

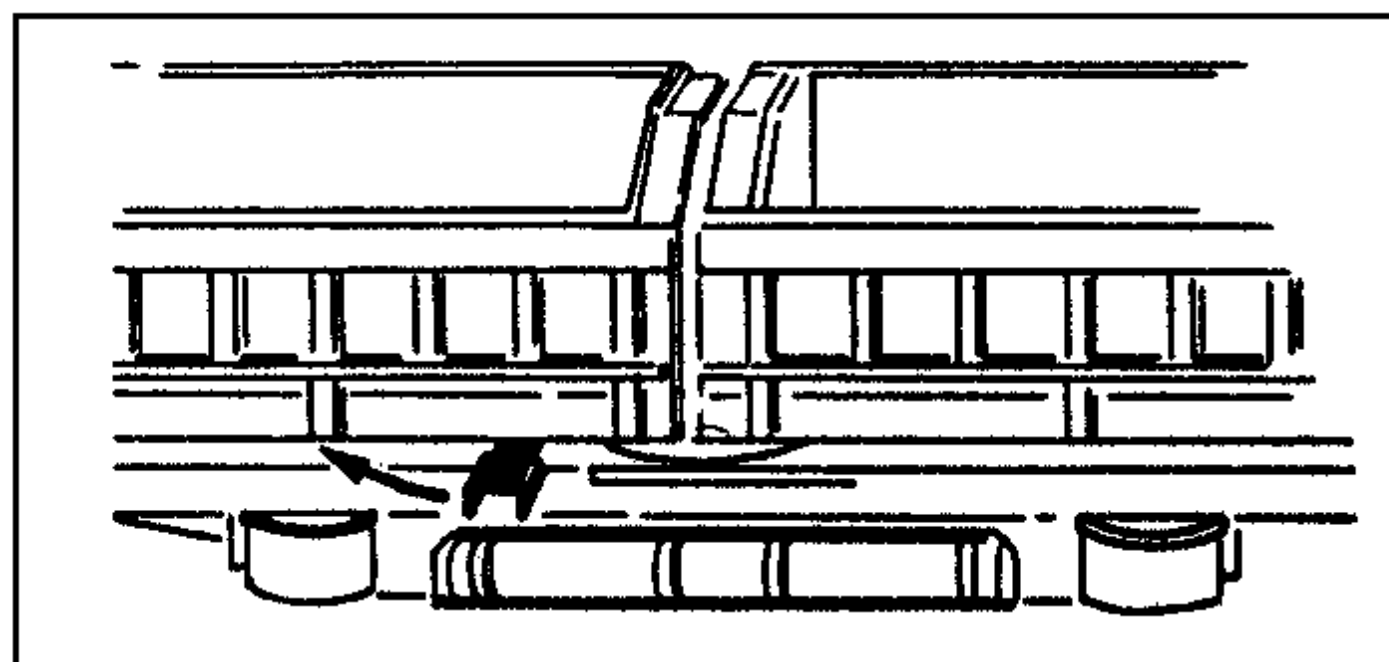
SERVICE MANUAL

NO. 3359 TWIN-BIN DUMP CAR

No. 3359 Twin-Bin Dump Car was first built in 1955 and was designed after the twin body automatic air dump car made by the Magor Car Corporation and used by the City of New York.

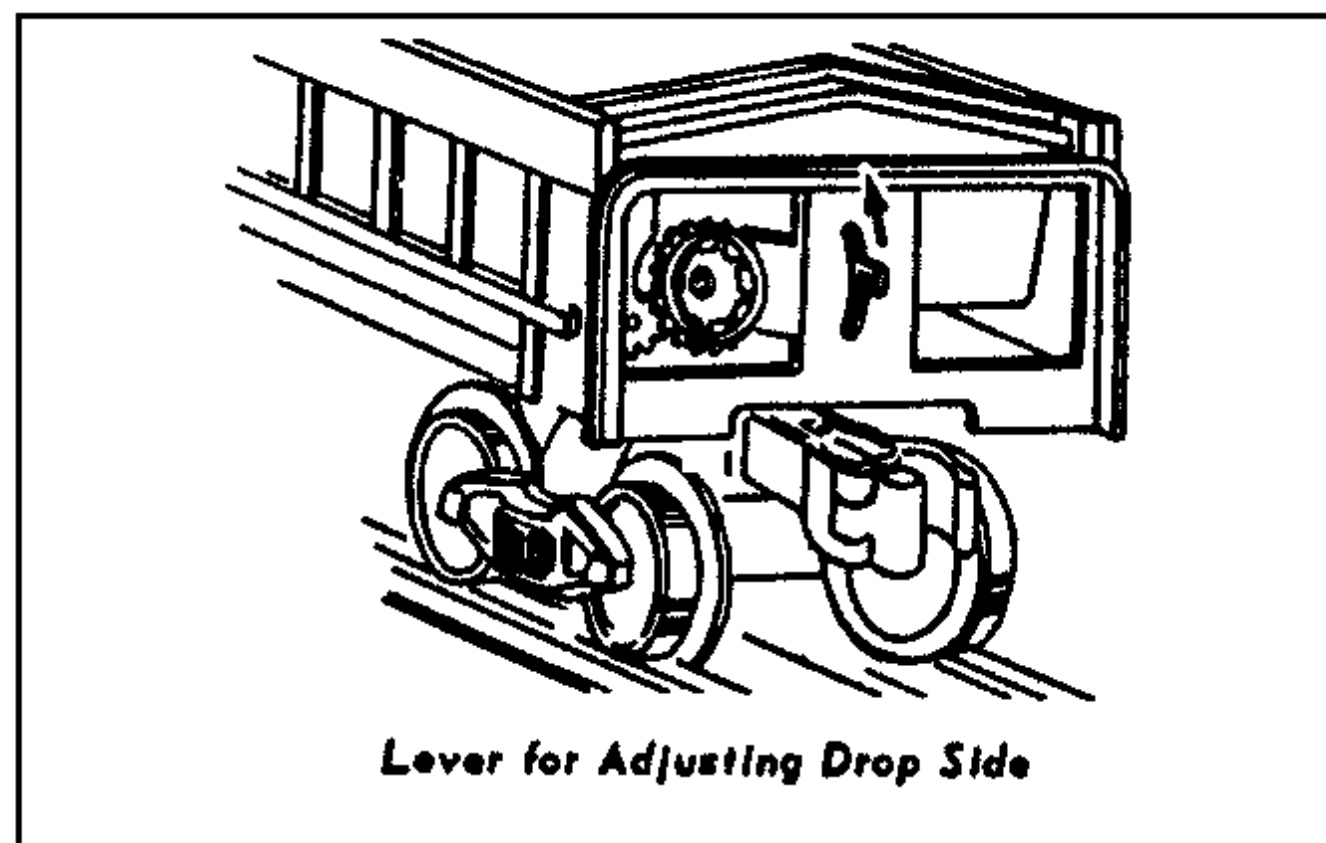
In the Lionel model the two car bins are raised to a dumping position alternately by the rotation of a geared cam which is engaged by a pawl attached to the solenoid plunger. Each time the solenoid coil is energized, the pawl advances the cam by the distance of one gear tooth. The gear totals 16 teeth or steps. Seven steps are required to raise a bin to its maximum height, while the eighth allows the bin to drop down to its normal position. The next eight steps repeat this sequence for the second bin.

Because of its length and manner of use, No. 3359 Dump Car must be operated on a pair of OTC contactors instead of a regular remote control track and its electrical circuit differs from other operating cars in that the "high" side of its solenoid coil is connected to both slide shoes in parallel while the "low" side is grounded directly through the body and wheels of the car. Since this circuit will cause the coil to become energized whenever either slide shoe passes over an electrified control rail, as during an uncoupling operation, a cam-locking lever is provided in the car's underframe to prevent unwanted dumping action. In closed position the latch fits into a slot in the rotating cam and locks it in place. The latch can be engaged only when both bins are in their normal low position.



Location of Cam-Locking Lever

To compensate for minor differences in alignment, the drop sides of the two dumping bins are provided with levers which are used to adjust the setting of the gears which regulate the action of the drop sides. To set them for proper action, the bin is held down in its lowest position and the lever moved upward to bring the drop side up close against the side of the bin. When assembling bin in place first set the lever all the way down to allow maximum adjusting range.



Lever for Adjusting Drop Side

Schematic Diagram of No. 3359 Dump Car

