

# DRYAIR MEMBRANE AIR DRYING SYSTEM MODEL 6770

**SHARPE**  
THE SPRAY GUN PEOPLE

FOR PRODUCT INFORMATION CALL:  
**1-800-742-7731**

## System Includes:

- Air Filter w/Overnight Drain (Part No. 22601)
- Coalescer w/Overnight Drain (Part No. 22605)
- Air Regulator Assembly (Part No. 1640)
- Membrane Air Dryer (Part No. 1-6770-3)

## System Description

Sharpe's DRYAIR Membrane Air Drying System is the painter's insurance for removing dirt, water, oil, and uncondensed moisture from compressed air lines. It provides clean dry compressed air while reducing overall costs and minimizing waste.

Sharpe's 3-Stage Point-of-Use System comes assembled and is simple to install.

Approved for Paint Company warranty programs when applying today's state-of-the-art refinish materials.

Ideal for protecting moisture sensitive tools.

## Specifications

### STAGE 1: Air Filter w/Overnight Drain (Part No. 22601)

Provides removal of water and contaminants down to 5 microns.

Air Inlet 1/2 in. F.P.T.

Air Outlet 1/2 in. F.P.T.

Air Flow Capacity 115 cfm (3.2 m<sup>3</sup>/min.)

Max. Operating Pressure 175 psi (1.2 MPa, 12 bar)

Max. Temperature 150°F (65°C)

### STAGE 2: Coalescer w/Overnight Drain (Part No. 22605)

Provides removal of oil and sub-micronic particles down to .01 microns.

Air Inlet 1/2 in. F.P.T.

Air Outlet 1/2 in. F.P.T.

Air Flow Capacity 70 cfm (2.0 m<sup>3</sup>/min.)

Max. Operating Pressure 175 psi (1.2 MPa, 12 bar)

Max. Temperature 150°F (65°C)

### STAGE 3: Membrane Air Dryer (Part No. 1-6770-3)

Provides removal of uncondensed moisture.

Air Inlet 1/2 in. F.P.T.

Air Outlet 1/2 in. F.P.T.

Air Flow Capacity 30 cfm (0.85m<sup>3</sup>/min.)

Max. Operating Pressure 175 psi (1.2 MPa, 12 bar)

Max. Temperature 175°F (79°C)

## Advanced Membrane Technology

- Point-of-Use air dryer
- Optimize overall drying costs
- Effective even at low flow rates
- No chemicals to dispose of
- Transparent operation
- Continuous, effective air drying
- No maintenance on Stage 3
- No electricity
- No additional hookups or connections
- Easy installation

**Model 6770 Membrane Air Drying System**



## Warning

RISK OF INJURY. BE SURE TO RELEASE ALL AIR PRESSURE FROM SYSTEM BEFORE SERVICING UNIT.  
**MAXIMUM OPERATING PRESSURE OF SYSTEM IS 175 PSI (1.2 MPa, 12 bar).**

**SHARPE MANUFACTURING COMPANY • P.O. BOX 1441, MINNEAPOLIS, MN 55440-1441**

**1-800- 742-7731, [www.sharpe1.com](http://www.sharpe1.com)**

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# DRYAIR MEMBRANE AIR DRYING SYSTEM

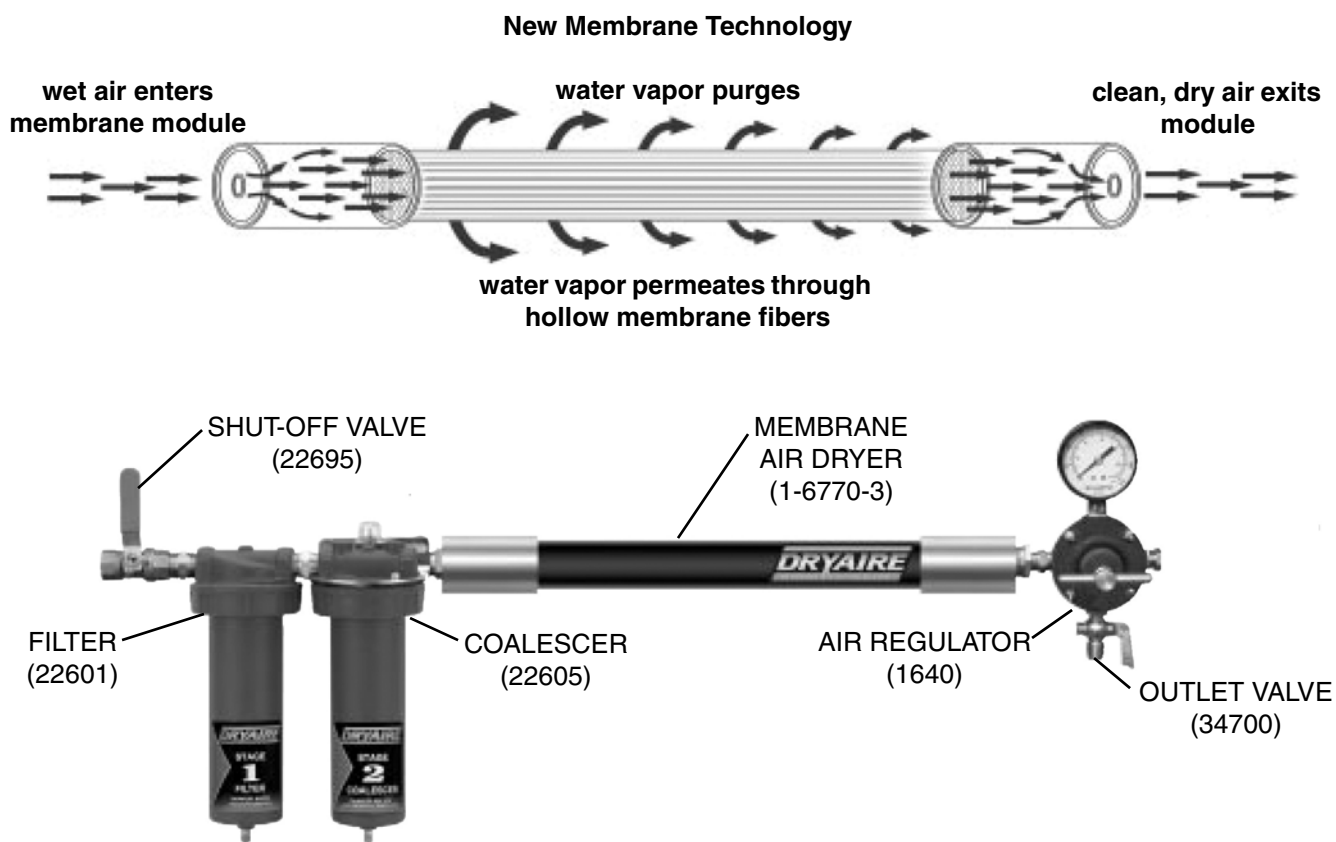
## Installation

1. Install Air Drying System as close as possible to the point where the air is being used.
2. Install main shut-off valve (part no. 22695) upstream of air system to allow maintenance of the unit.
3. Install system with air flow through filters in the direction noted on top of units.
4. Minimum 1/2 in. npt piping is recommended. Avoid using many fittings, couplings, etc. that restrict air flow.
5. Maximum operating pressure and operating temperature of system is: 160 psi (1.1 MPa, 11 bar) and 150°F (65°C).

## Operation

After the system is installed and ready to use:

1. Attach air hose(s) to outlet valve (part no. 34700).
2. Open main shut-off valve upstream of system.
3. Adjust regulator to desired setting by turning T-handle adjusting screw in or out.
4. Open outlet valve (part no. 34700) to supply air to spray guns or tool being used.
5. With air flowing, readjust air pressure at regulator if necessary.
6. Be sure to turn off unit when not in use.



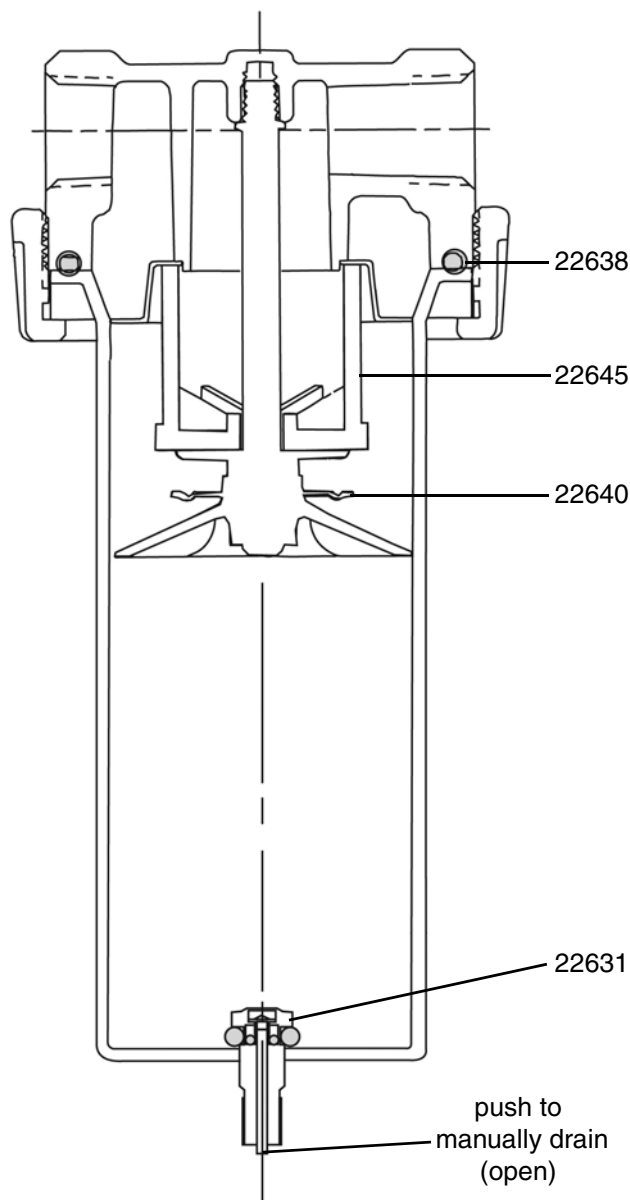
## Warning

RISK OF INJURY. BE SURE TO RELEASE ALL AIR PRESSURE FROM SYSTEM BEFORE SERVICING UNIT.

## Maintenance

1. Check system at least once per shift to ensure proper drainage.
2. Before performing maintenance on system, close main shut-off valve located upstream. Bleed off residual air in system.

## Air Filter w/Overnight Drain (Part No. 22601)



### Maintenance

To maintain maximum filtering efficiency and to avoid excessive pressure drop, the filter must be kept clean. Bowl drainage is automatic with the overnight drain; however, manual draining can also be done by removing the bowl. A visible coating of dirt on the filter element surface or an excessive pressure drop is an indication that cleaning is necessary.

### Cleaning

To clean, it is not necessary to remove the complete filter from the line. Disassembly is simple and does not require tools. Before disassembly, shut off the air supply and depressurize filter. Clean all parts with cleaning solvent and blow out filter body before reassembly. Wash filter element in cleaning solvent and blow out from the inside.

### Overnight Drain

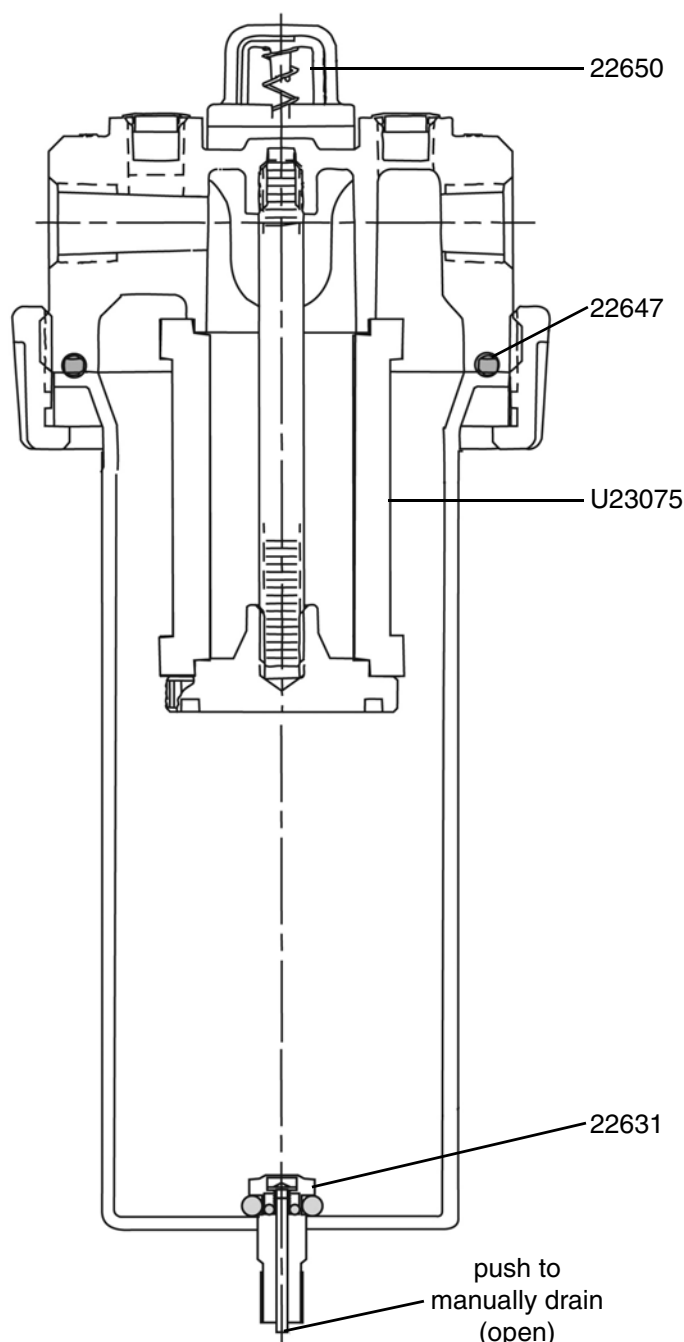
The overnight drain (part no. 22631) is simple in design and operation. When the filter bowl is pressurized, the piston travels down against the spring and closes the drain opening. When the bowl is depressurized (i.e.: overnight when system is shut down), the spring lifts the piston from the seal allowing the bowl to drain.

*NOTE: The overnight drain can be operated manually at anytime by pushing the piston stem up.*

### Parts

Part No.	Description
22631	Overnight Drain
22632	Mounting Bracket
22638	O-Ring
22640	Baffle Kit
22645	Filter Element

## Coalescer w/Overnight Drain (Part No. 22605)



### Installation

It is always recommended that a SHARPE air filter be installed upstream of the coalescing filter to remove 5 micron and larger size particles and separate large droplets of moisture from the air line.

### Maintenance

Never let the liquid level in the bowl reach the base of the coalescing element.

### Cleaning

To clean, it is not necessary to remove the complete filter from the line. Disassembly is simple and does not require tools. Before disassembly, shut off the air supply and depressurize coalescer. Clean all parts with cleaning solvent and blow out body before reassembly. Replace coalescing element (part no. U23075).

### Pressure Drop Indicator

The differential pressure drop indicator on this unit is designed to provide early detection of a clogged coalescing filter element. As the filter element becomes clogged the red indicator will start to rise while air is flowing through the unit. When the pressure drop across the element reaches 10-12 psi (0.07-0.08 MPa, 0.7-0.8 bar) the red indicator will be in full view and the element should be replaced. Failure to replace the element when the pressure drop exceeds 10 psi (0.07 MPa, 0.7 bar) will affect your air quality and tool efficiency.

### Overnight Drain

The overnight drain (part no. 22631) is simple in design and operation. When the filter bowl is pressurized, the piston travels down against the spring and closes the drain opening. When the bowl is depressurized (i.e.: overnight when system is shut down), the spring lifts the piston from the seal allowing the bowl to drain.

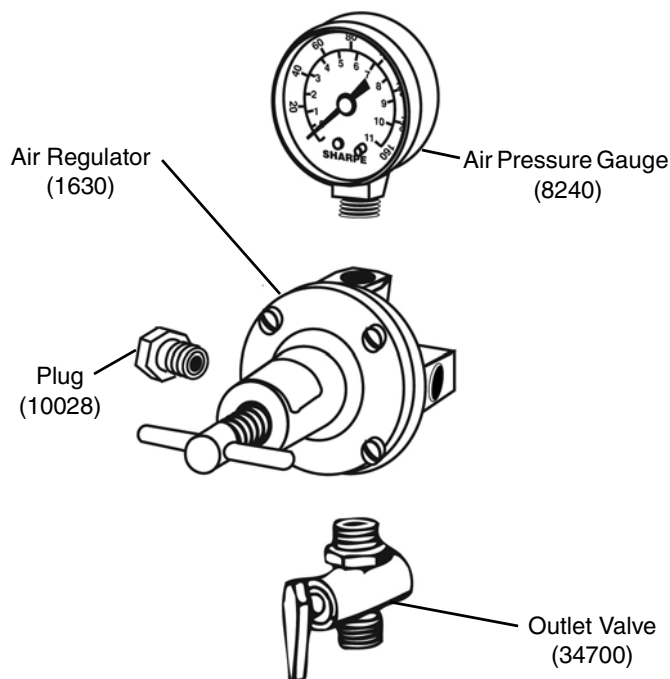
*NOTE: The overnight drain can be operated manually at anytime by pushing the piston stem up.*

### Parts

Part No.	Description
22631	Overnight Drain
22632	Mounting Bracket
22647	O-Ring
22650	Pop-up Indicator Repair Kit
U23075	Coalescer Element

# DRYAIR MEMBRANE AIR DRYING SYSTEM

## Air Regulator Assembly (1640)



## Air Regulator Assembly (Part No. 1640)

### Maintenance

If the air supply is kept clean, this regulator will provide long periods of uninterrupted service. Erratic regulator operation or loss of regulation is most always due to dirt in the diaphragm area and cleaning is in order.

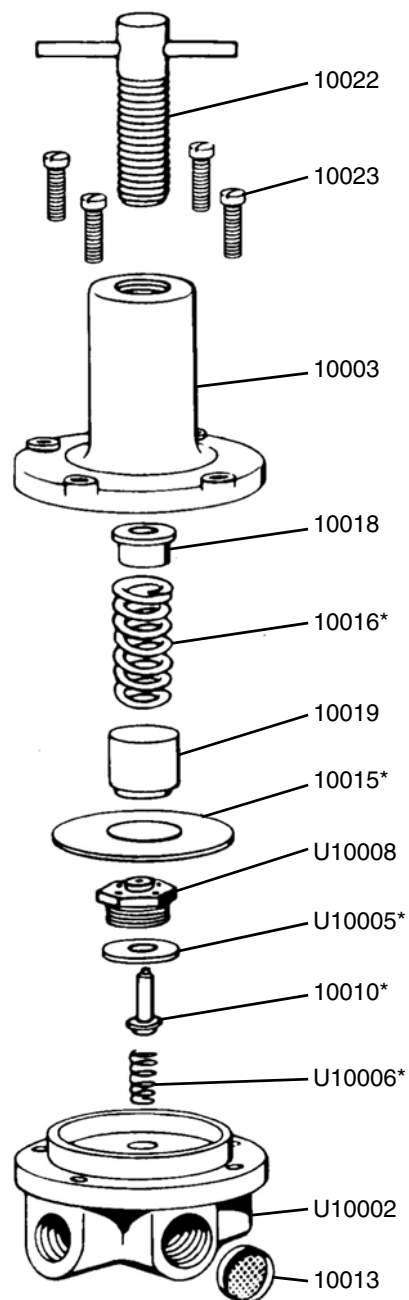
### Cleaning

Depressurize regulator, clean parts with denatured alcohol, wipe off seat, and blow out body with compressed air. Should regulator continue to malfunction, obtain Diaphragm/Valve Repair Kit (part no. 10102) and replace parts provided.

### Specifications

Air Inlet 3/8 in. F.P.T.  
Air Outlet 1/4 in. F.P.T.  
Air Flow Capacity 50 cfm (1.4 m<sup>3</sup>/m)  
Max. Operating Pressure 160 PSI (1.12 MPa, 11.2 bar)  
Max. Temperature 150°F (65°C)

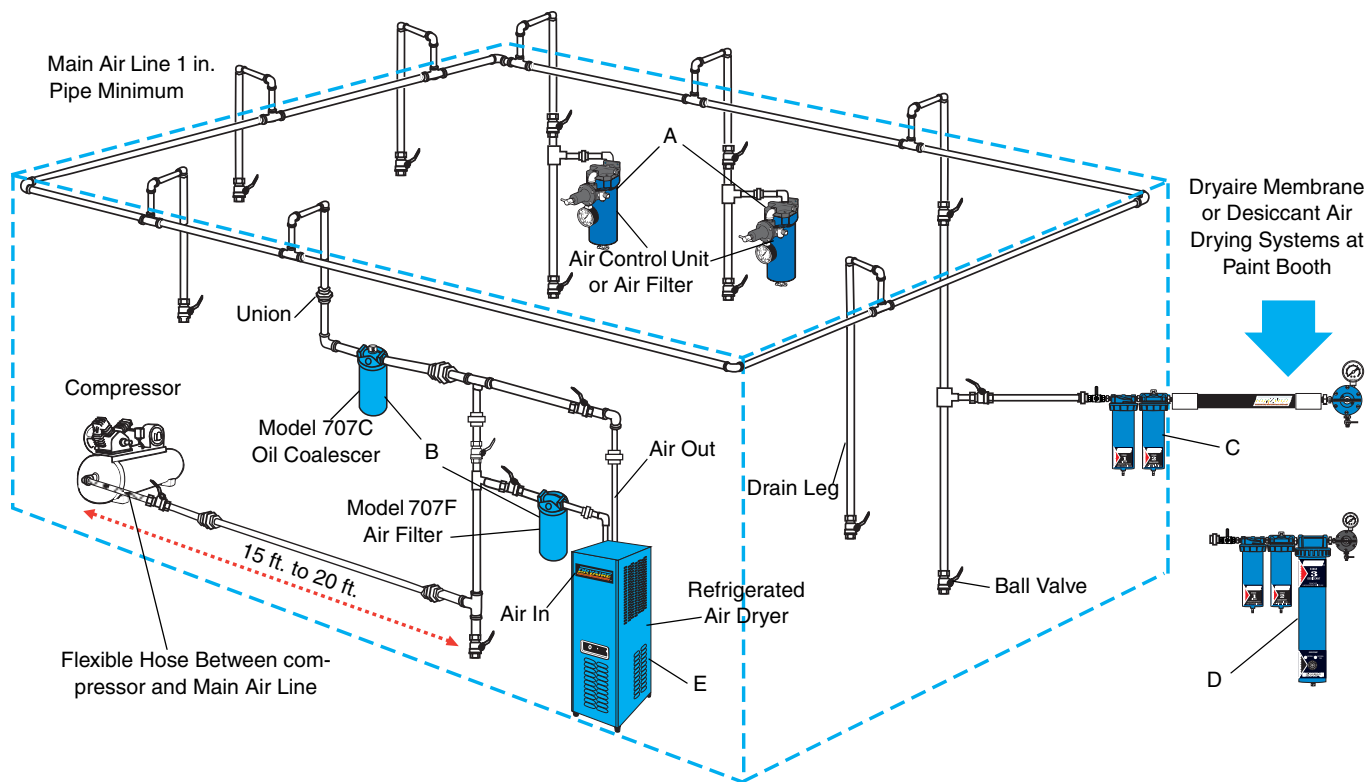
## Diaphragm/Valve Repair Kit (10102)



\* Included in Diaphragm/Valve Repair Kit 10102 (purchase separately).

## Diaphragm/Valve Repair Kit (Part No. 10102)

# DRYWARE MEMBRANE AIR DRYING SYSTEM



Ref. Letter	Description	Model No.
A	Sharpe 606	U06710
	Sharpe 606A	U06720
	Sharpe 606B	6730
	Sharpe 880A	6950
	Sharpe F88	8130
B	707C	6930
	707F	6920
	707FC	6910
C	Dryaire Membrane	6770
D	Dryaire Desiccant	6760
E	Refrigerated Air Dryer	
	25CFM	6880
	35CFM	6885
	50CFM	6890
	75CFM	6895