

Velcon®

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INSTALLATION Instructions

THREADED BASE CARTRIDGES

1. Turn off the pump. Close inlet and outlet valves to the housing.
2. Open the top vent and drain the housing through the bottom drain. Drain a few gallons out of the inlet compartment dirty drain if so equipped.
3. Loosen the bolts and swing away/remove the cover.
4. Remove the spider (if installed); remove all cartridges.
5. Inspect the inside of the housing and wipe it clean if necessary.
6. The cartridges are packaged in individual poly-bags (the anti-static poly-bag protects the cartridge from being disarmed by handling, and prevents build up of static charge to cartridge). Cut the bag at the threaded base end and slide it back a few inches. **DO NOT TOUCH THE OUTER SOCK/MEDIA.**
7. Hold the cartridge with the poly-bag still protecting the cartridge or by the endcaps only if no bag and place it over the threaded base adapter. Screw on hand tight.
8. Remove the poly-bag **SLOWLY** from the cartridge after it is in place.
9. For 4 inch diameter cartridges, tighten to 15 ft-lbs of torque or hand tight. For 6 inch diameter cartridges, tighten to 30 ft-lbs of torque (about ¼-turn past hand tight). It is preferable to use a special Gammon Technical Products part number GTP-1224 four-sided adapter to do this. (**DO NOT** touch the outer sock.)
10. Make sure that no poly-bags remain in the housing. (If spider is not included proceed to step #11.) Replace the spider as follows:
 - Install the flat washer over each cartridge end and install the spider over the ends of the cartridges.
 - Affix the spider to the threaded clips on the vessel walls using the nut and lockwasher.
 - Adjust the spider clip nuts, so the spider lies flat on the ends of the cartridges
 - Install the washer and nut over the ends of the cartridges, to affix the spider to the cartridge ends. Snug

the nuts. **DO NOT TIGHTEN YET.**

- Adjust the ends of each cartridge to create even separation between the cartridges and between the cartridge and vessel wall. Cartridges should **NOT** be touching each other, nor touching the vessel wall. The ends of the cartridges can be shifted within the spider plate holes as follows:

Cartridge Length	Shift Within the Spider Hole
Greater than 33"	Full movement within the spider hole
30"	Less than 5/8" (16 mm)
28"	Less than 9/16" (14 mm)
24"	Less than 1/2" (12 mm)
22"	Less than 1/2" (12 mm)
20"	Less than 3/8" (10 mm)
18"	Less than 3/8" (10 mm)
16"	Less than 1/4" (8 mm)
14"	Less than 1/4" (6 mm)
11"	Less than 1/4" (5 mm)
9"	Less than 3/16" (5 mm)

- When the cartridges are spaced properly, tighten the spider nuts to 5 ft-lbs.
11. Inspect the cover gasket and replace it if necessary. Tighten the cover securely in a cross-pattern process.
 12. Close the bottom drain valve and start the system pump.
 13. With the outlet valve closed, slightly open the inlet valve and allow the vessel to fill **SLOWLY** with fuel until the air eliminator closes or fluid begins to flow from the manual air vent. Close the vent valve. Fully open the inlet valve.
 14. Open the outlet valve **SLOWLY**.
 15. When the unit is operating, check the differential pressure across the cartridges. There should be indication of positive pressure, normally 1-5 psid. This insures that all seals have been properly made during the installation.

OPERATING PROCEDURES

Velcon Recommended Cartridge Changeout

(Please also check with your company's fuel handling guidelines and operating procedures.)

Coalescer Cartridges: One (1) year or 15 psid, whichever occurs first

Filter Cartridges: Three (3) years or 25 psid, whichever occurs first (**INSPECT VESSEL ANNUALLY**)