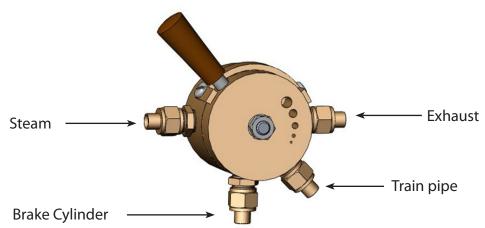


## PNR 10K - Combined Steam / Vacuum Brake Valve 5" - 7¼" PNR 10L - Combined Steam / Vacuum Brake Valve 7¼" - 10¼" Assembly Instructions

This valve allows the operation of a locomotive steam brake and application of the train vacuum brake with the same control handle. The first movement of the handle starts to admit air to the train pipe through the graduated size holes. At about the halfway position, steam starts to be admitted to the locomotive brake cylinder. With the handle fully over vacuum and steam brakes are applied at their maximum.

Two holes tapped 3mm are provided on the back of the valve to facilitate mounting. It is advisable to occasionally ease the vacuum valve disc front face away from the body and apply a small amount of oil between the disc and body, this will aid in sealing the valve and help prevent scoring of the faces.



The diagram above applies to both sizes of valve and shows the functions of the ports. The smaller valves union nuts and nipples take ½2″ pipe and the larger valves fittings take ¾6″ pipe. Appropriate fittings are supplied with each valve, nipples should be silver soldered to pipes. Should the valve require maintenance contact PNP Railways.

## **IMPORTANT**

Please note these valves are designed to work with a steam ejector generated vacuum only, the lap function (holding a partial brake application) is achieved by allowing the steam ejector to continue drawing a vacuum against the variable air bleed the valve allows into the train pipe. The valves should never be used in conjunction with a vacuum generated by an electric pump as damage to the pump or motor could occur.

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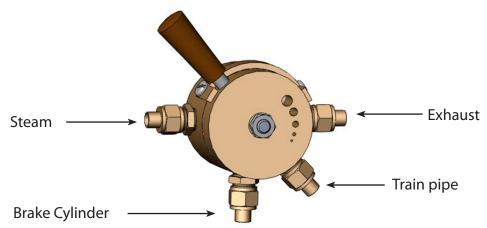
Website: www.pnp-railways.co.uk Tel: 01453 833388



## PNR 10K - Combined Steam / Vacuum Brake Valve 5" - 7¼" PNR 10L - Combined Steam / Vacuum Brake Valve 7¼" - 10¼" Assembly Instructions

This valve allows the operation of a locomotive steam brake and application of the train vacuum brake with the same control handle. The first movement of the handle starts to admit air to the train pipe through the graduated size holes. At about the halfway position, steam starts to be admitted to the locomotive brake cylinder. With the handle fully over vacuum and steam brakes are applied at their maximum.

Two holes tapped 3mm are provided on the back of the valve to facilitate mounting. It is advisable to occasionally ease the vacuum valve disc front face away from the body and apply a small amount of oil between the disc and body, this will aid in sealing the valve and help prevent scoring of the faces.



The diagram above applies to both sizes of valve and shows the functions of the ports. The smaller valves union nuts and nipples take  $\frac{5}{32}$ " pipe and the larger valves fittings take  $\frac{3}{16}$ " pipe. Appropriate fittings are supplied with each valve, nipples should be silver soldered to pipes. Should the valve require maintenance contact PNP Railways.

## **IMPORTANT**

Please note these valves are designed to work with a steam ejector generated vacuum only, the lap function (holding a partial brake application) is achieved by allowing the steam ejector to continue drawing a vacuum against the variable air bleed the valve allows into the train pipe. The valves should never be used in conjunction with a vacuum generated by an electric pump as damage to the pump or motor could occur.

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