

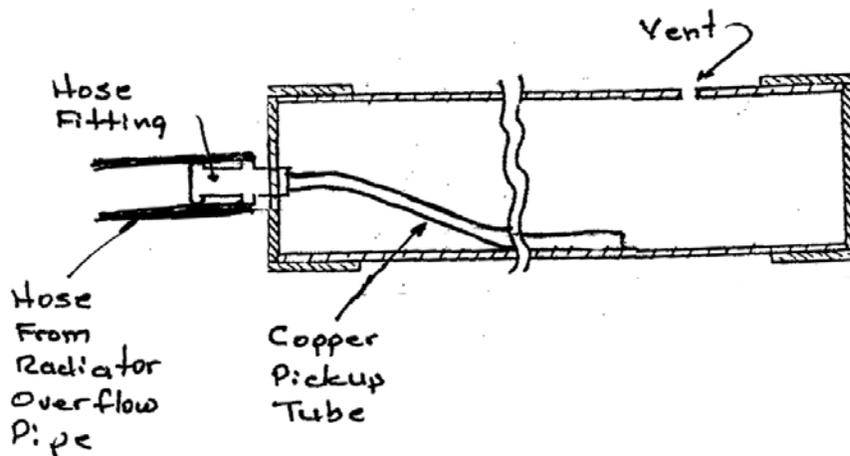
MG TC

COOLANT CATCH TANK

COOLANT RECOVERY SYSTEM

Most racing groups require a catch tank for coolant overflow. My goal in meeting this requirement was to have a tank that was out of sight and could also serve as a recovery system.

In the January, 1984 issue of "Skinned Knuckles" Robert Kaiser detailed a Pressure/Coolant Recovery System for the MG TC. In concept it met my needs, however I did not want to have a pressurized system, so I modified his concept to just make it a catch tank/recovery system.



The materials used are:

- 14" length of 2" or 2 1/2" ABS pipe
- (2) end caps to fit pipe size
- 1/8" NPT brass hose fitting
- 12" length of copper tube, sized to fit inside the hose fitting
- (2) 4" hose clamps to hold the tank to the front cross tube (see Photo below)
- Length of small diameter radiator hose of a length to connect the hose fitting to the existing radiator overflow tube
- (2) small hose clamps for the connector hose

The key to this tank, what makes it a coolant recovery system, is the copper tube inside the tank. The tube must be bent to rest on the bottom of the tank and be submerged so that as the engine cools the radiator will pull coolant (or in the case of racing, water as coolant is not generally allowed) back into the radiator. Because this is a basic syphon,

without the tube, unless there is an unusually high level of coolant (water), only air will be returned to the radiator.

Assembly of the parts is straight forward, except for the vent which will be noted later.

- Drill and tap one of the end caps for the brass hose fitting
- Solder the copper tube into the hose fitting
- Test fit the hose fitting w/tube into the end cap and pipe. Bend the copper tube to ensure that the tube is touching the side of the tube
- Cement the end cap w/tube to the ABS tank pipe
- Once cemented, determine the bottom of the tank pipe, that is the point where the copper tube touches the tank tube
- At the point opposite the copper tube (what will be the top of the tank) drill a 1/4" vent hole
- Cement the other end cap to the tank
- Mount the tank the car cross tube
- Connect the radiator overflow tube to the catch tank.



The installation can be done without removing the valance. Once installed, the tank is out of sight unless viewed from under the car.