

SUMMARY

The Dosatron Proportioner provides a safe, controlled and economic method for dilution of chemical into either an open container, i.e. "bucket fill", or into sprayers, brushes or piped and valved systems.

These simple proportioners required no electricity and are driven by the water flow; they are self priming. The units give an accurate and adjustable dilution for a wide range of flow.

A range of proportioners is available to suit the required flow and dilution range.

Note: Water Authority regulations state that no chemical dilution equipment may be connected directly to the mains supply. A break in the supply using a type "A" air gap is required.

Holchem guarantee the unit for 12 months from the date of delivery. The guarantee covers material defects, manufacturing defects or incorrect assembly. The guarantee does not cover wear and tear, misuse, use of incompatible chemicals, damage caused by frost or incorrect water supply.



SPECIFICATION	D3RE2 PVDF – DOSATRON PROPORTIONER
HOLCHEM CODE	SKS02859
Flow Rate Range	Minimum 0.01 m ³ /h (0.166 l/min) Maximum 3.00 m ³ /h (50 l/min) Note: Flow Rate is dependent on pressure.
Operating Pressure	Minimum 0.5 bar (7 psi) Maximum 6 bar (85 psi)
Maximum Water Temperature	40°C
Dilution Rate	0.2% to 2% v/v (Continuously Variable)
Connections	¾" BSP male
Total Height	47 cm excluding chemical pickup hose.
Width	16 cm
Diameter	10.5 cm
Weight	1.8 Kg
Materials of Construction (water side)	PVDF & Viton
Materials of Construction (chemical side)	Polypropylene & Hastelloy
Supplied with:	Wall mounting bracket Chemical pickup tube - 1 metre clear & Chemical strainer
Chemical suitability	Acids & chlorinated products





SAFETY

1. The equipment should not be used prior to proper installation and commissioning.
2. The equipment should only be used by personnel trained in its use and in the use of the chemicals being dispensed.
3. The equipment should only be adjusted when the water supply has been isolated from the equipment and the unit depressurised.
4. Operators must wear suitable personal protective equipment for the chemical being dispensed.
5. Chemicals must never be mixed either prior to or after dilution.
6. The unit must be made safe prior to any maintenance:
7. Flush chemical out of equipment by placing chemical pick-up tube in clean water and running the unit.
 - a. Isolate water supply from the equipment.
 - b. If unit has failed and the chemical cannot be flushed then suitable personal protective equipment must be worn for disassembly.

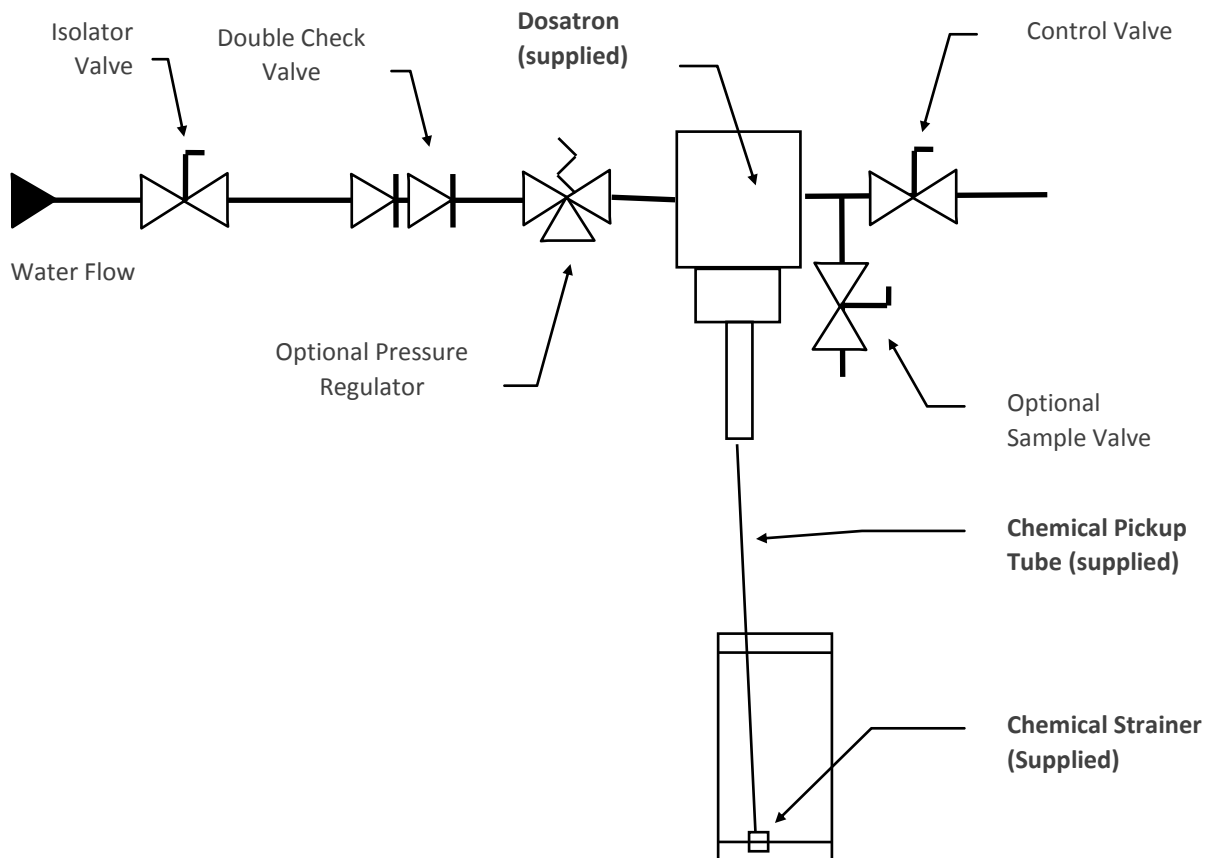
SERVICES REQUIRED

1. Isolated water supply and double check valve (pressure regulator is optional).
2. Water pressure, flow and temperature requirements given in equipment specification.



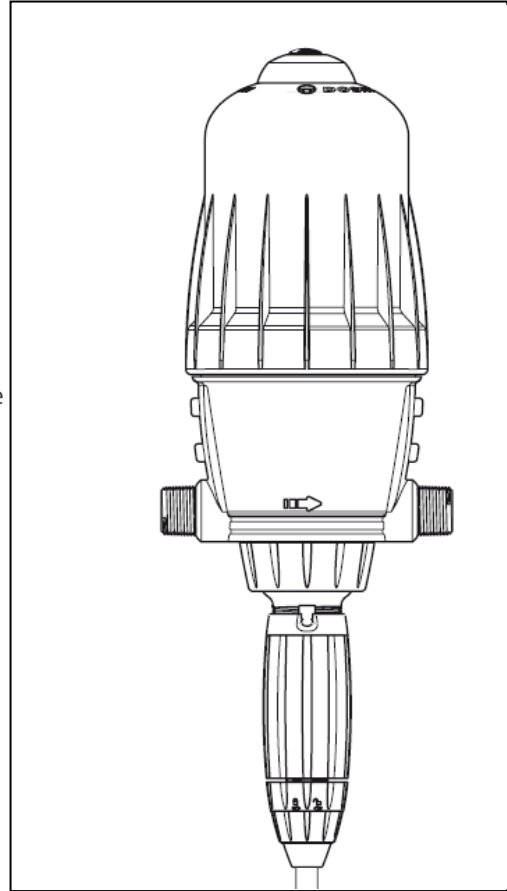
INSTALLATION.

1. **Water Authority regulations state that no chemical dilution equipment may be connected directly to the mains supply. A break in the supply using a type "A" air gap is required.**
2. A double check valve should be fitted on the inlet side of the unit to prevent possible siphoning / backflow of product through the unit. The connection to the Dosatron is a $\frac{3}{8}$ " bsp male thread.
3. All parts of proportioner must be above maximum liquid level of the neat chemical product.
4. The compatibility of the materials of construction of the dosing unit and the chemical must be checked. If injecting a chemical that can decompose to gases the dosing unit must be plumbed in such a way that the generated gas cannot cause an increase in pressure above the safe operating pressure of the system. Otherwise the pressure build up may cause damage, leakage or an explosion.
5. If water-hammer is a problem or the line pressure is above the rated pressure then a protection device such as a pressure regulator must be fitted.
6. Where the unit is fitted to more than one outlet point, or has outlet pipes that go into a roof void, it is advisable to fit a sample valve in the outlet pipework adjacent to the unit to allow easy adjustment and strength checks.



INSTALLATION \ COMMISSIONING

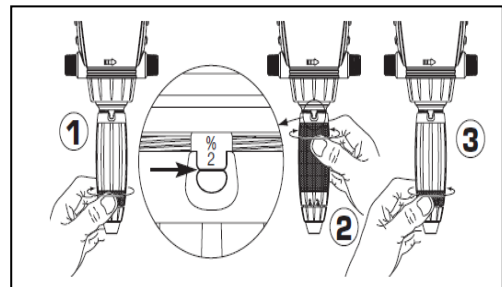
1. Remove plastic transport caps from water inlet, water outlet and chemical inlet.
2. Fit mounting bracket to a suitable vertical support.
3. Connect unit to water supply. Ensure direction of water flow is as per arrow on the Dosatron body.
4. Fit chemical suction tube by unscrewing bottom nut. Place nut over tube; push tube firmly onto inlet and screw nut up by hand.
5. Ensure chemical strainer is fitted to end of suction tube. Then immerse the tube in the chemical to be injected.
6. Slightly turn on the water and check for leaks, bleed the air out of the Dosatron by pushing down on the bleed button (button on top of blue housing). Once all the air is bled slowly open the inlet valve to the permitted maximum.
7. Open the outlet valve and the unit will self-prime.
8. The unit is now ready for the setting of the chemical strength.



ADJUSTING STRENGTH.

IMPORTANT - USE NO TOOLS!

1. Turn off water supply
2. Partially unscrew black nut.
3. Twist injector body until required strength is aligned with line.
4. Hand tighten black nut.
5. Check strength and readjust if required (steps 1 to 5)



MAINTENANCE

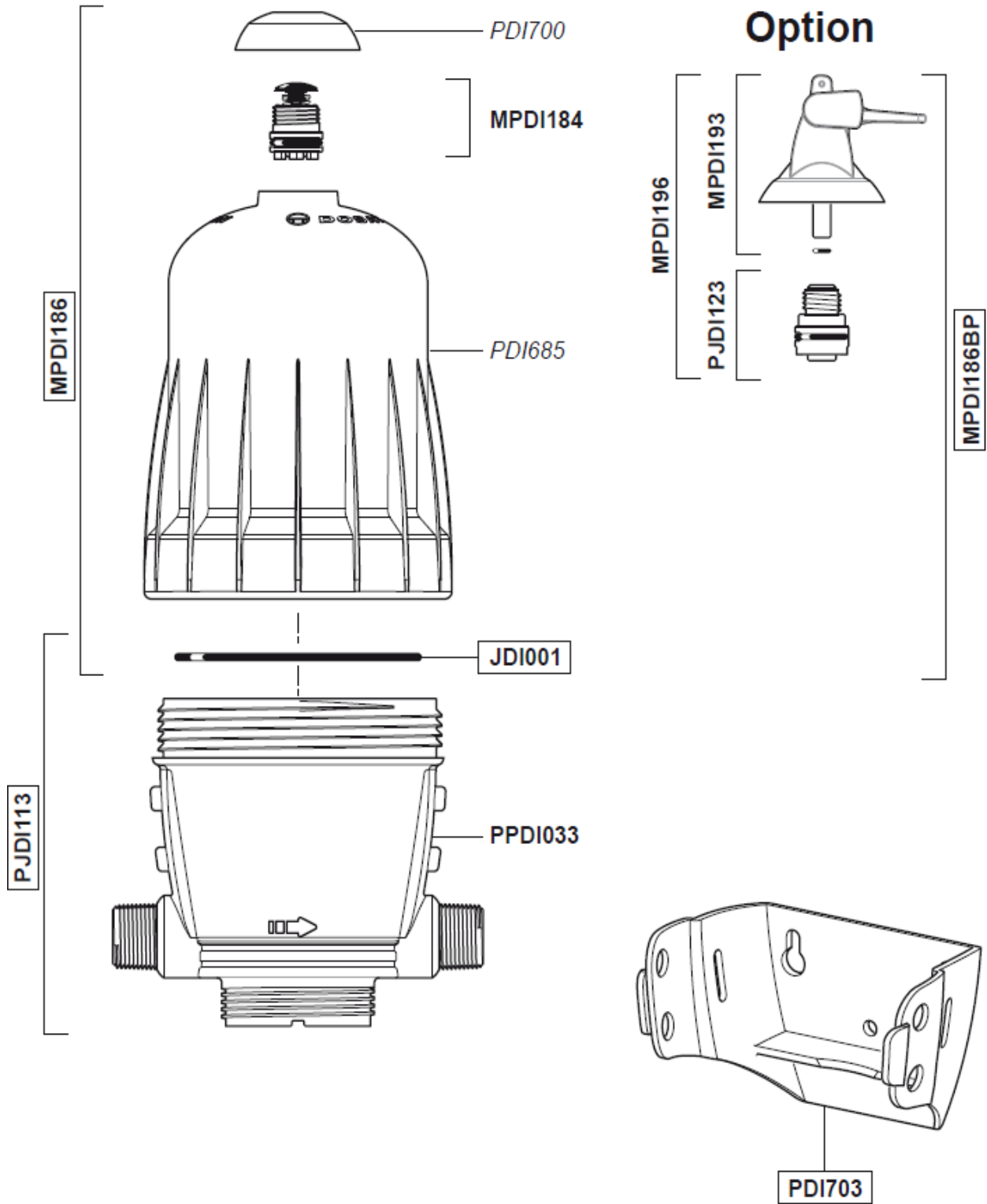
1. No routine maintenance required.
2. Recommend chemical suction tube be replaced annually or when showing signs of wear.

TROUBLE SHOOTING

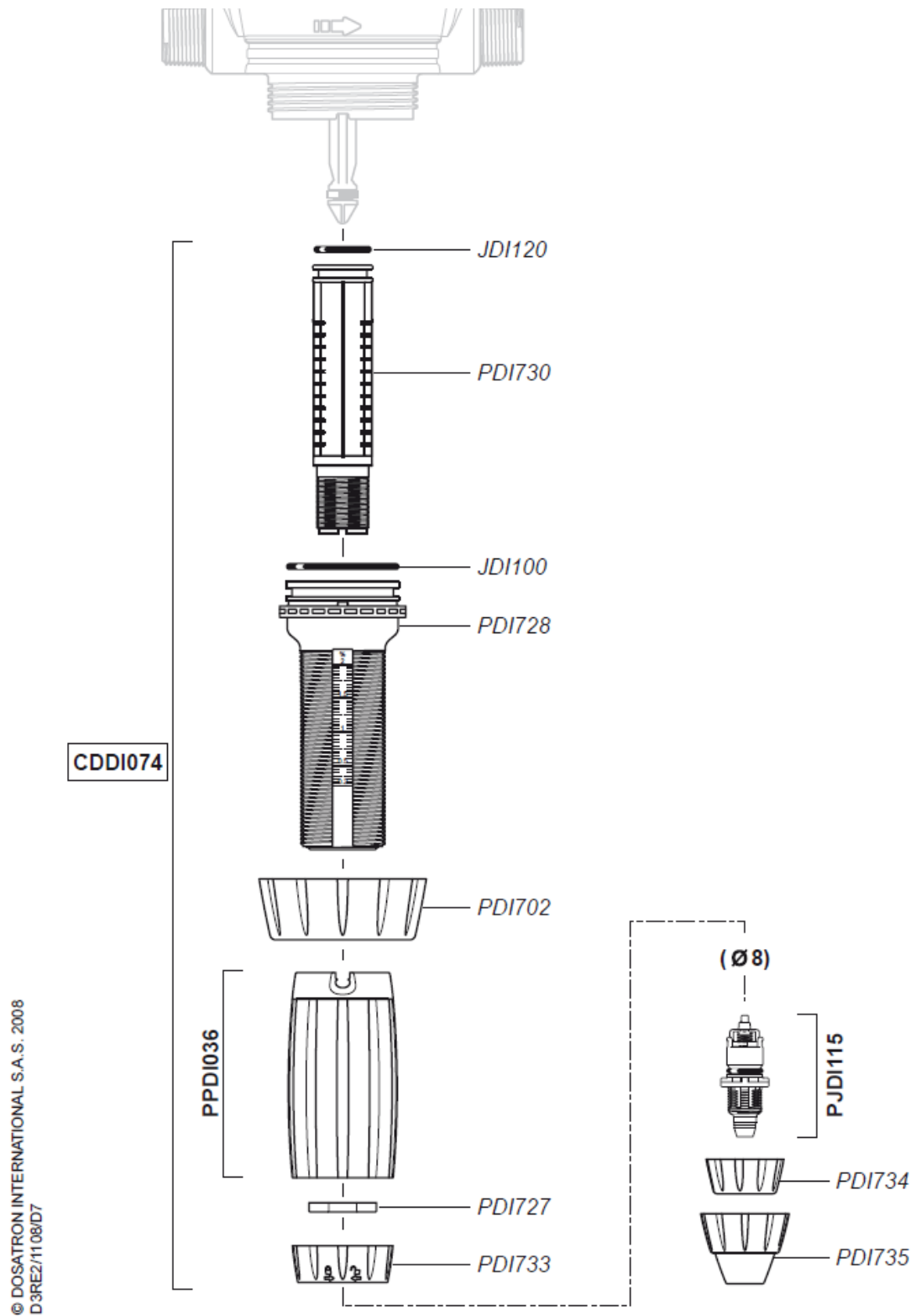
FAULT	DIAGNOSIS	REMEDY
Proportioner motor does not start (no clunking sound)	No water supply	Check water supply Check all valves or solenoids
	Air has not been bled from motor	Bleed air by pressing top button
	Clogged internal filter	Clean filter (see supplier manual)
	Damage to body	Return for repair
Water flowing back into chemical	Worn or dirt in suction valve seal	Clean or change suction valve seal
No suction of chemical <u>or</u> Low chemical strength	Motor stopped	See above
	No chemical in container	Replace chemical container
	Air leak on chemical inlet	Check tightness of nuts Check chemical suction tube for holes
	Worn or dirt in suction valve seal	Clean or change suction valve seal
	Blocked suction tube or filter	Clean out and refit
	Maximum flow exceeded	Reduce flow
	Worn plunger seal	Replace
	Worn injector body	Replace



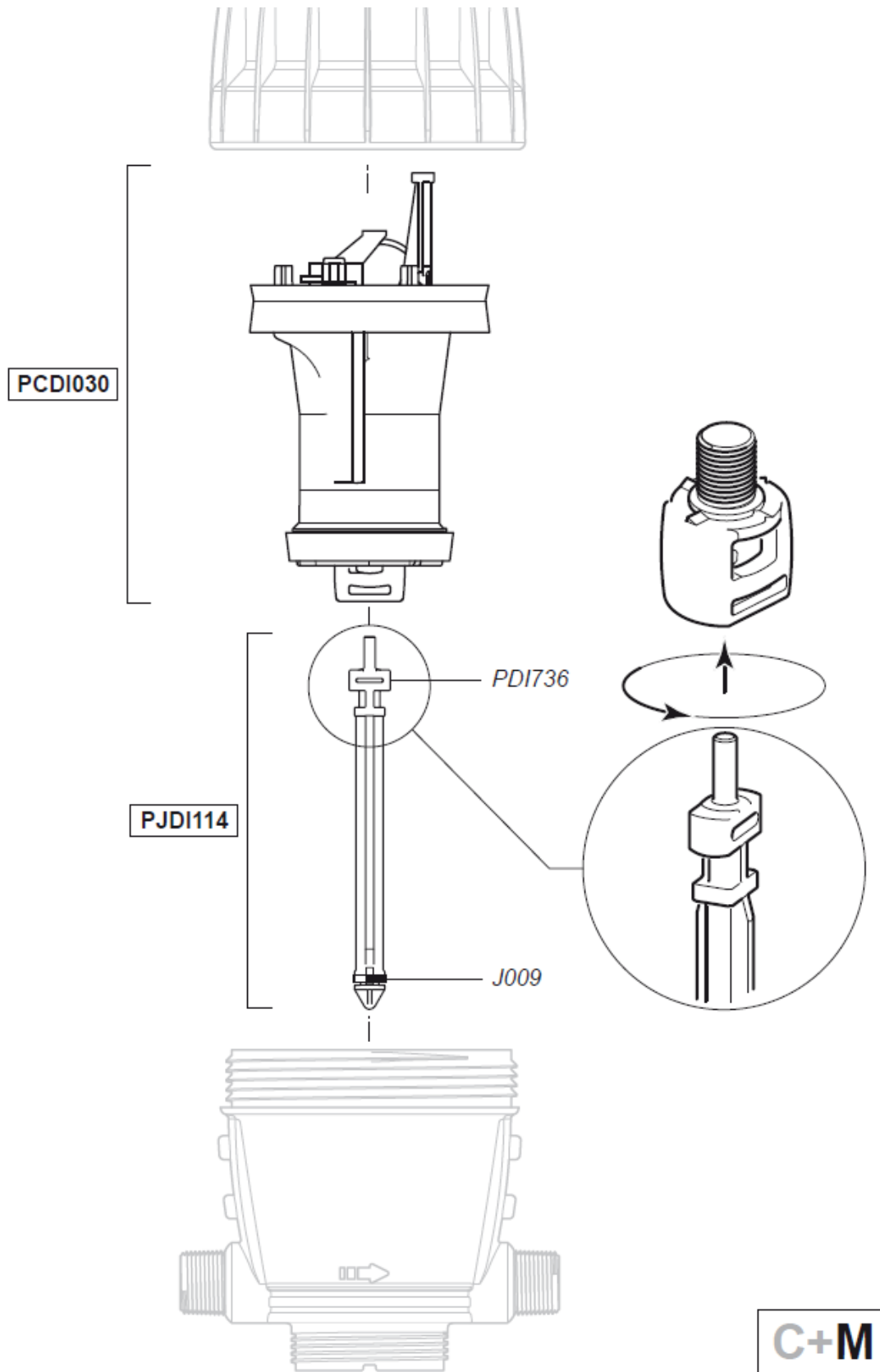
PARTS DRAWING (1 OF 4)



PARTS DRAWING (2 OF 4)



PARTS DRAWING (3 OF 4)



PARTS DRAWING (4 OF 4)

