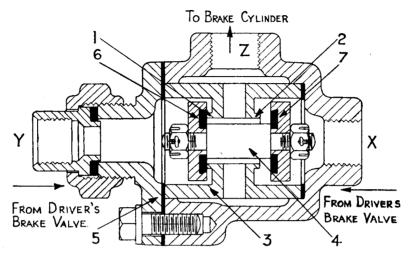


DOUBLE CHECK VALVE. No. 19

Patent Application pending



This double check valve is used on cars having two driving positions, in conjunction with a straight air brake equipment in which the driver's brake valve handle is removable from the brake valves in application position. It is arranged to blank off the pipe from the non-operative brake valve, this pipe being open to main reservoir pressure.

Two valve seats 1 and 2 are formed on the bush 3 and a movable valve, with two rubber seatings on a common stem 4, is arranged to seal on one or other of the seats, depending on the position of the valve.

In the position shown, the boss "X" is connected to the driver's brake valve at the driving end of the car, and boss "Y" to that at the non-driving end. Boss "Z" is in connection with the brake cylinder.

The non-operative brake valve being in the full application position, main reservoir pressure enters at "Y" and holds the valve to the right, sealing on the seat 1. The right hand seat 2 is uncovered, permitting air to flow from the operative brake valve connected at "X" to the brake cylinder pipe connected at "Z."

In changing ends, the handle of the operative brake valve is moved to "handle off" position, which is the full application position, so that the brake is fully applied and the pressures in the three connections to the double check valve are all equal.

When the handle is removed and then placed on the driver's brake valve at the other end of the car, it is moved to release position, so allowing air to exhaust from connection "Y." Then the balance of pressures on the valve moves it over to the left, sealing on seat 2 and allowing brake cylinder air to escape from connection "Z" through the now operative brake valve connected at "Y."

MAINTENANCE. This valve requires very little attention, but should it be necessary to overhaul or clean at any time cover 5 should be removed and bush 3 withdrawn with the valves and stem. Then by unscrewing one of the nuts on the valve stem this can be withdrawn. The whole of the interior should be thoroughly cleaned and the valve seats and the two seatings 6 and 7 examined and replaced if they show signs of deterioration.

MADE IN ENGLAND BY

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