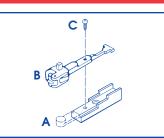
# **KNUCKLE COUPLER INSTALLATION**

- 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 daytime 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 \$15.00 U.S. currency to cover return postage. Any locomotives returned in the continental U.S.A. will be pre-paid by USA Trains.

3. Ship your item to:

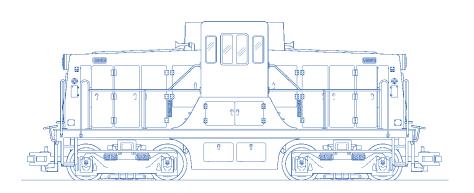
USA TRAINS 662 CROSS STREET MALDEN, MA. 02148

# 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 to determine "excessive use". Transportation costs incurred by the customer are not covered under this warranty.



# 44 TONNER DIESEL LOCOMOTIVE OWNERS MANUAL



USA TRAINS P.O. BOX 100 MALDEN, MA 02148 USA



Dear Customer,

Congratulations on your purchase of this highly detailed replica of a 44 Tonner Locomotive.

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

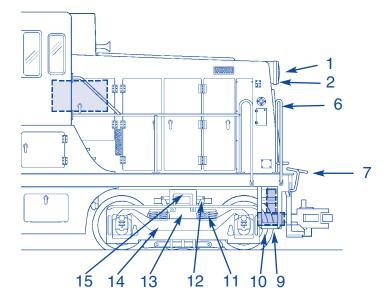


The 44 Ton locomotives were produced between 1940 and 1955 and were designed to be that weight to provide common carrier railroads with the largest locomotive they could operate with one man.

GE built the largest number of 44-ton locomotives powered by a pair of Caterpillar D-17000 B-8 engines, first rated at 150 h.p. each and later at 175 h.p., giving the locomotive a rating of 300 or 350 h.p.

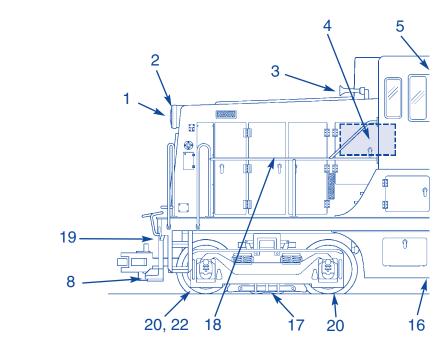
## **FEATURES**

- Powerful dual-motored 8 wheel Power Trac drive train
- Dual operating smoke stacks "puff real smoke"
- 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, sliding cab windows, grill work on top and side of body, and simulated wood front steps
- Expert decoration reproducing authentic paint schemes of your favorite railroad



ITEM	PART	DESCRIPTION	PRICE
NO	NO.		
14	R22-164	TRUCK SIDEFRAME (2) (specify color)	\$6.95
15	R22-165	TRUCK MOUNTING BLOCK (1)	2.95
16	R22-166	AIR TANK (2) & TOOL BOX (1) (specify color)	4.95
17	R22-167	SLIDE SHOES & SPRINGS (4)	3.95
18	R22-168	SIDE HANDRAILS (4) (specify color or undecorated)	12.95
19	R22-169	AIR HOSES (2)	2.95
20	R22-170	METAL WHEELS WITH GEARS (2)	8.95
21	R22-171	TRACTION WHEELS w/GEARS (2) (for rubber tires)	8.95
22	R22-137	RUBBER TIRES (4)	3.95
	R50001	USA TRAINS SMOKE FLUID	6.95
	R50002	USA TRAINS CONDUCTIVE LUBRICANT	9.95

Please use diagram above and circle the required part(s) Fax copy with method of payment or mail with check made payable to USA Trains, P.O. Box 100 Malden, MA 02148 Fax: 781-321-6459 No phone orders please Include \$5.00 for shipping and handling.



ITEM	PART	DESCRIPTION	PRICE
NO	NO		
1	R22-151	LENS COVER (1)	\$1.95
2	R22-152	LIGHT BULB AND WIRE (Headlight)	3.50
3	R22-153	DIESEL HORN (1)	2.00
4	R22-154	SMOKE UNIT (1)	14.95
5	R22-155	LIGHT BULB AND WIRE (Cab)	3.50
6	R22-156	FRONT/REAR HANDRAILS (2) (specify color)	10.95
7	R22-157	COUPLER LIFT BAR WITH 4 HOLDERS (1)	1.00
8	R22-158	END STEPS (specify color) (2)	1.95
9	R22-159	COUPLER MOUNTING BLOCK & PIVOT (no coupler)	4.95
10	R22-160	COUPLER SPRING & MOUNTING PLATE	1.95
11	R22-161	TRUCK SIDEFRAME SPRINGS (8)	1.95
12	R22-162	REPLACEMENT MOTOR TRUCK (1)	24.95
13	R22-163	REPLACEMENT MOTOR ONLY (1)	14.95

## 44 TONNER REPLACEMENT PARTS LIST

# ASSEMBLY

Due to the high level of detail designed into the USA Trains 44 Tonner Locomotive, some simple assembly is required.

## (1) Coupler Lift Bar Assembly (2)

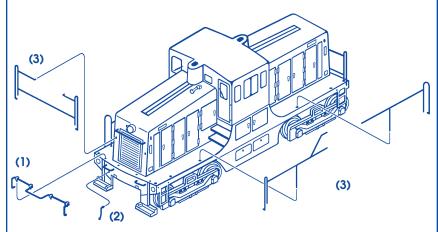
Insert 2 eye bolts onto each side of lift bar and insert all 4 eyebolts into top of each end of frame as in diagram below.

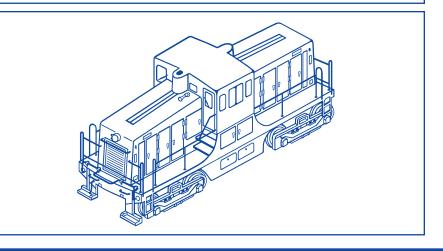
## (2) Air Hoses (2)

Insert air hose to left of coupler as shown in diagram below. (both ends)

## (3) Hand Rails - Sides (4) and Ends (2)

Insert side and end handrails into frame as shown in diagram below.





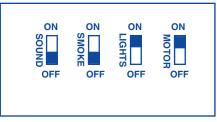
# **OPERATION**

#### **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)



**CAUTION!** To prevent smoke generator burnout, never run the locomotive without smoke fluid in the smoke generator. If no smoke is in the generator, switch smoke generation to the OFF position. For more info, see smoke generator operation instructions.

#### **SMOKE GENERATOR**

The locomotive contains two smoke units which produce "diesel exhaust" through the two stacks on the top side of the cab body. The smoke generators require the periodic addition of smoke fluid in order to operate properly. When doing so make sure the switch marked "smoke" under the locomotive (see control switch operation above) is in the OFF position. Add 10-20 drops of USA Trains smoke fluid (USA Trains part #R50001) into BOTH smoke stacks with eye dropper. Never overfill the smoke generator and promptly wipe up any excess smoke fluid that may have spilled onto any painted surfaces. Turn the smoke unit switch to the ON position and begin operation. Smoke production will begin when the fluid becomes heated. It may take longer to generate the smoke if the unit is full. By following these directions the smoke generator will provide hours of enjoyment and enhance the realistic operation of your 44 Tonner locomotive.

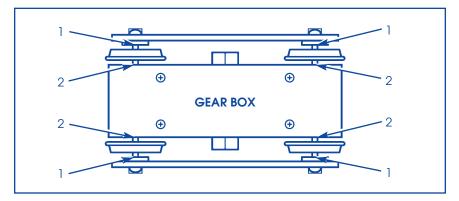
**CAUTION**-NEVER RUN THE UNIT WITHOUT SMOKE FLUID UNLESS THE SMOKE SWITCH IS IN THE OFF POSITION. THIS WILL PREVENT THE SMOKE GENERATOR FROM BURNING OUT!

**NOTE:** It is not uncommon for the front stack to smoke more than the rear stack due to the draft created by movement of the locomotive.

## MAINTAINING AND SERVICING YOUR 44 TONNER

#### 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. SIDEFRAME 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 four 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 44 Tonners are 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.