

1984.194

Beyer, Peacock GA and detail drawings for 9643 and 9641

Beyer, Peacock detail drawings for Buenos Aires and Rosario Railway Locomotives order Nos. 9641 and 9643, 1907.

<u>Plan</u>	<u>Drawing No.</u>	<u>Title</u>
82	69053	Intercepting Valve
83	68029	Steering Valve, Oilcups and Pipe Unions
84	70283	Smokebox
85	70082	Chimney and Intercepting Valve Casing
86	70182	Smokebox Door etc.
87	61959	Vacuum Exhaust and Steam Pipe Elbows
88	42560	Smokebox Details
89	18112	Furnace Lubricator, Blower Valve etc.
90	68811	Exhaust Pipe and Nozzle
91	69955	Boiler and Firebox Shell
92	66911	F S Sections
93	66832	Mud Collector, Clackbox Seatings etc.
94	70388	Hornish Cleaner, Arrangement of Skimmer and Suckers
95	70409	Drummond's Spark Arrester
96	70410	Stones Conical Spark Arrester
97	70677	Louvre Spark Arrester
98	69959	Dome
101	68657	Regulator Steam Pipe

119	42116	Firedoor
120	42117	Firedoor Pieces
121	41315	Sighthead Lubricator Steam Cocks
122	70086	Ejector
123	40724	Injector Steam Cock, Stand and Levers
124	68850	Whistle Cock, Levers, Bell and Stem
125	70287	Pipe Arrangement (Elevation)

Tenders Order No. 9642 and 9643

159	70450	Manhole Lid and Sieve etc.
160	70449	Lifting Eyes (Front and Hind)
161	70443	Coping and Rack
162	70451	Wrought Iron Pieces and Watercock
163	70448	Lamp Bracket and Water Pipe Carrier
164	70444	Toolbox Sections etc.
165	36701	Brake Screw, Handle and Nut
166	70201	Brake Screw Pillar
167	43433	Brakeshaft
168	70199	Brakeshact Carrier
169	70197	Brake Hangers and Blocks
170	43473	Brake Rods and Floating Levers
171	28166	Steam Cylinder, Piston Rod etc.
172	43498	Brass Cross Beams
173	70198	Steam Brake Cylinder
174	70560	Acetylene Gas Arrangement
175	70561	Acetylene Gas Details
176	70407	Wood Tool Box

Drawings available on negative for the San Paulo Railway

Garratt – Order NO. 1184, Works No. 6795. 2-6-0 + 0-6-2 1 metre gauge 1936.

<u>Drawing No.</u>	<u>Title</u>
1	General Arrangement Front End
2	General Arrangement Rear End
3	Boiler Pipe Arrangement (Elevation)
4	Boiler Pipe Arrangement (Plan)
5	Boiler Pipe Arrangement End Views
6	Engine Pipe Arrangement
<u>Boiler and Firebox</u>	
7	Boiler and Firebox Arrangement (2 negatives)
8	Firebox Back and Side Liners, Firehole Protector and Deflector Plates
9	Longitudinal and Transverse Stays and Sling Stay Bracket
10	Roof Stays Tee Bar and Palm Stays
11	Firebox Seatings
12	Dome
13	Regulator and Stuffing Box
14	Regulator Details
15	Regulator Steam Pipe Carrier
16	Asbestos Mattress
17	Mouldings and Casings
<u>Ashpan and Smokebox</u>	
18	Ashpan Arrangement
19	Smokebox Arrangement

- 20 Spark Arrester
- 21 Chimney
- 22 Blast Pipe and Cap
- 23 Smokebox Door Details

Mountings

- 24 Firebox Fixings Arrangement (2 negatives)
- 25 Mechanical Lubricator and Details
- 26 "Klinger" Water Gauge, Safety Valve, Piston Rod and Valve Spindle Packing
- 27 Whistle Cylinder Cock Steam Valve
- 28 Firedoor and Details
- 29 Detroit Lubricator
- 30 Steam Valves for Reversing Cylinder and S F Lubricator
- 31 Reversing Valve Details and S F Lubricator Carrier
- 32 Reversing Lever and Sector
- 33 Reversing Rod and Levers

Ball Joints

- 34 Steam Ball Joints
- 35 Exhaust Ball Joint
- 36 Steam Pipe Elbows and the Steam Pipe in Smokebox
- 37 Steam Tee Pipe to Cylinders and Expansion Joint

NB. This film is positive and will print white on black.

Engine Frame

- 38 Engine Frame Arrangement (2 negatives)
- 39 Pivot Centre Castings

Boiler Frame

- 40 Boiler Frame Arrangement (2 negatives)
- 41 Wood Platform (2 negatives)

Wheels and Axils

- 42 Coupled and Bogie Axils, Coupled Hornblocks
- 43 Bogie Wheel, Coupled Spring Links
- 44 Coupled Axilbox

Bogie

- 45 Radial Bogie
- 46 Radial Bogie Axlebox
- 47 Bogie Details
- 48 Bogie Spring

Reversing Gear

- 49 Reversing Cylinder Carrier Slidebar Bracket
- 50 Steam Reversing Cylinder
- 51 Cataract Cylinder
- 52 Reversing Cylinder Details
- 53 Reversing Shaft
- 54 Reversing Rods, Reversing Cylinder Crosshead

Cylinders

- 55 Cylinders

Cab

56 Cab Arrangement

57 Cab Ventilators

Tanks

58 Hind Tank

59 Hind Tank Details

60 Sandbox, Hind Engine Inner

Brake

61 Steam Brake Cylinder

62 Brake Hanger and Block

63 Hand Brake Shaft and Carrier

64 Hand Break Screw and Details

65 Hand Break Screw Bracket and Casing

66 Brake Pull Rod and Brakebeams

67 Brake Lever Carrier, Platform Supports

Miscellaneous

68 Steam and Exhaust Pipe Carriers

69 Pipe Clips

70 Steel Flanges

71 Bass Flanges

72 Miscellaneous Brasswork

73 Headlamp and Lamp Brackets

Photographs available for the Machtransimport, Leningrad

4-8-2 + 2-8-4 Garratt Locomotive, 5' 0" gauge, 1932

Order No. 1176, works Nos. 6737.

<u>Photo</u>	<u>Reference</u>
LHS Elevation	18/C/7
RHS Elevation	18/C/8
RHS $\frac{3}{4}$ Front View	18/C/9
LHS $\frac{3}{4}$ Rear View	18/C/11
RHS $\frac{3}{4}$ Rear View	18/C/12
LHS Acute Oblique Front View	18/C/13
Cylinder Castings	18/C/14
Aerial View of Front Engine Frame	18/C/15
Rear Tank	18/C/16
Aerial View of Rear Engine Frame	18/C/17
$\frac{3}{4}$ Front View of Boiler Frame	18/C/18
RHS Elevation, Boiler Unit and Cab	18/C/19
Boiler and Firebox	18/C/20
Firebox showing Arch Tubes and Part of Boiler	18/C/21
External View of Firebox	18/C/22
Firebox showing Arch Tubes	18/C/23
Inside Firebox	18/C/24
Firebox and Boiler Side View	18/C/25
Firebox and Boiler $\frac{3}{4}$ View	18/C/26
LHS Elevation with Visitors	18/C/27
Smokebox showing Superheater Tubes	18/C/28
Engine Frame	18/C/29

Close up of Boiler Unit	18/C/30
Engine and Boiler Frame in Erecting Shop	18/C/32
LHS ¾ Front View with Visitors	18/C/33
Front Tank	18/C/34
Mechanical Stoker	18/C/35
Boiler Frame	18/C/36

Drawings available on negative for the Rhodesian Railways

Garratt 20A class – 4-8-2 + 2-8-4 3' 6" guage 1957.

Order No. 11182/3/4 Works Nos. 7780 – 7825.

<u>Drawing No.</u>	<u>Title</u>
1	Diagram – weight distribution
2	Vogel Diagram

General Arrangements

3	General Arrangement – Engine Unit Front
4	General Arrangement – Boiler Unit
5	General Arrangement – Engine Unit Hind
6	General Arrangement – End Views

Pipe Arrangements

7	Engine Pipe Arrangement – Front End Elevation and Plan Engine Nos. 715 – 720
8	Engine Pipe Arrangement – Hind End Elevation and Plan – Engine Nos. 715 – 720
9	Engine Pipe Arrangement – End Views 715 – 720
10	Engine Pipe Arrangement – Front End Elevation and Plan – Engine Nos.721 – 760

11	Engine Pipe Arrangement – Hind End Elevation and Plan – Engine Nos. 721 – 760
12	Engine Pipe Arrangement – End Views Nos. 721 – 760
13	Boiler Pipe Arrangement – Elevation and Plan
14	Boiler Pipe Arrangement – Elevation and Plan and End Views
15	Arrangement of Steam Brake Flexible Hose

Boiler and Firebox Details

16	Gusset Stay at Firebox Backplate
17	Foundation Ring
18	Everlasting Blow Off Cock
19	Boiler Seatings
20	Boiler Tubes
21	Tubing Procedures

Ashpan

22	Ashpan and Firebar Arrangement
23	Ashpan and Firebar Arrangement
24	“Waugh” Firebars and Details
25	Firebar Carriers
26	Rocking and Drop Grate Details
27	Catch Boxes and Details
28	Ashpan Drench Cock

Mechanical Stoker

29	Mechanical Stoker (Type HT) Arrangement Front Part
30	Mechanical Stoker (Type HT) Arrangement Hind Part
31	Mechanical Stoker Brasswork, Valves etc.

32	Mechanical Stoker Brasswork on Fixings
33	Mechanical Stoker Miscellaneous Brasswork and Pipe Unions
34	Mechanical Stoker – Pipe Carriers and Clips
35	Hopkinson’s Mac. Valve and Stoker Brasswork
36	Arrangement of Stoker Gauge Pipes
37	Distributing Table and Distributor Jet
38	Tray for Stoker, Engine Sump Drain and Dome Base Crinoline

Smokebox

39	Smokebox arrangement Elevation and Plan
40	Smokebox Arrangement End Viewa
41	Blast Pipe and Cap
42	Steam Pipe Branch Through Smokebox
43	Steam and Exhaust Pipe Elbows at Smokebox
44	Smokebox Door and Details
45	Steam Pipe Casing Outside Smokebox
46	Spark Arrester and Details
47	Smokebox Door Details

Superheater

48	Superheater Header
49	Superheater Header
50	Regulator Valve Arrangement
51	Regulator Valve Arrangement
52	Regulator Valve Covers etc.
53	Superheater Elements and Clamps
54	Regulator Camshaft Casing

- 55 Superheater Header Carrier
- 56 Modified Clamp, Bolts, Nuts and Pilot Valve

Mountings

- 57 Firebox Fixings Arrangement – Elevation
- 58 Firebox Fixings Arrangement End Views and Plan
- 59 Firedoor Details and Ross Pop Safety Valves
- 60 Steam Turret
- 61 Turret Steam Valve for Dynamo, Reversing Pressure Gauge, Cylinder Cocks, Injector and Anti-Carbonisers
- 62 Ejector and Blower Valves, Mechanical Lubricator, Atomiser Steam Valves
- 63 Pressure Gauge , for Boiler and Atomiser Steam Gauge Carriers and Stoker Valve Gauge
- 64 Extension Spindle and Carriers
- 65 Brass Flanges Handwheels and Handwheel Markings
- 66 Firedoor Screen
- 67 Auxiliary Blower Valve
- 68 Graduable Brake Valve
- 69 Carriers for Ejectors etc., Spindles for Small and Large Ejectors.
- 70 Carriers for Stoker Gauges and Manifold
- 71 Regulator Details, Lever and Shaft, Handle, Sector etc.
- 72 Drifting Brinter and Instruction Plate on Regulator Handle

Clothing

- 73 Clothing and Internal Pipe Arrangement Elevation and Plan
- 74 Clothing and Internal Pipe Arrangement - End Views
- 75 Firebox Crinoline and Details

76	Firebox Crinoline and Details
77	Asbestos Mattresses
78	Steam Pipe Casings
79	Clothing on Firebox Backplate
80	Cylinder Clothing and Casing
81	Stoker Manifold Casing

Pyrometer

82	Pyrometer Arrangement – Fitted on Engine 724 only
83	Pyrometer Arrangement – Fitted on Engine 724 only
84	Pyrometer Details

Boiler Frame

85	Boiler Frame Arrangement – Elevation Front End
86	Boiler Frame Arrangement – Elevation Hind End
87	Boiler Frame Arrangement – Front End
88	Boiler Frame Arrangement – Hind End
89	Boiler Frame End Views
90	Pivot Centre Top Casting
91	Pivot Centre Top Casting
92	Frame Details
93	Wood Platform in Cab
94	Insulation under Drivers Platform
95	Flanged Plates for Frames
96	Boiler frame Stiffening Bar

Engine Frame

97	Engine frame Arrangement Elevation and Plan Front End Engine Nos. 715-720
98	Engine frame Arrangement Elevation and Plan Hind End Engine Nos. 715-720
99	Engine frame Arrangement Elevation and Plan Front End Engine Nos. 721-760
100	Engine frame Arrangement Elevation and Plan Hind End Engine Nos. 715-720
101	Pivot Centre Bottom Casting
102	Pivot Centre Bottom Casting
103	Frame stay and tank support between driving intermediate wheels
104	Frame stay and tank support between intermediate and outer wheels
105	Frame stay and tank support between outer and bogie wheels engines 721-760
106	Drag Casting and Uncoupler Gear
107	Uncoupler Gear Arrangement and Details for Engine Nos. 745-760
108	Alliance Coupler – Engine Nos. 745-760
109	Spring Links and Compensating Beams
110	Tank Fastening Order Engine Nos. 715-735
111	Tank Fastening Order Engine Nos. 736-760
112	Footsteps, Screw Jack Clips and Frame Details for Engine Nos. 715-720
113	Footsteps, Screw Jack Clips and Frame Details for Engine Nos. 721-760
114	Tank Support at Outer End for Engines Nos. 721-760
115	Outer Platform Plates for Engine Nos. 721-760
116	Outer Platform Plates for Engine Nos. 715-720

Cylinders

117	Cylinders – 20” diameter x 26” stroke. Section
118	Cylinders – 20” diameter x 26” stroke. Elevation and Plan
119	Covers and Pistons
120	Outer Steam Chest Cover
121	Piston Valve
122	Cylinder Relief Valve and Cylinder Cocks

Motion

123	Motion Arrangement (Walschaerts)
124	Motion Arrangement (Walschaerts)
125	Reversing Lever Bracket at Pivot Castings
126	Slide Bars and Main Reversing Shaft Carriers
127	Crosshead
128	Piston Rod, Return Crank, Crank Pins and Crosshead Pin
129	Connecting Rod Safety Strap
130	Coupling Rods

Wheels, Axles and Bogies

131	Coupled Wheels 4’ 3” diameter
132	Outer Bogie Wheel 2’ 9” diameter. – Engines 721-760 and Inner Bogie Wheel 2’ 9” dia. – Engines 715-760
133	Coupled and Bogie Axles, Markings of Tyres and Axles
134	Axlebox (Coupled)
135	Axlebox for Inner and Outer Bogies
136	Inner Bogie Arrangement (two wheeled radial arm)
137	Radial arm and Details, Check Spring
138	Check Spring Casing, Compensating Beam Bracket

139	Axlebox Housing
140	Axlebox Cover Plate and Maker's Name Plate
141	Outer Bogie Arrangement (four wheeled) for Engines 721-760
142	Outer Bogie Frame and Axlebox Liners for Engines Nos.721-760
143	Outer Bogie Frame Stay and Top Pivot
144	Outer Bogie Details for Engine Nos. 715-720
145	Outer Bogie Details for Engine Nos.721-760

Reversing Gear

146	Steam Cylinder Brasswork
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Lubrication

147	Arrangement of Davies and Metcalfe Mechanical Lubricator and Pipes for Engine Nos.715-720
148	Arrangement of Davies and Metcalfe Mechanical Lubricator and Pipes for Engine Nos.715-720
149	Arrangement of Davies and Metcalfe Mechanical Lubricator and Pipes for Engine Nos.721-760
150	Arrangement of Davies and Metcalfe Mechanical Lubricator and Pipes for Engine Nos.721-760
151	Arrangement of Davies and Metcalfe Lubricator Details
152	Diagram of Lubrication System Front Half
153	Diagram of Lubrication System Rear Half
154	Lubricator for Exhaust Ball Joints
155	Davies and Metcalfe Mechanical Lubricator Oil Reservoir and Details for Stoker Engine
156	Lubricator Feed Indicator Plates

Miscellaneous Brasswork

157	Miscellaneous Brasswork
158	Miscellaneous Brasswork
159	Miscellaneous Brasswork

Cab

160	Cab Arrangement – Elevation with Detachable Plate in Cab Side
161	Cab Arrangement – Plan, End Views and Section
162	Front Door Details
163	Hind Window
164	Front Window
165	Blanket Boxes, Seat and Back Rests in Cab

Tanks

166	Front Tank Arrangement – Elevation and Plan
167	Front Tank Arrangement End Views
168	Hind Tank and Coal Bunker – Elevation and Plan
169	Hind Tank and Coal Bunker Elevation and Plan Hind Part and Views
170	Tank Sections and Tank Fastening Plates
171	Headlamp Carrier and Vent Pipe and Clips
172	Bunker Doors, Vestibule and Details
173	Fire-iron Carriers and Lamp Brackets
174	Modified Stays for Hind Tank

Brake

176	Release Spring Details and Shafts – Front Engine
177	Hand Brake Lever Carrier and Steam Cylinder Carrier
178	Brake Hanger, Block and Hanger Carriers
179	Brake Pull Rods and Crossbeam
180	Brake Screw, Carrier and Details
181	Vacuum Brake Fittings

Automatic Train Control

182	Arrangement of Equipment and Conduit
183	Arrangement of Equipment and Conduit
184	Wiring diagram
185	Direction Circuit Control and Apparatus Case Details
186	Emergency Brake Valve Fittings and Relay Fixing Details
187	Cab and Conduit Fittings
188	Equipment for Automatic Train Control
189	Battery and Brake Equipment
190	Battery Box
191	Trickle Charge Valve for Turbo Generator
192	Box for Automatic Train Control, Isolating Cock

Injectors etc.

193	Steam Ball Joint
194	Steam Y Branch and Expansion Joint on Boiler Unit
195	Steam Pipe Expansion Joint on Boiler Unit
196	Equilibrium Pipe Elbows and Carriers
197	Equilibrium Pipe Elbows at Pivots for Engine Nos. 730-760
198	Water Cut-out Valve and Feedwell

199	Water Cut-out Valve and Feedwell
200	Gresham and Craven No. 13 Injector Class RHW
201	Gresham and Craven No. 13 Injector Class RHW
202	Arrangement of Flexible Pipes at Pivot Centres
203	Injector Pipe Elbows
204	Injector Operating and Stoker Reversing Details Puller and Pricker Irons
205	Water Cut-out Valve and Feedwell Details
206	Blow-down Cock Baffle Details
207	Coal Watering Cock

Cylinder Cocks

208	Cylinder Cocks Operating Cylinder
209	Cylinder Cocks Operating Gear Arrangement for Engines Nos. 715-720
210	Cylinder Cocks Operating Gear Arrangement for Engines Nos. 721-760
211	Cylinder Cocks Operating Gear Details for Engines Nos. 721-760

Sandbox

212	Sandbox (outer) for Engine Nos. 721-760
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Electric Lighting

213	Arrangement of Stone's Electric Lighting Equipment and Diagram - Front
214	Arrangement of Stone's Electric Lighting Equipment and Diagram – Rear
215	Conduit Clips, Generator Carrier and Lamp Carrier
216	Pressure Gauge Lamp and Cap Lamp etc.

217 Bunker Lamps

Flanges, Pipes and Pipe Carriers

218 Steel Pipes, Steam Exhaust and Equilibrium
219 Pipe Carriers, Brake
220 Pipe Carriers (Firebox Fixings) and Oilbox Carriers
221 Pipe Carriers (Boiler Unit)
222 Pipe Carriers (Boiler Unit)
223 Pipe Carriers (Engine Unit)
224 Miscellaneous Carriers and Flexible Pipe Supports and Carriers
225 Flexible Pipe Supports and Carriers

Nameplates

226 Monogram, Boiler Registration Plate and Rly. Co. Number Plate

Photographs available for the South African Railways

2-6-0 + 0-6-2 Garratt Locomotive – NG/11. 1919.

Order Number 01060, Works Nos. 5975-77.

<u>Photo</u>	<u>Reference</u>
LHS, Elevation	11/C/58
RHS, ¾ Rear View	11/C/59
RHS, ¾ Front View	11/C/60

Photographs available for the South Railways

2-6-2 + 2-6-2 Garratt Locomotive NG/G16, 2' 0" gauge. 1958.

Order Number 11188, Works Nos. 7862-7868.

<u>Photo</u>	<u>Reference</u>
RHS Elevation	28/B/43
LHS Elevation	28/B/44
RHS $\frac{3}{4}$ Front View	28/B/45
LHS $\frac{3}{4}$ Front View	28/B/46
Front End View	28/B/47
Rear End View	28/B/48
Cab Fittings	28/B/49

