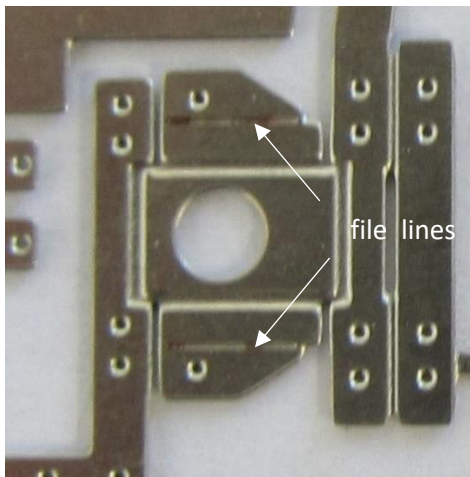


BRASSMASTERS E224 Replacement 00 Pony Truck for Hornby 5101 and 61xx Large Prairie

The Hornby pony truck is quite basic so a replacement has been designed for the 00 model.

Note: the photos are of the EM/P4 version but the assembly is exactly the same. Also, some of the photos show an assembly order different than that described in the text, but the text is the correct order.

- 1 Remove the pony truck top [P1] and push through the rivets in the front plate using a scribe, other pointed instrument or a riveting tool.
- 2 Referring to the diagram at the end of the instructions, bend the part of the arms that will later be bent to 180 degrees to 90 degrees. Remember the fold line is on the outside.
- 3 Next bend up the rear plate to 90 degrees, then complete the first bend to 180 degrees.
- 4 Now bend the arms to 90 degrees.
- 5 Finally bend up the front plate to 90 degrees.
- 6 All the bends can now be strengthened with solder.



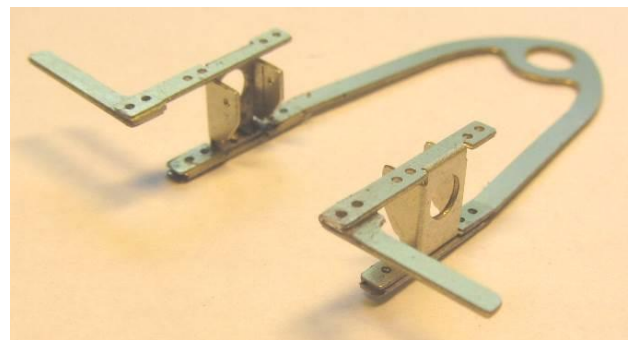
- 7 Remove the pony truck bottom [P2] from the etch and decide if your model will have an ATC casting fitted, and if so, if it will be fitted to the pony truck. If it is not being fitted to the pony truck, then the bracket extensions should be removed. This is done by filing all four back to the line (see photo).

- 8 Firstly, bend the bottom frame piece through 180 degrees. Then bend the lifeguards at the front of the top frame through 180 degrees. Remember both these bends are with the bend line on the outside.

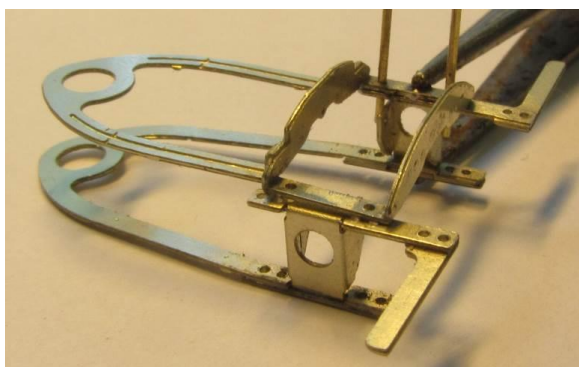
- 9 Next bend the top and bottom frames to 90

degrees.

- 10 All the bends can now be strengthened with solder.
- 11 Finally bend to 90 degrees the ATC brackets or stubs of them.



- 12 Open out all the holes in the pony truck top and bottom with a 0.6mm drill.

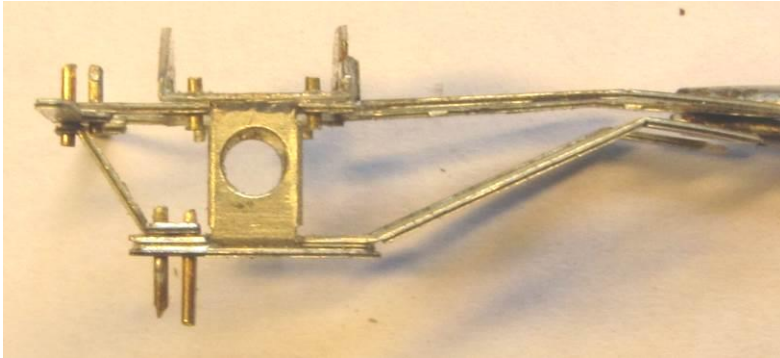


- 13 Using four lengths of 0.6mm wire to align the pony frame top to the pony frame bottom and solder the two parts together. Trim the wire to represent the prototype assembly bolts.

- 14 Put marks on the lifeguards 2mm and 4mm from the tips, then bend down the lifeguards by holding the frame and lifeguard from the front in a pair of pliers until the lifeguards are vertically. This should result in quite a tight bend. **Do not form the lower bends at this stage.**

15 Drill out the holes in the front diagonals **[P3]** to clear 0.6mm wire, then bend them to the approximate shape to fit the pony truck.

16 Cut two short lengths of 0.6mm wire, push one piece through one of the holes in the bottom frame and the other through the front hole of the guard iron. Try the diagonal in place and adjust the angle at each end until it fits correctly (see photo). Solder in place.



17 Cut two more short lengths of 0.6mm wire, push through the second holes in the bottom plate and guard iron and solder in place.

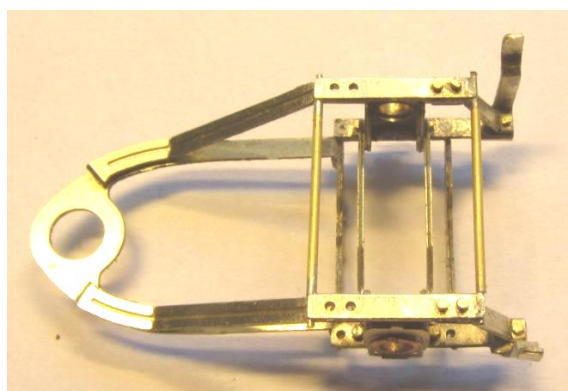
18 Repeat for the other side of the pony truck.

19 File back all the pieces of wire to a suitable length. To represent the assembly 'bolts'.

20 If fitting the ATC beams **[P4]**, attach them to the front and back of the pony truck using 0.45mm wire.

21 There are two types of axlebox etch, the early type with coil springs **[P5]** and the later type with contained springs **[P6]**. The 2mm bearings should now be pushed through the appropriate axlebox etch and then soldered into the hole in each side of the pony truck ensuring the spring etch is vertical.

22 The cross bars can now be fitted to the front and back of the lower frame. These consist of a piece of 0.6mm tube that fits between the pony truck frame with a piece of 0.4mm wire



through the centre, with ends of the wire located in the slots at the front and back of the lower frames (see photo left).

23 For this version of the pony truck the pivot at the end of the lower arms needs to be removed. Cut through the arms, using side cutters, at the end of the slot for the strengthening rib (see photo left).

24 The pony truck arms now need bending so that, when mounted on the model, the pony truck sits horizontal.

25 The wheelset will now be temporarily assembled in the pony truck so that the bends in the upper arms can be formed. Mount the first wheel fully on the axle. Put the axle through the bearings and push on the second wheel so it just fits on the end of the axle.

26 Bend the upper arms slightly upwards just behind the cross bracket and the end of the arms downwards at the bend line (bend line on the outside). Try in place on the model. For it to sit properly, four axle washers need to be fitted to the pivot after the pony truck has been mounted on the Hornby chassis and the original pony truck screw screwed in. It is easier if the four washers are soldered or glued together. If the pony truck doesn't sit level, remove the screw, washers and pony truck, alter the bends in the arms at the two places and refit.

27 When satisfied the bends are correct, bend up the lower arms so that they touch the upper arms. Solder in place. Check again everything is horizontal.

28 Now put two bends in the lifeguards at the marks to give an 'S' shape (see photo right)

29 Curve the upper strengthening ribs **[P7]** to fit in the slots in the upper arms and solder into position.

30 Curve the lower strengthening ribs **[P8]** to fit in the slots in the lower arms and solder into position.

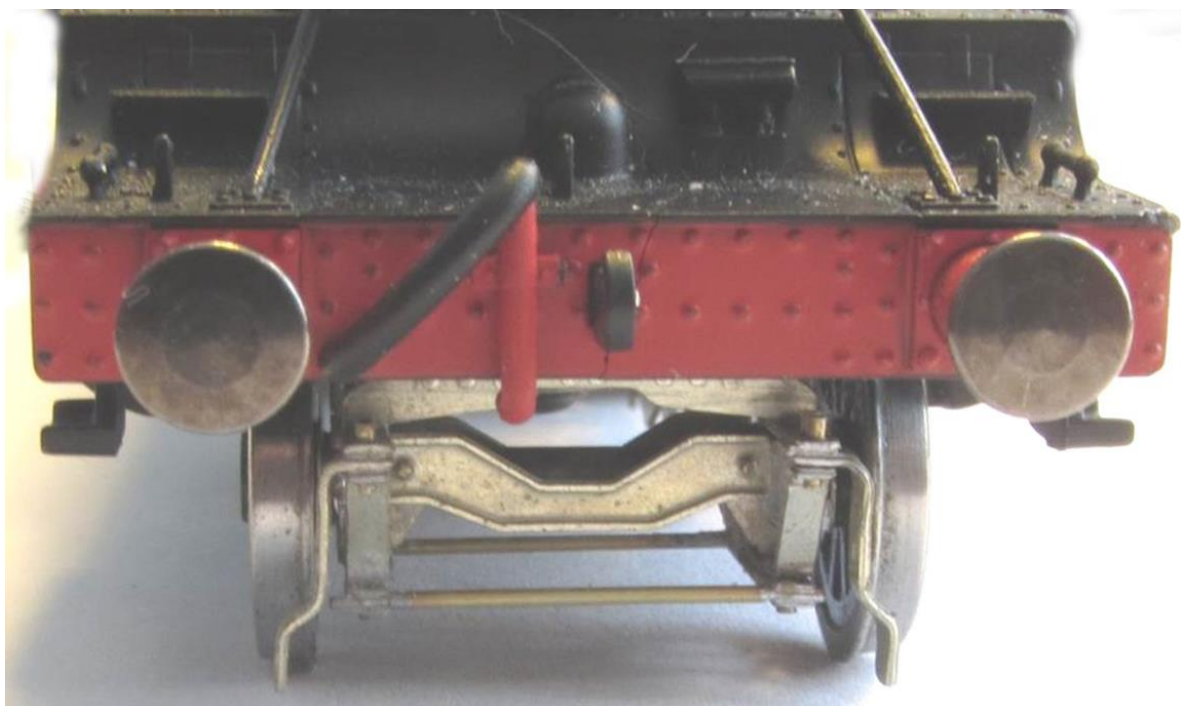
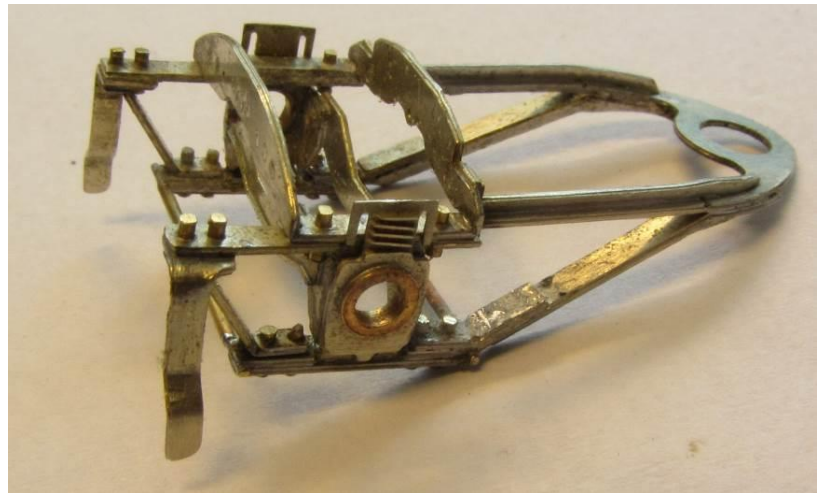
31 Take one of the lower arm bend strengtheners **[P9]**, bend to match the lower arm bend and with a piece of 0.6mm wire through one of the holes, solder in place. Add a short length of 0.6mm wire through the second hole.

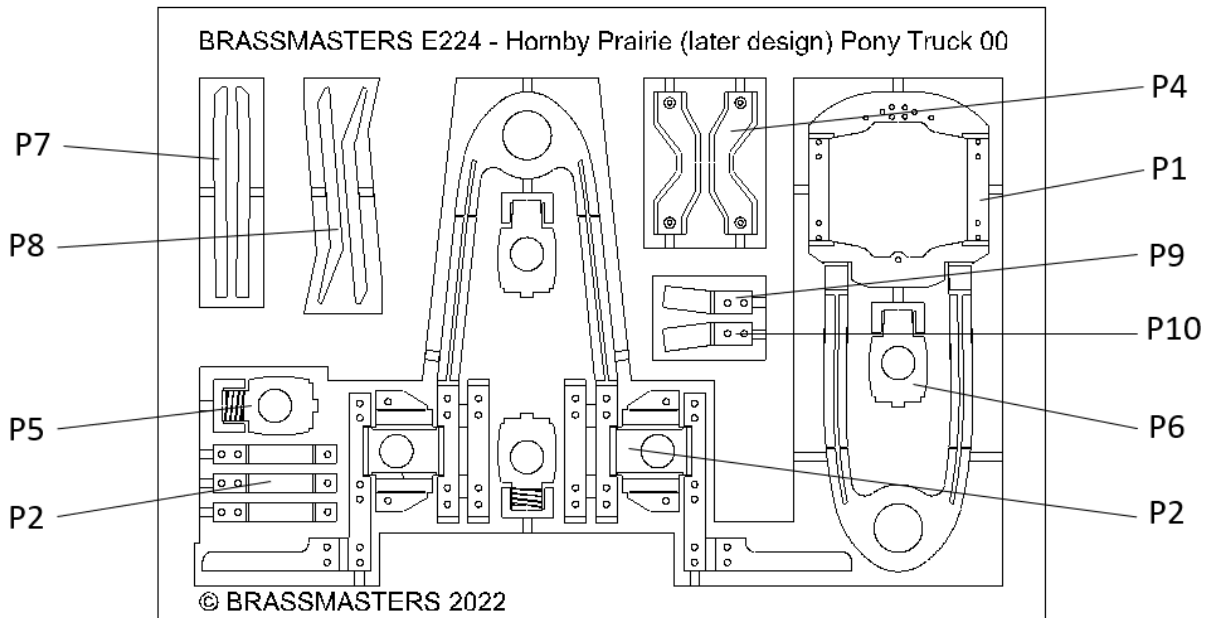
32 Repeat for the second bend strengthener **[P10]** on the opposite side of the pony truck. Then file back the wire on both arms to represent the 'bolts'.

33 The pony truck is now complete.

34 If re-using the Hornby wheels, the boss on the back of each wheel will need reducing in thickness until the assembled wheels spin freely in the new pony truck.

35 If fitting replacement wheels, assemble one wheel on the axle, add 2mm axle spacing washers as necessary to prevent side play, and fit the other wheel.





P1	Pony truck top	P6	Axle box with contained spring (2)
P2	Pony truck bottom	P7	Upper strengthening ribs (2)
P3	Front diagonals (2)	P8	Lower strengthening ribs (2)
P4	ATC beams (2)	P9	Lower arm bend strengthener
P5	Axle box with coil spring (2)	P10	Lower arm bend strengthener

1/8" axle washers	
0.6 mm brass wire	2 mm axle washers
0.45 brass wire	2 mm axle bushes
0.4 mm brass wire	0.6 mm brass tube

Fold order diagram

