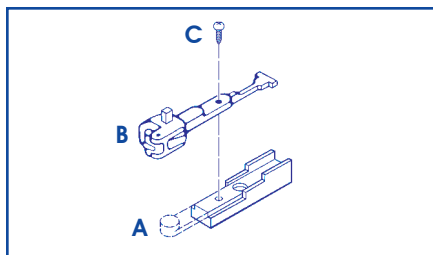


## KNUCKLE COUPLER INSTALLATION

- Remove Hook & Loop coupler.
- Clip tab "A" from end of tongue and file smooth.
- Attach USA knuckle coupler "B" with #4 screw (C) provided.



## SERVICING

This Diesel locomotive is built with pride by USA Trains and is covered by a limited warranty. (See limited warranty terms). Please follow these instructions carefully before sending your locomotive for service:

1. Return locomotive in its original blue/red box with the proper foam inserts and then pack the original box in a proper shipping carton so it is well protected in shipment. The package must be fully insured and prepaid. USA Trains is not responsible for damage or loss during shipment.

2. Include a note explaining the problem and servicing you need performed. Be sure to include your name, street address, (NO P.O. BOXES PLEASE) City, State, Country (if outside U.S.A) and zip code along with a day-time phone number including area code. If the locomotive service is not covered by warranty, a reasonable service fee will be charged. For any locomotives to be returned outside the continental U.S.A., please include \$75.00 U.S. currency to cover return postage. Any locomotives returned to customers in the continental U.S.A. will be pre-paid by USA Trains.

3. Ship your item to:

**USA TRAINS**  
662 CROSS STREET  
MALDEN, MA. 02148

## LIMITED ONE YEAR WARRANTY

This USA Trains locomotive is warranted for one year from the date of purchase against defects in material or workmanship. We will repair or replace (at our option) the defective part without charge for parts or labor within one year of the original date of purchase provided the warranty registration card has been received by USA Trains. This warranty does not cover items that have been abused or damaged by careless handling or improper operation such as a train derailment, modification or repair by non-factory technicians. Parts that "wear out" due to excessive use are also not covered under warranty. USA Trains reserves the right to determine "excessive use". Transportation costs incurred by the customer are not covered under this warranty.



## EMD GP30 DIESEL LOCOMOTIVE OWNERS MANUAL



**USA TRAINS**  
662 Cross Street,  
Malden, MA 02148, USA  
[www.usatrains.com](http://www.usatrains.com)



Dear Customer,

Congratulations on your purchase of this highly detailed replica of the Electro-Motive Division GP-30.

The engineering and design staff at USA Trains has spent many hours reviewing original blueprints and developing a locomotive that looks authentic and will provide you with many hours of operating enjoyment all at a reasonable price. Over 400 parts make up this model - the level of detail found in

brass locomotives costing thousands of dollars for a fraction of the cost. This locomotive will enhance the appearance of any modelers railroad.

Please read the following instructions which will help you understand and operate the numerous features of this locomotive.

Happy Railroading  
USA TRAINS

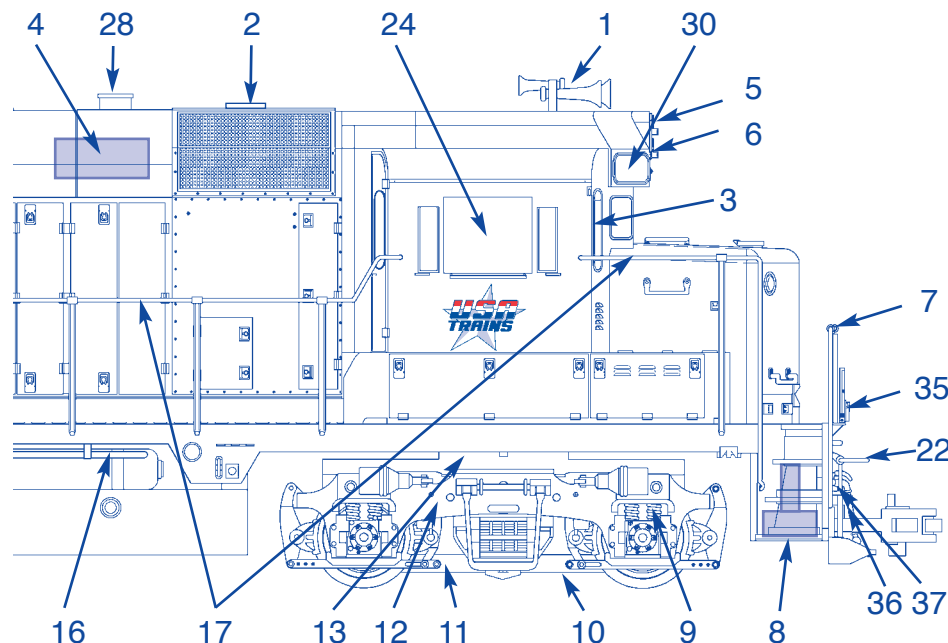
## HISTORY OF THE EMD GP30

General Motor's Electro-Motive Division first introduced the GP30 locomotive in 1961 to compete with General Electric's U25B. The General Motors' EMD group improved the locomotives performance capabilities over previous models while the GM automotive styling group shaped the locomotive's unique exterior. The GP30 is distinguished by the rounded contour to the top of the hood, the result of fairing in a bulge created from a taller electrical cabinet and larger area needed for the turbocharger and central air intake. The fairing extended all the way back into the dynamic brake blister.

During its 2 year long production life, 948 units were built for 29 different railroads making it one of the most popular locomotives ever built. The accurate reproduction of this locomotive by USA Trains will allow the modeler to have their favorite railroad GP30 running among the other locomotives on their railroad.

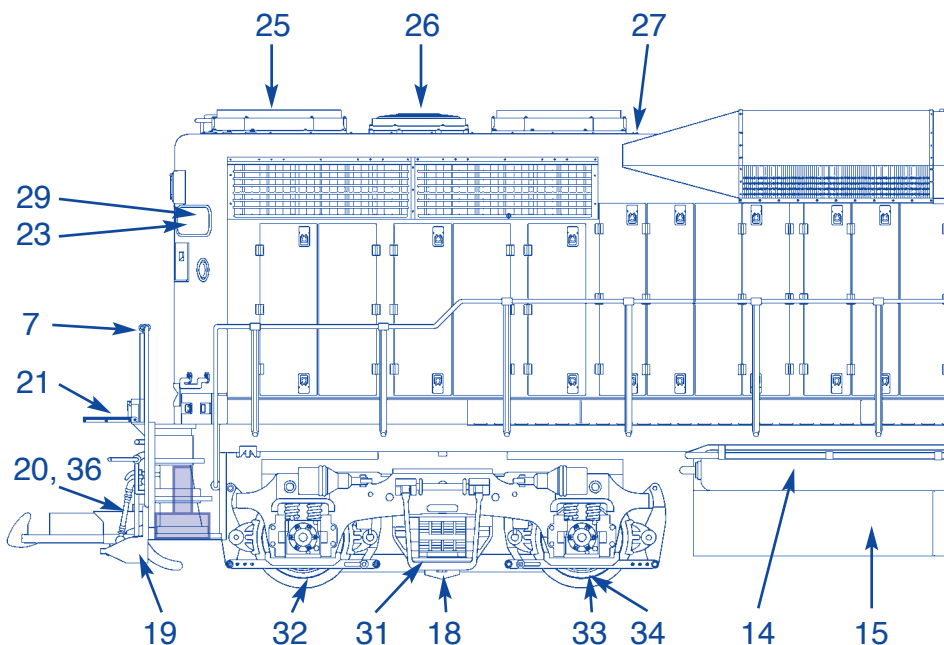
## FEATURES

- Powerful dual-motored 8 wheel Power Trac drive train
- Operating fan driven smoke stack emits realistic diesel exhaust
- Directional red/green marker lights
- Front & rear directional headlights
- Metal handrails
- Interior cab lighting
- Opening cab doors
- Detail cab interior with engineer and control panel with gauges
- Authentic detailing including diamond plate walkways, grating on steps, window shades, sliding windows and MU connector
- Expert decoration reproducing authentic paint schemes of your favorite railroad
- Multiple road numbers available for prototypical multi-unit operation



ITEM No.	PART No.	DESCRIPTION
22	R22-467	COUPLER LIFT BAR WITH 4 HOLDERS (1)
23	R22-468	LIGHT BULB AND WIRE (Number Board)
24	R22-469	LIGHT BULB AND WIRE (Cab)
25	R22-470	LARGE ROOF FAN w/ROTATING FAN BLADE (specify color)
26	R22-471	SMALL ROOF FAN w/ROTATING FAN BLADE (specify color)
27	R22-472	BRASS LIFT RINGS (8)
28	R22-473	SMOKE STACK (1)
29	R22-474	NUMBER PLATE - REAR (specify number)
30	R22-475	NUMBER PLATE - FRONT (specify number)
31	R22-134	STIRRUP FOR SIDE FRAME (4) (specify color)
32	R22-135	METAL WHEELS WITH GEARS (2)
33	R22-136	TRACTION WHEELS WITH GEARS (2) (for rubber tires)
34	R22-137	RUBBER TIRES (4)
35	R22-138	M.U. CONNECTOR (2) (specify color)
36	R22-476	SINGLE AIR HOSE (1)
37	R2021	SNOW PLOW
38	R22-000	MOTOR BLOCK BOTTOM PLATE
	R50002	USA TRAINS CONDUCTIVE LUBRICANT (1)
	R50003	USA TRAINS SMOKE FLUID (1) (Unscented)
	R50006	USA TRAINS SMOKE FLUID (1) (Diesel Scented)

Please call our parts department for prices and availability or visit our web site [www.usatrains.com](http://www.usatrains.com) • Phone: 781-322-6084 • Fax: 781-321-6459



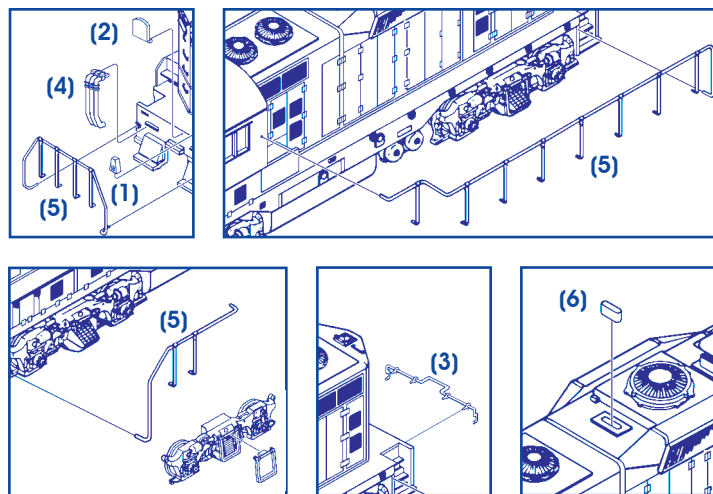
ITEM No.	PART No.	DESCRIPTION
1	R22-451	DIESEL HORN
2	R22-452	ROOF VENT (specify color)
3	R22-453	WINDSHIELD WIPERS (5)
4	R22-454	SMOKE UNIT WITH FAN
5	R22-455	FRONT LENS COVER (1)
6	R22-456	LIGHT BULB AND WIRE (headlight)
7	R22-457	FRONT/REAR HANDRAILS (2) (specify color)
8	R22-458	COUPLER MOUNTING BLOCK & PIVOT (no coupler)
9	R22-114	TRUCK SIDEFRAME SPRINGS (8)
10	R22-115	REPLACEMENT MOTOR TRUCK (1)
11	R22-116	REPLACEMENT MOTOR ONLY (1)
12	R22-117	TRUCK SIDEFRAME (2) (specify color)
13	R22-459	TRUCK MOUNTING BLOCK (1)
14	R22-460	CYLINDERS (2) (specify color)
15	R22-461	FUEL TANK (specify color)
16	R22-462	FUEL TANK AIR LINES (2) (specify color)
17	R22-463	SIDE HANDRAILS (4) (specify color or undecorated)
18	R22-122	SLIDE SHOES & SPRINGS (4)
19	R22-464	END STEPS (2) (specify color)
20	R22-465	AIR HOSES (1 right, 1 left)
21	R22-466	FOLD DOWN END STEP (2) (specify color)

## ASSEMBLY

Due to the high level of detail designed into the USA Trains GP30, some simple assembly is required.

- (1) M.U. Connector (2 pieces)  
Insert M.U. connector in frame as shown in diagram below. (both ends)
- (2) Fold Down Step (2 pieces)  
Insert step into step base assembly and insert into end of frame as shown in diagram below. (both ends)
- (3) Coupler Lift Bar Assembly (2 pieces)  
Insert 2 eye bolts onto each side of lift bar and inserted all 4 eyebolts onto frame as in diagram below. (both ends)
- (4) Air Hoses (6 pieces)  
Insert right and left air hoses (3) into frame and single air hose to right of coupler as shown in diagram below. (both ends)
- (5) Hand Rails - Sides and Ends (6 pieces)  
Insert side and end handrails into frame as shown in diagram below.
- (6) Smoke Stack  
Insert the plastic stack into smoke stack hole as shown in diagram below.
- (7) Truck Sideframe Stirrups (4 pieces)  
Insert one truck side frame stirrup into each truck sideframe as shown on the diagram below. Proper installation will cover the top two side frame screws.

**NOTE:** Apply pressure to middle top slotted piece to ensure stirrup will stay on during operation.



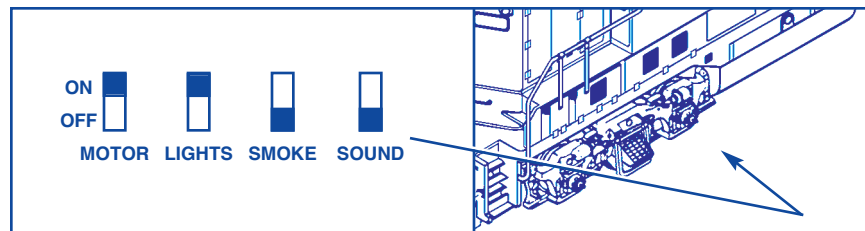
## OPERATION

### POWER REQUIREMENTS

The locomotive is designed to operate on direct current (DC) with outputs of 0-22 volts.

### CONTROL SWITCHES

The locomotive contains four switches to operate the on/off motors, on/off smoke generator, on/off lights and on/off sound. The control switches are located on the underside of the locomotive, between the front motor truck and the fuel tank (see diagram below). Please note the sound system is not included with the locomotive and can be purchased separately.



**CAUTION!** If the locomotive is going to be run for any period of time without smoke fluid, please position the smoke switch to the OFF position.

### SMOKE GENERATOR

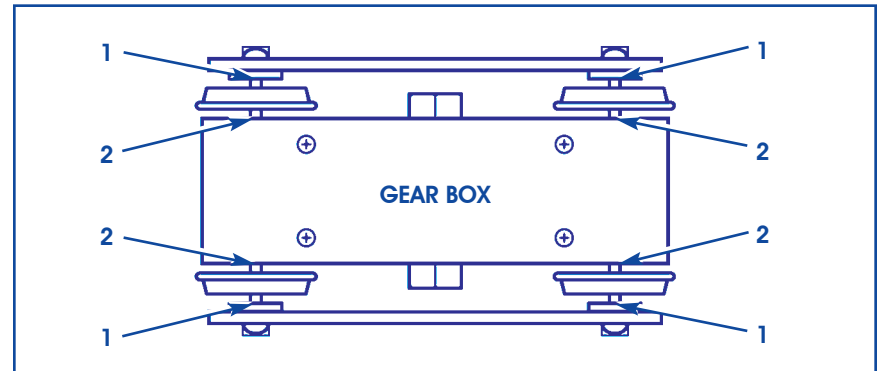
The locomotive contains a fan driven smoke unit which produces "diesel exhaust" through the stack on the topside of the cab body. The smoke generator requires the periodic addition of smoke fluid in order to operate properly. To add smoke, remove the stack from the top of the locomotive and add 25-30 drops of USA Trains smoke fluid (USA Trains part # R50003) into the smoke generator hole. Never overfill the smoke generator and promptly wipe up any excess smoke fluid that may have spilled onto any painted surfaces. Place the smoke stack back on top of the locomotive and begin operation. Smoke production will begin when the fluid becomes heated and should last approximately 20 minutes. It may take longer to generate the smoke if the unit is full. When the smoke chamber is empty the unit will shutdown automatically until more fluid is added. By following these directions the smoke generator will provide hours of enjoyment and enhance the realistic operation of your GP30 locomotive.

**CAUTION!** Even though your locomotive is equipped with an automatic shut-off when the smoke generator runs out of fluid, we suggest you shut off the smoke switch on the underside of the locomotive to prevent accidental burning out of the smoke generator.

## MAINTAINING AND SERVICING YOUR GP30

### LUBRICATION

Your locomotive was lubricated at the factory and under normal operating conditions will not need to be lubricated during the first 50 hours of operation. The locomotive has three lubrication points. (See diagram below)



**1. SIDEFRAAME JOURNAL BOX:** The axle ends fit into brass bushings which bring power into the locomotive. These brass bushings should periodically be cleaned out and lubricated with a small amount of USA Trains electrically conductive lubricant (USA Trains Part #R50002). Use only our conductive lubricant to avoid loss of electrical contact which could cause your locomotive to lose power or run erratically. The frequency of lubrication depends on your operating conditions.

**2. AXLE LUBRICATION:** Two drops of oil should be placed on all four contact points where the axle enters the gear box. An ultra light oil such as Hob-E-Lube (#HL653) is recommended.

**3. GEAR BOX LUBRICATION:** Under normal operating conditions, the gear box should not have to be lubricated. However, you may want to lubricate the gears after each 100 hours of operation by removing the six screws on the bottom of the gear box to expose the gears and applying moly grease by Hob-E-Lube to the gears on the axle only. Do not apply grease to any electrical contacts inside the gear box as you may hinder the electrical contacts required for smooth operation.

### WHEEL/SLIDE SHOES

The GP30 unit is equipped with twelve electrical pickup points-six per motor truck. Each of these must be cleaned periodically to ensure proper electrical contact with the track which will ensure smooth operation of your locomotive. Clean all four wheels and the bottom surface of the slide shoes periodically to ensure good electrical contact with the track. A good indication that you need to clean these contacts is flickering lights, non-operation of the smoke unit, or a jerking motion of the locomotive.