

LIONEL SERVICE MANUAL

NO. 497 COALING STATION

No. 497 Coaling Station, introduced in 1953, is designed to be operated in conjunction with No. 3659 and similar dump cars. The Coaling Station is installed in a layout so that two sections of straight track run through the station. The station base is provided with clips to clamp the track in place and to furnish the electrical ground for the station circuits. Ground and power blades, adjustable to either "O" or "027" track height, are provided to make contact with the operating dump car within the station.

The station motor is wound with a double field so that it can be reversed either to elevate the receiving tray to the top of the station where it dumps its load into the overhead storage bin, or to lower it back into place. Note that if the motor is allowed to turn continuously in the direction to lower the tray it will un-

wind the full length of the supporting cords and rewind them on the spools backwards. This will have the effect of reversing the UP and DOWN designations on the controller panel.

The storage bin is provided with a solenoid-and-plunger operated chute which allows the coal to be poured back into the dump car.

As illustrated in the schematic wiring diagram below, current for operating the motor, the dumping solenoid and the power blade for energizing the dump car is supplied through the 497C controller. Since all the circuits are grounded to the outside rail the transformer fixed voltage circuit selected for operating the station must have a common ground with the variable voltage track circuit.

Circuit Diagram of No. 497 Coaling Station

