

SB UNDERGROUND AIR VALVE SYSTEM

SAFETY RECOMMENDATIONS

1. Know and understand the product before installing and maintenance work. Always use the correct personal safety equipment.
2. Due caution is required for assembly extraction from and insertion into the Valve Box.
3. Be careful not to catch body parts or clothing during assembly extraction and insertion.
4. When working near the Valve Box, be careful not to drop objects into the Valve Box - e.g. tools, mobile phones, debris etc.

VERY IMPORTANT: Do not attempt to turn or release the assembly before you have closed the shut-off disc valve (see step #1 in the section below "Removal of air valve assembly...") and released pressure (see step #2 in the section below "Removal of air valve assembly...")

INSTALLATION

1. The SB Underground Air Valve System is connected to the main line. There is no need to install a separate isolating valve at the connection from the main to the SB unit. The unit includes its own isolating sliding disc valve. Please refer to the full SB Underground Air Valve System IOM Manual for detailed directions on proper installation of the unit.
2. IOM Manuals for the specific air valves in the unit are obtained separately.

OPERATING INSTRUCTIONS – Underground Air Valve (General)

Initial operation

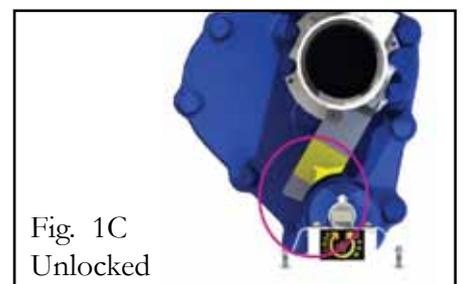
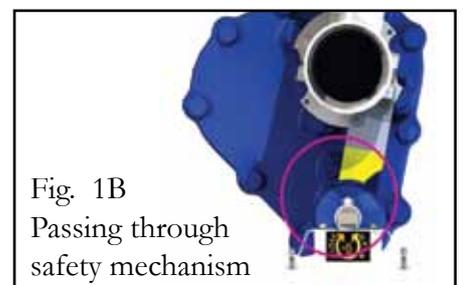
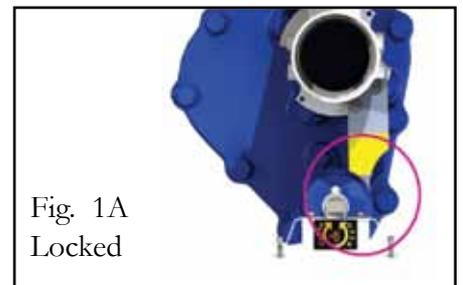
1. Make sure that the Air Valve Assembly is in the locked position (the yellow indicator plate is positioned to the right of the gear box) - see Fig. 1A. Locking is carried out by rotating the Air Valve Assembly in a counterclockwise direction.
2. Close the Pressure Release Valve (Fig. 3 #4).
3. Close the 1½" Ball Valve (Fig. 3 #2) on the backwash assembly.
4. Open the disc valve (Fig. 3 #9) by fully turning the Operator Rod (Fig. 3 #3) in a counterclockwise direction

Removal of the Air Valve Assembly from the Valve Box for air valve maintenance

1. Close the Disk Valve (Fig. 3 #8) by attaching the "T" Key (Fig. 3 #11) to the upper end of the Operator Rod (Fig. 3 #3) and fully turning in a clockwise direction.
2. Open the Pressure Release Valve (Fig. 3 #4).
3. Open the 1½" Ball Valve (Fig. 3 #2) on the backwash assembly.
4. Slide the "T" Key (Fig. 3 #11) on the stainless steel handle of the assembly until it locks in place (See Fig. 2).
5. Unlock the Air Valve Assembly by rotating the "T" Key and Air Valve Assembly in a clockwise direction - see Fig. 1B, 1C.
6. Lift and remove the Air Valve Assembly from the valve box housing (Fig. 3 #5).
7. Perform maintenance on the air valve (Refer to the specific air valve maintenance manual).

Return the air valve assembly to the Valve Box

1. Before beginning – grease well the O-Rings on the Adapter (Fig. 3 #8).
2. Insert the Air Valve Assembly into the Disc Valve (Fig. 3 #9).
3. Lock the Air Valve Assembly into the Disc Valve by rotating the "T" Key (Fig. 3 #11) and Air Valve Assembly in a counterclockwise direction - see Fig. 1B, 1A
4. Continue by following instructions for - Initial Operation.



PARTS LIST

No. Part

1. Valve Box Cover
2. Ball Valve 1½"
3. Operator Rod
4. Pressure Release Valve
5. Valve Box
6. Back Flushing Assembly
7. Adaptor - Quick Connector
8. O-Rings
9. Disc Valve
10. Flange
11. "T" Key

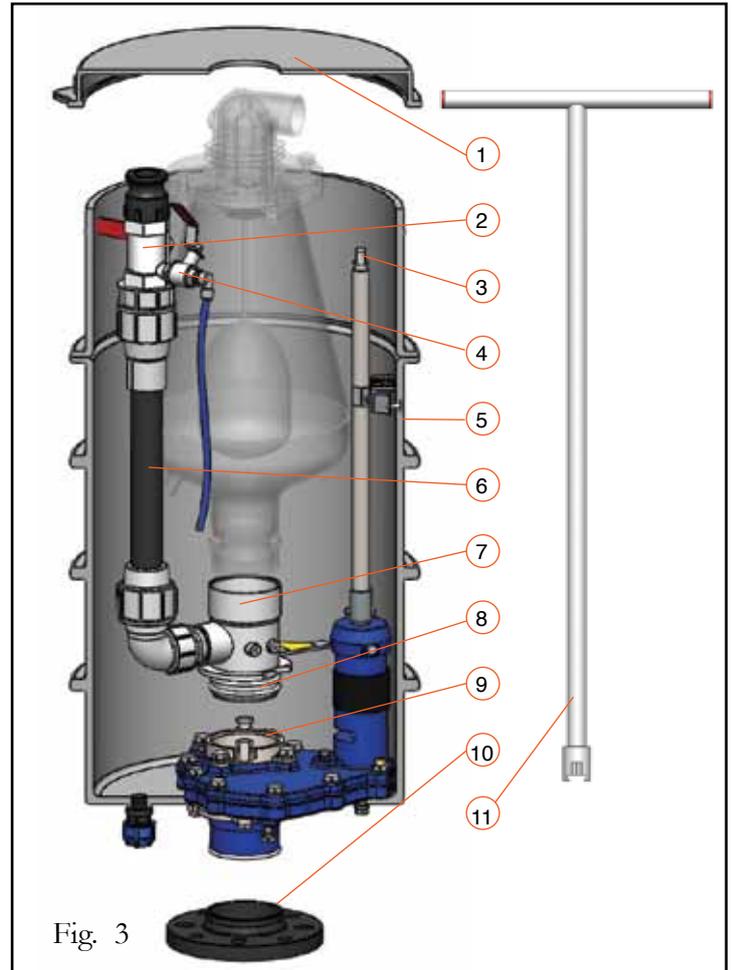


Fig. 3

TROUBLESHOOTING GUIDE

PROBLEM	REASON	SOLUTION
1. The Air Valve Assembly can't be removed from the Disc Valve	Mechanical interference	<ol style="list-style-type: none"> 1. Rotate the Air Valve Assembly counterclockwise to the locked position (Fig. 1A) 2. Make sure that the Disc Valve is in the closed position (Fig. 3 #9) 3. Release Pressure: <ol style="list-style-type: none"> 3.1. Open the Pressure Release Valve (Fig. 3 #4). 3.2. Open the 1½" ball valve (Fig. 3 #2). 4. Rotate the air valve assembly clockwise to the open position - see Fig. 1B, 1C.
2. When opening the Ball Valve, water continues to flow through the back flush assembly.	The Disc Valve is not fully closed or has debris.	<ol style="list-style-type: none"> 1. Make sure the back flush Ball Valve (Fig. 3 #2) is closed 2. Fully open then, fully close the Disc Valve (Fig. 3 #9)
3. The air valve continuously leaks water with the opening of the Disc Valve	Air valve malfunction	<ol style="list-style-type: none"> 1. Follow Operating Instructions for "Removal of the Air Valve Assembly from the Valve Box housing" 2. Maintain the air valve (See specific air valve maintenance manual)

