



**DESIGN, FIT,
FUNCTION AND DEPTH OF
ASSORTMENT,
AT SPECTRA PREMIUM
WE'VE GOT YOU COVERED**

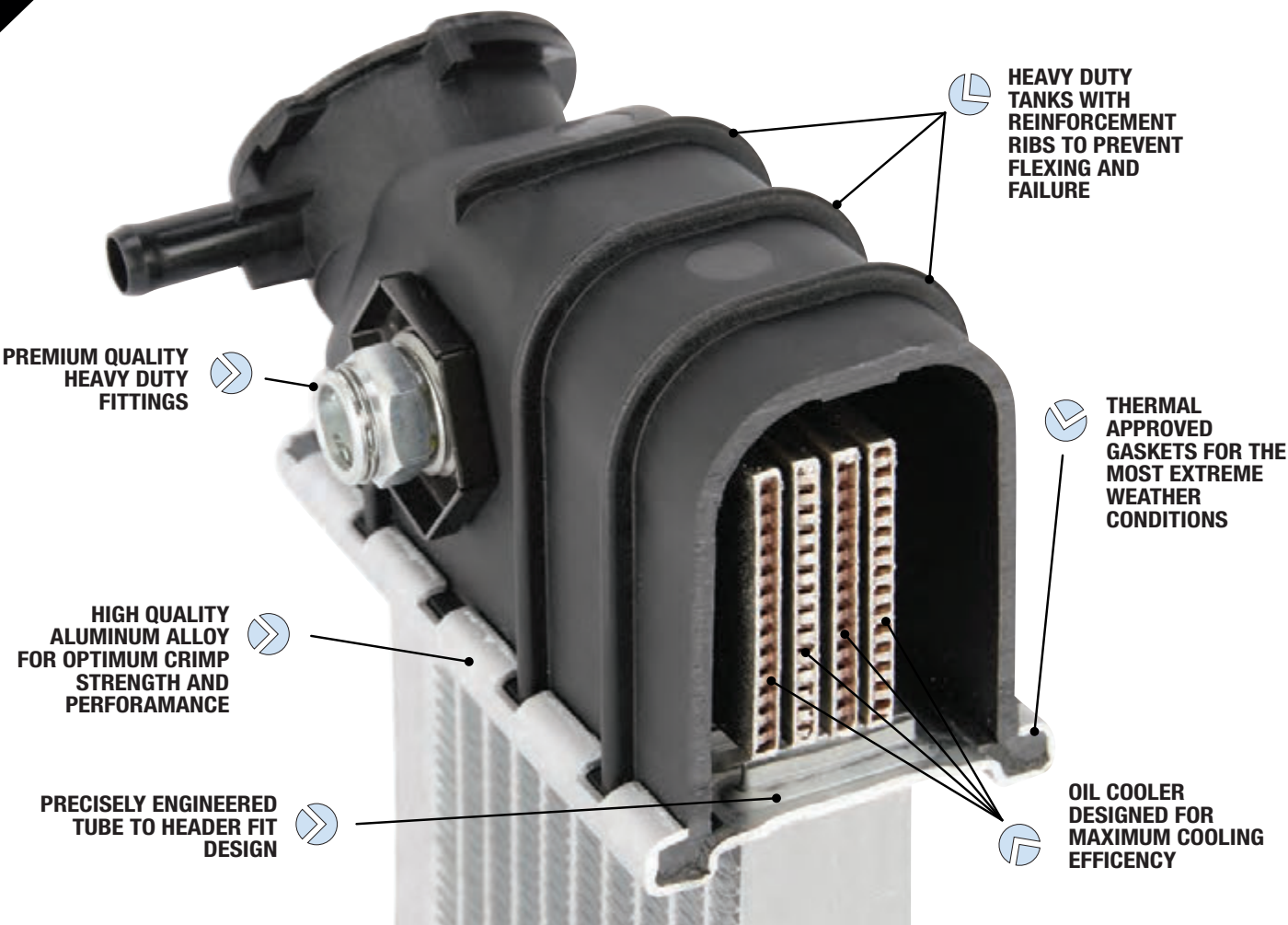
**YEAR AFTER YEAR, SPECTRA PREMIUM
HAS BEEN SUPPLYING INNOVATIVE COOLING
SYSTEM SOLUTIONS FOR THE NORTH AMERICAN
AUTOMOTIVE AFTERMARKET**



RADIATORS CONDENSERS HEATERS

COOLING SYSTEM

QUALITY THROUGH INNOVATION... IN EVERY BOX... SPECTRA PREMIUM RADIATORS



**CYCLE TESTED FOR LONG
LASTING DURABILITY**



**EVERY MODEL 100%
FIT TESTED**

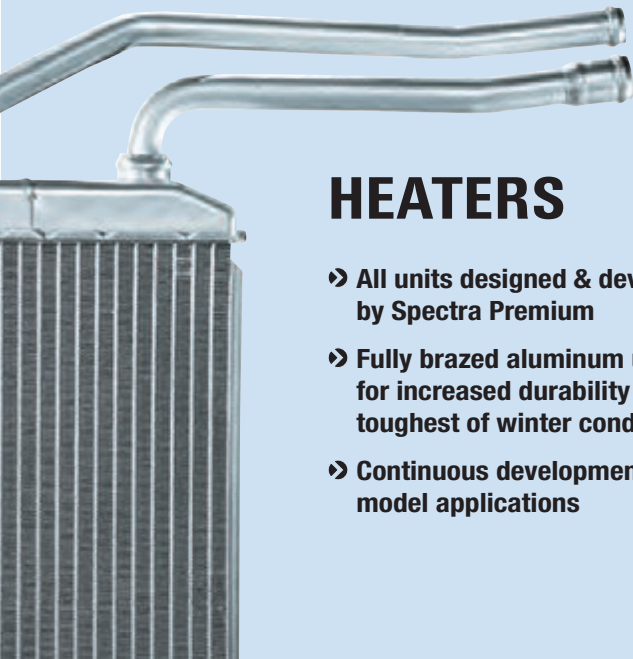
COMMITTED TO COVERAGE

- First to market commitment
- Dedicated development for late model applications
- Over 75 new models introduced annually

AAIA COVERAGE BY MAKE

GM		FORD		CHRYSLER		MAZDA		TOYOTA		HONDA		NISSAN	
1980-1999	2000-2008	1980-1999	2000-2008	1980-1999	2000-2008	1980-1999	2000-2008	1980-1999	2000-2008	1980-1999	2000-2008	1980-1999	2000-2008
97.0%	96.2%	99.0%	95.7%	95.29%	95.0%	98.8%	97.3%	97.5%	95.3%	98.6%	96.3%	94.3%	94.4%

CLIMATE CONTROL SOLUTIONS



HEATERS

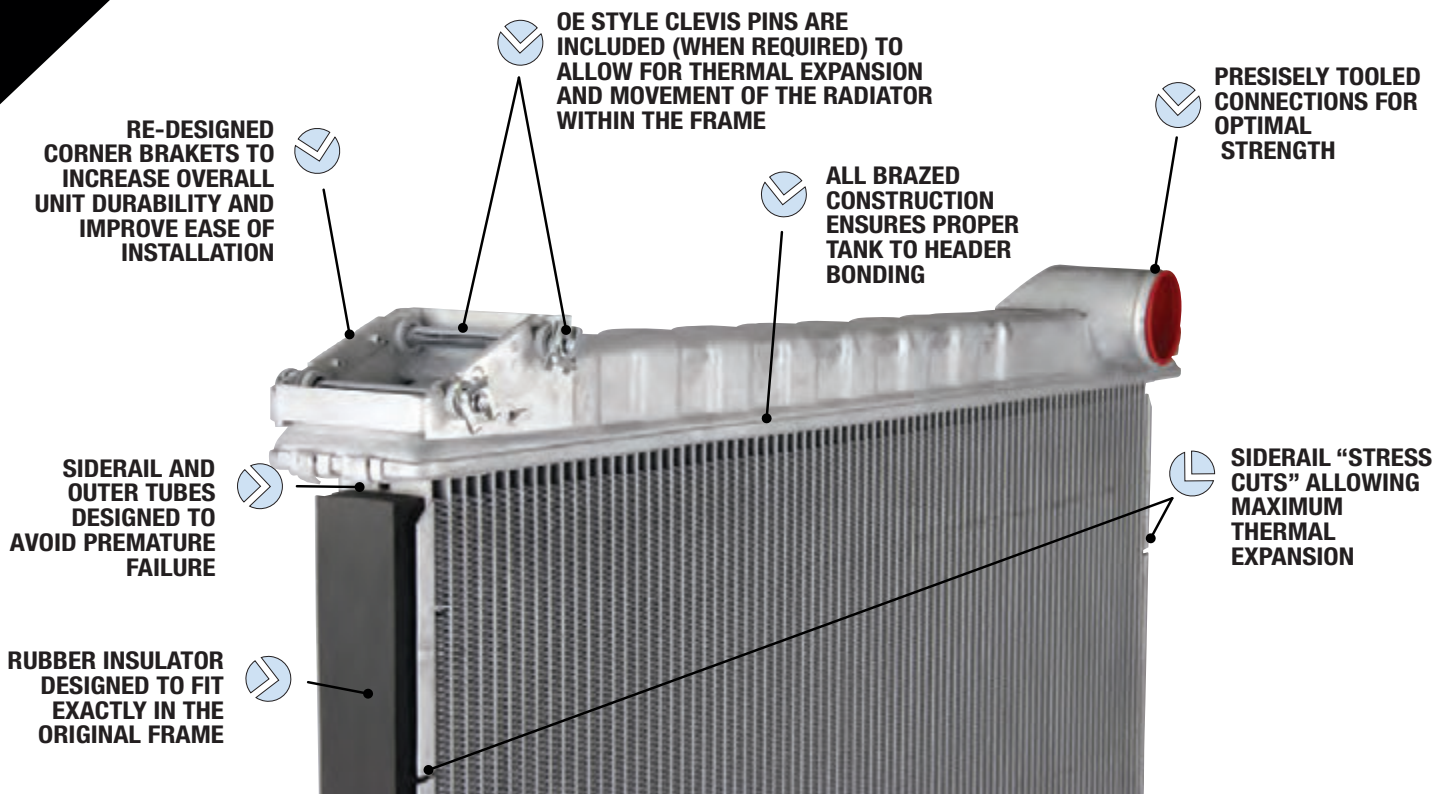
- All units designed & developed by Spectra Premium
- Fully brazed aluminum units for increased durability in the toughest of winter conditions
- Continuous development of late model applications

CONDENSERS

- Best coverage in the industry with over 800 unique sku's
- All units are exact OE type replacements
- Continuous development of late model applications



HD RADIATORS DESIGN ENHANCEMENTS



SPECTRA PREMIUM e SOLUTIONS



- Cooling system training
- Cooling system repair tips and solutions
- Complete cooling system overview and diagnosis

COOLING SYSTEM

PREVENTATIVE MAINTENANCE SOLUTIONS

MAINTENANCE:

- › Verify and repair any on-board diagnostic trouble codes related to engine temperature.
- › Test coolant density and Ph level.
- › Pressure test cooling system and radiator cap.
- › Inspect electric, thermostatic and hydraulic cooling fans for proper operation.
- › Operate climate controls in the instrument panel;
 - › Move temperature control from cold to hot.
 - › Move air mode controls from defrost to floor.
- › Inspect blower motor operation at all speeds.

REPLACEMENT:

- › When installing major system components, install a new thermostat and gasket.
- › When replacing the coolant, thoroughly flush the system with approved flush liquid.
- › Use approved cooling liquid for the specific vehicle.
- › Mix coolant liquid at 50% with clean distilled water only.
- › Bring engine up to normal operating temperature.

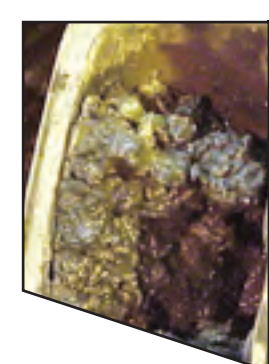


COMMON PROBLEMS



ELECTROLYSIS

ELECTROLYSIS IS ONE OF THE MAIN CAUSES OF RADIATOR FAILURE CAUSED BY INADEQUATE PH LEVEL IN THE SYSTEM OR BAD ACCESSORY GROUNDS.



CONTAMINATION AND ADDITIVES

CONTAMINATION AND ADDITIVES CAN CLOG PASSAGES AND REDUCE OVERALL HEAT TRANSFER. PURE COOLANT LIQUID OR MIXING DIFFERENT TYPES OF LIQUIDS WILL ALSO CAUSE SLUDGING IN THE SYSTEM. IT IS RECOMMENDED TO ONLY USE A 50/50 MIX OF WATER AND COOLANT LIQUID.



INADEQUATE Ph LEVEL

INADEQUATE PH LEVEL OF THE COOLING LIQUID CAUSES INNER TUBE BLOOMING THAT RESTRICTS FLOW AND INCREASES ENGINE TEMPERATURE. PREVENT THESE CONDITIONS WITH REGULAR COOLING SYSTEM MAINTENANCE.



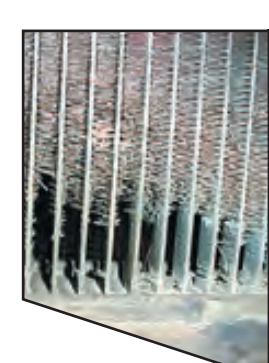
PRESSURE CAP

THE PRESSURE CAP MAINTAINS CONSTANT SYSTEM PRESSURE TO PREVENT COOLING LIQUID FROM BOILING. COOLANT NEEDS TO BE CIRCULATED FROM THE OVERFLOW RESERVOIR TO PREVENT AIR FROM ENTERING THE SYSTEM. THE CAP MUST BE INSPECTED ON A REGULAR BASIS.



MAINTENANCE

REGULAR MAINTENANCE REQUIRES THAT THE THERMOSTAT BE REPLACED EACH TIME THE COOLANT IS FLUSHED OR DURING RADIATOR REPLACEMENT. INSTALL THE PROPER TEMPERATURE RANGE THERMOSTAT FOR MAXIMUM ENGINE PERFORMANCE AND FUEL ECONOMY.

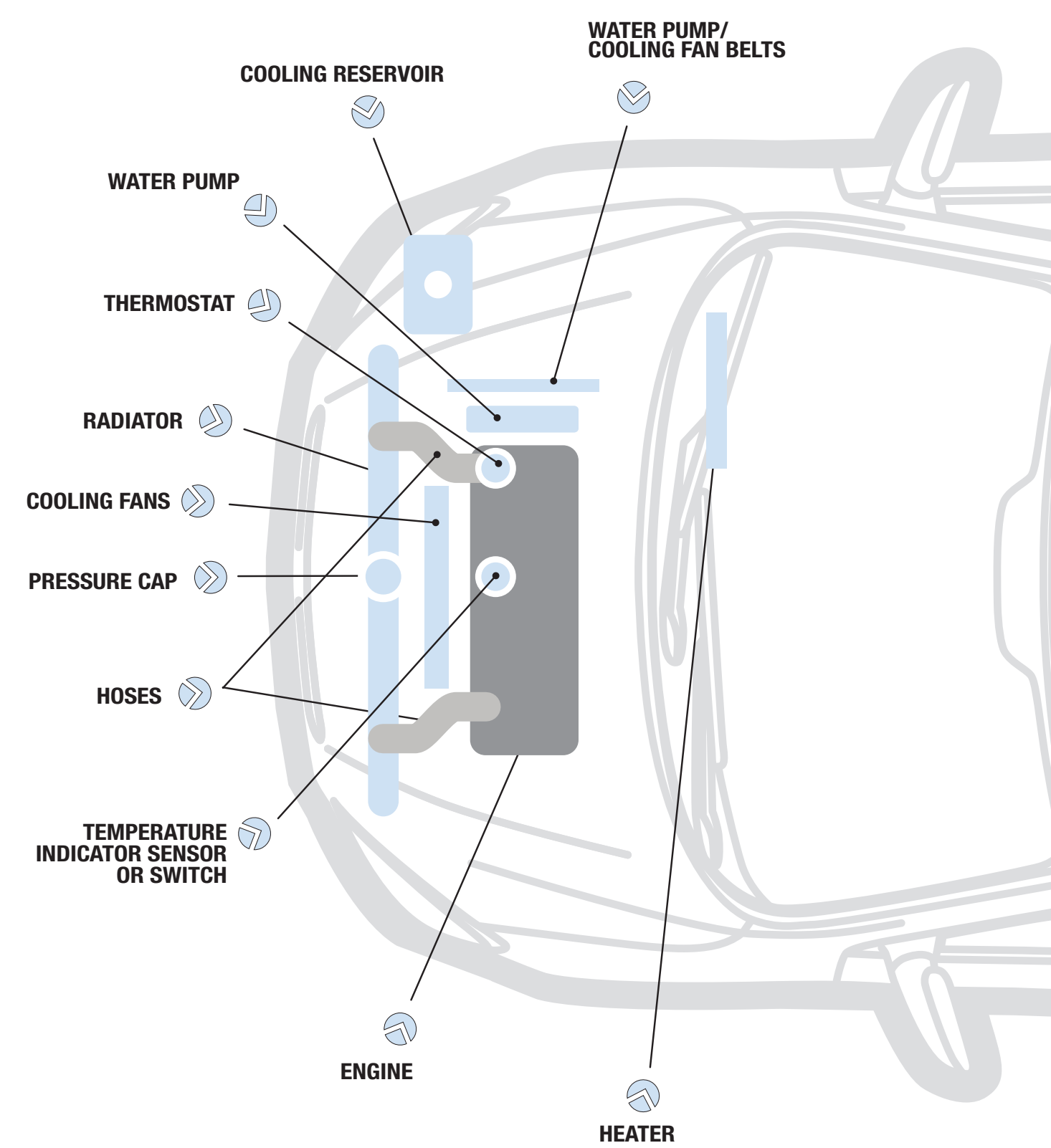


EXCESSIVE EXTERNAL WEAR

RADIATOR EXCESSIVE EXTERNAL WEAR IS MOSTLY CAUSED BY AGING OR ROAD DEBRIS. DETERIORATING OR DAMAGED COOLING FINS WILL REDUCE HEAT TRANSFER. REPLACEMENT IS NECESSARY WITH COMPLETE SYSTEM TESTING.

COOLING SYSTEM DIAGNOSTIC CHART

KEY COMPONENTS OF THE ENGINE COOLING SYSTEM



SPECTRA
PREMIUM™
forming the future