

MODEL CF-112

Installation Instruction Sheet

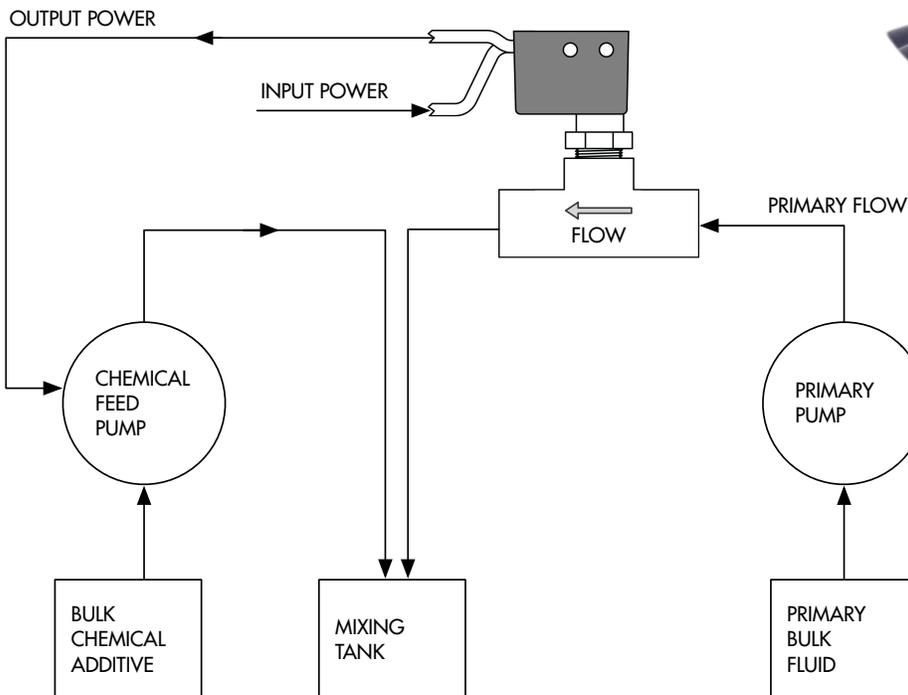
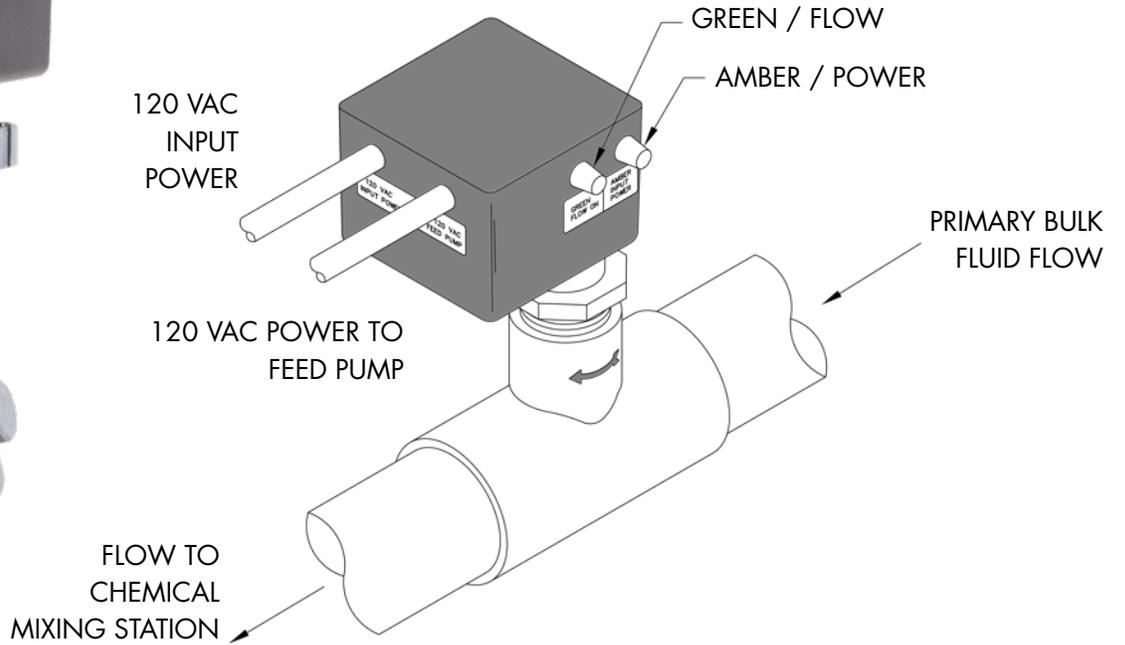
HARWIL CORPORATION

541 KINETIC DRIVE, OXNARD, CA 93030

TEL: (805) 988-6800 FAX: (805) 988-6804

EMAIL: HARWIL@HARWIL.COM

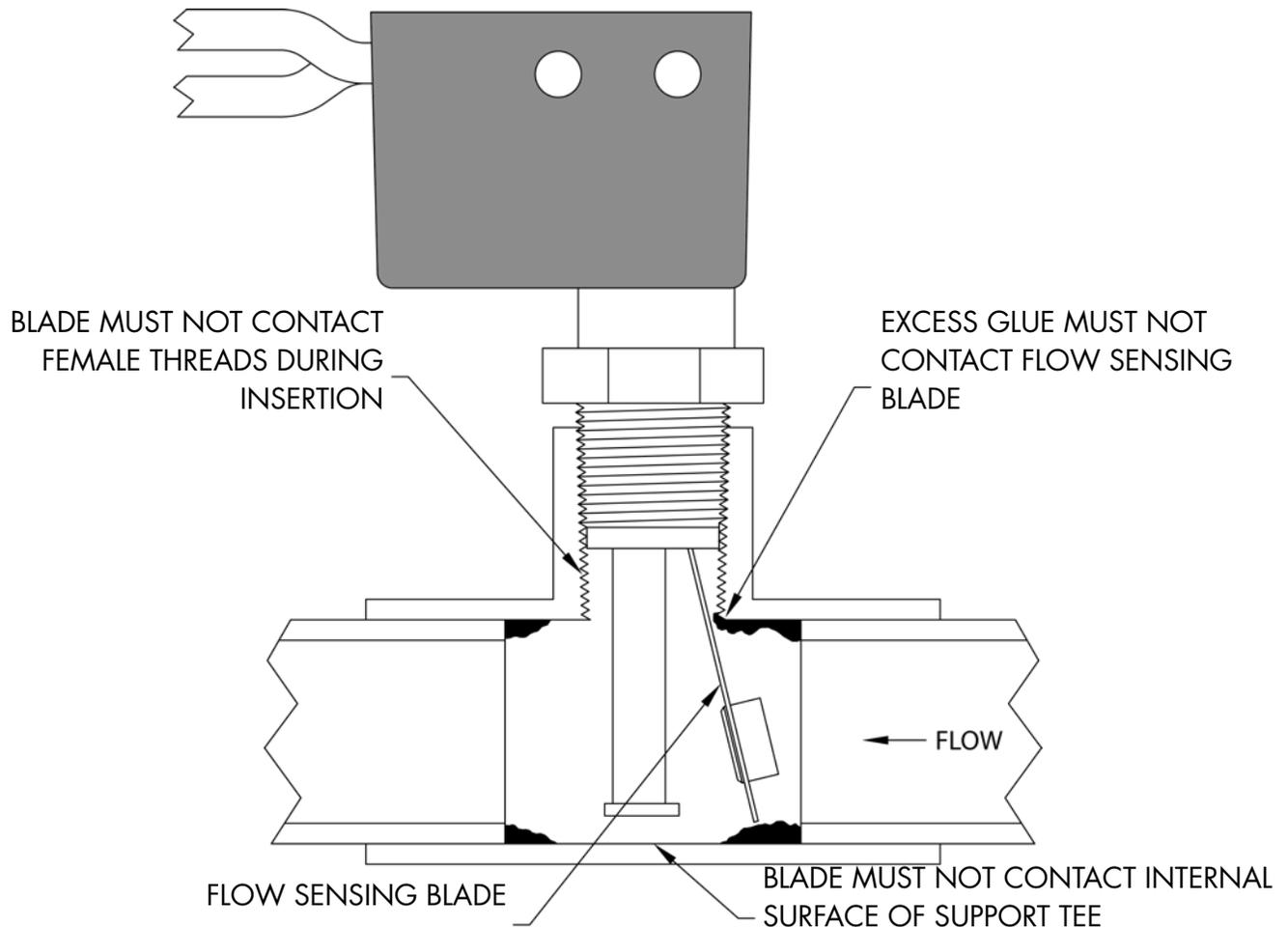
CHEMICAL FEED PUMP INTERFACE MODULE



MODEL CF-112

Installation Instruction Sheet

1. Inspect the shipping container and its contents for damage. If any damage is visible, place the contents and paperwork back into the original shipping container and notify a supervisor.
2. Read this instruction sheet in detail, noting input and output power cord labels in addition to the primary fluid flow direction arrows.
3. Check both the primary flow line size and the CF-112 detailed P/N to insure the desired flow ON/OFF switch point is being installed relative to the primary flow line size.
4. Check both the input and output power cables against the P/N to insure the external end of each cable is terminated correctly as received.



5. Thread the module into the leg of the user-supplied tee (see note). All male threads supplied by Harwil are delivered with several layers of Teflon-coated tape. New tape should be applied each time the thread is used. "Paste" type thread-sealing is not recommended.

MODEL CF-112

Installation Instruction Sheet

6. Insert the mating threads with care in order to insure that the threads match without cross threading and the delicate flow-sensing metal blade does not touch any interior surfaces during insertion and tightening. Touching the blade can change its fluid flow sensing ON/OFF set points.
7. Tighten the thread until a firm coupling is established and all flow arrows are aligned.

CAUTION: ALWAYS TORQUE THE CF-112 USING A WRENCH APPLIED TO THE HEX BODY. NEVER TURN THE BLACK BOX.

8. If plastic tees have been provided with the CF-112 module, insert the preassembled tee into the primary flow line. Avoid touching the flow sensing blade manually or with glue.
9. Connect the external 120 VAC input power to the CF-112 120 VAC input power cable.
10. Connect the CF-112 output chemical feed pump power cable to the input 120 VAC power connection on the chemical feed pump.
11. Turn on primary flow and check for chemical feed pump operation.
12. If the feed pump fails to operate, check the flow rate of the primary line to insure the CF-112 has enough flow to activate the internal flow switch.
13. If the internal flow switch is activated (green light illuminated), check for 120 VAC output voltage.
14. If no output voltage is sensed, the CF-112 is defective and needs to be replaced. **CF-112 internal circuitry is fully potted; therefore, no internal inspection or adjustment is possible.**
15. If an output voltage is sensed, the chemical pump or associated circuitry is defective.

NOTE: When a CF-112 with a 1/2" NPT is being installed in a 3/4" tee, it is strongly recommended to mount the 1/2" NPT coupling of the CF-112 in a 3/4" neck of the tee using a 3/4 x 1/2" reducer bushing. This allows more inside clearance for the flow sensing blade.