in until the head is just proud of the wheel back. I then fill the countersink hole with Araldite and then screw it in until it locks. Leave the wheels until the Araldite has set and then clean of any excess Araldite by rubbing the wheel on the emery cloth. This should leave the screw head embedded in Araldite and prevent the potential problem of the screw turning when you are trying to undo the crankpin nut.

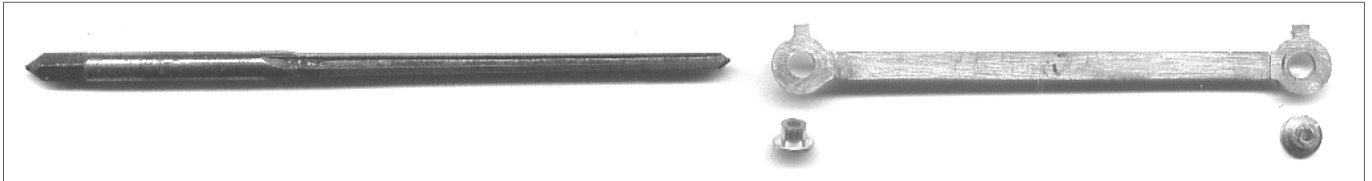


You may find that the square axle end is a tight fit into the centre of the wheel and this needs correcting. With a fine flat file gently dress each of the four sides of the axle end. I find it helps to lay the bottom flat of the axle end onto the edge of a block of wood. This helps me keep the file parallel as I file the top flat. Offer the axle end into the wheel centre and repeat if necessary. You are aiming to get a gentle push fit but with no rocking or movement on the square. A good guide is to get it so that you can remove the wheel from the axle with just your finger nails around the steel tyre. If you have to grip the tyre with your finger ends to pull it off you will find it difficult to remove the wheels to paint the chassis. Once happy fit the wheel sets into the chassis remembering to quarter the wheels (the crankpins on one side should lead the other by 90degrees).



One problem that you will find with Slater's wheels is that they are a bugger for going rusty when you are working on a chassis particularly if you use an active liquid flux. I have found that the best thing to do is ignore the rust if you can and clean it off before painting. As long as the rust is only an oxide on the surface there is not a problem but don't leave the wheels for days on end or you will find heavy spots of corrosion that will pit the surface of the wheel. Once you have finished working with the wheels clean off the rust using a fibre glass brush. I find that after the wheels have been abrasively cleaned a couple of times the surface of the tyre changes and the wheels don't seem to rust in service.

Included with the Slater's wheels are brass bearing bushes that should be slightly larger in diameter than the holes in the coupling rods and longer than the thickness of the rods. So open out the crankpin holes in the rods to accept the brass top hat bearing bushes. This is best done with a tapered broach or tapered engineers reamer (I have one that tapers from 3mm to 2mm and is 40mm long (see yellow pages for a good engineers tool merchant they are not cheap but will last a lifetime). With the reamer gently work from both sides of the rod until the bush is a smooth free fit into the hole.



We now have to reduce the length of the bush to prevent sloppy side play in the rods. Place a bush onto a block of wood then place a coupling rod face down over the bush. By pressing down on the rod with your finger you should be able to gently file the bush until it is 0.010" to 0.015" proud of the rod. These bearing bushes are not soldered into the rods but locked onto the crankpin with a nut and washer. So it is important that they will revolve freely in the holes in the rods.

Now fit the bushes onto the crankpin screws and fit the coupling rods gently locking them into place with the washers and nuts. Check that the wheels will turn without binding. If you do have a problem gently revolve the wheels with your finger tip until you hit the tight spot then check the rods. You should find that one rod still moves freely on the crankpins and this side is OK. You should find that the rod on the other side is tight on the crank pins and this is where the problem is. Normally the problem is a crankpin screw that is not square in the wheel (unless you have reamed the hole in the rod out of square). With a round file gently file oval the hole in the rod until it fits freely onto the crankpins and then refit the rod and check the chassis again.

At this stage don't worry about slight tight spots. If you can push the chassis along the bench without the wheels skidding along then all is OK. As the wheels are best removed for painting the chassis the chances are that they will not go back on in the same place. The correct point to make final adjustments is after painting and fitting pickups but before fitting the motor. If you have filed a crankpin hole in the rods oval it is worth marking this wheel so that you can match them up again on reassembly. Remove the rods and place safely to one side.

I prefer to paint and weather my wheels. Have a look at a real loco on a preserved railway and see how much dirt and gunge covers the wheels and then think how unrealistic clean spokes and shiny steel wheel rims will look on your model. You don't want paint on the back of the flanges to interfere with electrical pickup so place wheels, back side down, onto a flat surface and spray all the front of the wheels generously with primer. I slip a length of plastic sleeve (strip a short length of insulation off some electrical cable) over the crankpin screw to prevent the threads from being clogged by paint.

Once primed you can paint the wheels to taste. I stipple in a rusty, dirty, sludge mixing a little talcum powder in to get a textured finish. Once the paint is dry and hard you can scrape off the paint from the tread and tyre using a knife blade and then polish the surface using a fibre glass brush. This will also remove any rust. Some people mess about trying to mask off the tread but I have found this a waste of time and normally achieves a Sharpe edge to the primer that is vulnerable to chipping off.

When the completed chassis is painted and runs like a Swiss watch you can snip off the extra length of crankpin screw and dress back flush with the face of the nuts using a flat file. This should create a slight burr on the thread at the nut and this will help to keep the nut locked into place. If required in the future a slight twist of the nut with pliers will break off the burr allowing you to remove the nuts.