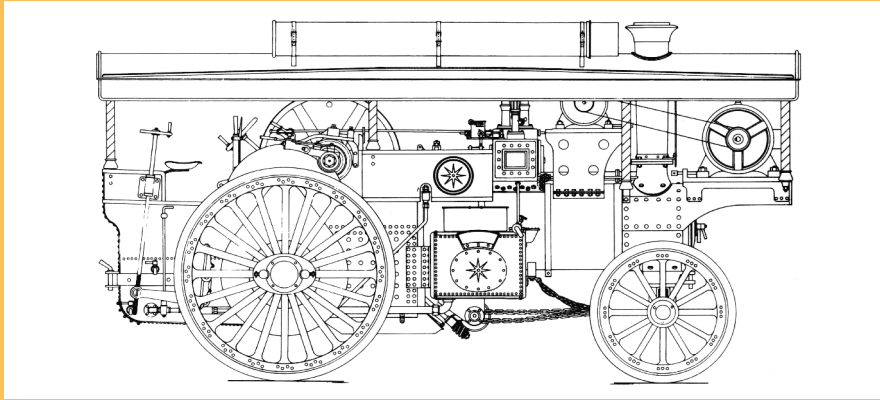


Burrell 8NHP 4" Scenic Showman Locomotive



Of all the engines ever built this must be the most magnificent. The miniature is based on "Simplicity" No. 4092 built in 1930. The last Burrell Showmans to be built, it was not fitted with a crane tower, thus making it easier to drive in the scale version. It is a double crank compound with three speed gearing and a differential on the second shaft. Although the engine is straightforward to build it is not recommended for the beginner, but must surely be the ultimate project for any builder. This engine can also be built as a road haulage or agricultural engine.

General Dimensions

Length	88 1/4"
Height	47"
Track front	22 5/8"
Track rear	28 15/16"
Wheel base	46 3/4"
Rear wheel	28" OD
Front wheel	18 3/4" OD
Flywheel	18" OD
Final drive gear	15 1/4"
Gearing ratios	1st: 9.3 overall 2nd: 6.9 overall 3rd: 5.7 overall
Total weight	17 cwt approx.
Working pressure	170 PSI
Cylinder bore h-pressure	2 1/4"
Cylinder bore l-pressure	3 3/4"
Stroke	4"

Stock No.	Description	Unit	Material
DRG4S	Full set of drawings in Imperial	set	
4S5	Firebars	set/9	Cast iron
4S6	Left-hand hornplate (dished)	each	Steel
4S7	Right-hand hornplate (flat)	each	Steel
4S8	Smoke box tube (rolled)	each	Steel
4S9	Smoke box door ring	each	Cast iron
4S10	Rolled chimney	each	Steel
4S11	Front wheel hubs	pair	Cast iron
4S12	Bronze for front hub bearings -05/346	7"	Bronze
4S13	Front hub outer cover plates	pair	Cast iron
4S14	Front hub inner cover plates	pair	Cast iron
4S15	Front hub caps	pair	Gunmetal
4S16	Front wheel spokes	set/24	Steel
4S17	Front wheel rims	pair	Steel
4S18	Rear wheel hubs	pair	Steel
4S19	Bronze for rear hubs -05/348	9"	Bronze
4S20	Rear hub nameplates	pair	Cast iron
4S21	Rear hub back plates	pair	Cast iron
4S22	Rear wheel hub caps	pair	Gunmetal
4S23	Rear wheel spokes	set/40	Steel
4S24	Rear wheel rims inc. brake bands	pair	Steel
4S26	Perch bracket	each	Cast iron
4S27	Front fork	each	S G iron
4S28	Front road spring	1 x 8ft	Steel
4S29	Front axle	each	S G iron
4S30	Top footstep	each	Gunmetal
4S31	Bottom footstep	each	Gunmetal
4S32	Tender brake tube	each	Cast iron
4S33	Brake shoes	pair	S G iron
4S34	Brake return spring	2ft	Steel
4S35	Brake arm	pair	S G iron
4S36	Brake lever	each	S G iron
4S37	Brake wheel	each	Gunmetal
4S38	Brake bracket	each	Cast iron
4S39	Second shaft tube	each	Cast iron
4S40	Bronze for second shaft tube - 05/345	7"	Bronze
4S41	Axle tube	each	Cast iron
4S42	Bronze for Axle tube bearing - 05/349	6"	Bronze
4S43	Crankshaft	each	S G iron
4S44	Crankshaft balance weights	set/4	Cast iron
4S45	Left-hand cannon bracket plus cap	each	Cast iron
4S46	Left-hand cannon bracket bearing	each	Gunmetal
4S47	Right-hand cannon bracket plus cap	each	Cast iron
4S48	Right-hand cannon bracket bearing	pair	Gunmetal
4S49	Pump gear blank	each	Nylon
4S50	Pump shaft housing	each	Cast iron
4S51	Bronze for pump shaft bearing - 05/34C	4"	Bronze
4S52	Dynamo rails	pair	S G iron
4S53	Dynamo extension nameplate	each	Gunmetal
4S54	Smoke box door	each	Cast iron
4S55	Small name ring	each	Gunmetal
4S56	Large name ring (road loco)	each	Gunmetal
4S57BR	Chimney cap brass	each	Brass
4S57CU	Chimney cap copper	each	Copper
4S58	Chimney base ring	each	Cast iron
4S59	Chimney base	each	Cast iron
4S62	Left-hand bottom steering bracket	each	Gunmetal
4S63	Right-hand bottom steering bracket	each	Gunmetal
4S65	Compensating centre	each	Cast iron
4S66	Bearing for part 4S65 - 05/355	3"	Bronze
4S67	Inner bevel gear	each	Cast iron
4S68	Outer bevel wheel/pinion	each	Cast iron
4S69	Bearing for part 4S68 - 05/351	3"	Bronze

Stock No.	Description	Unit	Material
4S70	L-hand drive pinion - Cast iron 08/320	2"	Cast iron
4S71	First gear ring	each	Cast iron
4S72	Second gear ring	each	Cast iron
4S73	Third gear ring	each	Cast iron
4S74	Winding drum centre	each	Cast iron
4S75	Winding drum	each	Cast iron
4S77	Right-hand centre spider	each	Cast iron
4S78	Final drive ring	each	Cast iron
4S79	Third speed hub casting	each	Cast iron
4S80	Exciter rails	pair	S G iron
4S81	Flywheel ring	each	Gunmetal
4S82	Flywheel	each	Cast iron
4S83	Cap for flywheel	each	Gunmetal
4S84	Brakeshoe for flywheel	each	S G iron
4S85	Brake pivot for flywheel	each	Cast iron
4S86	Flywheel brake top support	each	Gunmetal
4S87	Brakewheel for flywheel	each	Gunmetal
4S88	Cylinder block	each	Cast iron
4S89	High pressure liner	each	Cast iron
4S90	Low pressure liner	each	Cast iron
4S91	Rear cylinder cover	set/3	Cast iron
4S92	Front cylinder cover	set/3	Cast iron
4S93	Gland bushes	set/6	Gunmetal
4S94	High pressure finisher cover	each	Gunmetal
4S95	Low pressure finisher cover	each	Gunmetal
4S96	Low pressure valve chest cover	each	Gunmetal
4S97	High pressure valve chest cover	each	Gunmetal
4S98	Low pressure piston	each	Cast iron
4S100	High pressure piston	each	Cast iron
4S102	Slide bars	set/4	Cast iron
4S103	Wayshaft bracket	each	Cast iron
4S104	Crosshead	pair	Cast iron
4S105	L.P. Slide valve	each	Gunmetal
4S106	H.P. Slide valve	pair	Gunmetal
4S107	Bypass tap	each	Gunmetal
4S108	Water pump gland covers	set	Gunmetal
4S109	Pump eccentric strap	each	Cast iron
4S110	H.P. eccentric straps	pair	Cast iron
4S111	L.P. eccentric straps	pair	Cast iron
4S114	Pump clack box	each	Gunmetal
4S115	Injector clack box	each	Gunmetal
4S116	Blowdown valve	each	Gunmetal
4S117	Gear shift bracket	each	Cast iron
4S118	Regulator bracket (horizontal)	each	Gunmetal
4S119	Steering wheel	each	Gunmetal
4S120	Top steering bracket	each	Gunmetal
4S121	Water pickup	each	Gunmetal
4S122	Safety valve chimneys	pair	Gunmetal
4S123	Safety valve spring	each	Steel
4S124	Governor balls	set/3	Brass
4S125	Governor bevel gears	pair	Steel
4S126	Governor base	each	Gunmetal
4S126/1	Governor spring steel	2ft	Steel
4S126/2	Governor worm wheel	each	Bronze
4S126/3	Governor worm	each	Steel
4S127	Steam turret	each	Gunmetal
4S128	Motion plate ring	pair	Gunmetal
4S129	1/2" Olivers - 04/286	3.3 mtrs	Brass
4S130	1" Olivers - 04/288	2.2 mtrs	Brass
4S131	1/2" Oliver balls	set//28	Brass
4S132	1" Oliver balls	set/16	Brass
4S133	Centre ring stars	set/4	Gunmetal
4S160	Toolbox name plate	each	Gunmetal