

**RAILKING**<sup>®</sup>  
By M.T.H. Electric Trains

30-1168-1  
30-1168-0

# M1a 4-8-2 Steam Engine



# M1a 4-8-2

## Boiler Parts

Name and Number	Part #	\$Price Per Unit
1.) Shell ( green, red, graphite ) ( boiler )( PRR, # 6743 )	FB-1200223	*150.00
2.) Handrail ( nickel ) ( left )( cab )( 46.0mm long )	FB-1220052	2.00
3.) Handrail ( nickel ) ( right )( cab )( 46.0mm long )	FB-1210045	2.00
4.) Pop-off valve ( nickel ) ( 6.3mm long )	FB-1200224	2.00
5.) Whistle ( nickel )	FB-1200003	4.00
6.) Bell ( nickel bell, green bracket )	FB-1200225	10.00
7.) Steam generator ( graphite )	FB-1200226	6.00
8.) Screw ( 4/40x4.0mm )( roundhead )	IA-0000021	0.15
9.) Stanchion ( green ) ( 4.0mm long )( plastic )	FB-1200227	0.25
10.) Stanchion ( graphite ) ( 4.0mm long )( plastic )	FB-1200228	0.25
11.) Handrail ( nickel ) ( left )( boiler )( 222.0mm long )	FB-1220053	2.00
12.) Handrail ( nickel ) ( right )( boiler )( 222.0mm long )	FB-1210046	2.00
13.) Lens ( green )( marker ) ( 2.2x14.2mm )( 1.0x2.8mm rounded lens head )	FA-0000081	1.00
14.) Grommet ( black ) ( 4.5x5.0mm )( rubber )	IH-0000010	0.50
15.) Number board ( # 6743 )( sticker )	FG-1200007	0.50
16.) Lens ( clear )( headlight )	FA-1230004	2.00
17.) Screw ( M2x4.0mm )( roundhead )	IA-0000058	0.15
18.) Headlight housing ( green )	FB-1230001	12.00
19.) Number plate ( # 6743 )	FB-1200229	6.00
20.) Bulb ( clear )( 6v )( 1 ) ( 120.0mm long w/ black male 2 pin plug )	CA-0000042	2.00
21.) Wire strap ( white )	IH-0000103	1.00
22.) Insulator ( clear ) ( 30.5x90.3mm )( 0.5mm thick )	BD-0000070	2.00
23.) Boards ( Proto-Sound 2.0® )	AE-0000001	*200.00
24.) Screw ( 4/40x6.0mm )( roundhead )	IA-0000003	0.15
25.) Bracket ( Aluminum ) ( for Proto-Sound 2.0® boards )( 15.0x78.0mm )	IH-0000188	3.00
26.) Screw ( 6/32x14.0mm )( roundhead )	IA-0000194	0.15
27.) Insulator ( clear ) ( 13.0x19.0x0.1mm )( single hole )	ID-0000024	0.15
28.) Voltage regulator ( LM2937ET )	AG-0000032	3.00
29.) Insulator ( white ) ( washer )( 3.0x6.0x3.0mm )( plastic )	ID-0000025	0.15
30.) Screw ( 4/40x8.0mm )( roundhead )	IA-0000011	0.15
31.) Smoke unit ( Proto-Sound 2.0® ) ( 6.8x8.0x2.1x3.9mm brass cup )( 7.5mm long posts )	AA-0000034	50.00
32.) Bulb ( clear ) ( 6v )( small globe )( screw base )	CA-0000038	1.00
33.) Bracket ( black ) ( 25.0x45.0mm )( headlight/smoke unit )	IH-0000189	3.00
NS.) Wire harness ( 12 pin male plug )	BC-1200051	15.00
NS.) Wire harness ( 8 pin male plug )	BC-1200052	3.00
NS.) Wire harness ( 7 pin male plug )	BC-1200053	10.00
NS.) Wire harness ( 5 pin male plug )	BC-1200054	5.00
NS.) Wire harness ( 4 pin male plug )	BC-1200055	4.00

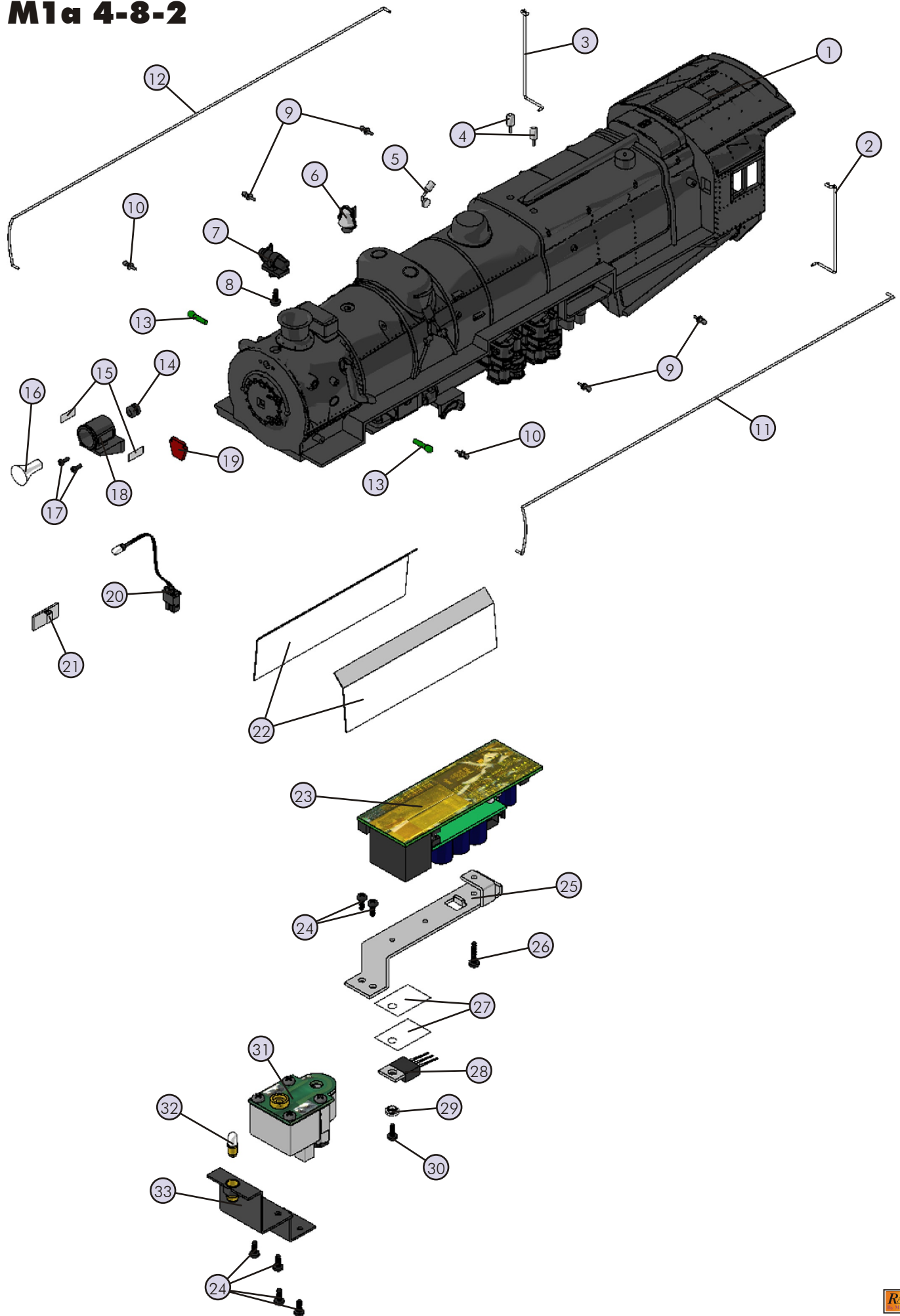
Name and Number	Part #	\$Price Per Unit
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## Loco-Sound® Only Parts

23.) Boards ( Loco-Sound® )	AE-0000003	*100.00
24.) Screw ( 4/40x6.0mm )( roundhead )	IA-0000003	0.15
25.) Bracket ( Aluminum ) ( for Loco-Sound® boards )	IH-0000190	3.00
27.) Insulator ( clear ) ( 13.0x19.0x0.1mm )( single hole )	ID-0000024	0.15
29.) Insulator ( white ) ( washer )( 3.0x6.0x3.0mm )( plastic )	ID-0000025	0.15
30.) Screw ( 4/40x8.0mm )( roundhead )	IA-0000011	0.15
NS.) Wire harness ( 12 pin male plug )	BC-1200056	15.00
NS.) Wire harness ( 7 pin male plug )	BC-1200057	10.00
NS.) Wire harness ( 5 pin male plug )	BC-1200058	5.00
NS.) Wire harness ( 4 pin male plug )	BC-1200059	4.00
NS.) Ferrite bead ( gray ) ( 4.6x9.7x9.4mm )( barrel shape )	AI-0000030	2.00
NS.) Capacitor ( .01 micro uF )( blue w/ 2 wires )	AI-0000031	2.00
NS.) Inline Ferrite bead ( gray )	AI-0000033	2.00

\*Requires Exchange  
All parts are priced as each

# M1a 4-8-2



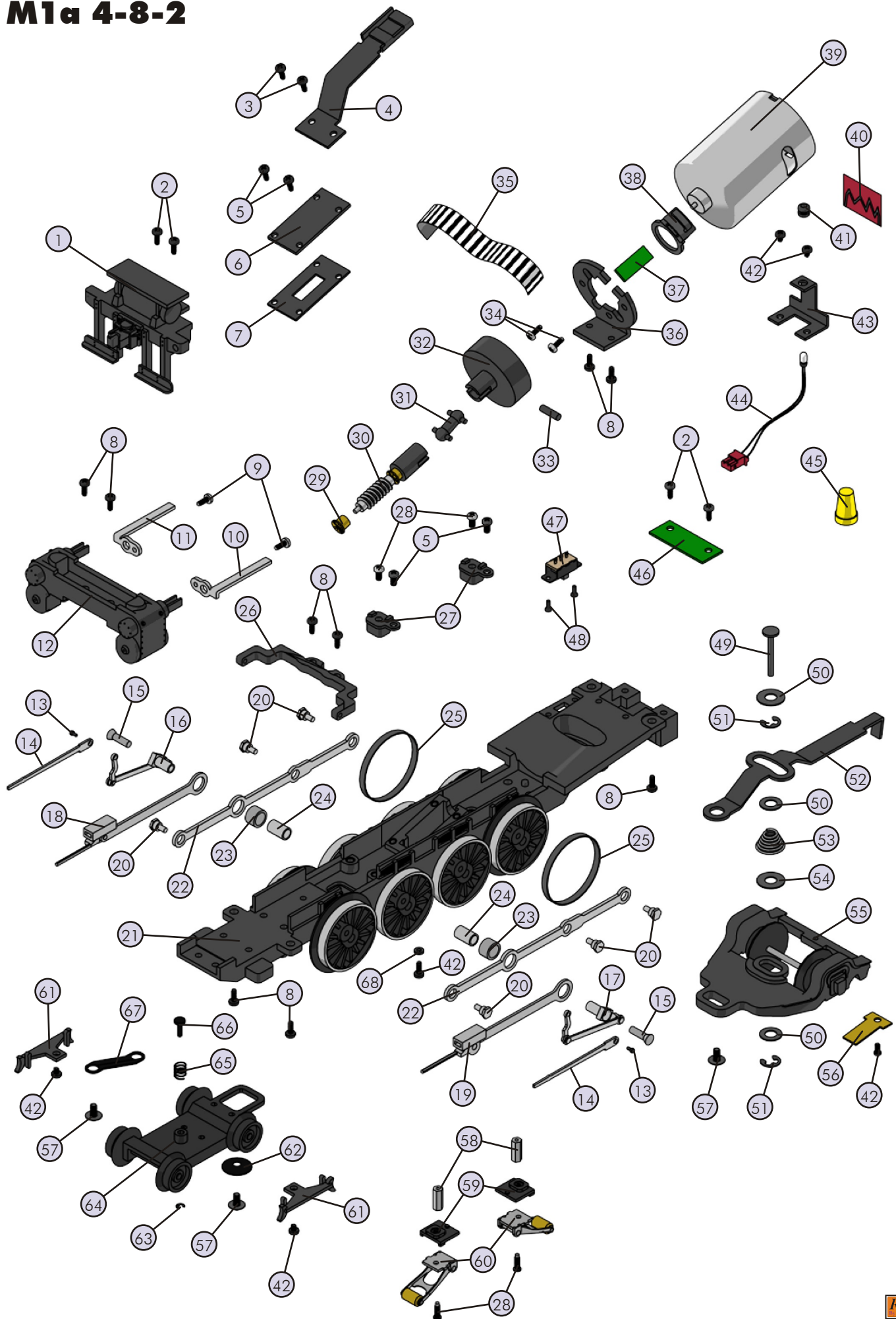
# M1a 4-8-2

## Drive Block Parts

Name and Number	Part #	\$Price Per Unit	Name and Number	Part #	\$Price Per Unit
1.) Pilot ( green )	DG-1230016	25.00	36.) Motor mount ( black )	BI-0000052	6.00
2.) Screw ( 6/32x6.0mm )( roundhead )	IA-0000027	0.15	( for motor RS-545RH )( stamped metal )		
3.) Screw ( 4/40x8.0mm )( roundhead )	IA-0000011	0.15	37.) Tach board ( w/ 1.5mm spacer between board & optical sensor )	AG-0000047	6.00
4.) Bracket ( black ) ( wire support )( stamped metal )	IH-0000191	3.00	38.) Bracket ( black )( plastic ) (for tach board mounting)(fits on part # BI-0000052)	IH-0000192	3.00
5.) Screw ( 4/40x6.0mm )( roundhead )	IA-0000003	0.15	39.) Motor ( RS-545RH )( no worm gear )	BE-0000087	25.00
6.) Gear box cover ( black ) ( 19.4x34.4x1.0mm )( metal )	BI-0000050	2.00	40.) Lens ( red )( firebox glow )	FA-0000077	2.00
7.) Gasket ( black )( fiber ) ( for gear box cover )( 19.3x33.9x1.5mm )	BI-0000051	1.00	41.) Grommet ( black ) ( 4.5x5.0mm )( rubber )	IH-0000010	0.50
8.) Screw ( 6/32x8.0mm )( roundhead )	IA-0000050	0.15	42.) Screw ( 4/40x4.0mm )( roundhead )	IA-0000021	0.15
9.) Screw ( nickel ) ( 6/32x6.0mm )( roundhead )	IA-0000051	0.15	43.) Bracket ( black )( firebox glow )	IH-0000193	3.00
10.) Drive rod guide ( nickel ) ( left )( 33.0mm long )	EA-1220010	3.00	44.) Bulb ( clear )( 6v )( firebox glow ) (90.0mm long wires)(w/ 2 pin plug)(grain of wheat)	CG-0000032	2.00
11.) Drive rod guide ( nickel ) ( right )( 33.0mm long )	EA-1210010	3.00	45.) Wire nut ( yellow )	BI-4500003	0.25
12.) Steam chest ( green )	EF-1230018	15.00	46.) PC board ( green ) ( w/ 10 pin female plug )	AG-0000039	8.00
13.) Screw ( M2x4.0mm )( roundhead )( w/ 2.0x2.5mm shank )	IA-0000053	0.15	47.) Switch ( small )	BB-0000009	5.00
14.) Eccentric rod ( nickel ) ( 50.0mm long )	ED-1200003	1.00	48.) Screw ( M2x4.0mm )( roundhead )	IA-0000058	0.15
15.) Screw ( nickel ) ( M3x16.0mm )( flathead )	IA-0000052	0.15	49.) Pin ( black ) ( 5.0x25.6mm )( 8.0x1.5mm flat head ) ( 1 e-clip groove 0.8mm out from end and 1 17.5mm )	IG-0000038	0.50
16.) Eccentric assembly ( nickel ) ( right )( 36.3mm long rod )	ED-1210026	5.00	50.) Washer ( 5.5x10.0x0.5mm )	ID-0000075	0.15
17.) Eccentric assembly ( nickel ) ( left )( 36.3mm long rod )	ED-1220026	5.00	51.) E-clip ( 3.5x9.0x0.6mm )	IF-0000009	0.15
18.) Drive rod ( nickel ) ( right )( 86.0mm long )	EC-1210022	5.00	52.) Draw bar ( black ) ( 103.2mm long )( 7.5mm & 10.5mm step-ups )	FB-1200230	3.00
19.) Drive rod ( nickel ) ( left )( 86.0mm long )	EC-1220022	5.00	53.) Spring ( 6.4x11.0x12.0mm )( 0.6mm thick wire )	IE-0000065	0.50
20.) Bolt ( nickel )( M3x9.4mm ) ( 4.0x2.5mm shank )( 5.0mm hex head )	IA-0000054	1.00	54.) Washer ( 5.0x15.0x0.5mm )	ID-0000013	0.15
21.) Drive block ( 4 axle )( black )	DF-1200033	*100.00	55.) Truck ( black )( trailing )( 1 axle )	DA-1240038	15.00
22.) Side rod (nickel)(109.0mm long)	EC-1250028	2.00	56.) Ground strap ( copper )	II-4500002	1.00
23.) Sleeve ( nickel ) ( outer )( 6.8x10.0x4.4mm )	ID-0000059	1.00	57.) Screw ( 6/32x6.0mm )( washer head )	IA-0000214	0.15
24.) Sleeve ( nickel ) ( inner )( 5.3x6.5x7.8mm )	ID-0000058	1.00	58.) Nut ( nickel )( 2.5x5.0x10.0mm )	IC-0000005	0.50
25.) Traction tire ( black )	DE-0000025	0.75	59.) Insulator ( black ) ( pick-up )( bottom )( plastic )	BD-0000001	2.00
26.) Motion hanger ( black )	EA-1200011	4.00	60.) Pick-up ( 8.0x11.0mm roller )( 28.0mm long )	BD-0000048	5.00
27.) Insulator ( black ) ( top )( square )( pick-up )	BD-0000026	2.00	61.) Brake assembly ( black ) ( lead truck )( 2 axle )	FB-1200231	5.00
28.) Screw ( nickel ) ( M3x6.0mm )( roundhead )	IA-0000015	0.15	62.) Spacer ( black ) ( 3.5x15.0x2.5mm )( metal )( cupped )	ID-0000014	1.00
29.) Bearing ( brass ) ( 2.9x5.3x4.6mm )	DC-0000006	3.00	63.) E-clip ( 2.5x6.0x0.5mm )	IF-0000004	0.15
30.) Worm gear ( 45.8mm long )	EH-1200001	5.00	64.) Truck ( black )( lead )( 2 axle ) ( 34.6mm long wheelbase )	DA-1230028	15.00
31.) Drive shaft ( black ) ( plastic )( 15.6mm long )( dog bone )	EH-1200002	2.00	65.) Spring ( nickel ) ( 7.0x10.0mm )( w/ 0.5mm thick wire )	IE-0000030	0.50
32.) Flywheel ( black ) ( 10.0x30.0mm )( w/ socket for drive shaft )	BE-0000086	5.00	66.) Pin ( black ) ( 3.1x14.8mm )( 6.0x1.0mm rounded head ) ( 1 e-clip groove 0.5mm out from end )	IG-0000003	0.50
33.) Set screw ( M3x10.0mm )( no screw head )	IA-0000151	0.15	67.) Bracket ( black )( lead truck ) ( 7.0x33.4mm )( 1.0mm thick )	IH-1230008	1.00
34.) Screw (M3x6.0mm)(roundhead)	IA-0000016	0.15	68.) Washer ( black ) ( 3.0x6.0x0.4mm )( fiber )	ID-0000040	0.15
35.) Tach tape ( fits 30.0mm flywheel )( 1.96mm wide stripes ) ( black & white striped tape )	BE-0000069	1.00			

\*Requires Exchange  
All parts are priced as each

# M1a 4-8-2



# M1a 4-8-2 Tender

## Tender Parts

Name and Number	Part #	\$Price Per Unit	Name and Number	Part #	\$Price Per Unit
1.) Handrail (nickel)( 41.4mm long )	GA-1200085	1.00	28.) Spring ( 6.5x11.0mm )( 0.5mm thick wire )	IE-0000063	0.50
2.) Lens ( clear )( back-up light ) ( 1.8x3.2x6.0mm )( 3.8x0.5mm lens head )	FA-0000078	2.00	29.) Washer ( black )( plastic ) ( 4.6x8.5x0.5mm )( cup shaped for spring )	ID-0000060	0.15
3.) Lens ( red )( marker light ) ( 1.8x3.2x6.0mm )( 3.8x0.5mm lens head )	FA-0000082	2.00	NS.) Coupler ( mechanical )( 44.5mm long )	DD-0000043	3.00
4.) Dog house ( green )	GA-1200086	*15.00	NS.) Armature ( 37.8mm long )	DD-0000044	1.00
5.) Screw ( 6/32x6.0mm )( roundhead )	IA-0000027	0.15			
6.) Shell ( green, red, black ) ( tender )( Pennsylvania )	GA-1200087	*100.00			
7.) Handrail (nickel)(43.8mm long)	GA-1200088	1.00			
8.) Wire harness (10 pin male plug)	BC-1200060	12.00			
9.) Screw ( 6/32x6.0mm )( washer head )	IA-0000214	0.15			
10.) Gasket ( black ) ( 43.8x49.8x3.0mm )( foam )	IB-0000009	0.50			
11.) Speaker ( Cuistack ) ( GF0501 )( 16 ohms )( 0.25 watt )	BF-0000007	8.95			
12.) Speaker cone ( black )( plastic ) (41.5x54.5x6.5mm)(3 mounting tabs)(cut out in center)	BF-0000017	3.00			
13.) Spacer ( black ) ( 3.0x6.0x4.3mm )( plastic )	ID-0000071	0.15			
14.) Volume pot ( small ) ( blue w/ green board )	BI-0000040	5.00			
15.) Screw ( M3x8.0mm )( roundhead )	IA-0000035	0.15			
16.) Screw ( M3x10.0mm )( roundhead )	IA-0000110	0.15			
17.) Battery leads ( 100.0mm long wires w/ male 2 pin plug )	BC-0000088	5.00			
18.) Bracket ( black ) ( metal )( for back-up light )	IH-0000194	2.00			
19.) Grommet ( black ) ( 4.5x5.0mm )( rubber )	IH-0000010	0.50			
20.) Bulb ( clear )( 6v )( back-up light ) (90.0mm long wires w/ green plug)(grain of wheat)	CF-0000012	2.00			
21.) Bracket ( battery )	IH-0000042	3.00			
22.) Screw ( M3x4.0mm )( roundhead )	IA-0000010	0.15			
23.) Battery	BG-4000001	9.95			
24.) Chassis ( black )( tender )	GB-1200045	*15.00			
25.) Screw ( 6/32x8.0mm )( roundhead )	IA-0000050	0.15			
26.) T-bar ( black )( plastic )	IG-0000001	0.50			
27.) Proto-Coupler ( Proto-Sound 2.0® )( 44.5mm long )	DD-0000033	10.00			
28.) Spring ( nickel ) ( 6.5x14.0mm )( 0.5mm thick wire )	IE-0000022	0.50			
29.) Washer ( 4.5x10.0x6.0mm )	ID-0000009	0.15			
30.) E-clip ( 3.0x8.0x0.5mm )	IF-0000001	0.15			
31.) Truck ( black )( 3 axle )( tender )	DA-1200014	30.00			
32.) Screw ( 4/40x6.0mm )( washer head )	IA-0000028	0.15			
33.) Draw bar (black)(12.0x62.0mm) ( 10.0mm step up )	GA-1200089	3.00			

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## Loco-Sound® Parts

8.) Wire harness (10 pin male plug)	BC-1200061	12.00
11.) Speaker ( Cuistack ) ( GF0501 )( 8 ohms )( 0.25 watt )	BF-0000015	8.95

# M1a 4-8-2 Tender

