

90-400\* (revised 01/05)  
 Questions regarding this form  
 should be directed to the  
 following:  
 732-390-8480

## 26 SERIES FILTER

### Operating Instructions and Parts List

#### Application:

The 26 Series Filter is rugged, yet compact so it offers an ideal solution for most design problems. These units are also available with many popular options so they can be tailored to suit your application.

#### Features & Benefits:

- Supplied with either 1/4" or 3/8" in / out ports.
- Provides excellent water removal efficiency.
- Coalescing filter removes 99.97% of oil and water aerosols as well as solids larger than .3 microns.
- Bowl guard supplied as standard and mounts directly to the filter body not the bowl.

#### Accessories:

	<i>Model No.</i>
Automatic Drain .....	.8851AD
Metal Bowl .....	.26F-41M
Metal Bowl with Sightglass .....	.26F-41S

#### Technical Data:

##### Maximum Supply Pressure:

Plastic Bowl .....	.150 PSI
Metal Bowl .....	.250 PSI

##### Maximum Operating Temperature:

Plastic Bowl .....	.120° F
Metal Bowl .....	.250° F

##### Filter Element:

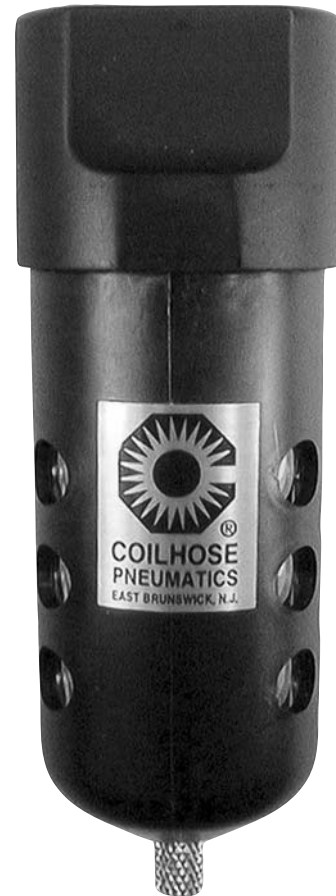
Standard .....	.40 micron
Option .....	.5 micron

##### Material:

Body .....	Die Cast Aluminum
Standard Bowl .....	Transparent Polycarbonate with High Impact Plastic Guard
Optional Bowl .....	Zinc Die Cast
Filter Element .....	Porous Polypropylene

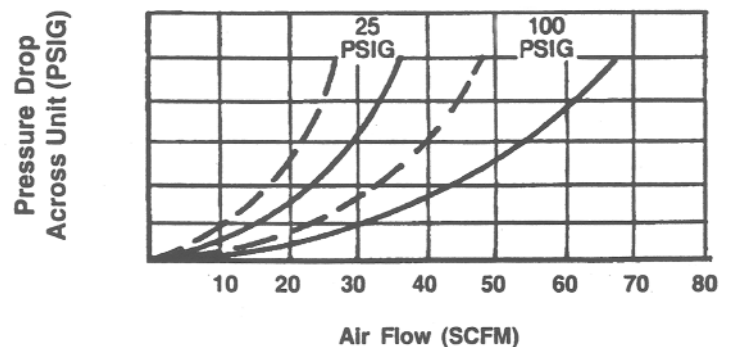
##### Dimensions and Weights:

Height .....	.6 1/2"
Width .....	.2"
Weight .....	.1/2 lb.



1/4" Port  
 3/8" Port

#### Performance Data:



## General Description of Operation:

### Filter –

Pressurized air enters through a curved inlet and deflector vane plate (3A) directing the incoming air in a downward whirling pattern. Centrifugal force hurls the larger solids and liquid water particles outward where they collect on the inner surface of the filter bowl (6). The particles spiral down past a retainer baffle (5A) into a quiet chamber. The baffle (5A) prevents turbulent air in the upper bowl from re-entering liquid contaminants and carrying them downstream. Then the dry, clean air follows a convoluted path through the filter element (4A), where finer solid particles are filtered out.

### Coalescing Filter –

Contaminated compressed air enters through the center of the graded porous element (4B). Solid particles are captured and held by direct impact, interception or diffusion, depending on their size. Liquid aerosols are also captured, but are forced through the filter matrix by the compressed air.

The element (4B) density lessens towards the outer surface, forcing the collected liquid to agglomerate into larger and larger droplets. As the enlarged droplets emerge on the outside of the element (4B) they are conducted to the drain sites by the drain layer. Gravity pulls the collected liquid to the bottom of the bowl (6.3) and is drained away by opening the draincock (6.2).

### Cleaning and Maintenance:

It is necessary to keep the filter clean in order to sustain peak filtering efficiency and avoid excessive pressure drop. A coating of dirt or condensation build-up on the filter element or pressure drop of 10 PSID or more indicates that cleaning is required.

Removal of the filter from the line for cleaning is not necessary. Disassembly requires no tools and the parts drawing on this page can be used as a guide. Air supply must be shut off and the filter must be depressurized prior to disassembly. The filter element should be replaced and all other parts should be cleaned with nothing stronger than household detergent. Before reassembly, the body should be blown out to remove any remaining debris.

To drain off any accumulations in the bowl, the draincock can be opened by turning it in a clockwise direction. This should be done before the collected fluid reaches the lower baffle.

The bowl guard is removed by depressing the release tab with the thumb, while turning the guard counterclockwise and pulling downward. The guard will become disengaged when the clasps clear the locking points on the body.

The bowl can then be removed by turning it counterclockwise until it is completely unscrewed and free of the body.

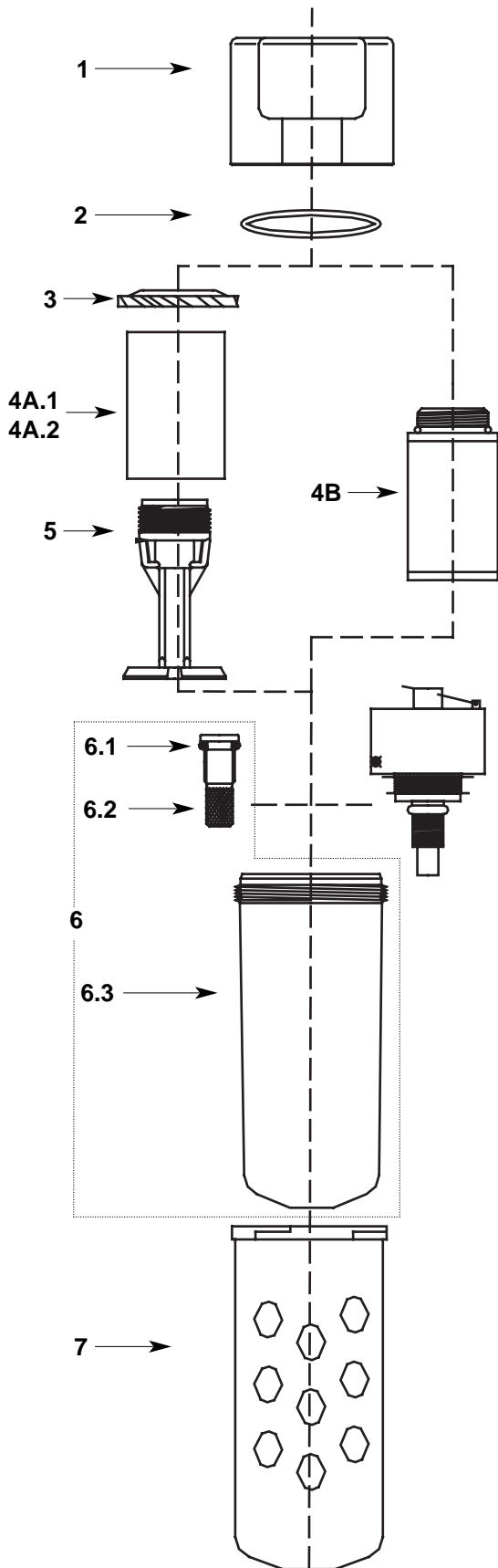
### Components:

#### Chart

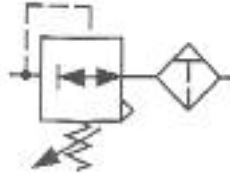
No.	Description	Model No.
1A	1/4" NPT Body	26F2-1
1B	3/8" NPT Body	26F3-1
2	Bowl Gasket	26F-16
3	Deflector Vane Plate	26F-11
4A.1	40 Micron Element	26F-12
4A.2	5 Micron Element	26F-12X
4B	Element, Coalescing	26C-14A
5	Retainer Baffle	26F-13
6	Polybowl and Draincock	26F-41L
6.1	Draincock O-Ring	26F-17
6.2	Brass Draincock	26F-18
6.3	Polycarbonate Bowl	26F-40L
7	Plastic Bowl Guard	26F-50

### Rebuilding Kit:

Filter Bowl Repair Kit  
(includes item 2, 6 and 7) ..... 26FK01



We reserve the right to make engineering changes in design or materials without notification.



90-415\* (revised 06/04)

Questions regarding this form should be directed to one of the following:

East: 732-390-8480 (NJ)  
 West: 503-434-5964 (OR)  
 E-mail: info@coilhose.com

## 26 SERIES INTEGRAL FILTER / REGULATOR

### Installation Instructions, Operating Instructions and Parts List

#### Application:

This Integral Filter / Regulator combination unit offers a rugged and dependable design in a compact space saving configuration. Available with many popular options, these units provide the advantages of a specially engineered system at substantial cost savings.

#### Technical Data:

##### Maximum Supply Pressure:

Plastic Bowl .....150 PSI  
 Metal Bowl .....250 PSI

##### Maximum Operating Temperature:

Plastic Bowl .....120° F  
 Metal Bowl .....250° F

##### Filter Element:

Standard .....40 micron  
 Option .....5 micron

##### Pressure Range:

Standard .....0 - 125 PSI  
 Option .....0 - 25 PSI  
 Option .....0 - 60 PSI

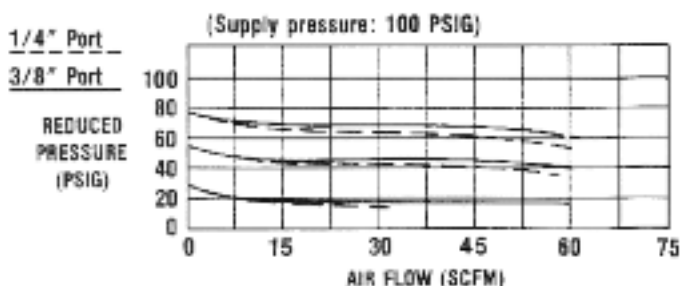
##### Material:

Body .....Die-cast aluminum  
 Adjusting Knob .....High-impact plastic  
 Standard Bowl .....Transparent polycarbonate with high impact plastic guard  
 Optional Bowl .....Zinc (die-cast)  
 Filter Element .....Porous polypropylene

##### Dimensions and Weights:

Height .....8"  
 Width .....2"  
 Weight .....3/4 lb.

#### Flow Characteristics / Performance Data:



#### Options and Accessories:

Options*:	Suffix
<u>Filter</u> –	
Automatic Drain .....	.D
Metal Bowl (without sightglass) .....	.M
Metal Bowl (with sightglass) .....	.S
Extra Fine Element (5 micron) .....	.X
<u>Regulator</u> –	
Gauge .....	.G
Extra Low Pressure Spring (0 - 25 PSI) .....	.J
Low Pressure Spring (0 - 60 PSI) .....	.L

\*Add a dash followed by the suffix(es) in alphabetical order to the model number.

Accessories:	Model No.
Mounting Bracket and Panel Mount Nut .....	MR140MB
Automatic Drain .....	.8851AD
Metal Bowl (without sightglass) .....	.26F-41M
Metal Bowl (with sightglass) .....	.26F-41S
Recommended Std. Pressure Gauge	
0 - 160 PSI (1 1/2" dial) .....	.26G-160
Recommended Optional Gauge	
0 - 60 PSI (1 1/2" dial) .....	.26G-60

## General Description of Operation

Pressurized air enters through a curved inlet and deflection vane plate (13) directing the incoming air in a downward whirling pattern. Centrifugal force hurls the larger solids and liquid water particles outward where they collect on the inner surface of the filter bowl (16). The particles spiral down past a retainer baffle (15) into a quiet chamber. The baffle (15) prevents turbulent air in the upper bowl from re-entering liquid contaminants and carrying them downstream. Then the dry, clean air follows a convoluted path through the filter element (14), where finer solid particles are filtered out. High pressure filtered air passes up the center of the element and flows through the annular orifice around the poppet valve (11) toward the outlet. Downstream pressure is connected through an aspirator tube to the bottom of the diaphragm (6). As downstream pressure increases, the diaphragm (6) is forced upward, compressing the adjustment spring (4). When the diaphragm (6) moves, the bottom spring (12) pushes the poppet valve (11) upward to throttle the annular orifice. If downstream pressure exhausts, the mechanical sequence reverses, the poppet valve (11) normally blocks the relieving orifice in the center of the diaphragm (6). High excessive pressure lifts the diaphragm (6) off the poppet valve (11) and air bleeds through the orifice and out the bonnet (2) vent until the system returns to set pressure.

## Filter –

### Cleaning and Maintenance

It is necessary to keep the filter clean in order to sustain peak filtering efficiency and avoid excessive pressure drop. A coating of dirt or condensation build-up on the filter element or a pressure drop of 10 PSI or more indicates that cleaning is required.

Removal of the filter from the line for cleaning is not necessary. Disassembly requires no tools and the parts drawing on this page can be used as a guide. Air supply must be shut off and the filter must be depressurized prior to disassembly. The filter element should be replaced and all other parts should be cleaned with nothing stronger than household detergent. Before reassembly, the body should be blown out to remove any remaining debris.

To drain off any accumulations in the bowl, the drain cock is opened by turning it in a clockwise direction. This should be done before the collected fluid reaches the lower baffle.

## Regulator –

### Pressure Adjustment

To adjust pressure setting, pull up the black adjusting knob. Turning the adjusting knob in a clockwise direction will increase the pressure setting and counterclockwise will decrease the pressure setting. Once the desired pressure setting is reached, push in the black adjusting knob to lock and maintain the proper setting.

The downstream pressure should always be adjusted to approximately 10 PSI above the required working pressure, even in the event of pressure fluctuations. It is advisable to adjust the setting under constant pressure conditions (unit not operating), as a changing flow rate affects the set valve.

To avoid readjustment after making a change in pressure setting, we recommend approaching the required setting from a lower pressure. When adjusting from a higher to a lower setting, reduce the pressure to a point below what is required, then adjust upward to the desired pressure setting.

## Regulator –

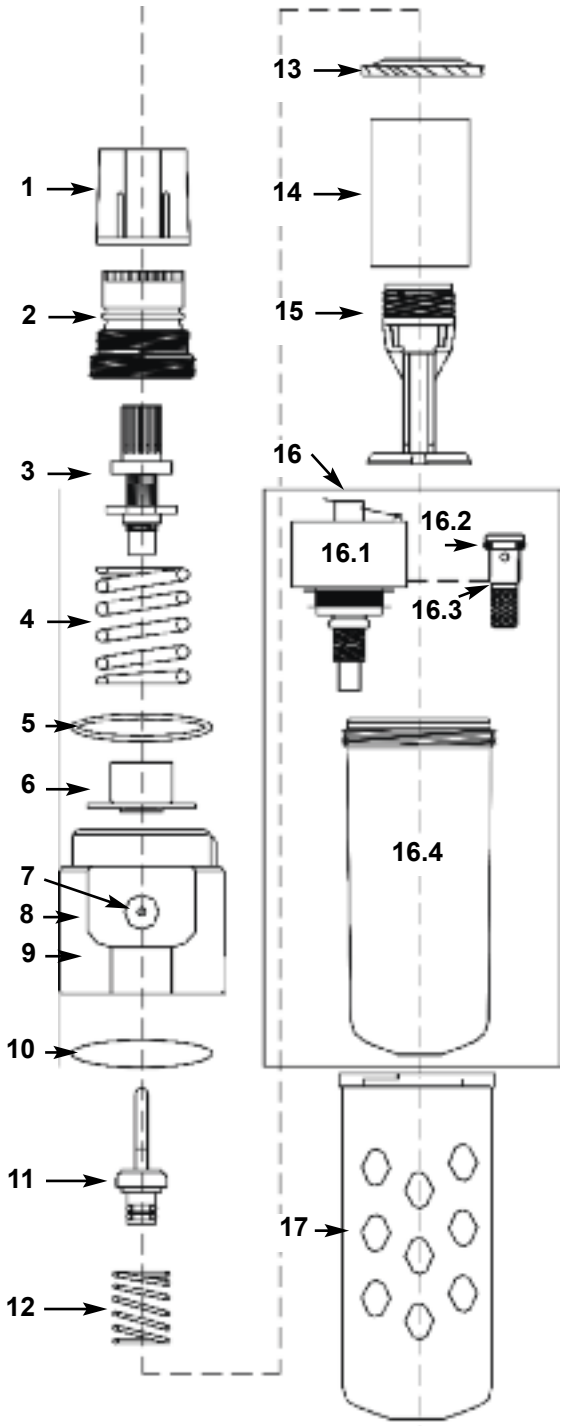
### Cleaning and Maintenance

A clean supply of air to the regulator will assure long periods of uninterrupted service. Dirt in the poppet valve assembly will lead to erratic operation or loss of regulation. When cleaning becomes necessary, air line should be shut off and depressurized. The regulator should be disassembled using the parts drawing on this page as a guide. All assembly parts should be cleaned with mild household detergent and the regulator body should be blown out with compressed air.

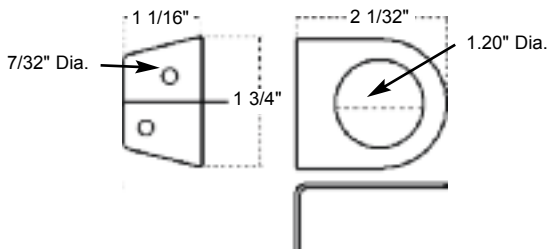
For proper reassembly, the poppet valve assembly must be firmly in place and the poppet stem must fit into the center hold of the diaphragm assembly. The bonnet assembly should be tightened slightly more than hand tight (approximately 45 foot pounds torque).

## Components:

Chart No.	Description	Model No.
1	Adjusting knob	26R-12A
2	Bonnet	26R-14B
3	Adjusting screw assembly	26R-13A
4	Adjusting spring – 125 PSI	26R-15
–	Adjusting spring – 0 - 25 PSI	26R-15J
–	Adjusting spring – 0 - 60 PSI	26R-15L
5	Spacer ring - diaphragm	26R-16B
6	Diaphragm assembly	26R-17B
7	Gauge port plug	PI002S
8	1/4" NPT integral body	26FC2-1
9	3/8" NPT integral body	26FC3-1
10	Bowl gasket	26F-16
11	Poppet valve assembly	26R-18B
12	Bottom spring	26R-19
13	Deflector vane plate	26F-11
14.1	40 micron element	26F-12
14.2	5 micron element	26F-12X
15	Retainer baffle	26F-13
16	Polybowl and draincock	26F-41L
16.1	Automatic Drain	8851AD
16.2	Draincock o-ring	26F-17
16.3	Brass draincock	26F-18
16.4	Polycarbonate bowl	26F-40L
17	Plastic bowl guard	26F-50



## Mounting Bracket Dimensions



## Rebuilding Kits

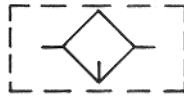
Filter Bowl Repair Kit (Includes items 10, 16 and 17)

**26FK01**

Regulator Repair Kit (Includes items 5, 6, 10, 11 and 12)

**26RK0B1**

We reserve the right to make engineering changes in design or materials without notification.



90-402\* (revised 02/05)

Questions regarding this form should be directed to one of the following:

East: 732-390-8480 (NJ)  
 West: 503-434-5964 (OR)  
 E-mail: info@coilhose.com

## 26 SERIES LUBRICATOR

### Operating Instructions and Parts List

#### Application:

The 26 Series Lubricator is rugged, yet compact so it offers an ideal solution for most design problems. These units are also available with many popular options so they can be tailored to suit your application.

#### Features & Benefits:

- Supplied with either 1/4" or 3/8" in / out ports.
- Lubricant can be added through fill port without shutting down air line – bowl removal and depressurization is not necessary.
- Tamperproof adjusting cap allows required oil delivery rate to be locked in place.
- Once delivery rate is set, lubricant is proportionately delivered at all other air flows – no readjustment is required.
- Bowl guard is supplied as standard and can be attached directly to lubricator body.

#### Accessories:

	<i>Model No.</i>
Metal Bowl . . . . .	.26L-41M
Metal Bowl with Sightglass . . . . .	.26L-41S

#### Technical Data:

##### Maximum Supply Pressure:

Plastic Bowl . . . . .	150 PSI
Metal Bowl . . . . .	250 PSI

##### Maximum Operating Temperature:

Plastic Bowl . . . . .	120° F
Metal Bowl . . . . .	250° F

#### Material:

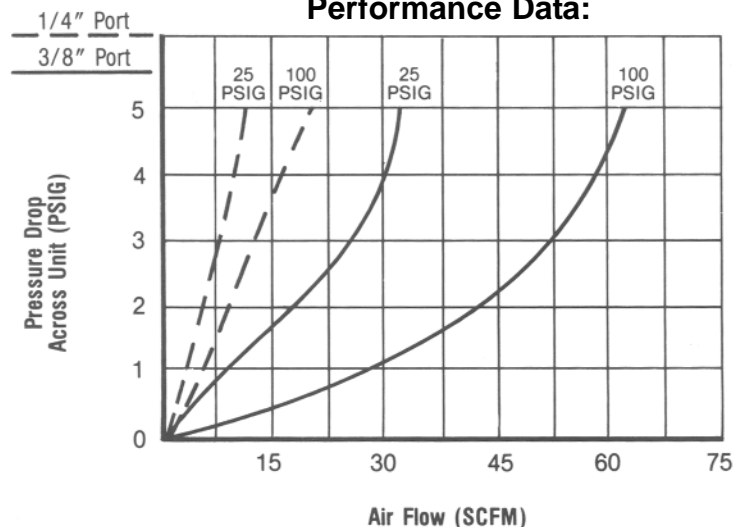
Body . . . . .	Die Cast Aluminum
Standard Bowl . . . . .	Transparent Polycarbonate
. . . . .	with High Impact Plastic
Guard	
Optional Bowl . . . . .	Zinc Die Cast

#### Dimensions and Weights:

Height . . . . .	6 1/2"
Width . . . . .	2"
Weight . . . . .	1/2 lb.



#### Performance Data:



## General Description of Operation:

As filtered and regulated air enters the lubricator, a small portion is diverted through the inlet passage to pressurize the lubricator bowl (14). At low flow rates the majority of air passes through the venturi section of the back pressure valve assembly (9.2) and creates a suction to draw oil from the bowl (14), through the capillary drip tube (12) and past the oil check ball (9.3) to the sight dome assembly (2). This is where the oil flow rate is controlled manually by the metering screw (2). When drops are formed, the oil flows through the clearance between the drip spout (5) and sight dome (2) dripping through the point of injection. There, the air stream breaks the oil up into fine particles and mixes it with the swirling air to be carried to the outlet.

Under high flow conditions, the spring loaded back pressure valve (9.2) opens and the excess flow bypasses the venturi section, then blends with lubricated air at a downstream port. The oil check ball (9.3) assures that when there is no air flow, oil in the feed tube (12) is held in place, shortening the time required to resume oil delivery when flow is reestablished. The fill plug (7) at the top of the lubricator provides access to refill the bowl (15) with oil.

### Lubricant -

Lubricants, as recommended by the equipment manufacturer, may be used, provided that they are not heavier than SAE#40 (S.U.V. 800 SEC at 100°F). **We recommend the use of Coilhose nondetergent ATL rustproofing lubricant in temperatures above 40° F. For applications between 45° F and -45° F, we suggest using Coilhose ATLW lubricant.**

### Filling -

Lubricators may be filled through the fill port while under pressure and without shutting down the equipment. After carefully removing fill plug, insert the tip of a long spout oil can into the bottom of the fill port to avoid any blow back. Lubricator bowl should be filled to within 1/2" of the top.

Lubricators may also be filled by removing the bowl after the system has been depressurized. **Once the bowl has been filled and replaced, be sure it is in the locked position before repressurizing the system.**

### Adjustment:

When the adjustment knob is turned completely clockwise, oil is not being delivered through the system and the equipment is not being lubricated. The adjusting knob should be set to the desired drip rate after the air has been turned on and flowing. Turning the adjustment knob in a clockwise direction reduces the oil feed rate. Although proper lubrication is determined through demand and experience, a good starting point is one to two drops per minute. To check lubrication rate, we suggest the following: Hold a piece of cardboard at the exhaust hole of the component in the least favorable position (farthest away from the lubricator or in the highest position). After the unit has run for about 100 strokes, an oil film on the cardboard will indicate that the setting is correct. If the oil film on the cardboard runs, the setting is too high. In order to prevent gumming, it is preferable to add too little rather than too much oil.

### Cleaning and Maintenance:

The lubricator will provide long periods of uninterrupted service as long as both the air and oil supplies are kept clean and the oil level is kept above the end of the tube in the bowl. Failure of oil to drip through the sight dome, regardless of the position of the adjusting knob, indicates that cleaning is required. The lubricator does not need to be removed from the line for cleaning. Depressurize the air line and disassemble the lubricator using the parts drawing on this page as a guide. Cleaning is normally needed only in the oil metering area.

After unscrewing the adjusting knob / sight dome assembly, remove the inner drip spout and clean all components with warm water and mild household detergent only.

The bowl guard is removed by depressing the release tab with the thumb, while turning the guard counterclockwise and pulling downward. The guard will become disengaged when the clasps clear the locking points on the body. The bowl can then be removed by turning it counterclockwise until it is completely unscrewed and free of the body.

### Components:

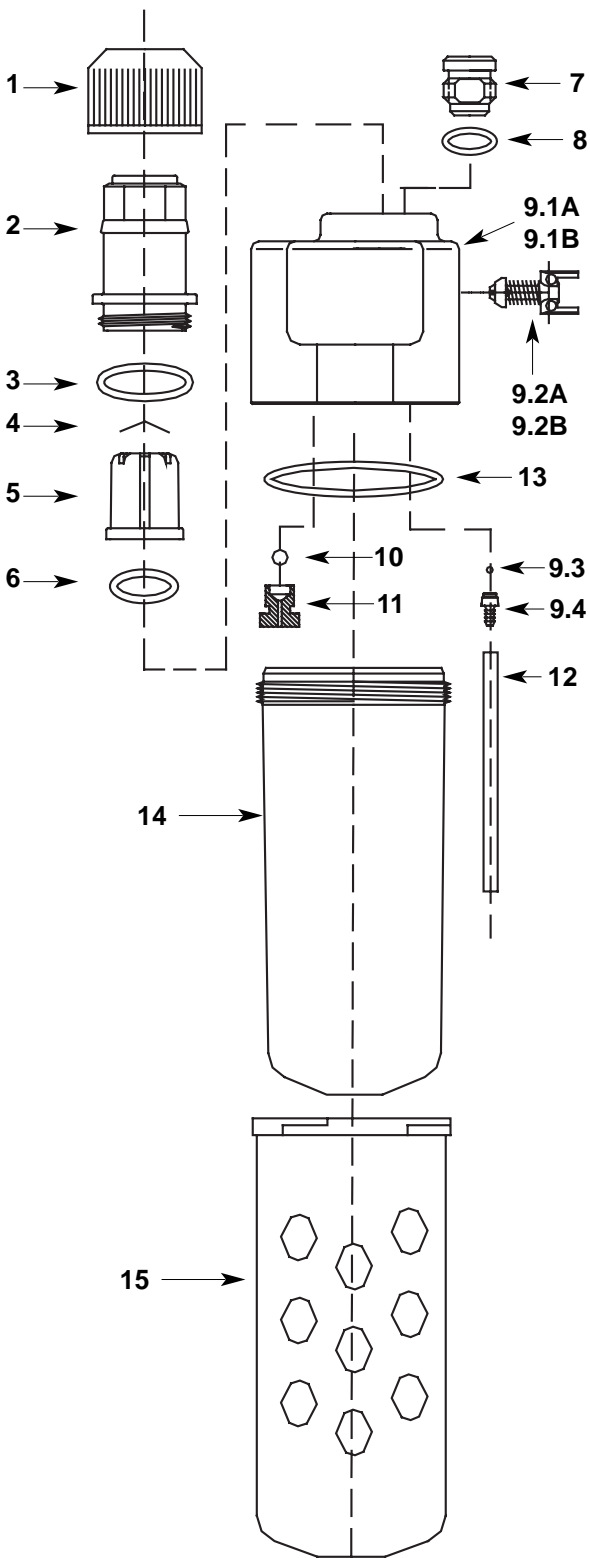
#### Chart

No.	Description	Model No.
1	Tamperproof Cap	8742-31A
2	Sight Dome Assembly	8742-32A
3	Retainer O-Ring	26L-12
4	Spring Washer	8742-42A
5	Drip Spout	8742-33A
6	Drip Spout O-Ring	26L-14
7	Fill Plug	8844-10
8	Fill Plug O-Ring	3294C-8
9A*	1/4" Lubricator Head Ass'y	26L2-55
9B*	3/8" Lubricator Head Ass'y	26L3-55
9.1A	1/4" Lubricator Head	26L2-1
9.1B	3/8" Lubricator Head	26L3-1

#### Chart

No.	Description	Model No.
9.2A	1/4" Back Pressure Valve Assembly	26L-15
9.2B	3/8" Back Pressure Valve Assembly	26L-16
9.3	Oil Check Ball	26L-18
9.4	Drip Tube Barb	26L-17
10	Air Check Ball	26L-19
11	Check Stud	26L-20
12	Feed Tube	8844-5
13	Bowl Gasket	26F-16
14	Polycarbonate Bowl	26L-41L
15	Plastic Bowl Guard	26F-50

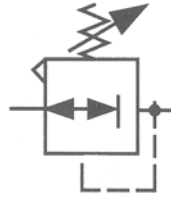
\* 9A and 9B include 9.1A or 9.1B and 9.2A or 9.2B, depending on size. 9A and 9B are factory assembled and should be purchased as an assembly.



### Rebuilding Kit:

Lubricator Bowl Repair Kit  
(includes item 13, 14 and 15) .....26LK01

We reserve the right to make engineering changes in design or materials without notification.



90-401\* (revised 04/04)

Questions regarding this form should be directed to one of the following:

East: 732-390-8480 (NJ)  
 West: 503-434-5964 (OR)  
 E-mail: info@coilhose.com

## 26 SERIES REGULATOR

### Operating Instructions and Parts List

#### Application:

Combining a compact configuration with rugged durability, the 26 Series offers an ideal solution to most design problems. Available with many popular options, these units provide the advantages of a specially engineered system at substantial cost savings.

#### Options and Accessories:

<b>Options:</b>	<i>Suffix</i>
Gauge .....	.G
Extra Low Pressure Spring (0 - 25 PSI) .....	.J
Low Pressure Spring (0 - 60 PSI) .....	.L
Panel Mount .....	.P

<b>Accessories:</b>	<i>Model No.</i>
Mounting Bracket and Panel Mount Nut . . . . .	MR140MB
Recommended Standard Pressure Gauge (0 - 160 PSI with 1 1/2" dial) .....	.26G-160
Recommended Optional Gauge (0 - 60 PSI with 1 1/2" dial) .....	.26G-60



#### Technical Data:

**Maximum Supply Pressure:** . . . . . 250 PSI

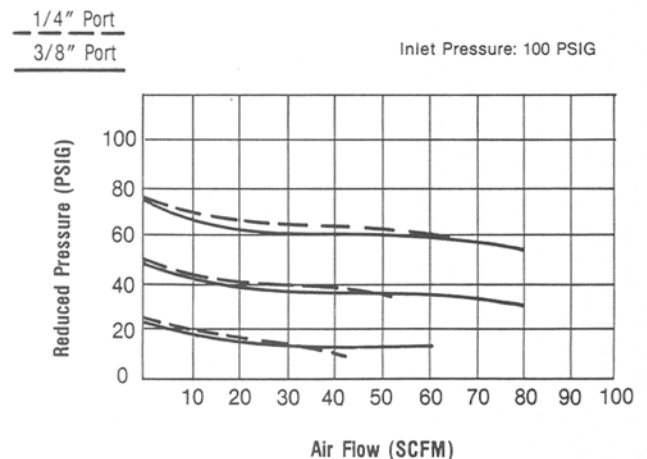
**Maximum Operating Temperature:** . . . . . 250° F

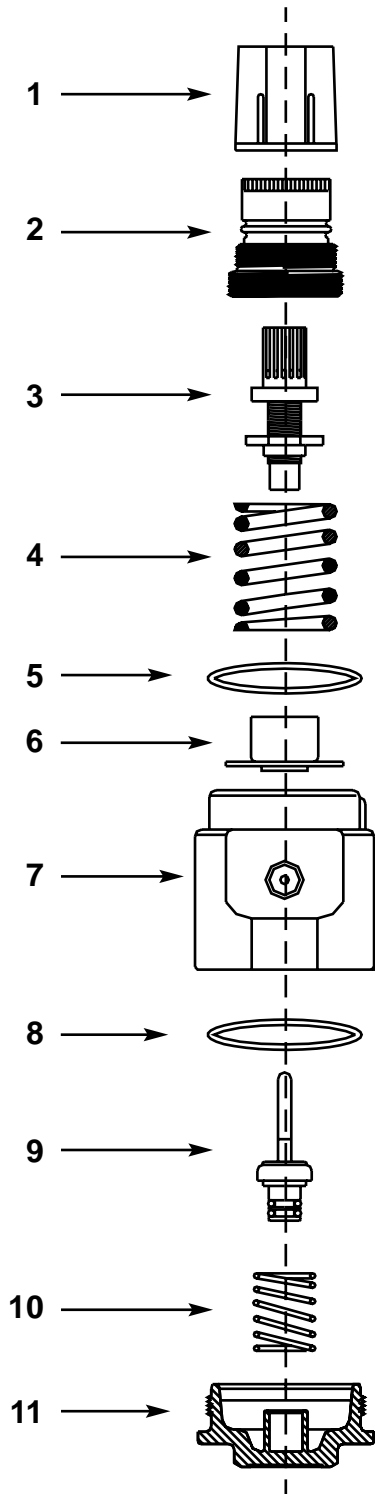
<b>Pressure Range:</b>	
Standard .....	0 - 125 PSI
Option .....	0 - 25 PSI
Option .....	0 - 60 PSI

<b>Material:</b>	
Body .....	Die Cast Aluminum
Adjusting Knob .....	High Impact Plastic

<b>Dimensions and Weights:</b>	
Height .....	.4"
Width .....	.2"
Weight .....	.1/2 lb.

#### Filter Performance Data:





## Rebuilding Kit

The Regulator Repair Kit includes items 5, 6, 8, 9, and 10. Use Model No. **26RK01B** when ordering.

We reserve the right to make engineering changes in design or materials without notification.

## General Description of Operation

High pressure filtered air flows through the annular orifice around the poppet valve (9) toward the outlet. Downstream pressure is connected through an aspirator passage to the bottom of the diaphragm (6). As downstream pressure increases, the diaphragm (6) is forced upward, compressing the adjustment spring (4). When the diaphragm (6) moves, the bottom spring (10) pushes the poppet valve (9) upward to throttle the annular orifice. If downstream pressure exhausts, the mechanical sequence reverses and the poppet valve (9) opens the annular orifice until the set pressure is reached again. The poppet valve (9) normally blocks the relieving orifice in the center of the diaphragm (6). High excessive pressure lifts the diaphragm (6) off the poppet valve (9) and air bleeds through the orifice through the orifice and out the bonnet (2) vent until the system returns to set pressure.

## Pressure Adjustment

To adjust pressure setting, pull up black adjusting knob. Turning the adjusting knob in a clockwise direction will increase the pressure setting and counterclockwise will decrease the pressure setting.

The downstream pressure should always be adjusted approximately 10 PSI above the required working pressure, even in the event of pressure fluctuation. It is advisable to adjust the setting under constant pressure conditions (unit not operating), as a changing flow rate affects the set value.

To avoid readjustment after making a change in pressure setting, we recommend approaching the required setting from a lower pressure. When adjusting from a high to a lower setting, reduce the pressure to a point below what is required, then adjust upward to the desired pressure setting. Once desired pressure setting is reached, push in the black adjusting knob to lock and maintain proper setting.

## Cleaning and Maintenance

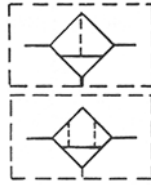
A clean supply of air to the regulator will assure long periods of uninterrupted service. Dirt in the poppet valve assembly will lead to erratic operation or loss of regulation. When cleaning becomes necessary, air line should be shut off and depressurized. The regulator should be disassembled using the parts drawing on this page as a guide. All assembly parts should be cleaned with mild household detergent and the regulator body should be blown out with compressed air.

For proper reassembly, the poppet valve assembly must be firmly in place and the poppet stem must fit into the center hold of the diaphragm assembly. The bonnet assembly should be tightened slightly more than hand tight (approximately 50 inch pounds of torque).

## Components:

Chart No.	Description	Model No.
1	Adjusting Knob	26R-12A
2	Bonnet	26R-14B
3	Adjusting Screw Assembly	26R-13A
4	Adjusting Spring: 0 - 125 PSI	26R-15
-	Adjusting Spring: 0 - 25 PSI	26R-15J
-	Adjusting Spring: 0 - 60 PSI	26R-15L
5	Spacer Ring - Diaphragm	26R-16B
6	Diaphragm Assembly	26R-17B
7	1/4" NPT Integral Body	26FC2-1
-	3/8" NPT Integral Body	26FC3-1
8	Bottom Plug Gasket	26F-16
9	Poppet Valve Assembly	26R-18B
10	Bottom Spring	26R-19
11	Bottom Plug	26R-20





Form: 90-410\* (revised 04/04)

Questions regarding this form should be directed to one of the following:

East: 732-390-8480 (NJ)  
 West: 503-434-5964 (OR)  
 E-mail: info@coilhose.com

## 27 Modular Series Filter and Coalescing Filter Installation Instructions, Operating Instructions and Parts List

### Application:

The 27 Series modular filter is constructed of lightweight aluminum. A compact configuration combines ease of installation with superior system design flexibility. Each unit is adaptable for conversion to duo or trio systems either with clamps, which connect without disturbing existing piping, or with standard nipples. A modular distribution block allows a portion of the air supply to be directed to a branch line or device.

### Options and Accessories:

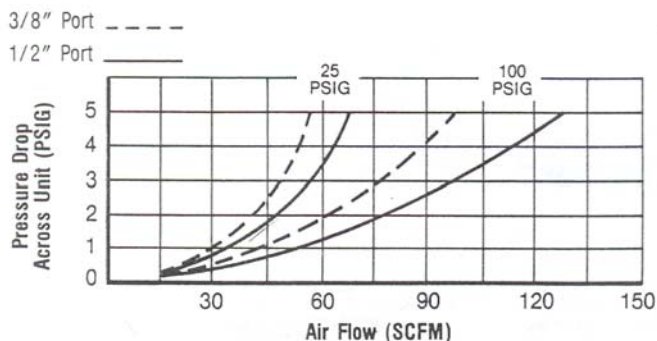
Options*:	Suffix
Automatic Drain .....	D
Metal Bowl without sightglass .....	M
Metal Bowl with sightglass .....	S
Extra Fine Element (5 micron) .....	X

\*Add a dash followed by the suffix(es) in alphabetical order to the model number.

Accessories:	Model No.
Automatic Drain .....	.8851AD
Metal Bowl without sightglass .....	.27F-41M
Metal Bowl with sightglass .....	.27F-41S
Connecting Clamp Kit (includes two connecting clamps, two screws, one o-ring and one allen wrench) . . . .	.27MB01
Wall Mount Connecting Clamp Kit (include one wall mount connecting clamp, one connecting clamp, two screws, one o-ring, and one allen wrench) . . . .	.27MB02
Distribution Block .....	.27DB01



### Filter Performance Data:



### Technical Data:

<b>Maximum Supply Pressure:</b>	
Plastic Bowl .....	150 PSI
Metal Bowl .....	250 PSI

<b>Maximum Operating Temperature:</b>	
Plastic Bowl .....	120° F
Metal Bowl .....	250° F

<b>Filter Element:</b>	
Standard .....	40 micron
Option .....	5 micron

<b>Material:</b>	
Body .....	Die cast aluminum
Standard Bowl .....	Transparent polycarbonate with high impact plastic guard
Optional Bowl .....	Zinc die-cast
Filter Element .....	Porous Polypropylene

<b>Dimensions and Weights:</b>	
Height .....	7 1/2"
Width .....	2 3/4"
Weight .....	1 lb.

## General Description of Operation

### Filter—

Pressurized air enters through a curved inlet and deflector vane plate (3), directing the incoming air in a downward whirling pattern. Centrifugal force hurls the larger solids and liquid water particles outward where they collect on the inner surface of the filter bowl (7). The particles spiral down past a retainer baffle (5) into a quiet chamber. The baffle (5) prevents turbulent air in the upper bowl from re-entering liquid contaminants and carrying them downstream. Then, the dry, clean air follows a convoluted path through the filter element (4), where finer solid particles are filtered out.

### Coalescing Filter—

Contaminated compressed air enters through the inside of the filter and passes through the graded porous element (4). Solid particles are captured and held by direct impact, interception or diffusion, depending on their size. Liquid aerosols are also captured, but are forced through the filter matrix by the compressed air.

The element (4) density lessens toward the outer surface, forcing the collected liquid to agglomerate into larger and larger droplets. As the enlarged droplets emerge on the outside of the element (4), they are conducted to the drain sites by the drain layer. Gravity pulls the collected liquid to the bottom of the bowl (7) and is drained away by opening the draincock (6).

## Cleaning and Maintenance

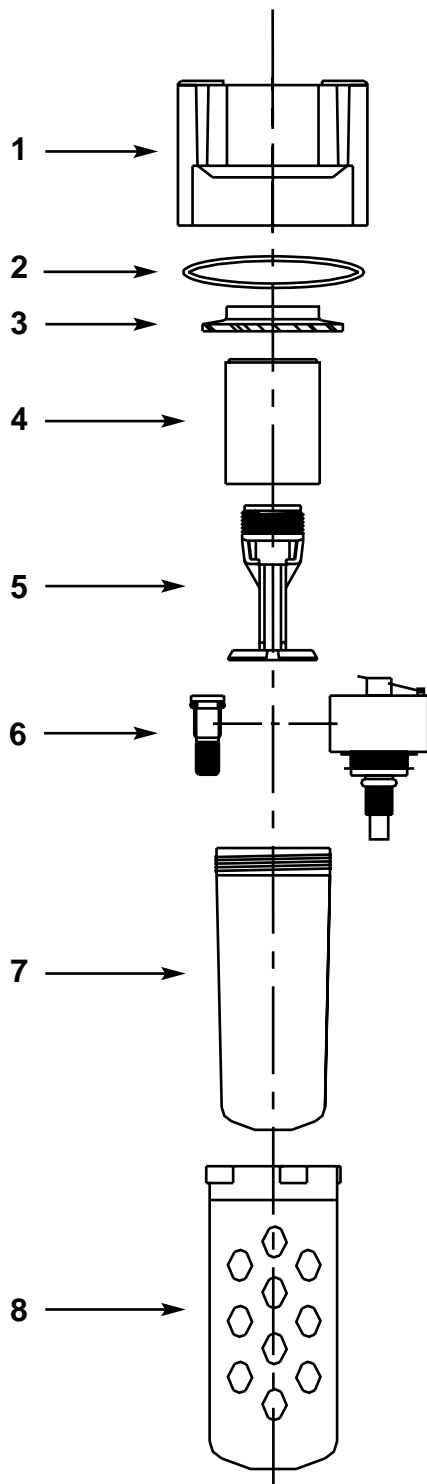
It is necessary to keep the filter clean in order to sustain peak filtering efficiency and avoid excessive pressure drop. A coating of dirt or condensation build-up on the filter element or a pressure drop of 10 PSID or more indicates that cleaning is required.

Removal of the filter from the line for cleaning is not necessary. Disassembly requires no tools and the parts drawing on this page can be used as a guide. Air supply must be shut off and the filter must be depressurized prior to disassembly. The filter element should be replaced and all other parts should be cleaned with nothing stronger than a household detergent. Before reassembly, the body should be blown out to remove any remaining debris.

To drain off any accumulations in the bowl, the draincock is opened by turning it in a clockwise direction. This should be done before the collected fluid reaches the lower baffle.

The bowl guard is removed by depressing the release tab with the thumb, while turning the guard counterclockwise and pulling downward. The guard will become disengaged when the clasps clear the locking points on the body.

The bowl can then be removed by turning it counterclockwise until it is completely unscrewed and free of the body.



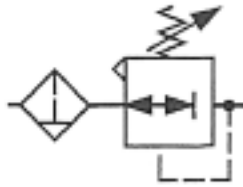
## Components:

Chart No.	Description	Model No.
1	3/8" NPT Body	27F3-1
—	1/2" NPT Body	27F4-1
—	3/4" NPT Body	27F6-1
2	Bowl Gasket	27F-16
3	Deflector Vane Plate	27F-11
4	40 micron Element	27F-12
—	5 micron Element	27F-12X
5	Retainer Baffle	27F-13
6	Brass Draincock Assembly	26F-18
—	Internal Automatic Drain	8851AD
7	Polycarbonate Bowl	27F-40L
—	Optional Metal Bowl without Sightglass	27F-40M
—	Optional Metal Bowl with Sightglass	27F-40S
8	Plastic Bowl Guard	27F-50

## Rebuilding Kit

The Filter Bowl Replacement Kit includes items 2, 6, 7 and 8. Use Model No. **27FK01** to order.

We reserve the right to make engineering changes in design or materials without notification.



FORM: 90-413\* (Rev. 4-05)

Questions regarding this form should be directed to one of the following:

East / Central: 732-390-8480

West: 503-434-5964

E-mail: info@coilhose.com

## 27 MODULAR SERIES INTEGRAL FILTER / REGULATOR

### Installation and Operating Instructions and Parts List

#### Application:

The 27 Series Integral Filter / Regulator is designed for applications where installation flexibility and a compact size are necessary. Each unit can be converted to a duo system either with clamps, which connect without disturbing existing piping, or with standard nipples.

#### Features and Benefits:

- Supplied with either 3/8", 1/2" or 3/4" in / out ports and two (2) full flow 1/4" gauge ports.
- Available with either 40 micron or 5 micron filter element.
- Balanced poppet valve design assures superior performance.
- Diaphragm type regulator allows low initial pressure drop while maintaining high sensitivity.
- Nonrising regulation adjustment knob locks in place and maintains desired pressure setting.

#### Technical Data:

##### Maximum Supply Pressure:

Plastic Bowl	.....150 PSI
Metal Bowl	.....250 PSI

##### Maximum Operating Temperature:

Plastic Bowl	.....120° F
Metal Bowl	.....250° F

##### Pressure Range:

Standard	.....0-125 PSI
Option	.....0-250 PSI
Option	.....0-25 PSI
Option	.....0-60 PSI

##### Filter Element:

Standard	.....40 micron
Option	.....5 micron

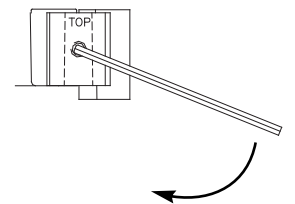
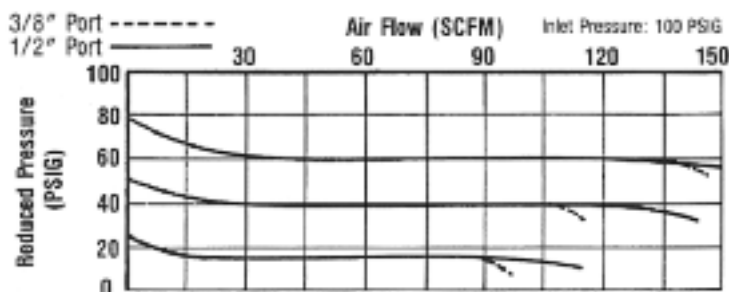
##### Material:

Body	.....Die Cast Aluminum
Bowl Standard	.....Transparent Polycarbonate w/ High Impact Plastic Guard
Bowl Option	.....Die Cast Zinc
Filter Element	.....Porous Polypropylene

##### Dimensions and Weights:

Height	.....10 1/2"
Width	.....2 3/4"
Weight	.....2 lbs.

#### Integral Filter/Regulator Performance Data



Modular clamp eliminates the need for a hex nipple between units.

#### Options and Accessories:

##### Filter Options:

Automatic Drain	.....D
Metal Bowl (without sightglass)	.....M
Metal Bowl (with sightglass)	.....S
Extra Fine Element (5 Micron)	.....X

##### Regulator Options:

Gauge	.....G
High Pressure Spring (0-250 PSI)	.....H
Extra Low Pressure Spring (0-25 PSI)	.....J
Low Pressure Spring (0-60 PSI)	.....L

\*Add a dash followed by the suffix(es) in alphabetical order to the model number.

##### Accessories:

Mounting Bracket	.....27RBA
Panel Nut	.....27RPA
Automatic Drain	.....8851AD
Metal Bowl	.....27F-41M
Metal Bowl with Sightglass	.....27F41S
Recommended Standard Pressure Gauge	
0-160 PSI (2" Dial)	.....8800-160
Recommended Optional Gauge	
0-300 PSI (2" Dial)	.....8800-300
0-60 PSI (2" Dial)	.....8800-60
Connecting Clamp Kit	
(includes two connecting clamps, two screws one o-ring, and one allen wrench)	.....27MB01
Wall Mount Connecting Kit	
(includes one wall mount connecting clamp, one connecting clamp, two screws, one o-ring, and one allen wrench)	.....27MB02
Distribution Block	.....27DB01

## General Description of Operation:

Pressurized air enters through a curved inlet and deflector vane plate (11), directing the incoming air in a downward whirling pattern. Centrifugal force hurls the large solids and liquid particles outward where they collect on the inner surface of the filter bowl (14.3). The particles spiral down past the retainer baffle (13) and into a quiet chamber. The baffle (13) prevents turbulent air in the upper bowl from re-entering liquid contaminants and carrying them downstream. Then the dry, clean air follows a convoluted path through the filter element (12), where finer solid particles are filtered out.

High pressure, filtered air flows through the annular orifice around the poppet valve (9) toward the outlet. Downstream pressure is directed to the bottom of the diaphragm (5). As downstream pressure increases, the diaphragm (5) is forced upward, compressing the adjustment spring (3). When the diaphragm moves, the bottom spring (10) pushes the poppet valve (9) upward to throttle the annular orifice. If downstream pressure exhausts, the mechanical sequence reverses and the poppet valve (9) opens the annular orifice until the set pressure is reached again. The poppet valve (9) normally blocks the relieving orifice in the center of the diaphragm (5). High excessive pressure lifts the diaphragm (5) off the poppet valve (9) and air bleeds through the orifice and out the bonnet (2) vent until the system returns to set pressure.

## Cleaning and Maintenance:

**Filter** – It is necessary to keep the filter clean in order to sustain peak filtering efficiency and avoid excessive pressure drop. A coating of dirt or condensation build-up on the filter element or a pressure drop of 10 PSI or more indicates that cleaning is required.

Removal of the filter from the line for cleaning is not necessary. Disassembly requires no tools and the parts drawing on this page can be used as a guide. Air supply must be shut off and the filter must be depressurized prior to disassembly. The filter element should be replaced and all other parts should be cleaned with nothing stronger than household detergent. Before reassembly, the body should be blown out to remove any remaining debris.

To drain off any accumulations in the bowl, the draincock is opened by turning it in a clockwise direction. This should be done before the collected fluid reaches the lower baffle.

The bowl guard is removed by depressing the release tab with the thumb, while turning the guard counterclockwise and pulling downward. The guard will become disengaged when the clasps clear the locking points on the body. The bowl then can be removed by turning it counterclockwise until it is completely unscrewed and free of the body.

**Regulator** – A clean supply of air to the regulator will assure long periods of uninterrupted service. Dirt in the poppet valve assembly will lead to erratic operation or loss of regulation. When cleaning becomes necessary, the air line should be shut off and depressurized. The regulator should be disassembled using the parts drawing on this page as a guide. All assembly parts should be cleaned with a mild household detergent and the regulator body should be blown out with compressed air.

For proper reassembly, the poppet valve assembly must be firmly in place and the poppet stem must fit into the center hole of the diaphragm assembly. The bonnet assembly should be tightened slightly more than hand tight (approximately 40 foot pounds torque.)

## Regulator Pressure Adjustment:

Turning the adjusting knob in a clockwise direction will increase the pressure setting and counterclockwise will decrease the pressure setting.

The downstream pressure should always be adjusted to approximately 10 PSI above the required working pressure, even in the event of pressure fluctuations. It is advisable to adjust the setting under constant pressure conditions (unit not operating), as a changing flow rate affects the set valve.

To avoid readjustment after making a change in pressure setting, we recommend approaching the required setting from a lower pressure. When adjusting from a higher to a lower setting, reduce the pressure to a point below what is required, then adjust upward to the desired pressure setting.

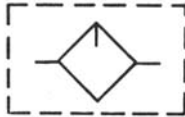
## Components:

Item No.	Description	Part No.	Item No.	Description	Part No.
1	Adjusting Knob	27R-12A	8	Bowl Gasket	27F-16
2	Bonnet/Adj. Screw As'ly	27R-14A	9	Poppet Valve Assembly	27R-18
3A	Adj. Spring (0-125 psi)	27R-15	10	Bottom Spring	27R-19
3B	Adj. Spring (0-250 psi)	27R-15H	11	Deflector Vane Plate	27F-11
3C	Adj. Spring (0-60 psi)	27R-15L	12A	40 Micron Element	27F-12
3D	Adj. Spring (0-25 psi)	27R-15J	12B	5 Micron Element	27F-12X
4	Spacer Ring-Diaphragm	27R-16	13	Retainer Baffle	27F-13
5	Diaphragm Assembly	27R-17	14	Polybowl & Draincock	27F-41L
6	1/8 Pipe PLug	PI004S	14.1	Draincock O-Ring	26F-17
7A	3/8 NPT Body	27FC3-1	14.2	Brass Draincock	26F-18
7B	1/2 NPT Body	27FC4-1	14.3	Polycarbonate Bowl	27F-40L
7C	3/4 NPT Body	1421-7	15	Plastic Bowl Guard	27F-50

### Rebuilding Kit

Filter Bowl Repair Kit  
(includes items 8, 14, and 15) . . . . .27FK01  
Regulator Repair Kit  
(includes items 4, 5, 9, 11, and 10) . . . . .27RK01

We reserve the right to make engineering changes in design or materials without notification.



90-412\*\* (revised 09/04)

Please direct questions regarding this form to one of the following:

East: 732-390-8480 (NJ)  
 West: 503-434-5964 (OR)  
 E-mail: info@coilhose.com

## 27 MODULAR SERIES LUBRICATOR

### Installation Instructions, Operating Instructions and Parts List

#### Application:

The 27 Series Modular Lubricator is constructed of lightweight aluminum in a compact configuration, combining ease of installation with superior system design flexibility. Each unit is adaptable for conversion to duo or trio systems either with clamps which connect without disturbing existing piping or with standard nipples. A modular distribution block allows a portion of the air supply to be directed to a branch line or device.

#### Options and Accessories:

Options*:	Suffix
Metal Bowl (no Sightglass) .....	.M
Metal Bowl with Sightglass .....	.S

\*Add a dash followed by the suffix(es) in alphabetical order to the model number.

Accessories:	Model No.
Metal Bowl .....	.27L-41M
Metal Bowl with Sightglass .....	.27L-41S
Connecting Clamp Kit (includes two connecting clamps, two screws, one O-ring and one allen wrench) . . .	.27MB01
Wall Mount Connecting Clamp Kit (includes one wall mount connecting clamp, one connecting clamp, two screws, one O-ring and one allen wrench) . . . . .	.27MB02
Distribution Block .....	.27DB01



#### Technical Data:

##### Maximum Supply Pressure:

Plastic Bowl .....	150 PSI
Metal Bowl .....	250 PSI

##### Maximum Operating Temperature:

Plastic Bowl .....	120° F
Metal Bowl .....	250° F

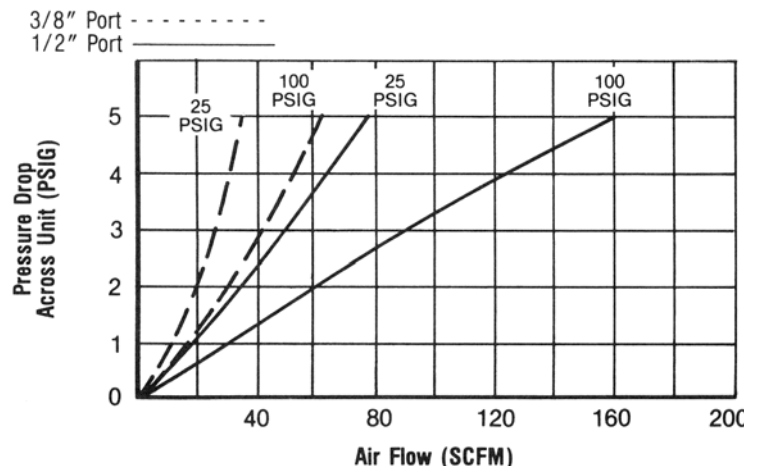
##### Material:

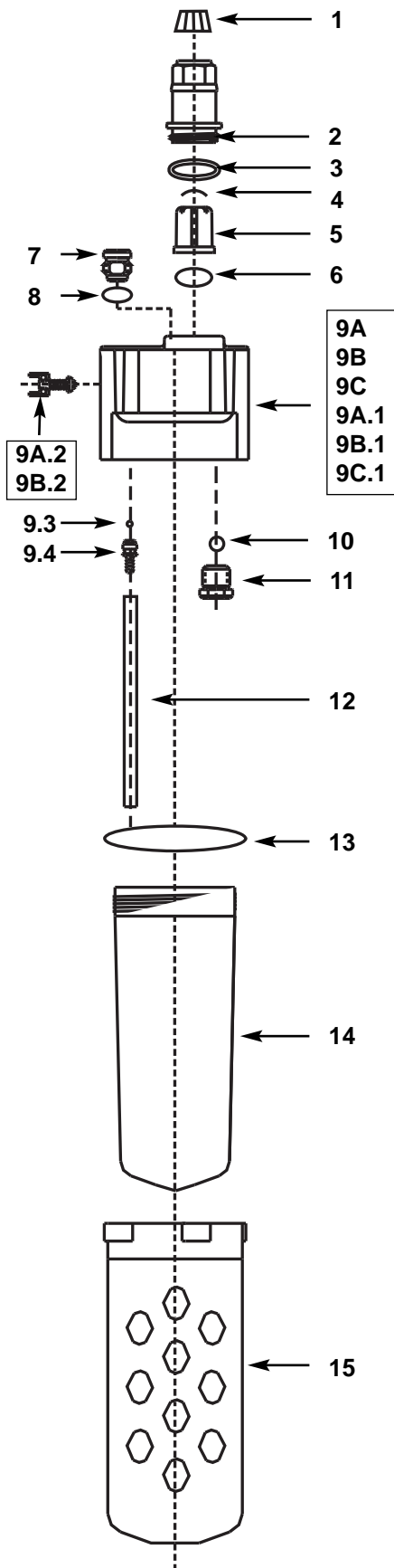
Body .....	Die cast aluminum
Standard Bowl .....	Transparent polycarbonate
.....	w/ high impact plastic guard
Optional Bowl .....	Die cast zinc

##### Dimensions and Weights:

Height .....	8"
Width .....	2 3/4"
Weight .....	1 lb.

#### Lubricator Performance Data:





### General description of operation:

As filtered and regulated air enters the lubricator, a small portion is diverted through the check stud (11) to pressurize the lubricator bowl (14). At low flow rates the majority of air passes through the venturi section of the back pressure valve assembly (9.2) and creates a low pressure arc to draw oil from the bowl (14), through the capillary feed tube (12) and past the oil check ball (9.3) to the sight dome assembly (2). This is where the oil flow rate is controlled manually by the adjusting screw (2). When drops are formed, the oil flows through the clearance between the drip spout (5) and sight dome (2) dripping through the point of injection. There, the air stream breaks the oil up into fine particles and mixes it under the swirling air to be carried to the outlet.

Under higher flow conditions, the spring loaded back pressure valve (9.2) opens and the excess flow bypasses the venturi section, then blends with lubricated air at a downstream point. The oil check ball (9.3) assures that when there is no air flow, oil in the feed tube (12) is held in place, shortening the time required to resume oil delivery when flow is reestablished. The fill plug (7) at the top of the lubricator provides access to refill the bowl (14) with oil.

### Lubricants to use:

Lubricants, as recommended by the equipment manufacturer, may be used, provided that they are not heavier than SAE #40 (S.U.V. 800 SEC at 100° F). We recommend the use of Coilhose nondetergent ATL rustproofing lubricant in temperatures above 40° F. For applications between 45° F and -45° F, we suggest using Coilhose ATLW lubricant.

### How to fill the Lubricator:

Lubricators may be filled through the fill port while under pressure and without shutting down the equipment. After carefully removing fill plug, insert the tip of a long spout oil can into the bottom of the fill port to avoid any blow back. Lubricator bowl should be filled to within 1/2" of the top.

The lubricator may also be filled by removing the bowl after the system has been depressurized. Once the bowl has been filled and replaced, be sure it is locked into position before repressurizing the system.

### Adjusting the Lubricator:

When the adjustment knob is turned completely clockwise, oil is not being delivered through the system and the equipment is not being lubricated. The adjusting knob should be set to the desired drip rate after the air has been turned on and flowing. By turning the adjustment knob in a clockwise direction, the oil feed rate is decreased. Although proper lubrication is determined through demand and experience, a good starting point is one to two drops per minute. To check lubrication rate, we suggest the following: Hold a piece of cardboard at the exhaust hole of the component in the least favorable position (farthest away from the lubricator or in the highest position). After the unit has run for about 100 strokes, an oil film on the cardboard will indicate that the setting is correct. If the oil film on the cardboard runs, the setting is too high. In order to prevent gumming, it is preferable to add too little rather than too much oil.

### Cleaning and maintenance:

The lubricator will provide long periods of uninterrupted service as long as both the air and oil supplies are kept clean and the oil level is kept above the end of the tube in the bowl. Failure of oil to drip through the sight dome, regardless of the position of the adjusting knob, indicates that cleaning is required. The lubricator does not need to be removed from the line for cleaning. Depressurize the air line and disassemble the lubricator using the parts drawing on this page as a guide. Cleaning is normally needed only in the oil metering area. After unscrewing the adjusting knob/sight dome assembly, remove the inner drip spout and clean all components with warm water and mild household detergent only. The bowl guard is removed by depressing the release tab with the thumb, while turning the guard counterclockwise and pulling downward. The guard will become disengaged when the clasps clear the locking points on the body. The bowl can then be removed by turning it counterclockwise until it is completely unscrewed and free of the body.

### Components:

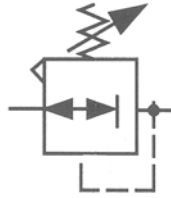
Item No.	Description	Part No.	Item No.	Description	Part No.
1	Adjusting Knob	8742-31A	9C.1	3/4" Lubricator Head	27L6-1
2	Sight Dome Assembly	8742-32A	9A.2	3/8" Back Pressure Valve Assembly	26L-16
3	Retainer "O" Ring	26L-12	9B.2	1/2" Back Pressure Valve Assembly	27L-15
4	Spring Washer	8742-42A	9.3	Oil Check Ball	26L-18
5	Drip Spout	8742-33A	9.4	Feed Tube Barb	26L-17
6	Drip Spout "O" Ring	26L-14	10	Air Check Ball	26L-19
7	Fill Plug	8844-10	11	Check Stud	26L-20
8	Fill Plug "O" Ring	3294C-8	12	Feed Tube	8844-5L
9A*	3/8" Lub. Head Ass'y	27L3-55	13	Bowl Gasket	27F-16
9B*	1/2" Lub. Head Ass'y	27L4-55	14	Polycarbonate Bowl	27L-41L
9C	3/4" Lub. Head Ass'y	27L6-55	15	Plastic Bowl Guard	27F-50
9A.1	3/8" Lubricator Head	27L3-1			
9B.1	1/2" Lubricator Head	27L4-1			

\*Items 9A, 9B and 9C are factory assembled and should be purchased as an assembly.

### Rebuilding Kit:

The Lubricator Repair Kit (Part number 27LK01) includes items 13, 14, and 15.

We reserve the right to make engineering changes in design or materials without notification.



90-411\* (revised 04/04)

Questions regarding this form should be directed to one of the following:

East: 732-390-8480 (NJ)  
 West: 503-434-5964 (OR)  
 E-mail: info@coilhose.com

## 27 MODULAR SERIES REGULATOR

### Installation Instructions, Operating Instructions and Parts List

#### Application:

The Modular Series Regulator is constructed of lightweight aluminum in a compact configuration, combining ease of installation with superior system design flexibility. Each unit is adaptable for conversion to duo or trio systems either with clamps which connect without disturbing existing piping or with standard nipples. A modular distribution block allows a portion of the air supply to be directed to a branch line or device.

#### Options and Accessories:

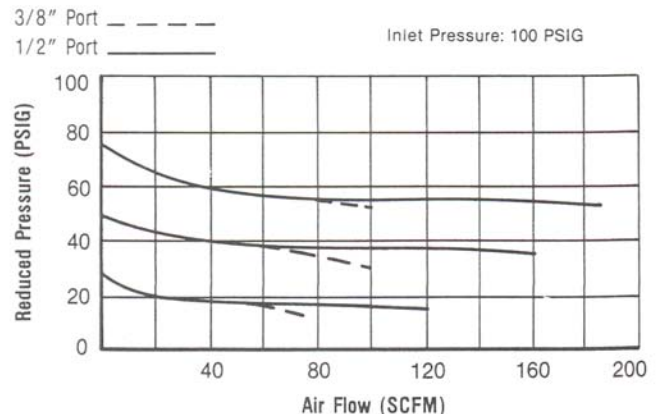
<b>Options*:</b>	<i>Suffix</i>
Gauge .....	G
High Pressure Spring (0 - 200 PSI) .....	H
Extra Low Pressure Spring (0 - 20 PSI) .....	J
Low Pressure Spring (0 - 60 PSI) .....	L
Panel Mount .....	P
 <b>Accessories:</b>	 <i>Model No.</i>
Mounting Bracket .....	.27RBA
Panel Nut .....	.27RPA
Recommended Standard Pressure Gauge:	
0 - 160 PSI with 2" dial .....	.8800-160
Recommended Optional Pressure Gauge:	
0 - 300 PSI with 2" dial .....	.8800-300
0 - 60 PSI with 2" dial .....	.8800-60
Connecting Clamp Kit (includes two connecting clamps, two screws, one o-ring and one allen wrench) .....	.27MB01
Wall Mount Connecting Clamp Kit (includes one wall mount connecting clamp, one connecting camp, two screws, one o-ring and one allen wrench) .....	.27MB02
Distribution Block .....	.27DB01

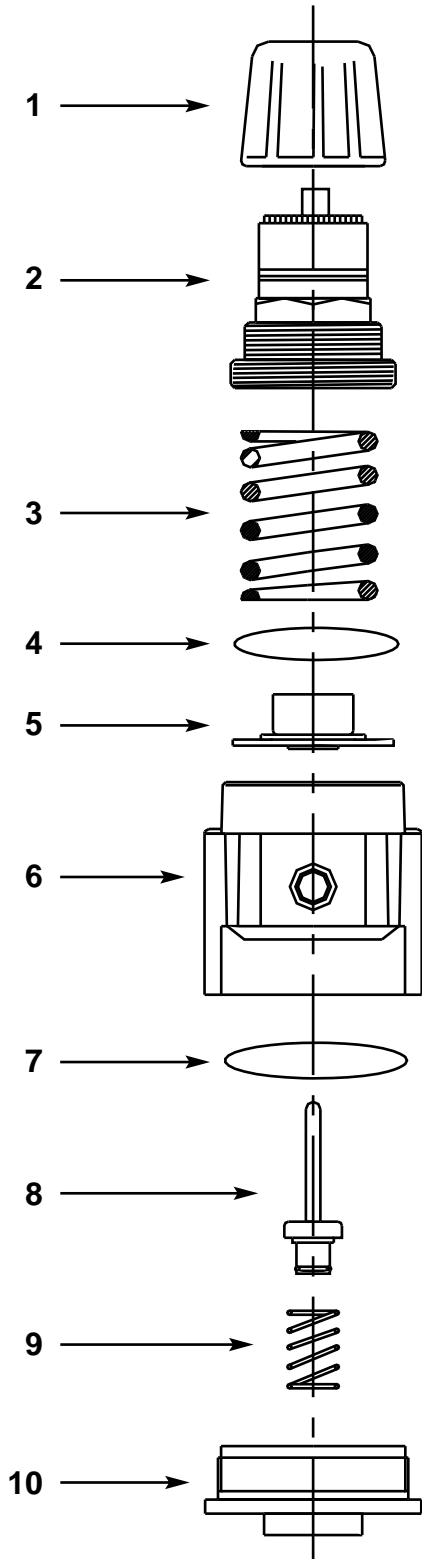


#### Technical Data:

<b>Maximum Supply Pressure:</b> .....	300 PSIG
<b>Maximum Operating Temperature:</b> ..	250° F
<b>Pressure Range:</b>	
Standard .....	0 - 125 PSI
Option .....	0 - 200 PSI
Option .....	0 - 25 PSI
Option .....	0 - 60 PSI
<b>Material:</b>	
Body .....	Die Cast Aluminum
Adjusting Knob .....	High Impact Plastic
<b>Dimensions and Weights:</b>	
Height .....	5 1/2"
Width .....	2 3/4"
Weight .....	1 3/4 lbs.

#### Performance Data:





## General Description of Operation

High pressure filtered air flows through the annular orifice around the poppet valve (8) toward the outlet. Downstream pressure is directed to the bottom of the diaphragm (5). As downstream pressure increases, the diaphragm (5) is forced upward, compressing the adjustment spring (3). When the diaphragm (5) moves, the bottom spring (9) pushes the poppet valve (8) upward to throttle the annular orifice. If downstream pressure exhausts, the mechanical sequence reverses and the poppet valve (8) opens the annular orifice until the set pressure is reached again. The poppet valve (8) normally blocks the relieving orifice in the center of the diaphragm (5). High excessive pressure lifts the diaphragm (5) off the poppet valve (8) and air bleeds through the orifice and out the bonnet (2) vent until the system returns to set pressure.

## Pressure Adjustment

Turning the adjustment knob in a clockwise direction will increase the pressure setting, while turning it counterclockwise will decrease the pressure setting.

The downstream pressure should always be adjusted to approximately 10 PSI above the required working pressure, even in the event of pressure fluctuation. It is advisable to adjust the setting under constant pressure conditions (unit not operating), as a changing flow rate affects the set value.

To avoid readjustment after making a change in pressure setting, we recommend approaching the required setting from a lower pressure. When adjusting from a higher to a lower setting, reduce the pressure to a point below what is required, then adjust upward to the desired pressure setting.

## Cleaning and Maintenance

A clean supply of air to the regulator will assure long periods of uninterrupted service. Dirt in the poppet valve assembly will lead to erratic operation or loss of regulation. When cleaning becomes necessary, air line should be shut off and depressurized. The regulator should be disassembled using the parts drawing on this page as a guide. All assembly parts should be cleaned with a mild household detergent and the regulator body should be blown out with compressed air.

For proper reassembly, the poppet valve assembly must be firmly in place and the poppet stem must fit into the center hole of the diaphragm assembly. The bonnet assembly should be tightened slightly more than hand tight (approximately 40 foot pounds torque.)

## Components:

<i>Item No.</i>	<i>Description</i>	<i>Model No.</i>
1	Adjusting Knob	27R-12A
2	Bonnet / Adjustable Screw Assembly	27R-14A
3	Adjusting Spring 125 PSI	27R-15
-	Adjusting Spring 0 - 250 PSI	27R-15H
-	Adjusting Spring 0 - 25 PSI	27R-15J
-	Adjusting Spring 0 - 60 PSI	27R-15L
4	Spacer Ring-Diaphragm	27R-16
5	Diaphragm Assembly	27R-17
6	3/8" NPT Body	27FC3-1
-	1/2" NPT Body	27FC4-1
-	3/4" NPT Body	27FC6-1
7	Spacer Ring-Diaphragm	27R-16
8	Poppet Valve Assembly	27R-18
9	Bottom Spring	27R-19
10	Bottom Plug	27R-20

## Rebuilding Kit

The Regulator Repair Kit includes items 4, 5, 7, 8 and 10. Use Model No. **27RK01** to order.

We reserve the right to make engineering changes in design or materials without notification.





Questions regarding this form should be directed to one of the following:

East/Central: 732-390-8480 (NJ)  
West: 503-434-5964 (OR)  
E-mail: info@coilhose.com



Questions regarding this form should be directed to one of the following:

East/Central: 732-390-8480 (NJ)  
West: 503-434-5964 (OR)  
E-mail: info@coilhose.com

## Adjustable In-Line Pressure Regulators Instruction Sheet

## Adjustable In-Line Pressure Regulators Instruction Sheet

### Technical Data:

Maximum Supply Pressure: . . . . .150 PSI  
Operating Pressure Range: . . . . .50-145 PSI  
Maximum Operating Temp.: . . . . .175° F  
Material: . . . . .Anodized  
Aluminum

### Technical Data:

Maximum Supply Pressure: . . . . .150 PSI  
Operating Pressure Range: . . . . .50-145 PSI  
Maximum Operating Temp.: . . . . .175° F  
Material: . . . . .Anodized  
Aluminum

To be used in applications where air pressure is pulsating or cycled. Not recommended for constant use.

To be used in applications where air pressure is pulsating or cycled. Not recommended for constant use.

See installation and operating instructions on reverse side.

See installation and operating instructions on reverse side.



Questions regarding this form should be directed to one of the following:

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West: 503-434-5964 (OR)  
E-mail: info@coilhose.com



Questions regarding this form should be directed to one of the following:

East/Central: 732-390-8480 (NJ)  
West: 503-434-5964 (OR)  
E-mail: info@coilhose.com

## Adjustable In-Line Pressure Regulators Instruction Sheet

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### Technical Data:

Maximum Supply Pressure: . . . . .150 PSI  
Operating Pressure Range: . . . . .50-145 PSI  
Maximum Operating Temp.: . . . . .175° F  
Material: . . . . .Anodized  
Aluminum

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Maximum Supply Pressure: . . . . .150 PSI  
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To be used in applications where air pressure is pulsating or cycled. Not recommended for constant use.

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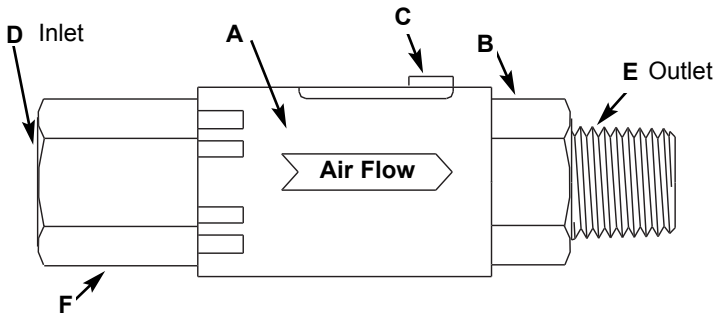
See installation and operating instructions on reverse side.

See installation and operating instructions on reverse side.

## Installation and Operation Instructions

(Use diagram at bottom of page as a guide)

1. Apply a small amount of seal compound to male threads of regulator and male threads of connector.
2. Engage regulator hex (B) with wrench and connect male outlet threads (E) to female inlet threads of tool.  
**Note: Adding a 6" snubber (whip hose) between the air tool and regulator will provide a safer and longer lasting installation.**
3. Engage regulator hex (F) with wrench and connect female inlet threads (D) to male threads of connector.
4. Engage connector to coupler of air supply line and apply pressure.
5. Loosen screw (C) and slide sleeve (A) toward tool and regulator outlet.
6. To adjust regulator to desired setting, turn hex (F) "out" to increase pressure or "in" to reduce pressure.
7. When desired pressure setting is reached, slide sleeve (A) back to original position by aligning the crest of the hex (F) and notch of the sleeve.
8. Tighten screw (C) to lock in at desired pressure setting.



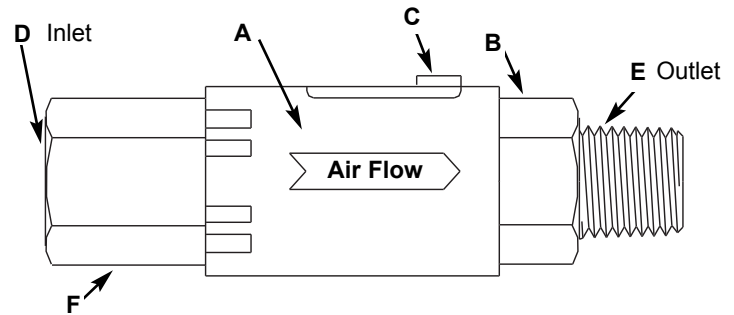
East/Central: 19 Kimberly Road • East Brunswick, NJ 08816  
Phone: 732-390-8480 / Fax: 732-390-9693

West: 1730 NE Miller Street • McMinnville, OR 97128  
Phone: 503-434-5964 / Fax: 503-472-1989

## Installation and Operation Instructions

(Use diagram at bottom of page as a guide)

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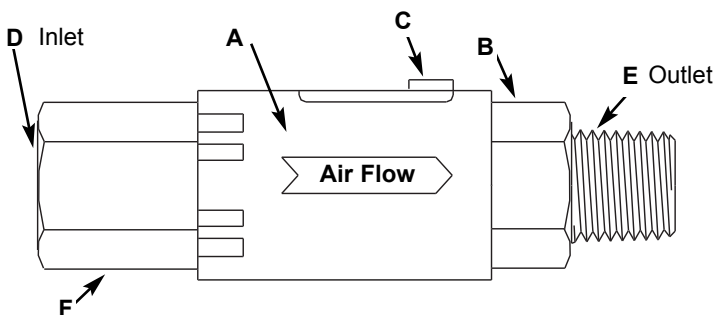
East/Central: 19 Kimberly Road • East Brunswick, NJ 08816  
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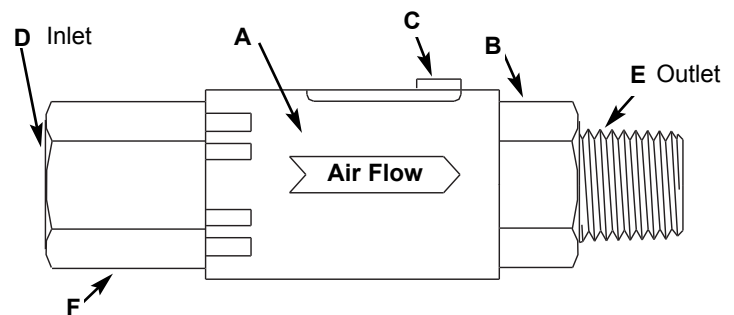
East/Central: 19 Kimberly Road • East Brunswick, NJ 08816  
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FORM: 90-4042

19 Kimberly Road  
East Brunswick, NJ 08816

1730 Miller Street  
McMinnville, OR 97128

## DISPOSABLE IN-LINE DESICCANT DRYER

### APPLICATION

The disposable in-line desiccant dryer is designed to remove moisture and oil aerosols that can pass through your current filtration system. It will provide dry air during its life cycle. It is not intended as a replacement of your current filtration system.

### INSTALLATION

The 4042 is equipped with (1) 1/4" NPTF and (1) 1/4" NPTM ports. It can be installed with the airflow moving in either direction. When installing the desiccant dryer, hand tighten to a leak proof seal only. DO NOT USE any tools or mechanical devices to tighten the unit.

Maximum Flow Capacity: 15 CFM  
Maximum Pressure: 125 PSI  
Maximum Temperature: 130° F

### OPERATION

-The 4042 features a see through design. When the dark color desiccant beads change to a light transparent color, the filter needs to be changed.

- Do not attempt clean unit. Solvents, ketones, etc., will affect the plastic housing.

- Keep any connected air lines free of snags and additional tension for the unit may break at the connecting ports. To manipulate hose, hold hose below the unit.

**WARNING: THIS DEVICE WILL COLLECT MOISTURE AND RISK FREEZING THAT MAY CAUSE UNIT TO RUPTURE. MINIMUM OPERATING TEMPERATURE IS 35°F.**



FORM: 90-4042

19 Kimberly Road  
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90-416\* (revised 07/05)

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## IN-LINE SERIES LUBRICATORS

### Installation and Operating Instructions

#### Application:

The In-Line Series Lubricators are an economical and efficient way to protect and maintain your air tools. Made of lightweight aluminum, these units are equipped with female inlet and male outlet threads for easy, point-of-use installation. Ideal applications include nailers, staplers, screwdrivers, drills, impact wrenches, and any other small- to medium- sized pneumatic tool requiring lubrication.

#### Features:

- FPT Inlet and MPT Outlet - available with either 1/4" or 3/8" ports.
- 5 cc or 7.5 cc lubricant capacity.

#### Technical Data:

**Maximum Supply Pressure** .....150 PSI  
**Maximum Operating Temperature** ... 250° F

#### Material:

Body .....Anodized aluminum  
 Fill Cap .....Brass

#### Capacity:

400XX .....5 cc  
 500XX .....7.5 cc

#### Dimensions and Weights:

	<u>400XX</u>	<u>500XX</u>
Height .....	3"	3 1/4"
Width .....	1 1/3"	2"
Weight .....	1/30 lb.	1/3 lb.

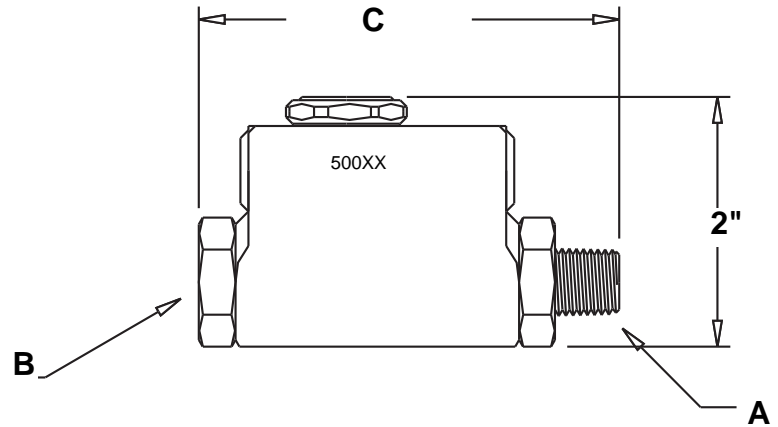
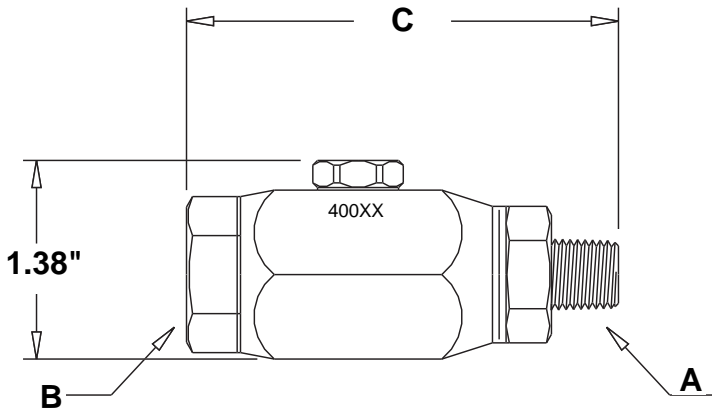


#### Cleaning:

Coilhose In-Line Lubricators will provide long periods of uninterrupted service, provided the air and the oil supply are kept clean. Periodic cleaning is recommended.

To remove and clean the lubricator:

1. Depressurize line and disconnect the lubricator from the air supply.
2. Slowly remove oil fill cap to relieve pressure in oil reservoir and then drain the oil.  
  
*Caution: If pressure is released too quickly, oil may spray from reservoir.*
3. Remove lubricator from air tool.
4. "Back flush" lubricator to blow out any dirt or residue.
5. Clean lubricator with warm water and household detergent or mild commercial-grade solvent.
6. Make sure all moisture is removed by thoroughly blowing out the unit with compressed air.
7. Follow "Installation and Filling" instructions on the reverse side of this page to reinstall lubricator.



Model Number	A Outlet	B Inlet	C Length	Net Weight	Oil Capacity	Max. Inlet Pressure
40014	1/4" MPT	1/4" FPT	3.09"	5.0 oz.	5.0 cc	150 PSI
40038	3/8" MPT	3/8" FPT	3.12"	5.5 oz.	5.5 cc	150 PSI
50014	1/4" MPT	1/4" FPT	3.25"	5.9 oz.	7.5 cc	150 PSI
50038	3/8" MPT	3/8" FPT	3.28"	6.4 oz.	7.5 cc	150 PSI

**Caution: Do not use synthetic oil.**

Also, detergent oil, antifreeze fluid, or machine oil heavier than SAE # 40 (S.U.V. 800 S.E.C. at 100° F) should not be used. For applications with temperatures above 40° F, we recommend the use of Coilhose non-detergent ATL rust-proofing lubricant; for applications with temperatures between -40° F and 40° F, we recommend the use of Coilhose ATLW lubricant.

**Caution: Do not exceed 150 PSI Inlet pressure.**

**Installation and Filling:**

1. Apply a small amount of seal compound to connector male threads and lubricator male threads.
2. Hand tighten male connector into female inlet of the air tool.

*NOTE:* Adding a 6" snubber (whip hose) between the air tool and lubricator will provide a safer and longer lasting installation.

3. Hand tighten male outlet of lubricator into female inlet of the air tool.
4. Wrench tighten both connections until air tight seals are formed.
5. Remove oil fill cap and fill reservoir with lubricant, leaving a small amount of space for air.
6. Replace and tighten oil fill cap until air tight.
7. Connect air supply.
8. Activate air tool several times to set needle valve into action.



CV500-2\* (revised 05/07)

Questions regarding this form should be directed to one of the following:

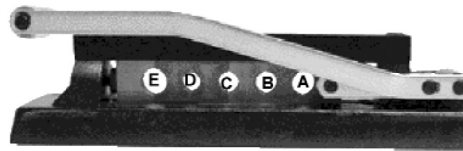
East/Central: 732-390-8480 (NJ)  
 West: 503-434-5964 (OR)  
 E-mail: info@coilhose.com

## CV500/CV501 HOSE CRIMPING VISE

The CV500 Hose Crimper is furnished with mounting holes for permanent installations or it may be used as a portable tool for in-the-field hose assembly. Crimps 1/4" to 3/8" I.D. hose in either one or two braid design.

### Hose Crimper Ordering Information:

Die Reference	Approximate Die Inside Diameter	Die Half Model
A	.630"	CV500-DH1
		CV500-DH2
B	.580"	CV500-DH2
		CV500-DH3
C	.530"	CV500-DH3
		CV500-DH4
D	.480"	CV500-DH4
		CV500-DH5
E	.680"	CV500-DH5
		CV500-DH6



Model CV500

### Optional Die Sets Ordering Information:

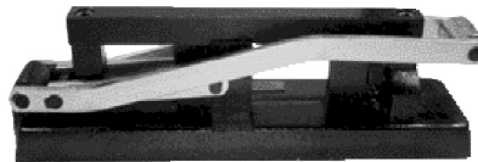
Approx. Die Inside Diameter	Model
.437"	CV500-DS7
.750"	CV500-DS8
.812"	CV500-DS9
.375"	CV500-DS10

The Optional Die Sets include the two die halves required to crimp a ferrule onto the hose.

### Larger Diameter Hose Crimper Die Set Ordering Information:

Hose Outside Diameter	Model
11/16"	CV501-DS1
23/32"	CV501-DS2
3/4"	CV501-DS3
25/32"	CV501-DS4
13/16"	CV501-DS5
27/32"	CV501-DS6
7/8"	CV501-DS7
29/32"	CV501-DS8
15/16"	CV501-DS9
31/32"	CV501-DS10
1"	CV501-DS11
1 1/32"	CV501-DS12
1 1/16"	CV501-DS13
1 1/8"	CV501-DS14
1 3/16"	CV501-DS15
1 1/4"	CV501-DS16
1 5/16"	CV501-DS17
1 3/8"	CV501-DS18
1 7/16"	CV501-DS19
1 1/2"	CV501-DS20

The CV501 Large Diameter Hose Crimper is designed for use with 7/8" to 1 1/2" O.D. (1/2" to 1" I.D.) hose. *This crimper is sold without dies.* Select the die set for the required hose size from the table shown.



Model CV501

Each die set includes the two die halves required to crimp a ferrule onto the hose. Only one die set can be loaded into the Large Diameter Hose Crimper at a time.

**Please see other side of this sheet for very important operating instructions.**



## CV500/CV501 HOSE CRIMPING VISE (CONT'D)

### OPERATION:

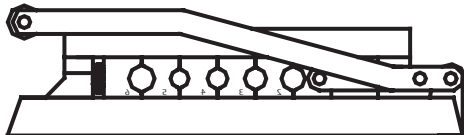
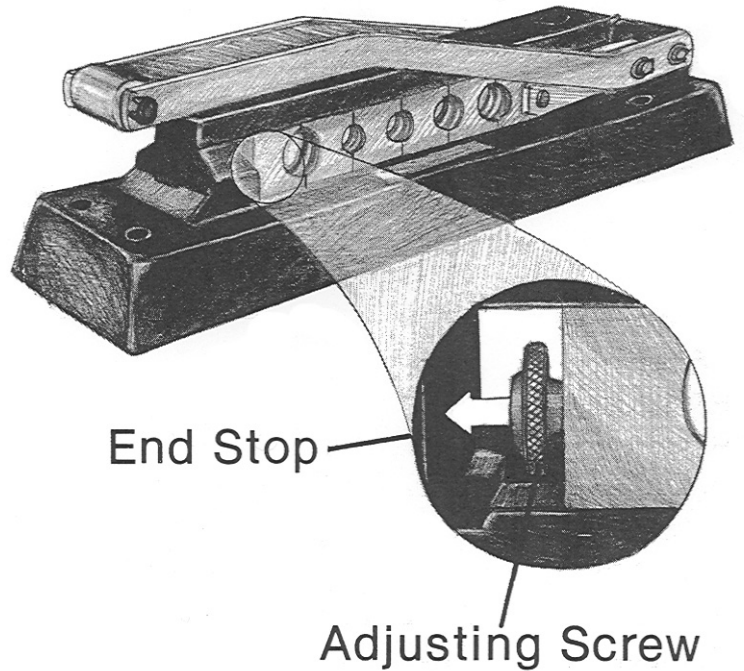
**IMPORTANT!** Before attempting to operate the CV500/CV501; with the crimping arm in the closed position, set the adjusting screw so it just touches the end stop.

This screw should NEVER be set tighter than this.

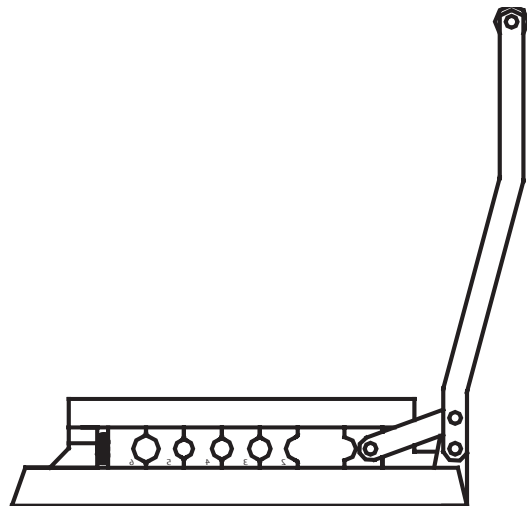
(It may be set looser if the hose is oversize to avoid crimping too deeply.)

### To Operate:

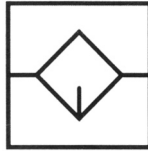
1. Slip ferrule over hose.
2. Dip end of hose into soapy water for easier assembly.
3. Press insert into hose.
4. Center ferrule in selected opening and depress crimping arm fully.
5. Rotate hose a quarter turn and repeat to finish crimp.



**CLOSED POSITION**



**OPEN POSITION**



93-420\* (revised 03/09)

Questions regarding this form should be directed to one of the following:

East: 732-390-8480 (NJ)  
West: 503-434-5964 (OR)  
E-mail: info@coilhose.com

## DESICCANT AIR DRYER

### Operating Instructions and Parts List

#### Application:

Although much of an air line's liquid condensate can be removed through the use of filters, driplegs and drain traps, water vapor and aerosols will remain in the line. The most reliable and cost efficient method of removing this residual vapor and aerosol is with a desiccant air dryer. These units are especially effective for protecting laboratory instrumentation, spray painting and air lines that are exposed to freezing conditions.

#### Features:

- Desiccant beads change color from blue to pink to indicate absorbing capacity (blue = dry, pink = wet).
- Provides exceptionally dry air.
- Pressure drop of less than 1 PSI.
- Easy to service.

#### Technical Data:

**Maximum Supply Pressure:** . . . . .150 PSI  
**Maximum Operating Temperature:** .125° F  
**Maximum Continuous Air Flow:** . . .10 SCFM  
**Atmospheric Dew Point:** . . . . .-45° F

#### Material:

Body . . . . .Die-cast zinc  
 Bowl . . . . .Polycarbonate  
 Bowl guard . . . . .Steel

#### Dimensions and Weights:

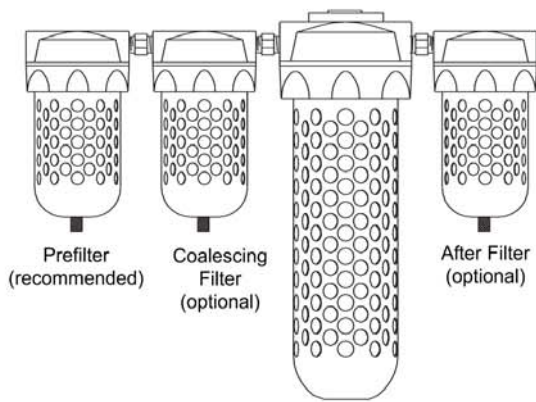
Height . . . . .12.25"  
 Width (port to port) . . . . .4.5"  
 Weight (with desiccant) . . . . .6.8 lbs.



#### Ordering Information:

1/4" port . . . . .8422  
 3/8" port . . . . .8423  
 1/2" port . . . . .8424  
 Desiccant gel refill . . . . .8422-GEL





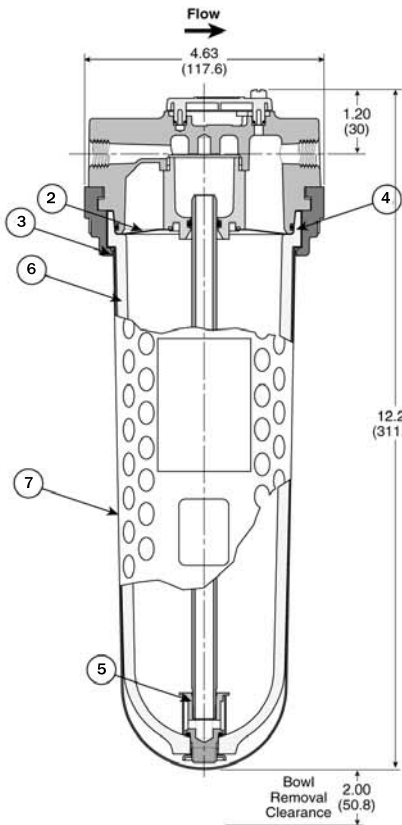
## General Description of Operation:

The moist, pressurized air enters the inlet port of the desiccant dryer and is forced down through the bed of silica gel. Each silica bead is made up of many microscopic pores which attract and absorb the water vapor and aerosols as the air passes around them. As the beads become saturated, they change color from blue (dry) to pink (wet), indicating the desiccant must be replaced. With the moisture remaining trapped in the desiccant beads, the dry air passes up the center tube and through the outlet assuring a supply of moisture free air to the downstream equipment.

## Installation:

The desiccant air dryer should be installed as close as possible to the area where the air is being used. To make the installation easier, do not open the package of desiccant gel and fill the bowl until the dryer is in place. Make sure the air flow is going in the same direction as the arrow at the top of the unit. Once the desiccant dryer is properly in place, the package of gel can be opened and poured into the bowl (see "Maintenance" instructions to the right for proper filling).

Although a properly installed and maintained desiccant air dryer will provide optimum results as a standalone unit, we recommend placing a particulate filter up stream from the dryer (see Figure 1). This will assure that only clean air will reach the desiccant dryer. In addition, the filter will remove some of the moisture before it reaches the dryer, thus prolonging the service life of the desiccant gel. Where there is oil or an excessive amount of moisture in the line, a coalescing filter should be installed after the particulate filter and before the desiccant dryer. Since Coilhose Pneumatics Desiccant Gel 8422-GEL produces virtually no dust, an after filter is not normally required. However, in applications where the air requirements are extremely critical, an after filter can be used to further protect the system. Recommended optional filters:



Port Size	Prefilter	Coalescing Filter	After Filter
1/4"	8822R	8922R	8822RX
3/8"	8823R	8923R	8823RX
1/2"	8824R	8924R	8824RX

## Cleaning and Maintenance:

The only maintenance required on the desiccant air dryer is when the desiccant gel turns from blue (dry) to pink (wet). This indicates that the desiccant beads are saturated and should be changed. Removal of the unit from the line is not necessary and changing the desiccant can be done without the use of any tools. The air supply must be turned off and the desiccant dryer must be depressurized prior to disassembly. Depress the locking tab on the clamping ring and, by rotating it slightly and pulling downward, the clamp is removed from the head of the desiccant dryer. This will allow the polycarbonate bowl and steel guard to come free from the top housing. Once the bowl is removed, pour out the wet (pink) desiccant gel and refill it with dry (blue) desiccant gel (Coilhose Pneumatics model number 8422-GEL) to approximately 1/8" below the inner step. Shake or tap the side of the bowl to help settle the desiccant to assure proper filling. Reassemble polycarbonate bowl, steel guard and clamping ring onto the top housing. Prior to pressurizing the unit, make sure the clamping ring is securely locked in place.

Note: Used (pink) desiccant can be regenerated as follows:

1. Pour out pink desiccant onto a flat pan.
2. Place desiccant-filled pan in 350° F oven for approximately three hours or ..... until the desiccant changes back to blue.
3. When the desiccant returns to blue, remove it from the oven and allow to cool to room temperature.
4. Pour desiccant back into bowl, following the above instructions.

## Components:

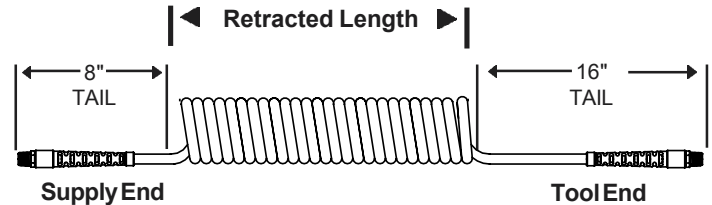
Chart No.	Description	Model No.
2	Screen assembly	8422-2
3	Clamping ring	8422-3
4	Bowl o-ring	8422-4
5	Tube assembly (with screen)	8422-5
6	Polycarbonate bowl	8422-6
7	Steel bowl guard	8422-7

We reserve the right to make engineering changes in design or materials without notification.

# FLEXCOIL® Instruction and Engineering Data Sheet

## HOSE ASSEMBLY INFORMATION

HOSE I.D. x O.D.	STANDARD LENGTH	RETRACTED LENGTH	APPROXIMATE WEIGHT
.160" x 1/4"	10 feet	7"	.29 lb.
	15 feet	9 1/2"	.37 lb.
	20 feet	12 1/2"	.46 lb.
	25 feet	15 1/2"	.54 lb.
	30 feet	19"	.62 lb.
3/16" x 5/16"	5 feet	2"	.23 lb.
	10 feet	6"	.34 lb.
	15 feet	10 1/4"	.46 lb.
	20 feet	14 1/2"	.56 lb.
	25 feet	18 1/2"	.68 lb.
1/4 " x 3/8"	5 feet	2 1/2"	.26 lb.
	10 feet	6"	.41 lb.
	15 feet	9 1/2"	.59 lb.
	20 feet	13"	.74 lb.
	25 feet	16"	.88 lb.
	30 feet	19"	1.05 lbs.
5/16" x 15/32"	10 feet	7 1/2"	.68 lb.
	15 feet	11 1/2"	.89 lb.
	20 feet	15"	1.11 lbs.
	25 feet	19"	1.32 lbs.
	30 feet	23"	1.52 lbs.
3/8" x 9/16"	10 feet	5 1/2"	1.00 lb.
	15 feet	8 1/2"	1.40 lbs.
	20 feet	11"	1.85 lbs.
	25 feet	14"	2.25 lbs.
	30 feet	17"	2.63 lbs.
.467" x 3/4"	10 feet	7"	2.14 lbs.
	15 feet	11 3/4"	2.95 lbs.
	20 feet	16 1/2"	3.77 lbs.
	25 feet	23"	4.60 lbs.
	30 feet	28"	5.35 lbs.



### CHEMICAL COMPATIBILITY

Has good resistance to fuels, oils, water and many non-polar solvents. Avoid lacquers, thinners and ketones. Consult factory for a complete chemical compatibility list.

### TEMPERATURE CONSIDERATION

Polyurethane is a thermoplastic elastomer so it will be affected by increases in temperature. As a compound, polyurethane has a temperature range of -40°F to +165°F. Careful consideration must be given to the reduced pressure capabilities as temperature is increased. To estimate working pressure at various temperatures, use the "Polyurethane Tubing Technical Information" chart below to find the approximate burst pressure, then calculate for safety factor as explained under "Working Pressure."

### WORKING PRESSURE

Working pressures are normally calculated by dividing the burst pressure by the desired safety factor. Safety factors of 3-to-1 or 4-to-1 are commonly used, depending upon the severity of the application.

### EXAMPLE:

If tubing burst pressure is 380 PSI @ 75°F, the working pressure with a:  
 3-to-1 S.F. is 126 PSI (380/3 = 126)      4-to-1 S.F. is 95 PSI (380/4 = 95)

## POLYURETHANE TUBING TECHNICAL INFORMATION

Size I.D. x O.D.	Approx. Burst Pressure (PSI) at				Vacuum Rating Hg" at 75°F
	75°F	100°F	125°F	150°F	
.160" x 1/4"	445	310	240	170	28
3/16" x 5/16"	440	290	220	180	28
1/4" x 3/8"	445	310	220	170	28
5/16" x 15/32"	400	300	190	170	28
3/8" x 9/16"	400	290	210	180	28
.467" x 3/4"	435	360	290	250	28



**WARNING: Recommended working length is 90% of the total hose length. Stretching the hose beyond that amount while pressurized may cause the fitting to blow out. This may cause violent hose whipping action which could cause injuries to user and surrounding personnel.**

## SPECIFICATIONS

	.160 x 1/4" Hose	3/16" x 5/16" Hose	1/4" x 3/8" Hose	5/16" x 15/32" Hose	3/8" x 9/16" Hose	.467" x 3/4" Hose
Inside Diameter	.165"	.202"	.250"	.320"	.380"	.475"
Tolerance	.155"	.192"	.240"	.310"	.370"	.460"
Outside Diameter	.255"	.320"	.380"	.477"	.567"	.765"
Tolerance	.245"	.310"	.370"	.467"	.557"	.750"
Wall Thickness	.045"	.059"	.065"	.078"	.093"	.145"
Outside Diameter	1 1/2"	1 7/8"	2 1/2"	2 15/16"	4 1/8"	5"
Recommended Temperature Range	-40°F to +165°F	-40°F to +165°F	-40°F to +165°F	-40°F to +165°F	-40°F to +165°F	-40°F to +165°F
Working Pressure	125 psi @ 75°F	145 psi @ 75°F	125 psi @ 75°F	120 psi @ 75°F	115 psi @ 75°F	115 psi @ 75°F



**WARNING: Using higher pressure and/or temperature than rated may cause the hose to rupture, potentially endangering personnel and surrounding equipment.**

# FLEXCOIL® INSTRUCTION AND ENGINEERING DATA SHEET

## REPLACEMENT FITTINGS

**NOTE:** For impact tool applications, we strongly recommend the use of a rigid fitting at the working (tool) end to assure a safer and more durable connection.

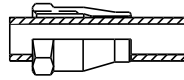
### Introduction:

Unlike conventional reinforced air hoses, polyurethane will expand in diameter when pressurized. Although this highly elastic material will stretch, it will not break under tension. As it is stretched, the hose wall becomes thinner, thus increasing the possibility of "pulling out" from the fittings. This tendency is more pronounced at higher working temperatures as the material "flows" and wall thickness thins under tension.

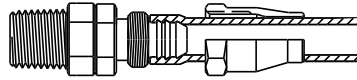
We have developed a fitting with the proper barb spacing and serration which, when used in conjunction with the retainer sleeve, will give optimum holding performance. The retainer sleeve also eliminates the need for a spring guard (strain relief). These same principles were designed into our reusable fittings which use an elongated nut to protect the tubing at its weakest point.

### Assembly Instructions for Reusable:

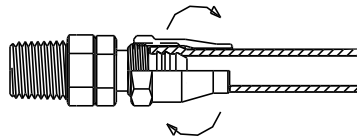
- After cutting the hose end straight and clean, insert it through the rounded end of the brass sleeve (nut) or strain relief.



- Press the barbed end of the fitting into the end of the hose until it seals against the thread base.

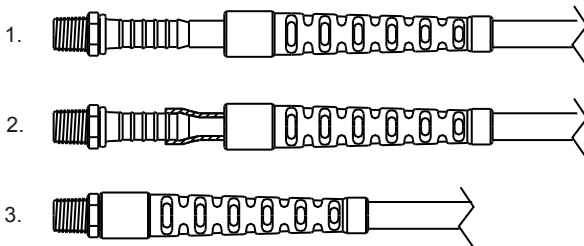


- Slide the brass sleeve (nut) or strain relief over the barbed connection and thread it onto the fitting. The installation is completed by tightening the sleeve with the appropriate sized open end wrench until it securely meets the fitting body.



### Assembly Instructions for Barb and Sleeve:

- Place the retainer sleeve over the hose.
- Place the fitting barb into the end of the hose. While the fitting is held stationary against a solid surface, exert pressure to push the hose over the fitting barb. Wrapping sandpaper around the hose will allow a firmer grip to achieve the required pressure.
- Once the fitting is completely in place, push the retainer sleeve over the increased diameter of the hose, using an open end wrench the size of the tube O.D. under the sleeve for leverage. A lubricant such as light oil, grease or silicone fluid should also be used to aid the assembly of the sleeve over the barb.

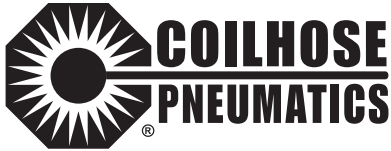


Tubing Size		Fitting Type and Size	Model Number
I.D.	O.D.		
.160"	1/4"	1/4" NPT Swl Male	PSM53204
3/16"	5/16"	1/4" NPT Swl Male	PSM0304
		1/4" BSPP Swl Male	PSM0304P
1/4"	3/8"	1/4" NPT Rigid Male	PRM0404
		1/4" NPT Swl Male	PSM0404
		1/4" BSPP Swl Male	PSM0404P
5/16"	15/32"	1/4" NPT Swl Male	PSM0504
		3/8" NPT Swl Male	PSM0506
		3/8" BSPP Swl Male	PSM0506P
3/8"	9/16"	1/4" NPT Rigid Male	PRM0604
		3/8" NPT Rigid Male	PRM0606
		1/4" NPT Swl Male	PSM0604
		3/8" NPT Swl Male	PSM0606
		3/8" BSPP Swl Male	PSM0606P
.467"	3/4"	1/2" NPT Swl Male	PSM0808
		1/2" NPT Rgd Fem	PRF0808

Tubing Size		Fitting Type and Size	Barb Model No.	Sleeve Model No.
I.D.	O.D.			
3/16"	5/16"	1/4" NPT Rigid Male	PUB0304	PUSC316K
		1/4" NPT Swl Male	PUB0304S	
		1/4" BSPP Swl Male	PUB0304SP	
1/4"	3/8"	1/4" NPT Rigid Male	PUB0404	PUSC14K
		1/4" NPT Swl Male	PUB0404S	
		1/4" BSPP Swl Male	PUB0404SP	
		3/8" NPT Rigid Male	PUB0406	
5/16"	15/32"	1/4" NPT Rigid Male	PUB0504	PUSC516K
		3/8" NPT Swl Male	PUB0506S	
		3/8" BSPP Swl Male	PUB0506SP	
3/8"	9/16"	1/4" NPT Rigid Male	PUB0604	PUSC38K
		3/8" NPT Rigid Male	PUB0606	
		3/8" NPT Swl Male	PUB0606S	
		3/8" BSPP Swl Male	PUB0606SP	



**WARNING:** Our barb and sleeve type fittings will not work without the special retainer sleeve. Hose clamps or other narrow band retainer devices should only be used on a temporary basis where operating pressure does not exceed 90 PSI. For use at the specified maximum operating pressure, the fitting can only be held in place by the properly sized and installed retainer sleeve as supplied by the manufacturer.



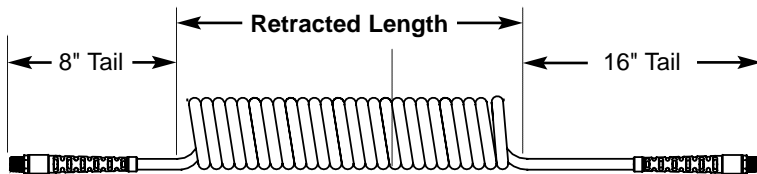
East Coast: 732-390-8480 (NJ)  
West Coast: 503-434-5964 (OR)



Phone: 503-434-5561

# FLEXEEL®

## Instruction and Engineering Data Sheet



### Hose Assembly Information:

Hose I.D. x O.D.	Standard Length	Retracted Length	Approximate Weight
1/4" x 3/8"	10 feet	9"	.41 lb.
	15 feet	14.5"	.59 lb.
	20 feet	19.5"	.74 lb.
	25 feet	26.5"	.88 lb.
5/16" x .473"	10 feet	9.5"	.68 lb.
	15 feet	15.5"	.89 lb.
	20 feet	21"	1.11 lbs.
	25 feet	27.75"	1.32 lbs.
3/8" x 9/16"	10 feet	10.5"	1.00 lb.
	15 feet	16.75"	1.40 lbs.
	20 feet	23"	1.85 lbs.
	25 feet	29"	2.25 lbs.

### Chemical Compatibility:

Polyurethane provides good resistance to fuels, oils, water and many solvents. Avoid lacquers, thinners and ketones. Consult factory for a complete chemical compatibility list.

Temperature Consideration: Since polyurethane is a thermoplastic elastomer, it is affected by temperature increases. As a compound, polyurethane has a general temperature range of -40° F to 180° F; however, its usefulness is limited to about 165° F. Careful consideration must be given to the reduced pressure capabilities as temperature rises. To estimate working pressure at various temperatures, use the "Polyurethane Tubing Technical Information" chart below to find the appropriate burst pressure, then calculate for safety factor as explained under "Working Pressure."

### Polyurethane Hose Technical Information:

#### Working Pressure:

Working pressures are normally calculated by dividing the burst pressure by the desired safety factor. Safety factors of 3-to-1 or 4-to-1 are commonly employed depending upon the severity of the application:

*Example:* If tubing burst pressure is 380 PSI at 75° F, the working pressure with a 3-to-1 safety factor is 126 PSI (380 / 3 = 126). A 4-to-1 safety factor is 95 PSI (380 / 4 = 95).

Hose I.D. x O.D.	Approximate Burst Pressure (PSI)				Vacuum Rating "Hg" at 75°F
	at 75° F	at 100° F	at 125° F	at 150° F	
1/4" x 3/8"	850	770	640	550	28
5/16" x .473"	800	?	?	430	28
3/8" x 9/16"	800	?	?	430	28

### Warning:

Recommended working length is 90% of the total hose length. Stretching the hose beyond that amount while pressurized may cause the fitting to blow out. This may cause violent hose whipping action which could cause injuries to user and surrounding personnel.

Using a higher pressure and / or temperature than rated may cause the hose to rupture, potentially endangering personnel and surrounding equipment.

### Specifications:

Description	1/4" x 3/8" Hose	5/16" x .473" Hose	3/8" x 9/16" Hose
Hose inside diameter tolerance	.250" / .240"	.320 / .310	.380 / .320
Hose outside diameter tolerance	.400" / .380"	.483 / .463	.573 / .553
Wall thickness	.080" / .070"	.085 / .075	.100 / .090
Coil outside diameter	1 3/4"	2 3/16"	2 7/8"
Recommended temperature range	-40° F to 165° F	-40° F to 165° F	-40° F to 165° F
Working pressure	200 PSI at 75° F	200 PSI at 75° F	200 PSI at 75° F

Fitting instructions on reverse.

# FLEXCEL® Fitting Instructions

**NOTE:** For impact tool applications, we strongly recommend using a rigid fitting at the working (tool) end to assure a safer and more durable connection.

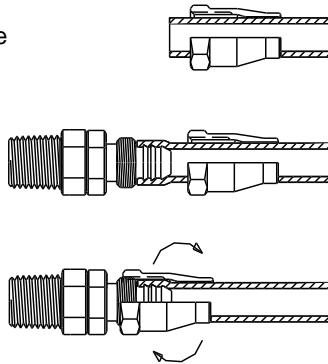
## Introduction:

Unlike conventional reinforced air hoses, polyurethane will expand in diameter when pressurized. Although this highly elastic material will stretch, it will not break under tension. As it is stretched, the hose wall becomes thinner, thus increasing the possibility of "pulling out" from the fittings. This tendency is more pronounced at higher working temperatures as the material "flows" and wall thickness thins under tension.

We have developed a fitting with the proper barb spacing and serration which, when used in conjunction with the retainer sleeve, will give optimum holding performance. The retainer sleeve also eliminates the need for a spring guard (strain relief). These same principles were designed into our reusable fittings which use an elongated nut to protect the tubing at its weakest point.

## Assembly Instructions for Reusable Fitting:

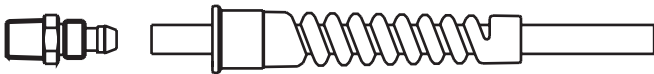
1. Make a clean, straight cut on the hose end and then insert the hose through the rounded end of the brass sleeve (nut) or strain relief.
2. Press the barbed end of the fitting into the end of the hose until it seals against the thread base.
3. Slide the brass sleeve (nut) or strain relief over the barbed connection and thread it onto the fitting. The installation is completed by tightening the sleeve with the appropriate sized open end wrench until it securely meets the fitting body.



Reusable Type		Thread sealant on swivel fittings only.		
Tube Size		Fitting	Swivel Model No.	Rigid Model No.
I.D.	O.D.			
1/4"	3/8"	1/4" Male	PSM0404	PRM0404
1/4"	3/8"	1/4" BSPP	PSM0404P	—
5/16"	.473"	1/4" Male	PSM0504	PRM0504
5/16"	.473"	3/8" Male	PSM0506	PRM0506
5/16"	.473"	3/8" BSPP	PSM0506P	—
3/8"	9/16"	1/4" Male	PSM0604	PRM0604
3/8"	9/16"	3/8" Male	PSM0606	PRM0606
3/8"	9/16"	3/8" BSPP	PSM0606P	—

## Assembly Instructions for Reusable Strain Relief Fitting:

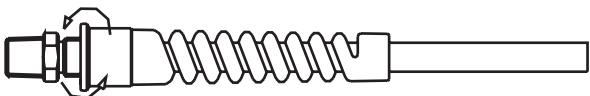
1. Make a square cut on the hose end. Slide the strain relief onto the hose.



2. Apply lubricant to the fitting barb. Place fitting against a stationary surface and push hose over barb until the hose reaches the threads.



3. Slide strain relief down to fitting.



4. Hold strain relief secure with one wrench, and using the other wrench, turn fitting hex clockwise.



Reusable Strain Relief Type				
Tube Size		Fitting	Swivel Model No.	Rigid Model No.
I.D.	O.D.			
1/4"	3/8"	1/4" Male	PSM0404SR	PRM0404SR
1/4"	3/8"	3/8" Male	PSM0406SR	PRM0406SR
5/16"	.473"	1/4" Male	PSM0504SR	PRM0504SR
5/16"	.473"	3/8" Male	PSM0506SR	PRM0506SR
3/8"	9/16"	1/4" Male	PSM0604SR	PRM0604SR
3/8"	9/16"	3/8" Male	PSM0606SR	PRM0606SR

We reserve the right to make engineering changes in design or materials without notification.



## General Purpose Series Filters

Click on the filter that you have and go to the correct instruction sheet.



Old Style



New Style



East: 19 Kimberly Road, East Brunswick NJ  
08816 - Phone: (732) 390-8480

New Style

Installation and Service Instructions:  
CH-101H Rev 6-2013

1/4", 3/8" & 1/2"  
General Purpose Filter

**⚠ WARNING**

To avoid unpredictable system behavior that can cause personal injury and property damage:

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion
- Disconnect air supply and depressurize all air lines connected to this product before installation, servicing, or conversion.
- Operate within the manufacturer's specified pressure, temperature, and other conditions listed in these instructions
- Medium must be moisture-free if ambient temperature is below freezing
- Service according to procedures listed in these instructions.
- Installation, service, and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied
- After installation, servicing, or conversion, air and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or the product does not operate properly, do not put into use
- Warnings and specifications on the product should not be covered by paint, etc. If masking is not possible, contact your local representative for replacement labels.

**⚠ CAUTION**

Polycarbonate bowls, being transparent and tough, are ideal for use with Filters and Lubricators. They are suitable for use in normal industrial environments, but should not be located in areas where they could be subjected to direct sunlight, an impact blow, nor temperatures outside of the rated range. As with most plastics, some chemicals can cause damage. Polycarbonate bowls should not be exposed to chlorinated hydrocarbons, ketones, esters and certain alcohols. They should not be used in air systems where compressors are lubricated with fire-resistant fluids such as phosphate ester and diester types.

Metal bowls are recommended where ambient and/or media conditions are not compatible with polycarbonate bowls. Metal bowls resist the action of most such solvents, but should not be used where strong acids or bases are present or in salt laden atmospheres. Consult the factory for specific recommendations where these conditions exist.

**TO CLEAN POLYCARBONATE BOWLS USE MILD SOAP AND WATER ONLY! DO NOT** use cleansing agents such as acetone, benzene, carbon tetrachloride, gasoline, toluene, etc. which are damaging to this plastic.

Bowl guards are recommended for added protection of polycarbonate bowls where chemical attack may occasionally occur.

**⚠ WARNING**

To avoid polycarbonate bowl rupture that can cause personal injury or property damage, do not exceed bowl pressure or temperature ratings. Polycarbonate bowls have a 150 PSIG pressure rating and a maximum temperature rating of 125°F.

**Introduction**

Follow these instructions when installing, operating, or servicing the product.

**Application Limits**

These products are intended for use in general purpose compressed air systems only.

**Maximum Recommended Pressure Drop:**

	kPa	PSIG	bar
Particulate Filter	70	10	0.7

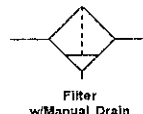
**With Polycarbonate Bowl**

	kPa	PSIG	bar
Operating Pressure Maximum	1000	150	10.3
Operating Temperature Maximum	52°C (125°F)		
Operating Temperature Minimum	0°C (32°F)		

**With Metal Bowl**

	kPa	PSIG	bar
Operating Pressure Maximum	1700	250	17.0
Operating Temperature Maximum	80°C (175°F)		
Operating Temperature Minimum	0°C (32°F)		

**ANSI Symbols**



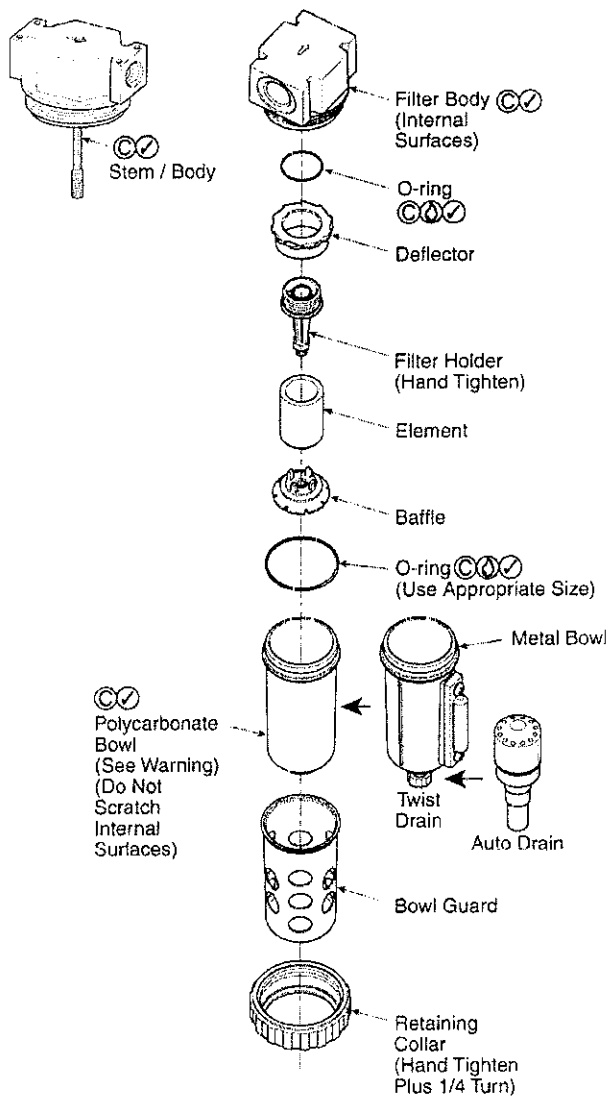
**⚠ WARNING**

**FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

This document and other information from The Company, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure and review the information concerning the product or systems in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing are subject to change by The Company and its subsidiaries at any time without notice.

EXTRA COPIES OF THESE INSTRUCTIONS ARE AVAILABLE FOR INCLUSION IN EQUIPMENT / MAINTENANCE MANUALS THAT UTILIZE THESE PRODUCTS. CONTACT YOUR LOCAL REPRESENTATIVE.



- Lightly grease with provided lubricant
- Inspect for nicks, scratches, and surface imperfections. If present reduced service life is probable and future replacement should be planned
- Clean with lint-free cloth

### Installation

- 1 The filter should be installed with reasonable accessibility for service whenever possible – repair service kits are available. Keep pipe or tubing lengths to a minimum with inside clean and free of dirt and chips. Pipe joint compound should be used sparingly and applied only to the male pipe – never into the female port. Do not use PTFE tape to seal pipe joints – pieces have a tendency to break off and lodge inside the unit, possibly causing malfunction. Also, new pipe or hose should be installed between the filter and equipment being protected.
- 2 The upstream pipe work must be clear of accumulated dirt and liquids.
- 3 Select a filter location as close as possible to the equipment being protected and upstream of any pressure regulator.
- 4 Install filter so that air flows in the direction of arrow on body.
- 5 Install filter vertically with bowl drain mechanism at the bottom. Free moisture will thus drain into the sump "quiet zone" at the bottom of the bowl.

### Operation and Service

- 1 Manual drain filters must be drained regularly before the separated moisture and oil reaches the bottom of the lower baffle.
- 2 The particulate filter element should be removed and replaced when pressure differential across the filter is 10 PSIG.

### Kits Available

Description	1/4", 3/8" & 1/2"
Element Kit 40 Micron*	PS801
Metal Bowl Kit	PS823
Polycarbonate Bowl Kit	PS832

\*Element kits include body / bowl seal





East: 19 Kimberly Road, East Brunswick, NJ 08816 - Phone: (732) 390-8480  
 West: 1730 NE Miller Street, McMinnville, OR 97128 - Phone: (503) 434-5964

Old Style

Installation & Service Instructions  
 CH-602

## General Purpose Filter

### WARNING

To avoid unpredictable system behavior that can cause personal injury and property damage:

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect air supply and depressurize all air lines connected to this product before installation, servicing, or conversion.
- Operate within the manufacturer's specified pressure, temperature, and other conditions listed in these instructions.
- Medium must be moisture-free if ambient temperature is below freezing.
- Service according to procedures listed in these instructions.
- Installation, service, and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
- After installation, servicing, or conversion, air and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or the product does not operate properly, do not put into use.
- Warnings and specifications on the product should not be covered by paint, etc. If masking is not possible, contact your local representative for replacement labels.

### CAUTION

Polycarbonate bowls, being transparent and tough, are ideal for use with Filters and Lubricators. They are suitable for use in normal industrial environments, but should not be located in areas where they could be subjected to direct sunlight, an impact blow, nor temperatures outside of the rated range. As with most plastics, some chemicals can cause damage. Polycarbonate bowls should not be exposed to chlorinated hydrocarbons, ketones, esters and certain alcohols. They should not be used in air systems where compressors are lubricated with fire-resistant fluids such as phosphate ester and di-ester types.

Metal bowls are recommended where ambient and/or media conditions are not compatible with polyurethane bowls. Metal bowls resist the action of most such solvents, but should not be used where strong acids or bases are present or in salt laden atmospheres. Consult the factory for specific recommendations where these conditions exist.

**TO CLEAN POLYCARBONATE BOWLS USE MILD SOAP AND WATER ONLY! DO NOT** use cleansing agents such as acetone, benzene, carbon tetrachloride, gasoline, toluene, etc., which are damaging to this plastic.

### Safety Guide

For more complete information on recommended application guidelines, contact Coilhose Pneumatics customer service or visit us at [www.coilhose.com](http://www.coilhose.com).

### Introduction

Follow these instructions when installing, operating, or servicing the product.

### Application Limits

These products are intended for use in general purpose compressed air systems only.

### Maximum Recommended Pressure Drop:

	kPa	PSIG	bar
Particulate Filter	70	10	0.7

### With Polycarbonate Bowl

	kPa	PSIG	bar
Operating Pressure Maximum	1034	150	10
Operating Temperature Range	4°C to 49°C (40°F to 120°F)		

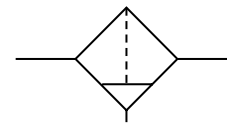
### With Aluminum Bowl

	kPa	PSIG	bar
Operating Pressure Maximum	2068	300	21
Operating Temperature Range	4°C to 82°C (40°F to 180°F)		

### With Zinc Bowl with Sight Gauge

	kPa	PSIG	bar
Operating Pressure Maximum	1723	250	17.0
Operating Temperature Range	4°C to 66°C (40°F to 150°F)		

### ANSI Symbols



Filter  
w/Manual Drain

**A**

Adsorber  
w/Manual Drain

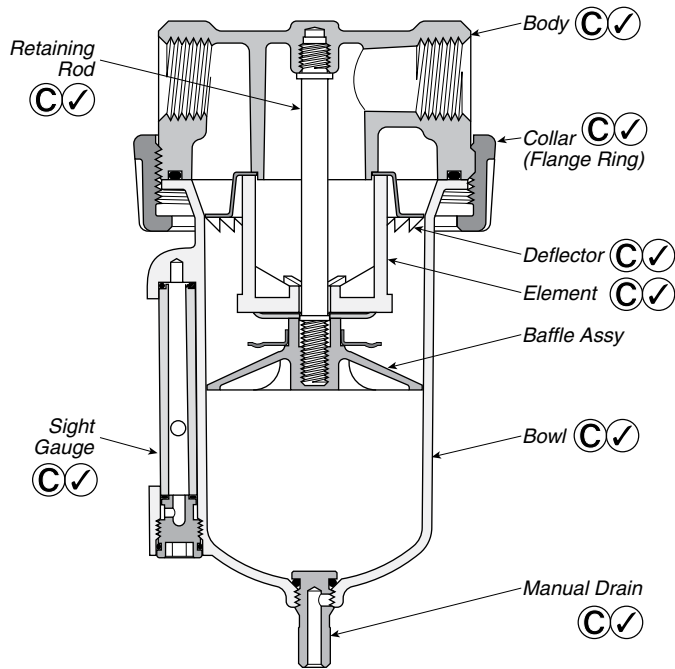
### WARNING

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- Ⓒ Lightly grease with provided lubricant.
- ✓ Inspect for nicks, scratches, and surface imperfections. If present, reduced service life is probable and future replacement should be planned.
- Ⓒ Clean with lint-free cloth.

### Installation

1. The filter should be installed with reasonable accessibility for service whenever possible – repair service kits are available. Keep pipe or tubing lengths to a minimum with inside clean and free of dirt and chips. Pipe joint compound should be used sparingly and applied only to the male pipe – never into the female port. Do not use PTFE tape to seal pipe joints – pieces have a tendency to break off and lodge inside the unit, possibly causing malfunction. Also, new pipe or hose should be installed between the filter and equipment being protected.
2. The upstream pipe work must be clear of accumulated dirt and liquids.
3. Select a filter location as close as possible to the equipment being protected and upstream of any pressure regulator.
4. Install filter so that air flows in the direction of arrow on body.
5. Install filter vertically with bowl drain mechanism at the bottom. Free moisture will thus drain into the sump “quiet zone” at the bottom of the bowl.

### Operation and Service

1. To service the filter, it is not necessary to remove the unit from the airline. Manual drain filters must be drained regularly before the separated moisture and oil reaches the bottom of the lower baffle.
2. The particulate Filter Element should be removed and replaced when pressure differential across the filter is 10 PSIG.
3. Shut off air supply and depressurize the unit, before servicing.
4. Carefully remove Bowl by turning counterclockwise.
5. Remove Filter Element, Baffle, and Retainer.
6. Wipe parts, clean with soapy water or denatured alcohol, **but do not use denatured alcohol on plastic bowl or sight gauge**. If using compressed air to blow dry, be sure to wear appropriate eye protection.
7. After servicing, apply system pressure and check for air leaks. If leakage occurs, **Do Not Operate** — conduct servicing again.

### Kits Available

Description	Product Number	Bowl Type	Port Size
<b>Bowls</b>			
Polycarbonate	BK602Y	B	1/4", 3/8"
Zinc with Sight Gauge	BK605WY	W	1/4", 3/8"
Polycarbonate	BK602A	B	1/2"
Aluminum	BK603A	E	1/2"
Zinc with Sight Gauge	BK605WA	W	1/2"
Aluminum	BK603B	E	3/4" thru 2-1/2"
Zinc with Sight Gauge	BK605WB	W	3/4" thru 2-1/2"
<b>Element Kits</b>			
5 Micron	EK602VY	—	1/4", 3/8"
40 Micron	EK602Y	—	1/4", 3/8"
5 Micron	EK602VA	—	1/2"
40 Micron	EK602A	—	1/2"
5 Micron	EK602VB	—	3/4" thru 1-1/2"
40 Micron	EK602B	—	3/4" thru 1-1/2"
5 Micron Bronze	EK602VB-BR	—	3/4" thru 1-1/2"
40 Micron Bronze	EK602B-BR	—	3/4" thru 1-1/2"
40 Micron	EK602G	—	2", 2-1/2"
<b>Drain Kits</b>			
Manual	SA600Y7-1	All	All Sizes
Piston (Poly Bowl Only)	RK602SY	B	1/4", 3/8"
Piston (Poly Bowl Only)	RK602SA	B	1/2"
External Auto. ( 8 oz. Poly & Metal)	SA602D	B	1/2"
External Auto. (16 oz. Aluminum)	SA603D	E	1/2"
Internal Auto.	SA602MD	All	1/2"
External Auto. ( 16 oz. Metal Bowl)	SA602D	W	3/4" thru 2-1/2"
External Auto. (32 oz. Aluminum)	SA603D	E	3/4" thru 2-1/2"
Internal Auto.	SA602MD	All	3/4" thru 2-1/2"
<b>Mounting Bracket Kits</b>			
	SAF602-0571	—	1/4", 3/8"
	SAF602-0572	—	1/2"
(2 per unit required)	SA200AW57	—	3/4"
(2 per unit required)	SA200CW57	—	1"
<b>Repair Kits</b>			
Deflector, Baffle Assy, Retaining Rod	RK602Y	—	1/4", 3/8"
Deflector, Baffle Assy, Retaining Rod	RK602A	—	1/2"
Deflector, Baffle Assy, Retaining Rod	RK602B	—	3/4", 1"
Deflector, Baffle Assy, Retaining Rod	RK602C	—	1-1/4", 1-1/2"
Deflector, Baffle Assy, Retaining Rod	RK602G	—	2", 2-1/2"
External Auto Drain (Short Float 602)	RK602D	—	1/2" thru 2-1/2"
External Auto Drain (Tall Float 603)	RK603D	—	1/2" thru 2-1/2"
Internal Auto Drain	RK602MD	—	1/4" thru 2-1/2"
Metal Bowl with Sight Gauge	RKB605WY	—	1/4", 3/8"
Metal Bowl with Sight Gauge	RKB605WA	—	1/2"



## General Purpose Series Lubricators

Click on the lubricator that you have and go to the correct instruction sheet.



Old Style



New Style



East: 19 Kimberly Road, East Brunswick, NJ  
08816 - Phone: (732) 390-8480

New Style

Installation & Service Instructions:  
CH-101E Rev. 6-2013

1/4", 3/8" & 1/2"  
General Purpose Lubricators

## ! WARNING

To avoid unpredictable system behavior that can cause personal injury and property damage:

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect air supply and depressurize all air lines connected to this product before installation, servicing, or conversion.
- Operate within the manufacturer's specified pressure, temperature, and other conditions listed in these instructions.
- Medium must be moisture-free if ambient temperature is below freezing.
- Service according to procedures listed in these instructions.
- Installation, service, and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
- After installation, servicing, or conversion, air and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or the product does not operate properly, do not put into use.
- Warnings and specifications on the product should not be covered by paint, etc. If masking is not possible, contact your local representative for replacement labels.

## ! CAUTION

Polycarbonate bowls, being transparent and tough, are ideal for use with Filters and Lubricators. They are suitable for use in normal industrial environments, but should not be located in areas where they could be subjected to direct sunlight, an impact blow, nor temperatures outside of the rated range. As with most plastics, some chemicals can cause damage. Polycarbonate bowls should not be exposed to chlorinated hydrocarbons, ketones, esters and certain alcohols. They should not be used in air systems where compressors are lubricated with fire-resistant fluids such as phosphate ester and diester types.

Metal bowls are recommended where ambient and/or media conditions are not compatible with polycarbonate bowls. Metal bowls resist the action of most such solvents, but should not be used where strong acids or bases are present or in salt laden atmospheres. Consult the factory for specific recommendations where these conditions exist.

**TO CLEAN POLYCARBONATE BOWLS USE MILD SOAP AND WATER ONLY! DO NOT** use cleansing agents such as acetone, benzene, carbon tetrachloride, gasoline, toluene, etc., which are damaging to this plastic.

Bowl guards are recommended for added protection of polycarbonate bowls where chemical attack may occasionally occur.

## ! WARNING

To avoid polycarbonate bowl rupture that can cause personal injury or property damage, do not exceed bowl pressure or temperature ratings. Polycarbonate bowls have a 150 PSIG pressure rating and a maximum temperature rating of 125°F.

## Introduction

Follow these instructions when installing, operating, or servicing the product.

## Application Limits

These products are intended for use in general purpose compressed air systems only.

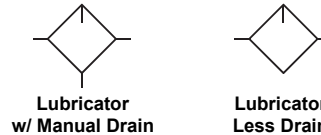
### With Polycarbonate Bowl

	kPa	PSIG	bar
Operating Pressure Maximum	1000	150	10.3
Operating Temperature Maximum	52°C (125°F)		
Operating Temperature Minimum	0°C (32°F)		

### With Metal Bowl

	kPa	PSIG	bar
Operating Pressure Maximum	1700	250	17.0
Operating Temperature Maximum	80°C (175°F)		
Operating Temperature Minimum	0°C (32°F)		

## ANSI Symbol



## Installation

1. The lubricator should be installed with reasonable accessibility for service whenever possible. Keep pipe or tubing lengths to a minimum with inside clean and free of dirt and chips. Pipe joint compound should be used sparingly and applied only to the male pipe – never into the female port. Do not use PTFE tape to seal pipe joints – pieces have a tendency to break off and lodge inside the unit, possibly causing malfunction.
2. Install lubricator so air flows in the direction of arrow on body.
3. Installation should be upstream of the device it is to lubricate (valve, cylinders, tool, etc.).

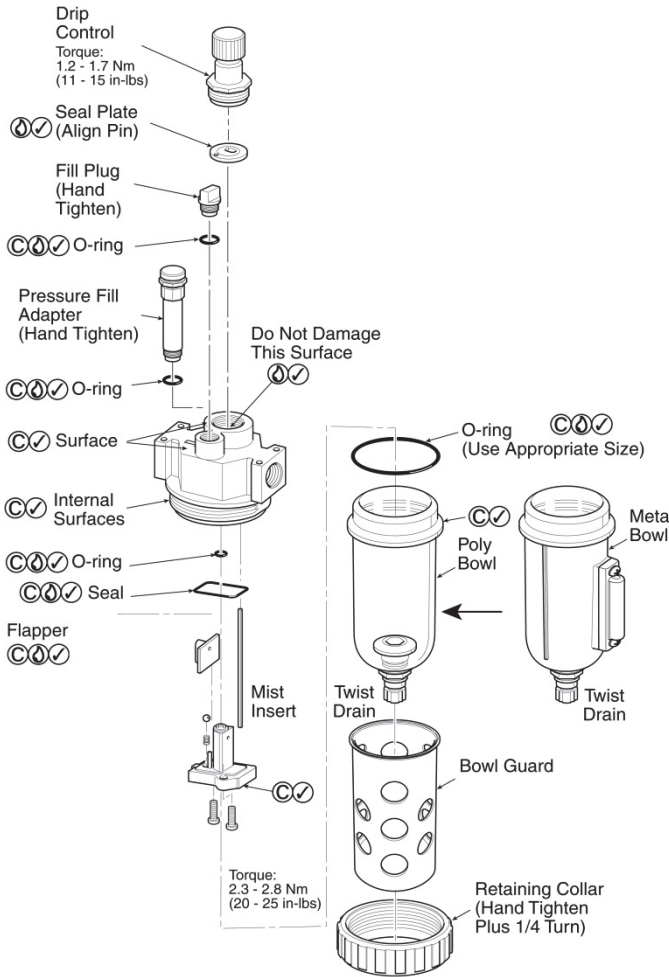
## ! WARNING

**FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

This document and other information from The Company, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure and review the information concerning the product or systems in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by The Company and its subsidiaries at any time without notice.

EXTRA COPIES OF THESE INSTRUCTIONS ARE AVAILABLE FOR INCLUSION IN EQUIPMENT / MAINTENANCE MANUALS THAT UTILIZE THESE PRODUCTS. CONTACT YOUR LOCAL REPRESENTATIVE.



Lightly grease with provided lubricant.

Inspect for nicks, scratches, and surface imperfections.

If present, reduced service life is probable and future replacement should be planned.

- C Clean with lint-free cloth.

### Operation and Service (Refer to Above Pictorial)

1. Filling — The Mist lubricator can be filled without turning off the upstream pressure. Slowly remove the fill plug (black) by turning counterclockwise. This allows the bowl pressure to vent.

Petroleum based oil of 100 to 200 SUS viscosity at 100°F and an aniline point greater than 200°F. Do not use oils with adhesives, compound oils containing solvents, graphite, detergents or synthetic oils.

2. Replace the fill plug (by turning clockwise) and seat firmly. Excessive torque is not required. Turn on air, if leakage occurs, **DO NOT OPERATE** — conduct repairs again. The lubricator is now ready for setting.
3. Oil delivery adjustment — To adjust oil delivery, turn adjustment knob on top of the lubricator.

Leaner — Clockwise

Richer — Counterclockwise

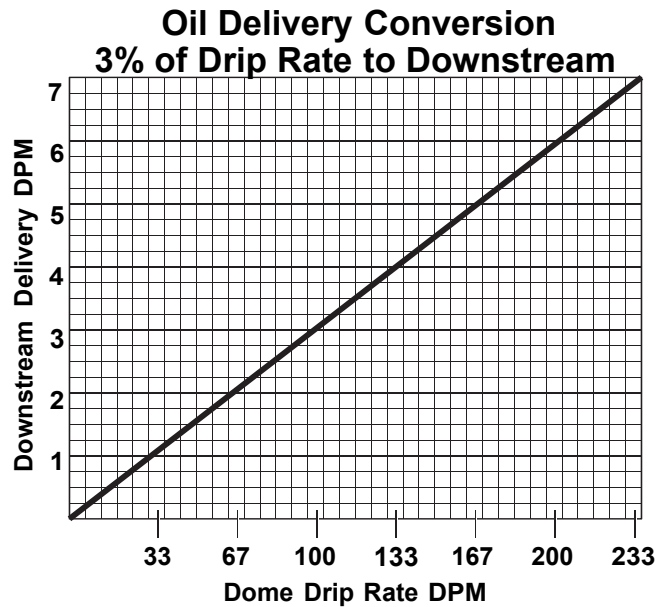
By counting the number of drops per minute in the sight dome, you can adjust to your requirements.

Mist lubricator — Every drop visible in the sight dome goes downstream

Generally, one drop per minute downstream for every 10 - 15 SCFM flow is satisfactory.

25 drops per minute equals one (1) ounce per hour - volume of oil passing through the sight dome.

NOTE: This is a constant density type lubricator which delivers a constant ratio of oil air flow. Therefore, if air flow increases or decreases, oil delivery will be adjusted proportionately. ONLY IF A DIFFERENT RATIO IS DESIRED SHOULD YOUR ADJUSTMENT KNOB SETTING BE CHANGED AFTER YOUR INITIAL SETTING.



4. To replace fill plug, drip control, & service lubricator:

- A. Turn off air supply and depressurize the unit.
- B. Refer to pictorial for servicing and torque values.
- C. Turn on air supply and check lubricator for leakage. If leakage occurs, **DO NOT OPERATE** — conduct repairs again.

### Kits Available

Description	1/4", 3/8" & 1/2"
Lubricator Repair Kit	PS748
Polycarbonate Bowl	PS746
Metal Bowl	PS729



East: 19 Kimberly Road, East Brunswick, NJ 08816 - Phone: (732) 390-8480  
 West: 1730 NE Miller Street, McMinnville, OR, 97128 - Phone: (503) 434-5964

Old Style

Installation & Service Instructions  
 CH-606

**General Purpose Lubricator**

**⚠ WARNING**

To avoid unpredictable system behavior that can cause personal injury and property damage:

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect air supply and depressurize all air lines connected to this product before installation, servicing, or conversion.
- Operate within the manufacturer's specified pressure, temperature, and other conditions listed in these instructions.
- Medium must be moisture-free if ambient temperature is below freezing.
- Service according to procedures listed in these instructions.
- Installation, service, and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
- After installation, servicing, or conversion, air and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or the product does not operate properly, do not put into use.
- Warnings and specifications on the product should not be covered by paint, etc. If masking is not possible, contact your local representative for replacement labels.

**⚠ CAUTION**

Polycarbonate bowls, being transparent and tough, are ideal for use with Filters and Lubricators. They are suitable for use in normal industrial environments, but should not be located in areas where they could be subjected to direct sunlight, an impact blow, nor temperatures outside of the rated range. As with most plastics, some chemicals can cause damage. Polycarbonate bowls should not be exposed to chlorinated hydrocarbons, ketones, esters and certain alcohols. They should not be used in air systems where compressors are lubricated with fire-resistant fluids such as phosphate ester and diester types.

Metal bowls are recommended where ambient and/or media conditions are not compatible with polycarbonate bowls. Metal bowls resist the action of most such solvents, but should not be used where strong acids or bases are present or in salt laden atmospheres. Consult the factory for specific recommendations where these conditions exist.

**TO CLEAN POLYCARBONATE BOWLS USE MILD SOAP AND WATER ONLY! DO NOT** use cleansing agents such as acetone, benzene, carbon tetrachloride, gasoline, toluene, etc., which are damaging to this plastic.

**With Polycarbonate Bowl**

	kPa	PSIG	bar
Operating Pressure Maximum	1034	150	10
Operating Temperature Range	40°F to 120°F (4°C to 49°C)		

**With Zinc Bowl & Wrap Around Sight Gauge**

	kPa	PSIG	bar
Operating Pressure Maximum	1723	250	17.0
Operating Temperature Range	40°F to 150°F (4°C to 66°C)		

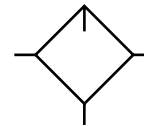
**With Aluminum Bowl**

	kPa	PSIG	bar
Operating Pressure Maximum	2068	300	21
Operating Temperature Range	40°F to 180°F (4°C to 82°C)		

**With Aluminum Bowl & Wrap Around Sight Gauge**

	kPa	PSIG	bar
Operating Pressure Maximum	1034	150	10
Operating Temperature Range	40°F to 120°F (4°C to 49°C)		

**ANSI Symbols**



**⚠ WARNING**

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**Introduction**

Follow these instructions when installing, operating, or servicing the product.

**Application Limits**

These products are intended for use in general purpose compressed air systems only.

## Installation

- The lubricator should be installed with reasonable accessibility for service whenever possible – repair service kits are available. Keep pipe or tubing lengths to a minimum with inside clean and free of dirt and chips. Pipe joint compound should be used sparingly and applied only to the male pipe – never into the female port. Do not use PTFE tape to seal pipe joints – pieces have a tendency to break off and lodge inside the unit, possibly causing malfunction. Also, new pipe or hose should be installed between the lubricator and equipment being lubricated.
- The upstream pipe work must be clear of accumulated dirt and liquids.
- Select a lubricator location as close as possible to the equipment being lubricated and downstream of any pressure regulator.
- Install lubricator so that air flows in the direction of arrow on body.
- Install lubricator vertically with bowl drain mechanism (if supplied) at the bottom.

## Operation and Service

- Filling — Lubricators can be filled while under pressure and without shutting down equipment. Slowly remove either fill plug and fill to 1/4" to top of bowl using correct oil. For proper automatic fill operation, the oil inlet pressure to lubricator must be maintained between 10 and 200 PSI above air pressure to lubricator.

Suggested Lubricant: ATL016

Petroleum based oil of 100 to 200 SSU viscosity at 100°F and an aniline point greater than 200°F. (Mobil DTE24 and Sun Company Sunvis 932 are good examples). Do not use oils with adhesives, compound oils containing solvents, graphite, detergents or synthetic oils.

- Replace the Fill Plug (by turning clockwise) and seat firmly. Excessive torque is not required. Turn on air supply, if leakage occurs, **DO NOT OPERATE** — conduct repairs again. The lubricator is now ready for setting.
- Oil Delivery Adjustment — To adjust oil delivery, turn Adjustment Knob on top of the lubricator.

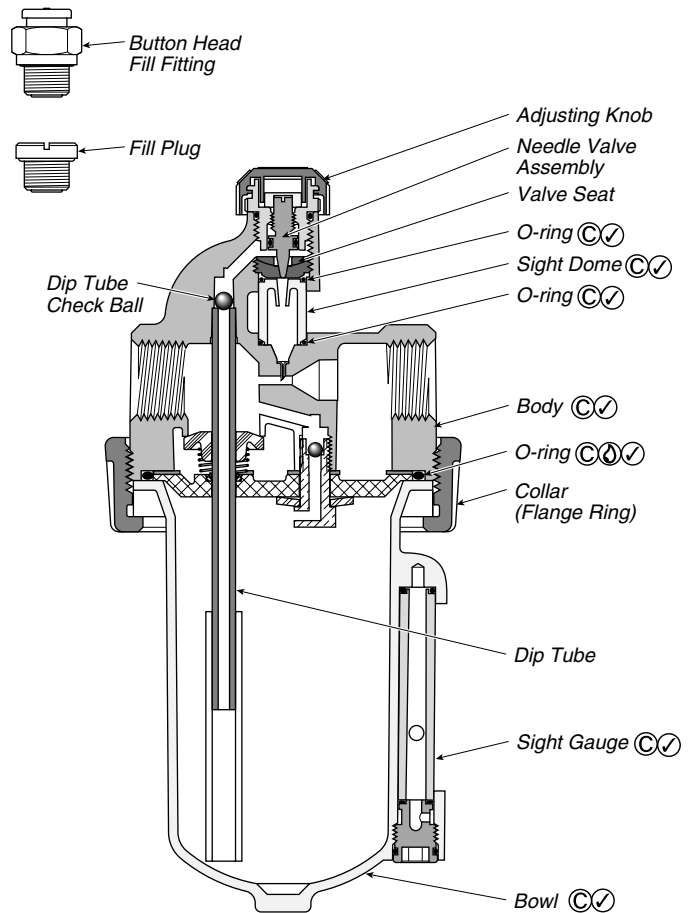
Leaner — Clockwise

Richer — Counterclockwise

By counting the number of drops per minute in the Sight Dome, you can adjust to your requirements. Generally, one drop per minute downstream for every 10 - 15 SCFM flow is satisfactory. 25 drops per minute equals one (1) ounce per hour - volume of oil passing through the Sight Dome.

**NOTE:** This is a constant density type lubricator which delivers a constant ratio of oil air flow. Therefore, if air flow increases or decreases, oil delivery will be adjusted proportionately. **ONLY IF A DIFFERENT RATIO IS DESIRED SHOULD YOUR ADJUSTMENT KNOB SETTING BE CHANGED AFTER YOUR INITIAL SETTING.**

- Cleaning — Erratic lubricator operation or loss of lubrication is almost always due to dirt (rust, pipe tape, etc.) in the needle valve or venturi area. To clean, shut off and vent all air line pressure to the unit being cleaned. In most cases cleaning is needed only in the oil metering area. Pull off Adjusting Knob and remove Needle Valve Assembly by turning out large hex nut. Remove Needle Valve Seat and clean removed parts with alcohol making sure hole in seat is clear. With a #57 drill, make sure hole in bottom of sight gauge area is open. Remove Bowl. Clean parts with soapy water or denatured alcohol **but do not use denatured alcohol on plastic bowl, sight dome or sight gauge.** If using compressed air to blow dry, be sure to wear appropriate eye protection.
- After servicing, apply system pressure and check for air leaks. If leakage occurs, **Do Not Operate** — conduct servicing again.



**D** Lightly grease with provided lubricant.

**✓** Inspect for nicks, scratches, and surface imperfections. If present, reduced service life is probable and future replacement should be planned.

**C** Clean with lint-free cloth.

## Kits Available

Description	Product Number	Bowl Type	Port Size
Bowl			
Polycarbonate	BK606Y	B	1/4", 3/8"
Zinc with Sight Gauge	BK609WY	W	1/4", 3/8"
Polycarbonate	BK606A	B	1/2"
Aluminum	BK603A	E	1/2"
Zinc with Sight Gauge	BK609WA	W	1/2"
Aluminum with Sight Gauge	BK606X30A	G	1/2"
Aluminum	BK603B	E	3/4" thru 1-1/2"
Zinc with Sight Gauge	BK609WB	W	3/4" thru 1-1/2"
Aluminum with Sight Gauge	BK606X30B	G	3/4" thru 1-1/2"
Repair Kit			
Dip Tube Replacement Kit	DTK606	All	All Sizes
Needle Valve Assembly	RK606Y	All	All Sizes
Sight Dome Repair Kit	RK606SY	All	All Sizes
Sight Gauge Bowl Repair Kit	RBK605WY	W	1/4", 3/8"
Sight Gauge Bowl Repair Kit	RKB605WA	W	1/2"
Sight Gauge Bowl Repair Kit	RKB606X30A	G	1/2"
Sight Gauge Bowl Repair Kit	RKB606WB	W	3/4" thru 1-1/2"
Sight Gauge Bowl Repair Kit	RKB606X30B	G	3/4" thru 1-1/2"
Button Head Fill Fitting	SAA606C109-1	—	—
Fill Plug	SA60684	—	—



East: 19 Kimberly Road, East Brunswick, NJ 08816 - Phone: (732) 390-8480  
 West: 1730 NE Miller Street, McMinnville, OR, 97128 - Phone: (503) 434-5964

## Installation & Service Instructions CH-119

1/4", 3/8", 1/2", 3/4", 1", 1-1/4", 1-1/2"

## General Purpose Regulators

### WARNING

To avoid unpredictable system behavior that can cause personal injury and property damage:

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect media source and depressurize all media lines connected to this product before installation, servicing, or conversion.
- Operate within the manufacturer's specified pressure, temperature, and other conditions listed in these instructions.
- Medium must be moisture-free if ambient temperature is below freezing.
- Service according to procedures listed in these instructions.
- Installation, service, and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
- After installation, servicing, or conversion, media and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or the product does not operate properly, do not put into use.
- Warnings and specifications on the product should not be covered by paint, etc. If masking is not possible, contact your local representative for replacement labels.

## Introduction

Follow these instructions when installing, operating, or servicing the product.

## Application Limits

These products are intended for use in general purpose compressed media systems only.

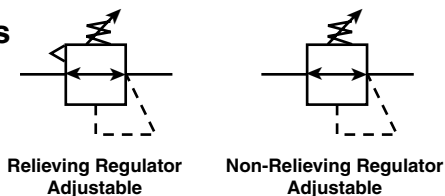
## Operating Pressure:

	kPa	PSIG	bar
Maximum Inlet Pressure	2068	300	21.0
Ambient Temperature Range:	4°C to 49°C (40°F to 120°F)		

### WARNING

Product rupture can cause serious injury.  
 Do not connect regulator to bottled gas.  
 Do not exceed maximum primary pressure rating.

## Symbols



## Installation

1. The regulator should be installed with reasonable accessibility for service whenever possible - repair service kits are available. Keep pipe and tubing lengths to a minimum with inside clean and free of dirt and chips. Pipe joint compound should be used sparingly and applied only

to the male pipe - never into the female port. Do not use PTFE tape to seal pipe joints - pieces have a tendency to break off and lodge inside unit, possibly causing malfunction.

2. Install regulator so that media flow is in the direction of arrow. Installation must be upstream (high pressure) side and as close to the devices it is to service (valve, cylinder, tool, etc.). Mounting may be in any position.
3. Gauge ports are located on both sides of the regulator body for your convenience. It is necessary to install a gauge or pipe plugs into each port during installation.
4. For protection against rust, pipe scale, and other foreign matter, install a filter on the upstream (high pressure) side as close to the regulator as possible.

## Operation

1. Before turning on the media source turn the T-handle counterclockwise until compression is released from the Control Spring. Then turn on media source and adjust regulator to desired secondary pressure by turning T-handle clockwise. This permits pressure to build up slowly, preventing any unexpected operation of the valve, cylinders, tools, etc., attached to the line. Adjustment to desired secondary pressure can be made only with primary pressure applied to the regulator.
2. To decrease regulator pressure setting, always reset from a pressure lower than the final setting desired. For example, lowering the secondary pressure from 550 to 410 kPa (80 to 60 PSIG) is best accomplished by dropping the secondary pressure to 350 kPa (50 PSIG), then adjusting upward to 410 kPa (60 PSIG). Tighten the Locking Nut on the T-handle to lock the pressure setting.

## Reduced Pressure Spring Ranges

- "A" Range = 1 – 25 PSI (1/4", 3/8", 1/2" Only)
- "B" Range = 2 – 60 PSI (1/4", 3/8", 1/2" Only)
- "C" Range = 2 – 125 PSI (ALL)
- "D" Range = 5 – 250 PSI (ALL)

### WARNING

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**Service**

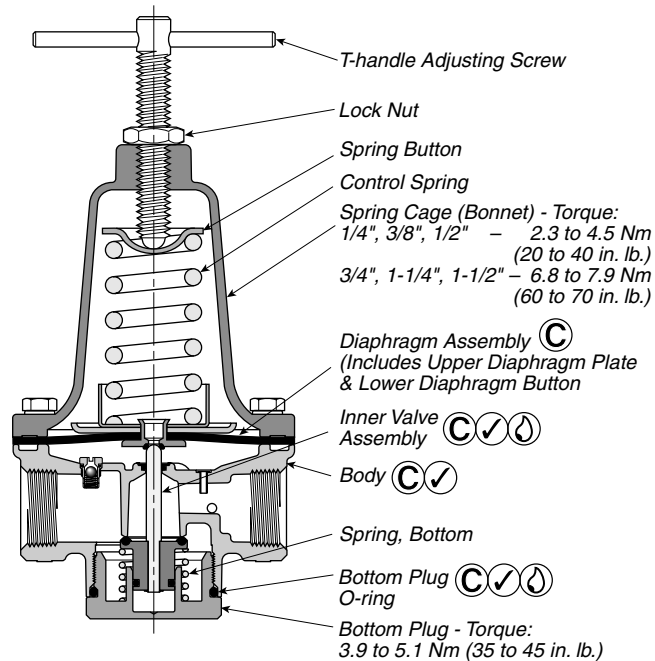
**⚠ Caution: Disconnect or shut off air supply and exhaust the primary and secondary pressures before servicing unit. Turning the T-handle counterclockwise does not vent downstream pressure on non-relieving regulators. Downstream pressure must be vented before servicing regulator.**

**⚠ Caution: Grease packets are supplied with kits for lubrication of seals. Use only mineral based grease or oils. Do not use synthetic oils such as esters. Do not use silicones.**

**Note: After servicing unit, turn on air supply and adjust regulator to the desired downstream pressure. Check unit for leaks. If leakage occurs, do not operate - conduct repairs and retest.**

**A. Servicing the Bonnet and Diaphragm Assembly**

1. Turn the T-handle counterclockwise until the compression is released from the Pressure Control Spring.
2. Remove Bonnet Mounting Screws, Bonnet Assembly, Pressure Control Spring and Spring Button. Remove Diaphragm Assembly. Next, disassemble, clean, and carefully inspect parts for wear and / or damage. Wipe parts, clean with soapy water or denatured alcohol. If using compressed air to blow dry, be sure to wear appropriate eye protection. If replacement is necessary, use parts from service kits.
3. Install Diaphragm Assembly, Pressure Control Spring, Spring Button as shown below. Then, install Bonnet Assembly to Body with Mounting Screws and tighten in an alternating or star pattern to the following torque specifications:  
 1/4", 3/8", 1/2" ..... 2.3 to 4.5 Nm (20 to 40 in. lb.)  
 3/4", 1-1/4", 1-1/2" ..... 6.8 to 7.9 Nm (60 to 70 in. lb.)



- Ⓟ Lightly grease with provided lubricant.
- ✓ Inspect for nicks, scratches, and surface imperfections. If present, reduced service life is probable and future replacement should be planned.
- (C) Clean with lint-free cloth.

**B. Servicing the Poppet Assembly**

1. Exhaust system media pressure as previously described. Then remove Bottom Plug by unscrewing it from Body. Next, remove Bottom Plug, O-ring, Bottom Spring and Inner Valve Assembly.
2. Next, disassemble, clean, and carefully inspect parts for wear and / or damage. If replacement is necessary, use parts from service kits.
3. Lubricate O-ring and sliding surfaces using grease supplied with service kit.
4. Install parts as shown.
5. Lubricate Bottom Plug O-ring and install it in o-ring groove on Bottom Plug. Be sure Inner Valve Stem fits into center area of Diaphragm Assembly before installing Bottom Plug. Then screw Bottom Plug into Body until it bottoms out in body. Tighten to 3.5 to 5.1 Nm (35 to 45 in. lb.).
6. Turn on media source and adjust to desired secondary pressure as described in the **Operation** section. Check regulator for leakage. If leakage occurs, **DO NOT OPERATE** — conduct repairs again.

If you have questions concerning how to service this unit, contact your local authorized dealer or your customer service representative.

**Service Kits Available**

Description	Kit Number	Regulator Size
Bottom Plug Only	118Y2	1/4", 3/8"
	118A2	1/2"
	119B2-2	3/4" thru 1-1/2"
Bottom Plug O-ring Only	118Y102	1/4", 3/8"
	118A101	1/2"
	118B101	3/4" thru 1-1/2"
Mounting Bracket Kit	SA15Y57	1/4", 3/8"
	18A57	1/2"
	18B57	3/4" thru 1-1/2"
Panel Mount Conversion Kit	4202	1/4", 3/8"
	4204	1/2"
Regulator Repair Kit* (Relieving)	RK119Y	1/4", 3/8"
	RK119A	1/2"
	RK119A250	1/2" ("D" Range)
	RK119B	3/4", 1"
	RK119D	1-1/4", 1-1/2"
Regulator Repair Kit* (Non-Relieving)	RK118Y	1/4", 3/8"
	RK118A	1/2"
	RK118A250	1/2" ("D" Range)
	RK118B	3/4", 1"
	RK118D	1-1/4", 1-1/2"
T-handle Kits	TK16Y	1/4", 3/8"
	TK119A	1/2"
	TK119B	3/4" thru 1-1/2"

**Accessories**

Gauges	
0 to 60 PSI (0 to 4 bar)	€ € € €
0 to 160 PSI (0 to 11 bar)	€ € € €
0 to 300 PSI (0 to 20 bar)	€ € € €



East: 19 Kimberly Road, East Brunswick, NJ 08816 - Phone: (732) 390-8480  
 West: 1730 NE Miller Street, McMinnville, OR, 97128 - Phone: (503) 434-5964

## Installation & Service Instructions

7<119J

&~D]`ch Regulator

; YbYfU`Di dcgY`

D]`chFY[ i `U`cf`



### WARNING

To avoid unpredictable system behavior that can cause personal injury and property damage:

- Disconnect electrical supply (when necessary) before installation, servicing, or conversion.
- Disconnect air supply and depressurize all air lines connected to this product before installation, servicing, or conversion.
- Operate within the manufacturer's specified pressure, temperature, and other conditions listed in these instructions.
- Medium must be moisture-free if ambient temperature is below freezing.
- Service according to procedures listed in these instructions.
- Installation, service, and conversion of these products must be performed by knowledgeable personnel who understand how pneumatic products are to be applied.
- After installation, servicing, or conversion, air and electrical supplies (when necessary) should be connected and the product tested for proper function and leakage. If audible leakage is present, or the product does not operate properly, do not put into use.
- Warnings and specifications on the product should not be covered by paint, etc. If masking is not possible, contact your local representative for replacement labels.

## Introduction

Follow these instructions when installing, operating, or servicing the product.

## Application Limits

These products are intended for use in general purpose compressed media systems only.

### Operating Pressure:

	kPa	PSIG	bar
Maximum Inlet Pressure	2068	300	21.0

### Ambient Temperature Range:

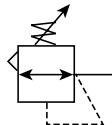
4°C to 49°C  
(40°F to 120°F)



### WARNING

Product rupture can cause serious injury.  
 Do not connect regulator to bottled gas.  
 Do not exceed maximum primary pressure rating.

## ANSI Symbols



## Installation

Installation of the R2000 requires the use of an additional pilot regulator to control the reduced pressure output of the R2000 unit. A typical installation is shown on reverse side, where a Gen. Purpose or 88 Series regulator is used to furnish the pilot operating supply pressure. With the flexibility provided by this typical installation, the R2000 regulator may be used in a remote and inaccessible location while the pilot regulator can be placed in a convenient location to control operation of the R2000 regulator.

Either a rigid pipe or flexible tubing may be utilized to connect the R2000 unit to the pilot regulator.

Before installing, blow out pipe line to remove scale and other foreign matter. This unit has DRYSEAL pipe threads. Use pipe compound or tape sparingly to male threads only. Install regulator in pipe line so that air will flow from IN to OUT. Install as near as possible to equipment being supplied.

Connections R and L are normally for gauge use, but may be used for outlet purposes in certain applications. To ensure trouble-free performance, a filter (F2000MB) should be installed upstream of the regulator.

## Adjustment

Since the reduced or regulated pressure is controlled by the pilot regulator, an increase in pilot pressure into the R2000 unit will produce a corresponding increase in the regulated pressure from the R2000 regulator. This regulator is constant bleed design. The system pressure is internally "bled-off" permitting adjustment for lower reduced pressure settings without the necessity of waiting for the flow to start.

NOTE: A small internal constant bleed device permits accurate fine point setting capability. This constant air bleed may be audible and is a perfectly normal characteristic of the regulator.

## Maintenance

If the main supply or pilot air supply are kept clean, the regulator should provide long periods of uninterrupted service. Erratic regulator operation, or loss of regulation, is most always due to dirt accumulating in the disc area. To remedy, clean the regulator as outlined below.

## Cleaning

Depressurize, remove bottom plug, spring and disc. Clean parts with alcohol, wipe off seat and blow out body with compressed air. Reassemble parts as a unit and screw into regulator (disc bottom O-ring must be relubed prior to assembly). Before tightening bottom plug, make sure disc is in center hole in body.

See reverse side for Service Kits / Parts Available.



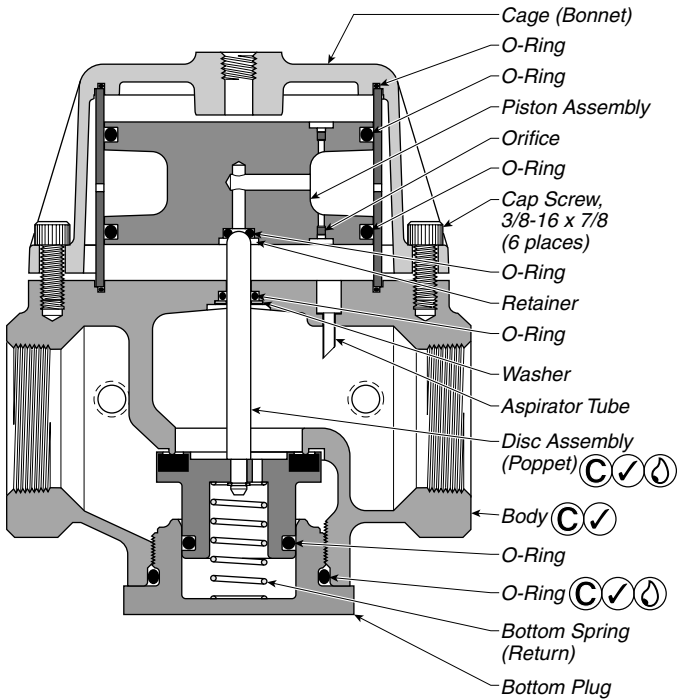
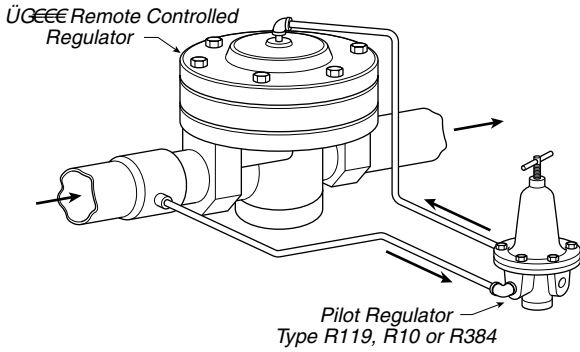
### WARNING

**FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

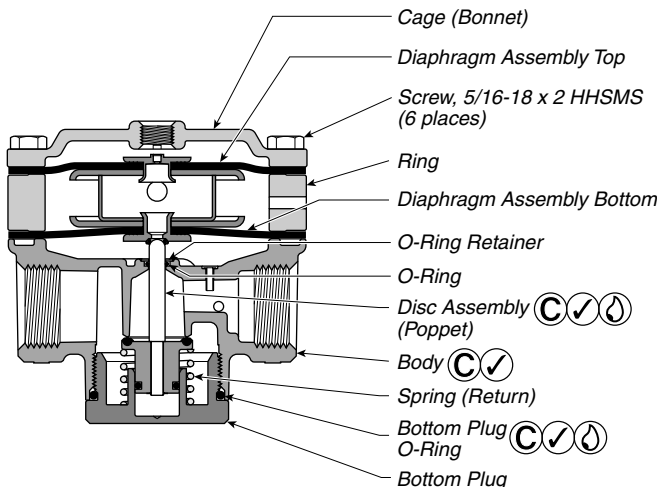
This document and other information from The Company, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application, including consequences of any failure and review the information concerning the product or systems in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by The Company and its subsidiaries at any time without notice.

**EXTRA COPIES OF THESE INSTRUCTIONS ARE AVAILABLE FOR INCLUSION IN EQUIPMENT / MAINTENANCE MANUALS THAT UTILIZE THESE PRODUCTS. CONTACT YOUR LOCAL REPRESENTATIVE.**



- Lightly grease with provided lubricant.
- Inspect for nicks, scratches, and surface imperfections. If present, reduced service life is probable and future replacement should be planned.
- Clean with lint-free cloth.



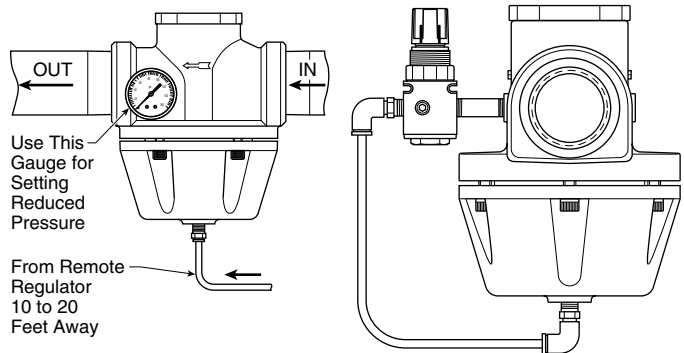
### Service Kits / Parts Available

Description	Kit Number	Regulator Size
2-1/2" Regulator Repair Kit Includes: Piston O-Rings, Cylinder O-Rings, Disc Assembly, Strainer, Bottom Plug Gasket	RK119G	2"

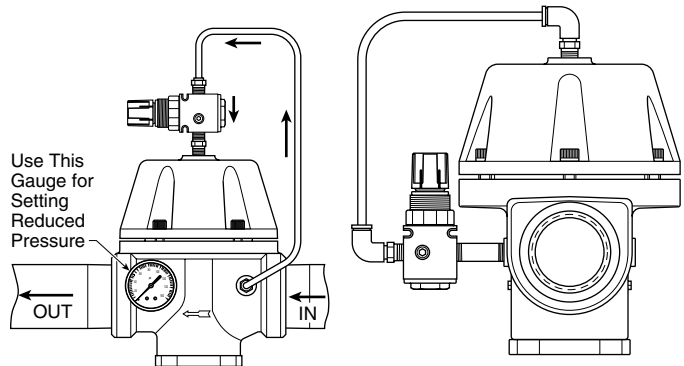
### Accessories

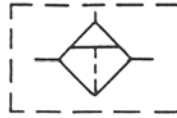
Gauges		
0 to 60 PSI (0 to 4 bar)		€€€
0 to 160 PSI (0 to 11 bar)		€€€
0 to 300 PSI (0 to 20 bar)		€€€

### Suggested Installation or Mounting for the R2000



- The top two are the best way of mounting for all applications.
- For best results at low pressure, mount inverted as shown above.
- Use a **FD 8804GL** for low pressure.





91-417\* (revised 09/04)

Questions regarding this form should be directed to one of the following:

East: 732-390-8480 (NJ)  
 West: 503-434-5964 (OR)  
 E-mail: info@coilhose.com

## HEAVY DUTY FILTER AND COALESCING FILTER Installation Instructions, Operating Instructions and Parts List

### Application:

The Heavy Duty Series Filter is designed to provide lasting service and superior performance in today's demanding industrial environment. A wide variety of options and accessories make this filter adaptable to any application.

### Options and Accessories:

Options*:	Suffix
Automatic Drain .....	D
20 micron Element .....	F
12 micron Element .....	X
Bowl Guard (for 1/4", 3/8" and 1/2" units) .....	R
Metal Bowl with sightglass .....	M

\*Add a dash followed by the suffix(es) in alphabetical order to the model number.

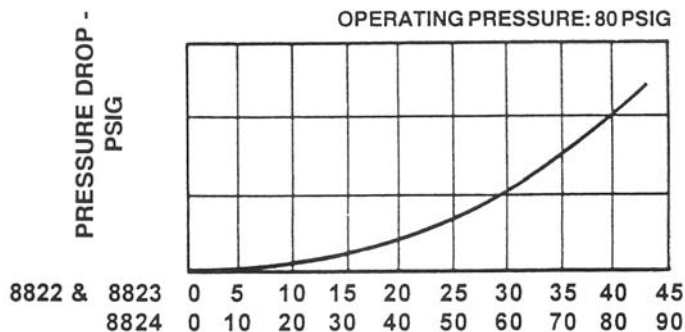
Accessories:	Model No.
--------------	-----------

<u>Automatic Drain Valves</u> –	
Internal* .....	8851AD
External (requires 4 1/2" clearance below bowl) .....	8861

<u>Metal Bowl with Sightglass</u> –	
1/4" and 3/8" .....	8823-41M
1/2" .....	8824-41M
3/4" and 1" .....	8828-41M

\*Internal Automatic Drain (8851AD - suffix "D") does not fit in 1/2", 3/4" and 1" coalescing filter units. These units must use an External Drain (8861).

### Filter Performance Drop Vs. Air Flow Characteristics:



### Technical Data:

#### Maximum Supply Pressure:

Plastic Bowl .....	150 PSI
Metal Bowl .....	250 PSI

#### Maximum Operating Temperature:

Plastic Bowl .....	120° F
Metal Bowl .....	250° F

#### Filter Element:

Standard .....	40 micron
Option .....	20 micron
Option .....	12 micron

#### Material:

Body .....	Die cast aluminum
Standard Bowl .....	Transparent polycarbonate
Bowl Guard .....	Steel
Optional Bowl .....	Aluminum with polycarbonate sightglass
Filter Element .....	Sintered bronze

#### Dimensions and Weights:

	1/4" and 3/8"	1/2"	3/4" and 1"
Height .....	.6"	7"	.9"
Width .....	.3"	3 1/2"	.5"
Weight .....	.3/4 lb.	1" lb.	.4 lbs.

## Cleaning and Maintenance:

It is necessary to keep the filter clean in order to sustain peak filtering efficiency and avoid excessive pressure drop. A coating of dirt or condensation build-up on filter element or pressure drop of 10 PSID or more indicates that cleaning is required. Please note: the Coalescing Element is NOT cleanable.

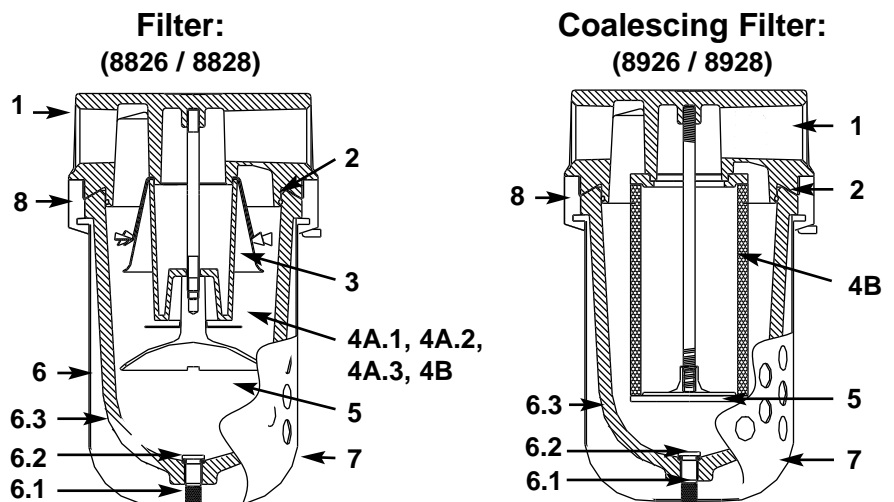
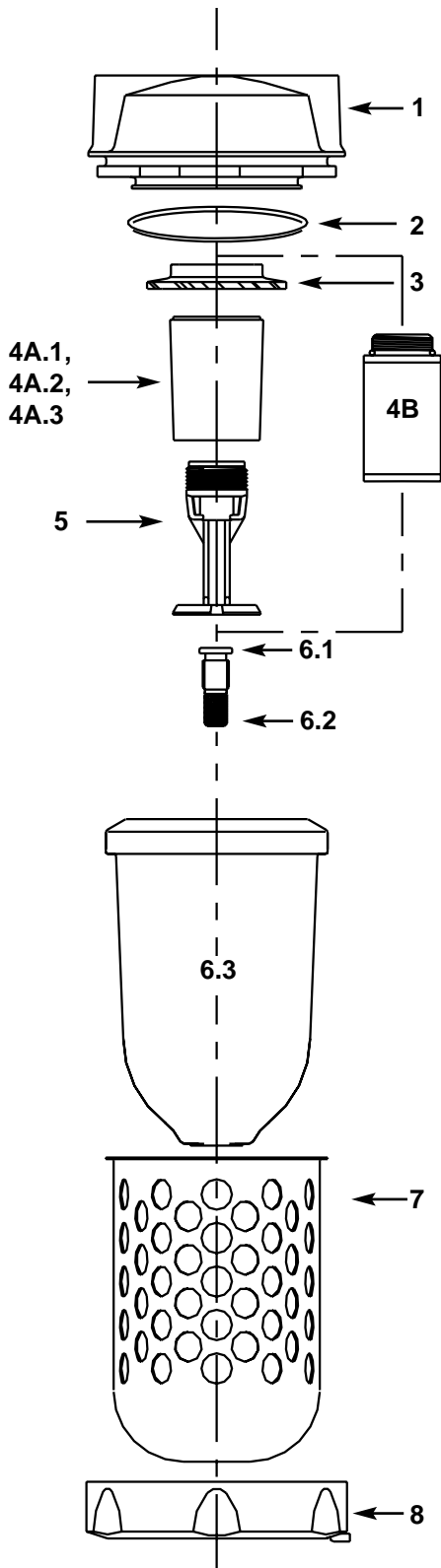
Removal of the filter from the line for cleaning is not necessary. Disassembly requires no tools and the filter and the filter element should be removed from the unit as follows.

Air supply must be shut off and the filter must be depressurized prior to disassembly. Depress the safety tab on the clamping ring and, by rotating it slightly and pulling downward, the clamp is removed from the head of the unit. The bowl can then be separated from the unit with slight downward force. Unscrew the retainer baffle from the stem and remove the filter element. The filter element should be washed in kerosene or soapy water and dried by blowing compressed air from the inside outward. All other parts should be cleaned with nothing stronger than household detergent. The body should be blown out to remove any remaining debris prior to reassembly. Replace the filter element and reassemble the unit.

To drain off any accumulations in the bowl, the draincock is opened by turning it in a clockwise direction. This should be done before the collected fluid reaches the lower baffle.

## Components:

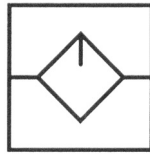
Item No.	Description	1/4"	3/8"	1/2"	3/4"	1"
1	Head	8822-1	8823-1	8824-1	8826-1	8828-1
2	Bowl O-Ring	8823-9	8823-9	8824-9	8826-9	8826-9
3	Deflector Baffle	26F-11	26F-11	27F-11	8826-5	8826-5
4A.1	40 Micron Filter Element	8823-7A	8823-7A	8824-7A	8826-7A	8826-7A
4A.2	20 Micron Filter Element	8823-7FA	8823-7FA	8824-7FA	8826-7FA	8826-7FA
4A.3	12 Micron Filter Element	8823-7XA	8823-7XA	8824-7XA	8826-7XA	8826-7XA
4B	Coalescing Element	26C-14A	26C-14A	27C-14A	8926-7	8926-7
5	Retainer Baffle	26F-13	26F-13	27F-13	8926-25	8926-25
6	Plastic Bowl & Drain Cock	8823-41L	8823-41L	8824-41L	8828-41L	8828-41L
6.1	Drain Cock O-Ring	26F-17	26F-17	26F-17	26F-17	26F-17
6.2	Removable Drain Cock	26F-18	26F-18	26F-18	26F-18	26F-18
6.3	Plastic Bowl	8823-40L	8823-40L	8824-40L	8828-40L	8828-40L
7	Bowl Guard	8823-50	8823-50	8824-50	8826-50	8826-50
8	Bowl Clamping Ring	8823-30	8823-30	8824-30	8826-30	8826-30



## Repair Kit

Sight Glass Repair Kit **RK88-SG**.

We reserve the right to make engineering changes in design or materials without notification.



91-419\* (revised 01/15)

Please direct questions regarding this form to the following:

Phone: 732-390-8480

Email: info@coilhose.com

## HEAVY DUTY LUBRICATOR

### Installation Instructions, Operating Instructions and Parts List

#### Application:

The Heavy Duty Series Lubricator is designed to provide lasting service and superior performance in today's demanding industrial environment. A wide variety of options and accessories make this regulator adaptable to any application.

#### Options and Accessories:

<b>Options*:</b>	<i>Suffix</i>
Bowl Guard (for 1/4", 3/8" and 1/2" units) . . . . .	R
Metal Bowl with Sightglass . . . . .	M

\*Add a dash followed by the suffix(es) in alphabetical order to the model number.

<b>Accessories:</b>	<i>Model No.</i>
<u>Bowl Guards:</u>	
1/4" and 3/8" . . . . .	.8823-50
1/2" . . . . .	.8824-50
3/4" and 1" . . . . .	.8826-50

<u>Metal Bowl with Sightglass:</u>	
1/4" and 3/8" . . . . .	.8843-41M
1/2" . . . . .	.8844-41M
3/4" and 1" . . . . .	.8848-41M
Sightglass Repair Kit . . . . .	.RK88-SG

#### Technical Data:

##### Maximum Supply Pressure:

Plastic Bowl . . . . .	150 PSI
Metal Bowl . . . . .	250 PSI

##### Maximum Operating Temperature:

Plastic Bowl . . . . .	120° F
Metal Bowl . . . . .	250° F

##### Material:

Body . . . . .	Die cast aluminum
Standard Bowl . . . . .	Transparent Polycarbonate
Bowl Guard . . . . .	Steel
Optional Bowl . . . . .	Aluminum

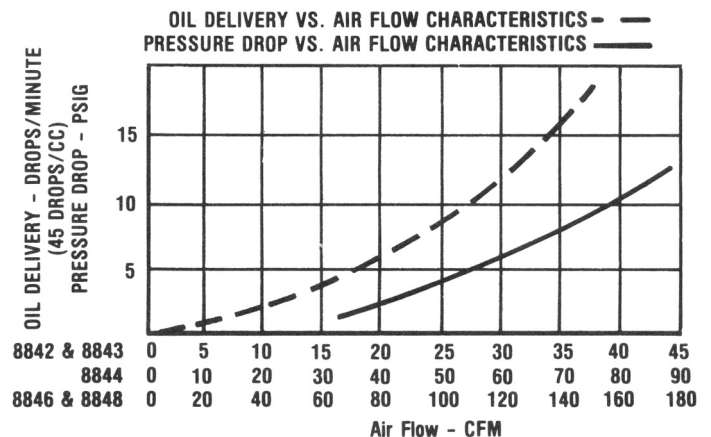
##### Dimensions and Weights:

	<i>1/4" and 3/8"</i>	<i>1/2"</i>	<i>3/4" and 1"</i>
Height . . . . .	.7"	.8"	.11 1/2"
Width . . . . .	.3"	3 1/2"	.5"
Weight . . . . .	.1 lb.	1 1/4" lb.	.3 1/2 lbs.



Port Size	Model Number
1/4" . . . . .	.8842
3/8" . . . . .	.8843
1/2" . . . . .	.8844
3/4" . . . . .	.8846
1" . . . . .	.8848

#### Performance Data:



## Lubricant:

Lubricants, as recommended by the equipment manufacturer, may be used, provided they are not heavier than SAE #40 (S.U.V. 800 SEC at 100° F). *We recommend the use of Coilhose nondetergent ATL rustproofing lubricant in temperatures above 40° F. For applications between 45° F and - 45° F, we suggest Coilhose ATLW lubricant.*

## Filling:

Lubricators can be filled while under pressure and without shutting down the equipment. After carefully removing the fill plug, insert the tip of a long spout oil can into the bottom of the fill port to avoid any blow back. Lubricator bowl should be filled within 1/2" from the top. The lubricator may also be filled by removing the bowl *after the system has been depressurized. Once the bowl has been filled and replaced, be sure it is locked into position before repressurizing the system.*

## Adjustment:

When the adjustment knob is turned completely clockwise, oil is not being delivered through the system and the equipment is not being lubricated. The adjusting knob should be set to the desired drip rate after the air has been turned on and flowing. By turning the adjustment knob in a clockwise direction, the oil feed rate is decreased. Although proper lubrication is determined through demand and experience, a good starting point is one to two drops per minute. To check lubrication rate, we suggest the following: Hold a piece of cardboard at the exhaust hole of the component in the least favorable position (farthest away from the lubricator or in the highest position). After the unit has run for about 100 strokes, an oil film on the cardboard will indicate the setting is correct. If the oil film on the cardboard runs, the setting is too high. In order to prevent gumming, it is preferable to add too little rather than too much oil.

## Cleaning and Maintenance:

The lubricator will provide long periods of uninterrupted service as long as both the air and oil supplies are kept clean and the oil level is kept above the end of the feed tube in the bowl. Failure of oil to drip through the sight dome, regardless of the position of the adjusting knob, indicates that cleaning is required. The lubricator does not need to be removed from the air line for cleaning. *Depressurize the air line* and disassemble the lubricator using the appropriate parts drawing on this page as a guide. Cleaning is normally needed only in the oil metering area. After unscrewing the sight dome assembly, *clean all components with warm water and mild household detergent only.* The bowl is removed by depressing the safety tab on the locking ring and, by rotating it slightly and pulling downward, the clamp is separated from the head of the unit. The bowl can then be removed from the lubricator head assembly with slight downward force.

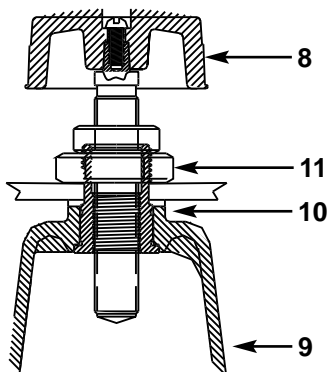
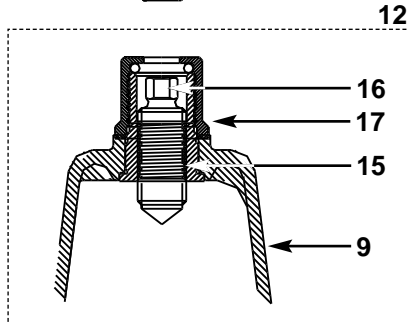
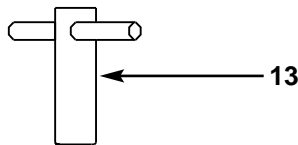
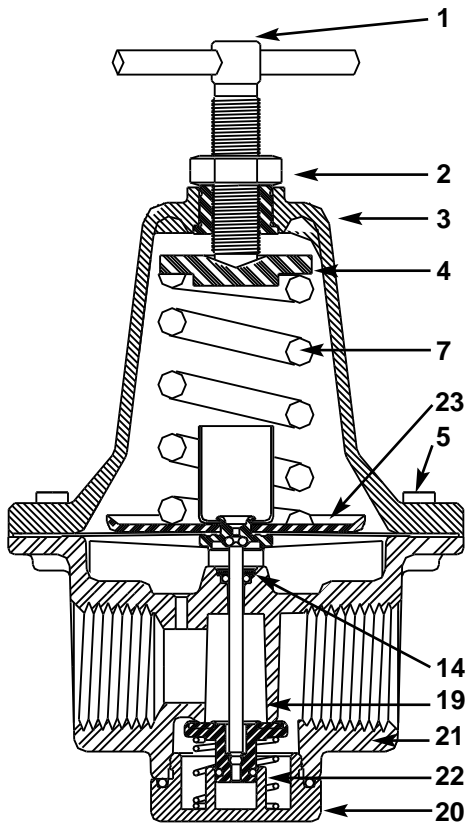
## Components:

Item No.	Description	1/4" (8842)	3/8" (8843)	1/2" (8844)	3/4" (8846)	1" (8848)
1	Tamperproof Cap	8742-31A	8742-31A	8742-31A	8742-31A	8742-31A
2	Sight Dome/Adj. Screw	8742-32A	8742-32A	8742-32A	8742-32A	8742-32A
3	Dome "O" Ring	26L-12	26L-12	26L-12	26L-12	26L-12
4	Fill Plug	8844-10	8844-10	8844-10	8844-10	8844-10
5	Fill Plug "O" Ring	30-6101	30-6101	30-6101	30-6101	30-6101
6	Spring Washer	8742-42A	8742-42A	8742-42A	8742-42A	8742-42A
7	Drip Spout	8742-33A	8742-33A	8742-33A	8742-33A	8742-33A
8	Drip Spout "O" Ring	84699-30	84699-30	84699-30	84699-30	84699-30
9	Head Ass'y	8842-55	8843-55	8844-55	8846-55	8848-55
10	Bowl "O" Ring	8823-9	8823-9	8824-9	8826-9	8826-9
11	Clamping Ring Ass'y	8823-30	8823-30	8824-30	8826-30	8826-30
12	Air Check Ball	26L-19	26L-19	26L-19	26L-19	26L-19
13	Air Check Stud	26L-20	26L-20	26L-20	26L-20	26L-20
14	Poly Bowl - Guard Ass'y	8843R-41L	8843R-41L	8843R-41L	8843R-41L	8843R-41L
15	Feed Tube	8844-5S	8844-5S	8844-5L	8844-5XL	8844-5XL
16	Poly Bowl	8843-41L	8843-41L	8843-41L	8843-41L	8843-41L
17	Metal Bowl	8843-41M	8843-41M	8844-41M	8848R-41M	8848R-41M
18	Metal Bowl Guard	8823-50	8823-50	8824-50	8826-50	8826-50

We reserve the right to make engineering changes in design or materials without notification.







## Pressure Adjustment:

Turning the adjustment screw in a clockwise direction will increase the pressure setting; turning in a counterclockwise direction will decrease the pressure setting.

The downstream pressure should always be adjusted to approximately 10 PSI above the required working pressure, even in the event of pressure fluctuations. It is advisable to adjust the setting under constant pressure conditions (unit should not be operating) since a changing flow rate affects the set value.

To avoid readjustment after making a change in pressure setting, we recommend approaching the required setting from a lower pressure. When adjusting from a higher to a lower setting, reduce the pressure to a point below what is required, then adjust upward to the required setting.

Once the desired operating pressure has been reached, the adjusting screw lock nut should be tightened to maintain the proper setting.

## Cleaning and Maintenance:

A clean supply of air to the regulator will assure long periods of uninterrupted service. Dirt in the stem and disc assembly will lead to erratic operation or loss of regulation. When cleaning becomes necessary, the air line should be shut off and depressurized. The regulator should be disassembled using the parts drawing on this page as a guide. All assembly parts should be cleaned with nothing stronger than mild household detergent and the regulator body should be blown out with compressed air.

For proper reassembly, the seat disc must be firmly in place and the poppet stem must fit into the center hole of the diaphragm assembly.

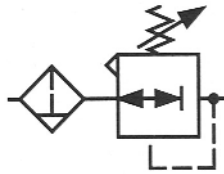
## Components:

Item No.	Description	1/4" (8802)	3/8" (8803)	1/2" (8804)	3/4" (8806)	1" (8808)
1	Adj. Screw Ass'y (Std.)	8804J-12	8804J-12	8804J-12	8806J-12	8806J-12
2	Lock Nut	1484-20	1484-20	1484-20	1488-20	1488-20
3	Bonnet Ass'y (Std.)	8803-2	8803-2	8804-2	8806-2	8806-2
4	Spring Button	1483J-5	1483J-5	1484J-5	1488-5	1488-5
5	Screws	8803-23	8803-23	8804-23	8806-23	8806-23
6	Gauge Plug (not shown)	PI004S	PI004S	PI004S	PI004S	PI004S
7	Adj. Spring (5-125)	1483-7	1483-7	1484-7	1488-7	1488-7
7	Adj. Spring (1-50)	1483L-7	1483L-7	1484L-7	1488L-7	1488L-7
7	Adj. Spring (100-200)	1483S-7	1483S-7	1484S-7	1488S-7	1488S-7
8	Adj. Screw Ass'y (Panel)	8804P-12	8804P-12	8804P-12	8806P-12	8806P-12
9	Bonnet Ass'y (Panel)	8803P-2	8803P-2	8804P-2	8806P-2	8806P-2
10	Washer (Panel)	1484P-31	1484P-31	1484P-31	1488P-31	1488P-31
11	Nut (Panel)	8804P-3	8804P-3	8804P-3	1488-32	1488-32
12	Tamperproof Bonnet Ass'y	N/A	N/A	J8804-2	N/A	N/A
13	Tamperproof Adj. Key	8804-5	8804-5	8804-5	8804-5	8804-5
14	O-Ring	8803-7	8803-7	8803-7	8803-7	8803-7
15	Adj. Screw (Tamperproof)	J8804-4	J8804-4	J8804-4	J8806-4	J8806-4
16	O-Ring	7193-1	7193-1	7193-1	7193-1	7193-1
17	Cap (Tamperproof)	J8804-3	J8804-3	J8804-3	J8806-3	J8806-3
18	Guide (not shown)	N/A	N/A	N/A	8600A-18	8600A-18
19	Stem, Seat, Retainer Ass'y	8803-56	8803-56	8804-56	8806-56	8806-56
20	Back Cap	8803-3	8803-3	8804-3	8806-3	8806-3
21	Back Cap O-Ring	8803-21	8803-21	8804-21	8806-21	8806-21
22	Back Cap Spring	8804-18	8804-18	8804-18	8806-18	8806-18
23	Diaphragm Ass'y	1483-59A	1483-59A	1484-59A	1488-59A	1488-59A

## Rebuilding Kit:

The Regulator Repair Kit includes items 19, 20, 21, 22, and 23. Use Model No. **8800-53** for the 1/4" and 3/8"; **8800-54** for the 1/2"; and **8800-56** for the 3/4" and 1".

We reserve the right to make engineering changes in design or materials without notification.



90-405\* (revised 06/05)

Questions regarding this form should be directed to one of the following:

East/Central: 732-390-8480 (NJ)  
 West: 503-434-5964 (OR)  
 E-mail: info@coilhose.com

# MINIATURE SERIES INTEGRAL FILTER / REGULATOR

## Installation Instructions, Operating Instructions and Parts List

### Application:

The Miniature Series Integral Filter / Regulator is designed for applications where space is limited such as compact control panels and miniaturized circuits. These integral filter / regulator units feature tough zinc body construction with either 1/8" or 1/4" in/out ports and two (2) full flow 1/8" gauge ports.

### Features and Benefits:

- 20 micron or 5 micron filter element available.
- Available with 0-125 PSI, 0-50 PSI or 0-20 PSI pressure ranges.
- Nonrising adjusting knob locks and maintains required pressure setting.

### Technical Data:

#### Maximum Supply Pressure:

Plastic Bowl .....150 PSI  
 Metal Bowl .....250 PSI

#### Maximum Operating Temperature:

Plastic Bowl .....120° F  
 Metal Bowl .....250° F

#### Filter Element:

Standard .....20 micron  
 Option .....5 micron

#### Pressure Range:

Standard .....0 - 125 PSI  
 Option .....0 - 50 PSI  
 Option .....0 - 20 PSI

#### Material:

Body .....Die-cast zinc  
 Adjusting Knob .....High-impact plastic  
 Standard Bowl .....Transparent polycarbonate  
 Optional Bowl .....Die-cast zinc  
 Filter Element .....Porous polypropylene

#### Dimensions and Weights:

Height .....6 1/8"  
 Width .....1 1/2"  
 Weight .....1/3 lb.

#### Bowl Volume:

Standard .....1.5 oz.



### Options and Accessories:

**Options\*:** **Suffix**

**Filter-**  
 Metal Bowl .....M  
 Filter Element (5 Micron) .....X

**Regulator-**  
 Gauge .....G  
 Extra Low Pressure Spring (0 - 25 PSI) .....J  
 Low Pressure Spring (0 - 50 PSI) .....L

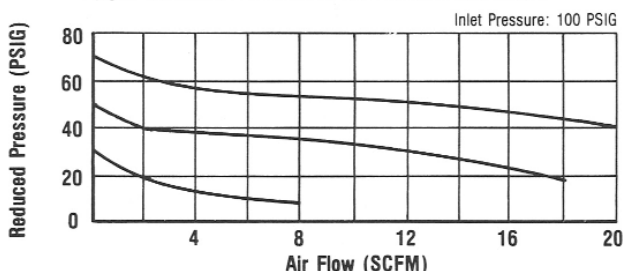
\*Add a dash followed by the suffix(es) in alphabetical order to the model number.

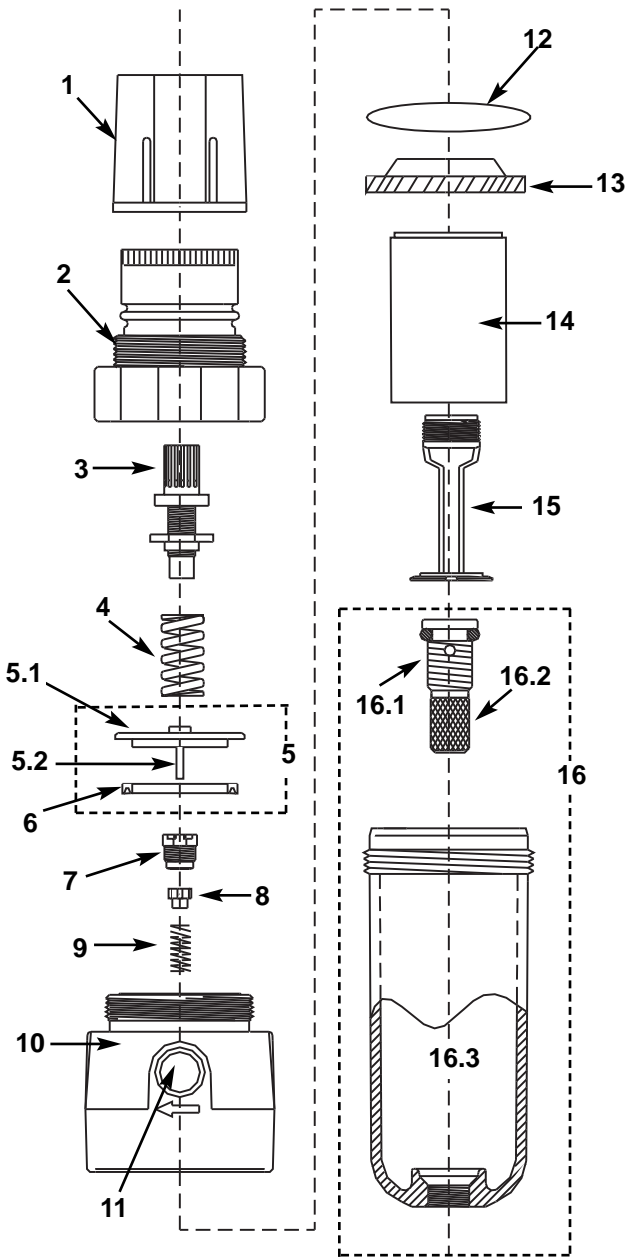
**Accessories:** **Model No.**

Metal Bowl .....MF140-41M  
 Mounting Bracket and Panel Nut .....MR140MB  
 Recommended Standard Pressure Gauge\*  
 0 - 160 PSI (1 1/2" dial) .....26G-160  
 Recommended Optional Gauge\*  
 0 - 60 PSI (1 1/2" dial) .....26G-60  
 Diaphragm Design (Relieving) .....17-851553  
 Diaphragm Assembly .....17-851552  
 Polycarbonate Bowl (2 oz.) .....F722-41L

\*When specifying low pressure spring and gauge options, 0-60 psi gauge (8700-60) will be supplied.

FLOW CHARACTERISTICS/PERFORMANCE DATA





## Description of Operation:

### Filter

Pressurized air enters the inlet port and flows through the deflector vane plate (13) directing the air in a downward swirling pattern. Centrifugal force pushes the dense particles and liquid drops outward where they collect on the interior wall of the filter bowl (16.3). The retainer baffle (15) separates the lower portion of the bowl (16.3) into a "quiet" zone and prevents the collected contaminants from being carried downstream. After the large particles and liquids are removed in the first stage of filtration, the air flows through the filter element (14) where the finer particles are retained. Clean, dry air is then passed to Regulator portion of unit.

### Regulator

Pressure enters and flows through poppet valve (8) orifice toward the outlet. Downstream pressure is connected through an orifice to the bottom of the piston (5.1). As downstream pressure increases, the piston (5.1) is forced upward, compressing the adjustment spring (4). When the piston (5.1) moves, the return spring (9) pushes the poppet valve (8) upward to throttle the orifice. If downstream pressure exhausts, the mechanical sequence reverses and the poppet valve (8) opens the orifice until the set pressure is reached again.

Some circuits may be subject to downstream-generated high pressure resulting from situations such as high temperature or heavy vertical loads or cylinders. This high pressure is reduced by the self-relieving orifice in the center of the piston (5.1). When excessive pressure lifts the valve stem (5.2), air is allowed to release through the piston (5.1) orifice and out the bonnet vent until the system returns to the set pressure.

## Pressure Adjustment:

### Regulator

To adjust pressure setting, pull up the black adjusting knob. Turning the adjusting knob in a clockwise direction will increase the pressure setting and counterclockwise will decrease the pressure setting. The downstream pressure should always be adjusted above the required working pressure, up to 10 PSI based on the the application, even in the event of pressure fluctuations. It is advisable to adjust the settings under constant pressure conditions (unit not operating), as a changing flow rate affects the set valve.

To avoid readjustment after making a change in pressure setting, we recommend approaching the required setting from a lower pressure. When adjusting from a higher to a lower setting, reduce the pressure to a point below what is required, then adjust upward to the desired pressure setting. Once the desired pressure setting is reached, push in the black adjusting knob to lock and maintain the proper setting.

## Cleaning and Maintenance:

### Filter

It is necessary to keep the filter clean in order to sustain peak filtering efficiency and avoid excessive pressure drop. A coating of dirt or condensation build-up on the filter element or pressure drop of 10 PSID or more indicates that cleaning is required.

Removal of the filter from the line for cleaning is not necessary. Disassembly requires no tools and the parts drawing on this page can be used as a guide. *Air supply must be shut off and the filter must be depressurized prior to disassembly.* The filter element should be replaced and *all other parts should be cleaned with nothing stronger than household detergent.* Before reassembly, the body should be blown out to remove any remaining debris.

To drain off any accumulations in the bowl, the draincock can be opened by turning it in a clockwise direction. This should be done before the collected fluid reaches the lower baffle

### Regulator

If air supply is kept clean the regulator should provide long periods of uninterrupted service. *When cleaning becomes necessary, the air line should be shut off and depressurized.* Erratic regulator operation or loss of regulation is almost always due to dirt between the poppet valve and the valve seat (refer to the drawing as a guide to disassembly and subsequent reassembly). *Clean parts with household soap and blow out body with compressed air.*

When reassembling, tighten valve seat hand tight being careful not to break the plastic alignment tabs. Relubricate the "U" cup seal using a silicone-based grease and tighten adjusting knob assembly slightly more than hand tight (10 foot pounds).

## Rebuilding Kits

Filter Bowl Repair Kit  
(Includes items 12 and 16) . . . . . **MF2RK**

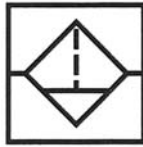
Regulator Repair Kit  
(Includes items 5, 6, 7, 8 and 9) . . . . . **MR140RK**

## Components:

Chart No.	Description	Part No.	Chart No.	Description	Part No.
1	Adjusting knob	26R-12A	10	1/8" NPT Body	MFRC180-1
2	Top Cap	8702-14	-	1/4" NPT Body	MFRC140-1
3	Adjusting Screw	8702-13	11	Gauge Port Plug	17-462078
4	Adjusting spring - (0 - 125 PSI)	8702-15	12	Bowl Gasket	8722-31
-	Adjusting spring - (0 - 50 PSI)	8702-15L	13	Deflector Vane Plate	8722-32
-	Adjusting spring - (0 - 20 PSI)	8702-15J	14	20 Micron Element	MF140-7
5*	Piston Assembly	17-851552	-	5 Micron Element	MF140-7X
5.1	Piston	17-858188	15	Retainer Baffle	8722-34
5.2	Valve Stem	17-452349	16	Poly Bowl and Draincock	MF140-41L
6	U-Cup Seal	17-855159	16.1	Draincock O-Ring	26F-17
7	Valve Seat	17-858189	16.2	Brass Draincock	26F-18
8	Poppet Valve	17-858191	16.3	Polycarbonate Bowl	MF140-40L
9	Return Spring	8762A-31			

We reserve the right to make engineering changes in design or materials without notification.

\*Factory assembled and should be purchased as an assembly.



90-403\* (revised 07/05)

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 West: 503-434-5964 (OR)  
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# MINIATURE SERIES FILTER AND COALESCING FILTER

## Operating Instructions and Parts List

### Application:

The Miniature Series Filters and Coalescing Filters are designed for applications where space is limited and flow requirements are low such as in control panels and miniature circuitry.

### Features and Benefits:

- Available in 1/8" or 1/4" ports.
- Manual drain for quick and easy fluid removal.

### Options and Accessories:

Options*:	Suffix
Metal Bowl .....	.M
Filter Element (5 Micron) .....	.X

\*Add a dash followed by the suffix(es) in alphabetical order to the model number.

Accessories:	Model No.
Polycarbonate Bowl (1.5 oz.) .....	.MF140-41L
Polycarbonate Bowl (2 oz.) .....	.8722-41L
Metal Bowl .....	.MF140-41M

### Technical Data:

#### Maximum Supply Pressure:

Polycarbonate Bowl .....	150 PSI
Metal Bowl .....	250 PSI

#### Maximum Operating Temperature:

Polycarbonate Bowl .....	120° F
Metal Bowl .....	250° F

#### Filter Element:

Standard .....	.20 micron
Option .....	.5 micron
Coalescing .....	.0.1 micron

#### Material:

Body .....	Die cast zinc
Filter Element (Standard) .....	Porous polypropylene
Filter Element (Optional) .....	Sintered bronze
Filter Element (Coalescing) .....	Synthetic fiber
Standard Bowl (1.5 oz.) .....	Transparent polycarbonate
Optional Bowl (2 oz.) .....	Transparent polycarbonate
Metal Bowl .....	Die cast zinc

#### Dimensions and Weights:

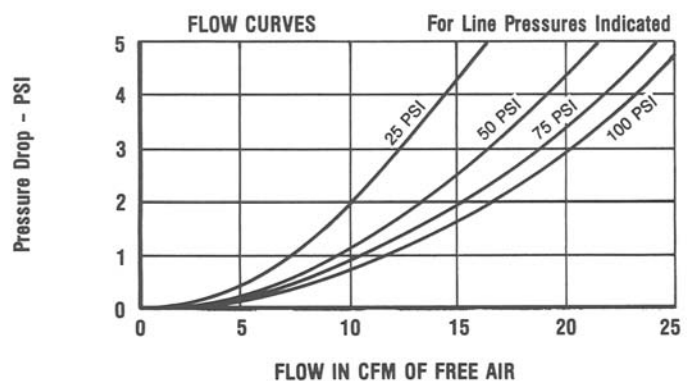
Height .....	.4"
Maximum Diameter .....	.1 1/2"
Weight .....	.1/4 lb.

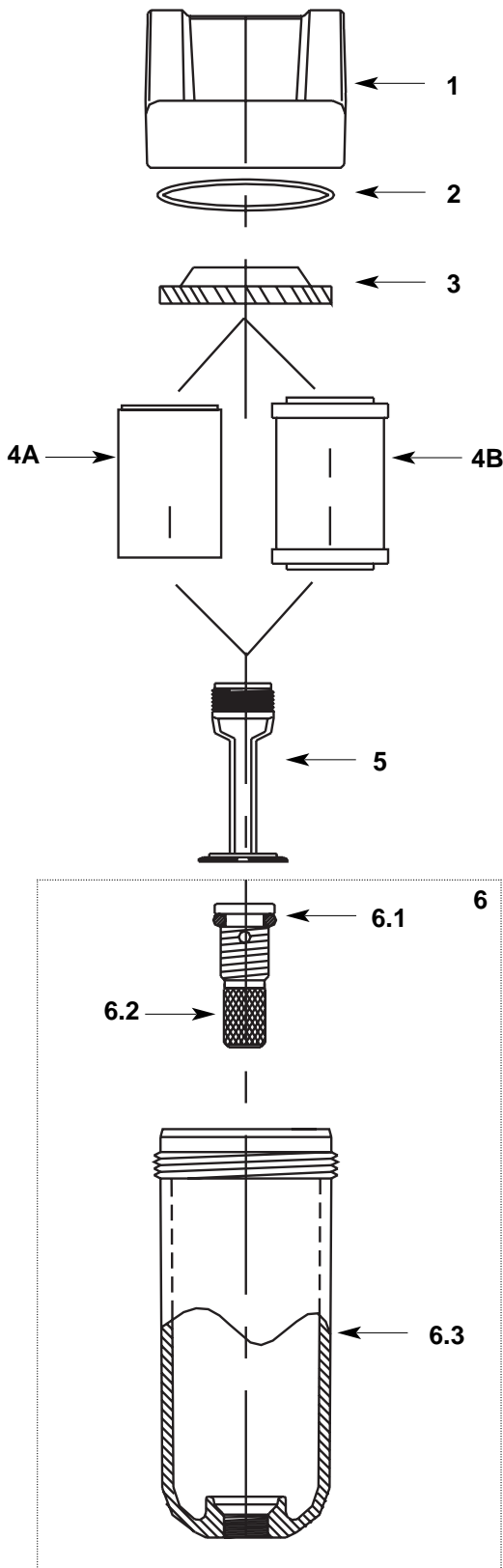
#### Bowl Volume:

Standard .....	1.5 oz.
Metal .....	1.5 oz.
Optional .....	.2 oz.



### Performance Data:





**General Description of Operation:**

**Filter –**

Pressurized air enters the inlet port and flows through the deflector vane plate (3) directing the incoming air in a downward swirling pattern. Centrifugal force pushes the dense particles and liquid drops outward where they collect on the interior wall of the filter bowl (6.3). The retainer baffle (5) separates the lower portion of the bowl (6.3) into a "quiet" zone and prevents the collected contaminants from being carried downstream.

After the large particles and liquids are removed in the first stage of filtration, the air flows through the filter element (4A), where the finer particles are retained. Clean, dry air is then passed downstream.

**Coalescing Filter –**

Contaminated compressed air enters through the center of the graded porous element (4B). Solid particles are captured and held by direct impact, interception or diffusion, depending on their size. Liquid aerosols are also captured, but are forced through the filter matrix by the compressed air.

**Cleaning and Maintenance:**

It is necessary to keep the filter clean in order to sustain peak filtering efficiency and avoid excessive pressure drop. A coating of dirt or condensation build-up on the filter element or pressure drop of 10 PSID or more indicates that cleaning is required.

Removal of the filter from the line for cleaning is not necessary. Disassembly requires no tools and the parts drawing on this page can be used as a guide. *Air supply must be shut off and the filter must be depressurized prior to disassembly.* The filter element should be replaced and all other parts should be cleaned with nothing stronger than household detergent. Before reassembly, the body should be blown out to remove any remaining debris.

To drain off any accumulations in the bowl, the draincock is opened by turning it in a clockwise direction. This should be done before the collected fluid reaches the lower baffle.

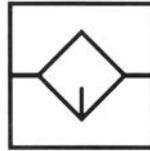
**Components:**

Chart No.	Description	Model No.
1	1/8" Filter Body	MF180-1
-	1/4" Filter Body	MF140-1
2	Bowl Gasket	8722-31
3	Deflector Vane Plate	8722-32
4A	20 Micron Filter Element	MF140-7
-	5 Micron Filter Element	MF147-7X
4B	Coalescing Filter Element	MC140-7
5	Retainer Baffle	8722-34
6	Polycarbonate Bowl and Draincock	MF140-41L
6.1	Draincock O-ring	26F-17
6.2	Brass Draincock	26F-18
6.3	Polycarbonate Bowl	MF140-40L

**Rebuilding Kit:**

Filter Bowl Repair Kit (includes items 2 and 6) . . . . .MF2RK

We reserve the right to make engineering changes in design or materials without notification.



90-404\* (revised 01/05)

Questions regarding this form should be directed to one of the following:

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 West: 503-434-5964 (OR)  
 E-mail: info@coilhose.com

## MINIATURE SERIES LUBRICATOR

### Operating Instructions and Parts List

#### Application:

The Miniature Series Lubricator is designed for applications where space is limited such as compact control panels and miniaturized circuits. These lubricator units feature tough die cast zinc body construction with either 1/8" or 1/4" in / out ports.

#### Features & Benefits:

- Tamperproof cap can be used to adjust oil delivery rate and lock desired lubrication level in place.
- Provides constant oil delivery at both steady and pulsing air flows.
- See-through drip tube gives visual indication of lubricant flow rate.
- Unit can be completely disassembled by hand, simplifying maintenance requirements.

#### Accessories:

	Model No.
Metal Bowl .....	ML140-41M

#### Technical Data:

##### Maximum Supply Pressure:

Plastic Bowl .....	150 PSI
Metal Bowl .....	250 PSI

##### Maximum Operating Temperature:

Plastic Bowl .....	120° F
Metal Bowl .....	250° F

##### Material:

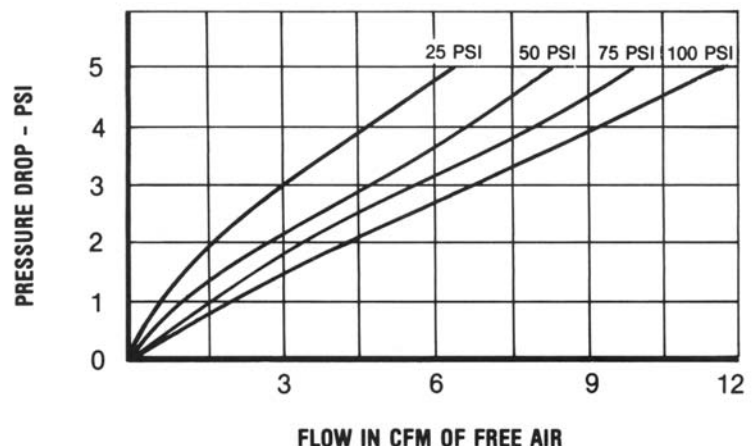
Body .....	Zinc Die Cast
Standard Bowl .....	Transparent Polycarbonate
Optional Bowl .....	Zinc Die Cast

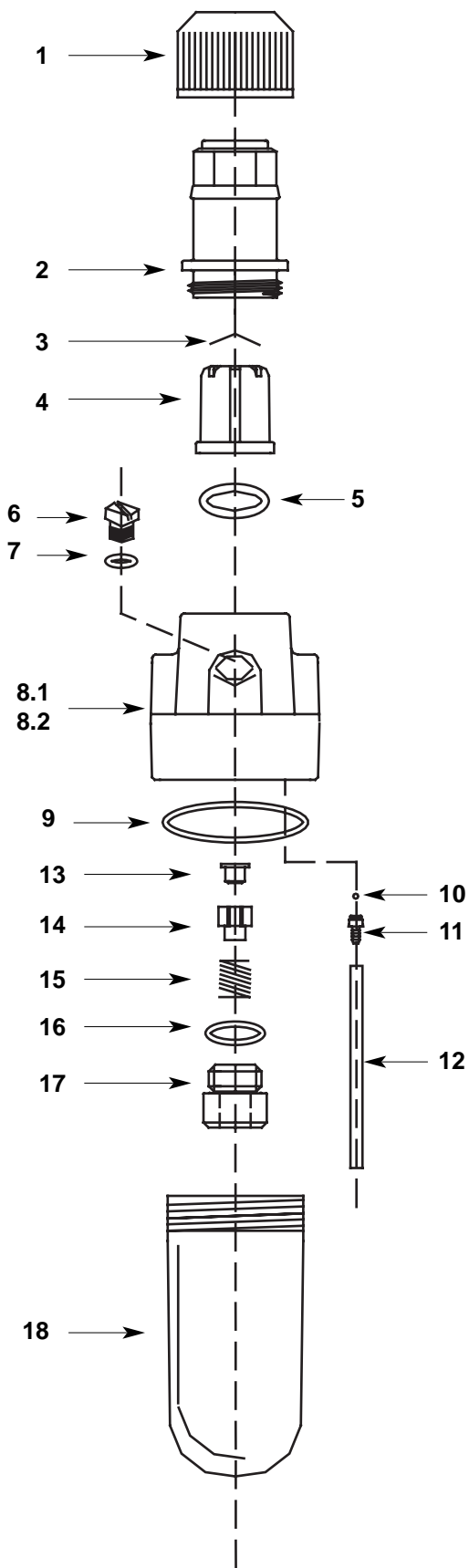
##### Dimensions and Weights:

Height .....	.5"
Width .....	1 1/2"
Weight .....	1/4 lb.



#### Performance Data:





### Rebuilding Kit:

Lubricator Bowl Repair Kit (includes item 9 and 18) . . . ML2RK

We reserve the right to make engineering changes in design or materials without notification.

### General Description of Operation:

As filtered and regulated air enters the lubricator, a small portion is diverted through the inlet passage to pressurize the **lubricator bowl** (18). As air flows through the lubricator, the majority of the air travels through the venturi section while the rest is slightly deflected to flow past the **back pressure valve** (14). The velocity of the air flowing through the venturi section creates a lower pressure at the throat section. This lower pressure allows oil to be forced from the **bowl** (18) through the **oil pickup tube** (12), past the **oil check ball** (10) to the **sight dome assembly** (2).

The oil flow rate is controlled by the **adjusting cap** (1). Oil flows through the clearance between the inner and outer **sight dome assembly** (2) where drops are formed and then drip through the **drip spout** (4) and into the throat section. Here it is broken into fine particles and mixed with the swirling air. This lubricated air is then reunited with the air that bypassed the **back pressure valve** (14) and exits through the out port.

As air flow increases, the **back pressure valve** (14) opens, allowing additional air to bypass the venturi section. This also creates a pressure drop through the venturi, increasing the oil delivery rate in proportion to the increased air flow rate.

The **oil check ball** (10) assures that when there is no air flow, oil in the **oil pickup tube** (12) is held in place, shortening the time required to resume oil delivery when flow is reestablished.

#### Lubricant –

Lubricants, as recommended by the equipment manufacturer, may be used, provided that they are not heavier than SAE#40 (S.U.V. 800 SEC at 100°F). **We recommend the use of Coilhose nondetergent ATL rustproofing lubricant in temperatures above 40° F. For applications between 45° F and -45° F, we suggest using Coilhose ATLW lubricant.**

#### Filling –

Once the system has been depressurized, the lubricator may be filled through the fill port even though the bowl remains pressurized. After carefully removing the fill plug, which depressurizes the bowl, insert the tip of a long spout oil can into the bottom of the fill port to avoid any blow back. Lubricator bowl should be filled to within 1/2" of the top.

Lubricators may also be filled by removing the bowl after the system has been depressurized. **Once the bowl has been filled and replaced, be sure it is in the locked position before repressurizing the system.**

#### Adjustment:

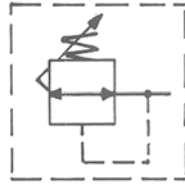
When the adjustment knob is turned completely clockwise, oil is not being delivered through the system and the equipment is not being lubricated. The adjusting knob should be set to the desired drip rate after the air has been turned on and flowing. Turning the adjustment knob in a clockwise direction reduces the oil feed rate. Although proper lubrication is determined through demand and experience, a good starting point is one to two drops per minute. To check lubrication rate, we suggest the following: Hold a piece of cardboard at the exhaust hole of the component in the least favorable position (farthest away from the lubricator or in the highest position). After the unit has run for about 100 strokes, an oil film on the cardboard will indicate that the setting is correct. If the oil film on the cardboard runs, the setting is too high. In order to prevent gumming, it is preferable to add too little rather than too much oil.

#### Cleaning and Maintenance:

The lubricator will provide long periods of uninterrupted service as long as both the air and oil supplies are kept clean and the oil level is kept above the end of the tube in the bowl. Failure of oil to drip through the sight dome, regardless of the position of the adjusting knob, indicates that cleaning is required. The lubricator does not need to be removed from the line for cleaning. Depressurize the air line and disassemble the lubricator using the parts drawing on this page as a guide. Cleaning is normally needed only in the oil metering area. After unscrewing the adjusting knob / sight dome assembly, remove the inner drip spout and clean all components with warm water and mild household detergent only.

#### Components:

Chart No.	Description	Model No.	Chart No.	Description	Model No.
1	Adjusting Cap	8742-31A	10	Oil Check Ball	8742-39
2	Sight Dome Assembly	8742-32A	11	Drip Tube Barb	ML140-17
3	Spring Washer	8742-42A	12	Oil Pickup Tube	ML140-65B
4	Drip Spout	8742-33A	13	Back Pressure Valve Seal	8742-35
5	Drip Spout O-Ring	26L-14	14	Back Pressure Seal Body	8742-36
6	Fill Plug	8742-34	15	Back Pressure Return Spring	8742-37
7	Fill Plug O-Ring	4275-10	16	O-Ring	30-6118
8.1	1/8" Lubricator Body	ML180-1	17	Back Pressure Retainer	8742-38
8.2	1/4" Lubricator Body	ML140-1	18	Polycarbonate Bowl	ML140-41L
9	Bowl Gasket	8722-31			



90-414\* (revised 04/04)

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 West: 503-434-5964 (OR)  
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## MINIATURE SERIES REGULATOR

### Installation Instructions, Operating Instructions and Parts List

#### Application:

The Miniature Series Regulator is designed for applications where space is limited such as compact control panels and miniaturized circuits. These regulator units feature tough zinc body construction with either 1/8" or 1/4" in and out ports and two full-flow 1/8" gauge ports.

#### Options and Accessories:

<b>Options*:</b>	<i>Suffix</i>
Gauge .....	.G
Extra Low Pressure Spring (0 - 20 PSI) .....	.J
Low Pressure Spring (0 - 50 PSI) .....	.L
Panel Mount .....	.P

\*Add a dash followed by the suffix(es) in alphabetical order to the model number.

<b>Accessories:</b>	<i>Model No.</i>
Mounting Bracket and Panel Nut .....	MR140MB
Recommended Pressure Gauge:*	
0 - 60 PSI with 1 1/2" dial .....	.26G-60
0 - 160 PSI with 1 1/2" dial .....	.26G-160

\*When specifying low pressure spring and gauge options, 0 - 60 PSI gauge (26G-60) will be supplied.

#### Technical Data:

Maximum Supply Pressure: .....250 PSI

Maximum Operating Temperature: ...250° F

#### Pressure Range:

Standard .....	.0 - 125 PSI
Option .....	.0 - 50 PSI
Option .....	.0 - 20 PSI

#### Material:

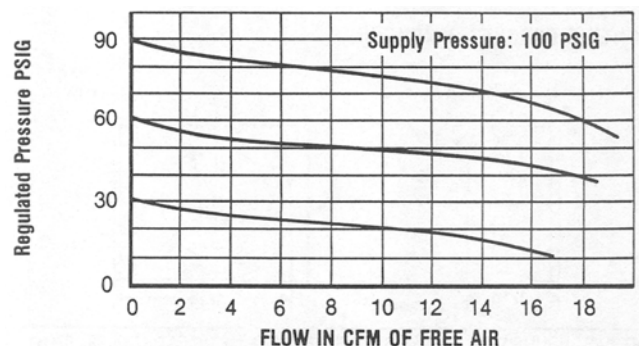
Body .....	.Zinc Die-Cast
Adjusting Knob .....	.High Impact Plastic

#### Dimensions and Weights:

Height .....	.2 7/8"
Width .....	.1 1/2"
Weight .....	.1/3 lb.



#### Flow Characteristics / Performance Data:





## General Description of Operation

High pressure air enters and flows through the poppet valve (3) orifice toward the outlet. Downstream pressure is connected through an orifice to the bottom of the piston (6). As downward pressure increases, the piston (6) is forced upward, compressing the adjustment spring (7). When the piston (6) moves, the return spring (2) pushes the poppet valve (3) upward to throttle the orifice. If downstream pressure exhausts, the mechanical sequence reverses and the poppet valve (3) opens the orifice until the set pressure is reached again.

Some circuits may be subject to downstream high pressure, resulting from situations such as high temperature or heavy vertical loads or cylinders. This high pressure is reduced by the self-relieving orifice in the center of the piston (6). When excessive pressure lifts the valve stem (6), the air is allowed to bleed through the piston (6) orifice and out the bonnet vent until the system returns to the set pressure.

## Pressure Adjustment

To adjust pressure setting, pull up the black adjustment knob. Turning the adjusting knob in a clockwise direction will increase the pressure setting and counterclockwise will decrease the pressure setting.

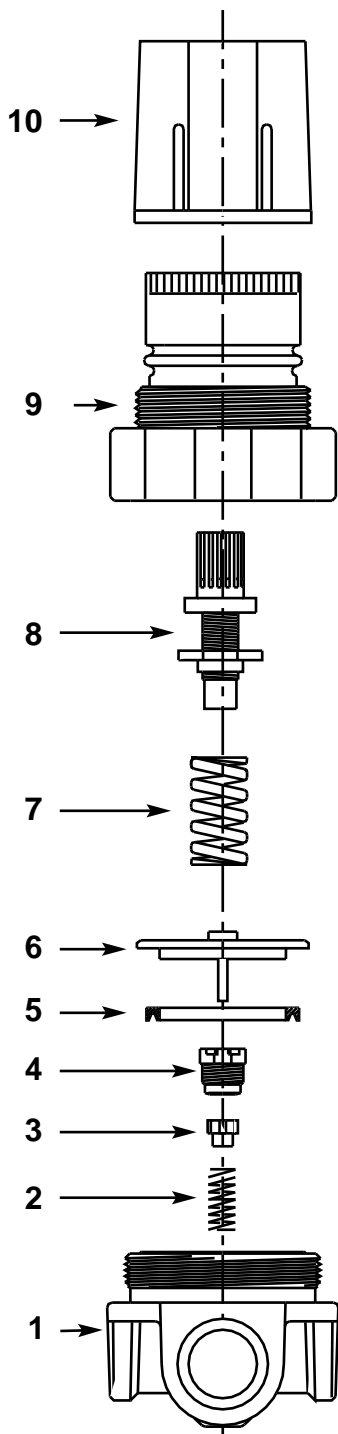
The downstream pressure should always be adjusted to approximately 10 PSI above the required working pressure, even in the event of pressure fluctuations. It is advisable to adjust the setting under constant pressure conditions (until not operating), since a changing flow rate affects the set value.

To avoid readjustment after making a change in pressure setting, we recommend approaching the required setting from a lower pressure. When adjusting from a higher to a lower setting, reduce the pressure to a point below what is required, then adjust upward to the desired pressure setting. Once the desired pressure setting is reached, push in the black adjusting knob to lock and maintain the proper setting.

## Cleaning and Maintenance

If air supply is kept clean, the regulator should provide long periods of uninterrupted service. Standard procedure would be to install a filter before the regulator. When cleaning becomes necessary, the air line should be shut off and depressurized. Erratic regulator operation or loss of regulation is almost always due to dirt between the poppet valve and the valve seat (refer to drawing as a guide to disassembly and subsequent reassembly). Clean parts with household soap and blow out body with compressed air.

When reassembling, tighten valve seat hand tight, being careful not to break plastic alignment tabs. Relubricate the "U" cup seal using a silicone-based grease and tighten the adjusting knob assembly slightly more than hand tight (to 10' pounds torque).



## Rebuilding Kit

The Mini Regulator Repair Kit includes items 2, 3, 4, 5 and 6. Use Model No. **MR140RK** to order.

We reserve the right to make engineering changes in design or materials without notification.

## Components:

Chart No.	Description	Model No.
1	1/4" FPT Body	MR140-1
-	1/8" FPT Body	MR180-1
2	Return Spring	8762A-31
3	Poppet Valve	17-858191
4	Valve Seat	17-858189
5	U-Cup Seal	17-855159
6	Piston Assembly	17-851552
7	Reg. Spring 0 - 125 PSI	8702-15
-	Reg. Spring 0 - 20 PSI	8702-15J
-	Reg. Spring 0 -50 PSI	8702-15L
8	Adjusting Screw	8702-13
9	Top Cap	8702-14
10	Adjusting Knob	26R-12A



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Tire Repair,  
Wheel Hardware, and more!

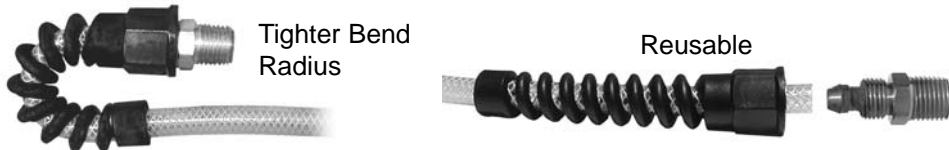


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**The Best Hose Just Got Better!**

**FLEXEEL®**  
**The Original**

**With a Reusable Fitting and Built-In Strain Relief**



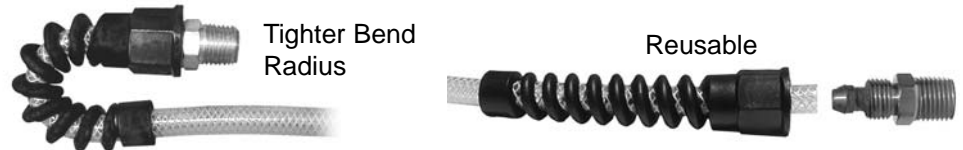
Tighter Bend Radius

Reusable

**The Best Hose Just Got Better!**

**FLEXEEL®**  
**The Original**

**With a Reusable Fitting and Built-In Strain Relief**



Tighter Bend Radius

Reusable

## Reusable Strain Relief

Acme Automotive has improved our industry-leading FLEXEEL® line with the addition of a strain relief that incorporates a built-in reusable fitting. This Reusable Strain Relief fitting is completely field-repairable and always ensures a secure connection, eliminating the need to rig a hose barb with clamps or ties. The new Reusable Strain Relief also provides an extremely tight bend radius, giving the user a greater range of motion, extending the life of the hose, and virtually eliminating the possibility of kinking.

### Acme's Reusable Strain Relief . . .

- Is easily and completely **field repairable**
- Has a **tighter bend radius**, which improves flexibility, even at extremely low temperatures
- **Improves maneuverability**, which extends hose life
- Is **durable** to withstand the rigors of the Industrial environment

The Reusable Strain Relief is offered as a standard feature and replaces Acme's barb and sleeve type fittings. Please use Acme's barb and sleeve part numbers when ordering.

## Assembly Instructions

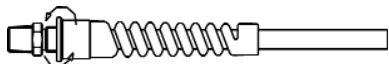
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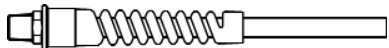
1. Make a square cut on the hose end. Slide strain relief onto the hose.



2. Apply lubricant to fitting barb. Place fitting against a stationary surface and push hose over barb until the hose reaches the threads.



3. Slide strain relief down to fitting.



4. Hold strain relief secure with one wrench, and using the other wrench, turn fitting hex clockwise.

## Reusable Strain Relief

Acme Automotive has improved our industry-leading FLEXEEL® line with the addition of a strain relief that incorporates a built-in reusable fitting. This Reusable Strain Relief fitting is completely field-repairable and always ensures a secure connection, eliminating the need to rig a hose barb with clamps or ties. The new Reusable Strain Relief also provides an extremely tight bend radius, giving the user a greater range of motion, extending the life of the hose, and virtually eliminating the possibility of kinking.

### Acme's Reusable Strain Relief . . .

- Is easily and completely **field repairable**
- Has a **tighter bend radius**, which improves flexibility, even at extremely low temperatures
- **Improves maneuverability**, which extends hose life
- Is **durable** to withstand the rigors of the Industrial environment

The Reusable Strain Relief is offered as a standard feature and replaces Acme's barb and sleeve type fittings. Please use Acme's barb and sleeve part numbers when ordering.

## Assembly Instructions

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CPF20-600 (revised 08/08)

Please direct questions regarding this form to one of the following:

East: 732-390-8480 (NJ)

West: 503-434-5964 (OR)

E-mail: info@coilhose.com

## SOLID STATE AUTOMATIC DRAIN VALVE Instruction & Engineering Data Sheet

### Application:

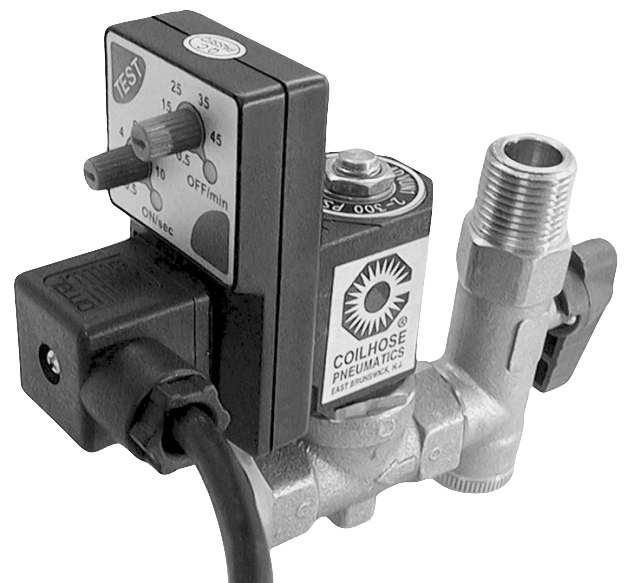
Coilhose Pneumatics 8653 Solid State Automatic Drain Valve discharges accumulated water from compressor tanks, dryers, separators, after coolers, drop legs, filters, high elevation locations and other remote or hard-to-reach installations. The adjustable electronic timer allows precise settings for both cycle time between discharges as well as for actual drain time (amount of time the valve is open). By adjusting the cycle time to meet specific requirements of peak moisture accumulation, air lines are protected against flooding without the time, expense and inconvenience of draining equipment manually.

### Installation Instructions:

1. Drain valve should be installed at a location below the moisture collection reservoir so that the accumulated fluid will be gravity fed to the drain. Mounting can be vertical or horizontal.
2. Air pressure should be turned off and any liquid should be drained from the reservoir.
3. Install the 1/2" NPT end of the Strainer Ball Valve, using either teflon tape or pipe dope, onto the system. The unit can be mounted either vertically or horizontally. Pipe the outlet port into the discharge line.
4. Plug the power cord of the 8653 unit into a grounded 120V/110V AC receptacle.
5. The automatic drain valve will now open once a cycle - between one and forty-five minutes, which can be selected by setting the TOP knob on the timer unit. The drain valve will remain open for a period of between one and fifteen seconds, which can be selected by setting the BOTTOM knob on the timer unit.

**Note:** The cycle time between valve openings should be adjusted so that it drains often enough to prevent water from filling the ball valve. The amount of time the valve remains open should be adjusted so that mostly water is expelled during drain time.

*Settings should be checked periodically as the rate of moisture accumulation may vary at different times of the year or with different usage conditions.*



### Ordering Information

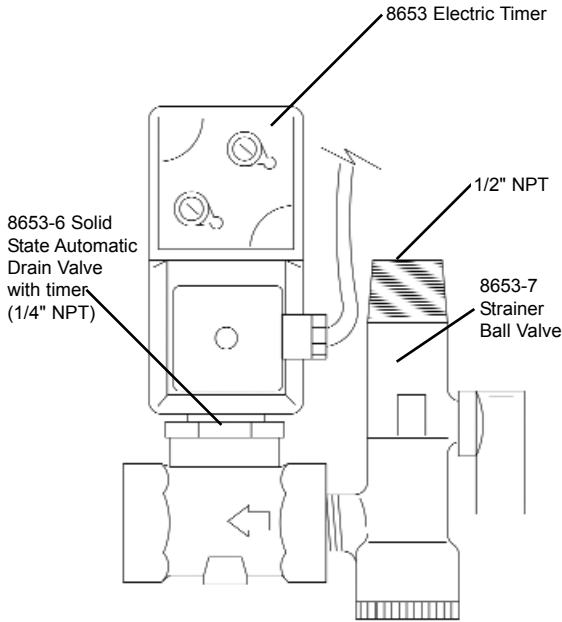
Solid State Automatic Drain Valve	8653
Solid State Timer with Gasket	8653-1
Solenoid Valve	8653-2
Six Foot Power Cord with Gasket	8653-3

**Cleaning and Maintenance:**

It is necessary to keep the filter element clear in order for the drain valve to operate at peak performance. A reduction in the fluid discharge rate or pressure drop of 10 PSI or more indicates that cleaning is required.

Shut the ball valve to the "OFF" position. Unscrew the knurled knob on the opposite end, taking care not to drop the parts. Clean the element by washing in kerosene or soapy water. The filter element should then be dried by blowing compressed air from the inside outward.

When the cleaning is complete, the filter element should be placed back into the body and the filter housing nut threaded back into the strainer ball valve until tight.



**Specifications:**

Voltage:	120 V 60HZ / 110V 50Hz
Power:	20 Watts
Cycle Range:	1 min to 45 mins
Open Time:	1 sec to 15 sec
Operating Temperature:	10°F to 120°F
Maximum Inlet Pressure:	175 PSI
Fluid Discharge Capacity:	1.5 Gal/min @ 125 PSI
Height:	4-7/8"
Width:	1-1/2"
Depth:	4"
Weight:	1lb 7-1/2 oz.
Port Size (One "IN" & Two "Out"):	1/4" NPT
Drain Orifice Diameter:	3/32"
Filter Element:	Sintered Bronze (40 micron)

**CV Values (approximate)**

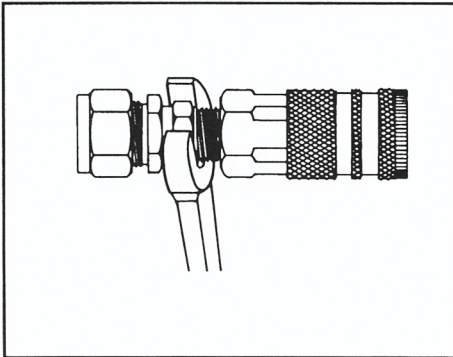
<b>Valve Size</b>	1/4"
<b>CV</b>	1.5
<b>Discharge-gallons (5 sec, at 90 PSIG)</b>	1.2

**Note:** The cycle time between valve openings should be adjusted so that it drains often enough to prevent water from filling up the valve. The amount of time the valve remains open should be adjusted so that mostly water is expelled during drain time.

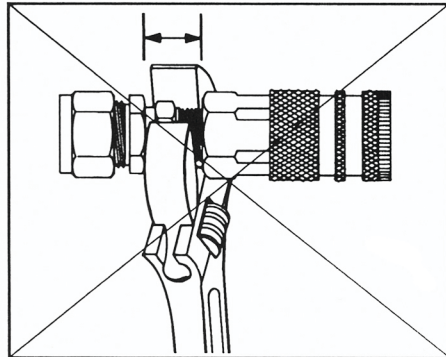
**Settings should be checked periodically as the rate of moisture accumulation may vary at different times of the year or with different usage conditions.**

We reserve the right to make engineering changes in design or materials without notification.

# Swivel Fitting Installation Notice



***CORRECT***



***INCORRECT***



**WARNING:** Do not overtighten and use only a 9/16" open end wrench to hold the 1/4" NPT swivel fitting during installation. As the connection is tightened, an oversized wrench (eg: adjustable or crescent types) can become "pinned" between the fitting body hex and the component the assembly is being connected to. This has a prying effect which can force the swivel portion away from the fitting body. Since brass is a soft metal, overtightening with an oversized wrench could cause the swivel to push right through the flare. When pressurized, the fitting may then blow apart, creating a potentially dangerous situation.