

## Fleetschool Fact Sheet

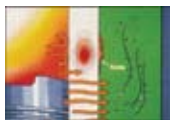
### Coolant Maintenance Tips

Cooling systems are frequently overlooked during maintenance.

40% of all engine problems originate or are caused by inadequate cooling system maintenance. Modern high speed, high performance engines require fully formulated, premixed, glycol based coolants containing formulated additive packages and de-ionized water. Make sure such coolants meet required standards to TMC RP330, RP338, 329 and / or ASTM D6211, D5216, D4985, D3306, D6210.

Here are some cooling system maintenance tips:

- Check systems for leaks, correct mechanical function of pumps, belt and pulleys.
- Check for correct thermostat operation. Engines running too cool or too hot are not running correctly, leading to equipment damage.
- Keep coolant levels maintained, using premix coolant. Using premix coolant to top up systems ensures glycol and inhibitor concentration levels don't get diluted. Using water, not only dilutes the chemistry, but poor quality make up water introduces impurities that lead to system contamination and corrosion.
- Avoid dirt ingress into the coolant during handling, storage, dispensing and servicing. Coolant contamination can interfere with the chemistry and system protection of your cooling system.



1.6mm of scale has same heat stopping effect at 75mm of steel over the same area.

- Fit cooling system filtration, if not already provided, fit retro kit # WFK1. Coolant filtration serves three purposes.
  - 1) The administration and dosage of inhibitor chemicals needing replenishment.
  - 2) The removal of wear causing particulate contamination.
  - 3) Extending the life of the coolant.
- Test inhibitor concentrations and glycol levels at every service interval, or at least twice yearly with test strips CC2602A(M)
- Replenish depleted coolant additives to the manufacturer's recommendation. Do not over charge the coolant by adding inhibitor above the recommended levels. This can also



#### CLEAN SYSTEM

Contaminated and fouled cooling systems cannot transfer heat sufficiently

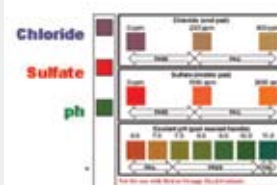
happen when chemical coolant filters are changed too frequently without monitoring the depletion of the coolant.

- Test coolant condemnation limits with test strips CC2718 at least twice yearly. This test detects undesirable impurities and conditions that require the changing of the coolant if detected. Replace coolant if coolant has not passed the test.
- Check the coolant for visual clues and odor. Investigate any changes to the coolant colour turning turbid, or unusual odors, such as ammonia. These could be early tell tale signs of problems that need attention.
- Start clean and stay clean. When changing the coolant, or during major maintenance / repair events, consider to clean and flush the system with a cleaner. For best results follow the manufacturer's recommendation.



#### Condemnation Test Strips

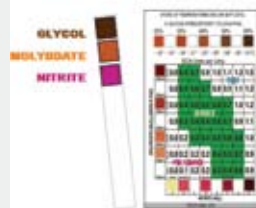
CC2718 - 10 strips



#### Coolant Charge Test Strips

CC2602M - 50 strips

CC2602AM - 4 foil packaged strips



# Fleetschool Fact Sheet



Part No. 3.301.029A



Part No. 3.301.032A



Part No. 3.301.023A



Part No. 3.301.024A

Other Fleetschool Fact Sheets can be found on the Cummins Filtration Website at:

[http://www.cumminsfiltration.com/en/product\\_literature/en\\_lit\\_asia.shtml](http://www.cumminsfiltration.com/en/product_literature/en_lit_asia.shtml)

## Test Your Knowledge

- 1) What are the benefits of using filters on cooling systems?
  - A) They help in the administering and dosage of coolant inhibitors
  - B) They remove wear causing particulate contamination
  - C) They extend the life of the coolant
  - D) All of the above
- 2) Why is the maintenance of the coolant system so important?
  - A) 40% of all engine problems originate from cooling system problems
  - B) It helps reducing oil leaks
  - C) It helps with the efficiency of the air condition system
- 3) Which of the typical problems below can cause equipment damage?
  - A) Mechanical function of pumps, belts, pulleys and thermostats
  - B) Using poor make up water quality
  - C) Overcharging the system with inhibitor
  - D) All of the above
- 4) What test kit tests the inhibitor concentration in Fleetguard coolants?
  - A) CC2718
  - B) CC2602M
  - C) CC2602M and CC2718

1) D 2) A 3) D 4) B  
**Answers**

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