



Accu-Zorb & Accu-Sep

Installation & Operation Manual



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Models AZ15 - AZ240
Models AS15 - AS240
Oil / Water Separator System

Introduction

Congratulations! You have wisely taken the first step in reducing your waste removal costs. By choosing to install an ACCU Series Oil/Water Separator, you have gained the simplest, most economically viable, method of reducing the volume of compressed air condensate destined for disposal. Depending on air intake conditions, water represents up to 98% of the total condensate load you are forced to deal with. So, it stands to reason – you can reduce your waste hauling costs by up to 98% if you can effectively remove the water!

The ACCU Series provides an environment where the small percentage of an insoluble lubricant can rise to the surface to be skimmed off. Water that is displaced by fresh incoming condensate slowly sinks to the bottom, then rises to pass through our unique polar Pre-absorber before finally being purified by eitherh activated carbon (ACCU-SEP) or zeolite (ACCU-ZORB.) From there, the clean water can be safely discharged to your sanitary sewer system.

Lubricants that possess a specific gravity less than that of water tend to be ideal candidates for the ACCU-SEP system due their tendency to separate. Conversely, soluble lubricants such as ATF, Detergent based Motor Oils and, Polyglycol based coolants do not separate well from water. For these problematic lubricants, the filter media of the ACCU-ZORB unit does the majority of the work separating the lubricant from the water and have to be replaced frequently.

If you have any doubt about your system's requirements, before using this product we recommend a simple glass jar test. First, collect a sample of the actual compressed air condensate in a clean, clear glass jar (mayo, jelly, etc.). Shake it well, then set it down to allow it to separate. Time how long it takes to separate (it could take minutes or even hours depending on the lubricant). Lubricants that separate easily will settle to be relatively clear water for most of the sample, with a little oil on the surface, and can be used with the ACCU-SEP systems. If you see milky looking emulsified oil after allowing the sample to rest, an ACCU-ZORB system is likely a better choice. Please contact your supplier if you have any questions.

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Here's How It Works....

Depressurization:

Condensate is depressurized as it enters the separator through the (3) ½" Condensate Inlets in the Inlet Diffuser Assembly. Air is exhausted to atmosphere through the Filter located in the top.

Gravity draws the new condensate into the Sediment Chamber and pushes the old condensate through the Separation Filter. The Separation Filter causes fine oil droplets to coalesce which speeds up the separation process. It also prevents the dirt, rust and scale from leaving the Sediment Chamber.

Processing:

Both the Oil and Water enter the Vessel through exit holes in the Sediment Chamber. Nonsoluble oil will float to the surface and then be removed via the Oil Outlet Tube to the Oil Container

The Water slowly sinks to the bottom of the Vessel. It rises through a tube and enters the Pre-Absorption Chamber where it is pre-cleaned before it flows down through the Media Refill for final polishing. From there it exits the separator via the Water Outlet Port located conveniently at the back of the vessel.

Monitoring:

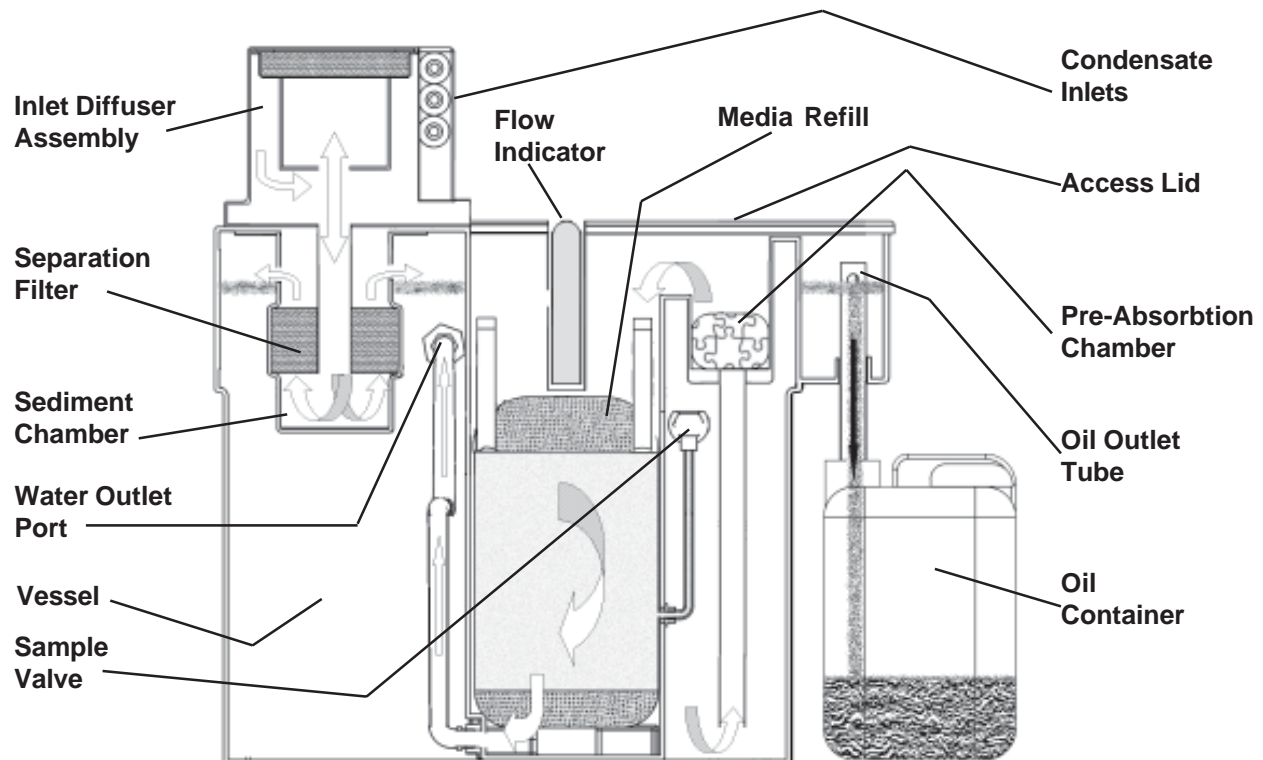
The ACCU-Series was designed with the user in mind. A translucent Oil Container is provided so you can easily tell with a quick glance, just how much oil has collected

for disposal. Our **LEVEL MINDER** option offers you a remote Alarm System to warn you that the oil container is full and needs to be changed.

Sample Jars are provided to collect water from the Sample Valve. A simple comparison test will confirm when it's time to change the Media Refill. The enclosed Maintenance Log will help you document your sampling results, providing you with evidence of compliance with local sanitary sewer regulations.

Our exclusive Flow Indicator pops-up and then stays up, to provide you with a visual indication that a reduced flow condition has occurred during operation. Designing it so that it stays up allows it to advise you that under peak operating conditions you are no longer getting full flow. This provides you with time to respond before it fails completely like other brands do. An easily removable Access Lid makes removal of the filter media quick and easy.

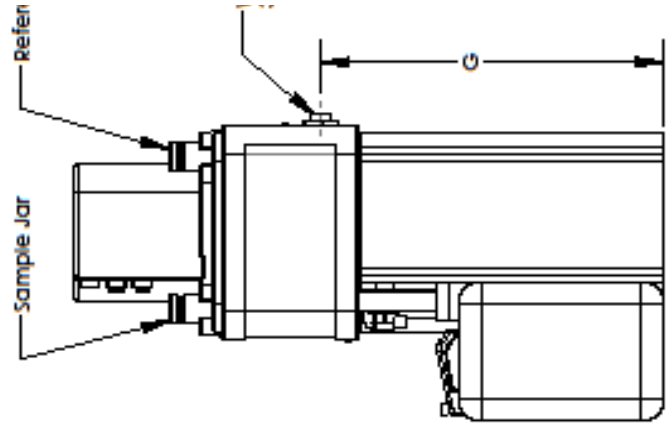
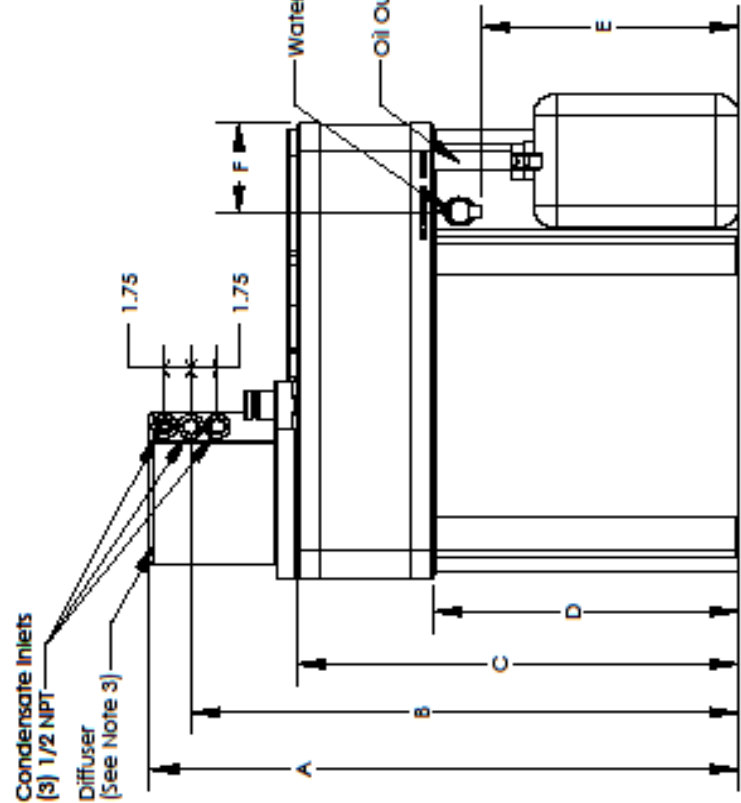
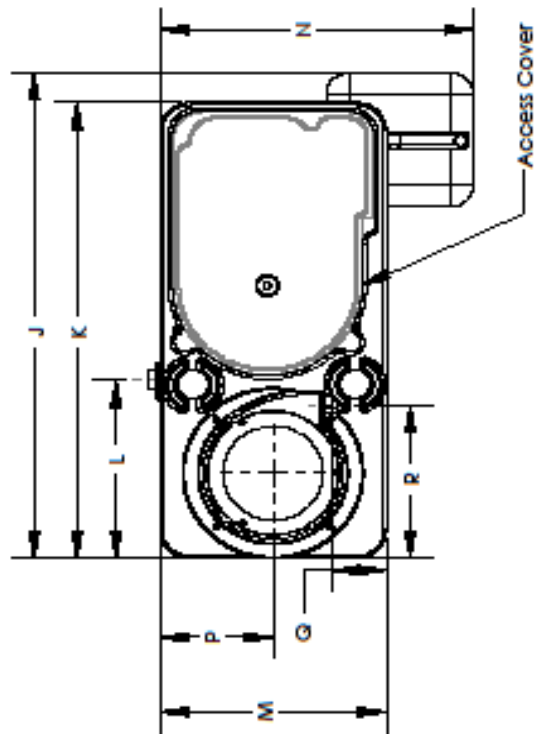
When you can't be there to see it, we offer our exclusive **Remote Flow Indicator** option. It provides you with both the visual indication of our Flow Indicator and the added benefit of a set of remote alarm contacts. If a reduced flow condition occurs, the contacts close to actuate whatever device you choose to sound the alarm. Nobody else offers you this kind of security at any price.

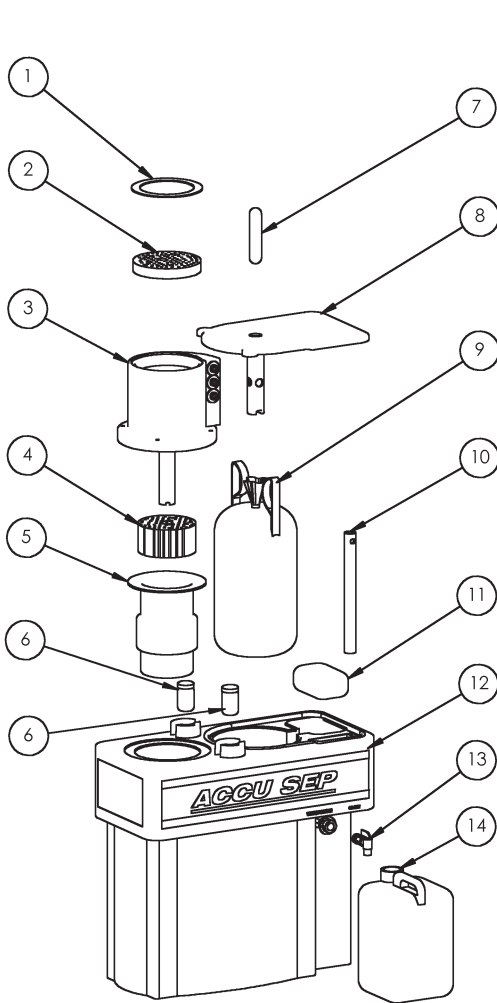


DIMENSIONS

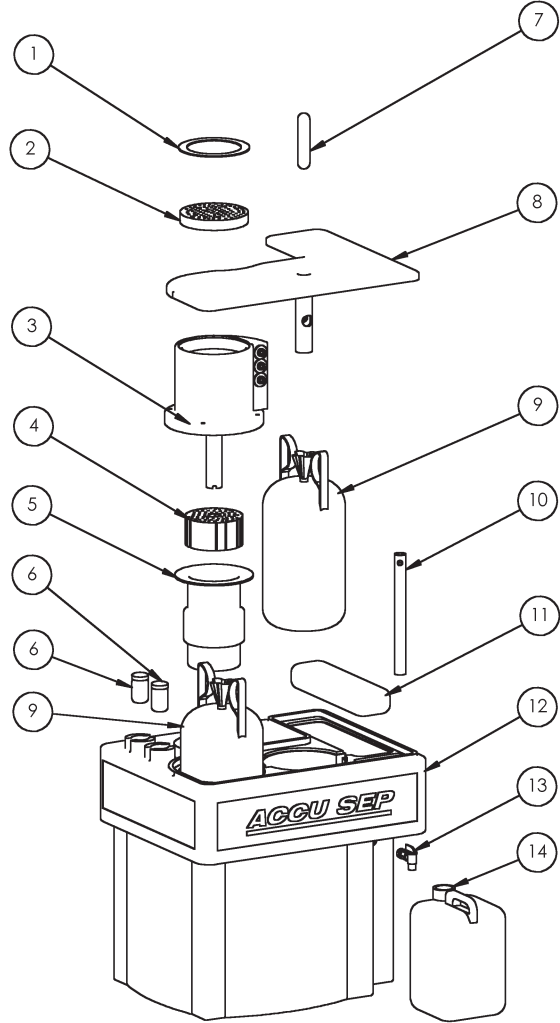
Model	A	B	C	D	E	F	G	J	K	L	M
15	29.7	27.0	20.7	14.5	11.3	5.3	16.0	26.5	26.0	9.0	14.0
30	39.0	36.3	20.7	14.5	11.3	5.3	16.0	26.5	26.0	9.0	14.0
60	39.0	36.3	30.0	20.2	17.1	4.7	23.0	35.0	32.0	21.8	26.8
90	45.0	41.3	36.0	26.0	23.1	4.7	29.0	35.0	32.0	21.8	26.8

- NOTES: 1. ALL DIMENSIONS IN INCHES, UNLESS OTH
 2. ALL DIMENSIONS ARE +/- .5, UNLESS OTH
 3. DIFFUSER IS ROTATABLE IN 90° INCREMENT
 4. SIZE 15 USED TO ILLUSTRATE DIMENSION





AS15/AS30

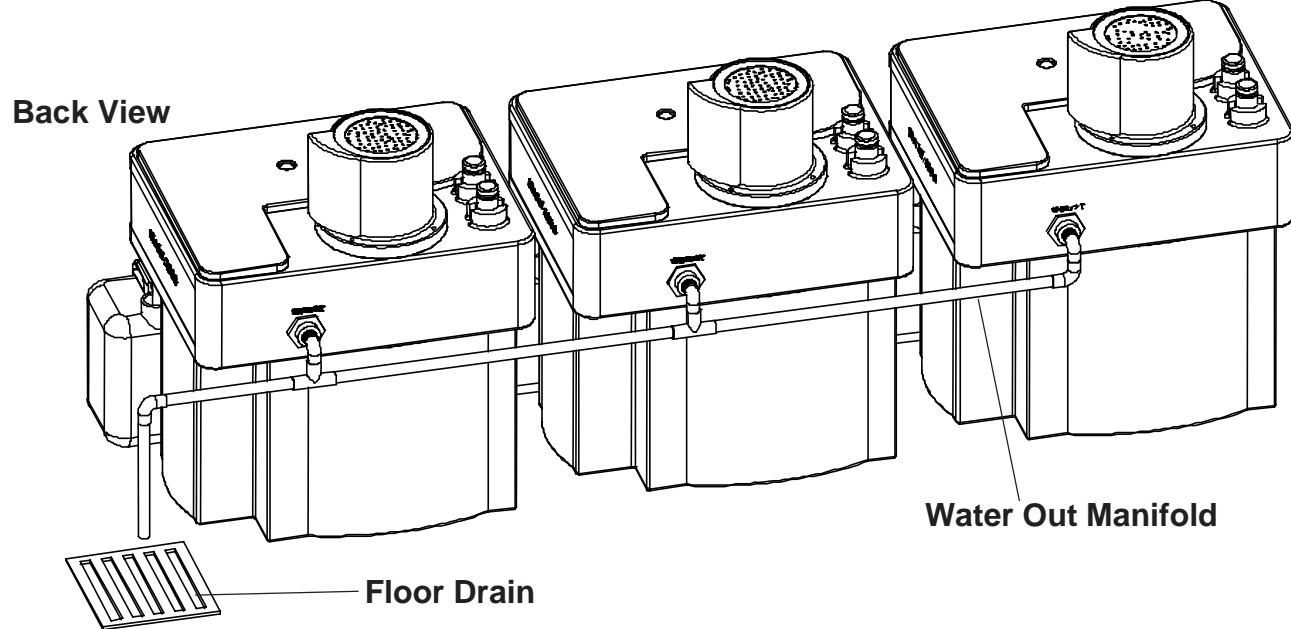
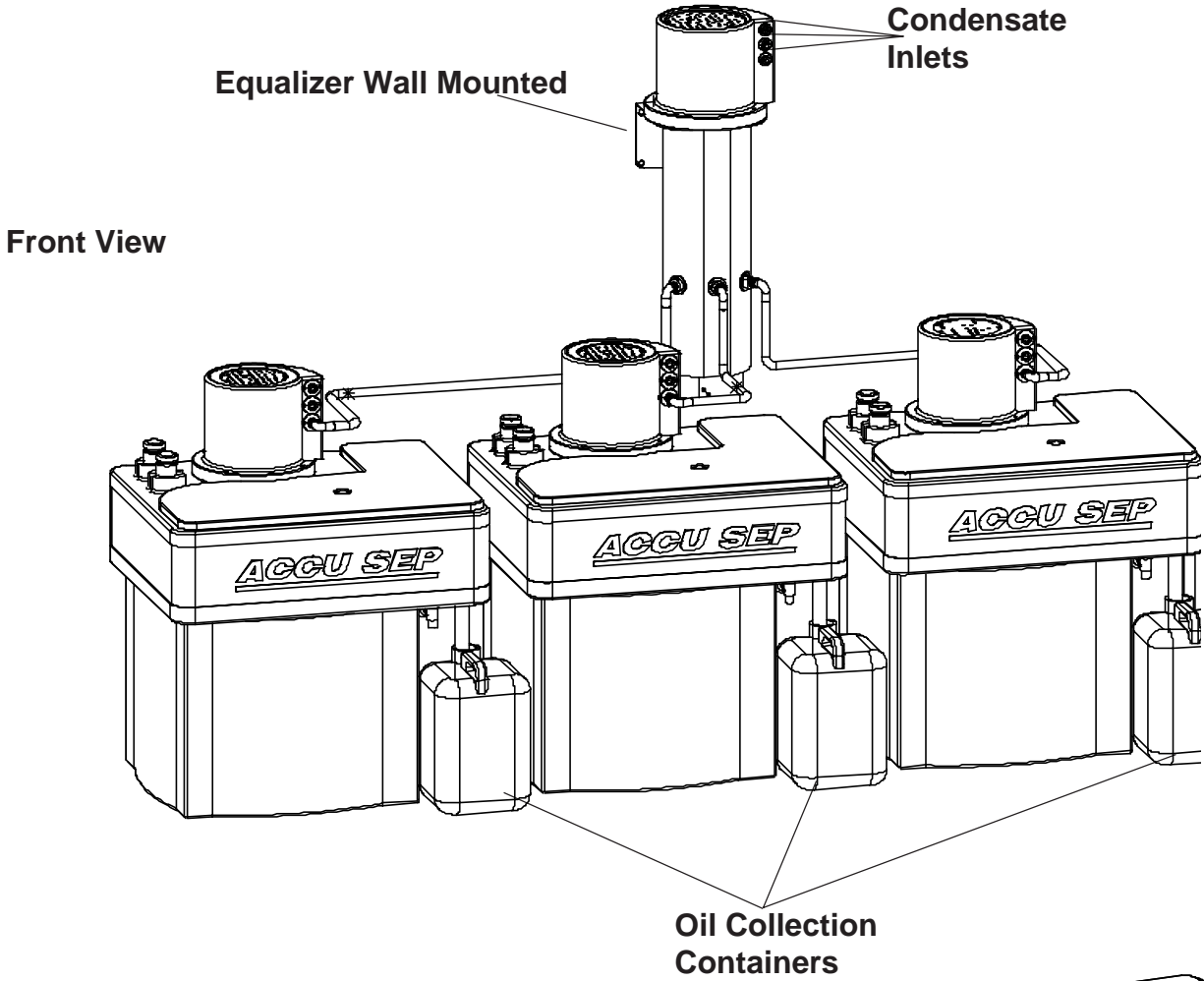


AS60 THRU AS240

LIST OF MATERIALS

PC#	DESCRIPTION	QTY	AS15 PART NUMBERS	QTY	AS30 PART NUMBERS	QTY	AS60 THRU AS240 PART #S	PC #
1	DIFFUSER COVER RING	1	TR4-8B-RING	1	TR4-8C-RING	1	TR4-8C-RING	1
2	DIFFUSER PAD	1	ASP-EC05	1	ASP-EC08	1	ASP-EC08	2
3	DIFFUSER ASSEMBLY	1	TR4-8C2	1	TR4-8C	1	TR4-8C	3
4	SEPARATION FILTER	1	ASP-SF1	1	ASP-SF2	1	ASP-SF2	4
5	SEDIMENT CHAMBER	1	TR1-15P	1	TR1-30P	1	TR1-30P	5
6	SAMPLE JAR	2	TR7-B	2	TR7-B	2	TR7-B	6
7	FLOW INDICATOR	1	TR1-FLOAT	1	TR1-FLOAT	1	TR1-FLOAT	7
8	COVER	2	TR1-15 COVER	1	TR1-30 COVER	1	TR1-60 COVER	8
9	MEDIA REFILL	1	Consult Factory	1	Consult Factory	2	Consult Factory	9
10	OIL OUTLET TUBE	1	TR1-OT	1	TR1-OT	1	TR1-OT	10
11	PRE-ABSORPTION PAD	1	Consult Factory	1	Consult Factory	1	Consult Factory	11
12	VESSEL	1	TR1-15	1	TR1-30	1	TR1-60, TR1-90	12
13	SAMPLE VALVE	1	TR9-4	1	TR9-4	1	TR9-4	13
14	OIL CONTAINER	1	OCP-2	1	OCP-5	1	OCP-5	14

Installation Diagrams for Multiple units with Equalizer Manifold (Model AS180 Shown)



Installation Instructions

WARNING:

COMPRESSED AIR CAN BE EXTREMELY DANGEROUS. DO NOT ATTEMPT TO CONNECT OR DISCONNECT ANY PIPING RELATED COMPONENT WITHOUT FULLY DEPRESSURIZING THAT PORTION OF THE SYSTEM FIRST.

PLACEMENT

The separator must be placed on a leveled surface capable of supporting the entire functioning weight of the installation. As gravity is responsible for the proper operation, it is highly recommended that you install the unit within close proximity of a sanitary sewer floor drain to which you can discharge the treated water. For ease of maintenance, please leave enough room around the unit to conveniently access the filters.

Heater Options are available to protect the ACCU-Series if it is to be installed in an area susceptible to freezing. Further precautions, such as heat trace tape, will need to be taken to protect the Condensate Inlet Piping and the Water Outlet Discharge Piping from freezing.

1. Level the floor area where the separator will be placed to ensure proper operation.
2. Twist the external OIL OUTLET TUBE while raising it to its maximum height.
3. Position the translucent OIL CONTAINER below the OIL OUTLET TUBE.

DO NOT LOWER THE OIL OUTLET TUBE AT THIS TIME.

EQUALIZER SURGE & BALANCE CONTROL OPTION

Note: Plan to centrally locate the EQUALIZER when using multiple units. It must be securely fastened to a rigid structure above the separators. Proper placement and elevation are critical as gravity flow delivers the condensate to the units. Consult system drawing and EQUALIZER Installation Instruction page for details.

FILTER PREPARATION

The Pre-Absorber and Filter Media come packaged in plastic bags and pre-installed in their respective compartments. This prevents the dust generated in shipping from migrating throughout the interior of the product. Thoroughly pre-wetting these components removes the dust, and reduces the likelihood of air pockets. This procedure is critical to ensure proper operation. It is common for the Pre-Absorber to foam-up during this procedure.

1. Remove the Access Lid, Pre-Absorber and media bag(s) from the unit.
2. Remove the plastic bags from the Pre-Absorber and the media bag(s).
3. Thoroughly hose down the Pre-Absorber and media bag(s) with fresh water while rolling them until the water runs clear. This process will pre-wet the carbon, prevent air pockets, and remove carbon dust created during transportation.

WARNING: *FAILURE TO THOROUGHLY WET THE MEDIA MAY LEAVE AIR POCKETS WHICH MAY CAUSE THE MEDIA BED TO FLOAT OR CAUSE UNDESIREABLE OPERATION.*

4. Reinstall the pre-wetted Pre-Absorber & Media Bag(s).

Note: For easier installation of the Media Bag(s), first, roll it back and forth on the floor to elongate the filter. Keep it horizontal while carrying it to the Media Chamber. Position the bottom of the bag at the mouth of the chamber and slowly lift it to vertical while sliding it into the chamber. Press down around the edge of the Media Bag to seat it in the Media Chamber after it has reached the bottom.

WATER OUTLET PLUMBING PREPARATION

The size and location of the Water Outlet fitting predetermine the internal water level of the separator.. Reducing the size would restrict the flow of the water exiting the unit, elevate the water level, and increase the likelihood of discharging water into the Oil Container.

1. DO NOT REDUCE THE PIPE SIZE.
2. The Water Outlet Port is ¾" npt (f) on models #15 and #30. It is 1" npt (f) on models #60 and larger.
3. Install an elbow on the Water Outlet Port and route the piping directly to the sanitary sewer drain.
4. Water exits the Water Outlet piping by gravity. Route piping in a continuous downward sloping manner so as not to impede the flow.

Note: When using a common discharge water manifold on multiple units, first, install an elbow to allow the water to drop before connecting to the manifold. Piping must be pitched below the height of the Water Outlet Port. Please consult the Multiple Unit System Drawing for further details.

CONDENSATE INLET PREPARATION

To make your piping job easier, the INLET DIFFUSER assembly can be rotated, if desired, as follows:

1. Remove the four (4) socket head cap screws that hold the Diffuser to the Vessel.
2. Rotate the Diffuser at 90° intervals until the three (3) ½" NPT Inlet Connections line up where you want them.
3. Reinstall the socket head cap screws and tighten.
4. Use flexible tubing to connect your condensate drains to the Inlet Connections.
5. Consult heading "COLLECTION MANIFOLD GUIDELINES" when needing to install multiple drain lines.

Note: The use of an EQUALIZER is recommended when demand style drain valves can collectively deliver more than 43 oz. for Model 15 units; 64 oz. for #30 units; 96 oz. for #60 and # 90 units.

COLLECTION MANIFOLD GUIDELINES

Collection Manifolds allow you to keep your pipe layout clean and simple by piping numerous drain lines to a common header. You then have only one connection to pipe to your Separator or EQUALIZER.

Recommended pipe sizes for Collection Manifolds are: 1" (#15); 2" (#30); 3" (#60); 4" (#120);
5" (#180/240)

1. Use the Bottom Inlet Connection on the INLET DIFFUSER when installing a collection manifold or an EQUALIZER.
2. When installing a Collection Manifold Header Pipe, the pipe should be made of a non-rusting material such as PVC or copper. Use as large a diameter as possible.
3. Wall mount the Manifold above the separator and slope it downward to the inlet connection of the diffuser (or EQUALIZER when included).
4. Condensate Drain piping should enter the Collection Manifold Header from the top at approximately one-foot intervals. Provide a separate connection point for each drain trap.

PRIMING THE SYSTEM

The specific gravity differential between the water and the lubricant are the keys to their ability to separate. Filling the unit with fresh, clean tap water before commissioning provides the platform for proper operation.

1. Use fresh, clean tap water to fill the separator vessel through the opening that surrounds the Oil Outlet Pipe.

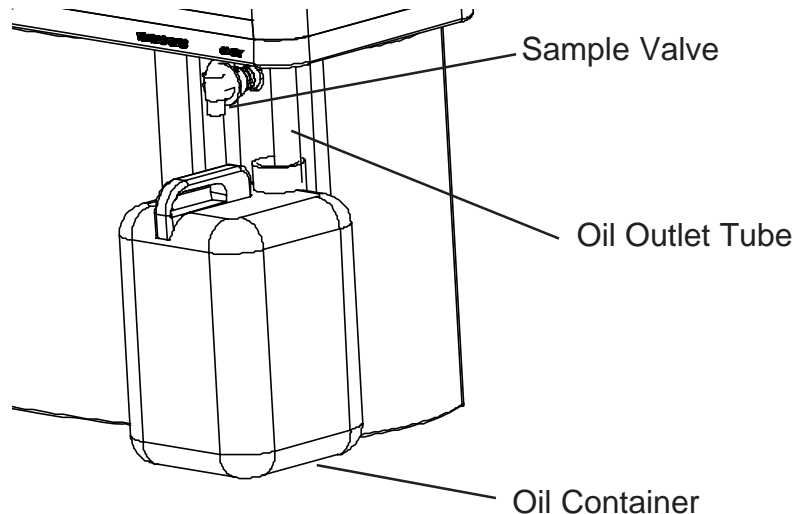
CAUTION! Slow down the flow of the water when it starts to spill into the Carbon Bed to prevent the unit from overflowing.

2. The unit is primed when clear water exits the Water Outlet.
3. Allow the unit to rest for 5 minutes to stabilize the water level before adjusting the Oil Outlet.

OIL OUTLET TUBE ADJUSTMENT

The Oil Outlet Tube extends up into the vessel to remove oil from the surface. When enough oil has accumulated, it will be skimmed off of the surface, drain down through the Oil Outlet Tube and be deposited into the Oil Container for removal.

1. With the Oil Container installed, firmly grasp the Oil Outlet Tube and twist it while lowering it until the Oil Outlet Orifice is at 1/2" to 3/4" above the water level.



Note: It will most likely take months before you accumulate enough oil on the surface water for it to begin to be seen in the Oil Container. This is normal.

SAMPLE TESTING

Two Sample Jars are included to provide you with the security of knowing you are discharging clean treated water to your sanitary sewer. A MAINTENANCE LOG is also provided within this booklet to allow you to log the dates and results of your sampling program.

1. Remove the two Sample Jars from their packaging.
2. Fill one with clean tap water to use as a reference and keep the other for taking samples from the Sample Valve located above the Oil Container.
3. Store the Sample Jars in the Placement Wells molded into the top of the vessel.
4. Keep a copy of the MAINTENANCE LOG Sheet near the ACCU-SEP for fast reference.
5. Refer to the MAINTENANCE INSTRUCTIONS for sampling details.

COMMISSIONING

Your separator is now ready for condensate service.

WARNING:

IT IS A VIOLATION OF THE CLEAN WATER ACT TO DISCHARGE COMPRESSED AIR CONDENSATE INTO A STORM SEWER OR INTO A BODY OF WATER. TREATED COMPRESSED AIR CONDENSATE MAY BE LEGALLY DISCHARGED INTO A SANITARY SEWER SYSTEM PROVIDED THE PPM CONCENTRATION IS WITHIN THE LEGAL LIMITS OF THE GOVERNING BODY OF THAT SEWER DISTRICT. CONSULT YOUR LOCAL SEWER AUTHORITY TO DETERMINE THE MAXIMUM ACCEPTABLE PPM LIMIT.

Oil/Water Separator Maintenance Instructions

Daily

1. Check the Oil level in the translucent Oil Container. Empty it when the oil level reaches 3/4 of capacity.
2. Verify that the bright red Flow Indicator is retracted inside the Access Lid. (See Troubleshooting Section)

Every Two Weeks

1. Take the empty Sample Jar and collect a sample from the Sample Valve located above the Oil Container.
2. Hold both the Sample Jar and the Reference Jar to a light for a visual turbidity comparison.
3. Keep a spare Pre-Absorber and Media Bed(s) in stock to avoid change out problems.
4. Change the Pre-Absorber and Media Bed(s) when the compared Condensate Sample appears cloudy.
5. Pour the Condensate Sample back into the Pre-Absorber Chamber.
6. Wash and dry the Sample Jar before returning it to the Placement Well.

Note: The Sample Valve extracts the condensate sample 2/3rds of the way through the Media Bed. This provides enough time and security for replacing the Media Bed(s) before PPM violations should occur.

Yearly

Keeping your ACCU-Series separator in good working condition prevents problems and pays you dividends all year long. Therefore, as part of a good preventative maintenance program, we recommend cleaning out the Sediment Chamber and replacing all of the filters at least once a year. The following sections will provide you with these servicing details.

DIFFUSER and SEPARATION FILTER MAINTENANCE PROCEDURE

The cleanliness of your piping will dictate how frequently you will need to perform this procedure. However, we recommend an annual cleaning to maintain the flow and to remove the dirt, rust and scale that has accumulated.

1. Shut off condensate flow to Inlet Diffuser Assembly.
2. Unscrew the four Socket Head Cap Screws that hold the Diffuser to the Vessel.
3. Lift up the Diffuser and move it out of the way so you can remove the Sediment Chamber.
4. Grasp the edges of the Sediment Chamber and slowly lift it from the vessel.
5. Tip the Sediment Chamber slightly to slowly pour the contents through the Separation Filter and back into the vessel until the liquid is emptied.
6. Remove the Separation Filter from the recess inside the Sediment Chamber and discard.
7. Clean the dirt, rust and scale from the Sediment Chamber. Reinstall a new Separation Filter into the recess.
8. Seat the Sediment Chamber into the vessel by slowly pouring tap water into it until the water exits the discharge holes in the Chamber walls.
9. Remove and replace the Expansion Chamber element located on top of the Diffuser Assembly.
10. Reinstall the Diffuser Assembly and secure with four socket head screws.

PRE-ABSORBER AND MEDIA BED REPLACEMENT PROCEDURE

Prepare the replacement Media Bed(s) and Pre-Absorber for service as follows:

1. Remove them from their plastic bags.
2. Thoroughly hose down the Pre-Absorber & Media Bed(s) while rolling them until the water runs clear.
3. Shut off the condensate flow to the Inlet Diffuser Assembly and remove the Access Lid.
4. Use a polypropylene pad to adsorb and remove any oil that is floating on the surface water in the Media Chamber(s).
5. Grab Media Bed Handles (#30/60/90 sizes only) and slowly lift bag(s) out of chamber.
6. Suspend bag(s) over chamber for a couple of minutes to drain.
7. Install new Pre-Absorber & Media Bed(s). (Install the left side Media Bed first on model #AS60 thru AS240).
8. Reorder a spare Pre-Absorber & Media Bed(s) set.

Note: For easier installation of the Media Bed(s), roll it back and forth on the floor to elongate the filter. Keep it horizontal while carrying it to the Media Chamber. Position the bottom of the bag at the mouth of the chamber and, slowly lift it to vertical while sliding it into the chamber. Press down around the edge of the bed to seat it in the Media Chamber after it has reached the bottom.

ATTENTION:
PLEASE BE SURE TO COMPLY WITH ALL APPLICABLE REGULATIONS WHEN DISPOSING OF LUBRICANT CONTAMINATED FILTERS.

SIZING CHART FOR MAXIMUM AIR COMPRESSOR CAPACITY IN CFM*

Lubricant Base Stock for Rotary Screw						Lubricant Base Stock for Rotary Vane & Reciprocating					
Model #	PAO	Turbine	Diester	Mineral	Motor Oil	Model #	PAO	Turbine	Diester	Mineral	Motor Oil
15	150	150	113	100	50	15	75	75	57	50	25
30	300	300	225	200	100	30	150	150	113	100	50
60	600	600	450	400	200	60	300	300	225	200	100
90	900	900	650	600	300	90	450	450	338	300	150
120	1200	1200	900	800	400	120	600	600	450	400	200
180	1800	1800	1350	1200	600	180	900	900	675	600	300
240	2400	2400	1800	1600	800	240	1200	1200	900	800	400

*CFM capacities are based on inlet air conditions of 90% humidity and 90° F temperature.

Separator Trouble Shooting Guide

<u>Trouble</u>	<u>Probable Cause / ●Remedy</u>
Carbon Bed Floats	<p><i>If the Media Bed is not adequately pre-wetted, air bubbles may be trapped.</i></p> <ul style="list-style-type: none">● See “INSTALLATION INSTRUCTIONS - FILTER PREPARATION” section.
Water in Oil Container	<p><i>Water level may be too high if unit is not on a level surface.</i></p> <ul style="list-style-type: none">● Level area as noted in “PLACEMENT” section. <p><i>Oil Outlet Tube is set too low allowing water to exit with the oil.</i></p> <ul style="list-style-type: none">● Refer to “OIL OUTLET TUBE ADJUSTMENT” section for details. <p><i>A large condensate surge will elevate the water level above the Oil Outlet Tube and allow water to escape before the level recedes and stabilizes.</i></p> <ul style="list-style-type: none">● Installing an EQUALIZER will prevent an overload by controlling the surge.● Installing the right system engineered Demand Drain(s) will prevent the surge, reduce emulsification, and extend filter life. Ask for selection assistance.
Red Flow Indicator is up	<p><i>Flow is restricted through the Media Bed(s). Usually caused by emulsified oil.</i></p> <ul style="list-style-type: none">● Install fresh Media Bed(s).● Replace Timer Drains with system engineered Demand Drains to reduce mechanical emulsification. Ask for selection assistance.● Retrofit a Heater. Raising the temperature of the water within the vessel will help the oil rise to the surface, especially with high viscosity lubricants.● Install an EQUALIZER. Large surges of condensate may not be enough to cause an overload but, the excessive turbulence stirs everything up thereby hindering separation and sending emulsified lubricant through the system.● A contaminant is being introduced through the compressors air intake. Acidic or corrosive gases, such as solvents or paint fumes, can react with the condensate to form a stable emulsion. Determine the origin of the contaminant and take measures to prevent its entry into the system. Typically, remote mount the air intake filter outside the building away from exhaust pipes and vents. Seal all pipe joints. Then disassemble the separator and pressure wash or steam clean the vessel and components, rinse well, and replace all filters and Media Beds. Reinstall the unit.
Condensate Spills out at base of Inlet Diffuser Assembly	<p><i>Large condensate surges can exceed the capacity of the Sediment Chamber and cause it to overflow below the Inlet Diffuser Assembly.</i></p> <ul style="list-style-type: none">● Installing an EQUALIZER will prevent an overload by controlling the surge.● Installing the right system engineered Demand Drains will prevent the surge, and eliminate this condition. Ask for selection assistance.
Condensate backing up inside the Diffuser Assembly	<p><i>Flow through the Separation Filter is restricted by sludge or debris.</i></p> <ul style="list-style-type: none">● Replace Separation Filter. See “SEPARATION FILTER” replacement instructions located under “MAINTENANCE INSTRUCTIONS.”

**Oil layer looks lumpy
& foamy**

Bacterial contamination.

- Disassemble the separator. Pressure wash or steam clean the vessel, and components, rinse well and replace all filters. Reinstall the unit.

No Oil in Oil Container

It could take months to accumulate enough oil to begin seeing it in the oil container.

- Check the depth of the Oil layer inside the vessel. Refer to the "OIL OUTLET TUBE ADJUSTMENT" section for details.
- *Oil Outlet Tube may be set too high.*

**Frequent Media
Replacement**

The lubricant may have poor demulsibility characteristics and/or the unit may be undersized.

- Perform the "GLASS JAR TEST" as described in the INTRODUCTION. Contact your supplier with the results for further assistance.
- Replacing the lubricant with another that displays better demulsification characteristics may extend the Media Bed life. Then disassemble the Separator. Pressure wash or steam clean the vessel and components, rinse well, and replace all filters and Media Beds. Reinstall the unit.
- Replace Timer Drains with system engineered Demand Drains to reduce mechanical emulsification. Ask for selection assistance.

Turbulence caused by large condensate surges disturbs the separation process and sends emulsified oil to the Media Bed.

- Installing an EQUALIZER will control the surges and prevent the turbulence.

A contaminant is being introduced through the compressor air intake. Acidic or corrosive gases, such as solvents or paint fumes, can react with the condensate to form a stable emulsion.

- Determine the origin of the contaminant and take measures to prevent its entry into the system. Typically, remote mount the air intake filter outside the building away from exhaust pipes and vents. Seal all pipe joints. Disassemble the separator pressure wash or steam clean the vessel and components, rinse well, and replace all filters and Media Bag(s). Reinstall the unit.

Cross-contamination caused by mixing different types of lubricants can cause emulsification problems which can shorten the life of the Media Bed(s). Mixing condensate from reciprocating, rotary screw or, rotary vane systems can result in this problem.

- Use the exact same lubricant brand and type in all machines. System ratings must be based on the lowest rated product classification i.e. recip. Alternatively, install two parallel systems: one for each system to prevent cross contamination.

Lubricant cross-contamination can also occur from using a common funnel or container to transfer various lubricants without cleaning it between uses.

- Use a dedicated transfer device for each lubricant and clean it after use.

OPTIONS

The following options are available for the ACCU-SEP and ACCU-ZORB Systems:

- **Heaters:** Heaters are available for use in areas where the separator might be subject to freezing temperatures, or where poor separation of the oil and water is a result of cool temperatures.

Heater P/N	Model	Voltage	Watts	Housing	Adjustable Thermostat	Field Installable
TR9-9A	15	120V 60 Hz	250	Nema 4	No	Yes
TR9-9A	30	120V 60 Hz	250	Nema 4	No	Yes
TR9-9A*	60	120V 60 Hz	500*	Nema 4	No	Yes

* Require two heaters

- **Equalizer:** Is used to prevent large surges of condensate from entering the separator and causing an overflow condition. The EQUALIZER is also used for connecting multiple units together. Up to to three ACCU-Series units can be connected with the standard unit (Model PSEQ1) and an option is available for handling four ACCU-Series (Model PSEQ2).
- **Level Minder:** Is used to provide a remote indication of when the oil container from an Oil/Water Separator needs to be emptied. The ACCU-Series #15 uses Level Minder Model LM3A; all other ACCU-Series units use Model LM5A.
- **Remote Flow Indicator:** Is used to provide a remote indication of when the Flow Indicator has risen, a warning sign that the carbon elements might have to be changed. Model ASP-RFI

Limited One Year Warranty

The ACCU-Series Separators are warranted to be free from defects in material and workmanship, under proper use, installation, application, and maintenance in accordance with the manufacturer's written recommendations and specification for a period of 15 months from the date of shipment from the factory or 12 months from the date of installation, whichever comes first. The manufacturer's obligation under this warranty is limited to, and the sole remedy for any such defect shall be, the repair or replacement (at manufacturer's option) of unaltered products returned to manufacturer within said period.

This is the only authorized Air System Products warranty and is in lieu of all other express or implied warranties or representation, including any implied warranties of merchantability or fitness, or of any other obligations on the part of the manufacturers.

Warranty claims must be submitted and shall be processed in accordance with Air System Products, Inc. established warranty claim procedure. In no event, shall Air System Products, Inc be liable for business interruptions, loss of profits, personal injury, costs of delay or any other special, indirect, incidental, or consequential losses, cost, or damages.

NOTE - Routine maintenance and minor adjustments to the Air System Products, Inc ACCU-SEP oil/water separators are not covered under this warranty. Prior to performing any possible warranty service or replacing a possible warranted part, please contact your local Air System Products, Inc Distributor. Failure to comply with this procedure will result in denial of warranty claim.

Please fill in the **Warranty Registration Form** within 30 days of installation and forward to:

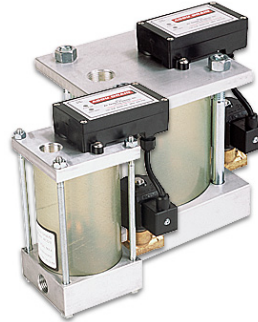
Air System Products, Inc. 51 Beach Ave, Lancaster, New York 14086
www.airsyspro.com

AIR SYSTEM PRODUCTS, INC. manufactures a complete line of drains for effectively removing condensate from your compressed air system.

Listed below are some of the drains that will help enhance the performance of your **ACCU-Series** by not wasting any compressed air. Contact your distributor for further information.

ACCU DRAIN

- Operation Lights
- See-Through Vessel
- Manual Override Test Button
- Exclusive Non-Clogging Valve



EXACTRONIC DRAIN SYSTEM

- See-Through Vessel
- Large Volume Discharge
- Manual Override Test Button
- Non-Clogging Ball Valve Discharge

ROBO DRAIN

- Low Profile
- See-Through Vessel
- No Electricity Required
- Non-Clogging Ball Valve Discharge



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