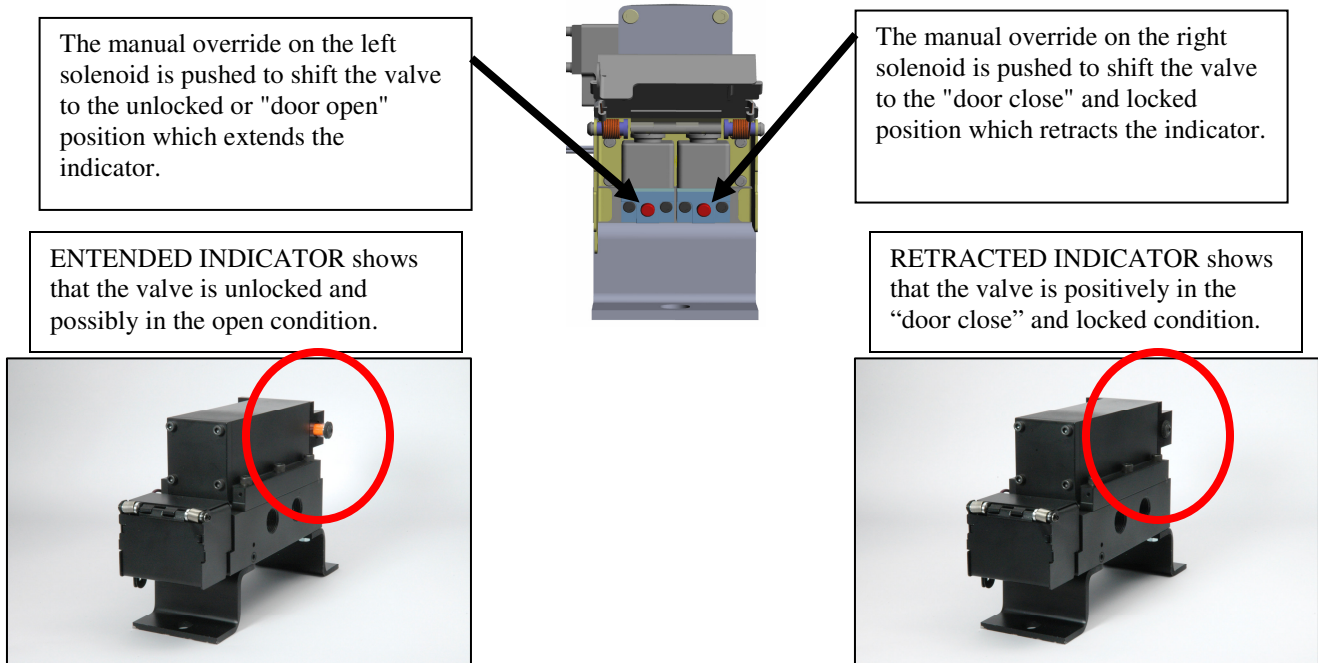


**Lexair, Inc. Second Generation Rail Car Valve
Operating Instructions
for valve part numbers "4415-6xx" and "4415-6xxHP"**

Cars equipped with our second generation valves feature operation as shown below. There are two basic versions of the valve, the "standard opening pressure" model and the patented "safety check" equipped "high opening pressure" model (signified with an "HP" suffix after the part number). The standard models will shift to the unlocked or "door open" position at approximately 25 PSI and the "HP" models will shift to the unlocked or "door open" position at approximately 45 PSI. Either model can be shifted to the "door close" and locked position at about 10-12 PSI. When the indicator is retracted, the valve is mechanically locked in the "door close" position. Only when an electrical signal or a manual signal (as illustrated below) is given can the valve be shifted to the unlocked or "door open" condition which extends the position indicator.

End view of valve with spring loaded
junction box lid raised.



It is suggested that the indicators be checked prior to charging the cars at the power plant before they are to be unloaded to assure that all valves are locked in the "door close" position (indicator retracted). Any valves found with visible indicators means that some inadvertent event has occurred at a pressure insufficient to operate the dump mechanism (such as unintentional contact with a "hot rail, vandalism while setting on a siding, operation by untrained personnel, etc.). Any valve found with the indicator extended can be returned to the locked, "door close" position safely by operating the right solenoid override as described above (with approximately 15 or more PSI in the dump system). With the indicator back in the retracted and locked position, it will now be safe to continue charging of the car. If the indicator does not retract, the car should not be charged with air and the reservoir on the car should be exhausted as well to prevent a possible inadvertent dumping of the car. The valve and door operating mechanism should be examined as soon as possible and the car should not be put back into service until the valve and door mechanism is operating properly. All indicators should be checked to make certain that they are in the retracted ("door close" and locked position) when checking that the doors are locked over center after the car has been emptied and the doors have been closed prior to sending them back to the mine to be re-loaded.