These valves have been lubricated for life during manufacture and as such require no further lubrication.

**Manual override operation (Fig 5)**

- **Exercise EXTREME CAUTION** when operating a solenoid manual override, as connected equipment will commence operation.
- Ensure all safety measures are in place.

**Installation and Maintenance Manual**

Series VS1000 5 Port Metal Seal Type Solenoid Valves

For future reference, please keep this manual in a safe place.

---

**Safety Instructions**

These safety instructions are intended to prevent a hazardous situation and/or equipment damage. These instructions indicate the level of potential hazardous label of “CAUTION”, “Warning” or “Danger”.

1. Ensure safety, be sure to observe ISO 4414, JIS B 8370 and other safety practices.

2. Only trained personnel should perform operation and maintenance of this equipment.

3. Do not service machine/equipment or attempt to remove component until safety is confirmed.

4. Contact SMC if the product is to be used in any of the following conditions:
   - Conditions and environments beyond the given specifications, if product is used outdoors.
   - Installations in conjunction with atomic energy, railway, air navigation, vehicles, medical equipment, food and beverages, recreation equipment, emergency stop circuits, press applications, or safety equipment.
   - Any application which has the possibility of having negative effects on people, property, or animals, requiring special safety analysis.

**WARNING**

1. The compatibility of pneumatic equipment is the responsibility of the person who designs the pneumatic system or decides its specifications.

2. Since the products specified here are used in serious operating conditions, their compatibility for the specific pneumatic system must be based on specifications or after analysis and/or tests to meet your specific requirements.

**Valve Specifications**

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Material</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Terminal board</td>
<td>Steel</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Terminal board</td>
<td>Steel</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Terminal board</td>
<td>Steel</td>
<td></td>
</tr>
</tbody>
</table>

**CAUTION**

Ensure that the air supply system is filtered to 5 micron.

**Electrical connection**

**WARNING**

Use air and electric power supplies before commencing any maintenance work.

- The ingress of carbon and oil present in the air supply (mostly from the compressor) into the valve can sometimes lead to increased resistance between the screw and sleeve. In extreme case it can lead to the screw adhering to the valve. Therefore it is important to check the quality of the air filter.

- When equipment is to be removed, confirm the safety procedure before removing the component until safety is confirmed.

**CAUTION**

Ensure that all electrical power supplies are isolated before commencing any maintenance work.

- Ensure all air and power supplies are ISO-LATED before commencing installation.

**WARNING**

Do not install these valves in explosive atmospheres.

**Installation**

1. Insert a small-bladed screwdriver into the slot.
2. Turn the override through 90° (ON position).
3. Remove screwdriver.

**Operator error could result in serious injury or loss of life.**