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SAFETY

These instructions contain essential health and safety requirements concerning the safe use of the equipment.

1. For the intended purpose that was specified to WVC, e.g. location, pressure, temperature, fluid, etc.
2. When installed, operated, maintained, etc. in accordance with these instructions.

Failure to comply with these points in their entirety involves serious risk.

The manufacturer of this valve is:

WEIR VALVES & CONTROLS Ltd,
Britannia House,
Huddersfield Rd, Elland,
West Yorkshire,
HX5 9JR.
England.

SAFETY WARNINGS:

Be aware of Hot surfaces.
Electrically isolate actuator before adjustment or maintenance to valve.
Valve must be depressurised before adjustment or maintenance.

Please refer to Weir Valves & Controls UK Ltd Publications 'SAFETY WITH VALVES' and 'SAFETY WITH ELECTRIC ACTUATORS' for general principles on installation, operation and

maintenance. However, in all cases these Operating and Maintenance Instructions supersede any alternative information that may be given in, for example non-specific catalogues or the above mentioned general safety publications.

At all times the valve must be maintained to a safe condition and any damaged or worn parts must be replaced with the correct parts supplied by Weir Valves & Controls UK Ltd.

Users are strongly recommended to avail themselves of the training courses that can be provided by Weir Valves & Controls UK Ltd.

We recommend that a record is kept of all work done to this equipment, including its operating history.

If in doubt ask.

OPERATION

The operation of the Combined stop & Non Return valves which is one directional only is the valve remains shut when the spindle is wound down to the shut position but the valve will start to open when the spindle is wound to the open position provided that the pressure on the inlet or underneath side of the valve head is greater than the pressure outlet or the topside of the valve head.

If the pressure is greater on the outlet side or top side of the valve head then the valve head will remain shut.

Note: It is important that the valves are installed with the spindle vertical.

DISASSEMBLY

1. Make sure there is NO pressure in the pipeline and the valve is safe to work on.
2. Open the valve to the half way position
3. Remove the bonnet nuts and washers
4. Mark the cover and body so that during re-assembly correct location is assured
5. Carefully lift out the top assembly
6. Remove the valve guide

7. Remove the valve head
8. Examine valve head and seat for any signs of damage or wear.

EXAMINATION AND COURSE OF ACTION

Visual inspection of the joint faces on the body, bonnet and gasket will reveal any major defects immediately, such as steam erosion marks etc.

Lap the valve head and seat independently as described in Weir Valves & Controls Publication Maintenance of Valves and Seats. IOM-P1-R1

The bonnet may be machined in a lathe if it is badly damaged, provided that the correct joint face angle be maintained. The face can be polished using fine emery cloth.

Thoroughly clean all joint faces. Do not lubricate them in any way, as carbonisation of grease or oil could cause serious leakage by preventing correct contact.

MAINTENANCE OF VALVE DISC AND SEAT FACES

The discs and seats must be lapped independently. No satisfactory result can be obtained by attempting to lap the valve disc directly on to its seat. Suitable lapping plates for the seats can be supplied by us; alternatively, they can be readily manufactured in cast iron.

Notes on lapping procedures are contained in WVC Publication: IOM-P1-R1 Maintenance of Valves and Seats.

ASSEMBLY

1. Ensure all parts are clean and all lapping compound removed
2. Carefully replace the valve head centrally on the seat
3. Replace the valve guide
4. Fit new bonnet joint gasket
5. Replace top assembly making sure that the spindle is in the half open position
6. Replace bonnet washer and nuts taking care progressively to tighten alternative fasteners.

Packing of Stuffing Boxes

Should the stuffing box require extra packing refer to WV&C Publication: IOM-P2-RO.

Lubrication

For recommended lubricants refer to WV&C Publication IOM-G3-R0 Lubrication of Valves.

Gearbox Feature

Certain valves of this type feature gearing for manual operation; refer to Publication. IOM-G4-R0. Gear Boxes Fitted to Valves.