

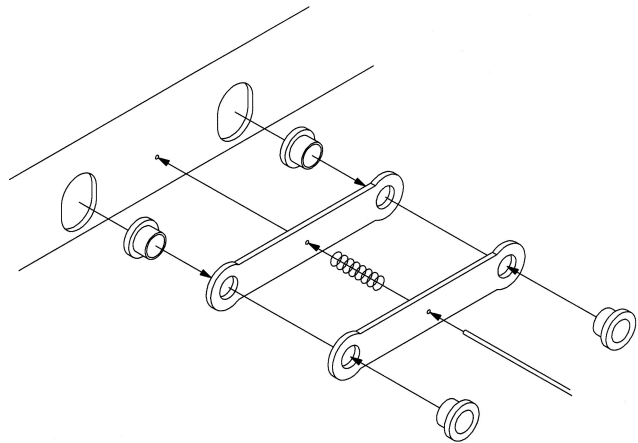
B16/1 Instructions

Chassis Assembly

The chassis can be built rigid or compensated so decide now which one you are going to make. If building a compensated chassis remove the sections from the axle holes.

Fold the main chassis frames (1) up and solder the rear (3), front (4) and middle (5) frame spacers in place making sure everything is square.

Compensated Chassis - Solder the axle bearings (2) into the compensating beams (6). Fit the compensating beams by passing brass wire through the frames, through one of the beams, then the spring, then the next beam and finally out the other side of the chassis. Hold the beams away from the chassis side while soldering the wire in place to prevent them being soldered to the frames. Trim the excess wire flush with the chassis side. Fit the wheels so you can test the compensating mechanism and when satisfied that it works O.K. remove the wheels and put them to one side.



Rigid Chassis - Solder the axle bearings (2) into the axle holes in the chassis (1).

Both Types – Take the cylinders (7) and solder two 2mm bearings (19) into the rear face hole. Fold down the front and rear sections. Fit the cylinders into the recess at the front of the frames. Curve the bottom and top of the cylinder sides (8) to match the shape of the cylinder front/rear. Solder the sides in place and solder around the seams. Fit the front cylinder covers (22). Fit the front body mounting (9) over the top of the cylinders. Note which way round it goes.

Solder the slidebar support bracket (10) in place.

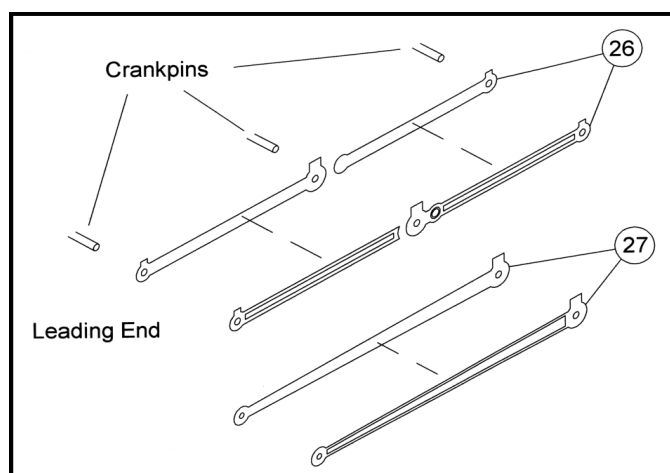
Solder three lengths of the brass wire (16) into the holes in the chassis to form the brake mountings. Take the brake hangers (14) and the brake blocks (13) and solder the blocks to the hangers, making four **L/H** and four **R/H**. Solder the assembled brakes to the wire **2mm** from the frames. Pass more brass wire through the bottom of the brakes and then through the pull rods (15). Solder all the joints.

The chassis is now ready for painting. With the chassis painted the wheels and motor of your choice can be fitted.

Fit the balance weights and paint the wheels.

Coupling Rods - With the chassis painted the wheels can be fitted permanently. Fit the crank pins and assemble the coupling rods (26) as shown. Take care in this as the rods need to move freely, both for side play and compensation.

The connecting rods (27) can also be assembled at this stage.



Body Assembly

Take the running plate (1) and using the valances (2) as a guide form it to shape. Fit the running plate valances into the recesses under the running plate. **Leave the support frames on the valances.** Fit the bufferbeam (3) and drag beam (4). Take the cab front/sides (5) and fold the cab sides at right angles to the cab front. Check the fit of the cab in the slots in the running plate, make sure it sits square. Solder the cab into the slots. Solder the Cab side overlays (6 & 7) onto the cab sides. Solder an **8BA** screw (8) into the holes at the front and rear of running plate. Fold the cab floor support (9) and fit inside the cab. Now fit the cab floor (10) on top of the floor support. Solder the smokebox saddle front and rear (13) and sides/frames (14 & 15) in place. Shape the centre cylinder cover (22) and solder it between the front frames. Fold up the front running plate step and support (23 & 24), solder them together and then solder them to the front section. Fold up the splasher sides on the running plate. Form the splasher tops (16) and solder them behind the splasher sides from under the running plate. Solder the splasher fronts (20 & 21) in place.

Solder the seam of the boiler (17) together. Bend out the firebox bottom to match the gap between the two sides of the running plate. Check the fit of the boiler into the slots in the cab front. Form the smokebox wrapper (18) and solder to the boiler. Consult the general arrangement diagrams for the position of the boiler bands for **Dia. 49 & Dia. 49a** boilers and then fit the boiler bands (28). Solder the boiler in place, fit the cab end first, make sure all is square and then solder to the smokebox saddle.

Now fit the cab roof (11), the rain strips (12), the roof shutter (25) and the riveted plate (27) at the back of the cab roof. Fold the cab boxes (38) and solder them in to the cab, against the cab sides and the cab front. Glue the backhead (40) in place.

Fit the following:

Smokebox door (33).

Smokebox door handle (34).

Vacuum pipe (35).

Buffer shanks (36).

Lamp brackets (37).

Handrails.

Sandbox fillers (26).

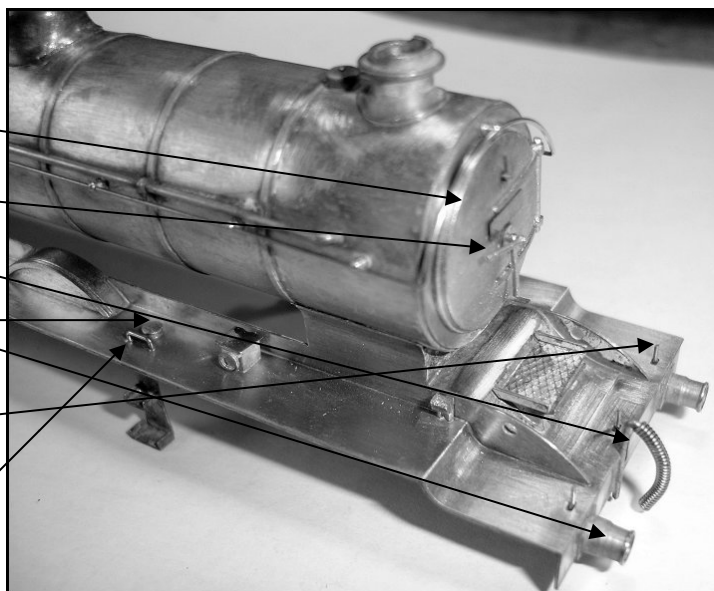
Mechanical lubricators (30).

Oilboxes (32).

Oval washout plugs (43).

Round washout plugs (42).

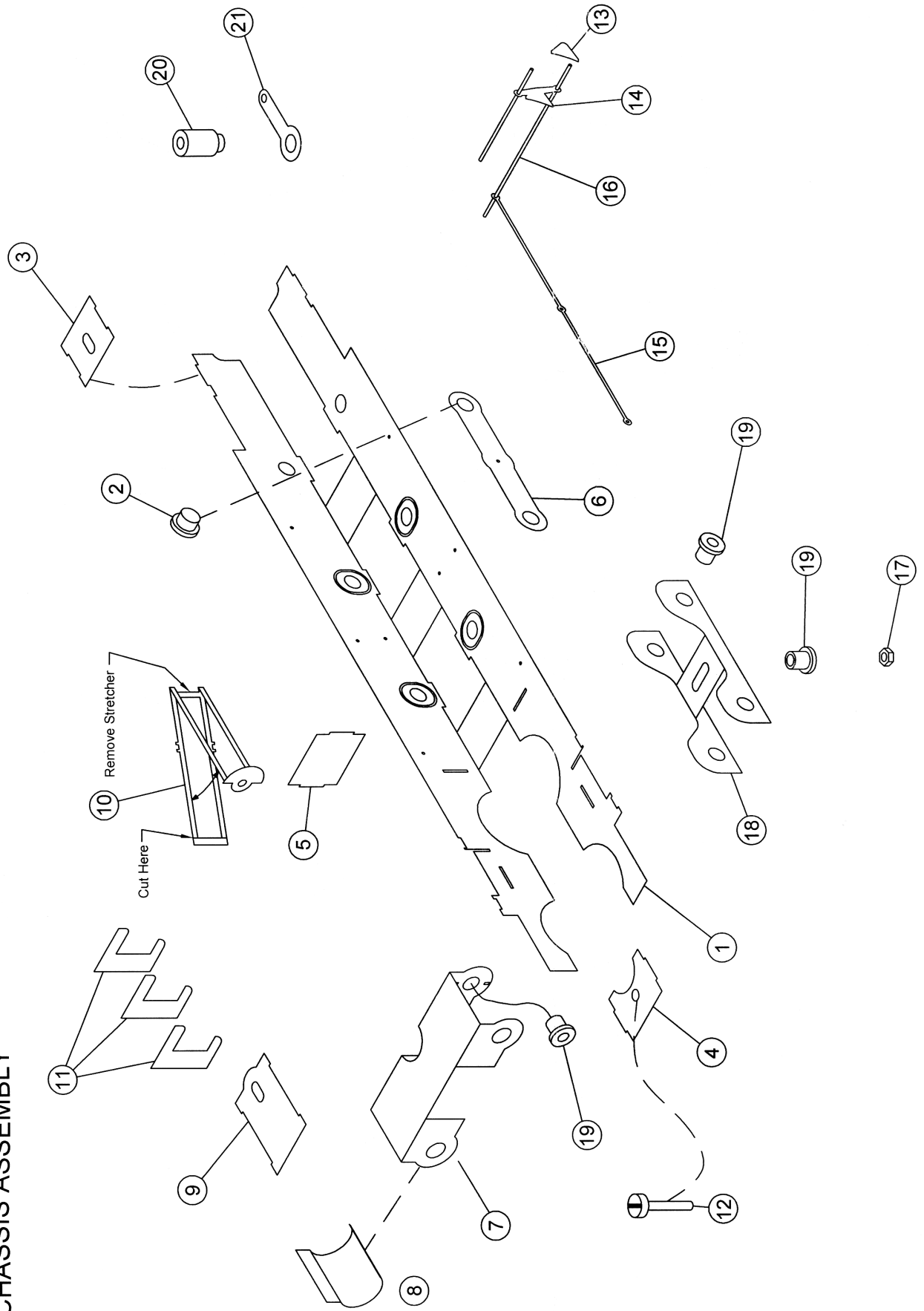
Consult the boiler fittings washout plugs (check which type on your loco). Drill the appropriate holes to suit the ejector pipe (.9mm brass wire) on the first, third and fifth boiler bands 1.5mm above the handrails. Fit all these parts plus the handrails, chimney, dome and safety valve base if required.



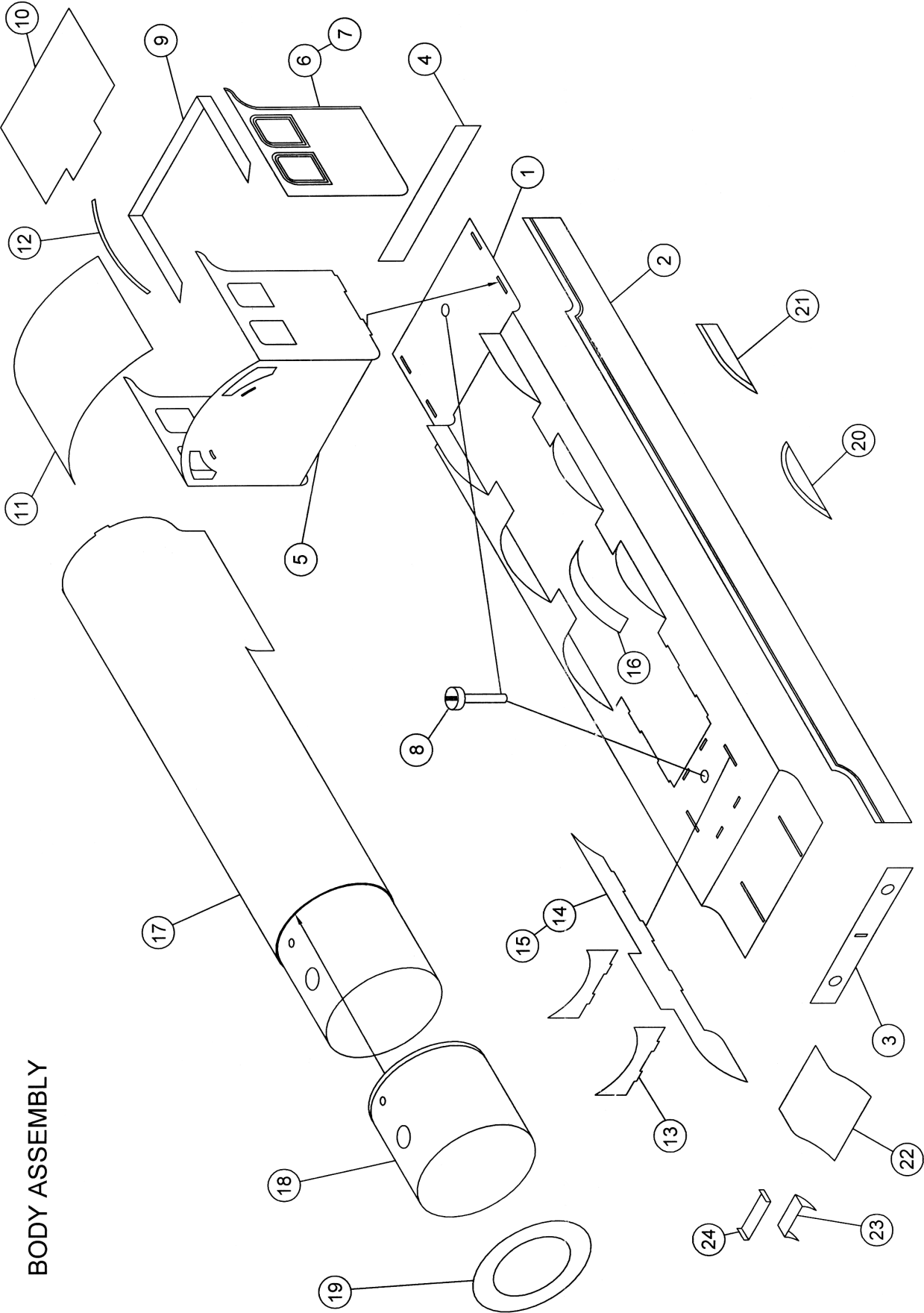
If you are doing a loco with a Westinghouse pump (39) cut a piece of scrap brass to 13.5mm x 5mm. Fold the bottom 2.5mm at 90° and solder it between the R/H front and middle splashers with the folded piece facing the boiler, Here. Attach the pump to the bracket and use some of the brass wire to make up the pipework. Fit the steam valve (29), using brass rod for the pipework. A reversing bar (31) was fitted to 1378, and is included in the kit, in two parts.

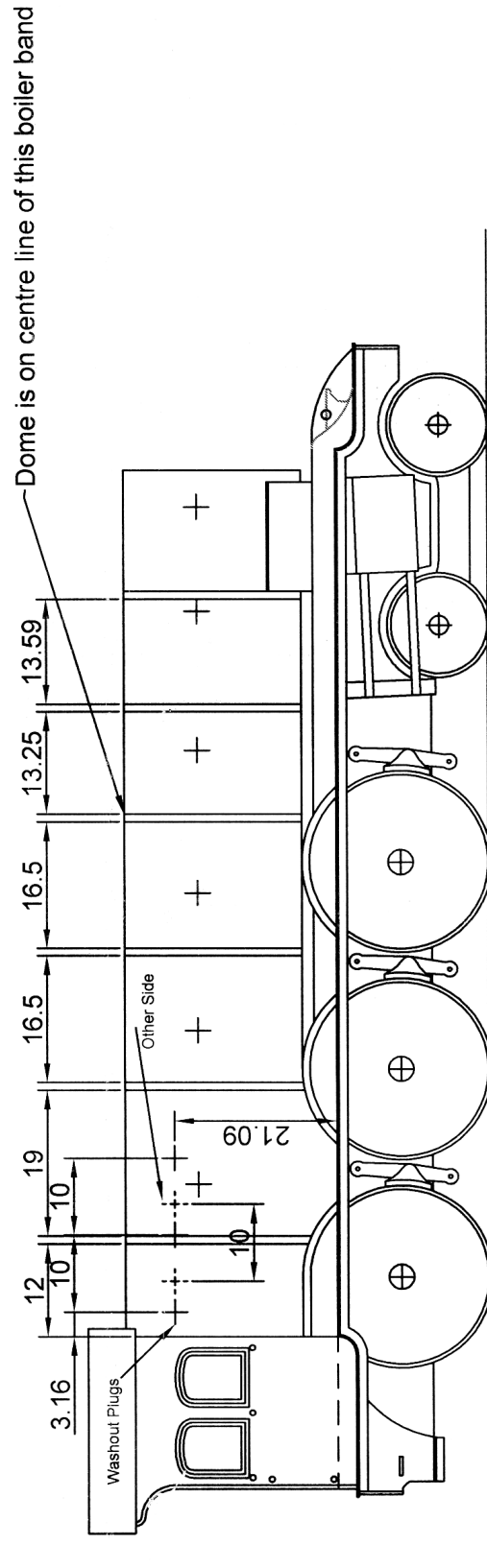
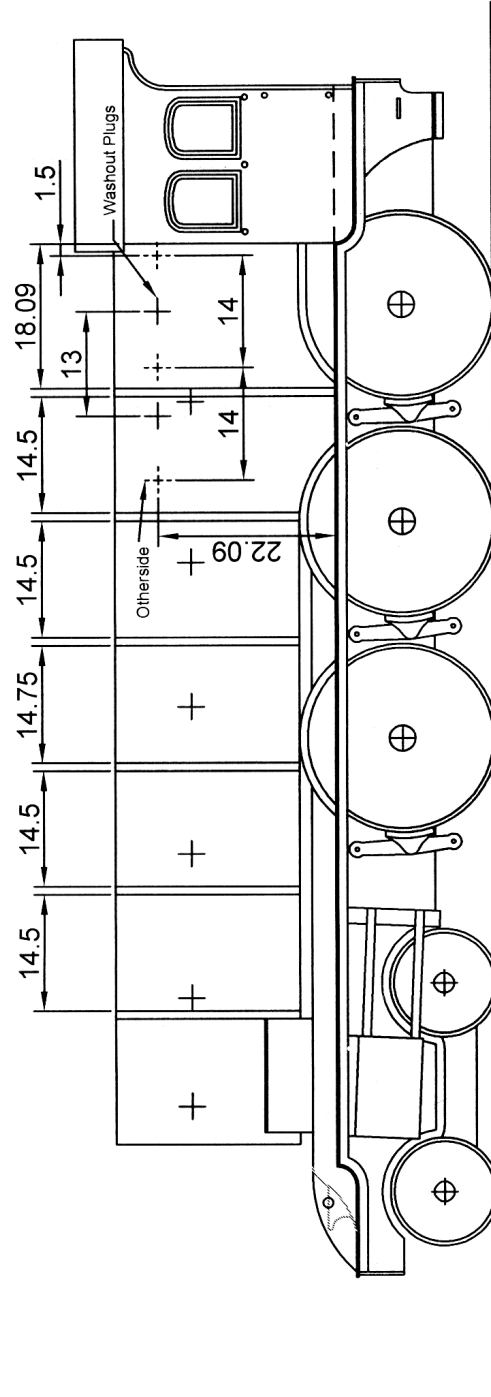
Further details, including rebuilding dates and boiler types can be found in RCTS Vol 2B and on the Isinglass drawing No. 421B.

CHASSIS ASSEMBLY



BODY ASSEMBLY





Chassis Parts List

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|---|--|
| <ol style="list-style-type: none"> 1. Main Frames. 2. 1/8th Bearings. 3. Rear Frame Spacer. 4. Front Frame Spacer & Bogie Mount. 5. Middle Frame Spacer. 6. Compensating Beams. 7. Cylinders. 8. Cylinder Overlays. 9. Front Spacer (Over Cylinders). 10. Slidebars. 11. Slidebar Brackets. 12. 8BA Nuts & Screws. 13. Brake Blocks. 14. Brake Hangers. 15. Brake Pull Rods. 16. Brass Wire. 17. . 18. Front Bogie. 19. 2mm Bearings. 20. Drawbar Pivot. | <ol style="list-style-type: none"> 21. Drawbar. 22. Cylinder Front Covers. 23. . 24. . 25. . 26. Coupling Rods. 27. Connecting Rods. 28. Sandboxes. 29. Crossheads. 30. 14BA Nuts & Screws. 31. . 32. . 33. . 34. Balance Weights. |
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Body Parts List

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| <ol style="list-style-type: none"> 1. Running Plate. 2. Valances. 3. Bufferbeam. 4. Dragbeam. 5. Cab Front & Sides. 6. R/H Cab Side Overlay. 7. L/H Cab Side Overlay. 8. 8BA Screws & Nuts. 9. Cab Floor Support. 10. Cab Floor. 11. Cab Roof. 12. Rain Strips. 13. Smokebox Saddle Front & Rear. 14. R/H Frames/Smokebox Saddle Sides. 15. L/H Frames/Smokebox Saddle Sides. 16. Splasher Tops. 17. Boiler. 18. Smokebox Wrapper. 19. Smokebox Front. 20. Front & Middle Splasher Fronts. | <ol style="list-style-type: none"> 21. Rear Splasher Fronts. 22. Centre Cylinder Cover. 23. Front Running Plate Step Support. 24. Front Running Plate Step. 25. Roof Shutter. 26. Sandbox Fillers. 27. Riveted Plate. 28. Boiler Bands. 29. Steam Valve. 30. Mechanical Lubricators. 31. Reversing Bar. 32. Oil Boxes. 33. Smokebox Door. 34. Smokebox Door Handle. 35. Vacuum Pipe. 36. Buffers. 37. Lamp Brackets. 38. Cab Boxes. 39. Westinghouse Pump. 40. Backhead. | <ol style="list-style-type: none"> 41. Safety Valve Base. 42. Washout Plugs (Round). 43. Washout Plugs (Oval). 44. Chimney. 45. Dome. 46. Safety Valves. 47. Whistle. 48. Handrail Knobs. 49. Brass Rod (Ejector Pipe). 50. Split Pins. 51. Handrail Wire. 52. Anti-Vacuum Valve. |
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