

DCS Owner Manual

TransAlta



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2 INTRODUCTION

This document describes the general requirements, engineering specifications and maintenance needs of the Carbone Dust Collection System also referred to as DCS.

3 OPERATING CONDITION

The DCS is constructed to operate 24/7 at room temperature. Its purpose is to catch carbon dust from at the source on ten (10) BUNG brush holder.

The DCS control panel was designed to be enslaved by the generator. So when the generator is stopped (on purpose or for emergency / failure) the DCS will also stop.

The DCS will stop itself when full and has also a switch for Manual stop

4 CERTIFICATION

The vacuum efficiency and filtration area meet the HEPA/CE/UL/CSA standards. The Dust Suction Shoe, the Brush Holders, and Brushes are made following the ISO 9001-2008 manufacturing standards.

5 WARRANTY

Vacuum

The Vacuum is covered by 1 years limited warranty on parts and Labor by MERSEN Canada Dn Ltée. The Filter is covered by 2 years warranty by MERSEN Canada Dn Ltée.

Suction Nozzle & Piping

The suction nozzle and piping is covered by 1 year limited warranty on parts, for defects in material by Mersen Canada Dn Ltée.

Brush Holders and Brushes

The brushes holders and brushes are not covered by warranty.



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6 START-UP INSTRUCTIONS

NOTE

Failure to follow these simple start-up instructions could result in the failure of your new DuroVac Industrial Vacuum Cleaner

Start-Up

Open the access door on your new vacuum and inspect all filter bags to assure they are properly seated and did not come loose during shipment. Remove the dirt can and look at the tube sheet from below; all the filters should be installed neatly and evenly. If the filters are not seated tightly, dust will leak by them. Leave the access door open.

Place an amp probe on one line of the electrical connections, and "bump" the motor. You should get air blowing from the discharge silencer. If you note a vacuum at the discharge silencer, reverse the motor direction.

Start the unit, and allow it to run several minutes with the access door open. Listen for any "unusual" sounds. The system should run quietly, smoothly, and cool.

After a few minutes, feel the casing of the vacuum pump for "hot spots". It should feel uniformly slightly warm.

With the motor still running, connect a hose into the system, and close the access door. While watching the amp probe reading, slowly close off the end of the hose with a piece of wood. The amperage should climb to within 90 - 95% of the motor's name plate full amperage rating for the voltage at which you are operating.

If the motor amperage holds at or slightly below the recommended full load with all hoses fully closed, and air is bleeding in through the vacuum relief valves, then unit is ready for full operation.

NOTE: The vacuum relief valves are factory set to the proper vacuum relief setting before shipping. If they do not open, or if the amperage exceeds the nameplate motor amperage, shut the unit off and contact the factory IMMEDIATELY.



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7 MAINTENANCE INSTRUCTION

NOTE: A loose or unsecured bag will allow product to pass through the filter separator and will plug the in-line filter.

The filter bags should be shaken at least daily, preferably after each use. To shake filter bags, simply open the bag house door and shake the filter assembly arm swiftly back and forth. This rapid movement will dislodge particles on the inside of the filter bag surfaces and drop them into the dust can.

NOTE: The unit must be OFF in order to shake the filters.

NOTE: If the filters are to be replaced, please replace them ALL at once, or they will be a constant source of frustration.

Filter Bag Maintenance

The following is a recommended program of preventative maintenance:

- 1. Check that the filters are seated properly and that they do not appear to be leaking WEEKLY. There should be NO appreciable or visible dust inside the service access door.
- 2. Replace ALL the filters if wear points or holes are noticed
- 3. If the secondary filter cartridge becomes plugged rapidly, check for holes in the primary filter bags, or upgrade the primary filter material to a more efficient type
- 4. Replace the secondary filter cartridge when the manometer reads higher than 12" WG

Removing Filter Bags

To change the filter bags, remove each bag from the filter shaker assembly inside the tank at the top. Squeeze the spring cuff at the bottom of the bag compressing the snap ring into a "U" shape, and remove from the bag plate hole.

Installing New Filter Bags

Attach the grommet in the bag with bolts on the filter shaker assembly inside the tank at the top. Grasp the spring cuff at the bottom of the bag and compress into a "U" shape. Insert into the proper hole in the bag plate, and release the bag bottom, assuring the "groove" in the bag cuff is centered in the bag plate hole.

After installing all the filters, check the installation from below; all the filters should be neatly and evenly seated.

WARNING: Failure to assure proper seating of the bag in the bag plate will allow material leakage.



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8 REPLACEMENT PARTS

Replacement Parts	Needed Qty	Part No.	Price.(ea)	Price.(Total)
Filter Bags, Cuff Filter Bag PTFE, 5"Ø x 40.3/8" L Cuff Bottom, Sealed Top, 1/2" Grommet Polypro PTFE 200-9540	14	DCS0001	60.00\$	840.00\$
Inline Filter Element - Filter Element, Me529 7.875 OD - 4.75 ID - 14.5 H Paper 200-3529	1	DCS0002	177.50\$	177.50\$
Switch, DP, 1950-1, NEMA 7, 120V 235-301	1	DCS0003	552.16\$	552.16\$
Gauge, DP 2020, 4 3/4" Diam, 0-20" Wg, Magnehelic 230-120	1	DCS0004	270.00\$	270.00\$
Vacuum Relief Valve Assembly, 2.0" NPT, 8" Hg. Max Brass A215-120	1	DCS0005	192.84\$	192.84\$
Gauge, Vacuum, 2" Diam x 1/4" Back 0-30" Hg 230-211	1	DCS0006	80.00\$	80.00\$
Filter Element, Me516 9.75 OD - 6.00 ID - 9.625 H Paper 200-3516	1	DCS0007	139.16\$	139.16\$
Filter Element HEPA, Me516He 9.750 OD - 6.000 ID -9.625 H HEPA 200-4516	1	DCS0008	465.92\$	465.92\$
Filter Element HEPA, Me529He 200-4529	1	DCS0009	425.79\$	425.79\$