DVP Vacuum Dump Valve Upgrade

Document number: 719-00442A-A

Product	FCO priority
Drum Vacuum Pump (DVP) on Magnus VLF semi-automatic devices only.	Customer request only.

Machines affected Semi-automatic devices running 0.15 mm plates that do not have a DVP unit with a vacuum dump valve.

Note: Autoloader devices are not capable of running 0.15 mm plates.

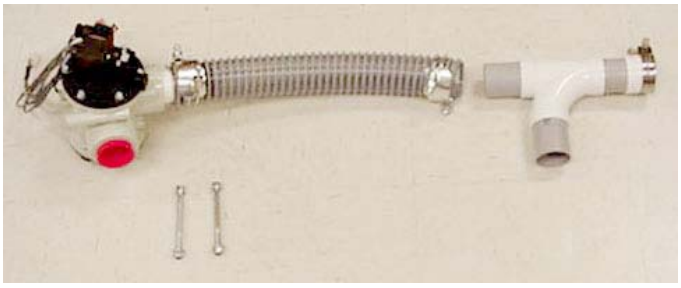
Background

The Magnus engine does not properly unload thin plates (0.15 mm) from the drum unless the vacuum in the drum is removed during the unload process. During normal operations of the machine, the vacuum pump is continuously running and there is always a vacuum in the drum. The thin plates are not very stiff and tend to adhere onto the drum during the unload process. The vacuum dump valve allows the vacuum in the drum to be removed for the plate unloading process.

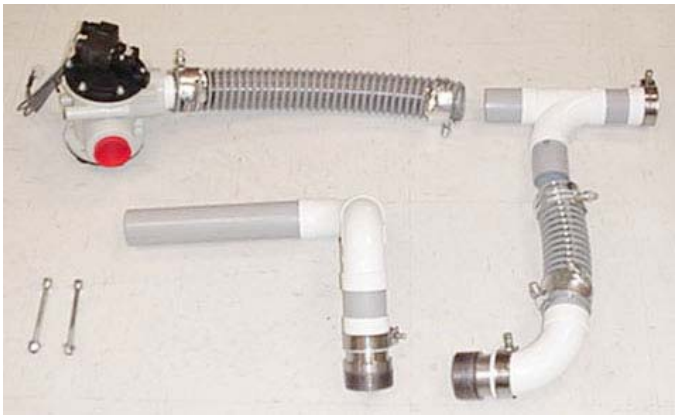
Solution

Install DVP vacuum dump valve upgrade kit.

- If FCO CA06461 has already been implemented, use upgrade kit 518-01074A.



- If FCO CA06461 has not been implemented, use upgrade kit 512-00230A.



Time required	1 hr

Parts required

Part Number	Part Name	Quantity
518-01074A	KIT,VAC DUMP VALVE,FOR 0.15MM,MTA	1
OR		
512-00230A	KIT,UPGRADE,CA06095,VAC DUMP VALVE,MTA	1

Tools required

- Crescent wrench
- Pipe wrench, 2 ½ in. opening minimum
- 4mm hex key
- Flat screwdriver
- 8.7mm drill bit (included in kit 512-00230A)
- Hand drill (only needed with kit 512-00230A)
- Center punch (only needed with kit 512-00230A)
- Tape measure (only needed with kit 512-00230A)
- Teflon pipe thread tape

Procedure

To replace the hoses and fittings in the Drum Vacuum Pump (DVP):

1. Disconnect the DVP power cable.
2. Open the DVP cover by removing the bottom four M5 socket head cap screws.

Upgrading with kit #512-00230A

3. Loosen the three hose clamps (500-01555B item 350).
4. Remove the suction and discharge hose assemblies.
5. Use a pipe wrench to remove the two plastic fittings (500-01555B item 420).

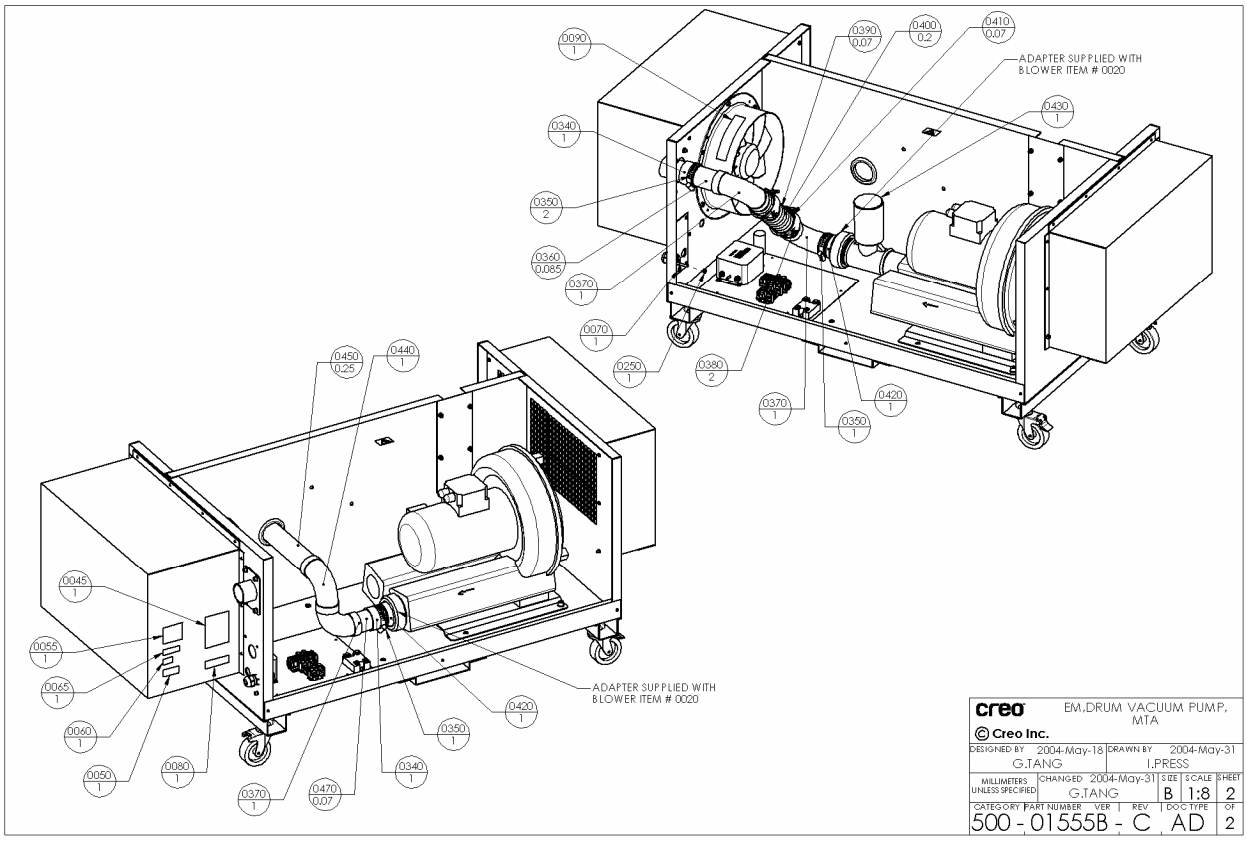
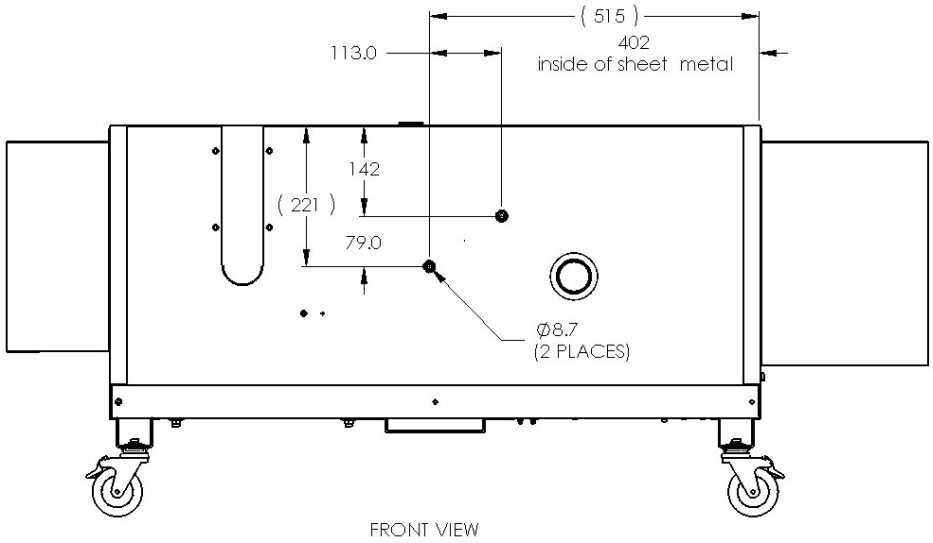


Figure 1: Drum vacuum pump

6. Measure and mark the locations of the two holes as indicated in the front view below. Center punch and drill the holes with a 11/32 in. drill bit.



7. Apply teflon pipe thread tape to the two new steel pipe adapters and tighten them into the vacuum pump. Be careful not to mark the neck of the adapters with the pipe wrench.
8. Mount the valve with the M8 screws, washers, and nuts from the kit.

   Note: Ensure that the brass manual override screw on the valve is pointing to “0” position.

9. Install the new suction and discharge piping assemblies.

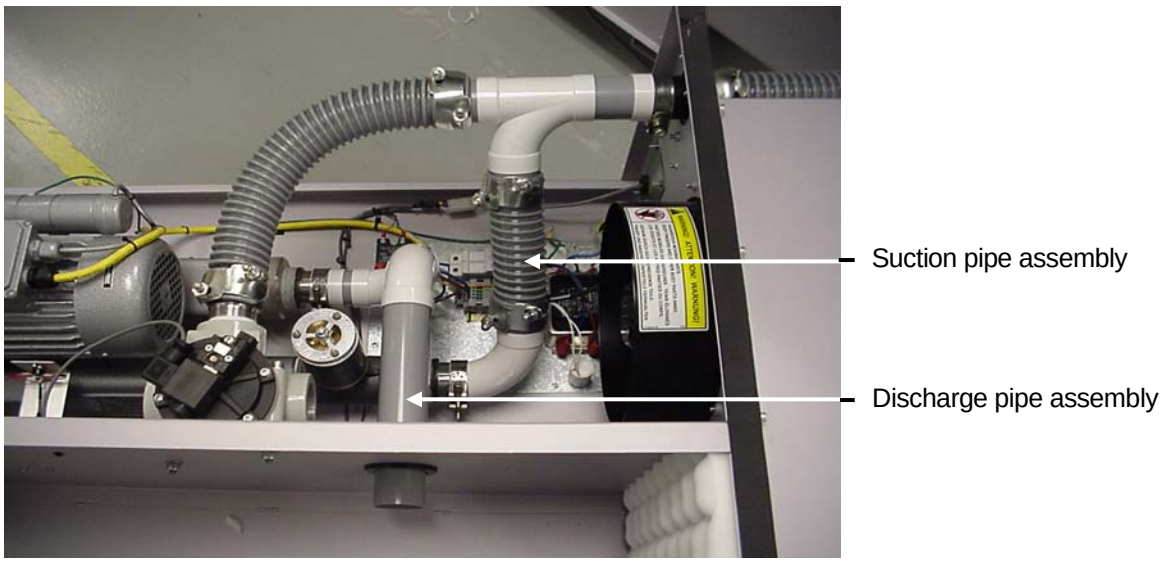


Figure 2: Pipe assemblies

10. Disconnect the control cable assembly inside the DVP.
11. Install the new cable assembly (220-01034A) connecting to the valve, thermostat, relay, and control cable connector.

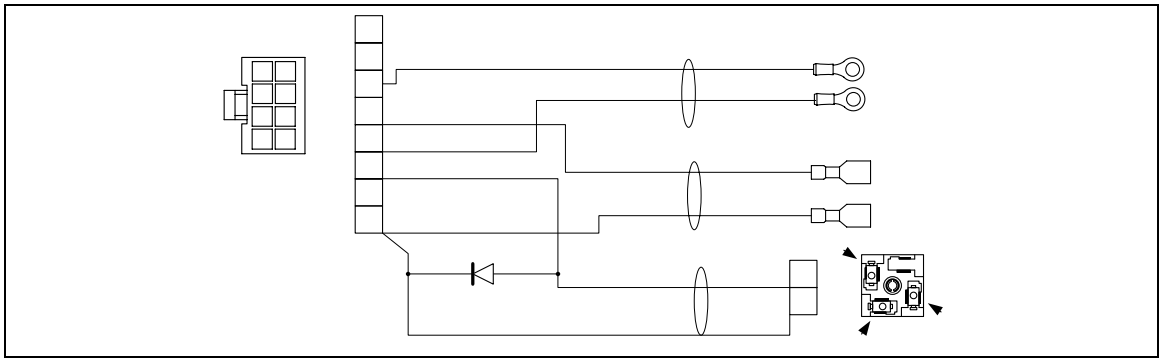


Figure 3: Cable connections

12. Install the DVP cover.
13. Connect the DVP power.
14. Upgrade the Magnus VLF device firmware to support the DVP vacuum dump valve. Contact Micle Zisman for the correct version of firmware to install.

Upgrading with kit #518-01074A

1. Loosen the top hose clamp (500-01555B item 350) and the top spiral hose clamp (500-01555B item 380).
2. Remove the top section of the suction hose assembly.
3. Mount the valve with the M8 screws, washers, and nuts from the kit.

   Note: Ensure that the brass manual override screw on the valve is pointing to “0” position.
4. Install the suction pipe assembly. See Figure 2.
5. Disconnect the control cable assembly inside the DVP.
6. Install the new cable assembly (220-01034A) connecting to the valve, thermostat, relay, and control cable connector. See Figure 3.
7. Install the DVP cover.
8. Connect and turn on the DVP power.
9. Upgrade the Magnus VLF device firmware to support the DVP vacuum dump valve. Contact Micle Zisman for the correct version of firmware to install.

See also	500-01555B assembly drawing FCO CA06461
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