

PGXL[®] HD

PREMIUM HEAVY DUTY COOLANT

COOLANT INHIBITOR MAINTENANCE CHART



Additives which protect against corrosion and liner cavitation in PGXL HD can deplete or degrade during service so these must be monitored and topped-up, if required, via chemical water filters and/or DCA4 liquid supplemental coolant additive (SCA).

MAINTENANCE

1 EXTENDED SERVICE (ES) INTERVAL

MAINTENANCE:

Use non-chemical or slow release ES chemical (DCA4+) water filters which are constructed to meet a 1 year, 250,000 kms or 4,000 hrs maintenance interval. The chemical filters replenish additives as they are needed during service are supplied in slow release chemical additive form. A single ES water filter will treat up to 80L of coolant and only need replacement once per year and can be used in conjunction with DCA4 (liquid). A good choice for on-highway or small coolant capacity engines (<80L).

2 STANDARD SERVICE (SS) INTERVAL

MAINTENANCE:

Use non-chemical or immediate release chemical (DCA4+) water filters. These require replacement every 20,000 kms or 250 hrs (approx. every oil change). The chemical filters range from 2-23 SCA units treating up to 230 litres of coolant.

3 DCA4 (LIQUID):

Can be used as part of the ES interval of SS interval servicing.

DCA4 is available in the following pack sizes:

PART NO.	SCA UNITS (IN PACK)	PACK SIZE (L)
DCA 60L	5	0.473
DCA 65L	20	1.89
DCA 75L	200	18.9
DCA 80L	2200	208



1 litre DCA4 liquid is equivalent to 10 units of SCA in a water filter.

For further information on our water filter range (part no., SCA Units and thread size), including filter head assemblies, refer to the Cummins Coolants & Chemicals Catalogue www.cummins.com.au.



PGXL[®]HD
PREMIUM HEAVY DUTY COOLANT

TESTING

ENSURE YOUR COOLANT CONCENTRATION IS 40-60%

PGXL HD propylene glycol level must be maintained between 40-60% v/v to ensure correct heat transfer properties and additive levels for best performance.

An accurate and easy way to monitor this is with a refractometer (CC2800).



PGXL HD refractometer: Part No. CC2800

If the glycol concentration is outside 40-60% adjust the coolant concentration before adjusting SCA levels.

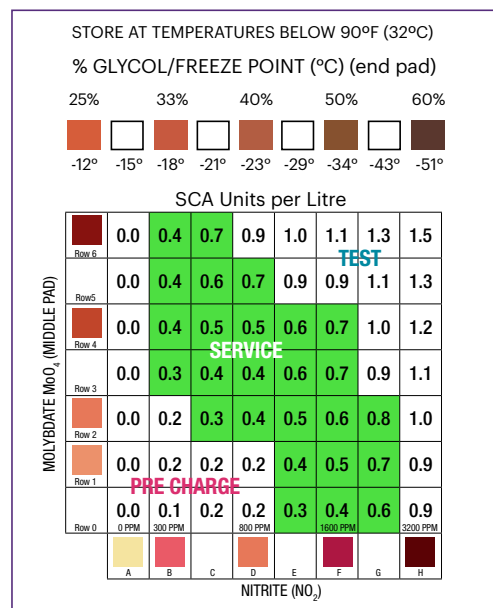
FLEETGUARD 3-WAY HEAVY DUTY COOLANT TEST STRIPS

Easy to use Fleetguard 3-way Heavy Duty Coolant strips monitor glycol and additive (measured as SCA level [nitrite/molybdate]) to flag coolant dilution and additive depletion.

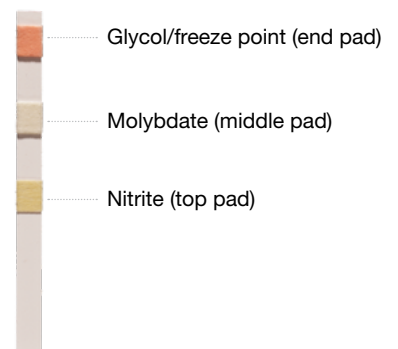
PACK TYPES	PART NO.
50 strip bottle	CC2602M
4 strip pack	CC2602AM

DCA4 (WATER FILTER OR LIQUID) SERVICE CARD

Indicates the number of SCA units per litre of coolant in your system based on nitrite and molybdate which are required for wet cylinder liner cavitation protection.



Test strip, prior to testing:



PGXL HD contains 0.7 units SCA (=7% v/v SCA) per litre of coolant.



MONITOR SCA LEVELS

Fleetguard 3-way Heavy Duty Coolant Strips (CC2602M or CC2602AM) monitor glycol and nitrite and molybdate levels. Read the SCA Units per Litre of coolant from the table on the Service Card or bottle and what region it falls into:

TEST / SERVICE / PRE-CHARGE

Extended Service (ES) Interval - **ANNUALLY**

Standard Service (SS) Interval - **EACH SERVICE**

TEST

SCA LEVEL ABOVE 0.8 UNITS PER LITRE

ES WF: Fit a non-chemical ES water filter.

SS WF: Fit a non-chemical SS water filter.

DCA4: Do not add DCA4 to the system.

DCA4: Do not add DCA4 to the system.

SERVICE

SCA LEVEL 0.3 – 0.8 UNITS PER LITRE

ES WF: Fit an ES WF for every 80 litres of coolant.

SS WF: Fit a SS WF containing DCA4+ (calculate as 0.1 unit SCA per litre of coolant in system) e.g. 50 litre system requires a 5 unit SS WF. For a 11/16" thread fit a WF2072 filter.

-or-

DCA4: Add 1 litre per 100 litres of coolant in system and fit a non-chem ES WF. e.g. 50 litre system requires 0.5L.

-or-

DCA4: Add 1 litre per 100 litres of coolant in system and fit non-chem WF. e.g. 50 litre system requires 0.5L (5 units) DCA4.

PRE-CHARGE

SCA LEVEL BELOW 0.3 UNITS PER LITRE

ES WF: Fit an ES filter for every 80 litres of coolant .

SS WF: Fit a SS WF containing DCA4+ (calculate as 0.4 units per litre of coolant in system. e.g. 50 litre system requires a 20 unit SS WF. For 11/16" thread fit a WF2076 filter.

-and-

DCA4: Add 4 litres per 100 litres of coolant in system and fit a non-chem ES WF. e.g. 50 litre system requires 2L (20 units) DCA4.

-or-

DCA4: Add 4 litres DCA4 per 100 litres of coolant in system and fit non-chem WF. e.g. 50 litre system requires 2L (20 units) DCA4.

If the coolant test returns a low result (<0.3) between annual filter replacements add a pre-charge amount of DCA4 liquid.

ALTERNATIVELY: Continual system top-up replenishes inhibitor concentration levels (eg. mining equipment).

Be aware that some engines will have two, or more, WF's fitted and should be taken into account when calculating the amount of SCA to add.

PRE-TEST INSTRUCTIONS

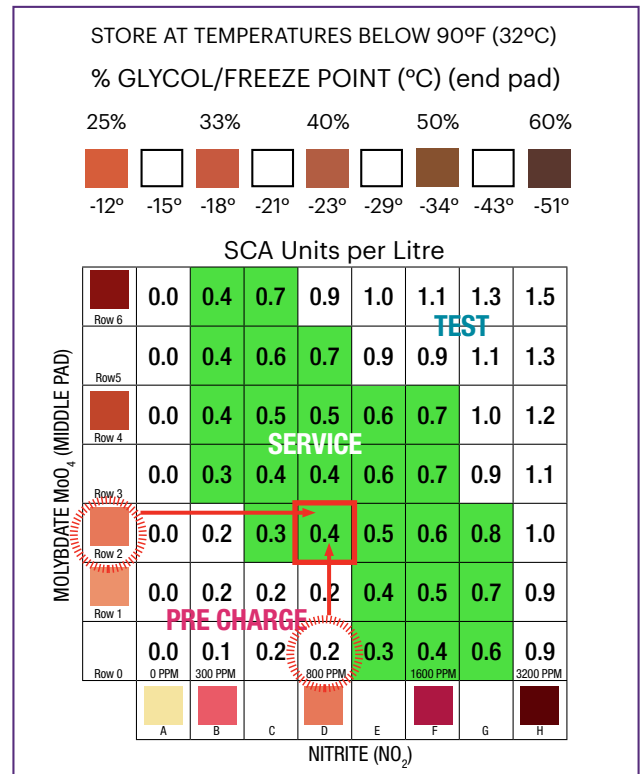
Recommended testing frequency ➤ at every lube service interval.

- Collect coolant sample from **radiator or petcock**.
- **DO NOT COLLECT FROM THE COOLANT RECOVERY OR OVERFLOW SYSTEM.**
- Coolant must be between **10 deg C and 55 deg C**. Room temperature is best.
- For accurate results – test must be completed **within 75 seconds**.

TEST INSTRUCTIONS

- Remove one strip from bottle and replace cap immediately. **DO NOT** touch the pads on the end of the strip. **DISCARD KIT** if nitrite test pads of unused strips have turned BROWN.
- Dip strip for **1 SECOND** in coolant sample, remove, and shake strip briskly to remove excess liquid.
- **45 SECONDS** after dipping strip, compare results to the colour chart included in the test kit and record in the following order:
- All three readings must be completed between 45 – 75 seconds after dipping. **No later than 75 SECONDS**.
- If uncertain about the colour match, pick the LOWER column or row (ex.: if nitrite colour is not quite F, use column E).
- The amount of SCA Units per litre of coolant is given where the Molybdate row intersects the Nitrite column.
e.g. Molybdate (300ppm), Nitrite (800ppm) intersects at 0.4 SCA Units per Litre of coolant in the system.
This is in the “SERVICE” region (0.3-0.8 SCA Units/L) ➤ Refer to the table above right.

Follow the guide for Extended Service (ES) and Standard Service (SS) intervals as described under section “Monitor SCA Levels” on the previous page.



For DCA4: the **MOLYBDATE** level intersects the **NITRITE** level.

Test strip, prior to testing:

