

THE MUNICIPAL TRAMWAYS TRUST, ADELAIDE

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Contents Self Lapping Brake Valve
for Railway Service

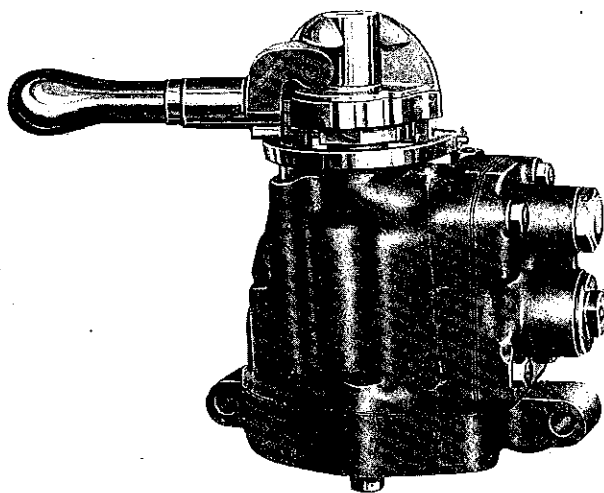
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Agent Westinghouse Brake & Coast.

Address Melbourne

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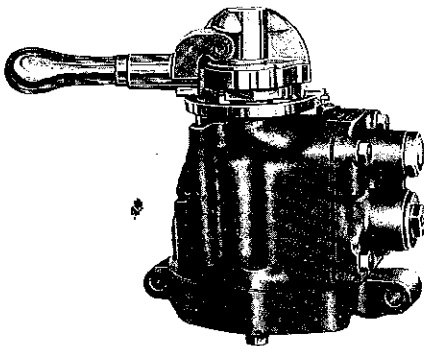
Self-Lapping Brake Valves
for
Traction Railway Service



Self-Lapping Brake Valves for Traction Railway Service

A FAST acting and flexible brake is the best weapon at the command of the street railway car in the relentless combat to retain position in city traffic. To maintain schedules the motorman must be quick on the take off, hold his speed, and keep a jump ahead of other operators to prevent them from closing up ahead and dropping him back.

These acts he can accomplish successfully only if he has a brake that responds instantly to his manipulation, giving him a quick release or just the right degree of retardation that the situation requires and that operates so consistently and smoothly as to impart to him confidence to use it to full advantage. Brake control that produces this remarkable degree of flexibility is made possible by the development of a new self-lapping type of brake valve.



*M-35 Self-Lapping Brake Valve for
Safety Car Control Equipment*

This brake valve automatically cuts off the flow of air when the brake cylinder pressure builds up to an amount corresponding to the brake valve handle position. Service position embraces a 90° arc of handle movement from full release to full service position and brake cylinder pressure obtainable varies directly with the distance the handle is moved through this arc. No fanning of the brake valve handle is required. If lower cylinder pressure is desired the handle is moved to the left; if

greater, to the right—the cylinder pressure immediately falls or rises an amount corresponding to the movement.

Less effort is required to operate this brake valve as no large frictional surface such as a rotary valve is employed; a small beam, operated from a cam on the brake valve stem, is the only element controlled by brake valve handle movement. A slight pressure on the beam, sufficient to upset the latter's balance, is the means of application. The relation between cam and beam is positive—no outside factors can affect it and, therefore, handle movements are always reliable. Consequently, the operator can always "feel" his brake, and his greater confidence in it causes him to take full advantage of the available braking facility.

This greater flexibility makes the fast application and release rates of the self-lapping brake valve entirely practical. Approximate one second application or release, 0-50 pounds, is obtainable on the average car where straight air pipe is not more than 25 feet of half inch iron pipe; where pipe length exceeds this limit the "E" Relay Valve or D-3 Emergency Valve can be employed to handle it in equivalent time.

Self-lapping brake valves are available for all classes of traction service; either hand or foot controlled; with or without emergency and safety features.

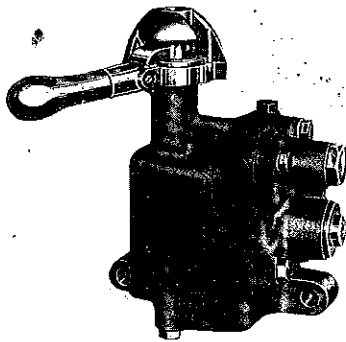


For Safety Car Control Equipment

When used on Safety Car Control Equipment the brake valve is known as the M-35. It includes all the safety features of the rotary type M-28, with or without selector valve for independent door control.

The M-35 has the following handle positions: Release (Doors Closed); Service, which includes a 90° arc up to and including the first notch which is Full Service; Brakes Applied position, in which the full service pressure is retained and the doors opened; Handle Off, in which doors are closed and brake cylinder pressure is equivalent to main reservoir pressure; Emergency, with doors balanced and full main reservoir pressure in brake cylinder.

It is also available with the extra handle position like the M-28-F for treadle control of exit doors.



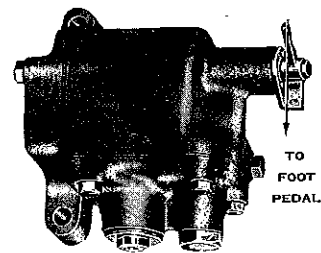
*Straight Air Self-Lapping
Brake Valve*

For Straight Air Brake Equipment

Two classes of self-lapping brake valves are available for straight air brake service. One, for single car operation without emergency feature, has three positions, Release, Service and Handle Off like its predecessors in this class of service. The second, for single car or motor-car trailer train service with emergency feature, is the same as the first except for the addition of a stem operated emergency valve and the fourth handle position, Emergency.

Foot Operated Self-Lapping Brake Valves

All three classes of self-lapping brake valves, described above, may be arranged for mounting underneath the car for foot pedal operation.



*Foot Pedal Operated Self-Lapping
Brake Valve*



Westinghouse Traction Brake Company

Pittsburgh, Pa., U. S. A.

WORKS AT WILMERDING, PA.



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