Technical Service Information

TSI–03–12–20

Date: December, 2003

Subject File: ENGINE

Subject: Color Change of Ethylene Glycol (Green Coolant)

DESCRIPTION

The Truck Maintenance Council has recently issued Recommended Practice RP351”Guidelines For Color Standardization of Engine Coolant / Antifreeze”. The purpose of this Recommended Practice is to propose guidelines for color standardization of engine antifreeze coolants based on antifreeze type.

NOTICE

The information supplied herein has been furnished by the manufacturer and/or the supplier for use with its product. International Truck and Engine Corporation reprints this information based on representations made to the Company by the manufacturer and/or supplier and is not responsible for any errors or mishaps resulting from such errors or from any misuse of the product. The coolant color will change when the new Purple coolant is added to any existing Green coolant. These coolants are completely compatible, however, the coolant color will definitely change. Every user is urged to carefully follow the instructions which accompany the product.

TECHNICAL SERVICES BULLETIN

SHELL FULLY FORMULATED COOLANTS COLOR CHANGE

The Technology Maintenance Council (TMC) recently issued Recommended Practice RP 351 "Guidelines For Color Standardization of Engine Coolant / Antifreeze". The purpose of this Recommended Practice is to propose guidelines for color standardization of engine antifreeze coolants based on antifreeze type (Table I below). In order to comply with TMC RP 351, the color of Shell's Type II Fully Formulated EG Coolants are being changed from Green to Purple. The products affected by this color change are: **Shell Diesel Ready Coolant A/F**, **Shell Fully Formulated Phosphate Free Coolant A/F** and **Pennzoil® Heavy Duty Antifreeze and Coolant**. ***This represents a dye change only with no other formulation changes.*** All affected products will continue to meet existing product specifications and carry the same OEM and customer approvals. Shell's other major antifreeze product lines (Shellzone®, Pennzoil Antifreeze/Summer Coolant, Quaker State Antifreeze/Coolant and ROTELLA® ELC) are in compliance with TMC RP 351 and are not affected by this color change.

TABLE I: TMC GUIDELINES FOR ANTIFREEZE / COOLANT COLOR CODING BY TYPE

Antifreeze / Coolant Type	TMC Spec	Suggested Color
Type I – Conventional Low Silicate	RP 302A	Green
Type II – Fully Formulated Ethylene Glycol	RP 329	Purple
Type III – Fully Formulated Propylene Glycol	RP 330	Blue
Type IV – Organic Acid Technology (OAT)	Per OEM Specs	Red

COLOR CONVERSION IN THE FIELD

Because the only change is the dye color, the new "Purple" Shell Fully Formulated coolant are completely compatible with the current "Green" products. Vehicles containing the current green product may be topped-off with the new purple product. It is not necessary to drain and flush the cooling system. As would be expected, mixing of green and purple colored products will result in off-color greenish-purple and purplish-green colors at lower concentrations of purple coolant. As the concentration of new product increases above 50%, the engine coolant will exhibit a more typical purple color. Photos showing possible color changes in transitioning from "Green" to "Purple" coolant are provided in the pictures below.

10% Purple 90% Green | **25% Purple 75% Green** | **50% Purple 50% Green** | **75% Purple 25% Green** | **90% Purple 10% Green** | **100% Purple Diesel Ready**

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