Mist Coolant Option

P66441A Rev A

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Welcome

Thank you for purchasing the Mist Coolant Option for your Sabre™ router. This option sprays a fine lubricant mist on the cutting tool to cool and lubricate it when cutting metals such as aluminum and brass. You do not use it when cutting non-metallic materials such as wood or plastic.

About this booklet

This booklet provides a list of the kit contents and instructions for installing and using the Mist Coolant Option. Special information in this booklet is presented in notes, cautions, and warnings as follows:

- *Note: A note contains important information which could affect successful completion of a task.*
- **CAUTION: A caution statement contains information which, if not observed, could result in damage to the equipment.**
- **WARNING: A warning statement contains information which, if not observed, could result in personal injury.**

Getting help

If you have questions regarding the installation or use of the Mist Coolant Option, please contact the Gerber Router Support Group at:

860-528-1028

860-290-5568 (fax)

Kit contents

The Mist Coolant Option kit contains the following:

- coolant control panel with flex lines and attaching hardware
- coolant tank kit with filter, cap plug, retainer and attaching hardware
- 1 tie wrap
- 1 gallon of TRIM® mist coolant
- flex line support bracket with mounting screw and washer

Installing the Mist Coolant Option

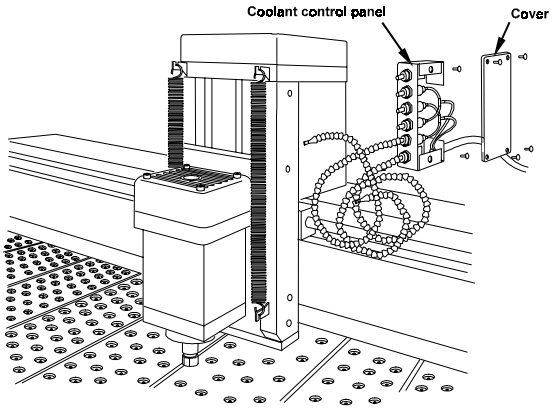
Installing the Mist Coolant Option involves the following steps:

- Install the coolant control panel on the carriage.
- Feed the coolant hoses through the cable carrier behind the beam.
- Mount the coolant tank
- Assemble the coolant tank

Note: You must have a source of continuous compressed air between 90 psi minimum and 120 psi maximum.

Installing the coolant control panel

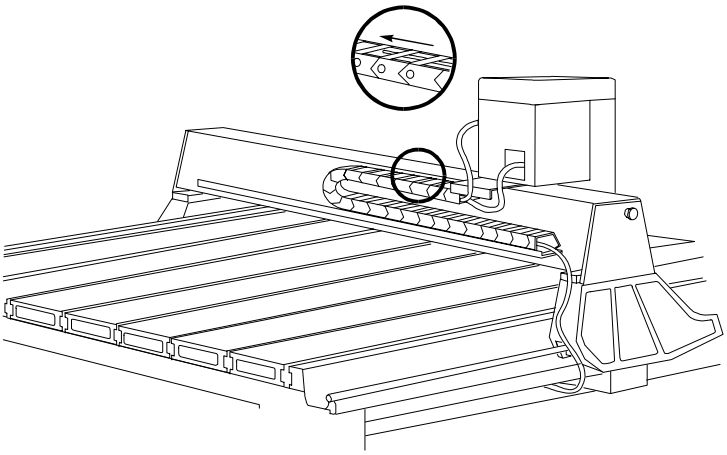
1. Attach the coolant control panel to the right side of the motor carriage using two M4 screws and lock washers provided in the kit. Insert the screws into the center holes of the control panel and tighten.
2. Attach the control panel cover using the four M4 screws provided in the kit.



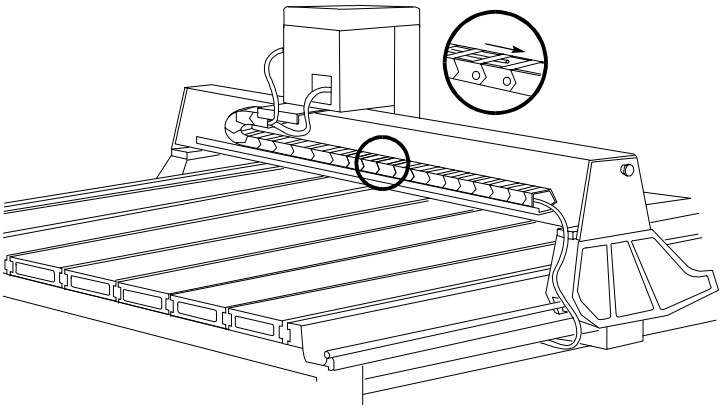
Installing the hoses in the cable carrier

1. The two hoses are surrounded by a large black hose for the first several feet as they first come out of the coolant control panel. After they come out of the large black hose, tape the two hoses together to make them easier to feed through the cable carrier. Tape the ends as well as several places along the hose.
2. Move the motor carriage all the way to the front left corner of the table.
3. Position the coolant hoses so that they pass over the top of the chip removal hose.

4. Feed the mist coolant hoses through the cable carrier until the ends of the hoses reach the bend in the cable carrier.



5. Move the carriage to the front right corner of the table.



6. Pull the hoses out of the cable carrier, then feed them back into the carrier through the same slot. Pulling them out first makes feeding them through the remaining section of the carrier easier.

7. Continue to feed the hoses until they reach the end of the carrier. Gently pull the slack out of the hoses.

8. At the left side of the carrier, position the black hose surrounding the coolant hoses so that it can be tie-wrapped to a tie wrap mounting tab. Attach it to the tab.

9. Feed the mist coolant hoses through the tie wraps on the chip removal hose.

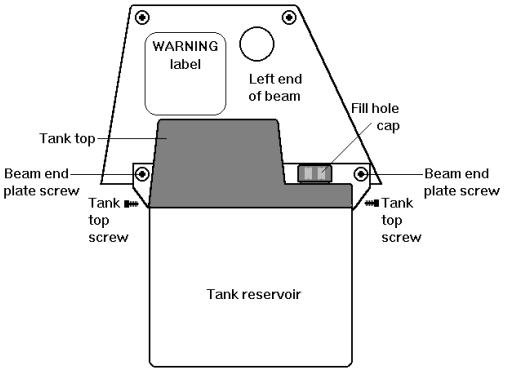
Mounting the coolant tank

1. Remove the fill hole cap from the tank top.

   Remove the two tank top screws attaching the top to the reservoir, then remove the top.

   Remove the two lower left beam end plate screws shown at the right.

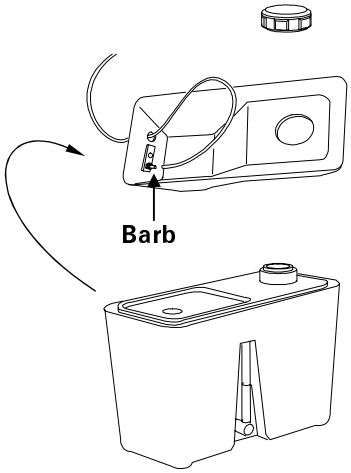
   Attach the tank reservoir and bracket to the left end of the beam with the screws removed at step 3.



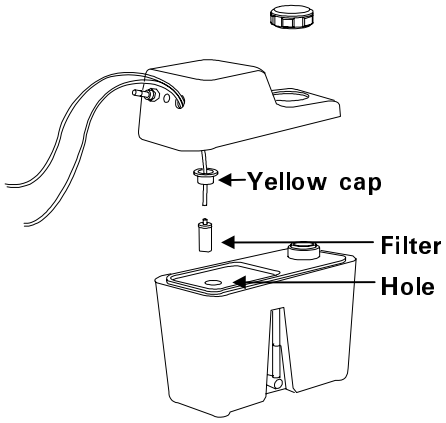
Assembling the coolant tank

1. Feed the hoses through the small hole in the tank top.
2. Push the blue hose (the air hose) onto the barb as shown in the illustration at the right.

   Note: You may need to trim excess hose so that it fits comfortably within the enclosure.



3. Feed the black hose with the red stripe (coolant hose) through the yellow cap supplied in the kit as shown in the illustration.
4. Attach the filter supplied in the kit to the end of the hose and feed it through the hole in the top of the tank reservoir until it rests on the bottom of the tank.
5. Press the yellow cap into the hole in the top of the tank reservoir.
6. Replace the tank top and secure it to the reservoir with the two hex screws.



7. Replace the fill hole cap.
8. Screw a compressed air quick disconnect fitting to the outside of the tank top opposite of where you attached the blue air hose over the barb on the inside. Seal the threaded connection with teflon tape.

Filling the coolant tank

TRIM mist coolant is a vegetable-based liquid which can skin over or clot if left in the coolant tank for awhile. This can create restrictions in the liquid tubing, the nozzle tips, and the pickup filter and tube. Do not mix more than you are likely to use for a job.

1. Prepare the coolant mixture by mixing water and coolant in a 10-to-1 ratio. You must use only TRIM mist coolant with the Trico mist system.
2. Remove the fill hole cap and pour the coolant mixture into the tank. Do not overfill.

If you do not use all the mixture, empty any leftover mixture into a separate, covered container. Put about a cup of plain warm water in the tank and open the air and coolant valves as described in the next paragraph to rinse out the system.

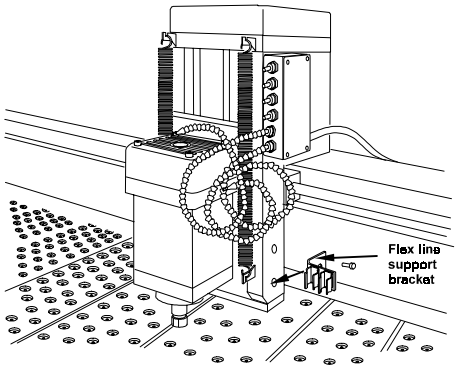
Leftover coolant mixture can be reused. Just skim off any skin on the top of the mixture and pour it into the coolant tank.

Using mist coolant

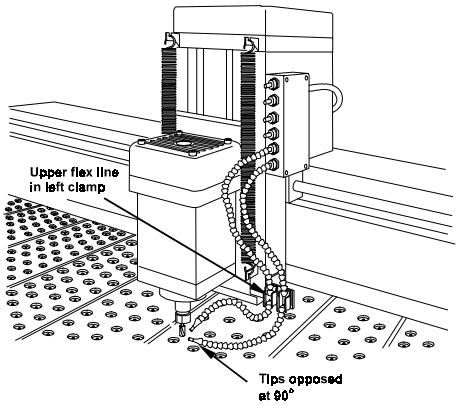
Note: The Mist Coolant Option cannot be used at the same time as the Chip Removal System or the Engraving Option.

1. Disconnect the chip removal system vacuum hose from the vacuum shroud and tuck it behind the motor carriage.
2. Remove the pressure foot and vacuum shroud from the carriage by removing two screws from each side of the shroud. Store the screws with the shroud.
3. Attach the flex line support bracket to the lower right vacuum shroud hole in the carriage using an M6 X 16 socket screw and washer supplied in the kit.

   CAUTION: When uncoiling and coiling the flex lines, do not twist them or you may kink the hoses within the lines. To unkink hoses, pop the flex line segments apart one at a time until you locate the kink, then reconnect the line segments.



4. Carefully uncoil the flex lines.
5. Attach the upper flex line (Line 1) to the left clamp. Attach the lower flex line (Line 2) to the right clamp.
6. Position the tips at right angles to each other, aimed at the point where the tool will enter the material being cut, and pointing slightly down and forward. **Do not aim the tips pointing toward the rear of the router table – coolant can be sprayed on the carriage lead screw and damage it.**



7. Use the quick disconnect plug to connect the compressed air hose to the coolant tank and turn on the compressed air.

8. Remove the fill hole cap and check the coolant level before starting each job. Refill the tank, if necessary.
9. Open both air valves by turning the control knobs one-quarter turn counterclockwise until you hear the air come out of the tips.
10. Open both coolant valves by turning the control knobs one-quarter turn counterclockwise until coolant starts to come out.

    Note: Because the coolant fluid is siphoned into the hoses, coolant may not appear at the nozzles for approximately 45 seconds after the valves have been opened for the first time. After you have used mist coolant the first time, coolant may not appear for 10 to 15 seconds.
11. Adjust the amount of spray by adjusting both the coolant and air valves until a wet mist is sprayed on the material. Light spray is appropriate for most jobs. Use heavier spray for soft materials. If the amount of spray is insufficient, the material will overheat and may melt, and tools may break.
12. Start the job. Check the material for correct coolant delivery and adjust as necessary during the job. Keep the material wet, but do not allow the coolant to puddle on the material.

    Note: If the mist stops, check the following:

    - *the nozzle tips may be clogged*
    - *no coolant in the tank*
    - *the flex lines may be twisted*
    - *the air pressure may not be high enough*

Turning off mist coolant

After the job has completed, turn off the coolant valves first, then turn off the air valves. Turning off the valves in this sequence keeps coolant in the hoses and speeds delivery when the system is used next.

Coil the flex lines against the coolant control panel when not in use.

Mist Coolant Option User's Manual
Comment Card

Please take a moment to complete this questionnaire and mail it to Gerber Scientific Products or fax to 860-290-5568. We are working hard to produce documentation that will meet your needs. We value your comments.

Name: _____ Phone:_____

Address:_____

			1 2 3 4 5	
1.	How many years of experience do you have with personal computers?	**none**	( ) ( ) ( ) ( ) ( )	**over 5 yrs experience**
2.	How often do you refer to the manual?	**never**	( ) ( ) ( ) ( ) ( )	**frequently**
3.	Was the manual easy to use?	**difficult**	( ) ( ) ( ) ( ) ( )	**easy**
4.	Did you learn what you needed to know?	**no**	( ) ( ) ( ) ( ) ( )	**yes**
5.	Was the manual well organized?	**poorly organized**	( ) ( ) ( ) ( ) ( )	**very well organized**
6.	Was the manual clearly written?	**not clear**	( ) ( ) ( ) ( ) ( )	**very clear**
7.	Were there enough illustrations?	**not enough**	( ) ( ) ( ) ( ) ( )	**enough**
8.	Did the illustrations support the procedures?	**no**	( ) ( ) ( ) ( ) ( )	**yes**
9.	What is your overall rating of the manual?	**poor**	( ) ( ) ( ) ( ) ( )	**excellent**

Comments:_____

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