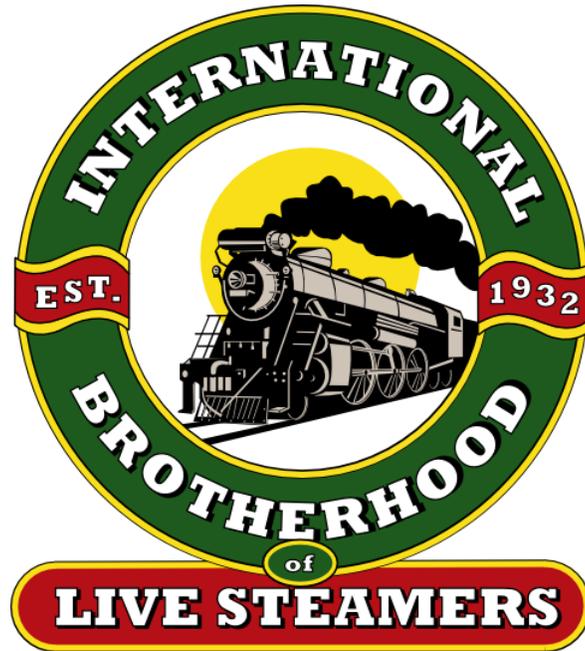


Jim Murray and MDM Locomotive Works



An IBLS Wandering Locomotive Book

Edited by Daris A Nevil

Version 2017/04/04

Table of Contents

| | |
|---|----|
| Table of Contents | 2 |
| Preface..... | 3 |
| MDM Locomotive Works Home Page | 4 |
| Diesel Locomotive General Information | 6 |
| F Unit Locomotives | 7 |
| GP60/GP60M Locomotives..... | 15 |
| GP 7/9 Locomotives..... | 26 |
| Power Truck..... | 30 |
| Blomberg Clasp Brake and Type M Trucks..... | 31 |
| HTC / Special Duty Trucks..... | 32 |
| AAR Type A Switcher Trucks..... | 33 |
| Components | 34 |
| Details | 37 |
| Construction Photos | 40 |
| Customer Photos | 44 |
| New | 58 |

Preface

James "Jim" Thomas Murray Jr., was born March 16, 1943 in Boston, Massachusetts, the only child of Ruth Margaret Murray and James Thomas Murray, Sr. At the age of three the family moved to Clayton, New Mexico where he spent his childhood. Jim and his father returned to Boston in 1957 upon his mother's death. Jim attended Boston Technological High School, and later graduated with an Associate's degree from OSU-Oklahoma City.

Jim began work with Honeywell as a machinist, and in 1971 was transferred to Oklahoma City, which would become his beloved hometown. In 1976 Jim realized his dream of becoming self-employed when he started Murray Heating and Air Conditioning which he operated until 1991. Jim got into the large scale model train business in 1979 starting Cannonball Enterprises with partners. In 1997 Jim founded MDM Locomotive Works, building 1/8th Scale Diesel Locomotive Models.

Jim passed away May 6, 2013, which also saw the end of MDM Locomotive Works.

This "Wandering Locomotive Book" pays tribute to the magnificent models built by Jim. It is based on the MDM Locomotive Works website before it went dark. Owners of Jim's models may find value in the photos and parts lists contained in this work. Those restoring such models may also gain insight into how Jim built them. It is hoped that future generations will be inspired to carry on Jim's passion for building 1/8th scale EMD Locomotives.



Jim Murray from a video interview by Jack Lucks at the Comanche & Indian Gap Railroad Fall Meet, 1992

MDM Locomotive Works Home Page



Welcome to the MDM LOCOMOTIVE WORKS home page. We supply 1 1/2" scale, electric powered, diesel locomotive models, power trucks, and accessories for the large scale backyard railroad hobby, AKA the live steam hobby. We primarily model locomotives built by the Electromotive Division of General Motors Corp. though many of our parts and accessories may be used to model diesel locomotives built by other manufacturers. Our models are built to the scale of 1.6 inches to the foot and to a track gauge of either 7 ¼ inch or 7 ½ inch.

Our product line includes - individual parts, complete kits of materials including drawings and instructions, machined kits for those builders without a machine shop, semi-finished units with all major construction complete. Our products are not the least expensive, but they are the most thoroughly detailed and highest quality locomotives available. As you examine our web site, note how the close-up photos show the realistic details on each of our locomotives.

We have added detail parts for GP 7 and GP 9 locomotives, sand hatch castings 1 3/4 square by ½ inch tall and headlight sets for some locomotives. See price list. Also we now have "F" sand hatch castings available as separate detail parts.

Also due to a customers' request we now have stamped battens ½ inch wide with alternating rivet punches along each edge. He wanted for his tank car model, how can you use? See photo in price list.

MISCELLANEOUS INFORMATION

All our kits come with instructions and drawings. We will replace any defective parts, contact us before returning any merchandise.

Small orders will ship USPS Priority Mail and large orders will be shipped UPS at the residential rate unless a commercial address is specified. Please contact us for shipping costs. \$10 minimum shipping and handling on small orders.

Payment via check, money order, VISA, or MasterCard. All orders to be prepaid before shipment. Charge cards will be billed upon shipment.

For kits requiring machining, or large orders, 50% down payment when order placed to hold spot in production schedule. Remainder due when order ready for shipment.

Prices do not include packing or shipping.

Murray Design & Manufacturing Corp.

1931 NE 69 St.

Oklahoma City, OK 73111

Phone/Fax 405-478-0502

E-MAIL info@mdmlocomotiveworks.com

Diesel Locomotive General Information

Our locomotives are constructed of steel and aluminum with almost all details applied separately. This method of construction allows the builder to construct a very accurate model of any prototype because the detailing is completely variable. As a result of this method of construction, they have the bonus attributes of being extremely durable and are naturally heavy. Let us assemble a kit to your specifications. We can supply your locomotive in various stages of completion. From a kit of raw materials with everything except paint and assembly labor, to kits with the lathe and milling work done, or semi-finished locomotives with all major assembly complete including machined power trucks.

We have tried to provide the most highly detailed locomotive kit possible for your locomotive. Locomotives available either powered or un-powered.

Powered unit standard features:

- 24 volt dc traction motors and gear boxes on each axle.
- Air compressor with all controls for working air brakes.
- Engine sound system with electronic horn and bell.
- Hand held control box with these controls:
 - Forward / Reverse switch
 - 8 Run Notches
 - Regenerative dynamic braking (built in to controller)
 - Headlight Control (Bright - Off - Dim)
 - Horn
 - Bell
 - Air Brake
 - Sound system volume control
- Four 6 volt deep discharge batteries for propulsion. (RTR units)
- Lighted number boards.
- Lighted class lights.
- Built in 115 volt charger.
- 24 volt DC to 12 volt DC battery equalizer.
- Working roof fans.

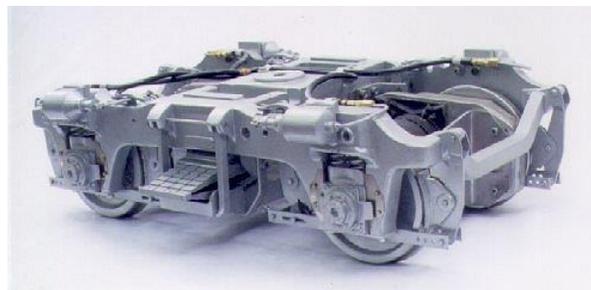
Optional features:

- MU signal line hoses
- Roof details - horns and radio antenna
- Snow plow
- Winterization hatch
- 48 inch fans for late model GP9
- GP60M comfort cab (wide cab)
- Dynamic brake hatch assembly for GP7/9
- Low nose on GP7/9
- Exhaust spark arrestor
- Diaphragm type door on F units
- Any special details needed to model a specific prototype locomotive

F Unit Locomotives



The F diesel locomotive line includes both "A" and "B" type locomotives. Virtually any prototype F unit from the 1939 FT 103 demonstrator to the last FP 9 built in 1959. These locomotives equipped with old style clasp brake Blomberg power trucks, as shown below.



Many parts in our kits are supplied partially machined. We do those operations which require elaborate tooling or industrial quality tools and processes. For instance the cab castings are welded, rough ground, and some machining is complete such as headlight holes, pilot mounting surface and bumper block mounting surface. Also semi-finished are the radiator grills which are cut to size and are bent, requiring only mounting holes to be drilled. The steel pilot is assembled and ready for mounting.

Details

To provide the highest detail quality possible many of the detail parts are die castings, or lost wax castings such as roof fans, exhaust stacks, door handles and sand hatches. The door frames and side battens have embossed screw heads, the portholes are assembled and come with simulated rubber gaskets, side louvers are punched, ladder frames bent, and we supply perforated material for the body steps. The fuel tank and battery box come assembled. The roof and roof hatches are pre-formed, lift rings assembled. The kit even includes 2 kinds of adhesives and silver bearing solder. Complete instructions and drawings included in each kit. Now available at no extra charge - Passenger style diaphragm end door option.

F unit specifications

Major variations available

| | | | | |
|--------|-----------------------|-------------------|----------------|--------------------------|
| Length | 84" (over couplers) | Un-powered | Powered | |
| Width | 16" | 23405 | 23406 | Kit |
| Height | 22 1/2" | 23410 | 23411 | Machined kit |
| Weight | 450 - 550 lb. | 33405 | 33406 | Semi-finished locomotive |
| Trucks | Clasp brake style. | | | FPs as kits |

Descriptions

Kit

All castings and metal stock needed.
 Fuel tank and battery box assembled.
 Cab partially machined, pilot assembled.
 Roof and roof hatches formed.

Machined kit

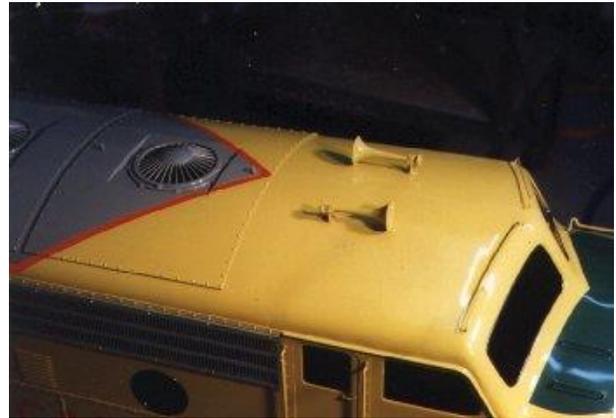
As above with all necessary lathe, milling work done.

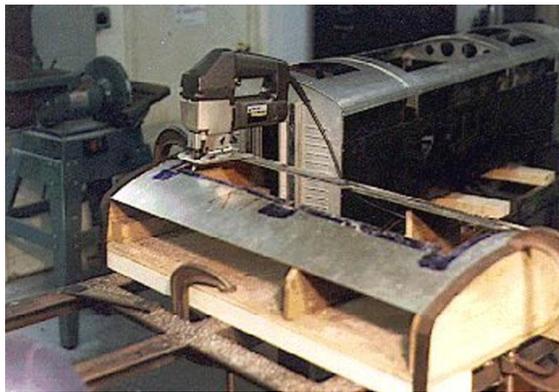
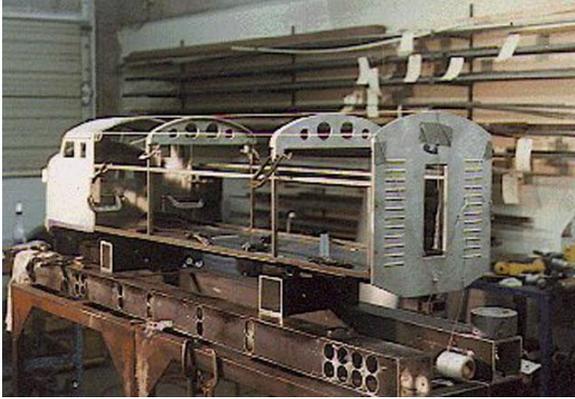
Semi-finished locomotive = Machined kit plus

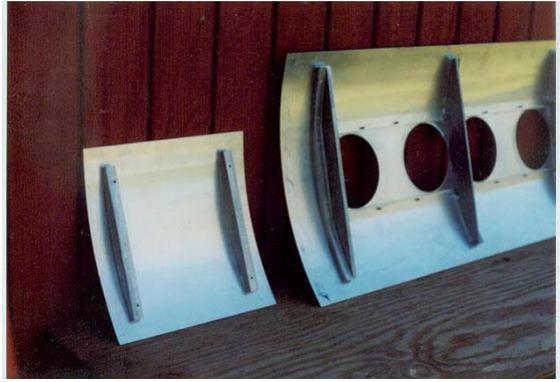
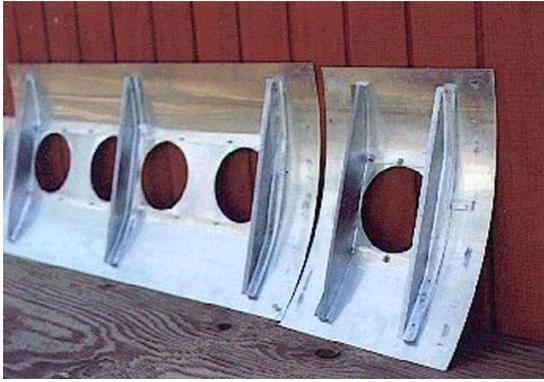
All below the floor parts assembled except for steps.
 Power trucks are furnished as a machined kit.
 Cab and body mounted on chassis.
 Hatches mounted on roof.
 Major holes cut - louvers, port holes, fan grills, sand hatches etc.
 Number board housings, anti-climber, head light housings, along with "B" end details are finished but not permanently mounted because finish body work still to be done.

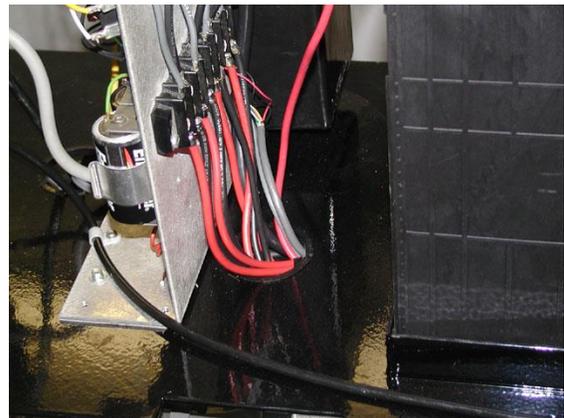
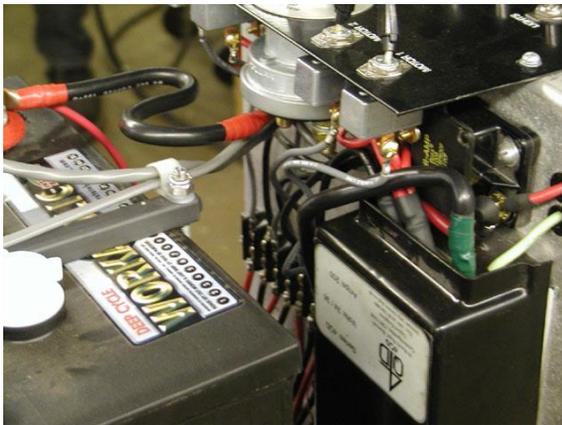
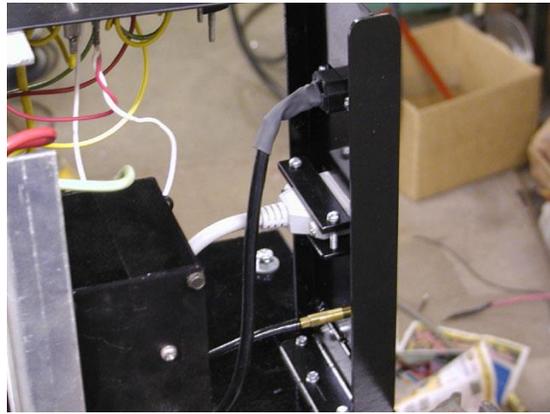
New

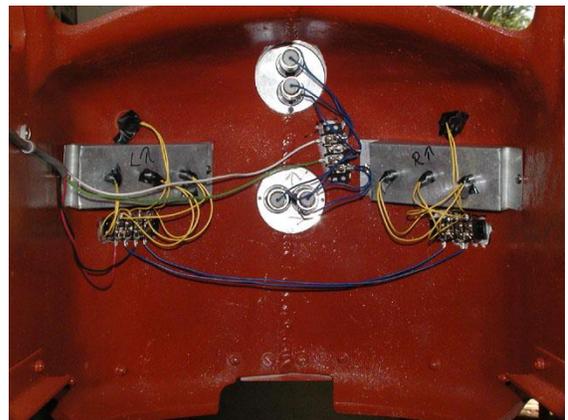
We have started adding photo pages of our products as a help to our builders. These photos have been taken over a long time period and may not represent current design and are for reference only.

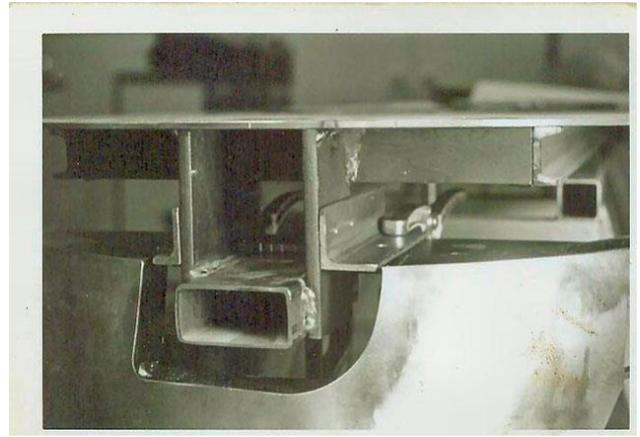
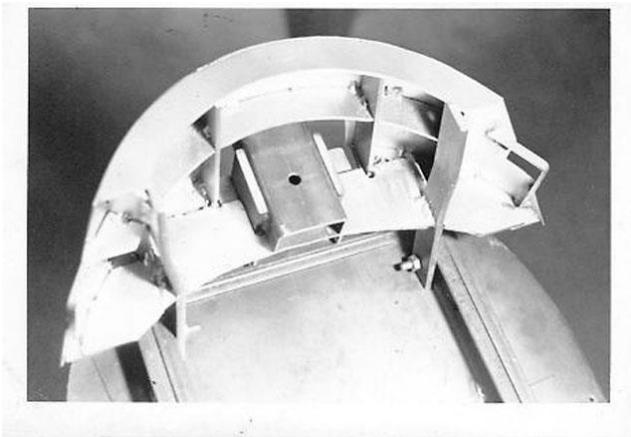








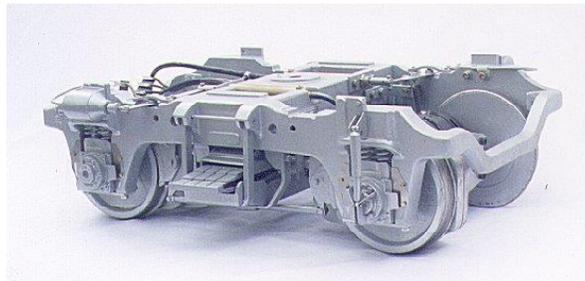




GP60/GP60M Locomotives



These locomotives are our largest which use Blomberg power trucks, and may be the last high horsepower GP locomotive produced by EMD division of General Motors Corp. Our model uses the latest style Type M Blomberg power truck (shown below) with low profile elliptical springs. An available option is a wide cab as used on the Santa Fe GP60M Super Series locomotives in the War Bonnet paint scheme.



Almost all the flat steel parts in the kit (over 300) are laser cut to shape and have the holes either cut out or marked for drilling. Complete instructions and drawings included in each kit.

As with our other locomotive lines, many parts will be supplied partially machined or partially assembled. The fuel tank is assembled, stairwells formed and the hoods are partially assembled. Complete instructions and drawings included in each kit.

DETAILS

- Stanchions stamped from steel
- Door latch holes punched
- Laser cut door latches
- Stamped door hinges
- Cab side doors on GP60M have punched louver
- Cab end doors laser cut
- Lift rings assembled
- Sand hatch lids open
- Cab front & door windows have simulated rubber moldings
- Molded number board housings, lenses and white number backing
- We even include 2 kinds of adhesive and silver bearing solder

GP60 Specifications

Major variations available

| | | | | |
|--------|-----------------------------|-------------------|----------------|--------------------------|
| Length | 95 inches (over couplers) | Un-powered | Powered | |
| Width | 16 inches | 23303 | 23304 | Kit |
| Height | 25 inches | 23305 | 23306 | Machined kit |
| Weight | 700 - 800 pounds | 33303 | 33304 | Semi-finished locomotive |
| Trucks | Type M Style | | | |

Descriptions

Kit

All castings and metal stock needed.
 Fuel tank assembled and stairwells formed.
 Cab and hoods partially assembled.
 Holes not cut, framing not installed.

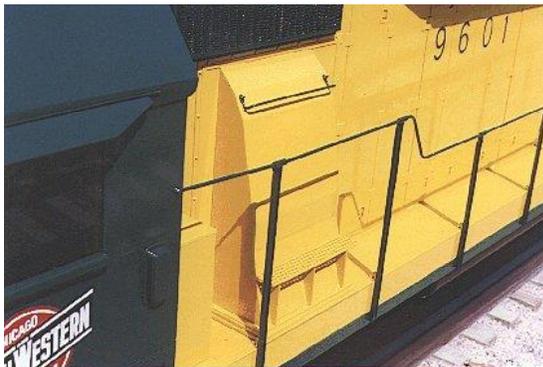
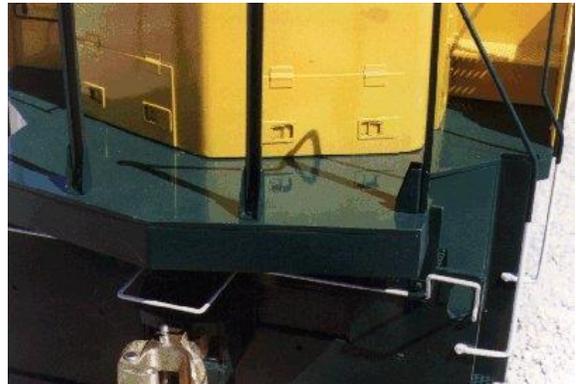
Machined kit

As above with all necessary lathe, milling work done.

Semi-finished locomotive = Machined kit +

Chassis assembled.
 Power trucks are furnished as a machined kit.
 Cab and hoods framed and mated to chassis.
 Roof hatches mounted on roof, fan holes cut.
 Cab window openings cut, side window frame installed.
 Cab and short hood assembled together.
 Some finish body work done, major holes cut.
 Any milling or welding on detail parts is complete.

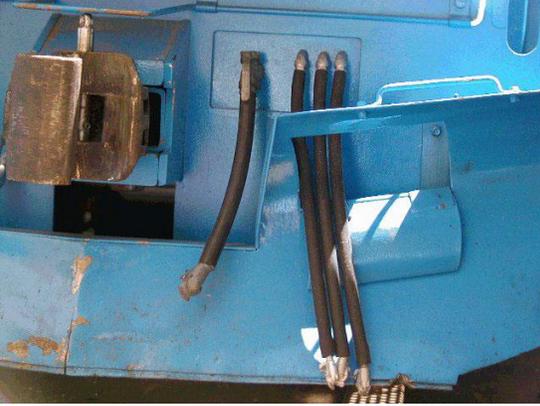
As a new experiment we are loading a group of photos showing details of our GP 60 locomotives.



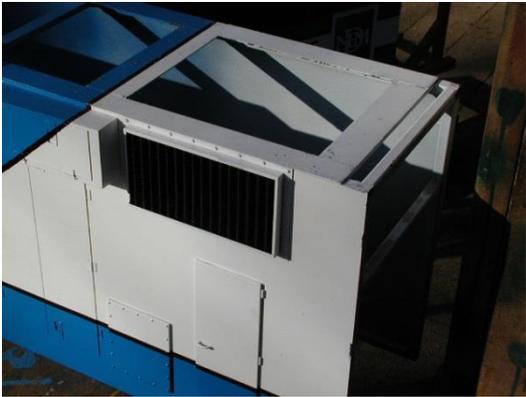


These photos show details of several locomotives mostly our company demo locomotive. Not all details shown are standard such as snowplow and MU hoses.

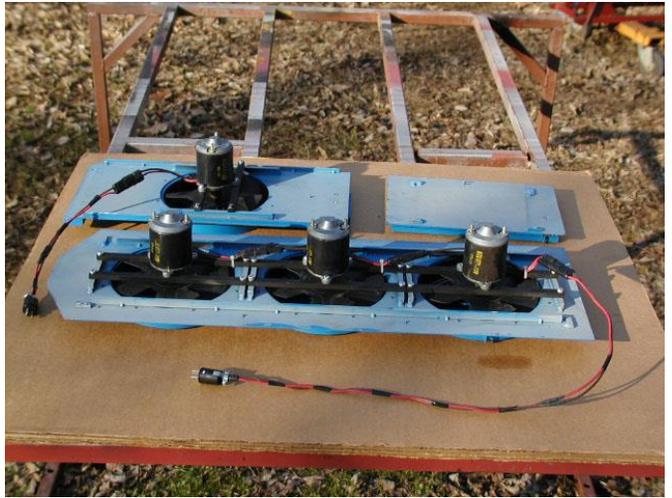








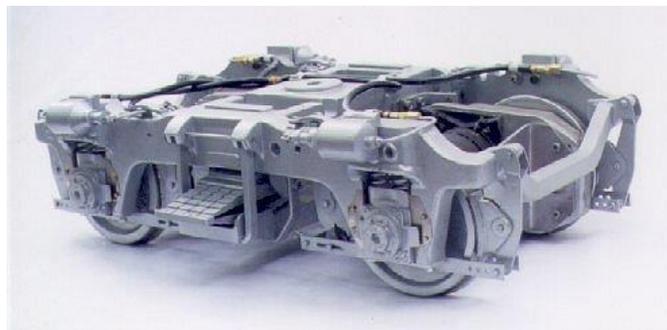




GP 7/9 Locomotives



Our GEEP line of locomotives are for those modelers who want a first generation diesel locomotive which will be right at home with live steam locos. With our kits you can build an accurate model of the first GP7 to roll off the EMD assembly line in 1949, a GP9, or the last GP18 built in 1963. Each kit or ready to run unit will have the appropriate details for the specific prototype you wish to model. These locomotives equipped with old style clasp brake Blomberg power trucks (shown below).



As with our other locomotive lines, many parts will be supplied partially machined or partially assembled. The fuel tank is assembled, stairwells formed and the cab and hoods are partially assembled. Complete instructions and drawings included in each kit.

DETAILS

- Stanchions stamped from steel
- Door latch holes punched, laser cut door latches
- Door louvers punched as appropriate
- Cab end doors laser cut
- Door hinges stamped
- Radiator grills assembled
- Lift rings assembled
- Sand hatches are investment castings
- Headlight housings partially machined investment castings
- Cab door windows have simulated rubber moldings
- Molded number board housings, lenses and white number backing
- We even include 2 kinds of adhesive and silver bearing solder

GP7/9 Specifications

Major variations available

| | | | | |
|--------|---------------------------|-------------------|----------------|--------------------------|
| Length | 90 inches (over couplers) | Un-powered | Powered | |
| Width | 16 inches | 23703 | 23704 | Kit |
| Height | 25 inches | 23706 | 23707 | Machined kit |
| Weight | 550 - 650 pounds | 33703 | 33704 | Semi-finished locomotive |
| Trucks | Clasp brake style | | | |

Descriptions

Kit

All castings and metal stock needed.

Fuel tank assembled and stairwells formed.

Cab end doors laser cut

Almost all the flat steel parts in the kit (122) are laser cut to shape and have the holes either cut out or marked for drilling.

Cab and hoods partially assembled.

Holes not cut, framing not installed.

Complete instructions and drawings included in each kit.

Machined kit

As above with all necessary lathe, milling work done.

Semi-finished locomotive = Machined kit +

Chassis assembled.

Power trucks are furnished as a machined kit.

Cab and hoods framed and mated to chassis.

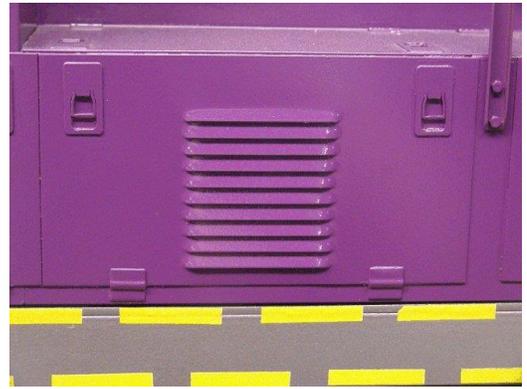
Roof hatches mounted on roof, fan holes cut.

Cab window openings cut, side window frame installed.

Cab and short hood assembled together.

Some finish body work done, major holes cut.





Power Truck

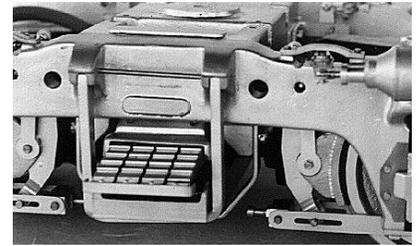
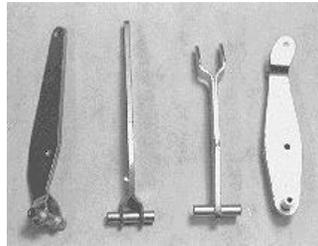
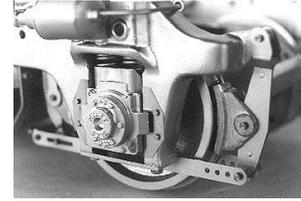
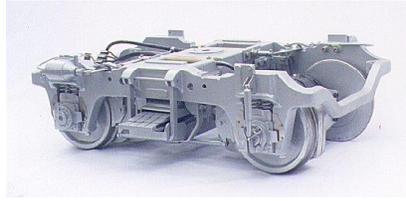
Diesel locomotive power trucks available as raw material kits or kits with milling and lathe work done. Trucks also available powered with 1/2 HP 24 volt traction motors and gearboxes. Kits come complete with working air brakes and all the hardware needed. Many of the brake rigging parts are laser cut steel requiring no finishing of the shape. The journal boxes on the Blomberg B-B and HTC trucks are steel investment castings requiring almost no machining.

The traction motors are 4" dia. permanent magnet low speed - high torque motors. Nominally 1/2 HP with a short time rating of 1 HP each. Fabricated steel gearbox with a 3 / 1 gear ratio insure maximum durability. A typical locomotive weighing around 700 lb. and equipped with 4 traction motor/gearbox assemblies should be able to haul a train of 10 to 20 cars depending upon car weights and track grades.



Motor / gearbox RTR

Blomberg Clasp Brake and Type M Trucks

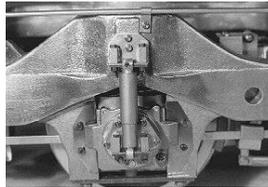
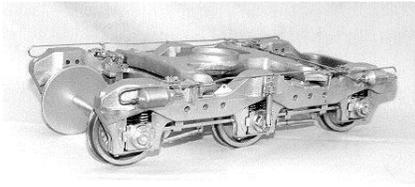


The old style Blomberg clasp brake truck is used on all EMD freight locomotives from the FT cab units to the GP40. The newer Type-M truck is used on the EMD dash 2 and later Geeps. The Type-M truck has low profile elliptical leaf springs, two instead of four brake cylinders, a single brake shoe on each wheel, and two shock absorber assemblies per truck. Wheelbase of both trucks is 14 inch, wheel diameter 5 inch and axles are 5/8 inch diameter with ball bearing journals.

Both styles of Blomberg trucks are available as kits - machined kits either powered with our prototype axle hung DC motor/gearbox assembly or un-powered.

Working air brake systems and other fine details separate these trucks from the competition. Brake shoes have rubber brake lining to increase stopping power.

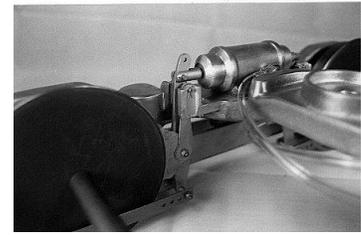
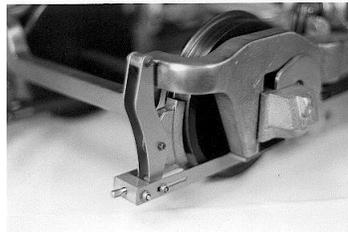
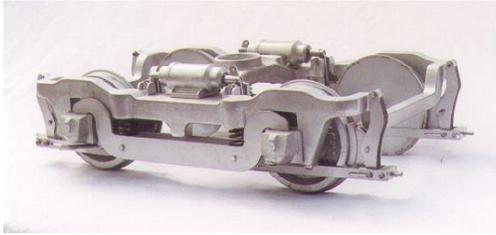
HTC / Special Duty Trucks



The HTC truck was introduced by EMD on the dash 2 locomotive line. This truck can be modified to look like the earlier Blomberg Flexicoil truck used on earlier SD locomotives. Available as a raw kit or as a machined kit, either powered with our prototype axle hung DC motor/gearbox assembly or unpowered. The truck is a single piece casting with a separate span bolster. Original patterns constructed by Lee Wright of Normal, Illinois. Truck wheelbase 20 3/8 inches, wheel diameter 5 inch and axles are 5/8 inch diameter with ball bearing journals.

Working air brake systems and other fine details separate these trucks from the competition. Brake shoes have rubber brake lining to increase stopping power.

AAR Type A Switcher Trucks

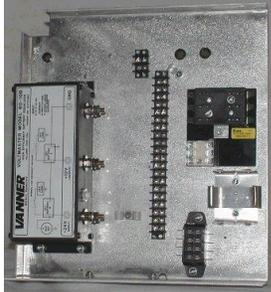


This truck is used on almost all EMD switchers; on all Alco switchers after 1950; all Fairbanks-Morse and Lima switchers; all Baldwin switchers after 1940. It is double equalized with laser cut drop equalizers. Our truck features a one piece casting, working air brakes and precision laser cut brake rigging parts. Wheelbase is 12 3/8 inches, wheel diameter 5 inches and axles are 5/8 inches diameter with ball bearing journals.

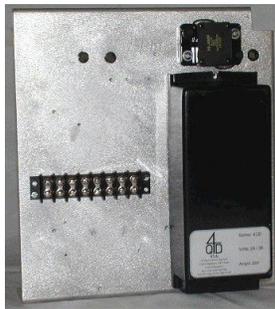
Working air brake systems and other fine details separate these trucks from the competition. Brake shoes have rubber brake lining to increase stopping power.

Components

33900 Electronic control system



Front



Rear



Power Control Panel



Handheld Control Box

Power control system kit Part No. 33900

Many new system features make it a complete power control system.

Battery equalizer to supply 12 volt power for the auxiliary systems from the 24 volt traction batteries and to insure that all batteries supply power at an even rate.

Fuse block with ground terminals to supply 12 volts to switches for controlling auxiliary systems.

Circuit breaker to protect main batteries along with fuse links to protect motors.

Battery power meter so you can monitor battery condition.

All necessary wiring components, wire, terminal blocks, fuses, wiring terminals, switches, mounting plates, control cables with plugs, hardware and other needed items.

Controller has a nominal 200 amp capacity with maximum rating of 230 amps and a 4 minute current rating of 150 amps. Power MOSFET design provides high efficiency (for reduced motor and battery losses) and silent operation. Built in thermal protection as well as under voltage cutback protects controller. Pot fault circuit shuts off controller if pot wires open. Reversing and regenerative dynamic braking are built into controller simplifying wiring.

The hand held control box kit comes with a 3 foot pendant cable complete with connector for disconnecting from locomotive.

Control box includes the following controls:

- Forward / reverse
- 8 run notches
- Regenerative dynamic brakes (puts power back in batteries)
- Headlight control (bright - off - dim)
- Horn
- Bell
- Air brake

All components mounted in a compact package.

23500 Air compressor system kit



Kit contains all components necessary to construct a complete system. 12 Volt air compressor - Tank with pressure gauge and pressure control - High pressure limit - Pressure output control with gauge - On /off output valve.

33924 Sound system kit



Speaker, amplifier, and sound board

(Speaker shown not current design)



Manual sound system hand held control box

We now have a new sound system utilizing a Phoenix Sound Systems "Big Sound" sound board which stores sounds as 16 bit sound samples giving more fidelity and realism. The new sound systems incorporate the following features:

Engine sound specific to particular locomotive:

F7 and GP7s with 1500 HP 567B engines

F9 and GP9s with 1750 HP 567C engines

Medium HP units with 645 engines such as GP38 or GP40s

High horsepower locomotives with turbo chargers like our GP60 locomotive line.

Other engine sounds available by request.

Sound system characteristics:

At initial system turn on there is engine start up sound and periodic air releases while locomotive is at idle. Engine sound increases in volume as locomotive is notched up then fades so the gear and turbo charger whine (if turbocharged) is more prominent when the engine is coasting or slowing. Brake squeal is heard when engine speed is reduced.

Bell and multi chime horns standard with optional single chime available for F units or GP9 locomotives.

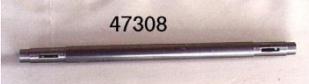
Automatic sound system (as supplied with our powered locomotives) senses motor voltage changes and notches the engine sound up or down as appropriate. Also includes a volume control on the control box.

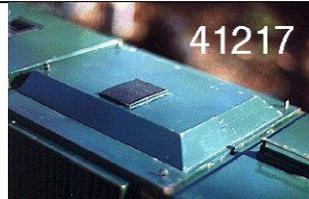
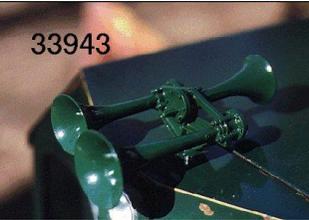
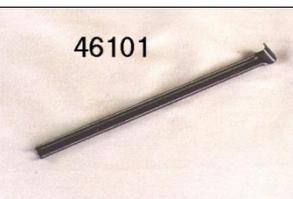
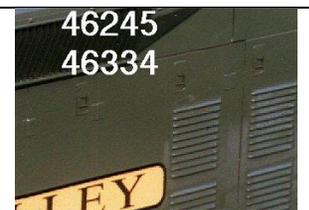
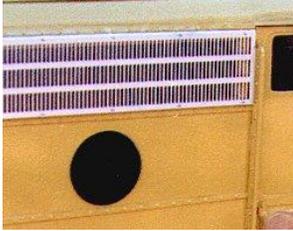
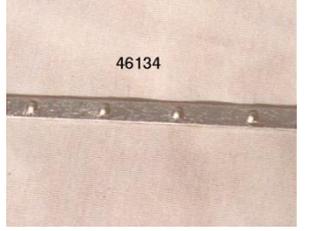
Manual version is supplied with a hand held control box incorporating the following: potentiometer to increase engine speed, horn button, bell switch, volume control, power switch. Also included are cabling with plug and socket for disconnecting unit from locomotive.

Both models come complete with amplifier, speaker, necessary wiring components, complete instructions, drawings, and construction photos.

The photo shows all components except controls, mounted on speaker enclosure but sound board and amplifier can be mounted separable if desired. Also our choice of a 6 by 9 inch speaker was dictated by locomotive space considerations. If you have more room a second or larger speaker may be added. The larger the speaker, the more powerful the sound.

Details

| | | | |
|--|---|---|---|
|  <p>45102</p> <p>New Journal Box</p> |  <p>21901</p> <p>Old Journal Box</p> |  <p>41155</p> <p>AAR A Switcher Journal Box</p> |  <p>41216</p> <p>Brake Shoe Ring</p> |
|  <p>31480</p> <p>Brake Shoes Machined</p> |  <p>33947</p> <p>Snowplow</p> |  <p>41190</p> <p>Brake Cylinder</p> |  <p>46315</p> <p>Louver Panel</p> |
|  <p>EXHAUST STACK 33429</p> <p>Exhaust Stack</p> |  <p>41102</p> <p>Switcher Headlight</p> |  <p>33960 33961</p> <p>Brake Hose and MU</p> |  <p>33707</p> <p>Lift Ring</p> |
|  <p>43104/43204</p> <p>5 inch Wheel Casting</p> |  <p>41191</p> <p>Inlet Shutter</p> |  <p>3390</p> <p>Fan Kit</p> |  <p>33931</p> <p>Fan Assembled</p> |
|  <p>33932</p> <p>Fan Kit</p> |  <p>33933</p> <p>Fan Assembled</p> |  <p>47308</p> <p>Axle</p> |  <p>41192</p> <p>Air Inlet</p> |

| | | | |
|---|---|--|---|
|  <p>Turbocharger Hatch</p> |  <p>41218 Turbocharger Hatch</p> |  <p>41217 Air Hatch</p> |  <p>33943 Roof Horns</p> |
|  <p>41186 Classification Light</p> |  <p>33301 Dynamic Brake Cooling Grill</p> |  <p>59066 Loctite and Activator</p> |  <p>33707 Lift Ring</p> |
|  <p>59033 Two-part Epoxy</p> |  <p>46101 Handrail Stantion</p> |  <p>46245 46334 Latch Plate</p> |  <p>41220 F Unit Roof Brace</p> |
|  <p>33408 F Unit Radiator Grill</p> |  <p>F Unit Porthole</p> |  <p>33405 F Unit Pilot</p> |  <p>46134 Batten</p> |
|  <p>41103 F Unit Step</p> |  <p>AIR SYSTEM 33500 Air System</p> |  <p>SNOWPLOW 33947 Snowplow</p> |  <p>CAST BRASS BELL 33962 Cast Brass Bell</p> |

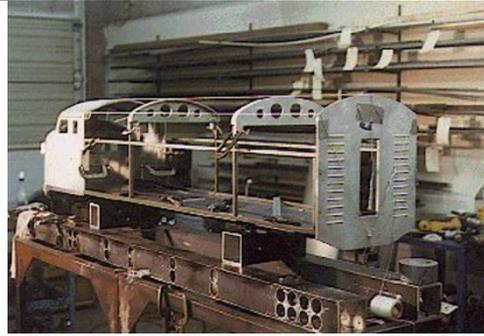
| | | | |
|--|---|--|---|
| <p>DUST BIN GRILL 91106</p>  <p>Dust Bin Grill</p> | <p>FIRECRACKER ANTENNA 91124</p>  <p>Firecracker Antenna</p> | <p>CLIPPARD AIR CYL. 56401</p>  <p>Clippard Air Cylinder</p> | <p>CAB VENT 91104</p>  <p>Cab Vent</p> |
| <p>LESLIE 3 CHIME S-3L 33943</p>  <p>Leslie 3 Chime</p> | <p>LESLIE 5 CHIME S-5T 33943a</p>  <p>Leslie 5 Chime</p> | <p>5 CHIME AIRCHIME K5LA 33943e</p>  <p>5 Chime Airchime</p> | <p>NATHEN 5 CHIME P5 33943c</p>  <p>Nathen 5 Chime</p> |
| <p>NATHEN 3 CHIME P3 33943b</p>  <p>Nathen 3 Chime</p> | <p>DOOR HANDLE 91101</p>  <p>Door Handle</p> | <p>DOOR LATCH 91102</p>  <p>Door Latch</p> | <p>SINCLAIR ANTENNA 91108</p>  <p>Sinclair Antenna</p> |
| <p>DIECAST INTAKE LOUVER 44105</p>  <p>Diecast Intake Louver</p> | <p>WIND DEFLECTOR 33945</p>  <p>Wind Deflector</p> | | |

Construction Photos

F "A & B" Construction Photos



Attaching "B" End



F Body Alignment



Body Holes outside



Body Holes inside



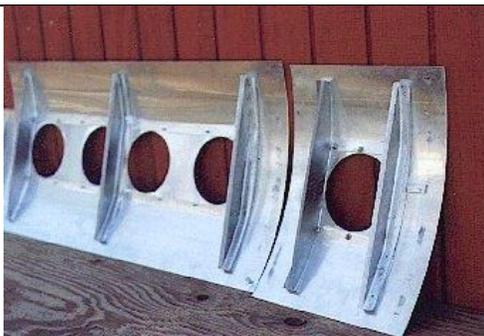
Attaching "B" Roof



"B" Hatch Openings

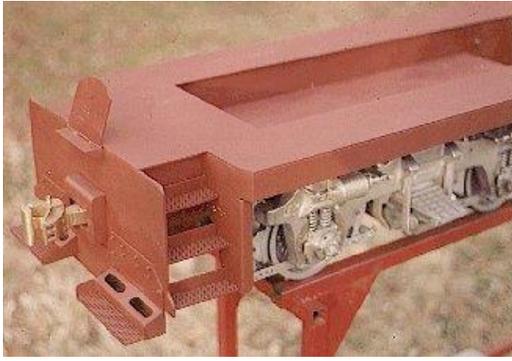


Cutting Radiator Hatch Opening

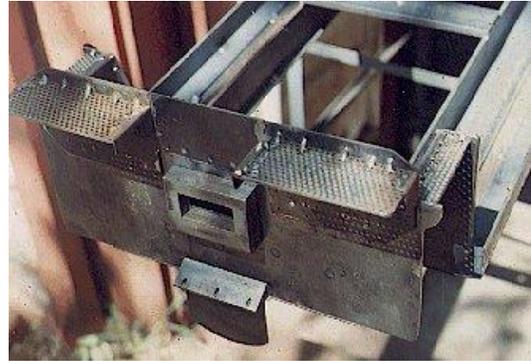


Roof Hatch Braces

GP7 & GP9 Construction



Chassis Top



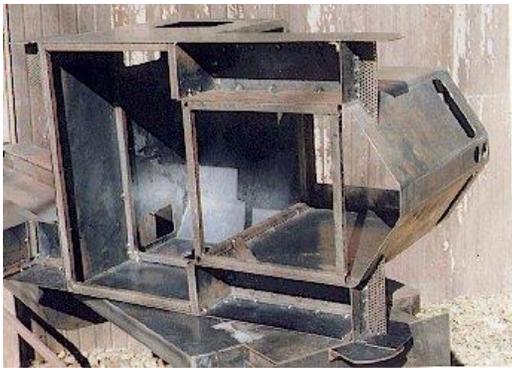
Chassis Bottom



Body & Chassis



Cab Short Hood



Cab Short Hood

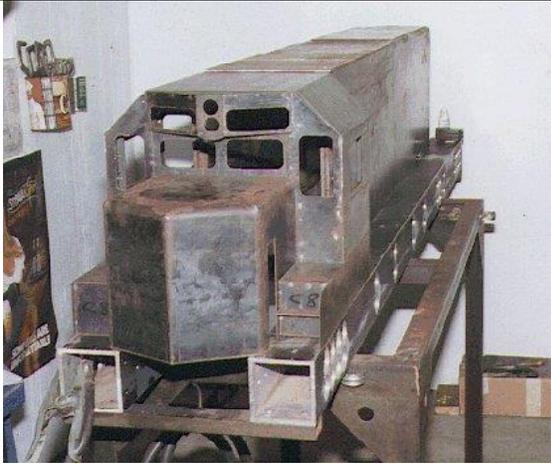


GP9 Long Hood Details

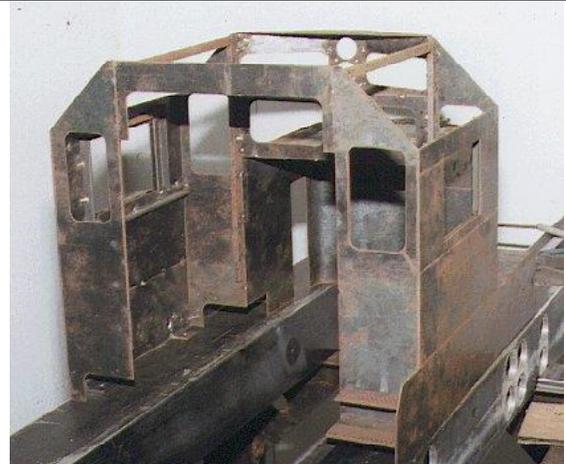


Lights & Sand Hatches

GP60 Construction



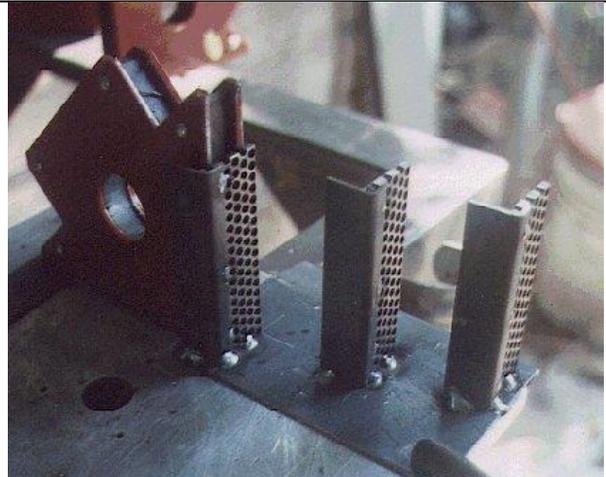
Car & Body



Cab

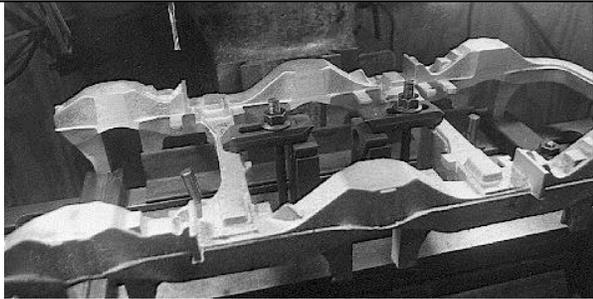


Radiator Hood

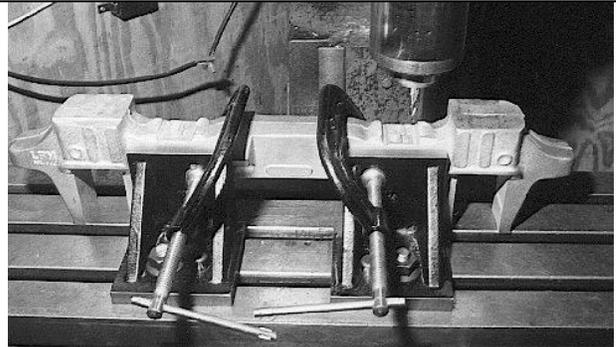


Step Construction

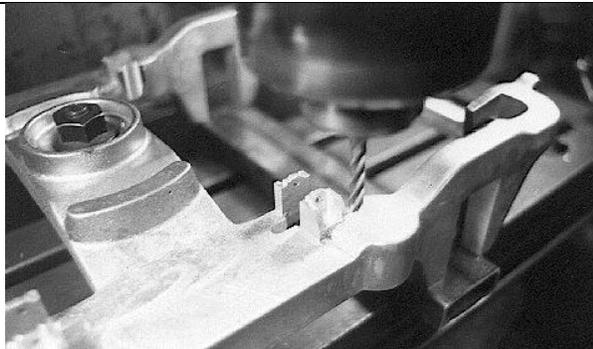
Power Truck Construction



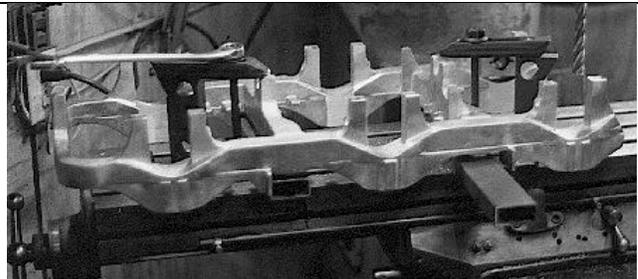
SD / HTC Top



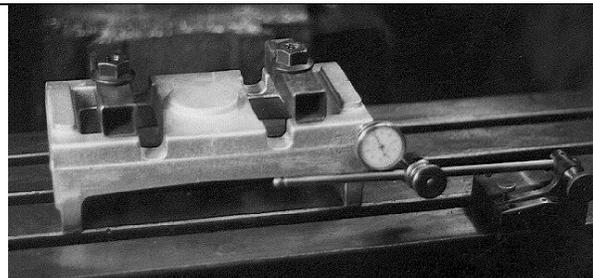
Blomberg Top



Switcher Top
Milling Brake Hangers



SD / HTC Bottom



Blomberg Bolster

Customer Photos

Matt Nussbaum GP7

The first set of photos are of Matt Nussbaum's GP 7 locomotive which Matt has done extra detailing and a super paint job. First set of photos were taken by Rob Mc Mullen of Lakeland FL. The second set taken by Matt's son after he completed the locomotive his dad started. Matt passed away September 2002.





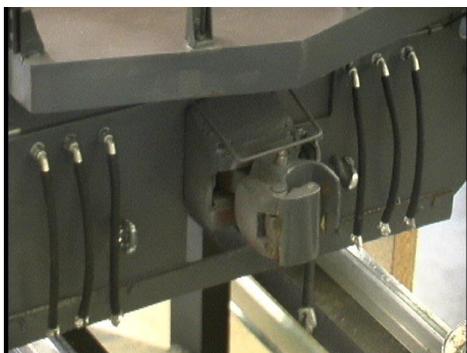
Richard Poole & Don Sweger Pennsylvania FP7

It was made PENNSY by: Substituting the "freight" pilot with the "passenger" pilot. PRR did not use the "freight" pilot on the bulk of their "cab" units. Added the two "lift-rings" on the front and the radio/phone antennas on the roof. We also added a fuel fitting and cap on the side.



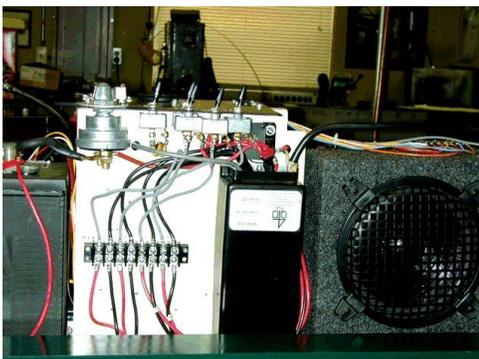


Paul Champlin GP60



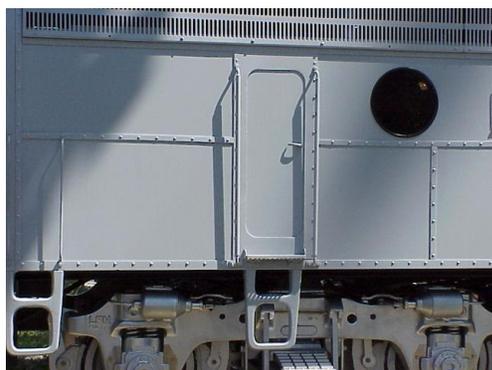


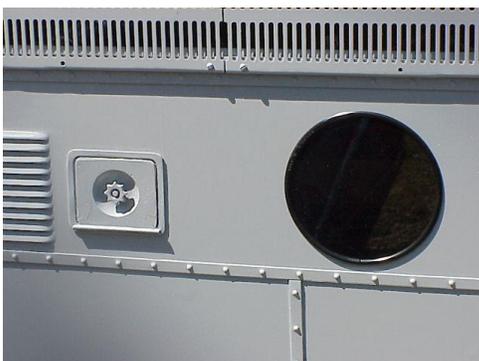
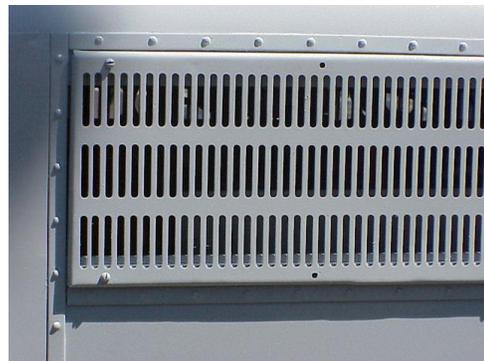
Mike Pedicini GP60



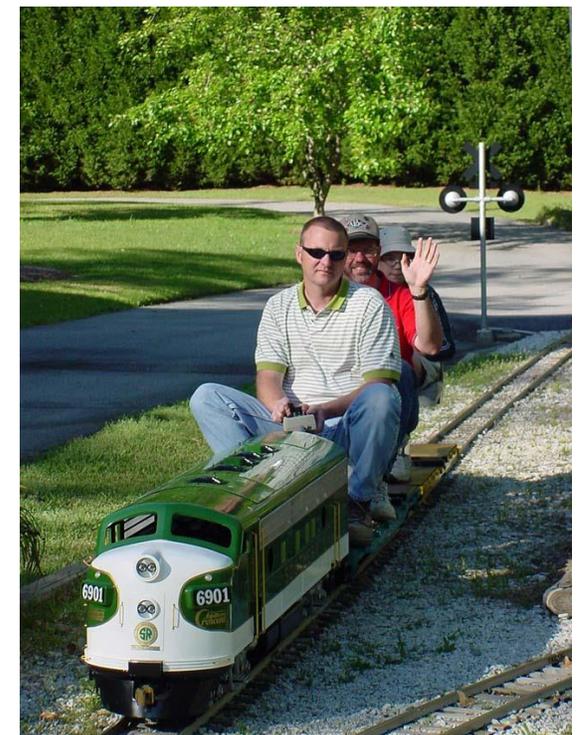
Lonnie Hall

The next set were taken by Lonnie Hall at the Mid-south spring meet at Columbia, TN, May 1999. Lonnie is building an F unit so was very interested in seeing the partially finished unit we had on display.



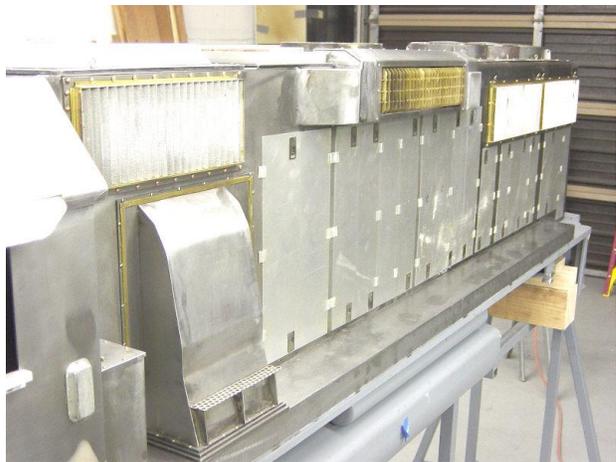
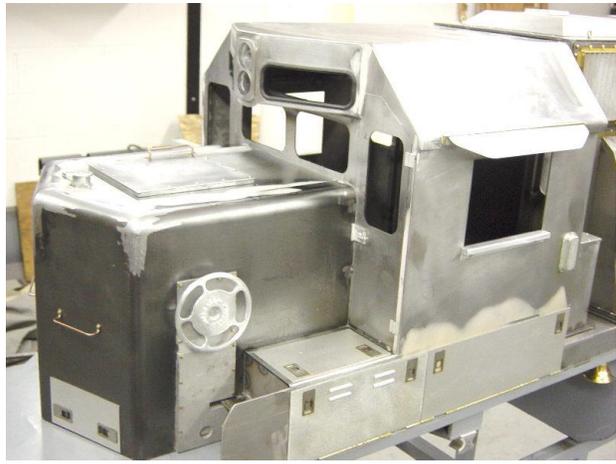
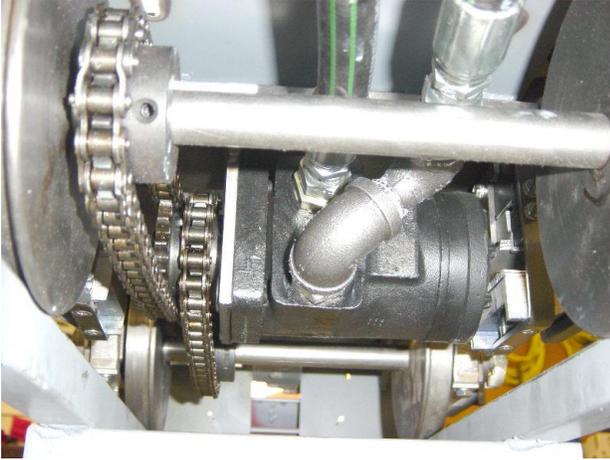


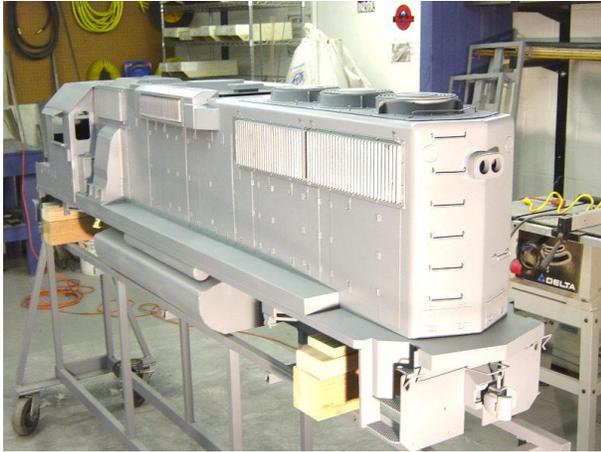
Lonnie has finished his locomotive so here are some recent photos taken at Bob Bagget's in Stone Mountain Ga.



Paul Karczewsky GP60

Photos of Paul Karczewsky's locomotive under construction and the finished product. Paul's locomotive is painted in EMD demonstrator scheme similar to our MDM-1 demonstrator locomotive.





Richard Smith

Richard Smith lives in Australia and he recently attended the 2005 Australian annual convention of live steamers in Brisbane, QLD where these photos were taken. He says his loco created quite a sensation. It is the first diesel in Australia that is a genuine model rather than a vague approximation.



General Large Scale Info

The large scale backyard railroad hobby consists of individuals who love railroads and who want to operate trains in as real a manor as possible. Most can't afford to own and operate full size trains and are not satisfied operating table top trains. There are many choices about scale and track gauge to be made by the prospective large scale backyard railroad tycoon. Miniature railroads have been built in every conceivable scale from ½ inch to the foot to 6 inches to the foot, and track gauge from 2 ½ inches to 36 inches. Today the most popular is 1 ½ inch scale with a gauge of 7 ¼ inch or 7 ½ inch. The 1 ½ inch to the foot scale is large enough to ride comfortably, is the largest size which can be transported easily from place to place, but is not so large as to be prohibitively expensive for most individuals.

We in the hobby build trains, track, bridges, tunnels, and other infrastructure items outdoors in the real world and have to deal with the same problems that the 12 inch to the foot prototype railroads do. This makes for an interesting challenge. Many in the live steam hobby do not have their own layout, instead they band together in live steam clubs. In that way much more extensive layouts can be constructed using the talents of all the club members and spreading the track building labor and costs around. In this scale there are two track gauges, 7 ¼ inch which is prevalent in the northeastern parts of the United States and Canada and most of the rest of the world and 7 ½ inch gauge which is prevalent in most of the United States and Canada. Neither gauge is strictly correct for 1 ½ inch scale. The correct gauge is 7 1/16 inch. This is one of the reasons many people build to a scale of 1.6 inch to the foot rather than 1.5 inch to the foot. For 1.6 inch scale 7 ½ inch gauge is correct. This slight difference in scale is not too noticeable except that it gives an extra inch of interior space in equipment.

The locomotives are powered by steam, batteries, or small gasoline engines. The rolling stock can be made of wood or metal. The type of individuals involved in this hobby are varied. Some construct all their equipment from scratch, some build their equipment from kits of materials and instructions purchased from hobby suppliers, and yet others who not having a machine shop at their disposal - buy machined kits which they finish themselves. The last category of large scale backyard railroaders is the ones who purchase their equipment ready to run.

MDMLW can supply the needs of all the above modelers.

1. Hard to duplicate parts for the scratch builder.
2. Complete kits of materials, drawings, and instructions for the builder with a complete shop.
3. Machined kits for those whose shop doesn't include a milling machine and a metal lathe.
4. Semi-finished locomotives for those who want the major components done, but are willing to spend time and effort doing the finish work in exchange for a significantly lower purchase price.

We can supply all of the above along with most in between variations. Examine our web site, then tell us how we can meet your needs.

Thank you : Jim

New

Product improvements

We have found a LED replacement unit for the MiniMag lights we have been using for many years that is much brighter 140 lumens verses 16 lumens. See item 53415 in price list. A lot of improvement.

Old New Stuff

GP locomotive controllers now have a new function, the ability to set which end of the locomotive is forward. This allows you to plug the control box into a second control plug at the cab end and when forward is selected the locomotive will travel away from the engineer. Also now there is a second control socket on the cab end. When operating two locomotives as a multiple unit (MU), the locomotives can operate prototype fashion, tail to tail. As an option F unit style locos can incorporate this new function along with the controls necessary for the F unit to operate as a trailing unit.

Type M power trucks shock absorber brackets are now laser cut saving the kit builder many hours of tedious labor. Along the same line, the cab doors on both the GP 7/9 and the GP60 locomotives are now laser cut to provide a better product as well as save labor.

Because all of our locomotive customers have requested the powered roof fan option as well as the commercial quality on-board 115 volt battery charger (24 volt at 25 Amps), we now include both items in our powered locomotives.

Air system now has 100% duty cycle compressor.

Lift rings are now lost wax castings.

New locomotive

Due to customer demand we have another F unit in production. It is the FP model which is 4 prototype feet longer than the regular F unit. Our version is 6 3/8" longer than standard and the kit is \$200 more than regular F kit.

Added details

We now are offering GP 7/9 headlights and GP 7/9 sand hatches. Also to improve the details on the front and rear of your locomotive, we now include brake lines with angle cocks and glad hands. As an option, MU signal hoses with elbows, hose, glad hands, and mounting bracket are available. Another new item is sand hatch for "F" units, see price list.

Enhanced sound system

We now have a new sound system utilizing a Phoenix Sound Systems "Big Sound " sound board which stores sounds as 16 bit sound samples giving more fidelity and realism. The new sound systems

incorporate the following features:

Engine sound specific to particular locomotive:

F7 and GP7s with 1500 HP 567B engines

F9 and GP9s with 1750 HP 567C engines

Medium HP units with 645 engines such as GP38 or GP40s

High horsepower locomotives with turbo chargers like our GP60 locomotive line.

Alco's and GE U-boat engine sounds available by special request.

Sound system characteristics:

At initial system turn on there is engine start up sound and periodic air releases while locomotive is at idle. Engine sound increases in volume as locomotive is notched up then fades so the gear and turbo charger whine is more prominent when the engine is coasting or slowing (if turbo-charged version). Brake squeal is heard when engine speed is reduced.

Bell and multi chime horns standard with optional single chime available for F units or GP9 locomotives.

Automatic sound system (as supplied with our powered locomotives) senses motor voltage changes and notches the engine sound up or down as appropriate. Also includes a volume control on the control box.

Manual version is supplied with a hand held control box incorporating the following: potentiometer to increase engine speed, horn button, bell switch, volume control, power switch. Also included are cabling with plug and socket for disconnecting unit from locomotive.

Both models come complete with amplifier, speaker, necessary wiring components, complete instructions, drawings, and construction photos.

Traction motors and gearboxes

Have been completely redesigned using a 1/2 HP permanent magnet low speed / high torque motor and a fabricated steel gearbox.

Power control system

The motor change allowed us to completely redesign our electronic control system. The new controller is much simpler to wire and has reversing and dynamic braking built in.

Many new system features make it a complete power control system.

- Battery equalizer to supply 12 volt power for the auxiliary systems from the 24 volt traction batteries and to insure that all batteries supply power at an even rate.
- Fuse block with ground terminals to supply 12 volts to switches for controlling auxiliary systems.
- Circuit breaker to protect main batteries along with fuse links to protect motors.
- Battery power level meter so you can monitor battery condition.
- All necessary wiring components, wire, terminal blocks, fuses, wiring terminals, switches, mounting plates, control cables and plugs, hardware and other needed items.