

## DAD-502 (13-0088) RETROFIT KIT

**IMPORTANT:** Read and follow all instructions and Safety Precautions before installing, operating or maintaining this equipment. Keep this manual for future reference.

### SPECIFICATIONS - Charcoal Filter

Air Inlet	1/2" NPT(F)
Air Outlet	1/2" NPT(F)
Air Flow Capacity	75 CFM @ 100 PSI
Maximum Inlet Pressure	150 PSIG (10.3 bar)
Maximum Operating Pressure	150 PSIG (10.3 bar)
Maximum Temperature	150° F (65.6° C)
Aerosol Filter	0.003 ppm/wt.
Particulate Filter	.3 micron

### DESCRIPTION

The DAD-502 is designed to attach to an existing DeVilbiss DAD-500 desiccant air dryer. The DAD-502 offers appropriate filtration and a connection for the attachment of a DeVilbiss breathable air hose and Air Vizor™ supplied air breathing system.



**WARNING**

**Risk of explosion or fire.**  
 Improper use can cause personal injury.

- This product is designed and intended for use in industrial compressed air systems only. Do not use for liquids or gasses other than air.
- Do not use where pressure or temperature can exceed rated operating conditions (see specifications).
- Regulated outlet pressure must never be set higher than the maximum operating pressure of the downstream air tool or equipment. An outlet pressure gauge should always be used.



**WARNING**

**Risk of illness or death.** Carbon monoxide can cause nausea, fainting or death. Stop using if carbon monoxide is present. This unit does not remove carbon monoxide. A carbon monoxide monitor should be incorporated into your air supply line to warn of the presence of carbon monoxide.



**WARNING**

**Risk of injury.** Do not place unit in service without metal bowl guard installed. Filter units are sold only with metal bowl guards. To minimize the danger of flying fragments in the event of plastic bowl failure, guard must not be removed. If the unit is in service without the metal bowl guard installed, manufacturer's warranties are void and the manufacturer assumes no responsibility for any resulting loss. If unit has been in service and does not have a metal bowl guard, order one and install before placing back in service.



**CAUTION**

Certain compressor oils, cleaning agents and solvents may attack the plastic and rubber components used in the construction of this product. This product should not be used in conjunction with or in the vicinity of these materials. Read and follow material labels carefully. Please consult DeVilbiss if in doubt.

### INSTALLATION

1. Be sure to read all "Cautions" and "Warnings" in this manual and on the unit before installation or using this equipment.
2. This unit is designed to fit a DeVilbiss DAD-500 desiccant air dryer. Installation on non-DeVilbiss desiccant dryers is not recommended, as we cannot assure the performance of those devices.
3. Shut off the air supply to the DAD-500 and bleed air from the system.
4. Remove the nut from the top of the desiccant tank. (This might be a good time to change the desiccant beads, Part No. DAD-1). Install the tee (1) into the top of the desiccant tank.

#### Note

Use PTFE tape on pipe plug threads and all threaded fittings to facilitate removal in the future. Do **not** use loctite or any material that may bond and make removal difficult.

5. Install nut from the top of the tank into the top of the tee. Align the outlet to face away from the tank inlet and parallel to it.
6. Install reducer (2) into outlet of the tee (1).
7. Remove the clamp ring, metal bowl guard, plastic bowl and filter element from the charcoal filter.
8. Thread the main unit onto the reducer (2) on the desiccant tank. Be sure the

main body is positioned in line with the DAD-500, with the regulator gauge facing straight forward. The filter should be in a vertical position.

9. Reinstall the filter element, plastic bowl, metal bowl guard and clamp ring.

### OPERATION

After the unit is installed and ready to use:

1. Attach breathable air hose to the Q.D. on the DAD-502.
2. Open main shut-off valve upstream of the DAD-500.
3. Attach DeVilbiss Air Vizor™ to the breathable air hose. Verify air flow into visor.
4. Adjust regulator to 60 PSIG (flowing).
5. After use, shut off ball valve(s) and bleed off residual air in hose.

### MAINTENANCE - CHARCOAL FILTER



**WARNING**

**Risk of injury.** Components under pressure. Relieve all pressure before performing maintenance.

#### Note

Change the charcoal element when it no longer removes odors, even though the filter indicator may still be green, or when the indicator is red.

1. Before performing maintenance on unit, close main shut-off valve located upstream of filter, bleed off residual air in unit.
2. To open filter, press button on clamp ring and rotate ring either clockwise or counterclockwise while pulling down on ring. The metal bowl guard and plastic bowl can then be removed from the filter head.
3. Frequency of element replacement will depend upon air quality, temperature, air usage and condition of the compressor and piping system, as well as maintenance of the filtration prior to the charcoal element. Change the filter element when it no longer effectively removes odors or when the indicator is red.
4. Remove the filter element by loosening counterclockwise.
5. Replace the o-ring, element seal, and element concurrently using Part No. HAF-36 element kit.
6. Inspect plastic bowl for signs of damage, such as cracks, crazing or deterioration. Replace if necessary.
7. Before placing unit back into service, make sure plastic bowl and metal bowl guard are properly installed and secured in place with the metal clamp ring.
8. Turn on air supply and check for proper operation.

**SAFETY PRECAUTIONS**

This manual contains important information that all users must know and understand before using the equipment. This information relates to **USER SAFETY** and **PREVENTING EQUIPMENT PROBLEMS**.

To help you recognize this information, we use the following terms to draw your attention to certain equipment labels and portions of this manual. Please pay special attention to any label or information that is highlighted by one of these terms:



**Important information to alert you to a situation that might cause serious injury if instructions are not followed.**



**Important information that tells how to prevent damage to equipment, or how to avoid a situation that might cause minor injury.**

**Note**

Information that you should pay special attention to.

**MAINTENANCE - REGULATOR**

See Service Bulletin SB-6-105 for details regarding operation and maintenance of regulator, HARG-510.

**DAD-10 MESH FILTER**

Replacing this filter is generally not required. The filter will not clog if the DAD-500 is properly maintained. In the unusual situation that the filter does become clogged, it is possible to clean or replace it.

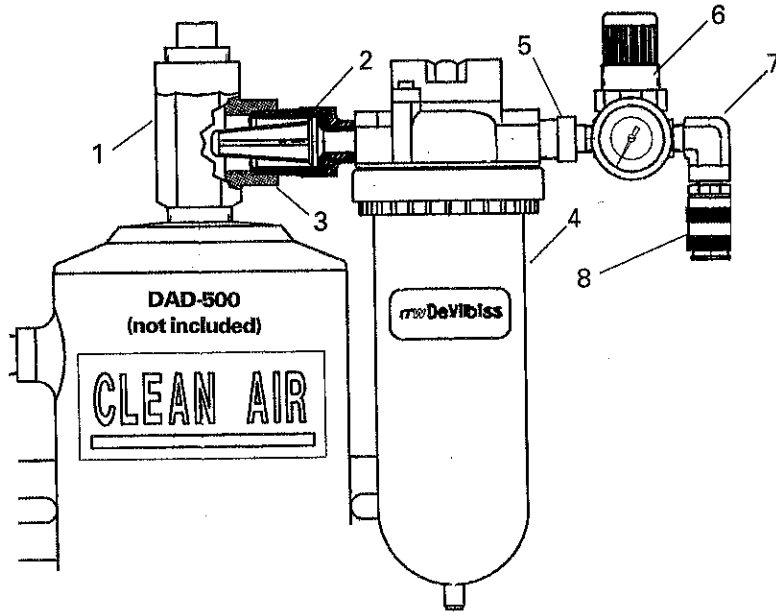
1. Shut off the air supply to the DAD-500 and bleed off residual air pressure from the unit.
2. Remove the clamp ring, metal bowl guard, plastics bowl and filter element from the charcoal filter.
3. Remove the filter body from the brass reducer, (2).
4. Remove the brass reducer from the tee fitting attached to the DAD tank.
5. If desired, it may be possible to unclog the filter with a blow-off gun or gently brushing the filter mesh. Make sure the filter is properly dried before reassembly of the unit.
6. To replace the filter, place the reducer in a vise and remove the filter by gripping the protruding tip with pliers by twisting and pulling the filter from the reducer. (Note - this will destroy the filter.)
7. Clean the interior of the reducer thoroughly before installing a new filter.
8. Place the replacement filter loosely on the top surface of the reducer, at a slight angle.
9. With a hammer, gently tap the filter into the reducer until it contacts the

- filter seat. This is much easier if you keep the filter at an angle rather than attempting to install it straight down.
10. Once the filter is seated on one edge, gently tap the opposite edge of the filter base with a hammer and small screwdriver until fully seated. Take care not to rupture the mesh during this process.
11. Reinstall the reducer and main body into the tee fitting.
12. Install the charcoal filter element, plastic bowl, metal bowl guard and clamp ring onto the charcoal filter.
13. Turn on air supply and check for proper operation.

**PARTS LIST**

Ref. No.	Replacement Part No.	Description	Individual Parts Required
1	----	Tee	1
2	----	Reducer	1
3	DAD-10	Mesh Filter	1
4	HAF-517	Charcoal Filter Assembly	1
5	----	Reducer	1
6	HARG-510	Regulator	1
7	----	Elbow	1
8	MPV-424	Quick Disconnect	1

**Figure 1 - DAD-502 Retrofit Kit**



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