

side of hole for backing, then fill hole with epoxy, slightly oval on the outside. When epoxy is set, file smooth on outside. While it sets, solder Headlight in Stand. After hole filed smooth, epoxy Headlight Stand in, while Boiler Front is on Boiler, to better tell when Headlight is square. When epoxy is set, solder Handrails along side of Stand and glue numerals on front of Stand.

TENDER---Inside part of Tender can be removed or left in. Remove Draw Bar. If AF Trucks are to be used, just run a wire from each Truck Swivel pin (Bolster Screw) on inside, and solder or screw to Tender Frame. With Cars or AF Trucks, both Trucks pick up on left side (Drivers pick-up on right side).

#214.1 Draw Bar---Install in Frame hole just forward of Cab-Frame assembly screw. Other end put thru hole in Tender Draw Bar hole, putting two 2-56 nuts on inside of screw with lock washer or fibre or cardboard washer between nuts. Phosphor Bronze washer to insure pick-up probably will not be needed here, but if intermittent pick-up is experienced between backing up and forward operation, grind Tender Frame hole thinner and put Phosphor Bronze washer over screw sleeve.

#234.5 6 Wheel Commonwealth Cast Truck---This is a very difficult Truck to cast all in one piece and have all the detail come out without some warpage when pulled out of the rubber mold, the wax bonds. So some are sprung one way or another, but easily corrected.

1) Lay Truck on table, all 6 pedestals should touch table and not rock on a couple of them, if they do, spring truck to straighten. Most Trucks viewed from ends will have sideframes sprung outward, so lay Truck on a board and mildly tap each pedestal with a protected hammer, same on other side. From the ends sight down the bottoms of the pedestals to see if all Journals align with each other. If not tap each pedestal out of line slightly for alignment, or wrap jaws of pliers with some tape and bend the pedestals straight in line. In practice you may find that it is desirable to have the sideframes bend slightly outward to give more side to side movement of the wheel sets for tighter curves.

2) With dykes, cut out the bars across pedestal openings. (These were cast in so all openings would be true widths.) File or grind these stubs with a cut-off disc or file smooth to pedestal openings. Check that the springs go into the holes at top of pedestal; if not, by hand drill out with a #36 drill, same with Journal spring holes. If necessary drill Journal Axle holes .0635" and .150" deep for Roller Journals if not cast out. You might, probably not, have to file top of Truck Bolster at hole so Bolster Pin sleeve sticks up above Bolster about .032" or less.

3) Fry Journals in Pedestal openings. You may have to very lightly file 3 contact sides of Pedestal openings and/or Journal groove, for Journal to go into Pedestal freely but not sloppy. On Plain Journals the top corner of groove  as shown on front and rear needs filing off until Journal goes to top. Probably desirable to remove about 1/32" from bottom of Journal. On less than 27" radius you may want to file inside of center Journal next to wheel to give more side to side movement of center Wheel on curves. On Roller Journals remove square gating and similarly fit.

4) Make a small piece of scrap stock .010" to .025" thick and tin on both sides, then cut about 1/6" wide and long enough to go across bottom of pedestal opening. Tin bottoms of all pedestals to take these straps to hold Journals in. Put Journal, Wheel set and springs in pedestal, being sure springs are seated in both their holes, and with soldering iron solder these straps over bottom of pedestal to hold Journals in.

5) Brake shoes are not part of the kit as some may not think they warrant the expense of 12 pair. But they do really give the Trucks that real look. There are forks under Truck the shank of the Brake Shoe goes in. Occasionally one fork may be broken off, so just solder to the other side of the fork. Cut the shank of the Brake Shoe just long enough so that the center of the Brake Shoe is just below the Axle, file end thin to go in these forks. Preferably file forks and Brake shank smooth, apply solder paste flux on