

OPERATOR'S MANUAL

DR-12-8-1500/2

DIESEL-ELECTRIC LOCOMOTIVE



BALDWIN-LIMA-HAMILTON CORPORATION

PHILADELPHIA, PA.





PRR
BALDWIN
CENTIPEDE
ADDON FOR
Train Simulator
2013



Rolling Stock



PRR CENTIPEDE UNIT A-1

5823-A1 - 5834-A1



PRR CENTIPEDE UNIT A-2

5823-A2 - 5834-A2



PRR B60b BAGGAGE CAR

9200 - 9399



PRR D78d DINING CAR

4470-4474-4475-4478-4486-
4490-4491-4492-4494-4497

OPERATION OF THE LOCOMOTIVE

Key W – Reverser Forward

Key A – Regulator Increase

Key SPACE – Long Horn

Key B – Bell

Key APOSTROPHE – Train Brake Applied

Key RIGHT BRACKET – Engine Brake Applied

Key Z – Engine Start

Key H – Master Headlight Dim

Key S – Reverser Backward

Key D – Regulator Decrease

Key C – Short Horn

Key X – Sander

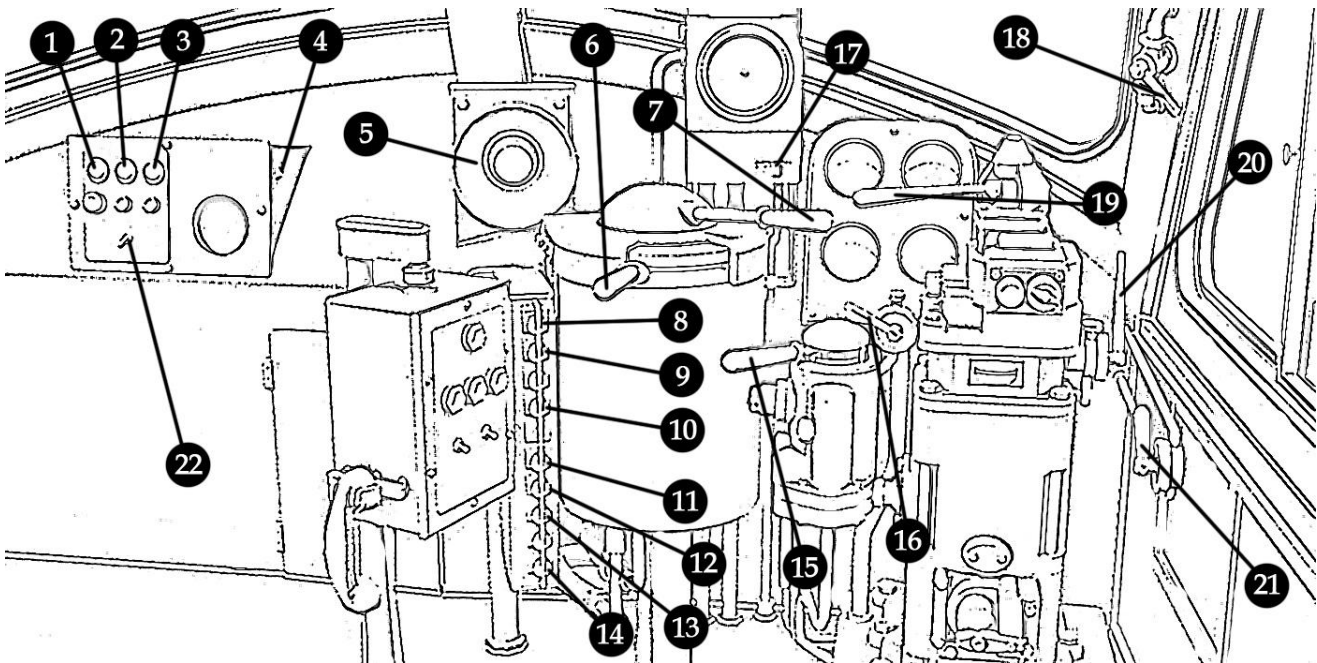
Key SEMI COLON – Train Brake Released

Key LEFT BRACKET – Engine Brake Released

Key V – Wipers

Key J – Extra Bright Headlight

Cab Arrangement Diagram



1.- Wheel Slip Alert.

2.- Overheat Alert.

3.- Low Battery Alert.

4.- Alerts Enable/Disable.

5.- Alert Buzzer.

6.- Reverser.

7.- Throttle Handle.

8.- Battery Supply Switch.

9.- Aux Generator Supply Switch.

10.- Start Engine Switch.

11.- Start Fuel Pump Switch.

12.- Headlight Dim.

13.- Headlight Bright.

14.- Cab Light.

15.- Independent Brake Valve.

16.- Bell Valve.

17.- Instruments Light Switch.

18.- Wipers Valve.

19.- Automatic Brake Valve.

20.- Horn.

21.- Sander Valve.

22.- Alerts Test.

Startup Procedure.

To start the engine you need to do the following steps.

- 1.- Connect the battery. So you get enough energy supply for the fuel pump.
- 2.- Pull the "Fuel Pump Start" button. The pump will turn on.
- 3.- Check the fuel pressure gauge and wait until the pressure reaches 12 psi.
- 4.- Pull the start button for 3-5 seconds. The engine should start.
- 5.- Once the engine is running, pull the button to connect the Aux Generator. If you forget to connect the Aux Generator, the fuel pump, lights and any electric system will be kept running only by the battery.
- 6.- Move the reverser handle, open the throttle lever and release the train brake. Drive the train normally.

Alerts.

Battery: Using the battery, you will get enough power for lights, fuel pump and other systems while the engine is off. Once the engine is running you must connect the aux generator to stop the battery from discharging. If the battery is discharging, you will get an alert signal (light and sound) when the needle indicating the battery's charge reaches the gauge's red zone. When this happens, you will only have power in the battery to last for approximately 2 minutes, just about enough time to connect the Aux Generator. If you ignore the low charge alerts, the battery will reach a point where it won't be able to keep the fuel pump working and the engine will shutdown. At this point your only way out is to re-start the scenario.

Also, note that while the Aux Generator is connected, it will recharge the battery automatically.

Overheat: The engine produces heat whilst running but it is cooled down by the fans and other cooling systems. Also note, tractive effort will have an effect on the engine's temperature, prolonged running of the engine at high power will increase its operating temperature.

The temperature is measured in °C (degrees Celsius). The normal working temperature is between 75 and 100 degrees. Above 120 degrees you will get an overheat alert. If you ignore

this alert, the engine will shutdown automatically if the temperature reaches 130 degrees. If this happens, you should apply the brakes to bring the train to a stop, and wait until the engine cools down. Then, you will be able to start the engine again.

Wheel Slip: You will get an alert if the wheels are slipping. Release sand if needed or reduce the tractive effort.

Warning: The Cold&Dark version has the alarms disabled by default so you must activate them. Consider this operation like an important part of the startup procedure. Additionally, you can test the state of the alarms by clicking on the switch placed below the alarm's red lights; if the system is available the lights will turn on briefly.

Sander: The sander will work while the "X" key is pressed. If you need to keep the sander working permanently, use the mouse to move the lever in cab.

Headlight.

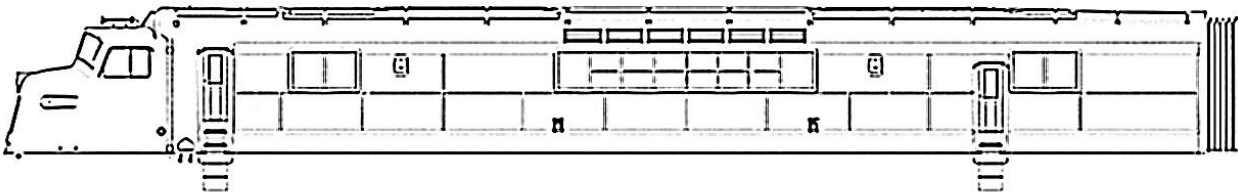
This locomotive has a single headlight with two intensity levels, Dim and Bright. To turn the headlight on you must pull the Headlight Dim Switch, if you need extra intensity, you must pull the Headlight Bright Switch.

If you are using the battery supply to keep the headlight turned on, bear in mind that a bright headlight consumes more energy than a dim headlight and the final intensity will be affected by the amount of power left in the battery. To avoid a quick discharge, use the headlights with the Aux Generator supply when the engine is running.

Locomotive Placement and Names of Units

Baldwin Centipede A(1-2)

Take it from the section of locomotives



Centipede_Front_Wheels

Take it from the section of wagons



Centipede_Rear_Wheels

Take it from the section of wagons
Once placed on tracks, a change of direction is needed.

The diagram shows the names of the three units which form the locomotive.

Gauges Description



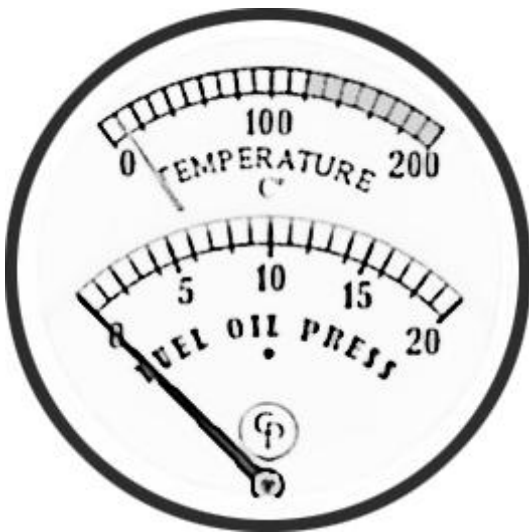
Brake Pipe and Brake Cylinder Pressure



Equalizer and Main Reservoir



Battery Charge and Ammeter



Temperature and Fuel Pressure

SCENARIO DESCRIPTION

1. TESTING THE POWER

May 1947. The first Centipede locomotive has been delivered to the Pennsy. Before entering revenue-earning service, she's got to go through several tests. The first one will take place today, with a consist of 15 passenger coaches. Only company managers and engineers are travelling on this train and a mini-lab has been set in one of the restaurant cars to check the engine's performance. Looks like an interesting day for all those involved in the tests.

This scenario comes in two versions: "Standard" and "Advanced". For "standard" scenario players, the locomotive is up and running for you. For "advanced" engineers, the loco's got to be started following the Baldwin Locomotive Works Manual.

2. LAST TRAIN TO GALLITZIN

November, 1948. It's one of those miserable nights, with horrendous weather, in which one would rather be seating at home next to the fire, or tucked in a nice, warm bed listening to the wind blowing outside. But no, instead you're sat at the controls of a Baldwin Centipede locomotive waiting for the home signal to Johnstown to clear and let your train into the platform, where a few passengers are waiting for their last train of the day. Take care - and don't get a cold with that wind!

3. DOWNHILL COAL

September, 1952. Reliability problems, together with improper (or lack of) maintenance has relegated the Baldwin locomotives to freight work after a short spell in prime mainline passenger workings - maybe too short for a 5 year old locomotive. Our Centipede has the task of taking 20 loaded coal hoppers to Altoona - 1400 Tons of coal! It's been raining the previous night, so the rails are wet and slippery – a challenge even for experienced drivers. Now, anyone mentioned the words 'poor availability'?

This scenario comes in two versions: "Standard" and "Advanced". For "standard" scenario players, the locomotive is up and running for you. For "advanced" engineers, the loco's got to be started following the Baldwin Locomotive Works Manual.

4. YOUR BIRTHDAY, YOUR CHOICE

April, 1952. It's your birthday today, but unfortunately you have to work. Your colleagues have planned a surprise shift for you, previously agreed with the Traction Inspector, of course! Today you'll be able to choose which train you wish to drive, all of them being hauled by one of your favourite locomotives: a Baldwin Centipede. Wondering what all this is about? Don't waste any time, then - they're waiting for you at the Depot.

Three scenarios in one. You have to decide which train you wish to drive, go next to the engine of your choice and "click" it as if it was a free roam scenario. The only difference is that it isn't! Each train has a schedule to follow and there are other trains running along the other lines – and the signals must be obeyed at all times. Once you get to your destination, go back to Altoona and take charge of another train – you have three choices. Enjoy!