



Lighting Kit Instructions Dummy Diesel Units

PLEASE READ BEFORE USE AND SAVE

Contents of Kit

Bag A (wires, lights, and constant voltage board)

- 2 sets of wires (red and black with ring lug connector) **(a)**
- 2 double grain of wheat light bulbs with wire harness/2 pin connector **(b)**
- 2 yellow wire nuts **(c)**
- 1 constant voltage board with red and black wires **(d)**
- 1 double sided foam tape **(dd)**
- 1 mounting screw for the constant voltage board **(e)**
- 1 extension wire with 2 pin connectors (male/female) **(f)**
- 1 wire tie **(t)**
- 1 nut **(u)**
- 1 washer **(v)**

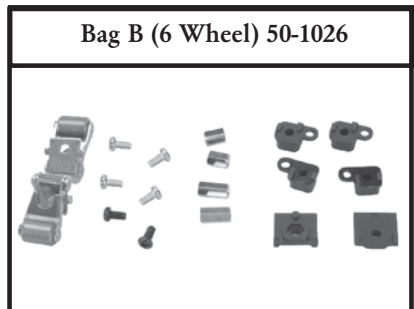


Bag B for 4/6 wheel truck

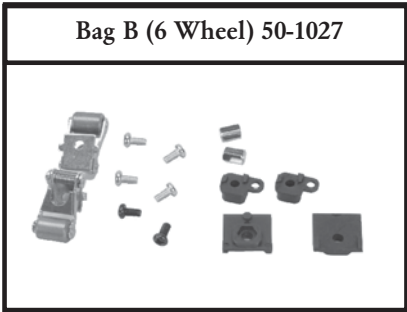
- 2 or 4 pick-up roller assemblies **(g)**
- 0 or 2 pick-up roller insulators **(h)**
- 0 or 2 nuts (short) **(i)**
- 0 or 2 nuts (long) **(j)**
- 4 or 8 pick-up roller mounting screws (nickel plated) **(k)**
- 2 or 4 pick-up roller wire mounting screws (black oxide coated) **(l)**
- 0 or 2 nut insulators (type A) **(m)**
- 0 or 2 nut insulators (type B) **(n)**



OR



Bag B continued



or



or



Bag C (CH-0000046)

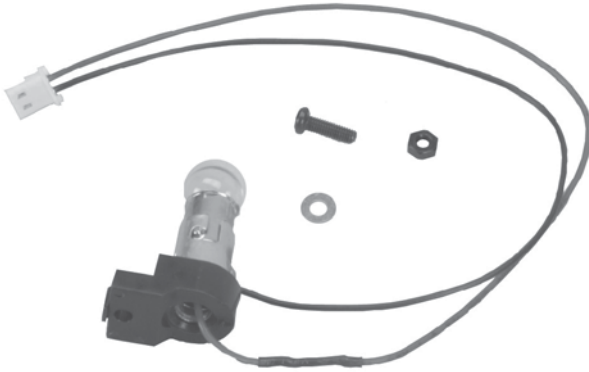
1 bayonet bulb (o)

1 bayonet bulb base with wires and 2 pin connector (p)

1 mounting screw (q)

1 washer (r)

1 nut (s)



Disassembly Instructions

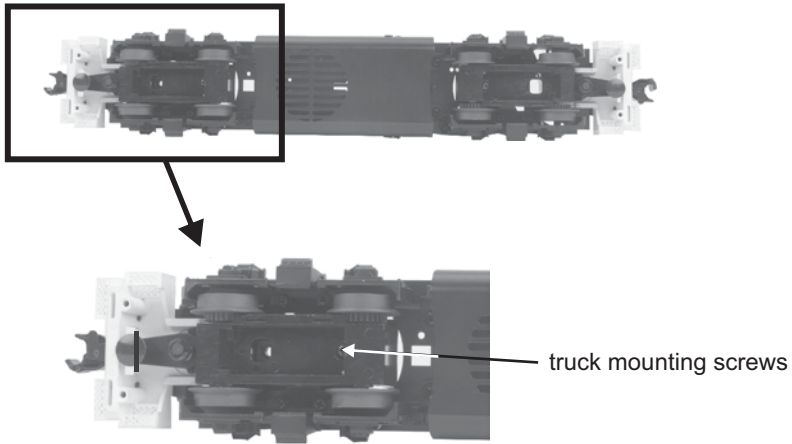
Remove the four, six, or eight body mounting screws holding the body shell to the chassis (reference your powered unit's instructions for more detail on removing the body shell) and save screws.



Example of four body mounting screws

Disassembly Instructions continued

Remove the trucks from the chassis by removing the truck mounting screws located on the bottom of the truck.



Example of truck mounting screws

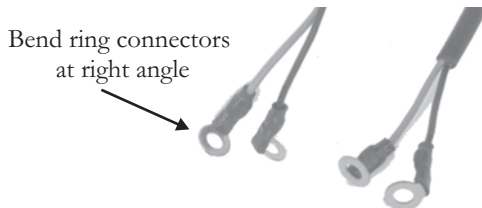
Pick Up Roller Assembly

Select the proper nut length (i or j), nut insulator (m or n), and pick-up roller insulator for the trucks. Note: the nut insulator fits on the top of the truck in one direction only, choose the correct insulator.

Install the pick-up roller insulator (h) onto the bottom side of the truck, place the pick-up roller assembly (g) on insulator (h) and secure using the nickel plated pick-up roller screw (k). Repeat for the second truck.

Reference power unit for specific configuration of truck with pick up roller.

Bend the ring lug connectors on the red/black wires (a) at the right angle as (shown below).

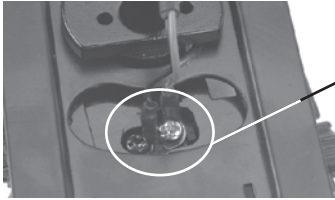


Pick Up Roller Assembly continued

Secure the ring lug connector from Red wire (a) to the pick up roller nut insulator (m or n) at the top of the truck using screw (k). Repeat for the second truck.

Install the black wire ring lug connector on wire (a) to the top of the truck using screw (l). Repeat for the second truck.

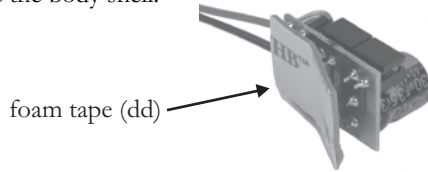
Make sure the ring lug connectors on red and black wires do not touch after installation. (if they touch it will cause a short).



Do Not let wires touch after installation

Constant Voltage Board Installation

Remove the double sided foam tape (dd) from the constant voltage board and save to secure the light bulb wires inside the body shell.



Locate a hole in the chassis frame to secure the constant voltage board (d) using screw (e). Chose the location for the constant voltage (d) carefully so the light bulbs reach the front and rear. If not possible place the constant voltage board near the front so wire (a) or the bayonet base (p) will reach the front light position.

NOTE: Make sure there is no burr at the edge of the hole where the constant voltage board (d) is mounted and remove any metal shavings. If there is a burr, remove it so the burr does not cause a short to the constant voltage board. If there is not a hole, drill a 1/8" diameter hole, deburr the hole, removing any metal shavings, and secure the constant voltage board to the chassis as shown.



Constant Voltage Board Installation continued

Route the red and black wires from the trucks up through the chassis openings above the trucks and reassemble the trucks onto the chassis using the truck mounting screw.

Remove any insulation left on the end of the red and black wires (a) from the truck and the constant voltage board (d) and connect all three red wires together using the yellow wire nut (c). Repeat this procedure to connect all three black wires together using the yellow wire nut (c). Use the wire tie (t) to secure the wires so they are not pinched when reinstalling the body shell.

Lighting Arrangement

Choose the lighting arrangement desired, only one.

Number Boards

Normally, only number board lights are illuminated when double or triple heading diesel locomotives. Use the two double grain of wheat light bulbs with wire harness and 2 pin connector (b) for this purpose. Direct one to the front of the locomotive and one to the rear of the locomotive to illuminate the number boards.

Use the extension wire (f) as needed in longer diesel applications. Note, place the constant voltage board nearer the front so wire (a) or the bayonet base (p) will reach. Use the extension wire to route wires to the rear as desired.

OR

Cab Interior

If you would like to illuminate the cab interior in the front of the engine, use the bayonet base and bulb in the front to illuminate the diesel interior. Often this illuminates the number boards as well. If not use one of the wires with the double grain of wheat bulbs to illuminate the headlight or number boards.

If there is only one headlight in the engine, simple cut one of the grain of wheat bulb/wire off so only one grain of wheat bulb is used. Cut the wires close to the 2 pin connector.

Body Shell Installation

- Cut the foam tape (dd) in half and secure the wires onto the top to the body shell using the foam tape.
- Reinstall the body shell.
- Place the engine on the track and apply power.

Troubleshooting

If the lights go out after some use, turn off power, let the constant voltage board cool for 30 minutes or more. Make sure the regulator on the constant voltage board is flush against the chassis. Tighten the screw as needed to secure the constant voltage board regulator against the chassis. This dissipates heat during operation.

If you have any questions, please contact MTH Service at 410 381-2580 on Monday through Friday between 12 noon and 5 PM EST.

