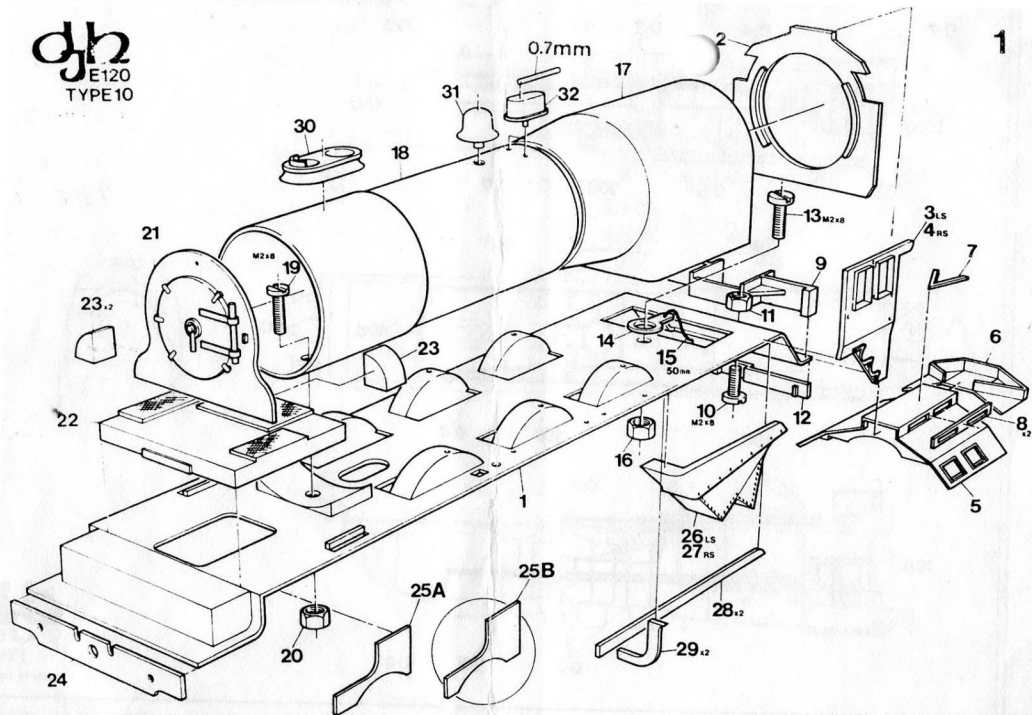
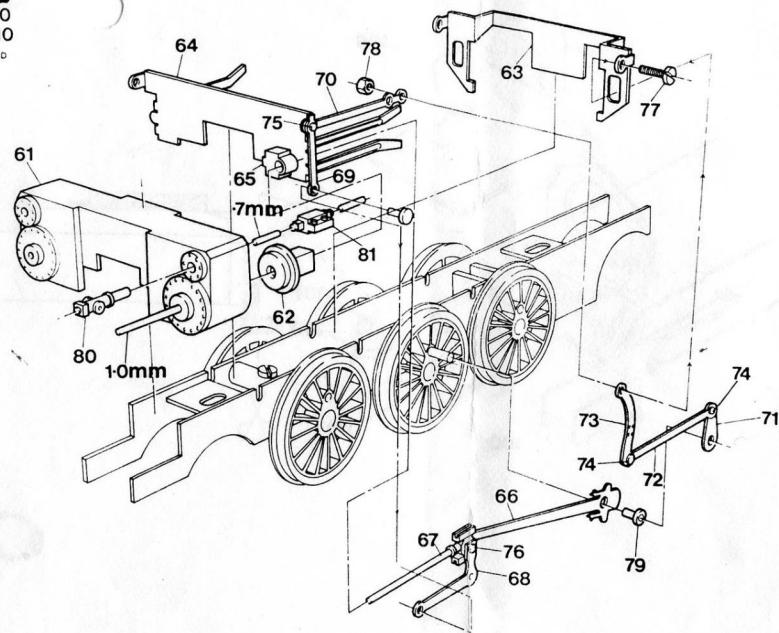


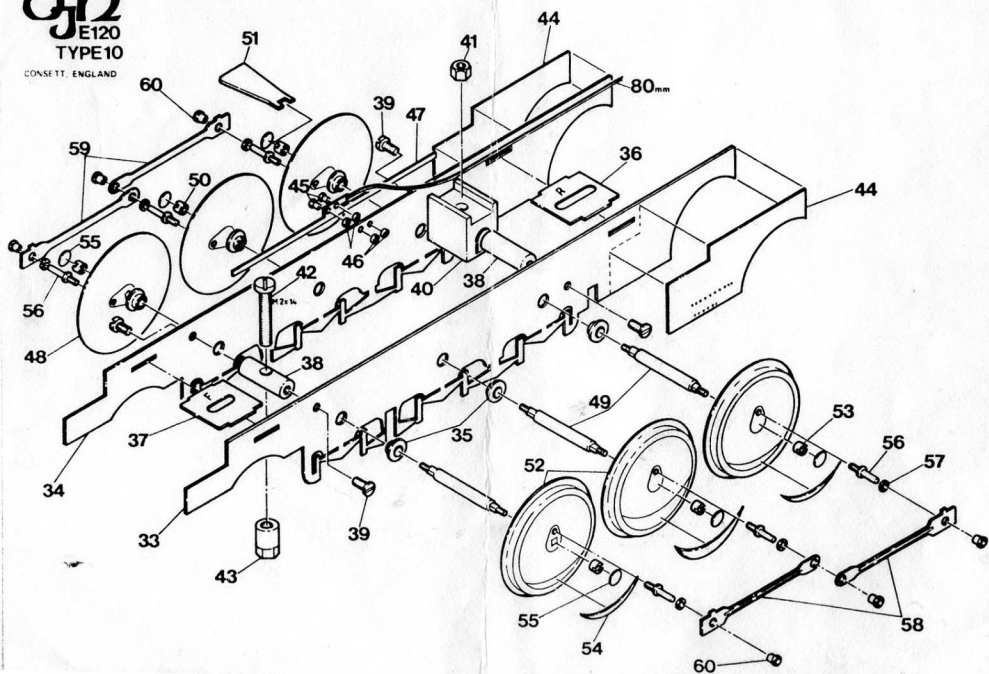
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TYPE10



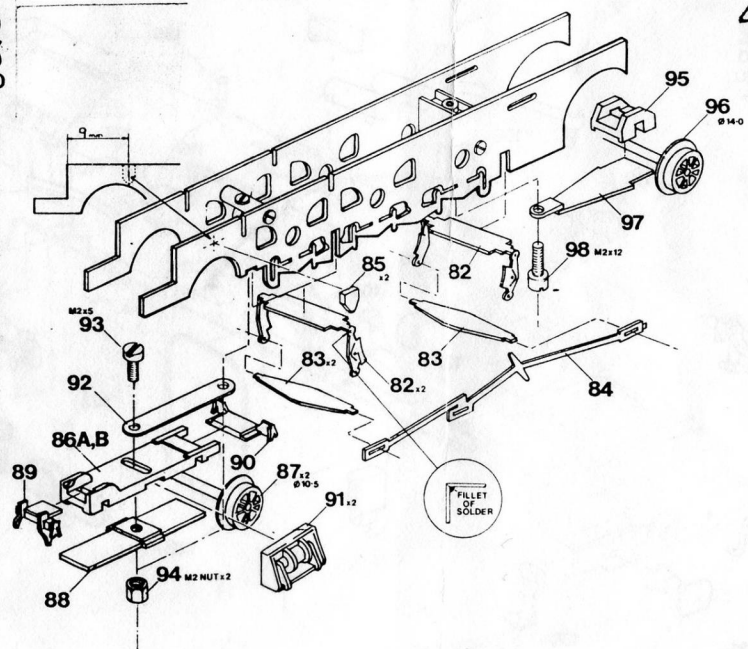
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TYPE10
CONSETT ENGLAND

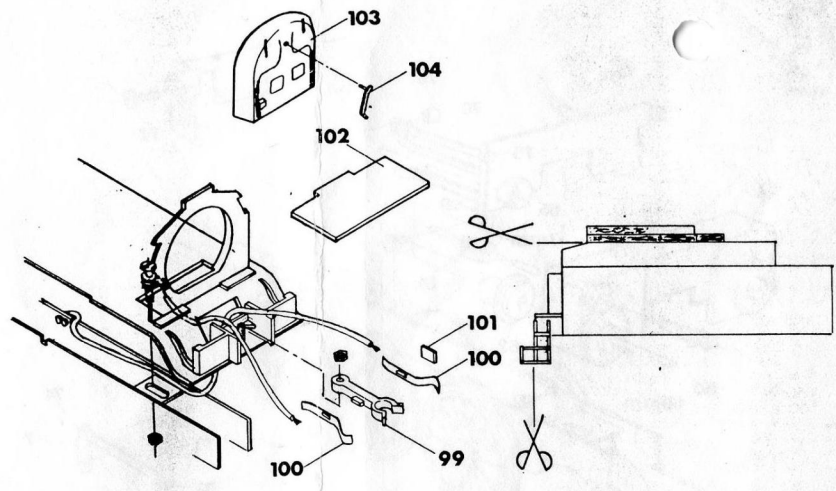


dh
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TYPE10
CONSETT ENGLAND



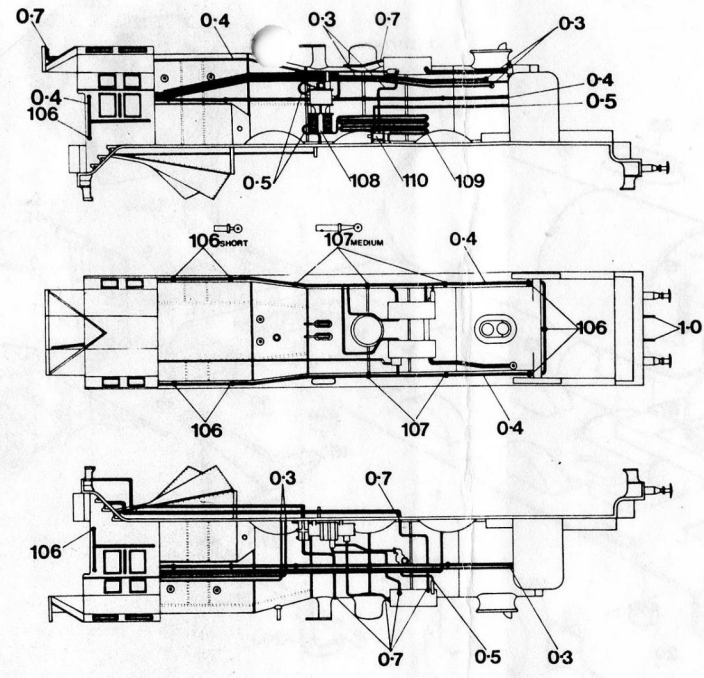
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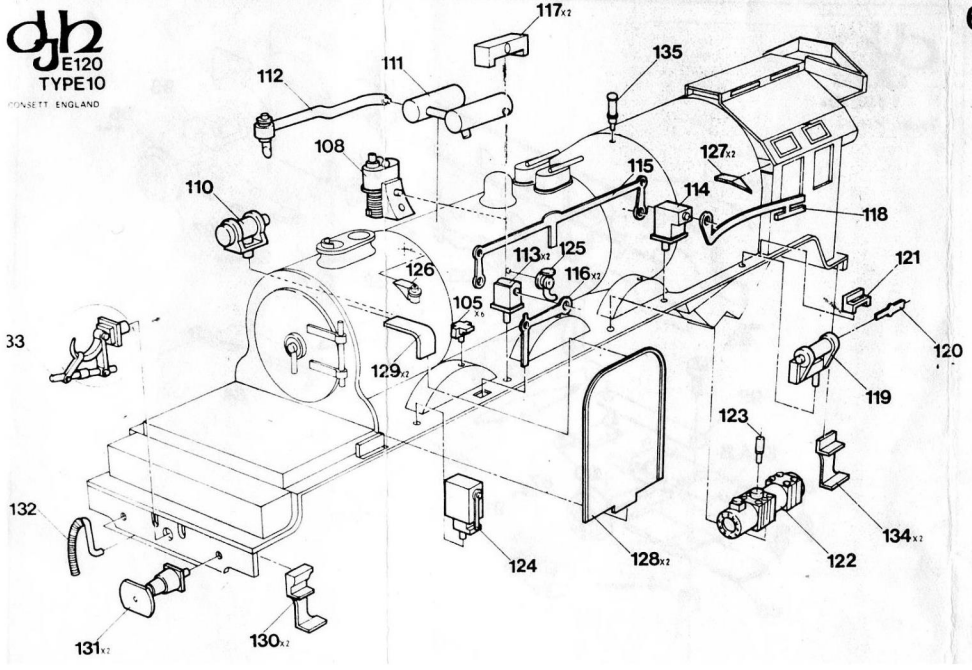
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dh
E120
TYPE10
CONSETT, ENGLAND



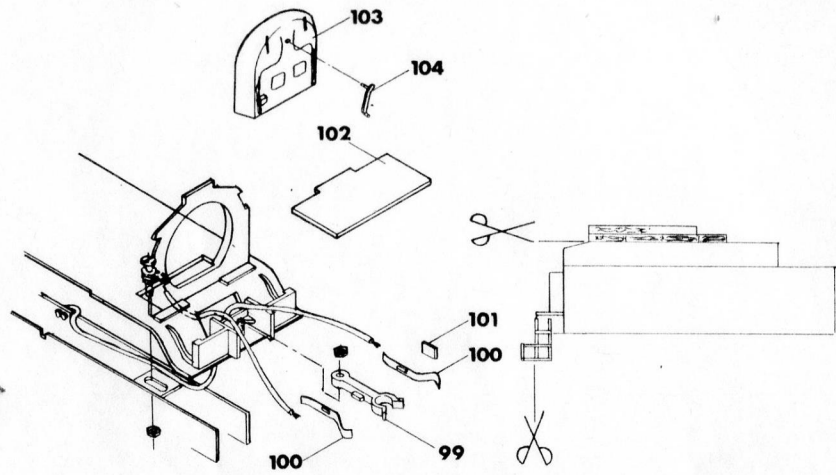
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dh
E120
TYPE1
CONSETT, ENGLAND



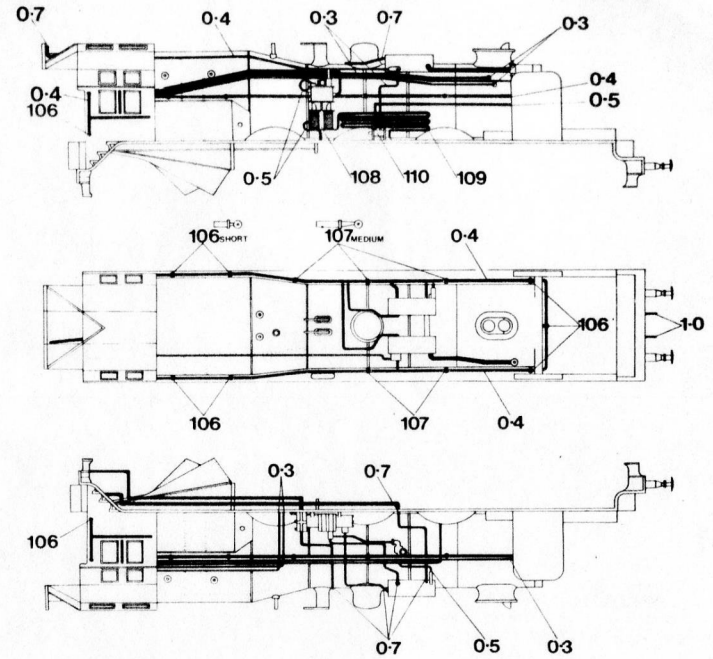
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dh
E120
TYPE10
CONSETT, ENGLAND



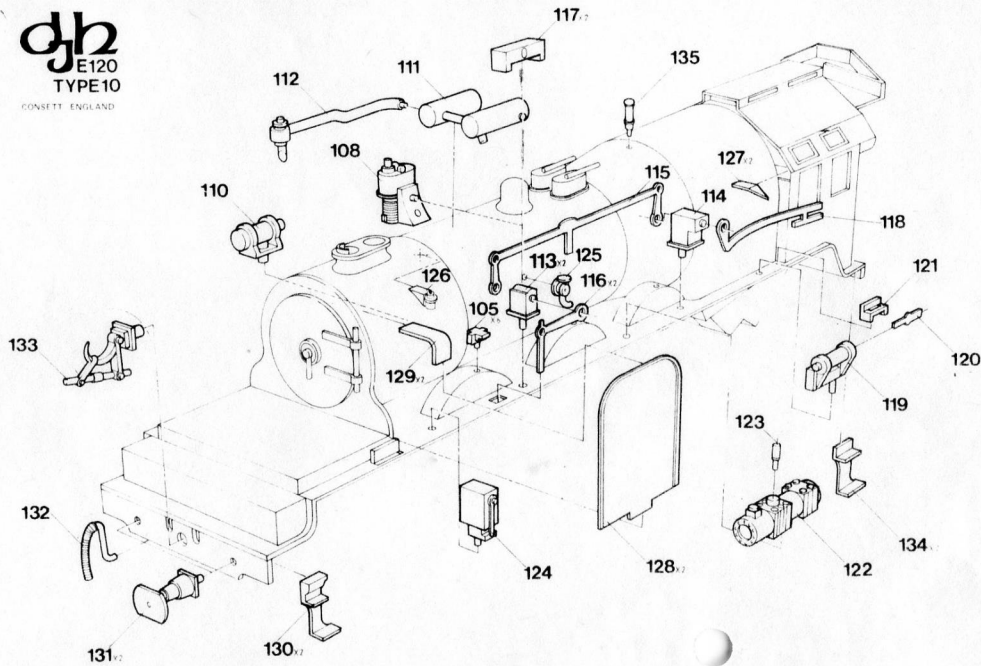
5

dh
E120
TYPE10
CONSETT, ENGLAND



dh
CONSETT,

dh
E120
TYPE10
CONSETT, ENGLAND



6

Hints and Tips for Assembly of White Metal Kits

Preparation of the Components

It is very important to ensure that all parts are clean, free of 'flash' and fit properly. The 'flash line' is easily removed from most areas by scraping with a sharp hobby knife such as 'Xacto' or similar, a round blade has proven more effective than the straight pointed type. Attempt to pull the blade along the 'flash line' and don't try to remove it all at once. Several light strokes along the 'flash line' are better than a single one.

Some areas will be better cleaned up with the use of files. Experience has shown these to be areas where a scraping with a knife is not permitted due to space limitations. A final light filing over the previously scraped 'flash line' will also ensure a neater appearance. Take care not to 'flatten' round parts by filing too heavily. Again several light strokes are better than one heavy one.

All locating holes for detail fittings should be pre-drilled to the size specified in the instructions. Sometimes it is necessary to clean out these holes, a round 'rat tail' file is best. Take care not to snap off the tip of the file.

Special care is needed for cleaning up the small detail parts. The above mentioned scraping technique is best applied but using the tip of a straight pointed knife rather than the round type. Light filing will also be necessary in the 'difficult to get at' places.

The white metal parts should now be brushed lightly with a suede brush to remove all loose particles of metal from the scrapings and filing. The parts should then be washed in warm 'soapy' water, rinsed and set aside to dry.

The brass etched components can be removed from the 'frets' by either cutting them out with small cutters or by placing the 'fret' on a hard flat surface and tapping the parts out with a small hammer and chisel (keep an old chisel exclusively for this job as it is the easiest way to ruin a good chisel).

Whichever method is chosen be careful not to bend or twist the Brass parts as it can be difficult to get them flat again.

Usually there is very little cleaning up to do on etched Brass parts. If the locating tab has not been cut off flush with the part, it will be necessary to file smooth. Again be careful not to bend the parts.

The Brass parts can now be folded, as per instructions, along the half etched fold lines. Before washing the Brass parts, in the same way as for white metal, soak them for about 20 minutes in some acetic acid (vinegar). This will provide a better surface for the paint to adhere to.

ASSEMBLY

White Metal and Brass Kits can be assembled using low melt solder, epoxy resin or 10 second instant glue. Soldering should only be attempted by experienced modellers as it is all too easy to melt the white metal components. Certain parts are best painted before assembly. Parts such as Head lamps, wheels and other parts which are not going to be the main body colour are the type of parts best painted before assembly. It is further recommended that the kit be assembled into sub-assemblies and these painted before final assembly. The instructions will be the best place to judge which parts can be built into sub-assemblies.

Where parts are to be epoxyed together first ensure a good fit (by doing a 'Dry-Run') and then carefully apply the adhesive, to one side only and press the parts together. Don't worry if a little epoxy seeps out between the joint. It is much easier to trim it away with a sharp knife when it sets rather than trying to wipe it off. It may, in some cases, be necessary to clamp the parts together while the adhesive sets. Usually propping the parts up with various wooden blocks will be all that is necessary.

The smaller detail parts are best attached using instant glue. It is best applying with the tip of a tooth pick or a needle. If strength is needed or it is a part that works rather use epoxy resin as instant glue does not have good strength in some applications.

After all assembling has been completed, the model should again be washed, in the way already described and primed for painting.

GENERAL INFORMATION

The parts in this kit are available separately - prices are available from the address below. Please quote Kit Number and Part Number on any enquiry.



Hope you have enjoyed building your model.

Address DJH Grandspot Limited
Leadgate Industrial Estate
Lope Hill Road
Leadgate
Consett
Co. Durham DH8 7RS

Tools Required

Selection of Swiss Files (small)
1 Pair Cutters
1 Pair Pliers
Screwdriver
Tweezers
Drill Pin Vice

Key Code

L/W - Lost Wax Brass
B/E - Brass Etched
T - Turned
P - Plastic
W/M - White Metal
 - Remove by cutting
 - Remove hatched area bycutting
* - Optional parts.
IS - Insulated side.
LS - Live side.
Ø - Diameter

Belgian Type 10

<u>Item No</u>	<u>Description</u>	<u>Material</u>
1	Footplate	wm
2	Spectacle plate	wm
3	Cab Side LS	wm
4	Cab Side RS	wm
5	Roof	wm
6	Roof extension	wm
7	Roof extension support	E
8	Roof windows x 2	E
9	Upper drawbar	wm
10	Tender loco connection pivot screw M2	T
11	M2 nut x 2	T
12	Drawbar	wm
13	Rear chassis fixing screw M2	T
14	Live pick-up tag	E
15	Insulated wire (80 mm)	E
16	M2 nuts x 2	T
17	Firebox	wm
18	Boiler	wm
19	Front chassis fixing screw M2	T
20	M2 nuts x 2	T
21	Smokebox door	wm
22	Cylinder cover	wm
23	Steam pipes x 2	wm
24	Buffer beam	wm
25A	Frame extensions x 2 (A curves 600 mm)	wm
25B	Frame extensions x 2 (B curves less than 600 mm)	wm
26	Firebox bottoms LS	wm
27	Firebox bottoms RS	wm
28	Footplate sides x 2	wm
29	Supports x 2	wm
30	Chimney	wm
31	Dome	wm
32	Safety valves x 2	wm
33	Chassis frame LS	E
34	Chassis frame RS	E
35	Bushes x 6	T
36	Fixing spacers rear	E
37	Fixing spacers front	E
38	Spacers x 2	T
39	Spacer screws x 4	T
40	Pony pivot box	wm
41	M2 nut	T
42	Bogie pivot screw M2	T
43	Bogie pivot spacer	wm
44	Rear frame detail plates x 2	E
45	Insulated rivets x 2	P

Belgian Type 10

<u>Item No</u>	<u>Description</u>	<u>Material</u>
46	Insulated washers x 4	P
47	Electric pick-up	E
48	Insulated wheels x 3	T
49	Axles x 3	T
50	Axle fixers x 3	T
51	Axle fixers screwdriver	E
52	Live wheels x 3	T
53	Axle fixers x 3	T
54	Balance weights x 6	E
55	Axle covers x 6	E
56	Crankpins x 6	T
57	Crankpin washers x 6	E
58	Coupling rods LS x 2	E
59	Coupling rods RS x 2	E
60	Crankpin fixers x 6	T
61	Cylinders	wm
62	Cylinder backs x 2	wm
63	Motion bracket	E
64	Slidebar bracket	E
65	Slidebar guides x 2	wm
66	Connecting rods x 2	E
67	Pistons x 2	LW
68	Union links x 2	E
69	Combining links x 2	E
70	Valve rods x 2	E
71	Cranks x 2	E
72	Eccentric rods x 2	E
73	Expansion links x 2	E
74	Rivets, short x 6	T
75	Rivets, medium x 2	T
76	Rivets, long x 2	T
77	M1 screws x 2	T
78	M1 nuts x 2	T
79	Crankpin fixers x 2	T
80	Piston valves, front x 2	wm
81	Piston valves, rear x 2	wm
82	Brakes x 3	E
83	Brake crossmembers x 3	E
84	Pull rod	E
85	Sandboxes x 2	wm
86	Bogie top (A curves 600 mm	wm
	Bogie top (B curves less than 600 mm)	wm
87	Bogie wheels 10.5mm x 2	T
88	Bogie bottom	wm
89	Bogie brakes front	wm
90	Bogie brakes rear	wm
91	Bogie brake cylinders x 2	wm
92	Bogie arm	E
93	Bogie screw M2	T
94	Bogie nuts x 2	T
95	Pony top	wm
96	Pony wheel 14 mm	T
97	Pony bottom	wm
98	Pony screw M2	T
99	Tender loco bar plastic	P

Belgian Type 10

<u>Item No</u>	<u>Description</u>	<u>Material</u>
100	Tender loco bar pickups x 2	E
101	Insulation strip	P
102	Cab floor	wm
103	Cab detail	wm
104	Regulator	wm
105	Oil boxes x 6	wm
106	Handrail knobs, short x 9	T
107	Handrail knobs, medium x 5	T
108	Pump (large)	wm
109	Pump wires	E
110	Pump (small)	wm
111	Twin cylinders	wm
112	Pipe	wm
113	Reversing lever pivot (front) x 2	wm
114	Reversing lever pivot (rear)	wm
115	Reversing rod (long)	E
116	Rod links to valve rods x 2	E
117	Rod link covers x 2	wm
118	Second reversing rod	E
119	Reversing lever pump	wm
120	lever	E
121	Lever support	wm
122	Generator	wm
123	Generator valve	wm
124	Lubricator	wm
125	Valve	wm
126	Valve	wm
127	Window shades x 2	E
128	Deflectors x 2	E
129	Deflector supports x 2	E
130	Front steps x 2	wm
131	Buffers x 2	wm
132	Vacuum pipes x 2	wm
133	Dummy coupling	wm
134	Rear steps x 2	wm
135	Whistle	
	Wires:	
	0.3Ø	650 mm
	0.4Ø	550 mm
	0.5Ø	150 mm
	0.7Ø	450 mm
	insulated	150 mm
	1 mm Ø	50 mm

CONSTRUCTION

Fit parts [1] through to [24].

Fit parts [25A] for curves over 600 mm
or [25B] for curves under 600 mm

Fit parts [26] to [32]

Clean up the body and fill any gaps.

Fit parts [33] through to [47]

Assembly of Driving Wheels:

Please follow instructions carefully. You will see that the wheels and axles are machined with a 'square' profile.

Carefully mount INSULATED wheels [48] onto the square section of the axles [49]. Do NOT force wheel onto axles; let the nuts [50] pull the wheel onto the axle, use part [51]

Place assemblies [48,49,50] through parts [33,34,35]

Carefully mount LIVE wheels [52] onto axles [49] with nuts [53].

Check that all wheel sets run parallel. When satisfied Loctite the nuts [50] and [53] onto [49].

Fit parts [54] to [60].

Make up parts [61] through to [81]. Oil all moving parts.

Fit parts [82] through to [85].

Fit parts [86A] for curves over 600 mm
[86B] for curves under 600 mm

Make up parts [87] to [98].

Make up parts [99] to [101]. Put insulation strip [107] onto [100]. This is to insulate the insulated pick-up [47] from electric shorting.

Fit part [102], [103], [104].

Fit parts [105] through to [135]