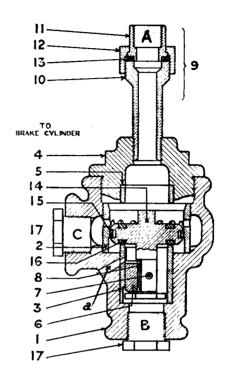


DOUBLE CHECK VALVE

This valve consists essentially of a ring-packed piston 14 operating in a cylindrical bush 2 in the body 1. In the bush 2 are arranged a number of holes which communicate with the connection "C" to the brake cylinder. The piston 14 has in both its faces rubber gaskets 16, which seat at either end of the piston stroke on suitable faces or seats, formed on bushes 3 and 5.

The chamber at the side on which connection "B" is made, is provided with a slide valve 6 which, in the position shown in the illustration, uncovers a small port "a" leading from this chamber to atmosphere. This vent to atmosphere is provided so that when air is admitted to the chamber on the opposite side of the piston 14, any leakage past the valve seat, or any leakage into the pipe connection at "B," will pass to atmosphere, thereby preventing pressure being built up on the slide valve side of the piston. This ensures that when the brake is applied from the source connected at "A," there will be no possibility of a failure to release, owing to air pressure on the other side of the check valve forcing piston 14 over to seat 5, thereby locking-up in the brake cylinder air under pressure.



The action of the valve is as follows:-

When air under pressure is supplied through connection "A" at one end of the valve, the piston 14 is forced to its seat to the right, as shown, blanking off connection "B" while permitting the air from connection "A" to flow to the brake cylinder through the holes in bush 2 and connection "C." Should air be first supplied through connection "B," the piston will move to the left and seal off connection "A," the atmospheric port "a" being then covered by the slide valve 6.

MAINTENANCE INSTRUCTIONS

The valve should be cleaned and lubricated periodically. The piston bush 2 should be evenly covered with a little good oil, and the piston worked backwards and forwards several times. There should be no free oil left on the parts. After thoroughly cleaning the slide valve and seat, rub in a little good oil, working the valve backwards and forwards several times. Any good (not very thick) type of oil can be used, but there should be no free oil left on any of the surfaces. Replace any seats 16 which are defective. Make sure that the vent hole is quite free.

THE WESTINGHOUSE BRAKE & SAXBY SIGNAL CO LTD.

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