DRYAIRE DESICCANT SYSTEM MODEL 6760



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

System Description

Sharpe's DRYAIRE Desiccant Air Drying System is the painter's insurance for removing dirt, water, oil, and uncondensed moisture from compressed air lines. Sharpe's Model 6760 Desiccant System includes 100% Indicating Silica Gel Desiccant which provides a higher moisture retention than competitors' units using activated alumina.

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.

System Includes:

- Air Filter with Overnight Drain (Part No. 22601)
- Coalescer with Overnight Drain (Part No. 22602)
- Desiccant Housing (Part No. 22603)
- Self Relieving Air Regulator
- Silica Gel Desiccant (5 lb can)
- Mounting Bracket Kit, Fittings, and Shut-Off Valve

Specifications

STAGE 1 - Air Filter with 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 108 cfm (3 m³/min.)

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

Max. Temperature 150°F (65°C)

STAGE 2 - Coalescer with Overnight Drain (Part No. 22602)

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 35 cfm (1 m³/min.)

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

Max. Temperature 150°F (65°C)

STAGE 3 - Desiccant Housing (Part No. 22603)

Provides removal of uncondensed moisture.

Air Inlet 3/4 in. F.P.T. (reduced to 1/2 in.)

Air Outlet 3/4 in. F.P.T. (reduced to 3/8 in.)

Air Flow Capacity 30 cfm (0.84 m³/min.)

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

Max. Temperature 150°F (65°C)



Model 6760
Desiccant 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 160 PSI (1.1 MPa, 11 bar).

Installation

- 1. Install Air Drying System as close as possible to the point where the air is being used. Use template/spacer (part no. 22635 provided) to position location of system. *NOTE: Spacer is required for correct installation of system.*
- 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 psig (1.03 MPa, 10.3 bar) and 150°F (65°C).

Operation

After the system is installed and ready to use:

- 1. Attach air hose(s) to outlet valve.
- 2. Open main shut-off valve upstream of system.
- 3. Adjust regulator to desired setting by turning Thandle adjusting screw in or out.
- 4. Open outlet valve to supply air to spray guns or tool being used.
- 5. With air flowing, readjust air pressure at regulator if necessary.

Warning

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

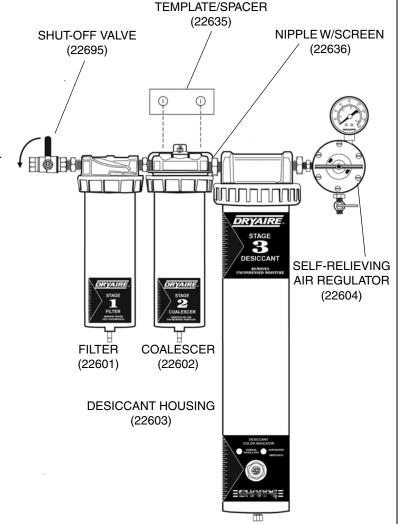
Maintenance

- 1. Check system at least once per shift to insure proper drainage.
- 2. Before performing maintenance on system, close main shut-off valve located upstream. Bleed off residual air in system.
- 3. Unscrew the metal collar holding the desiccant bowl to head and remove bowl and collar.
- 4. Dump old desiccant out of bowl. (See desiccant changeout.)
- 5. If the pressure drop across the dryer has become unacceptable, the bronze element in bottom of bowl may have become clogged. If this happens, blow air through the flow tube by
 - placing a blow gun at the top of the tube. If element replacement is needed, disassemble flow tube from bowl by removing the end cap and bottom nut from the bottom of the bowl, remove flow tube (hand tight) by turning counter clockwise and replace elements. Reverse instructions to reassemble.
- 6. Refill bowl with new or regenerated desiccant. Model 6760 holds 5 lb of desiccant. To regenerate Silica Gel Desiccant, heat desiccant for 4 hours at 275°F (135°C). To reorder, order desiccant replacement (part no. 6765-1).
- 7. Reassemble bowl to head making sure that the o-ring (part no. 22663) in head is in place.

Desiccant Changeout

Replace or regenerate the desiccant when the desiccant beads change to a pink color. The blue gel gradually turns pink indicating it has absorbed moisture to the saturation point. Desiccant can be regenerated by heating for 4 hours at 275°F (135°C). To reorder, order desiccant replacement (Part No. 6765-1).

DESICCANT BEADS ARE NON-TOXIC AND NON-FLAMMABLE.



DRY AIR OU Built-in screen prevents desiccant from going down tube on refill Quick remove flange Blue Silica Gel Desiccant beads turn pink when saturated Sintered Bronze Element prevents any Desiccant dust from traveling downstream Built in sightglass allows easy monitoring of desiccant color change

Why Use Sharpe's Dryaire Desiccant System?

When air is compressed, the temperature of the air is increased as is its capacity to hold moisture. As the hot moist air travels downstream through the lines, it cools, allowing the moisture to condense. Filters, drain traps, and driplegs are effective for removing liquid condensate. But for removing residual water vapor and aerosols, you need a Sharpe Desiccant Air Drying System.

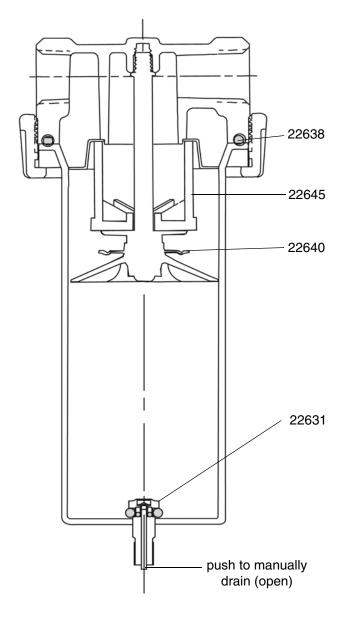
As the wet compressed air flows through the inlet port and down the bed of desiccant, the desiccant (silica gel) beads absorb the water vapor and aerosols. The silica gel beads are so effective in absorption, the air humidity can be reduced down to a -40°F (-40°C) pressure dewpoint. Unless your compressed air is exposed to a temperature below the dewpoint, there will be no further condensation forming in your air lines.

The microscopic pores of each silica gel bead are structured to attract and hold large capacities of moisture and prevent it from traveling downstream.

After the moisture has been removed, the dry air passes through a sintered bronze element, up the center tube, and out the outlet port. As long as the desiccant is replaced at saturation point, your equipment will receive ultra-dry, moisture-free air.

As the desiccant becomes saturated with moisture, the dewpoint will begin to rise. This is evident when the blue silica gel beads in the sight glass change to pink, indicating the need for desiccant replacement. Simply remove the flange and bowl and replace with new desiccant or regenerate saturated desiccant by heating to 275°F (135°C) for 4 hours.

Sharpe's Desiccant System is a convenient and cost effective means of ensuring your refinish work is never exposed to damaging moisture. Compact in size, the Sharpe Desiccant System can be used almost anywhere.



Air Filter with 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.

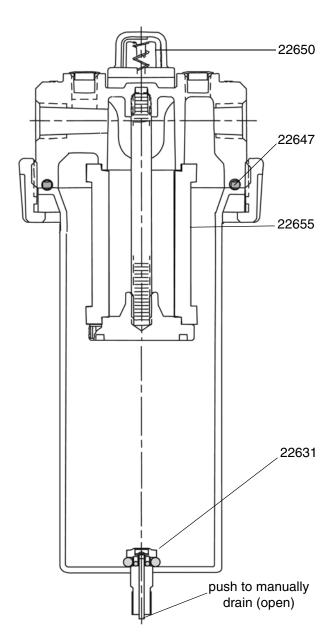
Overnight Drain

The overnight drain 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 with Overnight Drain (Part No. 22602)

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. 22655).

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 (.07-.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 (.07 MPa, 0.7 bar) will affect your air quality and tool efficiency.

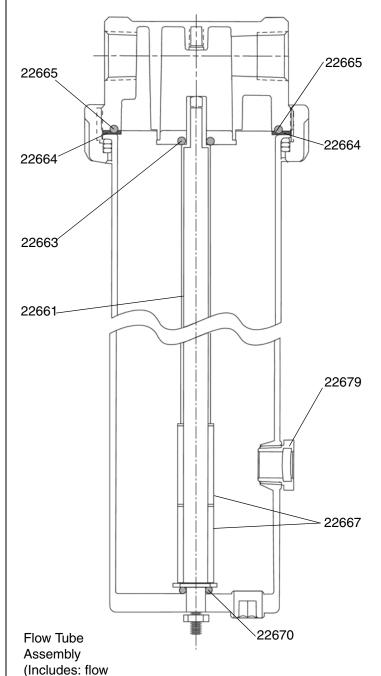
Overnight Drain

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
22655	Coalescer Element



tube, nut, O-ring, filter elements and retainers)

Desiccant Housing (Part No. 22603)

Installation

Always place a moisture filter upstream to remove bulk fluids. Always place a coalescing filter upstream to remove oil. Desiccant coated with oil will not absorb moisture.

Maintenance

A supply of low flow/low humidity air will provide longer desiccant life; whereas, high flow/high humidity air will require more frequent desiccant changes.

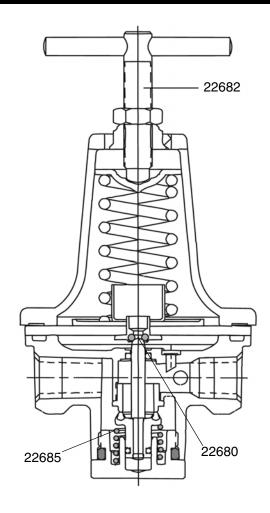
Installed in an application with intermittent flow, Sharpe's desiccant dryer will typically dry air for weeks before silica gel desiccant requires replacement or regeneration.

Desiccant Changeout

Replace or regenerate the desiccant when the desiccant beads change to a pink color (the blue gel gradually turns pink indicating it has absorbed moisture to the saturation point). Can be regenerated by heating for 4 hours at 275°F (135°C). To reorder, order desiccant replacement (part no. 6765-1).

Parts

Part No.	Description
6765-1	5 lb Desiccant
22661	Flow Tube Assy
22663	O-Ring
22664	Gasket
22665	O-Ring
22667	Filter Element (2)
22670	O-Ring
22679	Sight Glass



Specifications

Air Inlet 3/8 in. F.P.T.

Air Outlet 1/4 in. F.P.T. (3 EA.)

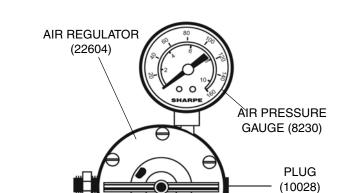
Air Flow Capacity 100 cfm (2.8 m³/min.)

Max. Operating Pressure 160 psi (1.1 MPa, 11 bar)

Max. Temperature 150°F (65°C)

Parts

Part No.	Description
8320	Air Pressure Gauge
10028	Plug
22680	Diaphragm/Valve Repair Kit
22682	T-Handle Adjusting Screw
22685	Bottom Spring
22687	3/8 in. x 3/8 in. Nipple
34700	Outlet Valve



Self-Relieving Air Regulator (Part No. 22604)

Maintenance

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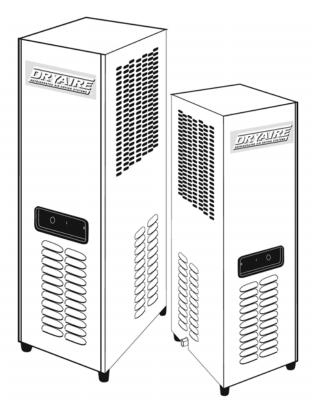
If the air supply is kept clean, this regulator will provide long periods of uninterrupted service. Erratic regulator operation or loss of regulation is most always due to dirt in the diaphragm area and cleaning is in order.

OUTLET

VALVE (34700)

Cleaning

Depressurize regulator, remove bottom plug, spring valve, and diaphragm. Clean parts with denatured alcohol, wipe off seat and blow out body with compressed air. Reassemble parts as a unit and screw into regulator before tightening bottom plug Make sure disc is in center hole in body. Should regulator continue to malfunction, obtain diaphragm/valve repair kit (part no. 22680) and replace parts provided.





- · Compact, high efficient heat exchangers
- Two stage separator/filter removes condensed oil and water
- Reliable air operated condensate drain automatically discharges water and oil from dryer without air loss
- CFC Free environmentally safe



MODEL	USE WITH AIR COMPRESSOR SIZE	FLOW CAPACITY	POWER REQUIREMENTS	DIMENSIONS H" x W" x D"	WEIGHT (lbs)
6880	5.0-7.5 H.P.	25 CFM	115/1/60	28 x 10 x 13	80
6885	10 H.P.	35 CFM	115/1/60	28 x 10 x 13	81
6890	15 H.P.	50 CFM	115/1/60	37 x 17 x 17	150
6895	20 H.P.	75 CFM	115/1/60	37 x 17 x 17	150

REFRIGERATED AIR DRYERS

Cool, Dry, and Clean your compressed air supply in one, compact Easy-To-Use Package

Cools... accepts high temperature air up to 180°F (32°C) directly from air compressor... no separate aftercooler or separator required

Dries... removes moisture... eliminates troublesome water from downstream air lines

Cleans... an integral 3 micron filter removes solid contaminants and oil aerosols

Clean, Dry Air

- Prevents surface blemishes and poor paint adhesion caused by compressed air humidity
- Ideal for autobody shops and industrial facilities with 5 to 15 horsepower compressors

Easy to Install

- Compact saves valuable floor space
- No separate components to pipe together... simply connect inlet and outlet connection to the air system, plug in and it's ready to operate

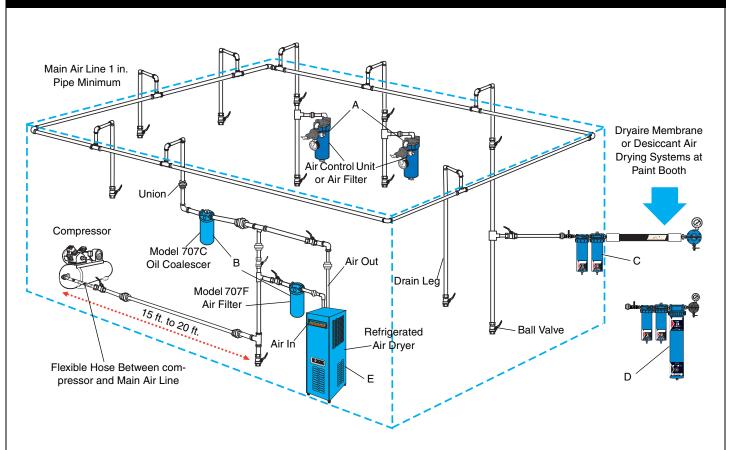
Easy to Operate

- On/Off switch turns all components on
- · Fault light indicates overload or system malfunction

Easy to Maintain

- Simple filter sleeve replacement
- Includes cleanable refrigeration condenser filter and inlet strainer

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