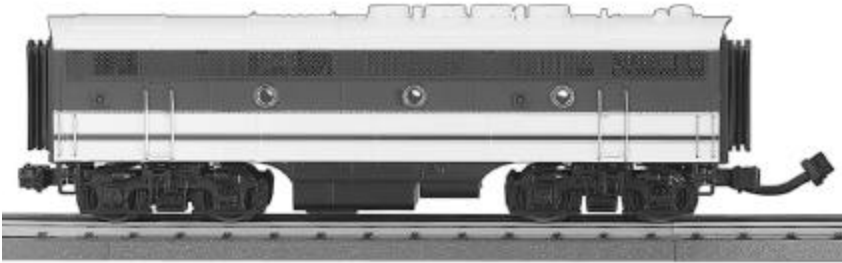


MTH NON-POWERED F-3 B UNIT OPERATING INSTRUCTIONS



Thank you for purchasing the MTH Electric trains production of the General Motors' F-3B diesel engine. The engine's durable ABS body and Die-cast Trucks are sized for operation on track diameters as small as O-31. The engine makes a perfect compliment to any MTH powered Premier Cab or Booster combination. The F-3B's non-operating couplers are compatible with most 3-rail locomotives and rolling stock.

The B Unit is prewired to be operated with a Proto-Coupler™ equipped powered engine.

OIL & LUBRICATION INSTRUCTIONS

In order for the engine to perform correctly and quietly, it is important that the chassis be lubricated before operation. Lubrication should include all truck block bushings and pickup rollers to prevent them from squeaking. Use light household oil and follow the lubrication points marked "L" in Fig. 1 below.

Periodically, check the locomotive wheels and for dirt buildup as this can significantly affect the engine's ability to perform properly. Dirty track and dirty wheels can cause both poor electrical contact as well as poor traction, especially on elevated track sections.

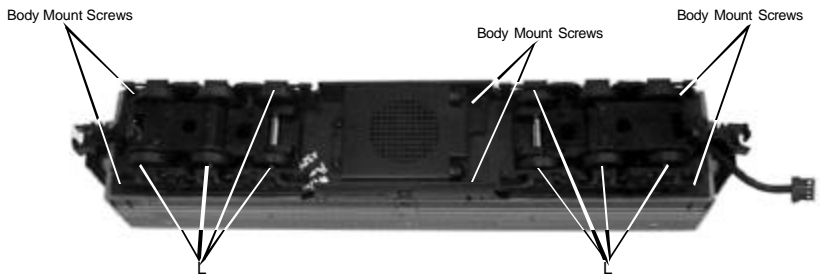


Figure 1: Lubricating The Chassis

PROTO COUPLER WIRE CONNECTION

If you are operating your F-3 B with the MTH F-3 AA set see figure 2 for connecting the Proto-Coupler wire harness. If you are operating your F-3 with a non Proto-Sound® engine, you might want to remove the shell as shown in figure 1 and place the Proto-Coupler wire harness into the shell so that the wire will not cause any operational problems.

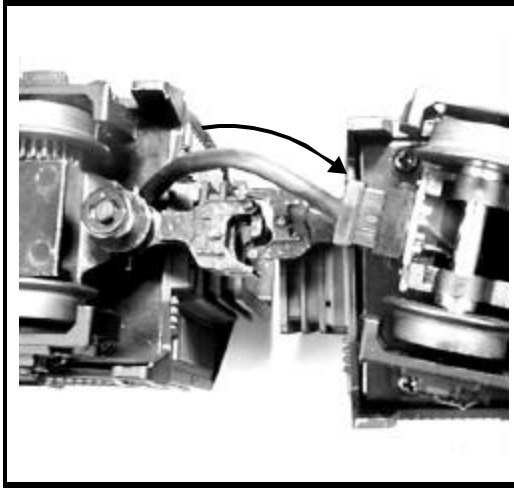


Figure 2: connecting the Proto-Coupler extension

Non-Powered F-3 B Unit

Parts

Name and Number	Part #
1.) Shell (Southern Pacific)(# 8081)	FC-2100303
1.) Shell (Reading)	FC-2100304
1.) Shell (Southern)	FC-2100305
1.) Shell (NYC)(# 3600)	FC-2100306
1.) Shell (Great Northern)(# 352B)	FC-2100307
1.) Shell (Santa Fe)	FC-2100308
1.) Shell (PRR)	FC-2100309
2.) Lens (portal)	FA-0000001
3.) Vent (top)(black)	FC-2100161
3.) Vent (top)(white)	FC-2100310
3.) Vent (top)(dark gray)	FC-2100311
3.) Vent (top)(green)	FC-2100312
3.) Vent (top)(blue)	FC-2100313
3.) Vent (top)(green)(PRR)	FC-2100314
4.) Vent (red)	FC-2100202
4.) Vent (black)	FC-2100203
4.) Vent (green)(Southern)	FC-2100315
4.) Vent (dark gray)	FC-2100316
4.) Vent (green)(GN)	FC-2100203
4.) Vent (yellow)(Santa Fe)	FC-2100317
4.) Vent (green)	FC-2100318
6.) Diaphragm	FI-0000017
7.) Handrail (18.5mm long) (nickel)	FC-2100104
7.) Handrail (18.5mm long) (yellow)	FC-2100193
8.) Handrail (31.5mm long) (nickel)	FC-2100105
8.) Handrail (31.5mm long) (yellow)	FC-2100194
9.) Bolt (8/32X15.0mm) (w/ 6.0X8.0mm shoulder)(slotted head)	IA-0000088
10.) Spring (8.0X12.0mm)(w/ 0.7mm thick wire)	IE-0000026
11.) Screw (M2.5X4.0mm)(roundhead)	IA-0000023
12.) Ladder (chassis)(black)	FC-2100107
13.) Screw (M2X5.0mm)(fillisterhead)	IA-0000034
14.) PCB board (145.0mm long w/ 4 pin male black plug)	BB-0000015
15.) Screw (M3X18.0mm)(washer head)(self-drilling)	IA-0000107
16.) Chassis	DH-2100012
17.) Screw (M3X6.0mm)(roundhead)	IA-0000016
18.) Fuel tank (black)	FC-2100131
19.) Screw (M3X6.0mm)(roundhead)	IA-0000016
20.) Truck side (black)	DB-2050002
21.) Ladder (truck side)(black)	FC-2100109
22.) Coupler (non-operating) (34.5mm long)(screw base)	DD-4000008
23.) Spring (centering spring)	IE-0000027
24.) Screw (M2.5X6.0mm)(washer head)	IA-0000108

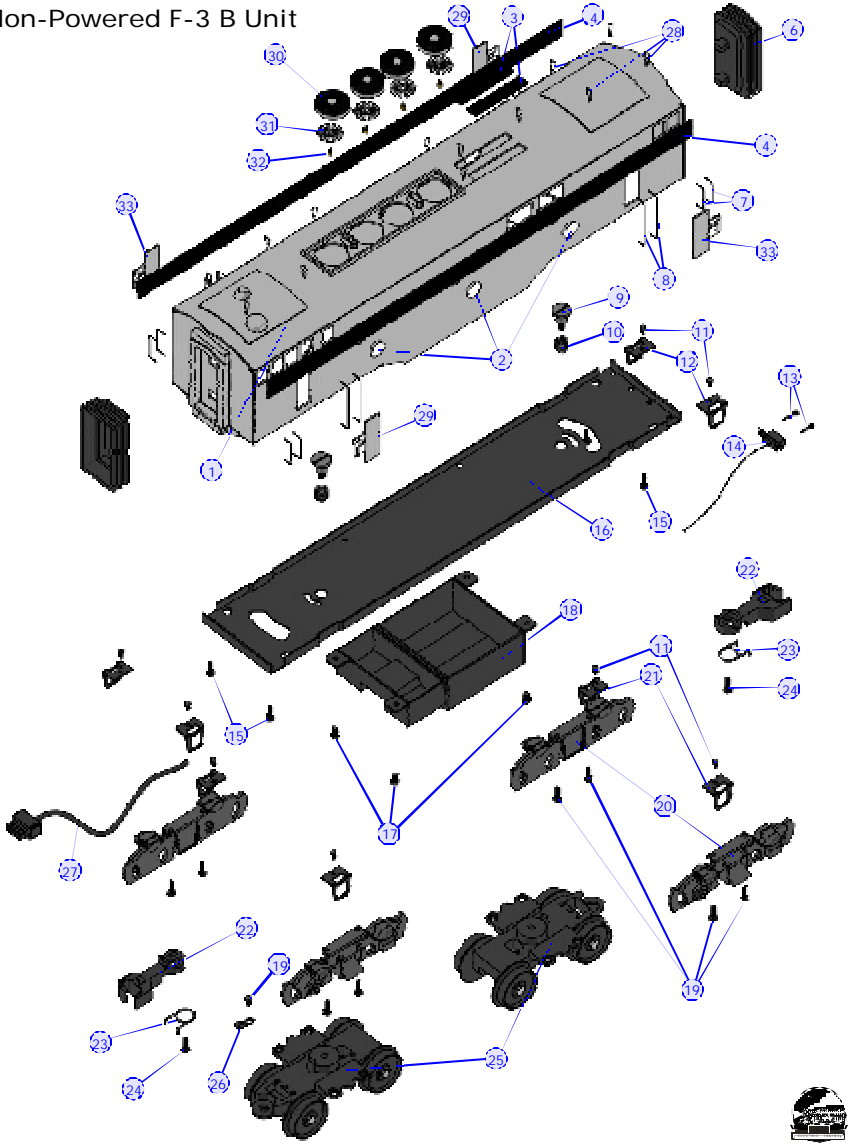
Parts

Name and Number	Part #
25.) Truck block (non-operating) (2 axle)(truck side screws mount from bottom)	DA-2000006
26.) Wire strap	IH-0000012
27.) Wire harness (200.0mm long wires w/ 4 pin female white plug)	BC-0000013
28.) Lift ring (black)	FC-2100189
28.) Lift ring (white)	FC-2100319
28.) Lift ring (dark gray)	FC-2100320
28.) Lift ring (green)(GN)	FC-2100321
28.) Lift ring (blue)	FC-2100322
28.) Lift ring (green)(PRR)	FC-2100323
29.) Door (S.P.) (complete w/ all hardware)(right rear/left front)	FC-2100195
29.) Door (Reading) (complete w/ all hardware)(right rear/left front)	FC-2100196
29.) Door (Southern) (complete w/ all hardware)(right rear/left front)	FC-2100324
29.) Door (NYC) (complete w/ all hardware)(right rear/left front)	FC-2100325
29.) Door (Great Northern) (complete w/ all hardware)(right rear/left front)	FC-2100326
29.) Door (Santa Fe) (complete w/ all hardware)(right rear/left front)	FC-2100327
29.) Door (PRR) (complete w/ all hardware)(right rear/left front)	FC-2100328
30.) Fan shroud (black)	FC-2100169
30.) Fan shroud (white)	FC-2100329
30.) Fan shroud (dark gray)	FC-2100330
30.) Fan shroud (green)(GN)	FC-2100331
30.) Fan shroud (blue)	FC-2100332
30.) Fan shroud (green)(PRR)	FC-2100333
31.) Fan	FC-2100171
32.) Pin (for fan)	FC-2100172
33.) Door (S.P.) (complete w/ all hardware)(right front/left rear)	FC-2100197
33.) Door (Reading) (complete w/ all hardware)(left front/right rear)	FC-2100198
33.) Door (Southern) (complete w/ all hardware)(left front/right rear)	FC-2100334
33.) Door (NYC) (complete w/ all hardware)(left front/right rear)	FC-2100335
33.) Door (Great Northern) (complete w/ all hardware)(left front/right rear)	FC-2100336
33.) Door (Santa Fe) (complete w/ all hardware)(left front/right rear)	FC-2100337
33.) Door (PRR) (complete w/ all hardware)(left front/right rear)	FC-2100338

*Requires Exchange



Ion-Powered F-3 B Unit



O-31 OPERATION

While the F-3 B Unit is more than capable of operating on O-31 curves and switches, you may find that certain light freight cars are prone to derailling when being pulled or pushed by the F-3 B Unit through O-31 switches. Should this occur, we suggest adding weight to the cars making them heavier and less likely to derail.

SERVICE & WARRANTY INFORMATION

HOW TO GET SERVICE UNDER THE TERMS OF THE LIMITED ONE YEAR WARRANTY

For warranty repair, do not return your product to the place of purchase unless it was purchased from Mike's Train House in Columbia, MD. Instead, follow the instructions below to obtain warranty service as our dealer network is not prepared to service the product under the terms of this warranty.

1. First, write, call or FAX MTH Electric Trains, 7020 Columbia Gateway Drive, Columbia, MD 21046, 410-381-2580 (FAX No. 410-423-0009), stating when it was purchased and what seems to be the problem. You will be given a return authorization number to assure that your merchandise will be properly handled upon its receipt.

2. CAUTION: Make sure the product is packed in its original factory packaging including its foam and plastic wrapping material so as to prevent damage to the merchandise. The shipment must be prepaid and we recommend that it be insured. *A cover letter, including your name, address, daytime phone number, sales receipt, and Return Authorization number and a full description of the problem, must be included to facilitate the repairs. Please include the description regardless of whether you discussed the problem with one of our service technicians when contacting MTH for your Return Authorization number.*

3. Please make sure you have followed the instructions carefully before returning any merchandise for service.

LIMITED ONE YEAR WARRANTY

This item 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, if the item is returned to the address below within one year of the original date of purchase. This warranty does not cover items that have been abused or damaged by careless handling. Wear parts such as, light bulbs and pick up rollers are also not covered under this warranty. Transportation costs incurred by the customer are not covered under this warranty.

This warranty gives you specific legal rights and you may have other rights which vary from state to state.

ProtoSounds® is a trademark of MTH Electric Trains. DCRU® is a registered copyright of QS Industries, Inc. Lionel® and Railsound® are registered trademarks of Lionel L.L.C.