

USRA MOUNTAIN 4-8-2

The light Mountains were the last of the USRA line to be completed. In May of 1919 they were delivered by Alco, with Baldwin soon following suit.

Many of the parts were interchangeable with other USRA engines. Cylinders were 27" x 30", the drivers were 69" in diameter, boiler pressure was 200 pounds, the locomotive weighed 327,000 pounds, and these engines had a tractive force of 53,900 pounds. The running gear for the USRA light is the same as on the heavy Mountain except for the weight of springs and certain other small parts.

Copies of the light model began to be produced in 1920 by Alco. Feedwater heaters were now added to the original version, along with copies of the original. Southern valve gears, Vanderbilt tenders, small compressors on the engine (an unusual sight on a large engine), front-end throttle, exhaust steam injector, and a second sandbox were all new features that would be found in later years on copies of the USRA 4-8-2 Light.

There were only 52 USRA Heavy Mountains built. Alco and Baldwin produced these locomotives for C&O, N&W, and FEC from 1918 to 1926. These engines had cylinders that were 28" x 32". Using 69" drivers, the same wheel spacing as the light Mountain, 200 pounds of pressure, and weighing 327,000 pounds a tractive force of 58,000 pounds was exerted. The boilers used on this model were the same as those used on the USRA 2-10-2, but since its drivers were larger the boiler was mounted 5" higher on the USRA Mountain.

Some additions to later versions of the heavy Mountain included: a pump, low headlight, cantilever bell hanger arrangement, Worthington SA feedwater heater, compressors, a long tender, front-end throttle, footholds, and some FEC's were installed with Elesco heaters.

PROTOTYPE SPECIFICATIONS

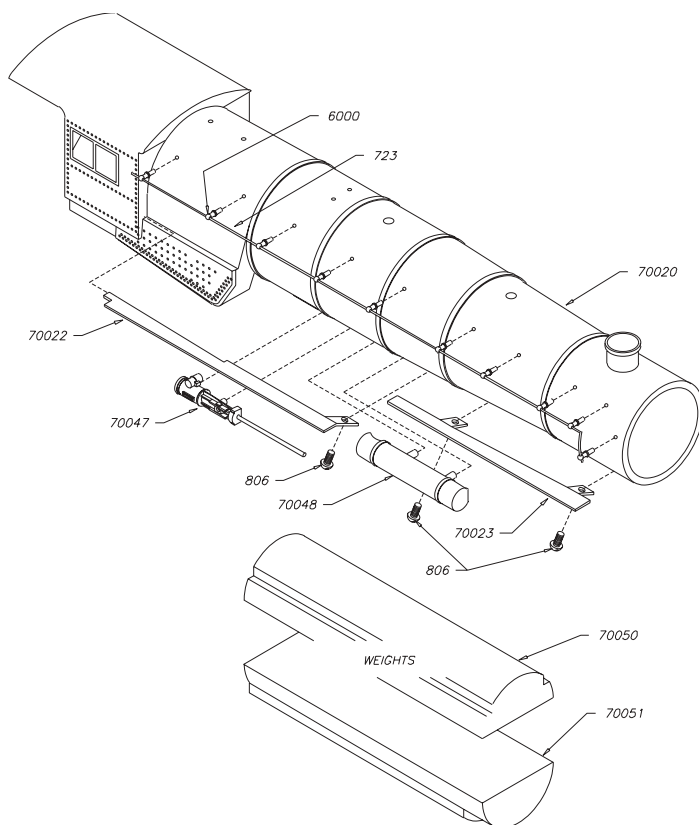
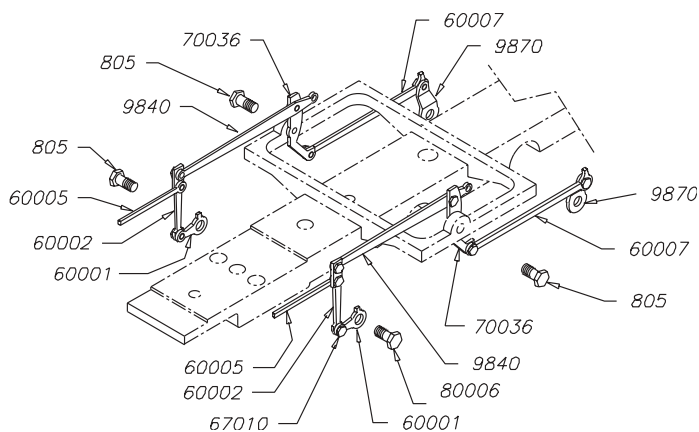
	<u>Light</u>	<u>Heavy</u>
Cylinders	27" x 30"	28" x 32"
Steam pressure	200 lbs.	200 lbs.
Tractive force	53,900 lbs.	58,000 lbs.
Weight of engine in working order	327,000 lbs.	327,000 lbs.

MODEL SPECIFICATIONS

Length with Tender	12 1/4"
Height	2 1/8"
Weight	2 lbs 5 oz.
Minimum radius	18"
Power	Bowser DC-71
Drivers	69"

BOWSER USRA MOUNTAIN - KITS AND ACCESSORIES

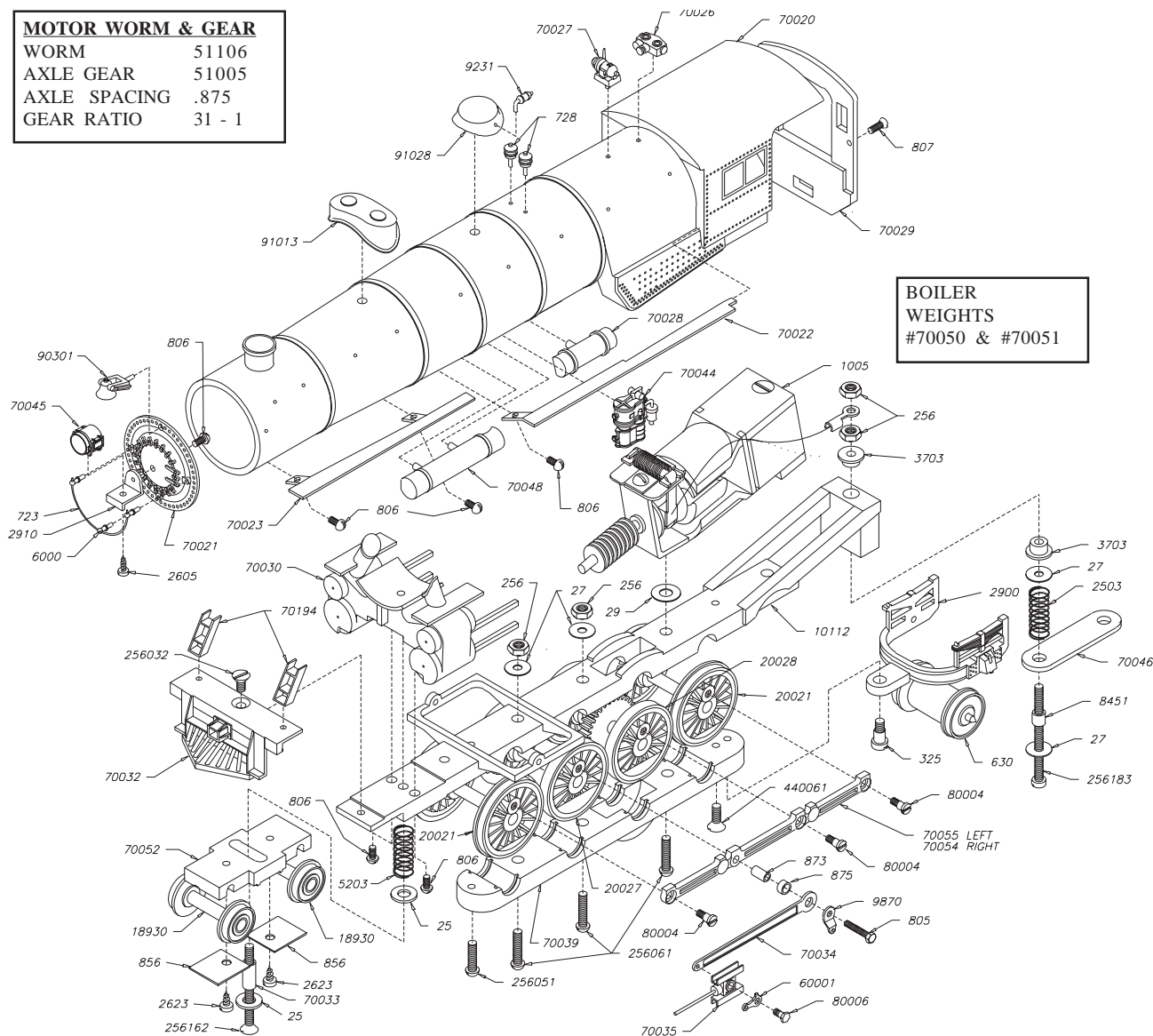
- #100400 USRA Mountain w/ Tender, Kit
- #100410 Superdetail Kit
- #100416 Smoke Unit Kit
- #100412 Painted Engineer & Fireman
w/ bulkhead & floor not in
- #100410 Assembled valve gear
- #500405 Assembled valve gear



USRA MOUNTAIN 4-8-2

MOTOR WORM & GEAR

WORM	51106
AXLE GEAR	51005
AXLE SPACING	.875
GEAR RATIO	31 - 1



BOILER WEIGHTS
#70050 & #70051

Smoke Unit Kit For Bowser & Penn Line Locos

Kit includes a Model Power Smoke Unit, Instructions and the necessary mounting hardware. Smoke fluid not included.

#100416 For USRA Mountain. Requires drilling smoke stack to accept the smoke unit.

Operating Headlight

If you already have a headlight. Use a #91039 Grain of Rice bulb for headlight. Drill out headlight and drill a hole in front of generator to run wire to motor brushes. Solder one wire to each brush.

REPLACEMENT BOX POK DRIVERS

- 16531 69" LIGHT w/ BEARINGS, FLANGED
- 16534 69" MEDIUM w/ GEAR, FLANGED
- 16535 69" HEAVY w/ BEARINGS, FLANGED

FLANGED DRIVERS

- 20024 69" HEAVY SPOKE
- 20026 69" MEDIUM SPOKE

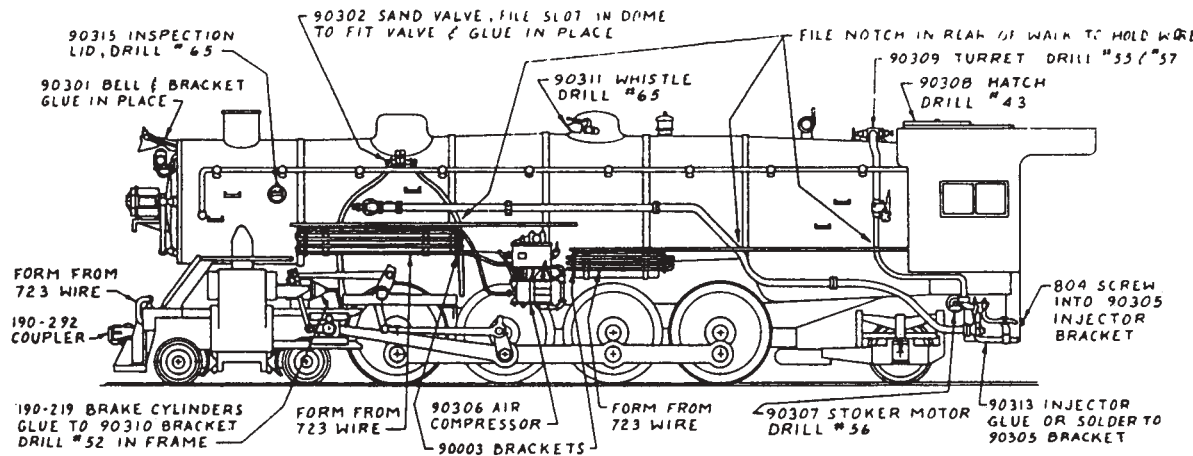
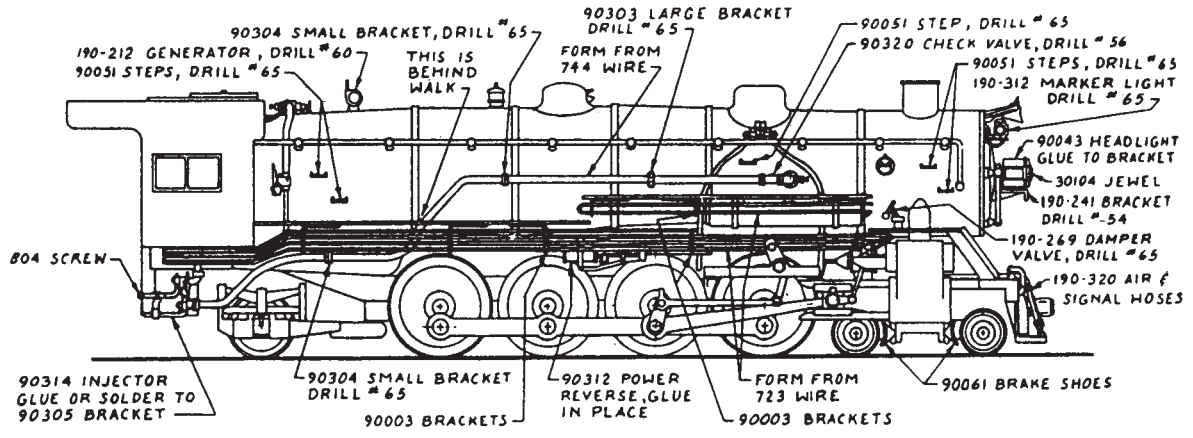
Marker Light Jewels:

Rule of thumb: Green to front, amber to side and red to rear.

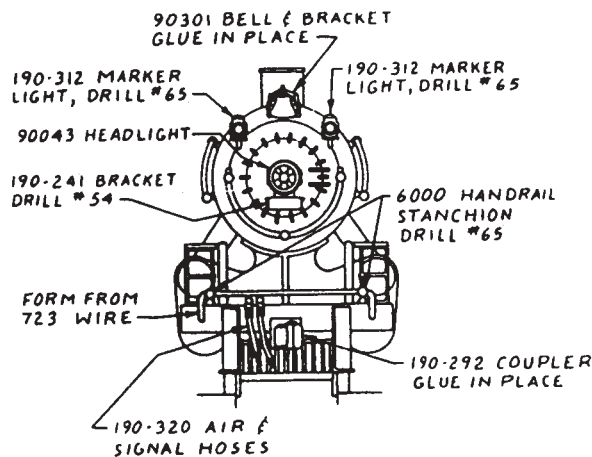
Pilot Coupler:

Use Kadee® #6 coupler and pocket. File cast on coupler pocket flush with pilot beam. Mount pilot to frame. Place the #6 coupler and pocket on screw holding pilot to frame and secure with a 2-56 nut.

USRA MOUNTAIN 4-8-2



PART #	AMOUNT	DESCRIPTION
723	10	.020 brass wire, 18"
744	1	.032 brass wire, 12"
804	2	0-80 x 1/4" screw, pk. 12
6000	4	Handrail stanchion, pk. 10
7510	4	Pk. 10 jewels, Red
7520	8	Pk. 10 jewels, Amber
30104	1	Pk. 10 headlight jewel
90003	12	Pk. 15 piping brackets
90018	1	Tender steam line
90019	1	Tender air & signal lines
90043	1	Headlight w/ light pole
90051	5	Steps, pr.
90061	2	Brake shoes, pr.
90301	1	Bell & bracket
90302	2	Sand valves & pipes
90303	2	Large piping bracket



90304	4	Small piping bracket
90305	2	Injector mounting bracket
90306	1	Air compressor
90307	1	Single stoker motor
90308	1	Cab roof hatch
90309	1	Turret
90310	1	Brake cylinder bracket
90311	1	Whistle, left mounting
90312	1	Power reverse
90313	1	Injector, left
90314	1	Injector, right
90315	2	Inspection lid
90316	2	.046 brass wire, 6"
90320	1	Check valve, pr.
190-212	1	Generator
190-219	1	Brake cylinders, pr.
190-221	1	Brake cylinder
190-241	1	Headlight bracket
190-269	1	Damper valve
190-292	1	Coupler
190-312	2	Marker light, loco, pr.
190-320	1	Air & signal hose

