
# Radiator Caps

The Tridon radiator cap range has been developed to operate within original equipment manufacturer's specifications. Photographs and technical specifications are shown for each Tridon part number.

The Tridon radiator cap range contains 74 part numbers available in metal or plastic design suitable for use on sealed, recovery vehicle cooling systems or open, non recovery vehicle cooling systems.

As the radiator cap must be compatible with the vehicle cooling system, always refer to the vehicle application list to ensure the correct part number is selected.

TRIDON

# Radiator Caps

The radiator cap is designed to seal the cooling system to prevent coolant loss, maintain pressure within the cooling system and raise the boiling point of the coolant.  Radiator caps are manufactured to a predetermined pressure rating, utilising either metal or plastic design, and are suitable for use on sealed recovery or open non recovery vehicle cooling systems.

## Recovery Caps (double seal)

In a sealed or recovery cooling system the recovery radiator cap (double seal) allows coolant to flow to and from the recovery or expansion tank, maintaining the integrity of the cooling system. In a correctly operational recovery cooling system, coolant checks are only required at OEM recommended service intervals as the coolant is maintained within the system.

## Non Recovery Caps (single seal)

The open or non recovery cooling system does not have a recovery or expansion tank; the non recovery radiator cap (single seal) allows the release of coolant and the return of air to the cooling system. The non recovery cooling system requires regular coolant checks and replacement to ensure the system does not run dry.

**NOTE:** A recovery radiator cap (double seal) may be used on a non recovery system, however a non recovery radiator cap cannot be used on a recovery cooling system.

## Safety Lever Radiator Caps

Safety Lever Caps are suitable for both performance and mining applications preventing scalding and burns during cap removal.

This cap has an inbuilt lock where the lever must be lifted prior to turning to enable the cap to be removed. Safety lever caps feature a stainless body and brass pin to conform to mining requirements. The cap contains no aluminium components.

All lever caps are recovery style covering standard bayonet and small bayonet Japanese (CA, CB series). There are 7 part numbers available in lever style caps (refer to page 95 for range and pressures).


# Selection

The Tridon radiator cap range has been developed to operate within original equipment manufacturer's specifications. As the radiator cap must be compatible with the vehicle cooling system, always refer to the vehicle application list to ensure the correct part number is selected. Failure to use the correct radiator cap may result in severe engine damage.

Always check the following prior to installing a new radiator cap:

- Radiator cap style (Recovery or Non Recovery)
- Radiator cap dimensions
- Correct operating pressure

Additional vehicles and applications may have been introduced after the time of catalogue printing. For complete, up to date vehicle application listings refer to the Tridon website **www.tridon.com.au** (or www.tridon.co.nz) and go to Tridon Part Finder.

## Pressure Rating

Always replace the cap with the same pressure rating as recommended by the vehicle manufacturer.
Each additional pound of pressure above the specified pressure increases the boiling point of the coolant by 1.4°C or 2.5°F. Generally caps are designed from 4PSI (30kPa) to 30PSI (205kPa).

| Pressure Conversion | |
|---|---|
| PSI | kPa |
| 4 | 30 |
| 7 | 50 |
| 10 | 70 |
| 13 | 90 |
| 14 | 95 |
| 15 | 100 |
| 16 | 110 |
| 17 | 120 |
| 18 | 125/130 |
| 19 | 130 |
| 20 | 135/140 |
| 21 | 145 |
| 22 | 150 |
| 30 | 200/205 |

# Function

In the normal position both the pressure and vacuum valves of the Tridon cap remain closed (Figure 1). The pressure in the cooling system rises as the temperature rises. When the pressure begins to exceed the caps rated pressure, the pressure valve opens (Figure 2) releasing pressurised coolant from the radiator into the recovery or expansion tank.

The pressure valve closes as the excess cooling system pressure reduces. The cycle of opening and closing the pressure valve continues, maintaining the appropriate system pressure and protecting cooling system components from over pressurisation.

As the system cools down cooling system pressure reduces, creating negative cooling system pressure. Negative pressure can cause radiator tanks and hoses to collapse leading to damage to the cooling system.

To prevent damage, Tridon radiator caps have an additional vacuum valve to allow coolant or air to return to the radiator as the pressure reduces (Figure 3). This serves a dual purpose of allowing the cooling system pressure to equalise as well as allowing coolant to return to the radiator.

**Recovery Radiator Cap**

**Figure 1** – Radiator cap in closed position.

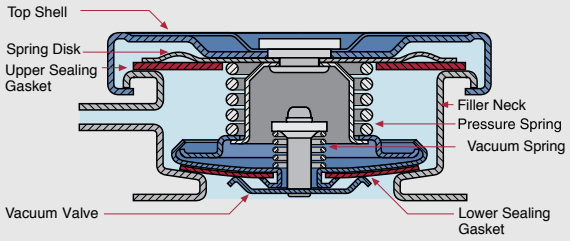



**Figure 2** – Pressure has exceeded the rated pressure releasing pressurised coolant from the radiator.

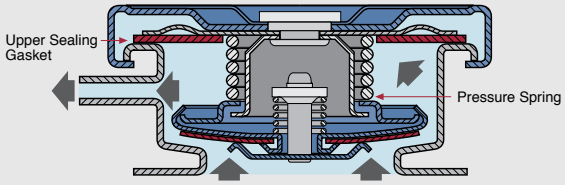
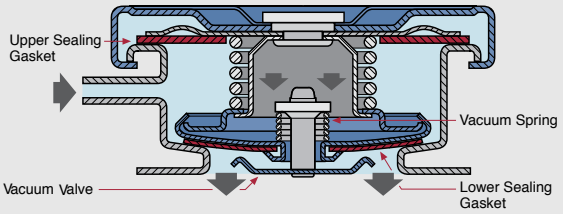



**Figure 3** – As pressure reduces, the radiator cap additional vacuum valve allows coolant or air to return to the radiator.




# Radiator Cap Test Procedure

For correct radiator cap testing a commercial type radiator cap and coolant system tester is required. For details on cooling system and radiator cap testers see service tools section page 117, including Toledo and Sykes Pickavant cooling systems and cap pressure testers.

**Step 1** Select the hand pump gauge assembly.

**Step 2** Select cap adaptor if required and attach to pump.

**Step 3** Moisten seals and connect cap to adaptor or pump.

**Step 4** Pump to exceed cap nominated pressure by 30%. Cap should blow off and return to nominated pressure.

**Step 5** Pressure should hold at the nominated pressure.

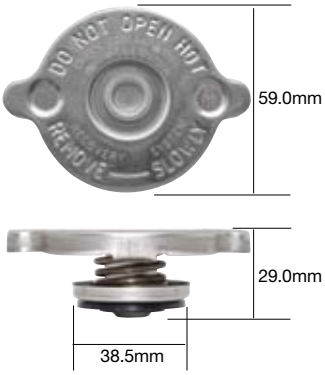
**Note:** There is a tolerance of 1-2PSI either side of the nominated pressure rating. Retest cap to verify results.

The cap should be replaced if:

1. The pressure is exceeded and it does not fall back to the nominated pressure tolerance of 1-2PSI.
2. The cap does not hold any pressure, i.e. needle on pump immediately returns to zero.
3. The cap falls outside the 1-2 PSI tolerance in holding pressure.

## CA Series

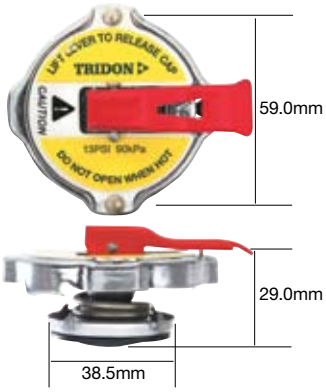
**Type** Recovery cap
**Style** Standard bayonet




| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 7 | 50 | CA0750 |
| 13 | 90 | CA1390 |
| 14 | 95 | CA1495 |
| 15 | 100 | CA15100 |
| 16 | 110 | CA16110 |
| 18 | 125 | CA18125 |
| 20 | 135 | CA20135 |
| 22 | 150 | CA22150 |

## CA Series with Safety Lever

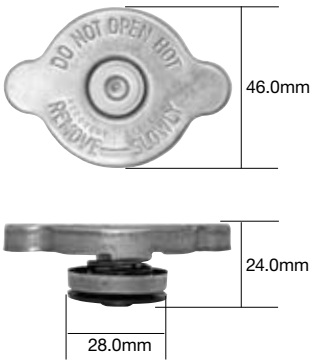
**Type** Recovery cap
**Style** Standard bayonet




| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 7 | 50 | CA0750L |
| 13 | 90 | CA1390L |
| 15 | 100 | CA15100L |
| 16 | 110 | CA16110L |
| 20 | 135 | CA20135L |

## CB Series

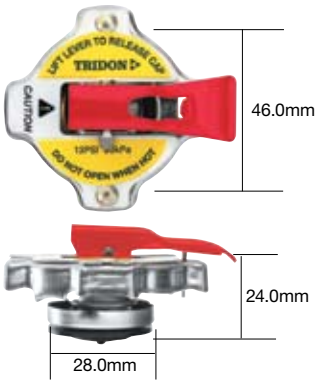
**Type** Recovery cap
**Style** Small Japanese bayonet




| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 13 | 90 | CB1390 |
| 15 | 100 | CB15100 |
| 16 | 110 | CB16110 |
| 17 | 120 | CB17120 |
| 18 | 125 | CB18125 |

## CB Series with Safety Lever

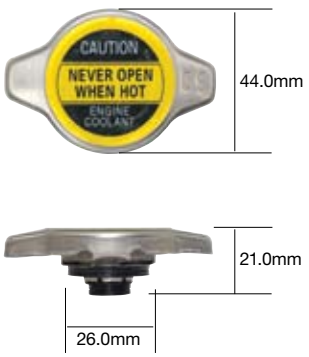
**Type** Recovery cap
**Style** Small Japanese bayonet




| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 13 | 90 | CB1390L |
| 16 | 110 | CB16110L |

## CC Series

**Type** Recovery cap
**Style** Extra small Japanese bayonet




| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 13 | 90 | CC1390 |
| 16 | 110 | CC16110 |

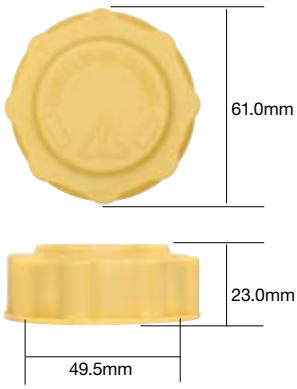
## CD Series

**Type** Recovery cap
**Style** Plastic screw (suits M48)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 20 | 135 | CD20135 |

## CE Series

**Type** Recovery cap
**Style** Plastic screw (suits M52)




| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 18 | 125 | CE18125 |

Note: To ensure correct product selection check vehicle application list.

## CF Series

**Type** Recovery cap
**Style** Plastic screw (suits M45)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 10 | 70 | CF1070 |
| 14 | 95 | CF1495 |
| 20 | 135 | CF20135 |

## CG Series

**Type** Recovery cap
**Style** Plastic screw (suits M45)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 14 | 95 | CG1495 |

## CH Series

**Type** Recovery cap
**Style** Plastic screw (suits M52)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 16 | 110 | CH16110 |

## CJ Series

**Type** Recovery cap
**Style** Plastic screw (suits M45)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 16 | 110 | CJ16110 |
| 18 | 125 | CJ18125 |
| 20 | 140 | CJ20140 |

## CK Series

**Type** Recovery cap
**Style** Plastic screw (suits M58)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 18 | 125 | CK18125 |

## CL Series

**Type** Recovery cap
**Style** Plastic screw (suits M53)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 20 | 135 | CL20135 |
| 30 | 205 | CL30205 |

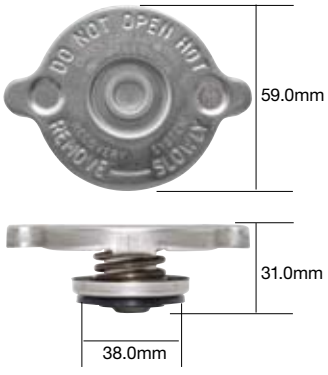
## CM Series

**Type** Recovery cap
**Style** Plastic screw (suits M52)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 16 | 110 | CM16110 |

## CN Series

**Type** Non recovery cap
**Style** Standard bayonet

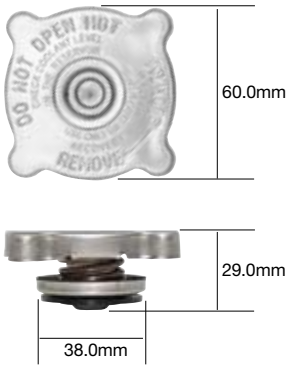



| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 4 | 30 | CN0430 |
| 7 | 50 | CN0750 |
| 10 | 70 | CN1070 |
| 13 | 90 | CN1390 |
| 15 | 100 | CN15100 |
| 20 | 135 | CN20135 |



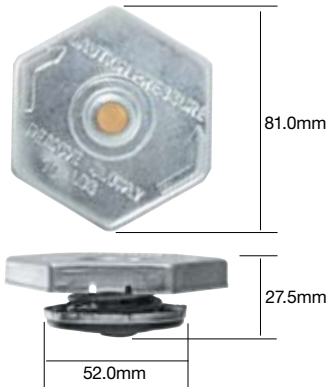
Note: To ensure correct product selection check vehicle application list.

## CO Series
**Type** Recovery cap
**Style** 4 ear bayonet



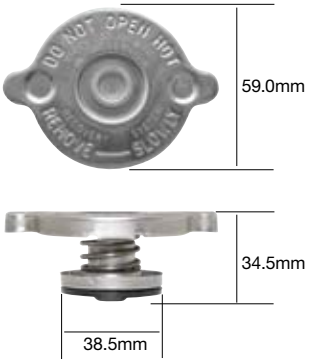

| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 18 | 125 | CO18125 |

## CP Series
**Type** Non recovery cap
**Style** Large bayonet



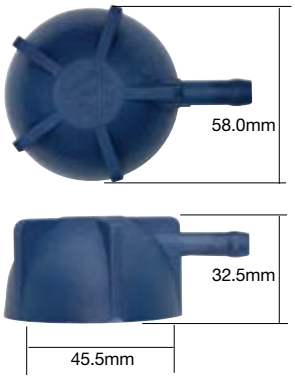

| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 4 | 30 | CP0430 |
| 7 | 50 | CP0750 |
| 10 | 70 | CP1070 |

## CR Series
**Type** Non recovery cap
**Style** Standard bayonet




| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 4 | 30 | CR0430 |
| 7 | 50 | CR0750 |
| 10 | 70 | CR1070 |
| 13 | 90 | CR1390 |

## CS Series
**Type** Recovery cap
**Style** Plastic screw (suits M48)

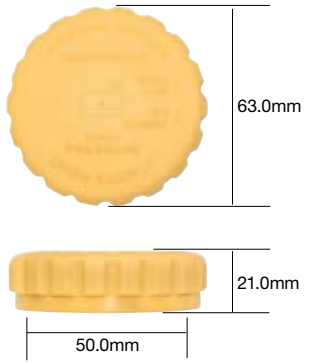



| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 16 | 110 | CS16110 |

## CT Series
**Type** Recovery cap
**Style** Plastic screw (suits M63)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 22 | 150 | CT22150 |

## CU Series
**Type** Recovery cap
**Style** Plastic screw (suits M53)




| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 17 | 120 | CU17120 |
| 20 | 135 | CU20135 |

## CV Series
**Type** Recovery cap
**Style** Plastic screw (suits M45)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 16 | 110 | CV16110 |
| 19 | 130 | CV19130 |

## CW Series
**Type** Recovery cap
**Style** Plastic screw (suits M55)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 16 | 110 | CW16110 |
| 18 | 125 | CW18125 |

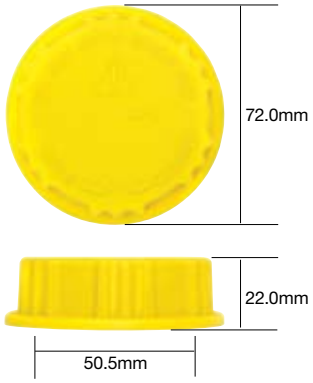
## CX Series
**Type** Recovery cap
**Style** Plastic screw (suits M53)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 18 | 125 | CX18125 |

Note: To ensure correct product selection check vehicle application list.

## CY Series

**Type** Recovery cap
**Style** Plastic screw (suits M52)




| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 18 | 125 | CY18125 |

## CZ Series

**Type** Recovery cap
**Style** Plastic screw (suits M53)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 20 | 140 | CZ20140 |

## DA Series

**Type** Recovery cap
**Style** Plastic screw (suits M50)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 21 | 145 | DA21145 |

## DB Series

**Type** Recovery cap
**Style** Plastic screw (suits M62)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 20 | 140 | DB20140 |

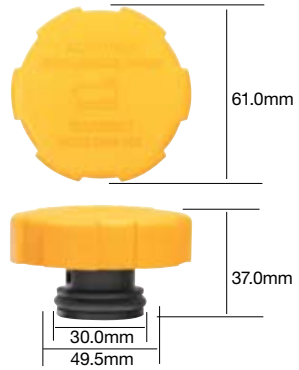
## DC Series

**Type** Recovery cap
**Style** Plastic (suits M45)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 20 | 140 | DC20140 |

## DD Series

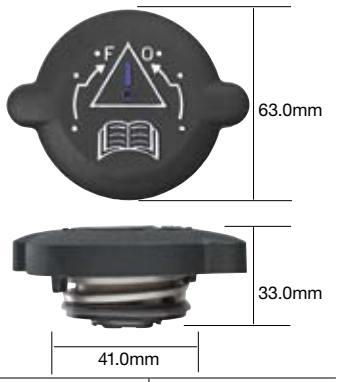
**Type** Recovery cap
**Style** Plastic screw (suits M53)




| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 17 | 120 | DD17120 |

## DE Series

**Type** Recovery cap
**Style** Plastic bayonet




| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 20 | 140 | DE20140 |

## DF Series

**Type** Recovery cap
**Style** Plastic screw (suits M53)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 20 | 140 | DF20140 |
| 30 | 200 | DF30200 |

## DG Series

**Type** Recovery cap
**Style** Plastic screw (suits M38)

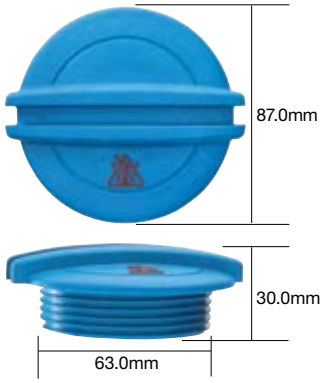

| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 20 | 140 | DG20140 |



Note: To ensure correct product selection check vehicle application list.

## DH Series

**Type** Recovery cap
**Style** Plastic screw (suits M62)




| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 18 | 130 | DH18130 |

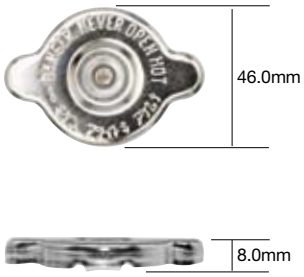
## DJ Series

**Type** Recovery cap
**Style** Plastic screw (suits M44)


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| 18 | 130 | DJ18130 |

## TRC Series – Small

**Type** Blanking cap
**Style** Small metal bayonet




| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| Nil | Nil | TRC11 |

## TRC Series – Standard

**Type** Blanking cap
**Style** Standard metal bayonet


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| Nil | Nil | TRC10 |

## TRC Series – Large

**Type** Blanking cap
**Style** Large metal bayonet


| Pressure | | Part No. |
|---|---|---|
| PSI | kPa | |
| Nil | Nil | TRC32 |

Note: To ensure correct product selection check vehicle application list.