## INSTALLATION INSTRUCTIONS



## PRODUCTS, INC.

**EXPANSION TANK** 

MANIFOLD

Model ET-1K

1917 Oak Park Blvd. Pleasant Hill, CA 94523 (925)935-3027 FAX (925)935-3518 www.dedenbear.com race.mail@dedenbear.com

The Dedenbear ET1 expansion tank provides a convenient location to fill the engine cooling system. By locating the radiator cap at the highest location on the engine, it will also help trap any air in the system. When the coolant heats up and expands, the cap will allow the air to be pushed out of the system into your overflow can. When the coolant drops in temperature, it will be drawn from the bottom of your overflow can, provided you've modified the fitting with a small hose or tube that extends to the bottom (ie: recovery system). The sight gauge on the side of the ET1 allows the racer to see the coolant level of the motor without opening the radiator cap. The two extra threaded holes centered on either side provide a convenient location for scoop mounts or throttle return spring bracket attachment. If you are using a reverse flow system, call tech. support for information regarding your system.

## INSTALLATION

- 1. The expansion tank has the capability to connect to three different types of outlet hoses. If you want to use braided line, the outlet has been drilled and tapped for a 3/4" pipe thread. Use -10AN or larger braided hose. If you are using standard V8 upper radiator hose (1-1/2" inside diameter) you can slip the hose directly over the outlet. If you are using a Volkswagen radiator hose (1-1/4" inside diameter) you can use the smaller portion of the outlet. In the case of the VW hose, take a hacksaw and cut the end off the outlet; then deburr the cut with a file. Be sure to leave the small bead on the outlet so the hose and hose clamp have something to grip.
- 2. Remove the upper radiator hose and thermostat housing. Scrape the gasket surface clean.
- Install the expansion tank using the new gasket. Do not install a thermostat or restrictor plates for race applications. Connect the outlet hose of your choice using a hose clamp if you are using a standard radiator hose. If you are using braided line, install a AN to 3/4"NPT adapter using a liquid teflor type thread sealer on the threads. Remember to use the largest possible hoses that you can so you don't restrict flow.
- 4. Install the sight tube on the side of the tank. Using a thread sealer, screw in the two brass right angle fittings with the outlets (compression fitting end) pointed towards the rear of the tank. Slip the tubing firmly into the fittings until the ends bottom out. Do not cut the tubing, since it was cut to the exact length at the factory. Tighten the compression fitting nuts (do not over-tighten). The sight tube should look like a loop when you are finished.
- 5. Using a thread sealer, screw in the brass barbed fitting for the overflow tube at the top of the tank. Either hole location can be used. Plug the remaining hole with the supplied 1/8" pipe plug, again using a thread sealer. Run an overflow line from the barbed fitting to your overflow can fitting. \*Remember, you can make your overflow can into a recovery system by extending the fitting with a tube to the bottom of the can. Be sure NOT to plug the vent (small hole or second fitting)on the top of the can. The closed system cap used will draw the coolant back into the motor when it cools down. Similar to production street vehicles.
- 6. Fill the cooling system slowly through the top of the expansion tank. Turn on the water pump and let the water circulate for about 5 minutes, stopping every so often to refill the tank (the water level will drop as air is being purged from the system). Top off the tank, install the cap and you are ready to go.

The RADIATOR CAP that this tank is designed for is part number 10331 (lever type) manufactured by STANT, INC. (also available from Dedenbear: Part no. #ETC).

## LIMITED 1 YEAR WARRANTY

Dedenbear Products components are warranted directly by Dedenbear Products against defective materials or workmanship under normal use and service for a period of one (1) year after purchase. Dedenbear Products will repair or replace the defective unit, at Dedenbear Products option, free of charge. This warranty does not cover any damage to the component caused by abuse, mishandling, alteration, accident, electrical current fluctuations, failure to follow installation/operating instructions, maintenance, storage and environmental conditions, acts of God, or repair attempts made by anyone other than Dedenbear Products Authorized Service facility.

DEDENBEAR PRODUCTS SHALL NOT BE LIABLE FOR INJURY, CONSEQUENTIAL, OR OTHER TYPE DAMAGES RESULTING FROM THE USE OF ITS PRODUCTS, OTHER THAN THE

LIABILITY STATED ABOVE. This warranty is in lieu of all other warranties of merchantability or fitness of use. This warranty gives you specific legal rights, and you may also have other rig which vary from state to state.

FOR SERVICE on all Dedenbear Products, return directly to: DEDENBEAR PRODUCTS, INC. • ATTN; REPAIRS • 1917 OAK PARK BLVD. • PLEASANT HILL. CA 94523. For Faster Service.

please include a note describing the nature of the problem, a copy of your original invoice, your name, return shipping address, and daytime & evening phone numbers reached. Or call us and we'll take down the information. Normal turn-around time on service is typically 24-48 hours.

CUSTOMER SERVICE & TECH. SUPPORT: (925)935-3027 Mon-Fri 8am-5pm PST