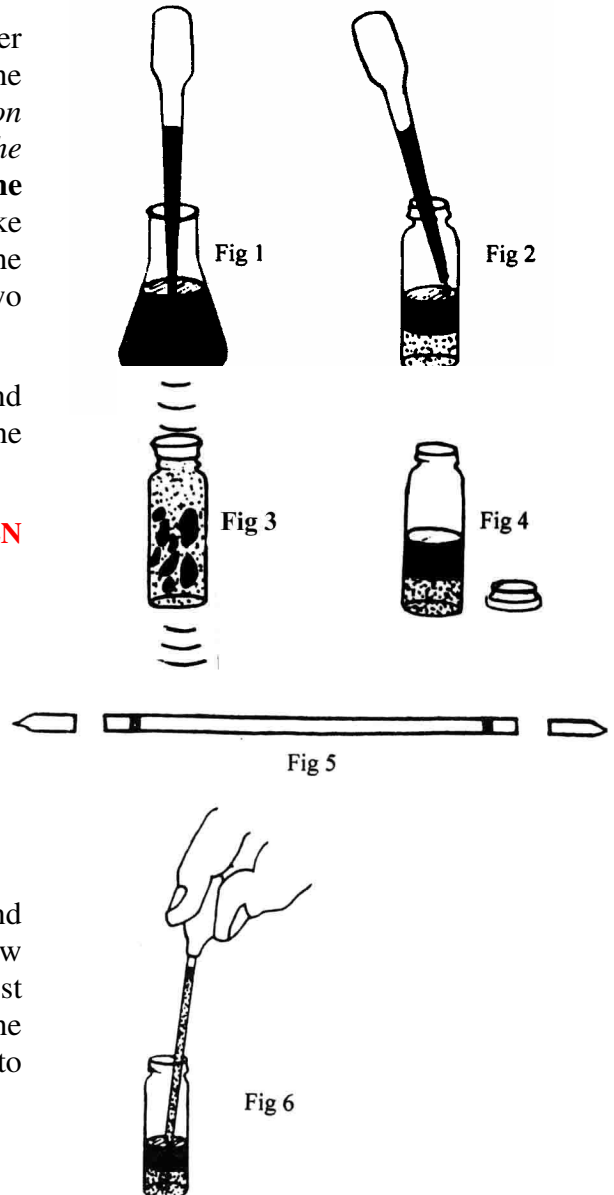


## \* GLY-TEK TEST FOR DETERMINATION OF ETHYLENE GLYCOL IN ENGINE OIL\*

### Directions:

- ◆ Remove a glass vial from the carton. Fill the eyedropper pipette  $\frac{3}{4}$  full with the sample oil to be tested and add to the vial. (*For semi-quantitative results, using the concentration chart, the quantity of sample oil added should equal the amount of liquid in the vial.*) **Pipettes are to be used one time only and then discarded.** Replace the cap and shake vigorously for 20 seconds. Remove the cap and place the vial on a flat surface in an upright position. Allow the two liquids to separate (*See Figures 1-4*).
- ◆ The indicator tubes in this kit have been pre-scratched and are ready for breaking. Locate the scratch mark, below the plastic end, and break away from mark (*Figure 5*).
- ◆ **C-A-U-T-I-O-N: PROTECT FINGERS AND EYES WHEN BREAKING OFF ENDS OF INDICATOR TUBES!**
- ◆ Insert one of the open ends of the indicator tube into the rubber suction bulb. Carefully squeeze the suction bulb fully between two fingers, expelling any excess liquid in the tube onto a small paper towel. (Disregard any purple color that may form on the towel). With the suction bulb squeezed fully, insert the other open end of the tube into the **bottom** of the glass vial (*Figure 6*).
- ◆ Slowly release the fingers holding the suction bulb and allow the clear extract from the bottom of the vial to flow slowly to the top of the indicator tube. When the liquid just passes the top felt plug (about  $\frac{1}{8}$  inch), quickly remove the suction bulb, being careful not to allow any more liquid to enter. (*Never allow any liquid to enter the suction bulb!*)
- ◆ Remove the indicator tube from the vial. Wipe the lower end with a paper towel and place on a flat surface in a horizontal position for 15 minutes. Test results develop in the lower end of the silica gel.



Disregard any tan or brown color that may immediately develop just above, below or in the felt plug, at the lower end of the indicator tube. This band of color, anywhere from  $\frac{1}{8}$  to  $\frac{3}{4}$  inch long, will not increase in length, but will gradually darken to brown or black-brown and could have a dark purple base. This reaction will have no effect on the quality of the test.

**IMPORTANT:**  
**Read directions on reverse side before starting test procedure**





**INTERPRETING RESULTS OF GLY-TEK TEST FOR ETHYLENE GLYCOL\***

**The Test is NEGATIVE:** If no color (other than the band previously described) develops within 15 minutes.

**The Test is POSITIVE:** If a faint pink color begins to develop at the base of the indicator tube. The developing pink color may begin within a few seconds, or take several minutes. It will continue to lengthen and darken to pink or shades of purple, depending on the concentration of glycol present. In higher glycol concentrations, the color will develop faster, be darker, and the length of color in the tube is longer. Weaker glycol concentrations take longer to develop, are lighter in color, and the length of color in the tube will be shorter. A Semi-Quantitative estimate of glycol concentration may be determined by comparing the color developed (after 15 minutes) with the concentration chart below.

A Glycol Sample of 500 ppm is provided in the vial with the Red Cap. It is provided as a convenience if you wish to make a visual test of a positive sample. **DO NOT ADD ANY OIL.** Just insert tube and proceed as described above.

**CONCENTRATION CHART**

	1000 ppm (parts per million)
	500 ppm
	100 ppm
	50 ppm

**IMPORTANT NOTICES:**

- BRIGHT SUN OR HEAT MAY DAMAGE TUBES. (PINK OR PURPLE COLOR DEVELOPES) HOWEVER, REGARDLESS OF STORAGE CONDITIONS, IF SILICA SAND IN TUBE IS WHITE, TUBE IS 100% ACCEPTABLE.
- OCCASIONALLY OVERHEATING OR FREEZING IN SHIPPING MAY CAUSE A FAINT PINK COLOR TO DEVELOP IN THE PLUG IN ONE END OF THE INDICATOR TUBE. THIS COLOR WILL BE ELIMINATED IN STEP 6 OF THE INSTRUCTIONS. ATTACH THE SUCTION BULB TO THE END OF THE INDICATOR TUBE OPPOSITE FROM THE PINK PLUG, AND THEN AS YOU SQUEEZE OUT THE EXCESS LIQUID THE PINK COLOR WILL DISAPPEAR.

**\*PATENTED**