Hose Kit Part No. & Car Model	Description	Hose No.
07-0012		
Holden Commodore (VL) 3.0L 6 Cyl. RB30 1986-88	Upper	05-0587
	Lower	05-0588
	Heater - Inlet	02-0131
	Heater Return	02-0131
	Pipe 1 to Pipe 2 (Bypass)	02-0141
	Heater - Pipe 1 to Engine	02-0141
	AC Valve to Heater Connector (Bypass)	02-0478
	Intake Manifold To throttle w/o Turbo (Bypass)	02-0479
	Pipe 2 to Pipe 3 (Bypass)	02-0480
	Pipe 3 to intake Man. w/o Turbo	02-0481
	Radiator to Reservoir	02-1211
	Reservoir Overflow	02-1214
CLAMPS 25 - 51mm x 4, 13 - 32mm x 6, 13 - 27mm x	2, 10 - 22mm x 12	

07-0013		
Toyota Landcruiser (HZJ70, HZJ73, HZJ75)	Heater - Inlet # 3	05-0863
4.2L 6 Cyl (1HZ) 1990-2001	Heater - Outlet	05-0891
	Upper	02-0269
	Heater - Inlet # 1	02-0719
	Lower	02-0764
	Heater - Rear Outlet	02-0765
	Heater - Inlet # 2	02-0823
	Header Tank to Radiator	02-1231
	Header Tank Overflow	02-1232
CLAMPS 25 - 51mm x 4, 13 - 32mm x 10		

Mitsubishi Pajero (NH,NJ) 3.0L V6 1991-95	Upper	05-0700
	Lower	05-0701
	Intake Manifold Bypass	02-1229
	The Body Water Intake	02-0636
	Thermostat Water Bypass	02-0634
	Radiator to Overflow Tank	02-1215
	Header Tank Overflow	02-1230
	Heater Hose	02-1180
	Heater Hose	02-1181

NOTE: Gates Automotive Hose Packs contain popular hose, please refer to this brochure and/or the pack content details. For more information on ECR and the range Gates products visit www.gatesaustralia.com.au

Hose Kit Part No. & Car Model	Description	Hose No.
07-0018		
Toyota Camry / Holden Apollo 2.2L 4 Cyl (5S) 04/93-95	Upper	05-0768
	Lower from 04/93	05-1096
	Bypass # 1	02-0073
	Heater - Outlet	02-0095
	Heater - Engine to Valve	02-0096
	Engine to Throttle Body	02-0446
	Heater - Valve to Heater	02-0395
	Engine to Pipe # 1	02-0396
	Engine to Pipe # 2	02-0396
	Reservoir to Radiator	02-1225
	Reservoir Breather	02-1226
CLAMPS 19 - 44mm x 4, 13 - 32mm x 12, 10 - 22mm x 2		

07-0019		
Holden Commodore (VT,VX) 3.8L V6 1997-02	Upper	05-1438
	Lower	05-1434
	Valve to Heater Upper	02-1086
	Valve to Heater Lower	02-1087
	Inlet to Heater Tap	02-1088
	Heater	02-1089
CLAMPS 44 - 70mm x 2, 25 - 51mm x 2, 13 - 32mm x	8	

07-0020		
Ford Falcon (AU) 4.0L 6 Cyl 1998-02	Upper	05-1525
	Lower	05-1524
	Radiator Supply	02-1039
	Heater	02-1115
	Heater Valve to Firewall	02-0115
	Firewall to Pipe (Engine)	02-0031
	Pipe Thermostat Housing to Header Tank	02-1222
	Pipe Header Tank to Radiator	02-1223
	Header Tank Breather	02-1224
CLAMPS 25 - 51mm x 4, 18 - 38mm x 2, 13 - 3	32mm x 5,  10 - 22mm x 6	

07-0027		
Holden Commodore (VR) 3.8L V6 1993 - 95	Upper	05-0741
	Lower	05-0662
	Heater - Engine to Valve	02-0063
	Bypass	02-0064
	Heater to Engine	02-0102
	Reservoir to Radiator	02-0412
	Valve to Heater	02-0851
CLAMPS 25 - 51mm x 4, 13 - 27mm x 4, 13 - 32n	ım x 2. 10 - 22mm x 4	



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Jates-®

# COOLANT HOSE PACK

TAKE THE HASSLE OUT OF SHOPPING AROUND FOR COOLANT HOSE PARTS.

Each Gates hose pack includes the relevant hose parts you need for a complete coolant hose service. They even include the clamps.



**DON'T RISK IT** - To prevent the risk of hose failure, change all major cooling system hose.

**FIT THE BEST** - With patented ECR technology, Gates hose is proven to fight the primary cause of hose failure.

**FIT GATES** - The most respected and trusted brand of hose, and preferred by most professional technicians.

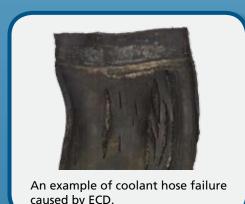
## **DON'T RISK IT**

### **COOLANT HOSE FAILS FROM THE INSIDE OUT**

The primary cause of coolant hose failure is an electrochemical attack on the rubber compound in the hose.

This phenomenon is known as electrochemical degradation, or ECD. It occurs because the hose, liquid coolant and engine/radiator fittings form a galvanic cell or "battery". This creates a chemical reaction which causes micro-cracks to form in the hose tube.

Coolant seeps into these cracks or stryations and begins to break down the reinforcement. This leads to hose failure and ultimately roadside breakdowns.



### PREVENTATIVE MAINTENANCE GUIDE

As there is no way to tell from a simple visual inspection if a hose has internal damage, Gates recommends that all cooling system hose should be inspected at least once a year for damage from the major hose enemies, including electrochemical degradation (ECD), heat, oil, abrasion, ozone and leakage.

The best way to check coolant hose for the effects of ECD is to squeeze the hose near the clamps or connectors using the following procedure:

- 1. Make sure the engine is cool.
- 2. Use fingers and thumb to check for weakness.
- 3. Squeeze near the clamps and connectors. ECD occurs within two inches of the ends of the hose - not in the middle (See image for correct position).
- 4. Check for any difference in the feel between the middle and ends of the hose. "Gaps," or "channels," can be felt along the length of the hose where it has been weakened by ECD. If the ends are soft and feel mushy, chances are, the hose is under attack by ECD.

To avoid the risk of a burst hose and a subsequent breakdown of the cooling



system, Gates engineers recommend replacing the hose immediately.

### IF ONE HOSE IS GONE, IT'S TIME TO REPLACE THE OTHER HOSE ALSO

The effects of ECD are NOT unique to the top or bottom hose only. ECD impacts on the entire system of coolant hose.

As such, if one coolant hose needs replacement due to ECD, it is highly likely that all other coolant hose will need replacement. As such, make sure you recommend a coolant hose replacement service to your customers.

Gates have made this process easy for you by introducing convenient hose packs which contain the hose parts you need for a comprehensive coolant hose service. They even include clamps!!!



### **COOLANT HOSE REPLACEMENT GUIDE**

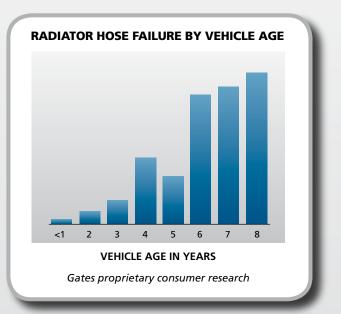
Pay special attention to hoses that have been in operation for four or more years. Hose failures increase dramatically after that period (see chart).

The best advice is to suggest replacement every four years for most vehicles. Vehicles operating under severe conditions may require more frequent replacements.

And remember, to prevent the risk of hose failure Gates recommends that if you are replacing one hose, that you should change all major cooling system hose at the same

#### WHEN TO REPLACE COOLANT HOSE:

- When you replace the water pump
- When you replace the thermostat
- Every four years of average driving
- Anytime you notice leakage or damage



# FIT THE BEST

To address the damage caused by ECD (Electro Chemical Degradation), Gates engineers developed an electrochemically-resistant coolant hose using a patented EPDM (ethylene propylene) formulation. We call this ECR\* or Electro Chemical Resistant.

Gates EPDM hose is better equiped at handling the extreme temperatures generated by modern vehicles.

By choosing Gates, you are providing a service to your customers that is proven to fight the primary cause of coolant hose failure, which is ECD.





# **FIT GATES**

Gates now make it even easier for the professional technician by providing comprehensive hose packs which makes light work of ordering coolant hose parts.

#### **Gates Hose Packs are Convenient:**

- Gates Hose Packs eliminate the time taken to hunt for the right hose parts (they even include clamps).
- Each pack contains the relevant hose parts you need to conduct a comprehensive coolant hose service.

#### Gates Hose Packs are Vehicle Specific

- Each pack provides the hose parts that are specific and relevant to each popular car make and model.
- You order one part number, and receive the coolant hose parts for the car you are working on.

#### Gates Hose Packs provide Real Value

- If one coolant hose needs replacement, it is recommended that the other coolant hose are replaced at the same time. This will help prevent hose failure.
- Gates Hose Packs provide a great reason to boost your sales and profits by offering a comprehensive hose service solution to your customers.

# **HOSE KIT PART NUMBERS**

Hose Kit Part No. & Car Model	Description	Hose No.
07-0001		
Ford Falcon (EF,EL) 6 Cyl 4.0L 1994-98	Upper	05-0916
	Lower	05-0917
	Valve to Heater	02-0031
	Heater Hose	02-0115
	Radiator To Supply Tank	02-0802
	Reservoir to Thermostat	02-1205
	Heater Pipe 1 to Pipe 2	02-1206
	Radiator to Reservoir	02-1208
	Heater Pipe 2 to Valve	02-1209
	Serge Tank to Resevoir	02-1213
CLAMPS 25 - 51mm x 4, 13 - 32mm x 7, 18 - 38m	m x 2,  13 - 27mm x  4,  10 - 22mm x 2	

07-0002		
Holden Commodore (VS) 3.8L V6 1995-97	Upper	05-0920
	Lower	05-0921
	Heater Outlet	02-0100
	Heater - Water Valve	02-0101
	Heater - Water Valve	02-0101
	Header Tank to Radiator	02-0409
	Header Tank Breather	02-1224
	Heater Inlet	05-1402
CLAMPS 25 - 51mm x 4, 13 - 32mm x 7, 19 - 44m	m x 1, 10 - 22mm x 4	

07-0008		
Holden Commodore (VN) 3.8L V6 1988-92	Upper (1988-90)	05-0663
	Lower	05-0662
	Heater Bypass	02-0032
	Heater Eng to Valve	02-0033
	Valve to Heater	02-0034
	Heater Outlet to Valve	02-0035
	Valve to Engine	02-0036
	Reservoir to Radiator	02-0409
	Reservoir to Engine	02-0410
	Res to Heater Pipe	02-0411
	Heater to Valve	02-0419
	Bypass	02-1009
	Surge Tank to Reservoir	02-1212
	Radiator to Intake Manifold	05-0678
CLAMPS 25 - 51mm x 6, 13 - 32mm x 14, 13 - 27	7mm x 2, 10 - 22mm x 6	