

INSTRUCTIONS

Read Carefully Before Installing

4 Gallon "MistMatic" Mist Coolant System

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 handling all of your mist cooling requirements. The large reservoir holds enough coolant for your most demanding machining operations.

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

INSTALLATION

1. The TRICO "MistMatic" can be mounted permanently or used as a portable unit. Handles have been built into the reservoir for this purpose. To permanently mount the unit, drill and tap two 5/16-18 holes 16" on center for the top mounting bracket. Drill and tap a 5/16-18 hole 7" below each of the first two holes for the lower mounting bracket. Install the unit securely using the four screws provided.
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 (4 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.

2. Adjust to deliver the desired mist. The mist should be wet enough to create a slight bead of moisture on the workpiece 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 screws 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 "O" rings, the polyethylene tank, the acrylic 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. Remove the pump access plate by loosening the four screws on top of the unit and lifting the plate from the cover.
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.
4. Attach the new pump to the cover. Push the fittings into the proper ports on the pump until the "O" rings are sealed. Slide the tab over each fitting until it locks in place. Push the exhaust tube completely over the "AIR OUT" fitting.
5. 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.
4. Snap the tip onto the casing.

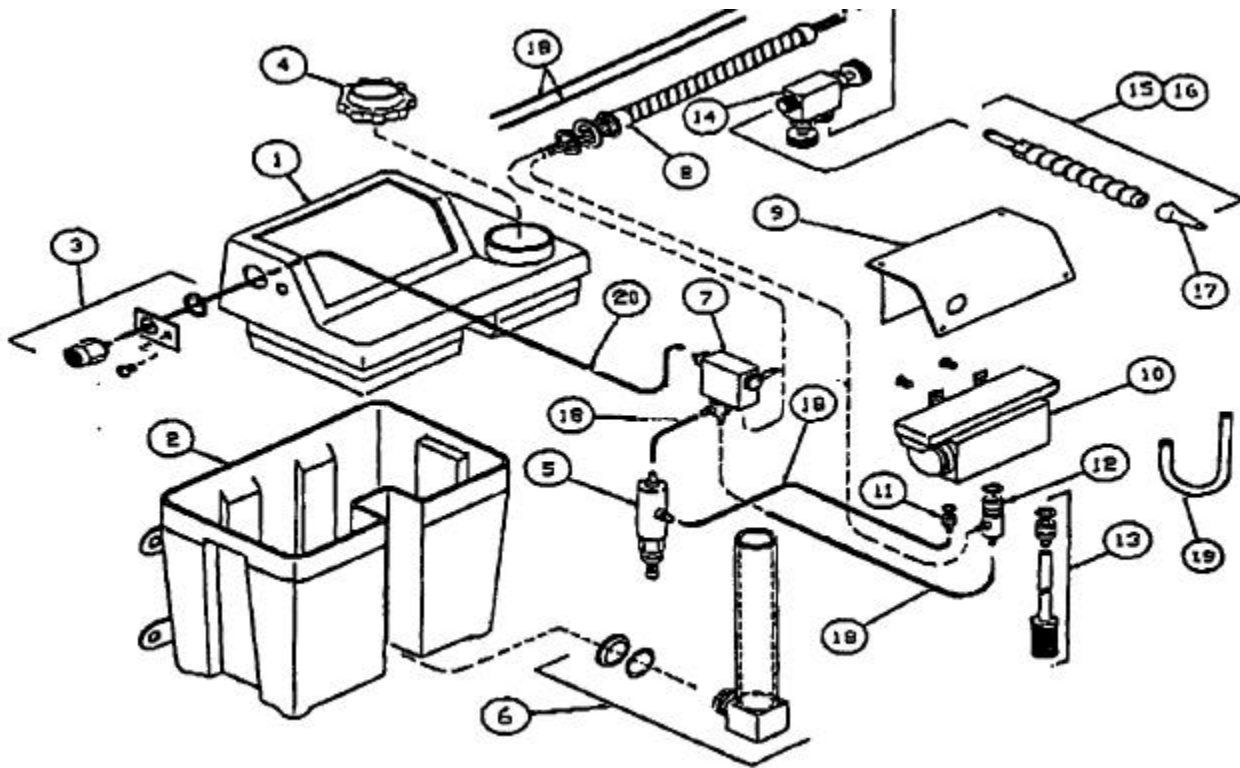
CONTROL VALVE REPLACEMENT

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.
3. 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.
4. Thread the knurled cap to the valve body.

LINE REPLACEMENT

1. 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 tube retainer eyelet away from the valve body. Cut the tubes. Keep the retainer eyelet. Trim the remaining tubing from the barbs on the control valve.
2. Separate the pump access plate from the cover by removing the four screws on top 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.
3. Remove the nut and lockwasher that fasten the armored line to the cover. Remove the line and discard it.
4. Feed the tubes of the new line assembly through the hole in the cover. Insert the brass fitting into the hole and replace the lockwasher and the nut.
5. 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 pump access plate to the cover.
6. Assemble the line and control valve using the CONTROL VALVE REPLACEMENT instructions above (steps 3 and 4)





ITEM NO.	PART NO.	DESCRIPTION
1	12055R 12061R	Cover - 1 Outlet Cover - 2 Outlet
2	21459R	Reservoir Assembly
3	21461R	Air Inlet Assembly
4	11530R	Filler Cap
5	21463R	Regulator Assembly
6	21450R	Sight Tube Assembly
7	21469R 21470R	Toggle Valve Assembly - 1 Outlet Toggle Valve Assembly - 2 Outlet
8	21134R	Armored Line Assembly - 5 Ft.
9	12059R	Access Plate
10	21467R	Pump Assembly
11	21468R	Pump Air Fitting Assembly
12	21464R 21465R	Coolant Fitting Assembly - 1 Outlet Coolant Fitting Assembly - 2 Outlet
13	21471R	Filter Assembly
14	21375R	Control Valve Assembly
15	30620	Nozzle Assembly - 7 In.
16	30621	Nozzle Assembly - 12 In.
17	21454R	Replaceable Nozzle Tip Assembly
18	66223R	Polyurethane Tubing (Available by the foot)
19	66229R	Polyurethane Tubing (Available by the foot)
20	66242R	Nylon Tubing (Available by the foot)

