# **INSTRUCTIONS**

# Read Carefully Before Installing 1 Gallon "MistMatic" Mist Coolant System

4.

TRICO introduces the latest in mist cooling technology — a system that eliminates the need for electrical connection and/or pressurized reservoir. It provides performance superior to syphon systems. Operating at a factory set air pressure from your 50-100 p.s.i. source, the TRICO 'MistMatic' is capable of providing all your mist cooling requirements.

The heart of the system is a powerful duplex diaphragm air operated pump that provides unequaled performance. Fingertip air and coolant controls provide adjustment from fine mist to coarse spray. This system can be installed and operating in minutes.

# INSTALLATION

- 1. Drill and tap two 5/16-18 holes 8" on center. Mount the TRICO 'MistMatic" using the slotted head screws provided. On plastic reservoir models, adjust the rubber bumper on the back so the unit hangs vertical.
- 2. Connect a source of clean shop air (50-100 p.s.i.) to the female 1/4" N.P.T. fitting on the left side of the cover.
- 3. Remove the filler cap. Fill the reservoir (1 gal. capacity) with coolant mixed to the proper dilution for your machining application.

#### CAUTION

THIS MIST SYSTEM IS NOT INTENDED FOR USE WITH TOXIC OR VOLATILE LIQUIDS. ALWAYS USE A COOLANT RECOMMENDED FOR MISTING BY THE MANUFACTURER. FOR BEST RESULTS USE TRICO "TRI-COOL" MIST COOLANT.

#### OPERATION

1. This unit is designed with individual air and coolant control at the nozzle. This provides a wide range of mist "wetness" and cooling capability. Mount the nozzle to deliver mist to the tool contact point and open each control one full turn.

### CAUTION

#### AIR PRESSURE TO THE PUMP IS PRESET TO 30 P.S.I. TAMPERING WITH THE REGULATOR INSIDE THE UNIT WILL AFFECT PROPER OPERATION AND VOID THE FACTORY WARRANTY.

 Adjust to deliver the desired mist. The mist should Be wet enough to create a slight bead of moisture on the work piece during machining. Mist evaporating at the tool contact point provides the desired cooling effect. Heat build-up is further minimized by the lubricant that remains after the water evaporates.

### IMPORTANT

Avoid an excessively "dry" mist. Improved cooling is obtained when larger mist droplets are applied.

# CLEANING

- 1. Disconnect the air supply.
- 2. Separate the cover and the reservoir by removing the screw on each side of the unit.
- 3. Wash the reservoir with warm, soapy water or a solution that will not harm the Buna-N seals and "0" rings, the sight tube, or the polyurethane lines. The same solution can be run through the system to clean the lines and nozzles. Remove the pick-up tube assembly by sliding the locking tab and pulling the assembly from the pump. Clean the filter screen with a solvent and blow air through the tube to remove contaminants.
- 4. Assemble the unit.

### PUMP REPLACEMENT

- 1. Separate the cover assembly and reservoir by removing the screw on each side of the unit.
- 2. Locate the "AIR IN" and "LIQUID OUT" fittings on the pump. Slide the locking tab to the side and gently pull the fittings from the pump housing. The coolant pick-up tube is removed in the same manner. Pull the exhaust tube from the "AIR OUT" fitting.
- 3. Remove the two slotted screws that secure the pump to the cover.
- Attach the new pump to the cover. Push the fittings into the proper ports on the pump until the "0" rings are sealed. Slide the tab over each fitting until it locks in place. Push the exhaust tube completely over the "AIR OUT" fitting.
  Assemble the cover and the reservoir.

#### Assemble the cover and the reservoir. NOZZLE TIP REPLACEMENT

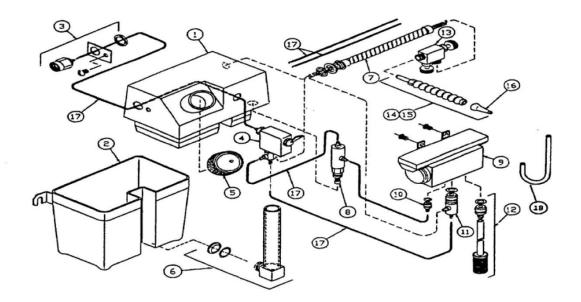
- 1. Bend the nozzle sharply to snap the tip from the segmented casing.
- 2. Pull the tube from the barb inside the nozzle tip. Do not allow the tube to slip into the casing.
- 3. Take the new tip and push the tube completely over the barb.
  - Snap the tip onto the casing.

## CONTROL VALVE REPLACEMENT

- 1. Unthread the knurled cap and pull the armored line 2-3 inches away from the valve body.
- 2. Use needle-nose pliers to slide the air tube retainer eyelet away from the valve body. Cut the air and coolant tubes as close as possible to the barbs. Leave the retainer eyelet on the air tube. Do not allow the tubes to slip into the armored line.
- Take the new control valve and push the air tube (with retainer eyelet) completely over the barb closest to the black needle valve. Push the coolant tube completely over the other barb. Slide the air tube retainer eyelet over the barb. Be sure the flat side of the eyelet flange faces the coolant tube.
  Thread the knurled cap to the valve body.

#### Thread the knurled cap to the valve body. LINE REPLACEMENT

- Remove the existing line assembly by loosening the knurled cap at the valve body. Pull the armored line away 2-3 inches. Use needle nose pliers to slide the air line retainer eyelet away from the valve body. Cut the tubes. Keep the retainer eyelet. Trim the remaining tubing from the baits on the control valve.
- 2. Separate the cover assembly and reservoir by removing the screw on each side of the unit.
- Locate the "LIQUID OUT" fitting on the pump and trace the air tube to the barb fitting on the toggle valve. Slide the retainer eyelets away from the fittings and cut the tubes. Keep the retainer eyelets. Trim the remaining tubing from the fittings.
- 4. Remove the nut and lockwasher that fasten the armored line to the cover. Remove the line and discard it.
- 5. Feed the tubes of the new line assembly through the hole in the cover. Insert the brass fitting into the hold and replace the lockwasher and the nut.
- 6. Slip a retainer eyelet over each tube (flange toward the end of the tube). Push the air tube (with black marking) completely onto the barb on the toggle valve. Push the coolant tube completely onto the fitting on the pump. Slide the eyelet over the barbed portion of each fitting. Assemble the cover the reservoir.
- 7. Assemble the line and control valve using the CONTROL VALVE REPLACEMENT instructions above (steps 3 & 4).



ITEM NO.	PART NO.	DESCRIPTION
1	12043R	Cover - 1 Outlet
	12044R	Cover - 2 Outlet
2	21451R	Reservoir Assembly
3	21461R	Air Inlet Assembly
4	21462R	Toggle Valve Assembly - 1 Outlet
	21466R	Toggle Valve Assembly - 2 Outlet
5	17-00542	Filler Cap
6	21449R	Sight Assembly
7	21134R	Armored Line Assembly - 5 Ft.
8	21463R	Regulator Assembly
9	21467R	Pump Assembly
10	21468R	Pump Air Fitting Assembly
11	21464	Coolant Fitting Assembly - 1 Outlet
	21465	Coolant Fitting Assembly - 2 Outlet
12	21448R	Filter Assembly
13	21375R	Control Valve Assembly
14	30620	Nozzle Assembly - 7 In.
15	30621	Nozzle Assembly - 12 In.
16	21454R	Replaceable Nozzle Tip Assembly
17	66223	Polyurethane Tubing (Available by the foot)
18	66229	Polyurethane Tubing (Available by the foot)



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