INSTRUCTION MANUAL S1900, Rev C

Coolant / Liquid Mixers
CMX/1+, CMX/2+ & CMX/3+

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DESCRIPTION

- Designed for mixing liquid coolant concentrate with water for supply to machines, used in workshops & garages for mixing water with detergents, antifreeze etc.
- Driven by pressure from water supply
- Rotary Disc Valve, precision CNC machined from Stainless Steel & highly accurate
- Compact construction & minimal parts make these mixers easy to install & highly reliable
- Lightweight Aluminium body
- Includes full flow Brass Ball valve & also fitted with 2 back flow preventers
- Adjustment of mixing ratio is variable & controlled through a simple turn of the knob

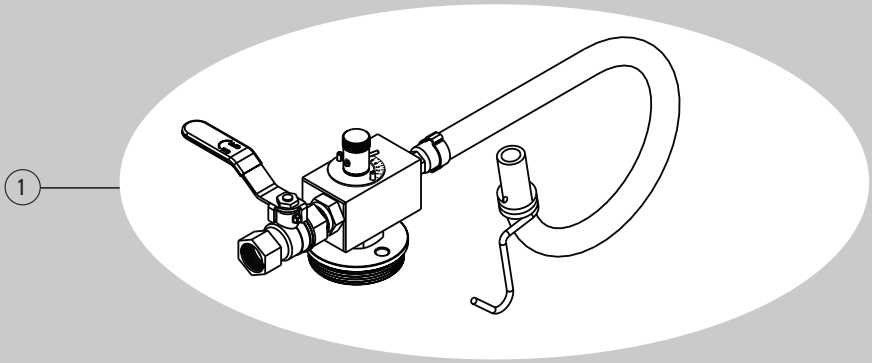
RED MIXER
MIXING RATIO= 0 - 11 %

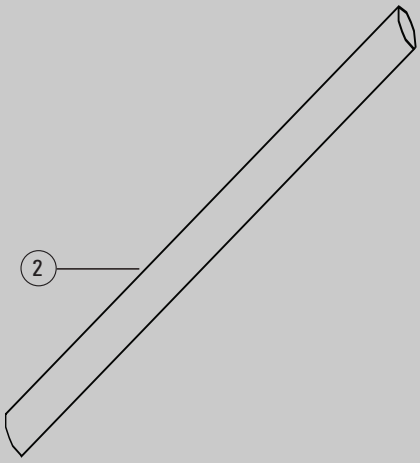
BLUE MIXER
MIXING RATIO= 0 - 57 %

YELLOW MIXER
MIXING RATIO= 0 - 9 %

CONSTITUENTS

1. Mixer Assembly (with Shut Off Valve, Bung Nut & Hose Assembly)
2. Suction Tube



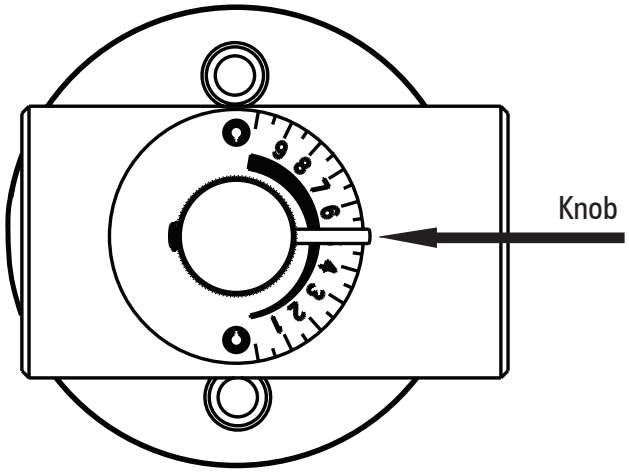


WORKING OF COOLANT MIXER

This is a Venturi type proportional mixer that is driven by water pressure supplied via a full flow Brass Ball Valve.
It uses water passing over an orifice to create suction that draws the concentrate from the drum into a Mixing Chamber where it is mixed with water.
The unit has two Non Return Valves :-

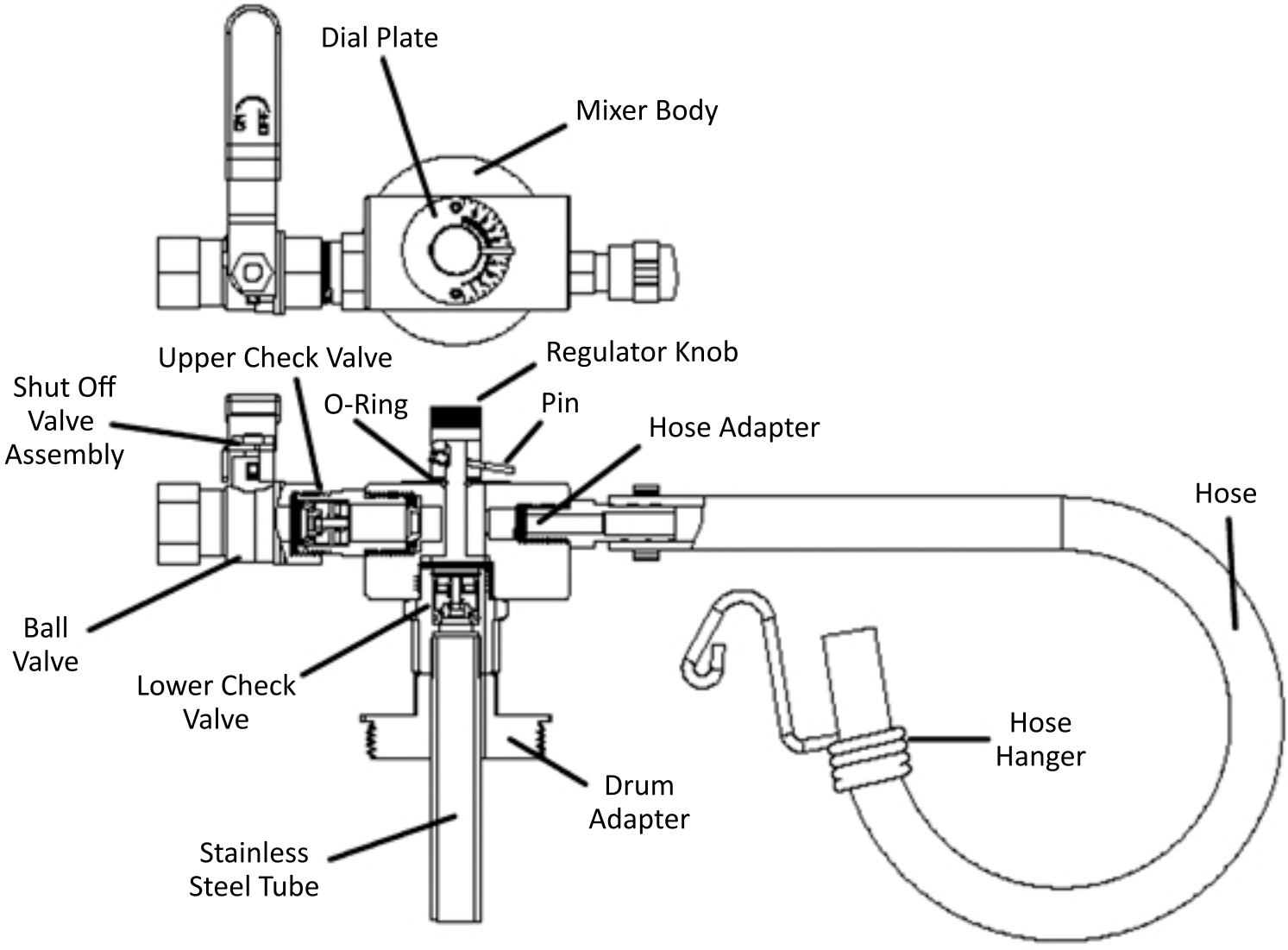
1. at the Water Side (to prevent the back flow of coolant into the water pipe)
2. at the Coolant side (to prevent the back flow of water into the drum)

Concentration is controlled by turning a metering device (i.e a Rotary Disc Valve) with the help of a Regulator Knob.
A Regulator Plate divides the whole range of possible concentrations into 10 equal settings. On trial & error basis, desired percentage of the coolant mixture is obtained by testing with a **refractometer**.



NOTE

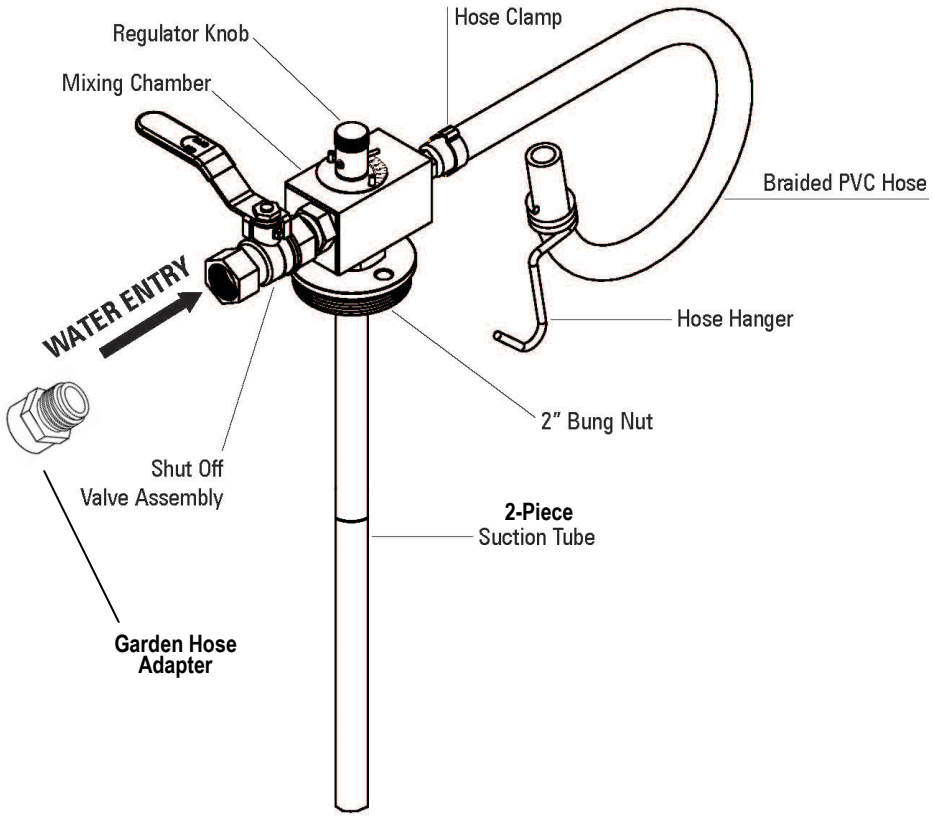
- **Though the Regulating Scale effectively gives a value based on trial & error, It should not be taken as an absolute Percentage Ratio. For desired mix, actual mix has to be checked by testing with a Refractometer**



COOLANT MIXER CONSTRUCTION

CAUTION

- **Mixer must be mounted horizontally within +/- 10º (because of the ball check valve).**
- **The outlet is supplied with a braided PVC fill hose which cannot be restricted or used to shut off the mixer. Shut off the water line leading to the mixer to stop the flow.**
- **The outlet hose must NOT be connected to any device that can restrict liquid flow. This means NO sprayer devices, in-line systems, or piping over-head lines.**



Installation and Operation

1. The mixer is already assembled with a hose and shut off valve.
2. Thread the two suction tube pieces together and thread the tube into the bottom of the mixer body.
3. Tighten the bung nut set screw to hold the mixer in the desired position.
4. Connect the mixer to your water supply using the garden hose adapter if needed. Apply thread sealer as needed.
5. Turn the regulator knob to a test setting.
6. Open shut off valve fully to start the water supply. The mixer will continuously dispense the mixture while the water supply is ON.
7. Take a sample of the dispensed mixture and check its concentration with a Refractometer. Use the regulator knob to increase or decrease the concentration until you get the desired mix. The 0-10 scale is for reference only and is not the percentage ratio.

NOTE: The mixer ratio specifications for each mixer have been determined after testing at a water pressure of 57 PSI. Actual mixture ratios may vary according to water pressure. Higher water pressure leads to higher concentrations and vice versa. Do not exceed 75 PSI. The regulating scale is for reference only and should NOT be used as the percentage ratio. Percentage must be calculated using a Refractometer.

SPECIFICATIONS

MODEL	RED	BLUE	YELLOW
Mechanism	Venturi Type	Venturi Type	Venturi Type
For Use With	55 Gal (205 Litre) Drums	55 Gal (205 Litre) Drums	55 Gal (205 Litre) Drums
Water Inlet	1/2"	1/2"	1/2"
Bung Size	2"	2"	2"
Hose Length	39.37" (1 m)	39.37" (1 m)	39.37" (1 m)
Suction Tube O.D	0.62" (16 mm)	0.69" (17.6 mm)	0.62" (16 mm)
Application	Metal Working Fluids	Soap Solutions	Metal Working Fluids
Mixing Ratio	0 to 11 %	0 to 57 %	0 to 9 %
Capacity	1100 Litre per Hour (290 Gallons per hour)	1250 Litre per hour (330 Gallons per hour)	1100 Litre per Hour (290 Gallons per hour)

WETTED COMPONENTS

Aluminium, Stainless Steel, Brass, Nylon, PVC, Nitrile Rubber

RECOMMENDED USE

Cutting / Metal Working Fluids, Select Chemicals, Wind Screen Fluids, Antifreeze, Detergents / Soap Solutions

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