

## INSTALLATION INSTRUCTIONS FOR MOISTURE MINDER® AUTOMATIC DRAIN USING OPTIONAL INSTALLATION KITS (P/N 21999-0316 / 21999-0317)

### READ ALL INSTRUCTIONS CAREFULLY BEFORE INSTALLATION WARNING

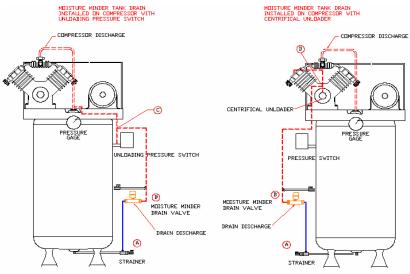
#### **RETAIN FOR FUTURE USE**



BEFORE SERVICING OR WORKING ON ANY COMPRESSED AIR SYSTEM COMPONENTS, USE THE MANUFACTURE'S MANDATORY SAFETY SHUT DOWN PROCEDURE FOR ALL COMPONENTS.



- THIS INCLUDES DISCONNECTING ELECTRICAL POWER AND USING REQUIRED SAFETY LOCKOUT TAGS.
- 2. AIR PRESSURE IN SYSTEM MUST BE BLED DOWN TO ZERO
- SAFETY GLASSES MUST BE WORN.
- 4. A LICENSED ELECTRICIAN MUST DO ALL ELECTRICAL WORK
- 5. ALL STATE AND LOCAL CODES MUST BE FOLLOWED.
- 6. TEFLON PIPE SEALANT SHOULD BE USED ON ALL PIPE FITTINGS.







#### Mounting the drain valve with Deluxe Installation Kit

- Depressurize system before installation
- Install bracket at desired location for drain mounting
- Attach drain using supplied nut and lock washer then install fittings as shown in photo to the right
- Tee unloading line and route to signal air end of drain (Note: use tube inserts when using nylon tubing)
- Install strainer, with nipple and elbow provided, to bottom of tank\*\*
- Route condensate from tank strainer to drain with 1/4" tubing
- Use 1/8" barbed fitting and 3/8" clear tubing to route drain discharge



Installation Kit P/N 21999-0316

\*\*Optional\*\*
Installation Kit w/ strainer
P/N 21999-0317





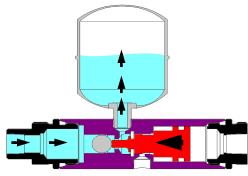
#### OPERATING INSTRUCTIONS FOR MOISTURE MINDER® AUTOMATIC PISTON DRAIN

The Moisture Minder® can be mounted above the bottom of the tank on the wall or on the motor-pump base plate allowing for easier installation. The valve is operated by teeing into the unloader line and is actuated every time the compressor cycles on and off.

# VALVE AT REST 1/4" NPT F INLET RESERVOIR 1/4" NPT PILOT PORT

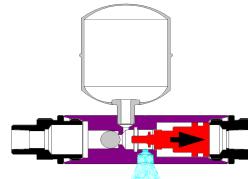
Condensation enters left hand or water inlet of valve.

#### PILOT SIGNAL FROM UNLOADER



Pilot signal causes piston to shift, closing off the drain port. As piston continues to move it will open up the stainless ball check allowing condensate to be forced up into the external reservoir creating a discharge pressure.

#### **PILOT SIGNAL RELIEVED**



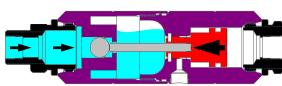
When pilot signal is relieved, piston returns to home position. The ball check closes preventing zero pressure loss in system. The drain port opens and stored condensate is ejected from the drain port.

All that is necessary for operation of the Moisture Minder<sup>®</sup> is an intermittent air source, such as tapping into the compressor unloader line with a tee. Proper maintenance of the air system is required to keep this and all air related products in good working order. The use of a self cleaning strainer is recommended on the bottom of a receiver tank or air line to prevent clogging of the screen in the unit; **see our Optional Installation Kit (P/N 21999-0317)**. Every Moisture Minder<sup>®</sup> is individually tested and is guaranteed against manufacturer's defects. All warranties are void if the unit has been disassembled.

# 1/4" NPT INLET 1/8" NPT DRAIN PORT PORT

Condensation enters left hand, or water Inlet, of valve.

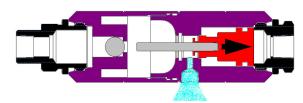
#### PILOT SIGNAL FROM UNLOADER



Pilot signal causes piston to shift, closing off the drain port. As piston continues to move it will open up the stainless ball check allowing condensate to be forced into the internal

reservoir creating a discharge pressure.

#### PILOT SIGNAL RELIEVED



When pilot signal is relieved, piston returns to home position. The ball check closes preventing zero pressure loss in system.

The drain port opens and stored condensate is ejected from the drain port.

Our engineers are available to assist you with any installation questions during normal daytime hours, Central Standard Time, at 1-800-782-5752 or (763)295-5635

Suburban Manufacturing Inc. believes the information presented here to be accurate. Suburban Manufacturing Inc. shall not be held liable for damage or problems caused by possible design changes by the equipment manufacturer or customer-modifications of the equipment prior to the installation of this device.

Liability limited to repair or replacement of the Moisture Minder® unit.