## K50

# DUKE OF GLOUCESTER

# Class 8P

## LIST OF PARTS

Material List: w/m - white metal
E - etched part
T - turned part
L/W - lost wax
P - plastic

Instruction No	Item	Material	Computor No
		a #	
1	Footplate	w/m	
2	Buffer beam	w/m	
3	Boiler	w/m	
4	M2 x 12 screw	. <b>T</b>	110347
5	M2 nut	T	10361
6	Smokebox door	w/m	
7	Firebox washout plugs x 4	w/m	
8	Firebox	w/m	
9	M2 x 8 screw	T	10351
10	Cab	E	
11	M2 x 8 screws x 2	T	10351
12	M2 nuts x 2	T	10361
13	Window blinds x 2	<u>E</u> E	
14	Cab floor	E	
15 a	Cab detail 15b Cab roof	w/m	
16	Drawbar	w/m	
17	Firebox bottoms x 2	w/m	
18	Frame extensions x 2	w/m	
19	Chimney	w/m	
20 ·	Rivet wrapper	E	
21	Frame 1/h	E	
22	Frame r/h	E	
23	Bushes x 6	T	STD 3175
24	Spacers x 2	T	SP00001
25	Spacer screws x 4	T	10369
26	Front fixing plate	E	
2.7	Rear fixing plate	E	
28	Motor plate	E	
29,	Insulated wheels x 3	T	R007185
30	Axles x 3	T	R009557
31	Axle nut fixers x 3	T	R009557
32	Axle sideplay washers x 6	E	
33	Gear (NOT SUPPLIED)		
34	Live wheels x 3	T	R007186
35	Axle nut fixers x 3	T	R009557
36	Crank covers x 6	E	
37	Crankpins x 6	T	CP00001
38	Crankpin spacing washers x 6	E	
39	Coupling rods x 1 pair	E	
40	Crankpin fixing washers x 6	E	
41	Balance weights x 6	E	
42	Pony screw M2 x 16	Ī	10345
. 72	Long Selen de A Lo	•	

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Instruc	tion No	Item	Material	Computor No
	43	Pony spacer	w/m	
	44	Pony spacer	T	110045
		Bogie screw M2 x 12		110347
	45	M2 nuts x 2	T	10361
	46	Cylinder 1/h	w/m	
	47	Cylinder r/h	w/m	
	48	Cylinder backs x 2	w/m	
	49	Slidebars x 2	E	
	50	Pistons x 2	L/W	
	51	Cylinder valves front 1/h	w/m	
	52	Cylinder valves front r/h	w/m	
	53	Steam pipe 1/h	w/m	
	54	Slidebar support bracket	w/m	
	55	Connecting rods x 1 pair	E	
	56 56	M1 x 6 screws x 2	T	100001
	57	M1 nuts x 2	Ť	
				10030
	58	Piston fronts x 2	E	
	59	Cranks x 2	E	
	60	Brakes x 3	E	
	51.	Brake stretchers x 3	E	
	52.	Brake pull rod	E	
	53	Caprotti control box	w/m	
(	54	Caprotti gear x 1 pair	L/W	
	55	Motor (NOT SUPPLIED)		
	56	Motor screws (NOT SUPPLIED)		
	57	Worm (NOT SUPPLIED)		
	58	Pony base	w/m	
	59	12mm wheel	T	BD07100
				RB07198
	70	Pony body	w/m	
	71	Pony side 1/h	w/m	
	72	Pony side r/h	w/m	
	73	M2 nut	T	10361
	74	Bogie top	w/m	
7	75	Bogie bottom	w/m	
	76	Bogie wheels 12mm x 2	T	RB07198
	77	Bogie arm	E	
	78	M2 x 5 screw	T	210353
	79	M2 nuts x 2	T	10361
	30	Ejector lagging	w/m	
	81.	Ejector fitting	w/m	
	32	Reversing cover	w/m	
			-	
	33	Steam pipe 1/h	w/m	
	34	Steam pipe r/h	w/m	
	35	Sandbox covers x 6	w/m	
	36	AWS box	w/m	
	37	AWS pipe connection	w/m	
	38	Handrail knobs x 24	P	P0301
8	39	Footplate steps x 2	w/m	
Ģ	90	Deflectors x 1 pair	<b>E</b>	
Ç	91	Deflector steps x 4	E	
9	92	Clag pipes x 2	w/m	
	93	Safety valves x 2	w/m	
	94	Steam turrett	w/m	
	95	Whistles x 2	w/m	
	96	Whistle (on side of Smokebox)	w/m	
	97			
		Pipes x 2	w/m	
	8	Steam turrett valve	w/m	
	99	Firebox steps x 2	w/m	
10		Rotating lever on boiler	w/m	
10	)1	Firebox pipe connections 1/h	w/m	

Instruction No	Item	Material	Computor No
102	Firebox pipe connections r/h	w/m	
103	Buffers x 2	w/m	
104	Coupling hook	E	
105	Steps x 1 pair	E	
106	Step treads x 2	E	
107	Vacuum pipes x 2	w/m	
108	Plates		
	Wires: 0.4 mm 150 mm x 5 lengths		1551
	0.5 mm 150mmm x 1 length	a <sup>p</sup> or a	1552
	0.7 mm 150 mm x 3 lengths		1553
	1 mm 150 mm x 1 length		1554
	Insulated wire x 150 mm		1559
109	Sandbox x 2	w/m	80 G

Your kit may not have plastic handrail knobs, these are replaced by split pins.

#### K50

## DUKE OF GLOUCESTER

- 1. Fit parts 1 to 10 onto the footplate.

  Note: Carefully fold up the cab 10 (use pliers).

  Fit parts 11 to 20.
- 2. Assemble parts 21 to 45.
- 3. Fit parts 46 to 62. Fit part 63. Temporarily position 64 x 1 pair on to 63 and 46, 47. Drill out locating holes in parts 46 and 47. Now fix 64 x 1 pair permanently in place.
- 4. Fit parts 65 to 67. Set mesh of worm and gear to your satisfaction and fix motor permanently.
- 5. Make up parts 68 to 79.
- 6. Clean up the body shell and fill any gaps with a car body filler. Fit parts 80 to 107.
- 7. Use wire for the pipework. When model has been painted fix plates 108 in place.

## Castings and etchings preparation

Castings:- clean flash lines and feeders off with a fine file. The long straight edges, main footplate, clean off with a large fine file (one or two sweeps along the complete length are better than several short strokes). Clean flash lines on the top and bottom of the boiler with a sharp knife. Drill all component clearance holes with the correct size drills.

Before securing the main parts together, make sure you do a dry run first to familiarise yourself with the parts. Use a sharp knife and file on all locating joints to ensure they fit really well. Most important of all is that when you secure parts together you fit them squarely and securely.

Clean up parts with steel wool, soft suede brush or fibre grass brush.

If glueing we recommend Devcon expoxy resin five or ten minutes drying time, Loctite super glue ten seconds drying time and Gloy Cyano ten second drying time.

For the experienced modeller, solder parts together, use a low melt solder, woods metal/soft solder.

Very gently brush the brass (B/E), valve gear (N/S) parts with a soft wire brush (suede) before removing parts from the frets. Also before removing parts do clearance holes with the correct size drill, reamer or round file. See instructions for all sizes.

Remove parts at the tab joints with a fine saw blade or a sharp knife, being careful not to cut shaped parts. Trim the tab joints on parts with a fine flat file. Note: Locomotives with brass wheel inserts must have tabs removed otherwise it will cause problems with the insulation.

When soldering a brass part to whitemetal first apply a coating of hardsolder to the brass area where the joint is to be made, then proceed as per joining two whitemetal parts. Make sure when soldering that you follow the instructions carefully.

#### Chassis Construction Hints

Fit axle bushes to the frames, ideally making them a tight fit (grip fit) use a hammer or a vice ensuring they fit squarely. Screw unit together with spacers, place an axle through bush holes, if a tight fit then open out with a reamer or a round file, do not open out too much, just enough so that the axle goes through with very little movement. Use etched axle washers for sideplay movement on the driving wheels for the required curve.

The fitting of the valve gear is most important, do not over tighten parts and check for free running on all assemblies. Use correct drills and small round file. Use a light oil to lubricate all moving parts. Take care with motor, gear and worm meshing, oil the teeth with a heavy oil (car oil) and add a little toothpaste. Use the same oil to lubricate the motor bearing - do not over oil.

#### The Electrical Pick-up

Make sure pick-up wires are touching the tyred parts of the wheel and do not touch the spoked parts or brass frames. If sparking occurs then tension wire more and use an electrolytic oil (DO NOT USE ON MOTOR). Check all moving parts and oil again and then bench run in the chassis for three to four hours.

This kit was produced by:\_DJH Models,
Lope Hill Road,
Leadgate Industrial Estate,
Consett,
Co. Durham. DH3 7RS

#### TENDER

NOTE: Only the last three digits of the computor codes have been used in the text and drawings for simplicity.

#### Body Shell

Locate and secure the fixer holders (001) to the footplate (002). Fix the front steps (003) to the footplate with their treaders (004) and fit the handrails (005) and (006) to the back of the tender; also fit the front handrails (007) to the wing plates (008).

Bend the sides (009) at  $90^{\circ}$  to the back of the tender and fit to the footplate with the front bulkhead (010).

NOTE: It may be easier to fit part (012) before fitting parts (010) and (013), see drawing.

Fix the top support (011), the tender top (012) and the tender front detail (013) to the tender body with the wing plates.

Drill out 'fitting' holes, etc, and clean up the body with either steel wool, fibreglass brush or a suede brush. Now fit parts (014) to (019) and make brake handle and water handle from wire, as shown.

### Tender Chassis

Fit the buffer (020) to the buffer beam (021) and fit to the chassis block (022) with the drawbar (023). Now fit the brake shoes (024), tender wheels (199) and secure in place with the chassis keeper plate (025) and stretchers, as shown. Fit the tender chassis to the tender body and check the assembly for squareness. Remove tender chassis and fit parts (026) to (032); make up the pick ups and fit to the keeper plate (pick ups to R/H wheels). Use (033) for the coupling pin, as shown.

#### LIST OF PARTS

#### Tender

BR10001	Fixer Holders	BR10018	Ladder (B/E)
BR10002	Footplate (B/E)	BR10019	Coal Pusher Shroud
BR10003	Front Steps (B/E)	BR10020	Buffers x 2
BR10004	Front Steps Treaders (B/E)	BR10021	Buffer Beam
BR10005	Small Rear Handrails x 2 (B/E)	BR10022	Chassis Block
BR10006	Large Rear Handrails x 2 (B/E)	BR10023	Drawbar
BR10007	Front Handrails x 2(B/E)	BR10024	Brake Shoes (B/E)
BR10008	Wing Plates x 2 (B/E)	BR10025	Chassis Keeper Plate (B/E)
BR10009	Tender Sides/Back (B/E)	BR10026	R/H Main Frame
BR10010	Front Bulkhead (B/E)	BR10027	L/H Main Frame
BR10011	Tender Top Support	BR10028	Á W S Boxes x 2
BR10012	Tender Top	BR10029	Rear Tender Steps x 2 (B/E)
BR10013	Tender Front Detail	BR10030	Rear Tender Treaders x 2 (B/E)
BR10014	Tool and Fire Iron Rack	BR10031	Vacuum Pipes x 2
BR10015	Water Filler	BR10032	Coupling Hook (B/E)
BR10016	Water Dome	BR10033	Coupling Pin
BR10017	Rear Tender Partition (B/E)		

NS/E = Nickel Silver Etchings

#### Fittings

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RB07199 Bogie Wheels 14mm x 3 pair
10369 Spacer Screws x 2
10351 M2 x 8mm Cheesehead Screw x 2
01015 Pickup Board x 1 length
1551 0.4mm Ø wire x 360mm
1552 0.5mm Ø wire x 80mm
1553 0.8mm Ø wire x 60mm
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NOTE: B/E = Brass Etchings























