

Installation & Maintenance Instructions

2-WAY DIRECT-ACTING SOLENOID VALVES
NORMALLY CLOSED OR NORMALLY OPEN OPERATION
3/8", 1/2", OR 3/4" NPT – STEAM SERVICE

SERIES

8267

Form No.V5338R3

NOTICE: See separate solenoid installation and maintenance instructions for information on: Wiring, Solenoid Temperature, Causes of Improper Operation, Coil or Solenoid Replacement.

DESCRIPTION

Series 8267 valves are 2-way normally closed or normally open direct-acting solenoid valves. These valves are designed for steam service. The guillotine-type disc provides straight through flow, minimizing pressure drop and turbulence through the valve. Series 8267 valves may be provided with a general purpose, raintight/explosionproof or raintight/watertight/explosionproof solenoid enclosure.

OPERATION

Normally Closed: Valve is closed when solenoid is De-energized; open when energized.

Normally Open: Valve is open when solenoid is De-energized; closed when energized.

Note: No minimum operating pressure differential required. See nameplate for maximum.

INSTALLATION

Check nameplate for correct catalog number, pressure, voltage, frequency, and service. Never apply incompatible fluids or exceed pressure rating of the valve. Installation and valve maintenance to be performed by qualified personnel.

Future Service Considerations

Provision should be made for performing seat leakage, external leakage, and operational tests on the valve with a nonhazardous, noncombustible fluid after disassembly and reassembly.

Temperature Limitations

For maximum valve ambient and fluid temperatures, refer to chart above. Check catalog number on nameplate to determine maximum temperatures.

Catalog Number	Coil Insulation Class	Maximum Ambient Temp.	Maximum Fluid Temp.
8267A1 8267A5 8267A9 8267A13 HT8267B9 HT8267B13	H	104°F (40°C)	320°F (160°C)
8267A3 8267A7 8267A11 8267A15 HT8267B3 HT8267B11	H	104°F (40°C)	280°F (138°C)
FT8267A11, FT8267A1104974	F	104°F (40°C)	190°F (88°C)
8267B7 8267B15	F	86°F (33°C)	250°F (121°C)
8267B3 8267B11	F	86°F (33°C)	280°F (138°C)
8267G1 8267G5 8267G9 8267G13	H	125°F (51.7°C)	320°F (160°C)
8267G3 8267G11	H	125°F (51.7°C)	274°F (134°C)
8267G7 8267G15	H	125°F (51.7°C)	250°F (121°C)

Positioning

Valve must be mounted with solenoid vertical and upright.

Piping

Connect piping to valve according to markings on valve body. Apply pipe compound sparingly to male pipe threads only. If applied to valve threads the compound may enter the valve and cause operational difficulty. Avoid pipe strain by properly supporting and aligning piping. When tightening the pipe, do not use valve or solenoid as a lever. Locate wrenches applied to valve body or piping as close as possible to connection point.

⚠ CAUTION: To protect the solenoid valve, install a strainer or filter, suitable for the service involved, in the inlet side as close to the valve as possible. Clean periodically depending on service conditions. See ASCO Series 8600, 8601, and 8602 for strainers.

MAINTENANCE

▲ WARNING: To prevent the possibility death, serious injury or property damage, turn off electrical power, depressurize valve, and vent fluid to a safe area before servicing the valve.

NOTE: Piping must be removed from inlet side of valve body.

Cleaning

All solenoid valves should be cleaned periodically. The time between cleanings will vary depending on the medium and service conditions. In general, if the voltage to the coil is correct, sluggish valve operation, excessive noise or leakage will indicate that cleaning is required. In the extreme case, faulty valve operation will occur and the valve may fail to open or close. Clean valve strainer or filter when cleaning the valve.

Preventive Maintenance

1. Keep the medium flowing through the valve as free from dirt and foreign material as possible.
2. While in service, the valve should be operated at least once a month to insure proper opening and closing.
3. Depending on the medium and service conditions, periodic inspection of internal valve parts for damage or excessive wear is recommended. Thoroughly clean all parts. If parts are worn or damaged, install a complete ASCO Rebuild Kit.

Causes of Improper Operation

1. **Incorrect Pressure:** Check valve pressure. Pressure to valve must be within range specified on nameplate.
2. **Excessive Leakage:** Disassemble valve and clean all parts. If parts are worn or damaged, install a complete ASCO Rebuild Kit.

Valve Disassembly (Refer to Figure 1 & 2)

1. Disassemble valve in an orderly fashion. Use exploded views for identification and placement of parts.
2. Remove solenoid, see separate instructions.
3. Unscrew solenoid base sub-assembly from valve body.
4. Remove pipe adapter screws and lockwashers (2). Then remove pipe adapter, adapter gasket, disc spring, and disc guide from valve body.
5. Slip core/disc sub-assembly with retainer guide sub-assembly and core spring from valve body
6. Remove solenoid base gasket from valve body.
7. Remove valve seat with seat gasket from valve body.

▲ CAUTION: During removal for cleaning, do not damage seating surface of valve seat (see Figure 1&2).

NOTE: If seat removal is difficult, remove valve body from pipe line and dislodge seat through valve outlet. Use a wooden dowel or similar tool.

8. All parts are now accessible to clean or replace. If parts are worn or damaged, install a complete ASCO Rebuild Kit.

Valve Reassembly

1. Lubricate seat gasket with DOW CORNING® 111 compound lubricant or with an equivalent high-grade silicone grease. Then install seat gasket in groove of valve seat.
2. Insert valve seat gasket end first into valve body. Use a rubber tool to prevent damage to the *seating surface* of the valve seat. Apply pressure until valve seat bottoms in valve body.

NOTE: When installing a valve seat in a 3/4" NPT valve (see Figure 2) the elongated hole in the seat must be aligned horizontal to mate with the hole in the core/disc sub-assembly.

3. Install core/disc sub-assembly with sharp edge of hole in core/disc sub-assembly toward valve seat.
4. Install disc guide large diameter end first into valve body. Then position disc spring on disc guide.
5. Lubricate solenoid base gasket and adapter gasket with DOW CORNING® 200 Fluid lubricant or with an equivalent high-grade silicone fluid.
6. Position adapter gasket on pipe adapter.
7. Install pipe adapter with gasket on valve body.

▲ CAUTION: Align pipe adapter evenly with valve body to avoid damage to adapter gasket

8. Holding the pipe adapter in alignment, replace screws with lockwashers (lockwashers use on 3/4" NPT valves only). Torque screws evenly to 95 ± 10 in-lbs [$10,5 \pm 1,1$ Nm].
9. Position solenoid base gasket in valve body.
10. Install core spring small end first into the top of the core/disc sub-assembly. Then install retainer/guide sub-assembly.
11. For 3/4" NPT Valves with a raintight /explosionproof or raintight/watertight/explosionproof solenoid enclosure, torque bonnet adapter to 175 ± 25 in-lbs [$19,8 \pm 2,8$ Nm].
12. Install solenoid base sub-assembly into valve body. Torque solenoid base sub-assembly to 300 ± 30 in-lbs [$33,9 \pm 3,4$ Nm].
13. Replace solenoid (see separate instructions) and make electrical hookup.
14. Makeup piping to inlet side of valve body.

▲ WARNING: To prevent the possibility of death, serious injury or property damage, check valve for proper operation before returning to service. Also perform internal seat and external leakage tests with a nonhazardous, noncombustible fluid.

15. Restore line pressure and electrical power supply to valve.
16. After maintenance is completed, operate the valve a few times to be sure of proper operation. A metallic "click" signifies the solenoid is operating.

**ORDERING INFORMATION FOR
ASCO REBUILD KITS**

Parts marked with an asterisk (*) in the exploded view are supplied in Rebuild Kits.

- When Ordering Rebuild Kits for ASCO valves, order the Rebuild Kit number stamped on the valve nameplate. +
- +If the number of the kit is not visible, order by indicating the number of kits required, and the Catalog Number and Serial Number of the valve(s) for which they are intended.

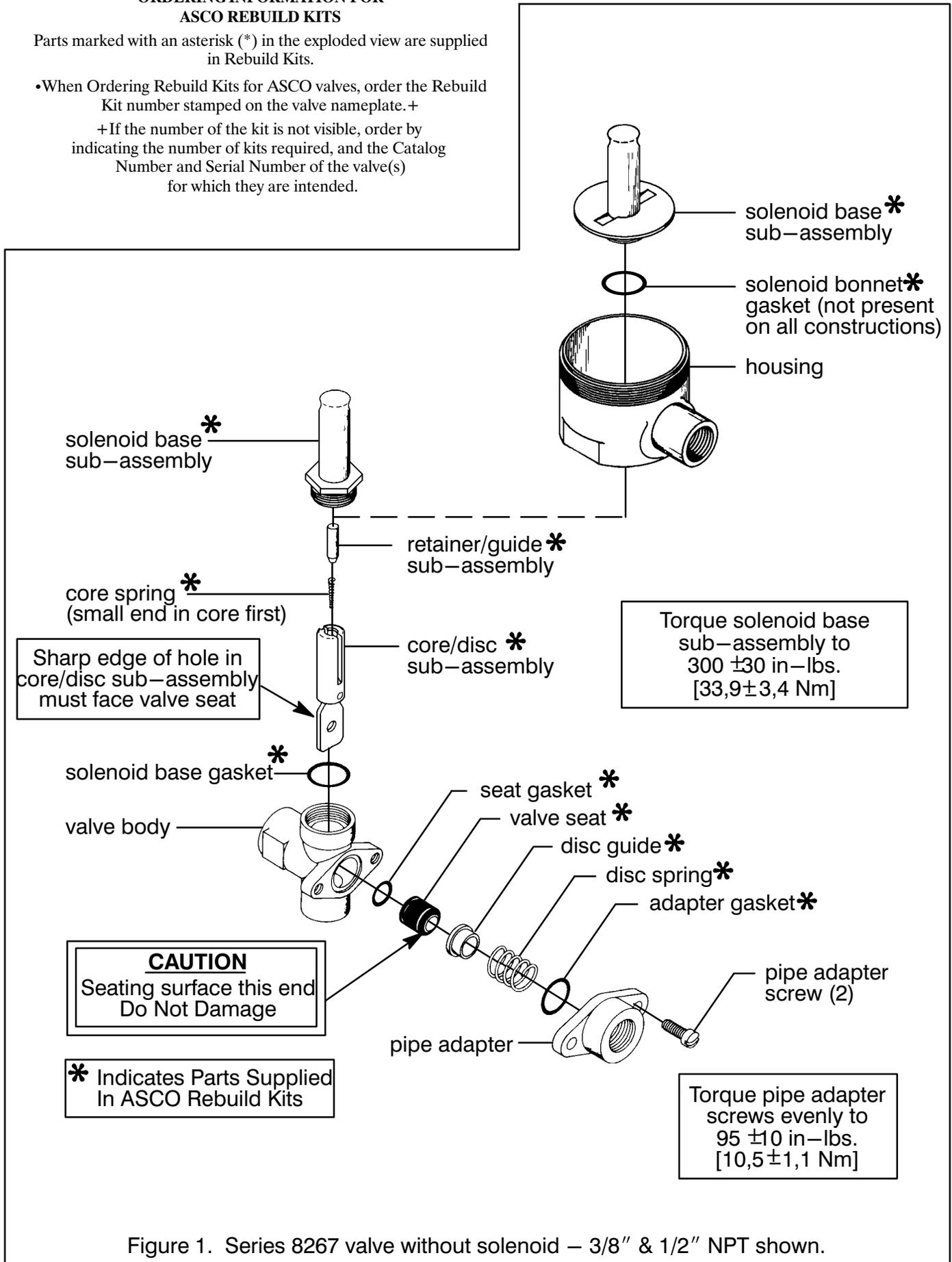
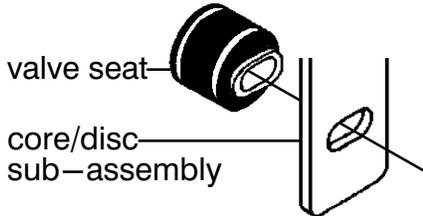


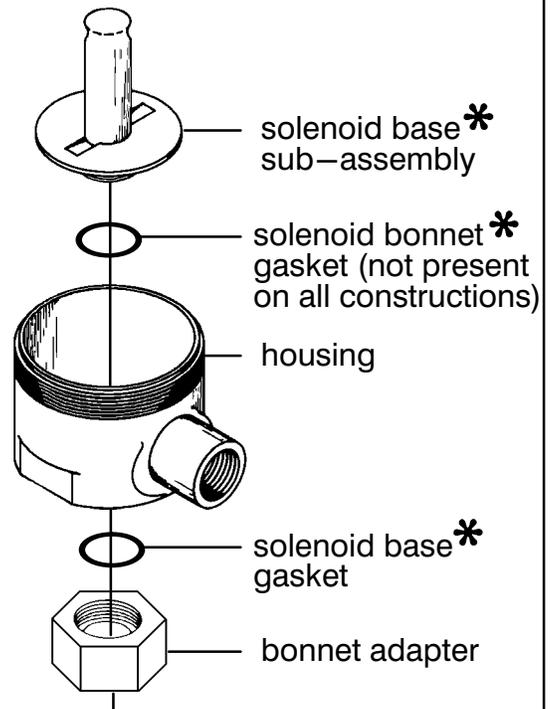
Figure 1. Series 8267 valve without solenoid – 3/8" & 1/2" NPT shown.

PARTIAL VIEW

When installing valve seat, align elongated hole in valve seat with hole in core/disc sub-assembly



* Indicates Parts Supplied In ASCO Rebuild Kits



Torque solenoid base sub-assembly to 300 ± 30 inch pounds [$33,9 \pm 3,4$ newton-meters]

solenoid base sub-assembly *

retainer/guide sub-assembly *

core spring * (small end in core first)

core/disc sub-assembly *

Torque bonnet adapter to 175 ± 25 inch-pounds [$19,8 \pm 2,8$ newton-meters]

Sharp edge of hole in core/disc sub-assembly must face valve seat

Torque pipe adapter screws evenly to 95 ± 10 in-lbs. [$10,5 \pm 1,1$ Nm]

solenoid base gasket *

seat gasket *

valve body

valve seat *

disc guide *

disc spring *

adapter gasket *

CAUTION
Seating surface this end
Do Not Damage

pipe adapter

lockwasher (2)

pipe adapter screw (2)

Figure 2. Series 8267 valve without solenoid – 3/4" NPT shown.