



## **OPERATION AND MAINTENANCE MANUAL**

Vacuum assisted sanding kit system  
with wet mix immersion separator

### **CHD3002**

for the automotive / aerospace industries

### **EC-15 (IT-63L) HEPA**



File number: LR 060825

CSA Certified for ordinary areas/locations

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**READ ALL INSTRUCTIONS BEFORE OPERATING,  
CLEANING OR SERVICING  
IMPORTANT - SAVE THESE INSTRUCTIONS**

## ROUTINE MAINTENANCE

- The wet mix immersion separator must be filled at all times with either water or any other liquid (except oil) required to neutralize the product being recovered.
- This unit must be filled up to the liquid level indicator line shown on the recovery drum.

Max. dust recovery capacity	Volume of liquid required
11 lbs / 5 kg	6.5 gallons / 25 liters

- Do not exceed the above mentioned recommended maximum dust recovery capacity.

We recommend proceeding with the following maintenance after each use and after a maximum of 8 hours of consecutive use:

- Drain the liquid by opening up the manifold drain valve.
- Once drained the unit must be disconnected from its power source – either from the electrical outlet or from the air compressor.
- Discard all recovered material from inside of the wet mix immersion separator.
- Thoroughly clean all parts of the unit, including the suction hoses.
- Once unit is clean reinstall the parts inside the wet mix immersion separator and fill it of clean liquid.

## COALESCING HEPA FILTER

The life of the Coalescing HEPA filter depends greatly on the use of the vacuum cleaner. It is recommended that the HEPA filter be replaced once a year if the vacuum assisted sanding kit system is used intensively (daily). The filter can be replaced every two years if the vacuum assisted sanding kit system is used less frequently (two or three times per week)

PLEASE CONSULT THE INSTRUCTION MANUAL AT ALL TIMES

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## 1.0 INSPECTION

Carefully unpack and inspect your vacuum assisted sanding kit system for shipping damage. Each unit is tested and thoroughly inspected before being shipped; therefore, any damage is the responsibility of the delivering carrier, who should be notified.

## 2.0 APPLICATIONS

**WARNING:** A full Process Hazard Analysis has to be conducted by the user for the recovery of dusts. The recommendations in this manual cannot, in any case, supplant the conclusions of a risk assessment.

EC-15 (IT-63L) HEPA vacuum assisted sanding kit system is **designed for use in ordinary non-hazardous areas/locations** to neutralize the recovered dust into a liquid bath into the wet mix immersion separator.

<p><b><u>WARNING:</u></b> Do not use this vacuum assisted sanding kit system in hazardous areas/locations Refer to the National Electrical Code (NEC) NFPA 70 paragraph 500 and to the Canadian Electrical Code (CEC) for more details.</p>
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**WARNING:** It is the user's responsibility to determine the appropriate liquid (except oil) to be used to neutralize the recovered dust into the wet mix immersion separator.

**WARNING:** This vacuum assisted sanding kit system is designed for the recovery of dry materials only. Do not recover liquids.

**WARNING:** DO NOT RECOVER ANY HOT EMBERS OR IGNITED DUSTS.

### **3.0 SPECIAL CONDITION FOR SAFE USE IN REGARD TO THE DEGASSING VENT**

A Degassing vent is installed on the equipment as a safety feature to prevent gas from building up in the WET MIX IMMERSION SEPARATOR.

Any gas which may develop escapes through the Degassing vent. The vent is open when the vacuum cleaner stops and close automatically during suctioning.

**WARNING:** THIS VACUUM ASSISTED SANDING KIT SYSTEM IS NOT DESIGNED TO BE USED IN HAZARDOUS AREAS/LOCATIONS. A RISK ASSESSMENT HAS TO BE CONDUCTED BY THE USER REGARDING THE TYPE OF GAS THAT WILL ESCAPES THROUGH THE DEGASSING VENT AS POTENTIALLY EXPLOSIVE GAS ATMOSPHERES CAN BE FORMED.

**IMPORTANT:** The Degassing vent must be open when the vacuum is not in use.



#### 4.0 PRE-USAGE INSTRUCTIONS AND IMPORTANT SAFETY PRECAUTIONS

**WARNING:** The vacuum assisted sanding kit system must be grounded during use. (See Section “GROUNDING INSTRUCTIONS”)

**WARNING:** DO NOT OPERATE UNIT WITHOUT A PROPER GROUND SOURCE. This unit is designed to operate on a grounded electrical outlet. It is the responsibility of the user to ensure that the electrical outlet is grounded.

**WARNING:** It is the user’s responsibility to determine the appropriate liquid (except oil) to be used to neutralize the recovered dust into the wet mix immersion separator.

**WARNING:** Improper use of this vacuum assisted sanding kit system will result in the voiding of the warranty.

**WARNING:** Operation and service of this vacuum assisted sanding kit system must only be carried out by trained personnel.

**WARNING:** Use only original replacement parts from the manufacturer or from one of its authorized distributors. This equipment is designed to be used only with supplied or recommended hose and tools. Any alteration to this equipment by a third party nullifies its certification.

- a. Consult local electric code and authority having jurisdiction before using. Make sure that the electrical installation is compatible with the voltage stated on the nameplate.
- b. Examine the vacuum assisted sanding kit system's power cable for damage (cracking or ageing) before every use. Return to manufacturer for servicing if damaged. Use only the power cable supplied with the unit or one purchased from the manufacturer.
- c. Do not pull the vacuum assisted sanding kit system by the power cable.
- d. Turn off the vacuum assisted sanding kit system and unplugged the power cable before servicing or storing the unit.
- e. This vacuum assisted sanding kit system is designed for indoor use only.
- f. The wet mix immersion separator should be clean and dry before using the vacuum assisted sanding kit system.
- g. **WARNING: Do not pick-up anything that is burning or smoking, such as hot ashes, cigarettes, matches or live embers.**
- h. The appliance shall only be operated when all filters are in position and undamaged.
- i. Brass fittings are required to ensure spark free operation and to ensure ground continuity between vacuum assisted sanding kit system and the compressed air supply
- j. Connect to a properly grounded outlet only. See Grounding Instructions.
- k. Do not use extension cords

## 5.0 PRECAUTIONS FOR THE RECOVERY OF TOXIC / NUISANCE DUST

**DANGER:** If the vacuum assisted sanding kit system is used to recover toxic or nuisance dust, the following safety precautions must be taken:

- a. The vacuum assisted sanding kit system must be equipped with an absolute filter HEPA or ULPA type.
- b. Service and operation should only be carried out by trained personnel.
- c. Appropriate clothing and personal protective equipment should be worn when operating or servicing the vacuum assisted sanding kit system.
- d. Dispose of collected materials responsibly. Follow applicable government regulations for the disposal of hazardous materials.

**NOTE:** Any health hazard associated with the use of this vacuum assisted sanding kit system in conjunction with the recovery of toxic / nuisance dust has not been investigated by CSA.

## 6.0 GROUNDING INSTRUCTIONS

This vacuum assisted sanding kit system must be properly grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to prevent the build-up static electrical charge and to ensure that static electricity is discharged to ground. The build-up of static electricity could create a sparking hazard and an ignition hazard.

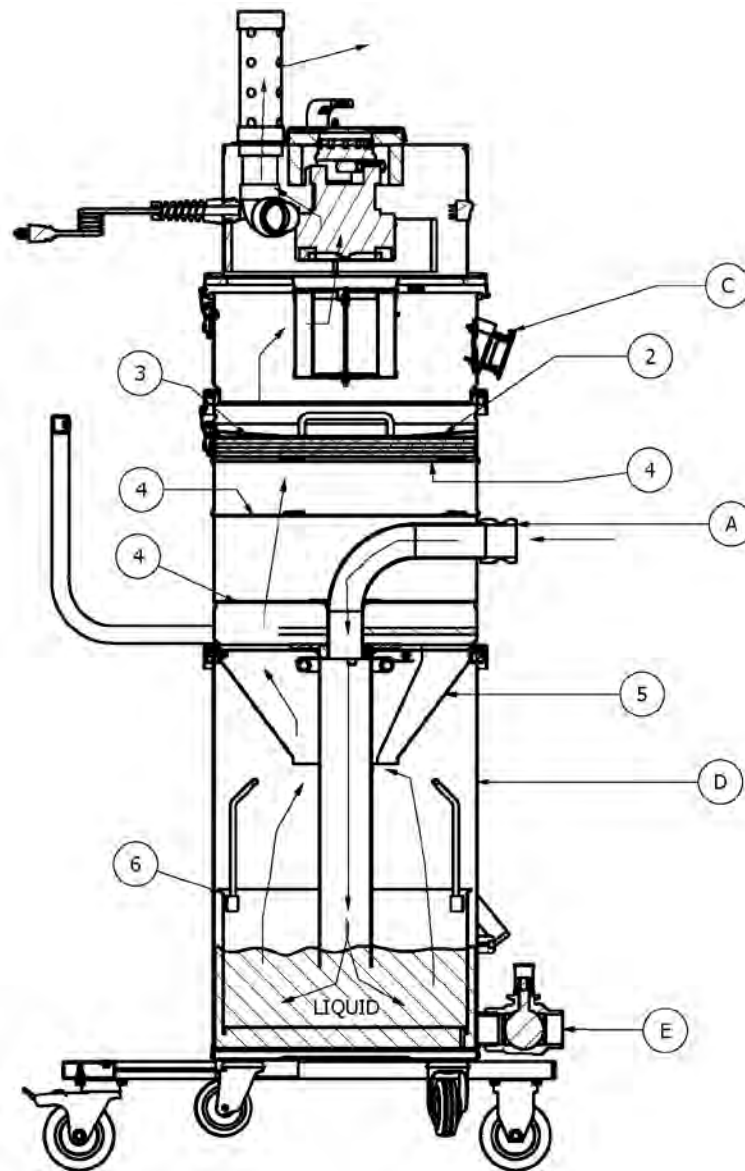
This vacuum assisted sanding kit system is equipped with a static dissipating electrical cable. It is the responsibility of the user to ensure that the electric outlet is grounded.

**WARNING:** This vacuum assisted sanding kit system is equipped with conductive wheels which allow for the vacuum cleaner to be grounded with the floor. Do not substitute the conductive wheels and use only replacement conductive wheels supplied by the manufacturer.

**WARNING:** To effectively dissipate static electricity this vacuum assisted sanding kit system must be grounded during use. Do not operate vacuum assisted sanding kit system if the electrical outlet is not properly grounded or if the grounding is questionable.



## 7.0 FILTRATION SYSTEM



- A. Suction inlet
- B. Exhaust Silencer
- C. Degassing vent
- D. Detachable liquid tank
- E. Drain valve

- 1. Coalescing HEPA filter: 99.97% on 0.3 micron
- 2. Stainless steel deflector plate
- 3. OPTIONAL: Mist arrestor pack
- 4. Stainless steel screens (3)
- 5. Separator cone
- 6. OPTIONAL: Sieve basket

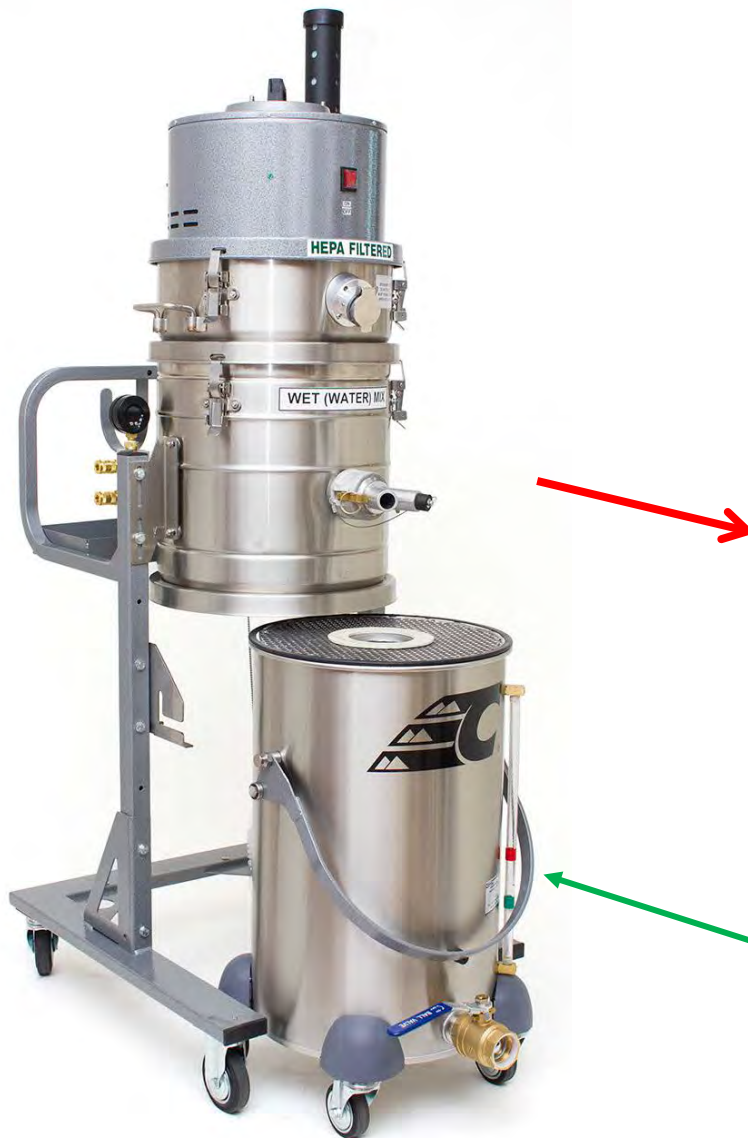
## 8.0 OPERATING INSTRUCTIONS

**WARNING:** Use caution when connecting and disconnecting compressed air lines. When static air pressure is suddenly released, it can cause the airline to whip.

- a. Make sure the ON/OFF button on the vacuum cleaner is in the "OFF" position (0)
- b. Detach the recovery tank by lifting the lever



**CAUTION:** HEAVY  
TANK WHEN LIQUID INSIDE



**LEVER**

c. Remove the baffle system



d. Remove the sieve basket



**WARNING:** Before use the inside of the wet mix immersion separator, the baffle system, hoses and accessories should be clean and dry

- e. Fill the wet mix immersion separator with liquid up to the appropriate level



**WARNING:** It is the user's responsibility to determine the appropriate liquid (except oil) to be used to neutralize the recovered dust into the wet mix immersion separator.

- f. If liquid foams upon agitation, use a de-foaming agent. Add the prescribed amount of de-foaming agent into the recovery tank in order to prevent foam from entering the powerhead.

**WARNING:** Do not add any foaming agent to liquid. Foam could damage parts located in the powerhead of the vacuum cleaner.

g. Put back the sieve basket



h. Put back the baffle system



- i. Put back the recovery tank in place by lowering the lever



**CAUTION: HEAVY  
TANK WHEN LIQUID INSIDE**

**LEVER**

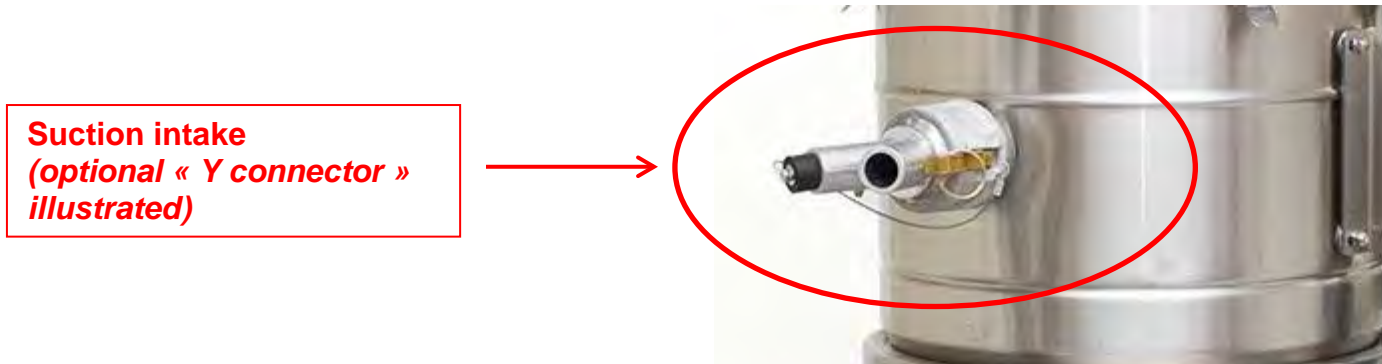




- j. Connect the airline hose(s) of one or two suction/air hose(s) to the air outlets placed on the vacuum cleaner **(Only for the optional *AUTOMATIC OPERATION WITH PNEUMATIC TOOL* version)**



- a. Connect the suction hose(s) of one or two suction/air hose(s) to the suction intake on the wet mix immersion separator. (Optional « Y connector » available)



- b. Connect sander/pneumatic tools to the end of the suction hose(s) of one or two suction/air hose (the manifold on the vacuum cleaner can be used to connect the compressed air line hoses)

## 9.0 AUTOMATIC OPERATION WITH PNEUMATIC TOOL (OPTIONAL)

**IMPORTANT:** The AUTOMATIC OPERATION WITH PNEUMATIC TOOL version is optional and must be factory installed.

- a. Make sure the ON/OFF button is in the "**OFF**" position (0)
- b. Make sure that the AUT/MAN button is in "**AUT**" position (0)
- c. Connect the airline hose to the air inlet on the vacuum cleaner and to the pneumatic air source.



- d. Plug the vacuum cleaner to a grounded electrical outlet
- e. Put the ON/OFF button to the "ON" position. The red light turns on and the machine is now on standby mode.
- f. Switch the pneumatic tool ON. The vacuum motor turns on.
- g. After use, switch the pneumatic tool OFF.
- h. **Wait 5 or 6 seconds before turning off the vacuum cleaner.**
- i. Switch the ON/OFF button to the "**OFF**" position.

## 10.0 STANDARD VACUUM CLEANER OPERATION

- a. Make sure the ON/OFF button is in the "**OFF**" position (0)
- b. Make sure that the AUT/MAN button is in position "**MAN**" (1)
- c. Connect hoses and tools
- d. Plug the vacuum cleaner to a grounded electrical outlet
- e. To turn on the vacuum cleaner place the ON/OFF button to the "**ON**" position.
- F.** To switch off the cleaner place the ON/OFF button to the "**OFF**" position.



## 11.0 MAINTENANCE AND CLEAN-UP PROCEDURE

**IMPORTANT:** We recommend proceeding with the following maintenance after each use and after a maximum of 8 hours of consecutive use

- a. After operation shut the vacuum assisted sanding kit system off.
- b. Use the drain valve to empty collected material.

**WARNING:** Empty collected material as soon as the liquid reach the maximum indicated level.

**IMPORTANT:** In order to check the level of liquid the vacuum assisted sanding kit system needs to be shut down.



- c. To operate drain valve lift the safety ring and turn the handle. Optional drain hoses are available for use with the drain valve.



**WARNING:** Empty collected materials into suitable container.

- a. Clean the baffle system and remove all remaining material with brush



**WARNING:** After use, be sure to remove any remaining materials by rinsing and cleaning the wet mix immersion separator, the baffle system, hoses and accessories.

**WARNING:** Flush the suction hose with water to remove build up dirt

**WARNING:** Empty the wet mix immersion separator regularly. Do not allow recovered materials to sit for extended periods of time. An excessive accumulation of recovered materials can create a dust ignition hazard.

## 12.0 STORAGE

It is recommended that the inside of the wet mix immersion separator be clean and dry when storing the vacuum assisted sanding kit system.

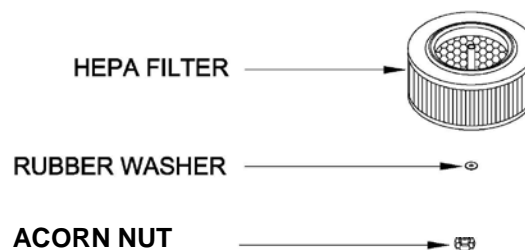
## 13.0 REPLACING THE COALESCING HEPA FILTER

For users who wish to implement a conservative protocol for replacing the coalescing HEPA filter, it is recommended that it be replaced once a year.

**WARNING:** Service and operation should only be carried out by trained personnel wearing appropriate clothing and breathing apparatus.

**WARNING:** Dispose of collected materials responsibly. Follow government regulations for the disposal of hazardous materials.

**IMPORTANT:** Use only original brand replacement coalescing HEPA filter.



- a. Shut the vacuum assisted sanding kit system off.

- b. Disengage the latches and remove the powerhead from the recovery tank.
- c. Unscrew and remove the acorn nut and the rubber washer securing the coalescing HEPA filter.

**IMPORTANT:** Conserve these items for re-use.

- d. Remove the used coalescing HEPA filter and install a new coalescing HEPA filter.



- e. Re-install the rubber washer and the acorn nut as shown.
- f. Dispose of the used coalescing HEPA filter in accordance with applicable government or state regulations.

## Warranty, Liability, and Contact Information

Chief Automotive Technologies warrants for 1 year for dust extractor motors and 2 years for dust extractor tanks from date of installation and/or purchase any components of its Vacuum-Assisted Sanding System which do not perform satisfactorily due to defect caused by faulty material or workmanship. Chief's obligation under this warranty is limited to the repair or replacement of products which are defective and which have not been misused, carelessly handled, or defaced by repair or repairs made or attempted by others. Chief will not warrant what is considered normal wear on filters and hoses.

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