

SR/BR BULLEID LIGHT PACIFIC

FIG. 1.

Carefully cut out all the etched parts (1 to 14, [15 and 16 are already cut out and preformed]) shown in the diagram. Solder the body spacers (3, 4 and 5) and the front and rear bulkheads (2 and 6) into place on the baseplate (1) as shown. Note that the body spacers are all different. If you are modelling the later BR version with the safety valves repositioned remove the dotted section from part 3. Solder the front footplate section (7) into the front bulk head. Check that everything so far is square.

At this stage select which cab width you are going to model (34001 - 70 had the **8'6"** cab and 34071 - 34110 had the **9'0"** cab). Solder the cab front (7 or 8) in place. Solder the body side frames in place with the fold lines on the outside. Solder along the bottom of the sides first and then curve them over onto the body spacers to give you the correct body shape. Next solder the body side overlays into place. You will find a gap of approximately 1mm along the bottom edge this **IS** correct. Solder two 8BA screws into the holes at front and rear of the baseplate. Be sure to do this before attaching the roof. Punch through the rivets on the underside of the appropriate roof section and solder it into place. The rear edge must be level with the cab front. You now have the main shell of the body complete.

FIG. 2.

Fit the appropriate cab sides (17 or 18 and 19 or 20) in place. All the **8'6"** cab parts are marked with a **B** on the inside surfaces and the **9'0"** cab parts are marked with an **A**. Having done this fit the cab backhead (64, **NOT SHOWN**) in place as this is difficult when the roof is on. The roof (21 or 22) can now be fitted. Cut out the appropriate cab rear bulkhead (23 or 24). Cut away the strengthening bar across the top and solder it into place. Glue or solder the chimney mounting (25) up under the front cowl section (26). Fit this section into place at the front of the body shell.

Fit the two rain strips (65) at the join between the roof and the sides. Fit the buffer beam unit (27) in place as shown. The rest of the parts are straight forward in fitting except for the following which you have choose between different variations, Parts 35 and 36 - manifold wheel covers. The early locos had the hinged hatch (36) and later ones had the sliding hatch (35) but most were converted to the sliding cover later on. Parts 29 and 30 - whistle manifold covers, Details same as for parts 35 and 36. Part 28 - clack valve cover. If you are modelling very late BR days (i.e. 1964 - 67) this part could be left of showing the clacks underneath. Check photos as this was not always the case. If you do leave it off then parts 58 and 59 - clack valves and base can be used. Parts 33 and 34 - roof panels. Use part 33 on the roof with BR safety valves and part 34 for the early version. Parts 47, 48 and 49 - smoke deflectors. Three types are supplied, the short ones were fitted when the first batches were built in southern days (most locos that carried them had the early flat fronted cab). The medium length were the most common being fitted as standard from about 1947 to all locos except 34004/5/6 which always had the long type. Part 51 - cylinder front cowls, These were fitted in SR and early BR days and removed later on. Parts 39 and 40 — inspection covers for centre cylinder. Part 40 should be used on SR and early BR locos, All locos eventually had part 39 as standard (Note that both parts have rivets to be punched through from the back, Part 52 - AWS Box, Fitted from approximately 1956. Part 43 — BR safety valve unit, use in conjunction with the BR roof only. Make up the rain strip over the cab windows with a piece

of the brass wire supplied. Always work from photographs so that you can be sure everything is in the right place.

FIG. 3.

Fit the ashpans (66 and 67) underneath the body as shown. Assemble the injectors (62 and 63) and glue up under the cab with the pipework between the ashpans and the body sides. The left hand pipework (68) is fitted in the same way. The electric generator (69) fits under the cab at the back on the cab side mounting.

FIG. 4.

MAINFRAMES (70) - Check all the wire pilot holes to make sure that the brass wire supplied will go through. Bend up the frames and the integral spacers at front and rear with the fold lines on the outside to make up a box section. The small frame spacer with no hole in it (71) fits in the angled slots between the front two sets of driving wheels. The small frame spacer with a hole in (73) fits into the recesses in the top of the chassis just behind the cylinder mounting slots. The larger spacer with a hole in it (72) fits into the recesses in the top of the chassis at the rear. The front spacer (74) is also the bogie mounting plate. Solder an 8BA nut over the hole (see fig 5.) so that the bogie can be fitted later. This slides into the two recessed slots at the front of the chassis. Solder frame bushes into the rear two holes and into the compensating beams (75 and 76).

COMPENSATING - The compensating spindle should be cut from the brass wire and the compensating spacer cut to 9.5mm from the 1/16th copper or brass tube supplied. It is very important that no parts of this mechanism are soldered in a fixed position other than the spindle to the mainframe. Both beams must move independently of each other. The assembly of the beams is otherwise very simple. Fit the wheels (Bulleid wheels are available from 'Markits') so you can test the compensating mechanism and when satisfied that it works O.K. remove the wheels and put them to one side.

FIG. 5.

CYLINDER BLOCK - Cut out the cylinder main etching (78) and fold down the front and back plates with the fold lines on the outside. Leave the wrapper plates in the horizontal position. Push the cylinder block onto the mainframes, with the wrapper plates still in the horizontal position the 3/32nd cylinder tubes (79) can be soldered in position so that the fronts of the tubes are flush with the surface of the front plate and protrude out of the back plate. Using a small block to ensure a right angle bend (see fig. 5a.) the wrapper plates can now be bent down to the vertical position.

By winding length of soft wire around the cylinder blocks, the wrapper plates can be pulled under the cylinders and held there while soldering. It is advisable to leave this wire in place throughout the next stage of assembling the cylinder and valve casing. Solder into position the cylinder end covers (80 and 81) and the three washers on each side (82). The fitting of the rest of the parts on the cylinders is self explanatory.

BOGIE - Cut out the bogie (86) punch through the rivets from the back, fold the sides down, Open out the holes to take the 2mm bearings (87) and solder the tube in place. Glue the dummy

compensating castings (88) in place. Then, when you are ready, the bogie can be fitted using the spring (89), screw (14) and washer as shown.

SLIDEBARS - Cut out the main slidebar etching (90) and fold as in fig. 6. Fold the slidebars down and pull the attached spacer round so that they meet, Solder the two faces together. Solder the loose spacer (91) onto the main slidebar and the outer slidebar and spacer (92) on top of that. Push the completed slidebars onto the chassis. The correct angle should be automatically obtained. Glue the oilbox (93) castings on top of the slidebars.

FIG. 7.

COUPLING RODS - The driving wheels can now be fitted permanently. When they are in place glue the centre wheel nut covers (94) in place. Fit Romford crank pins (supplied in the wheel set). Assemble the coupling rods (95, 96, 97, 98, 99, 100, 101 and 102) as shown in the diagram. Take care in this operation as they must move freely for the compensation to work. The connecting rods (103, 104, 105 and 106) can also be assembled.

FIG. 8.

BRAKE GEAR - The brake gear is rather delicate and requires a certain amount of patience. Careful study of fig. 8. is advised before commencing. As the joints are mostly close together super glue or the equivalent may be considered easier than soldering. Check that the brass wire will go through all the holes. Start by fitting both the LB and RH centre front brake hangers (107) onto the ends of the protruding compensating spindle. Once the brake hangers are correctly fixed in position they can be used as a datum point via the inner pull rods (108, 109 and 110) for the correct positioning of the other brake hangers. Finally add the outer pull rods (108, 109 and 110),

FIG. 9.

CROSSHEADS - Fold the crosshead (111) as shown in the drawing. Fix the crosshead to the con rod with the 16BA screws and nuts provided.

REAR PONY TRUCK - Drop the 12mm bogie wheel into the underside of the pony truck (112). The two pin point bearings must be used. You may have to shorten these. Fit the keeper plate (113) and test for free running.

PARTS LIST.

- | | |
|---------------------------------------|---|
| 1. Body Baseplate. | 50. Smokebox Door. |
| 2. Rear Bulkhead. | 51. Cylinder Front Cowls. |
| 3. Rear Spacer. | 52. AWS Box. |
| 4. Centre Spacer. | 53. Sprung Buffers. |
| 5. Front Spacer. | 54. Vacuum Pipes. |
| 6. Front Bulkhead. | 55. Electric Lamps. |
| 7. 8'6" Cab Front. | 56. Front Steps. |
| 8. 9'0" Cab Front. | 57. Cab Roof Shutter. |
| 9. Front Footplate. | 58. Clack Valve Base. |
| 10. L/H Bodyside Frame. | 59. Clack Valves. |
| 11. R/H Bodyside Frame. | 60. Fallplate. |
| 12. L/H Bodyside. | 61. Smokebox Door Handle. |
| 13. R/H Bodyside. | 62. Main Injector Casting. |
| 14. 8BA Nuts and Bolts. | 63. Ancillary Injector Casting. |
| 15. Early Roof. | 64. Backhead. |
| 16. Late Roof. | 65. Rain Strips. |
| 17. R/H 8'6" Cab Side. | 66. R/H Ashpan. |
| 18. R/H 9'0" Cab Side. | 67. L/H Ashpan. |
| 19. L/H 8'6" Cab Side. | 68. L/H Cab Pipework. |
| 20. L/H 9'0" Cab Side. | 69. Electric Generator. |
| 21. 8'6" Cab Roof. | 70. Mainframes. |
| 22. 9'0" Cab Roof. | 71. Centre Spacer. |
| 23. 8'6" Cab Rear. | 72. Rear Spacer. |
| 24. 9'0" Cab Rear. | 73. Front Spacer. |
| 25. Chimney and Baseplate. | 74. Bogie Mounting Plate. |
| 26. Front Cowl. | 75. R/H Compensating Beam. |
| 27. Front Bufferbeam Unit. | 76. L/H Compensating Beam. |
| 28. Clack Valve Cover. | 77. |
| 29. Whistle Manifold Sliding Shutter. | 78. Cylinder Block. |
| 30. Whistle Manifold Hinged Cover. | 79. 3/32 nd Tube. |
| 31. Dome Cover. | 80. Cylinder Front Cover. |
| 32. Front Roof Panel. | 81. Cylinder Rear Cover. |
| 33. Late Rear Roof panel. | 82. |
| 34. Early Rear Roof Panel. | 83. Outside Cylinder Inspection Covers. |
| 35. Manifold Wheel Sliding Cover. | 84. Rear Cylinder Valve Covers. |
| 36. Manifold Wheel Hinged Cover. | 85. Front Cylinder Valve Covers. |
| 37. Roof Sandbox Fillers. | 86. Bogie. |
| 38. Centre Cylinder Inspection Cover. | 87. 2mm Bearings. |
| 39. Later Inspection Cover. | 88. Dummy Compensating Castings. |
| 40. Early Inspection Cover. | 89. Spring. |
| 41. Bufferbeam. | 90. Main Slidebars. |
| 42. Cab Window Frames. | 91. Slidebar Spacer. |
| 43. BR Safety Valve Base. | 92. Slidebar Front and Spacer. |
| 44. Safety Valves. | 93. Oil boxes. |
| 45. Whistle Base. | 94. |
| 46. Whistle. | 95. Coupling Rods. |
| 47. Short Smoke Deflectors. | 96. " " |
| 48. Standard Smoke Deflectors. | 97. " " |
| 49. Long Smoke Deflectors. | 98. " " |
| | 109. Brake Pull Rods. |
| | 110. " " " |
| | 111. Crossheads. |

99. Coupling Rods.

100. " "

101. " "

102. " "

103. Connecting Rods.

104. " "

105. " "

106. " "

107. Brake Hangers.

108. Brake Pull Rods.

112. Pony Truck.

113. Wheel Keeper Plate.

114.

115. 1/16th Brass Tube.

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FIG. 1. MAIN BODY CONSTRUCTION.

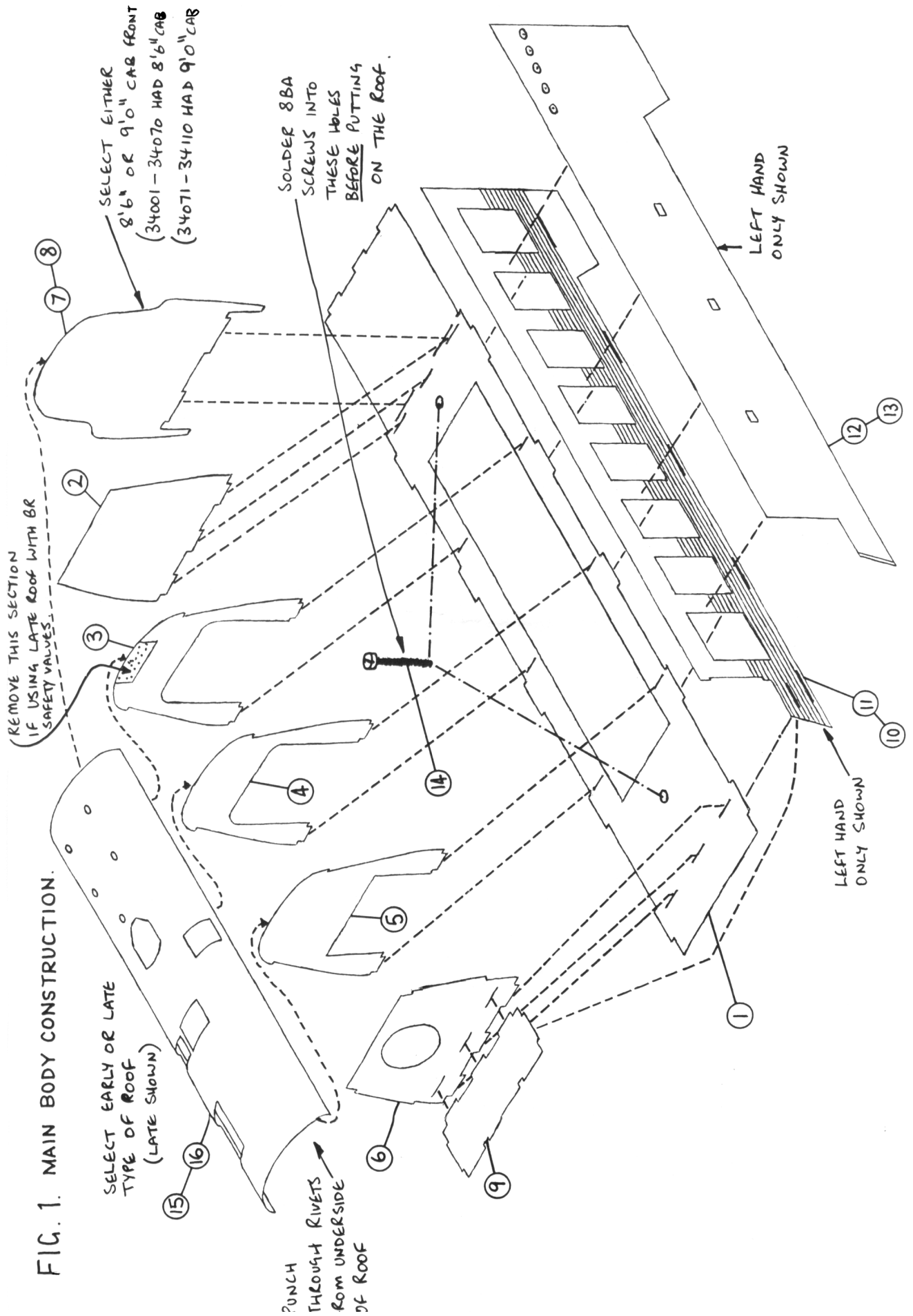


FIG. 2. DETAILING THE BODY.

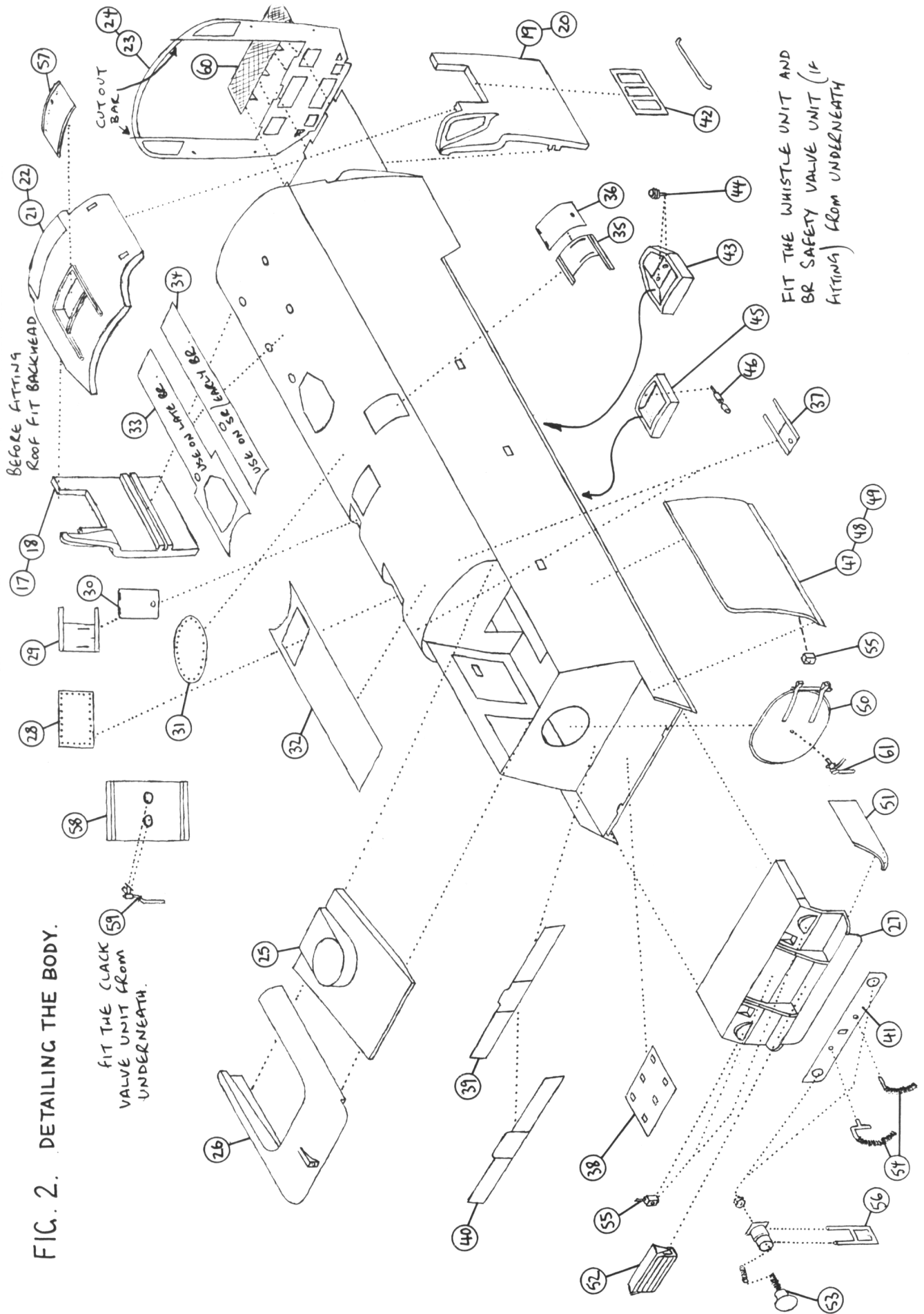


FIG. 3. DETAILING UNDER THE CAB

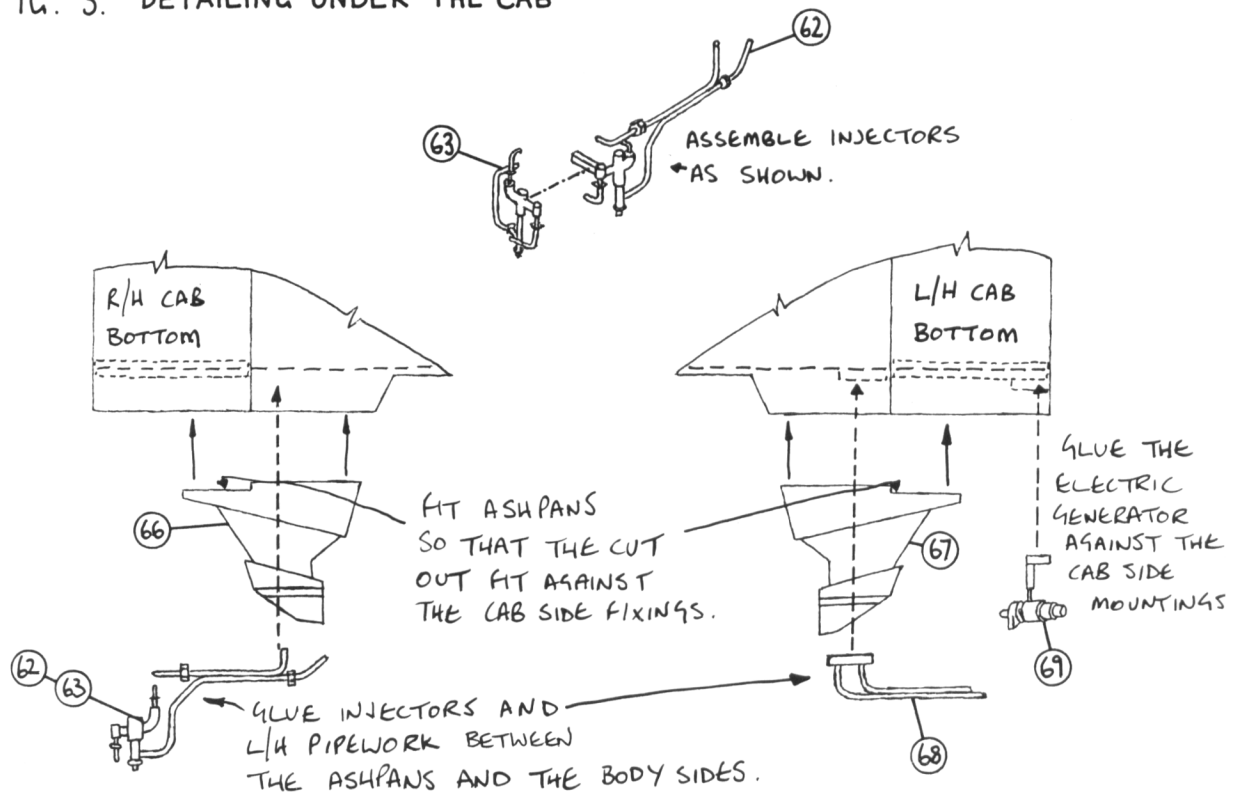


FIG. 4. CHASSIS COMPENSATION

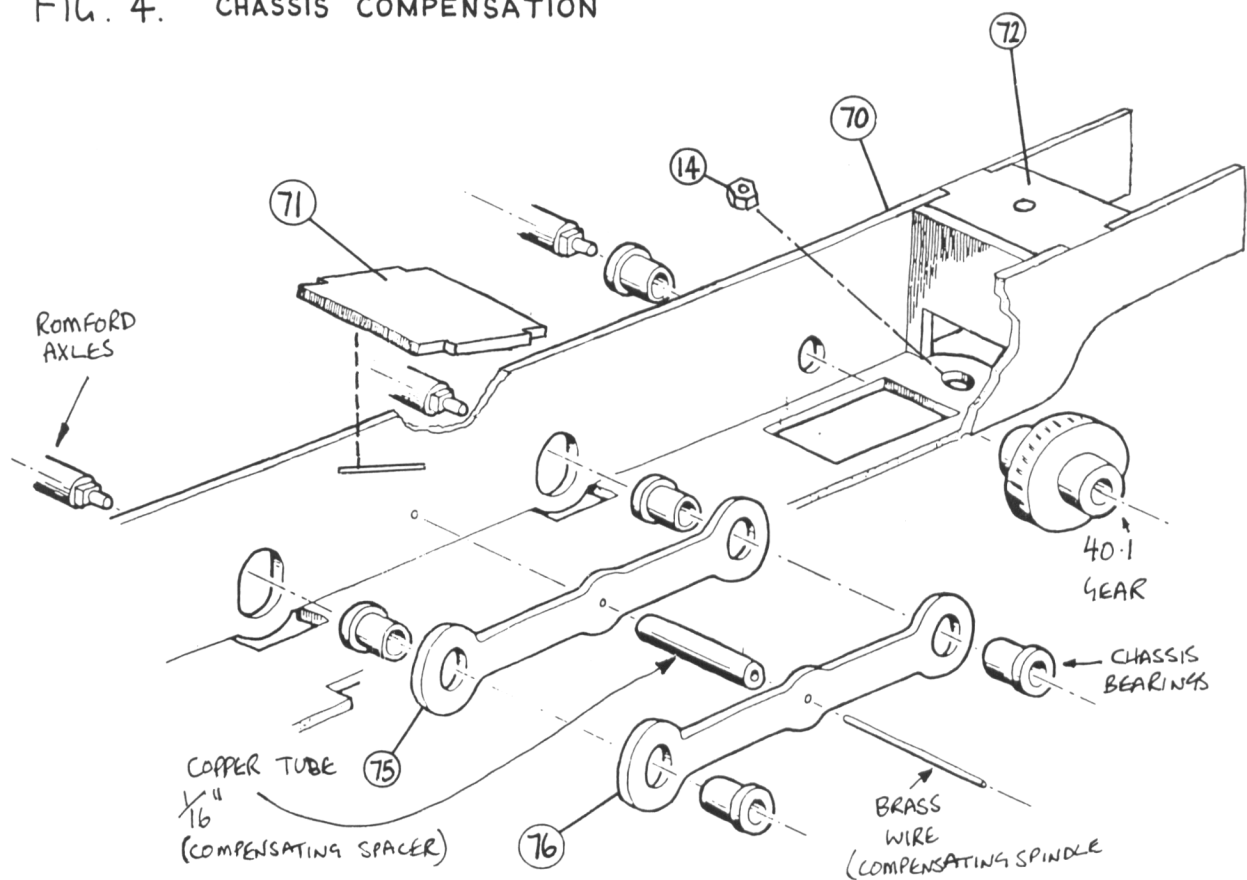


FIG. 5. CYLINDER AND BOGIE CONSTRUCTION

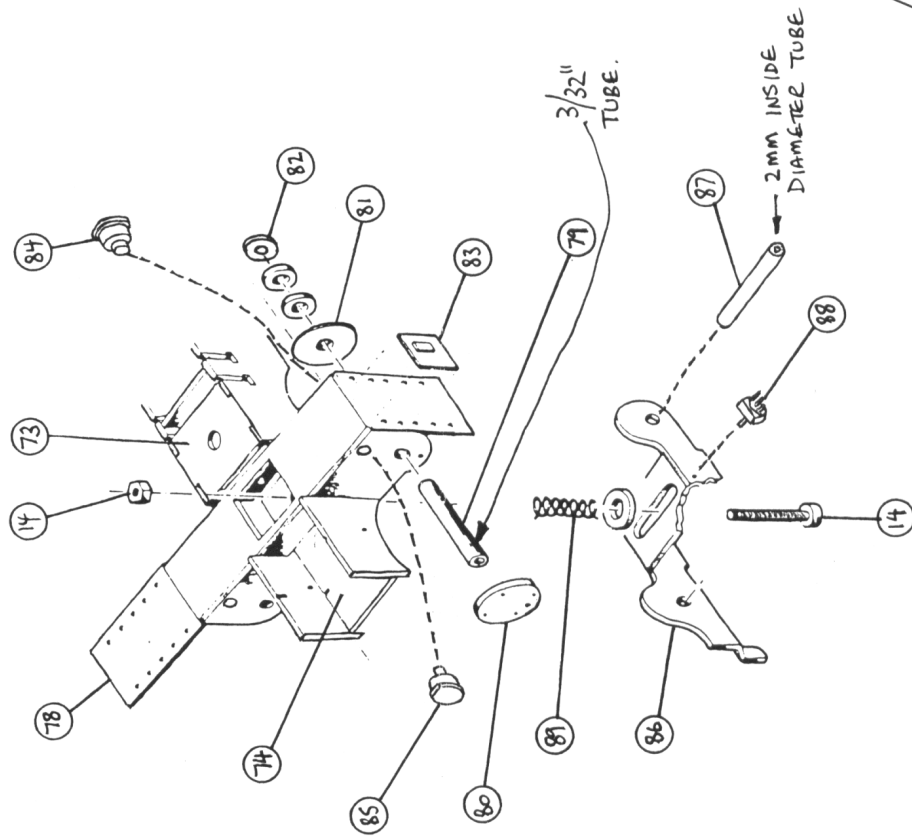


FIG. 5a.

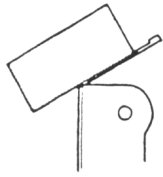


FIG. 6. SLIDEBARS

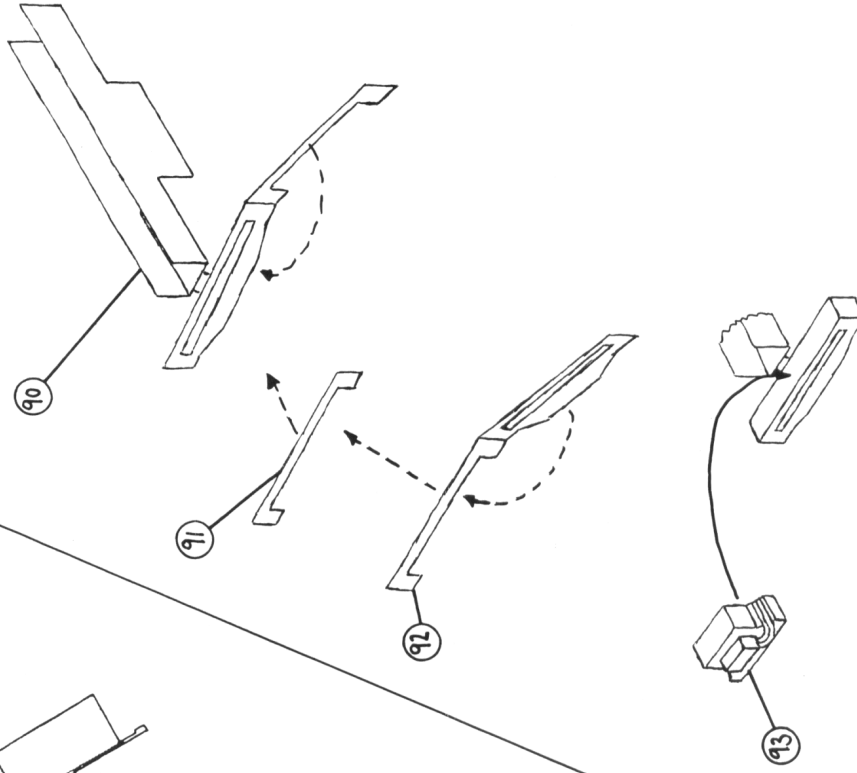


FIG. 7. COUPLING RODS

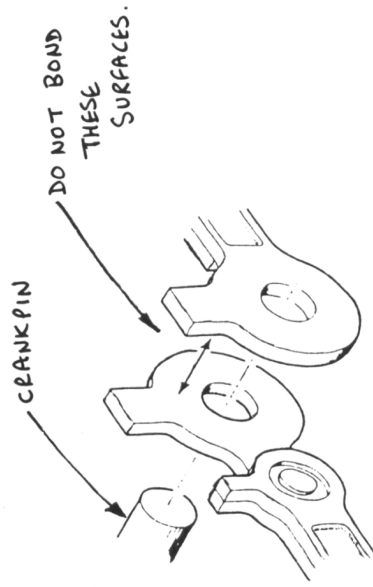
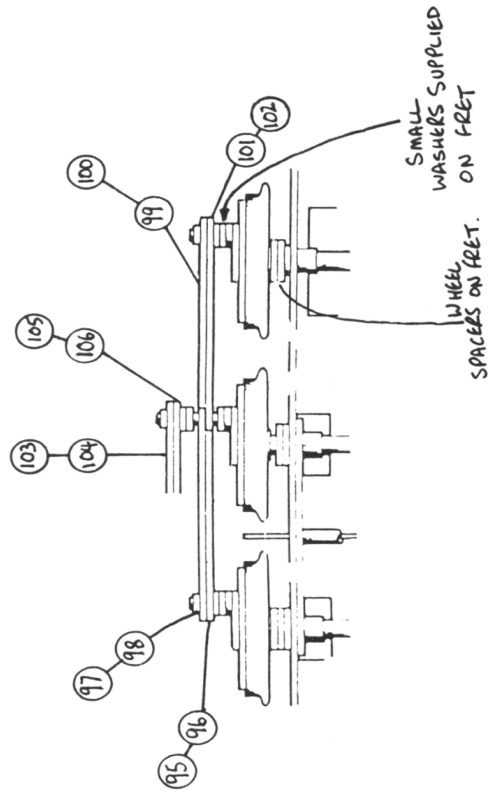


FIG. 8. BRAKE GEAR

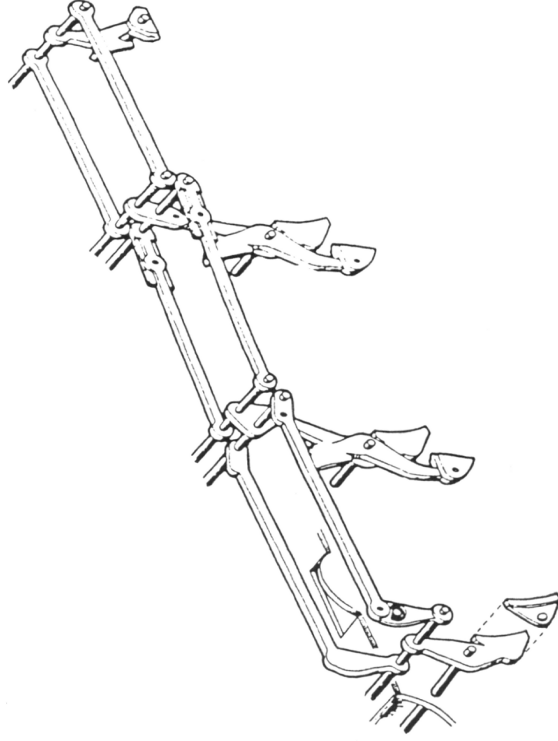


FIG. 9. CROSSHEAD.

