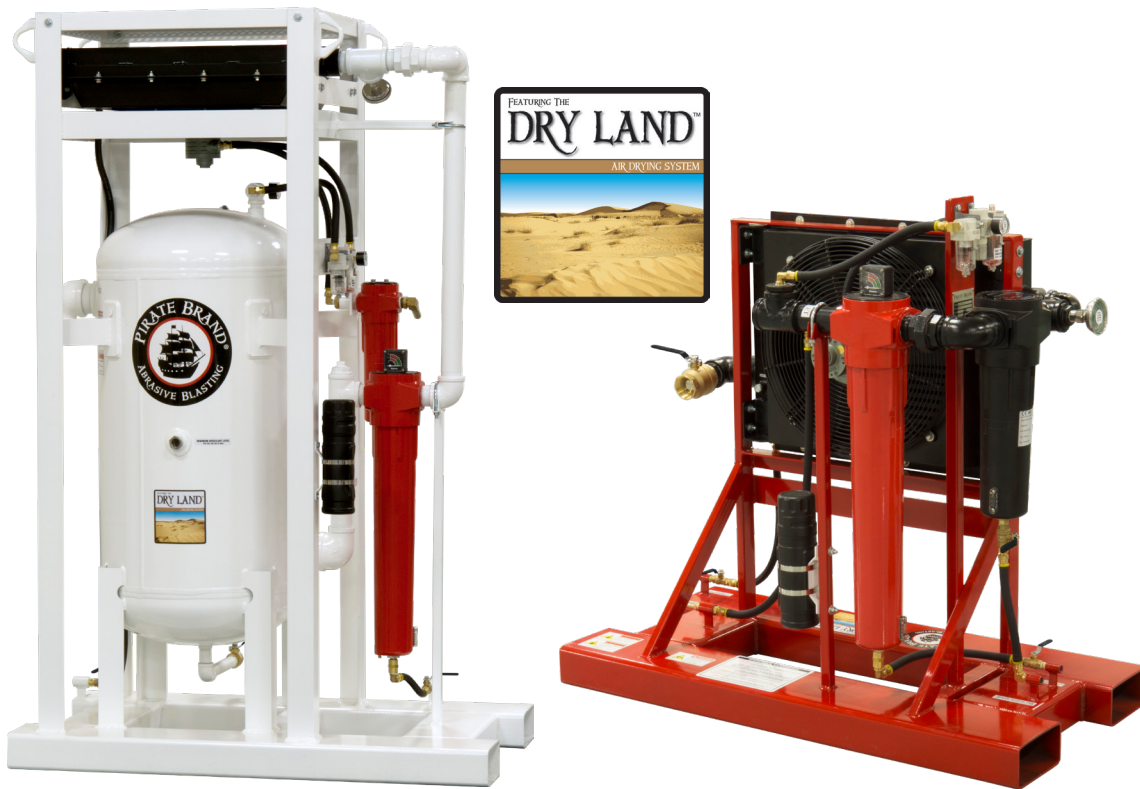




AIR DRYERS / AFTER COOLERS

User's Manual



⚠ WARNING

Abrasive blasting can create dust that may contain toxic materials from abrasive material and the surface being blasted. NEVER use abrasives containing high amounts of crystalline silica including silica sand/beach sand for abrasive blasting. Airborne crystalline silica causes silicosis, a fatal respiratory disease. Abrasive blasting can create high levels of noise that may cause hearing damage. Always use proper safety equipment including respiratory protection, hearing protection, and comply with local, regional and national safety codes. Ensure all operators of the equipment are properly trained and everyone in the area including bystanders are protected from the hazards of abrasive blasting. The manufacturer, wholesaler and distributor assume no responsibility arising from the failure to comply with this warning.



⚠ WARNING

Read Manual

Failure to read, understand & follow all safety and operation procedures in this manual can cause serious injury or death. Manuals that are lost, incomplete, or damaged must be replaced immediately.

Manual P/N: PB-MAD001

Using This Manual

Thank you for your purchase of a Pirate Brand® Dry Land™ Air Dryer or After Cooler. It is important to note that all Pirate Brand® equipment is designed to be safe when used properly, however, misuse of any compressed air equipment is dangerous and can result in the severe injury or death of the operator and others in the vicinity of the Air Dryer or After Cooler. In order to protect yourself and those around you, read and follow the instructions in all sections of this manual & warning labels located on the equipment.

Safety Symbols

The safety symbols shown below exist for the safety and protection of the operator and those in the vicinity of the Air Dryer or After Cooler. The descriptions below explain how they are used in relation to the equipment.



OR



CAUTION: This symbol calls attention to a potentially hazardous situation that could result in minor injury, moderate injury, or equipment damage if the instructions associated with the symbol are not followed. The caution triangle will be displayed throughout the manual to denote instructions to which special attention should be paid.



OR



WARNING: This symbol calls attention to a potentially hazardous situation that could result in serious injury or death if the instructions associated with the symbol are not followed. The warning triangle will be displayed throughout the manual to denote instructions to which special attention should be paid.



OR



DANGER: This symbol calls attention to a potentially hazardous situation that will result in serious injury or death if the instructions associated with the symbol are not followed. The danger triangle will be displayed throughout the manual to denote instructions to which special attention should be paid.

Important Warnings



Pressurized vessels contain large amounts of stored energy and can cause severe injury or death if safety procedures are not followed. **Never** perform maintenance or attempt to open a pressure vessel for any reason while it is pressurized. **Always** depressurize and properly disconnect equipment from its air source before performing any maintenance. **Do not** modify, grind or weld on the pressure vessel for any reason. Doing so will void the ASME certification. **Do not** use equipment with damaged pressure vessels.



All persons who will be operating or will be in the vicinity of the Air Dryer/After Cooler during its operation must receive proper training on how to safely operate the equipment and be informed of the potential hazards involved. In addition to proper training, all persons who will be operating or will be in the vicinity of the Air Dryer / After Cooler during its operation must read, understand and follow all procedures described in the user's manual. For replacement manuals, please contact your distributor or visit www.pirate-brand.com.



All persons who will be operating or will be in the vicinity of the Air Dryer/After Cooler during its operation must protect themselves with the proper safety equipment and use of common sense. Safety equipment including but not limited to hearing and eye protection are required. Air Dryers/After Coolers are heavy and can lead to severe injury or death if they fall over. Always follow all safety requirements of OSHA and NIOSH.



Never use malfunctioning or damaged equipment. Before each use, inspect the equipment for proper function. Inspect the pressure vessel inside and out regularly for corrosion, dents, gouges or leaks. If damaged, remove from service immediately.



Do not try to tighten a leaking pressure vessel fill cover. Immediately shut off the air supply and depressurize the system.



Do not use power tools to tighten the nut on the fill cover. Too much force can distort the fill cover and/or the gasket. If damaged by over-tightening, the fill cover can blow out and cause serious injury or death. (Note: Tighten the nut until it is snug, when the vessel is pressurized, the pressure on the fill cover will complete the seal)



Do not supply compressed air to the Air Dryer/After Cooler that exceeds 200 PSI (13.7 BAR).



Use only genuine Pirate Brand® replacement parts when performing maintenance on the Air Dryer/After Cooler. **Do not** modify the equipment for any reason. Use of modified or non-Pirate Brand® parts can cause an unsafe situation and will void your warranty.



Respiratory protection is mandatory for all persons operating or located in the vicinity where abrasive blasting is taking place. Follow all OSHA and NIOSH requirements for breathing equipment and supplied air standards.

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Contact Info:
For manual updates visit the
Pirate Brand® website at:
WWW.PIRATE-BRAND.COM

Warranty Information

PIRATE BRAND® DRY LAND™ AIR DRYER & AFTER COOLER 5 YEAR / 10 YEAR LIMITED WARRANTY

5 YEAR LIMITED AIR DRYER / AFTER COOLER WARRANTY. Manufacturer warrants the complete Air Dryer/After Cooler it manufactures to be free of defects in material and workmanship for a period of five (5) years from the date of invoice.

10 YEAR LIMITED DESICCANT TANK WARRANTY. Manufacturer warrants the desiccant tank (Air Dryers Only) it manufactures to be free of defects in material and workmanship for a period of ten (10) years from the date of invoice.

LIMITATION OF WARRANTIES AND REMEDIES. THIS WARRANTY IS EXTENDED ONLY TO THE BUYER WHO PURCHASES THE DRY LAND AIR DRYER OR AFTER COOLER DIRECTLY FROM THE MANUFACTURER OR ITS AUTHORIZED DISTRIBUTORS AND IS NON-TRANSFERABLE. THE PURCHASER'S EXCLUSIVE REMEDY ARISING FROM ITS PURCHASE OR USE OF THE PRODUCT SHALL BE STRICTLY LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCTS, AT THE DISCRETION OF THE MANUFACTURER, AND ALL WARRANTY CLAIMS OR REQUESTS MUST BE MADE IN WRITING TO THE MANUFACTURER WITHIN TEN (10) DAYS AFTER FAILURE OF THE PRODUCT. ALL OBLIGATIONS OR LIABILITIES OF MANUFACTURER OR SELLER FOR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE PRODUCT AND USE OR PERFORMANCE OF THE PRODUCTS, EXCEPT AS EXPRESSLY PROVIDED HEREIN, ARE FULLY DISCLAIMED AND EXCLUDED, AND NO SELLER OR DISTRIBUTOR HAS ANY AUTHORITY TO MAKE ANY WARRANTY OR ASSUME ANY LIABILITY ON BEHALF OF THE MANUFACTURER IN CONNECTION WITH THE SALE OF THE PRODUCT EXCEPT AS STATED HEREIN.

AS A CONDITION OF THE PURCHASE, PURCHASER AGREES THAT MANUFACTURER AND SELLER SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE FOR ANY COST OF FREIGHT, SHIPPING OR TRANSPORTATION, LABOR, SPECIAL CHARGES, NORMAL MAINTENANCE SERVICES, LOST OPERATING TIME, LOSS OF USE, LOST PROFITS, LOSS OF GOODWILL, CONSEQUENTIAL DAMAGES, PUNITIVE OR EXEMPLARY DAMAGES, OR OTHER DAMAGES OR LOSS. OTHER THAN AS DESCRIBED HEREIN, MANUFACTURER AND SELLER MAKE NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO THE PRODUCTS, AND SPECIFICALLY DISCLAIM ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHER WARRANTY. PURCHASER ASSUMES ALL RISK AND LIABILITY RESULTING FROM THE USE OF THE PRODUCTS. PURCHASER FURTHER AGREES AS A CONDITION OF THE SALE AND THE USE OF THE PRODUCT, THAT ANY DAMAGES OR RISK OF LOSS OTHER THAN AS DESCRIBED HEREIN ABOVE, SHALL BE THE EXCLUSIVE RESPONSIBILITY OF THE PURCHASER AND NOT THE MANUFACTURER OR SELLER. MANUFACTURER AND SELLER SHALL NOT BE LIABLE FOR ANY DAMAGES INCURRED BY ANY PERSON AS A RESULT OF MISUSE, IMPROPER INSTALLATION, IMPROPER APPLICATION, IMPROPER OPERATION OF THE PRODUCTS, NORMAL WEAR AND TEAR, ALTERATIONS OR MODIFICATIONS MADE TO THE PRODUCTS, OR ACCIDENT. THE USE OF REPLACEMENT PARTS NOT PROVIDED OR AUTHORIZED BY THE MANUFACTURER VOIDS ALL WARRANTIES.

A COMPLETELY FILLED OUT WARRANTY CARD MUST BE RETURNED TO THE MANUFACTURER WITHIN THIRTY (30) DAYS OF PURCHASE OF THE PRODUCT OR ALL WARRANTIES ARE VOID. PRODUCT MUST BE MAINTAINED IN ACCORDANCE TO THE MAINTENANCE SCHEDULE PROVIDED IN THE PRODUCT MANUAL, FAILURE TO MAINTAIN THE PRODUCT IN ACCORDANCE WITH THE MAINTENANCE SCHEDULE VOIDS ALL WARRANTIES. THIS WARRANTY DOES NOT COVER FACTORY INSTALLED OR CUSTOMER INSTALLED ACCESSORIES.

WARRANTY CLAIMS. Warranty claims must be submitted to the manufacturer within ten (10) days after failure of the product. Contact information for warranty claims:

Forecast Sales Inc., 2719 Tobey Dr., Indianapolis, IN 46219
317-829-0147

Effective Oct 27, 2017

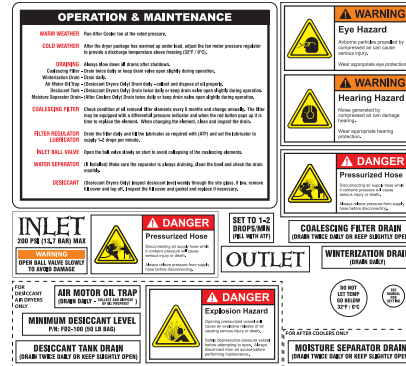
Equipment Safety Labels



Labels must be replaced when they are no longer readable!
Replacement Label Pack P/N: BSP-ADAC

Instructions For Installing Replacement Label Pack

1. Completely remove old label and clean area thoroughly before applying new label.
2. Apply replacement labels in same locations as original labels.
3. Some included labels are only used for Air Dryers and some are only used for After Coolers. Apply labels to proper equipment type as specified in the replacement label pack.



How It Works

Air Dryers

Pirate Brand® Dry Land™ Single Tower, Deliquescent, Air Dryers are a skid mounted system which includes an after cooler, a coalescing filter, and a single tower dryer filled with desiccant tablets. Warm compressed air enters the aftercooler where it is cooled to a 10°F to 15°F (5.6°C to 8.3°C) approach to ambient air temperature, water is condensed out during this cooling process. The saturated air and liquid water pass through a coalescing filter where any oil contaminants from the compressor are removed and then proceeds to the inlet of the dryer tank. The water and any solid particles present are separated by gravity and fall to the bottom of the dryer tank. The air moves up through the desiccant tablets which absorb the moisture from the air dropping the relative humidity before it flows through the dryer outlet. The tablets dissolve gradually as they absorb the moisture. The dissolved desiccant and water falls to the bottom of the vessel. The dryer must be drained periodically to remove the accumulated solution. A manual ball valve is installed for this purpose.

After Coolers

Pirate Brand® Dry Land™ After Coolers are a skid mounted system which includes an after cooler, a moisture filter, and a coalescing filter. Warm air enters the aftercooler where it is cooled to a 10°F to 15°F (5.6°C to 8.3°C) approach to ambient air temperature, water is condensed out during this cooling process. The saturated air and liquid water pass through a moisture separator where airborne water droplets are separated out. Next the air passes through a coalescing filter where any oil contaminants from the compressor are removed before it flows through the after cooler outlet.

Operating Procedures

Start Up Procedures

Connect your air compressor (fittings not included) to the Pirate Brand® Air Dryer or After Cooler inlet (inlet/outlet/compressor ball valves should be closed if equipped), then start the compressor. SLOWLY open the compressor ball valve and Dryer/Cooler inlet ball valve (if equipped) to pressurize the Dryer/Cooler.



CAUTION: DO NOT subject the Air Dryer or After cooler to sudden air surges as it can collapse the coalescing filter element. ALWAYS open valves slowly to permit gradual air pressure changes to the Dryer/Cooler.



CAUTION: Check that the air motor regulator pressure is set as described in the "Air Motor Regulator Settings" section of this manual to maintain the fan speed rpm ensuring proper performance. DO NOT exceed the maximum recommended pressure. DO NOT let compressed air temperature fall below 32°F / 0°C.



CAUTION: DO NOT start the Dryer/Cooler if the air motor lubricator does not have an ample supply of lubricating oil. Running the air motor without lubrication will cause damage to the air motor and void your warranty.

Daily Draining

Draining Air Dryers and After Coolers properly is a critical task to maintain performance and prevent damage to the equipment. The desiccant and water solution in the bottom of air dryers must not be allowed to accumulate and must be drained. Recommended draining intervals are listed below.

Draining Schedule	
Type Of Drain	Draining Interval
COALESCING FILTER DRAIN (Air Dryers & After Coolers)	Drain Twice Daily or Keep Slightly Open
WINTERIZATION DRAIN (Air Dryers & After Coolers)	Drain Daily
DESICCANT TANK DRAIN (Air Dryers Only)	Drain Twice Daily or Keep Slightly Open
AIR MOTOR OIL TRAP (Air Dryers Only)	Drain Daily - Collect and Dispose of Oil Properly
MOISTURE SEPARATOR DRAIN (After Coolers Only)	Drain Twice Daily or Keep Slightly Open

Refilling Desiccant (Air Dryers Only)

During the drying process, the desiccant tablets dissolve slowly. The desiccant consumption rate is dependent on several factors such as inlet temperature, flow and pressure. To check the level of the desiccant, look into the sight glass. If you can't see the desiccant tablets then the tank must be refilled to ensure peak dryer performance. See the "Maintenance Procedures" Section of this manual for instructions on refilling.

Shut Down Procedures

1. Close the ball valve on the outlet side of the Air Dryer or After Cooler (if equipped) or at the equipment attached to the Dryer/Cooler and open the inlet ball valve (if equipped).
2. Shut down the compressed air supply to the Dryer/Cooler.
3. Open the winterization, coalescing filter, desiccant tank (Air Dryers only) and moisture separator (After Coolers only) drains to release compressed air in the Dryer/Cooler and compressed air supply hose.
4. After the compressed air has been completely released, verify the compressed air supply hose is depressurized and disconnect it, then close the Dryer/Cooler inlet ball valve (if equipped).
5. Leave all drains open while storing.



DANGER: Disconnecting air supply hoses while they contain pressure will cause serious injury or death. ALWAYS relieve pressure from air supply hoses and check for absence of pressure before disconnecting.

Maintenance Procedures



DANGER: Never perform any maintenance or attempt to open Air Dryers or After Coolers in any way while they are pressurized. The violent release of compressed air and propelled objects will cause serious injury or death.



WARNING: Maintenance procedures are to be performed by experienced qualified personnel only. Failure to perform maintenance procedures correctly at the intervals specified below can lead to performance problems and equipment failure, and will void the equipment warranty.

Maintenance Schedule

Procedure To Be Performed	Maintenance Interval
CHECK OIL LEVEL IN LUBRICATOR (Air Dryers & After Coolers) Verify that there is a sufficient amount of oil in the lubricator and add oil as needed. ATF only (Automatic Transmission Fluid)	Every 8 Hours Of Use
CLEAN AFTER COOLER CORE (Air Dryers & After Coolers) The core should be cleaned regularly. Accumulation of dirt or oils will greatly reduce the efficiency of the after cooler. Dirt can be removed by blowing the core off with compressed air. If the core becomes coated with oil particles, it can be steam cleaned.	Every 8 Hours Of Use
CHECK DESICCANT LEVEL (Air Dryers Only) Look into the sight glass, if the desiccant is not visible then add desiccant.	Every 8 Hours Of Use
ADDING DESICCANT (Air Dryers Only) Shut down the air compressor and open the drain valve to allow the dryer to depressurize completely. Loosen the nut on the fill cover. Push on the fill cover. Once the seal is broken, remove the fill cover from the dryer. Add the amount of desiccant needed to restore to the maximum level  CAUTION: DO NOT overfill air dryers with desiccant. Desiccant level must never rise above the outlet pipe. Space must be left to allow for the fill cover to be installed	As Needed
FILL COVER AND GASKET INSPECTION (Air Dryers Only) Inspect the fill cover and sealing surface. If damaged, replace the cover. Inspect the fill cover gasket. If damaged, replace the fill cover gasket. Check the sealing surface of the opening. If dirt or rust are present, then it must be cleaned before installing the fill cover. Install the fill cover and gasket. Tighten the nut on the fill cover until it is snug. Over tightening will cause damage to the gasket. The fill cover will seal when pressurized.	Inspect Every Time Fill Cover Is Removed
COALESCING FILTER (Air Dryers & After Coolers) Check the condition of the oil removal filter element every 6 months and change annually. The differential pressure indicator on the top of the filter indicates when the filter needs to be changed. When replacing the element, make sure to clean and inspect the drain port.	Every 6 Months

Specifications

Maximum CFM & m³/min for Air Dryers and After Coolers

Model	80 PSI (5.5 BAR)	100 PSI (6.9 BAR)	125 PSI (8.6 BAR)	150 PSI (10.3 BAR)	175 PSI (12.1 BAR)	200 PSI (13.7 BAR)	Maximum
DLAD/DLAC-250-360	210 CFM (5.9 m³/min)	250 CFM (7.1 m³/min)	305 CFM (8.6 m³/min)	360 CFM (10.2 m³/min)	415 CFM (11.8 m³/min)	470 CFM (13.3 m³/min)	200 PSI (13.7 BAR)
DLAD/DLAC-450-575	330 CFM (9.3 m³/min)	450 CFM (12.7 m³/min)	500 CFM (14.2 m³/min)	575 CFM (16.3 m³/min)	660 CFM (18.7 m³/min)	750 CFM (21.2 m³/min)	
DLAD/DLAC-750-1130	630 CFM (17.8 m³/min)	750 CFM (21.2 m³/min)	960 CFM (27.2 m³/min)	1130 CFM (32 m³/min)	1300 CFM (36.8 m³/min)	1475 CFM (41.8 m³/min)	
DLAD/DLAC-900-1160	720 CFM (20.4 m³/min)	900 CFM (25.5 m³/min)	1000 CFM (28.3 m³/min)	1160 CFM (32.8 m³/min)	1350 CFM (38.2 m³/min)	1600 CFM (45.3 m³/min)	
DLAD/DLAC-1600-2300	1320 CFM (37.4 m³/min)	1600 CFM (45.3 m³/min)	1950 CFM (55.2 m³/min)	2300 CFM (65.1 m³/min)	2730 CFM (77.3 m³/min)	3245 CFM (91.9 m³/min)	

Weights / Dimensions / Capacities

Air Dryers

Model	Inlet	Outlet	Weight Empty	Width	Depth	Height	Desiccant Cap.
DLAD-250-360	1½" NPT	2" NPT	656 lb (298 kg)	48" (122 cm)	23" (59 cm)	73" (186 cm)	200 lb (90 kg)
DLAD-450-575	2" NPT	2" NPT	801 lb (364 kg)	49" (125 cm)	26½" (68 cm)	76" (194 cm)	300 lb (135 kg)
DLAD-750-1130	2" NPT	2" NPT	1042 lb (473 kg)	54" (138 cm)	33" (84 cm)	84" (213 cm)	400 lb (180 kg)
DLAD-900-1160	3" NPT	3" NPT	1904 lb (864 kg)	70" (178 cm)	44" (112 cm)	93" (237 cm)	1000 lb (450 kg)
DLAD-1600-2300	3" NPT	3" NPT	2090 lb (949 kg)	70" (178 cm)	44" (112 cm)	95" (242 cm)	1000 lb (450 kg)

After Coolers

Model	Inlet	Outlet	Weight Empty	Width	Depth	Height	Desiccant Cap.
DLAC-250-360	1½" NPT	1½" NPT	263 lb (120 kg)	35" (89 cm)	22" (56 cm)	33¾" (86 cm)	N/A
DLAC-450-575	2" NPT	1½" NPT	297 lb (135 kg)	38" (97 cm)	22" (56 cm)	46" (117 cm)	
DLAC-750-1130	2" NPT	2" NPT	417 lb (190 kg)	52" (132 cm)	26" (66 cm)	55½" (141 cm)	
DLAC-900-1160	3" NPT	3" NPT	659 lb (299 kg)	64" (163 cm)	32" (82 cm)	54½" (139 cm)	
DLAC-1600-2300	3" NPT	3" NPT	844 lb (383 kg)	64" (163 cm)	32" (82 cm)	62½" (159 cm)	

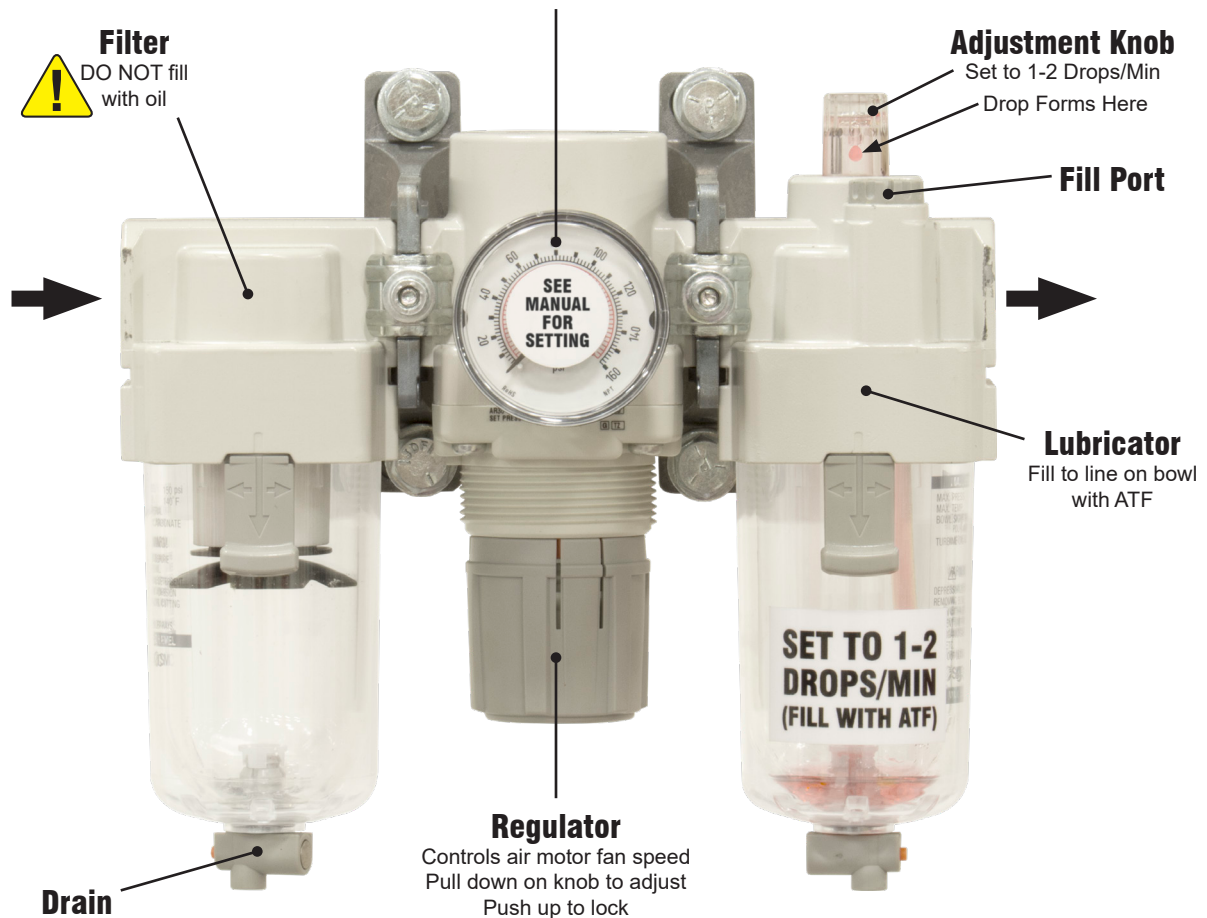
Air Motor Regulator Settings

Air Motor Settings & Specifications

Model	Recommended Regulator Setting	Max. Pressure	CFM Req.	Lubricator Setting	Lubricating Oil
DLAD/DLAC-250-360	22 PSI* to get 1725 RPM	40 PSI**	25 at max	1-2 Drops / Min	Automatic Transmission Fluid (ATF)
DLAD/DLAC-450-575	22 PSI* to get 1725 RPM	40 PSI**	25 at max		
DLAD/DLAC-750-1130	22 PSI* to get 1725 RPM	40 PSI**	25 at max		
DLAD/DLAC-900-1160	22 PSI* to get 1725 RPM	50 PSI**	70 at max		
DLAD/DLAC-1600-2300	22 PSI* to get 1725 RPM (AM8)	50 PSI**	100 at max		
DLAD/DLAC-1600-2300	22 PSI* to get 1725 RPM (AM16)	60 PSI**	150 at max		

Regulator Gauge

Set regulator to 22 PSI at 70°F / 21°C ambient temp.
 Reduce pressure in cold weather to keep air temp above 32°F / 0°C
 Increase pressure in warmer weather - DO NOT exceed Max. Pressure**



* Compressed air temperature must never go below 32°F / 0°C. Reduce regulator setting/fan speed in cold weather to prevent freezing.

** Recommended regulator setting is at 70°F / 21°C ambient temp. In warmer weather, the air motor can be operated up to the Max. Pressure.

Parts List

Description	Part Number	Air Dryers: DLAD-					After Coolers: DLAC-				
		250 360	450 575	750 1130	900 1160	1600 2300	250 360	450 575	750 1130	900 1160	1600 2300
Fill Cover Gasket, 4" x 6"	524-292	1	1	1	1	1					
Fill Cover Assembly, 4" x 6"	888-7000-00011PB	1	1	1	1	1					
Sight Glass, 1"	DL-SP-A-28905	1	1	1	1	1					
Ball Valve, 1" (Tank Drain)	VB-100	1	1	1	1	1					
Thermometer, °F & °C	DL-20114	1	1	1	1	1	1	1	1	1	1
Pressure Gauge, 1/8" NPT (For Air Motor Regulator)	408013	1	1	1	1	1	1	1	1	1	1
Coalescer Filter Element, L145	L145AA	1					1				
Coalescer Filter Element, L220	L220AA		1					1			
Coalescer Filter Element, L330	L330AA			1					1		
Coalescer Filter Element, L430	L430AA				1					1	
Coalescer Filter Element, LFB160	LFB-160AA					1					1
Coalescer Diff. Press. Gauge	DL-DSC-DPG	1	1	1	1	1	1	1	1	1	1
Air Motor Oil Trap Element	L080AA	1	1	1	1	1					
Pressure Relief Valve, 1", 200PSI	DL-51810-200	1	1	1	1	1					
Air Motor, AMV4	DL-DAC-AMV4	1	1	1			1	1	1		
Air Motor, AM6	DL-DAC-AM6				1					1	
Air Motor, AM8	DL-DAC-AM8					1					1
Air Motor, AM16	DL-DAC-AM16					1					1
Aftercooler, 250 (w/o Air Motor)	DL-DAC-250	1					1				
Aftercooler, 450 (w/o Air Motor)	DL-DAC-450		1					1			
Aftercooler, 750 (w/o Air Motor)	DL-DAC-750			1					1		
Aftercooler, 1000 (w/o Air Motor)	DL-DAC-1000				1					1	
Aftercooler, 1600 (w/o Air Motor)	DL-DAC-1600					1					1
Desiccant, 50 lb (22.6 kg) Bag	FD2-100	4	6	8	20	20					
Pressure Gauge, 1/4" NPT (For Air Dryer Pressure Vessel)	1242-250	1	1	1	1	1					

Available Accessories

Available Accessories		
	Description	Part Number
	1-1/2" Air Hose Assembly (Red), 4-Lug Couplings, 25' (7.6 m)	10-112RED-025-1
	1-1/2" Air Hose Assembly (Red), 4-Lug Couplings, 50' (15.2 m)	10-112RED-050-1
	2" Air Hose Assembly (Yellow), 4-Lug Couplings, 50' (15.2 m)	10-200YEL-050-1
	3" Air Hose Assembly (Yellow), Ground Joint Couplings, 50' (15.2 m)	10-300YEL-050-2
	Air Hose Coupling, 4-Lug, 1-1/2" Female NPT	UF-150
	Air Hose Coupling, 4-Lug, 2" Female NPT	UF-200
	Air Hose Coupling, Ground Joint, 3" Female NPT Spud	GJFS-300
	Closed Nipple, Galvanized, 1-1/2" NPT	888-3029-10899PB
	Closed Nipple, Galvanized, 2" NPT	888-3029-10999PB
	Closed Nipple, Galvanized, 3" NPT	888-3029-11199PB
	Ball Valve, 1-1/2"	VB150
	Ball Valve, 2"	VB200
	Ball Valve, 3"	VB300
	Safety Cable, 1-1/2" - 3", Hose To Equipment	27WT-2
	Air Distribution Manifold, 2" 4-Lug Inlet/Outlet, (8) 2-Lug Outlets, Includes Drain And Gauge, 150 PSI (10.3 BAR) Max	888-1124-11808PB
	Air Distribution Manifold, 3" Ground Joint Inlet/Outlet, (8) 2-Lug Outlets, Includes Drain And Gauge, 150 PSI (10.3 BAR) Max	888-1124-11809PB

Blasting Charts

Compressed Air, Power, & Abrasive Requirements

			NOZZLE PRESSURE							
NOZZLE # ORIFICE SIZE	NOZZLE AIR, POWER & ABRASIVE REQUIREMENTS		50 PSI	60 PSI	70 PSI	80 PSI	90 PSI	100 PSI	125 PSI	140 PSI
			(3.45 BAR)	(4.14 BAR)	(4.83 BAR)	(5.52 BAR)	(6.21 BAR)	(6.89 BAR)	(8.62 BAR)	(9.65 BAR)
#2 1/8 inch (3.2 mm)	AIR	(cu ft/min)	12	13	15	18	19	21	26	
		(cu m/min)	0.34	.037	0.42	0.51	0.54	0.59	0.74	
	HORSEPOWER	(hp)	1.75	2	2.5	3	3.5	4	6	
		(kW)	1.30	1.49	1.86	2.24	2.61	2.98	4.47	
	ABRASIVE	(lb/hr)	70	80	90	100	110	120	135	
		(kg/hr)	32	36	41	45	50	54	61	
#3 3/16 inch (4.8 mm)	AIR	(cu ft/min)	25	30	35	40	43	45	60	
		(cu m/min)	0.71	0.85	0.99	1.13	1.22	1.27	1.70	
	HORSEPOWER	(hp)	5	8	9	9.5	10	10.5	16	
		(kW)	3.75	5.97	6.71	7.08	7.46	7.86	11.93	
	ABRASIVE	(lb/hr)	150	170	200	215	240	260	320	
		(kg/hr)	68	77	91	98	109	118	145	
#4 1/4 inch (6.35 mm)	AIR	(cu ft/min)	50	55	60	70	75	80	95	
		(cu m/min)	1.42	1.56	1.70	1.98	2.12	2.27	2.69	
	HORSEPOWER	(hp)	10	12	13	16	17	18	25	
		(kW)	7.46	8.95	9.69	11.93	12.68	13.42	18.64	
	ABRASIVE	(lb/hr)	270	300	350	400	450	500	675	
		(kg/hr)	122	136	159	181	204	227	306	
#5 5/16 inch (8 mm)	AIR	(cu ft/min)	80	90	100	115	125	140	190	230
		(cu m/min)	2.27	2.55	2.83	3.26	3.54	3.96	5.38	6.51
	HORSEPOWER	(hp)	17	20	25	27	28	30	36	60
		(kW)	12.68	14.91	18.64	20.13	20.88	22.37	26.85	44.85
	ABRASIVE	(lb/hr)	470	530	600	675	750	825	1000	1125
		(kg/hr)	213	240	272	306	340	374	454	510
#6 3/8 inch (9.5 mm)	AIR	(cu ft/min)	110	125	145	160	175	200	275	315
		(cu m/min)	3.12	3.54	4.11	4.53	4.96	5.66	7.79	8.91
	HORSEPOWER	(hp)	25	29	32	35	40	45	57	65
		(kW)	18.64	21.63	23.86	26.10	29.83	33.56	42.50	48.59
	ABRASIVE	(lb/hr)	675	775	875	975	1060	1100	1350	1840
		(kg/hr)	306	352	397	442	481	499	612	835
#7 7/16 inch (9.5 mm)	AIR	(cu ft/min)	150	170	200	215	240	255	315	405
		(cu m/min)	4.25	4.81	5.66	6.09	6.80	7.22	8.92	11.46
	HORSEPOWER	(hp)	35	40	45	50	55	60	70	90
		(kW)	26.10	29.83	33.56	37.28	41.01	44.74	52.20	67.28
	ABRASIVE	(lb/hr)	900	1000	1200	1300	1400	1510	1800	2540
		(kg/hr)	408	454	544	590	635	703	816	1152
#8 1/2 inch (12.7 mm)	AIR	(cu ft/min)	200	225	250	275	300	340	430	540
		(cu m/min)	5.66	6.37	7.08	7.79	8.50	9.63	12.18	15.28
	HORSEPOWER	(hp)	45	50	55	63	70	75	95	120
		(kW)	33.56	37.28	41.01	46.98	52.20	55.93	70.84	89.70
	ABRASIVE	(lb/hr)	1200	1350	1500	1700	1850	2025	2525	3240
		(kg/hr)	544	612	680	771	839	919	1145	1470
#10 5/8 inch (16 mm)	AIR	(cu ft/min)	300	350	400	450	500	550	700	880
		(cu m/min)	8.50	9.91	11.33	12.74	14.16	15.58	19.82	24.90
	HORSEPOWER	(hp)	70	80	90	100	110	120	150	190
		(kW)	52.20	59.66	67.11	74.57	82.03	89.48	111.85	142.02
	ABRASIVE	(lb/hr)	1900	2200	2400	2700	3000	3300	4000	5200
		(kg/hr)	862	998	1089	1225	1361	1497	1814	2359
#12 3/4 inch (19 mm)	AIR	(cu ft/min)	430	500	575	650	700	800	1100	1255
		(cu m/min)	12.18	14.16	16.28	18.41	19.82	22.66	31.15	35.52
	HORSEPOWER	(hp)	100	115	130	145	160	175	215	245
		(kW)	74.57	85.76	96.94	108.13	119.31	130.50	160.33	183.13
	ABRASIVE	(lb/hr)	2700	3100	3500	3900	4300	4700	5700	7375
		(ka/hr)	1225	1406	1588	1769	1950	2132	2586	3345

This table is to be used as reference only. Actual results may vary depending on specific abrasive medium used. This table is based on abrasive with a bulk density of 100 pounds per cubic foot.