

Transmission Oil Coolers

Because of the tremendous heat generated in an automatic transmission, an auxiliary transmission oil cooler is an economical way to help protect against costly transmission repairs.

Automatic transmission fluid (ATF) cools, lubricates and cleans internal transmission components. When transmission temperatures exceed 93°C (200°F), the ability of ATF to perform is greatly diminished.

Subsequently, the life span of the fluid, seals and moving parts are significantly reduced. Higher internal temperatures also increase the wear rate of the friction and clutch plates.

Davies, Craig transmission oil coolers can reduce the ATF's temperature by as much as 33°C (60°F). A reduction of just 11°C (20°F) can double the life of an automatic transmission, the fluid and all internal parts.

Excessive transmission heat is caused by the following driving conditions:

- Towing
- Climbing
- Stop-and-go traffic
- **Carrying loads**
- Hot driving conditions
- Driving in sand or snow

Two types of Transmission Oil Coolers



HYDRA-COOL® plate and fin style



The Hydra-Cool transmission oil cooler is an effective and economical way to keep the transmission at its optimum operating temperature. High-efficiency turbulators in each tube direct the fluid for superior heat transfer.

Hydra-Cool's unique plate and fin design allows for effective cooling, yet requires 33% less space. The Hydra-Cool's compact design is perfect for applications where available mounting space is limited.

All Davies, Craig transmission oil coolers are 100% pressure tested to insure the reliability and durability of the product. Both Ultra-Cool and Hydra-Cool come complete with the necessary accessories and instructions for quick and easy installation.

... See our FAQs on page 63

All coolers come complete with a mounting kit, flexible hose and hose clamps.

The industry's first transmission cooler, the Ultra-Cool oil transmission cooler is available in three sizes to suit a wide range of applications from small sedans to light commercial vehicles.



Ultra-Cool® Transmission Oil Coolers

Note: Ultra-Cool Transmission Coolers are only recommended for vehicles manufactured prior to 1990

Features

- · Ultrasonically soldered for reliability
- 100% pressure tested at 150psi for quality assurance
- High-efficiency turbulators in every tube for maximum heat
- 3/8" push-on fittings for quick and easy installation.

All kits contain

Part #	Description	Qty
	3/8" hose	1
	Hose clamps	4
	Detailed fitting instructions	1
0579	Quick Fit Kit – nylon ties x4	1

Specifications

		OVERALL		CORE		
PART #	THICKNESS	LENGTH	WIDTH	LENGTH	WIDTH	FITTING SIZE
401	20	319	127	224	127	3/8" push on
403	20	316	191	224	191	3/8" push on
404	20	403	191	310	191	3/8" push on

Refer page 62 for vehicle specifications.

Accessories

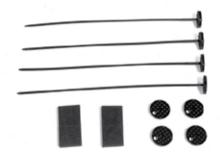
Ouick Fit Kit

When replacing a Transmission Oil Cooler or Power Steering Cooler, you will need to fit new nylon ties.

Use only the Davies, Craig "Quick Fit Kit" - Part #0579

Contents

Part #	Description	Qty
0579	Quick Fit Kit – nylon ties x4	1



Part #0579 - Quick Fit Kit

Transmission Oil Coolers

Hydra-Cool®

Hydra-Cool's unique plate and fin design offers excellent cooling efficiency in a compact, space-efficient design.



Hydra-Cool® Transmission Oil Coolers (Universal)

Note: Hydra-Cool Transmission Coolers are suitable for all vehicles

Features

- 100% pressure tested at 150psi for quality assurance
- 33% more efficient than a comparable tube and fin design
- Pre-drilled mounting plates for easy installation
- Four sizes available to fit a wider range of applications
- Internal turbulation for efficient heat transfer
- 3/8" or 5/16" push-on fittings for quick and easy installation.

All kits contain

Part #	Description	Qty
676 - 678	3/8" hose	1
686	5/16" hose	1
all	all Hose clamps	
	Detailed fitting instructions	1
	Quick Fit Kit – nylon ties x4 (0579)	1

Specifications

			OVERALL				
PART #	THICKNESS	LENGTH	WIDTH	LENGTH	WIDTH	FITTING SIZE	CORE PART #
676	20	281	141	281	112	3/8" push on	0856
677	20	281	180	281	152	3/8" push on	0859
678	20	281	213	281	184	3/8" push on	0853
686	20	281	180	281	152	Universal 5/16"	0851

Hydra-Cool® Transmission Oil Coolers (for Specific Vehicles)

• EA-ED Falcon • VN-VS Commodore

Features

- 100% pressure tested at 150psi for quality assurance
- 33% more efficient than a comparable tube and fin design
- Pre-drilled mounting plates for easy installation
- Two sizes available to fit a wider range of applications
- Internal turbulation for efficient heat transfer
- 3/8" or 5/16" push-on fittings for quick and easy installation.

All kits contain

Part #	Description	Qty
680	3/8" hose	1
685	5/16" hose	1
all	Mounting brackets set to suit vehicle	1
	Hose clamps	4
	Detailed fitting instructions	1
	Mounting: assorted hardware bag	1

Specifications

		OVERALL		CORE			
PART #	THICKNESS	LENGTH	WIDTH	LENGTH	WIDTH	FITTING SIZE	CORE PART #
680	20	280	181	280	151	Ford EA-ED 3/8"	0857
685	20	283	174	283	146	Commodore VN-VS 5/16"	0851

Transmission Oil Coolers - Model Selection Guide

UNIVERSAL KITS

		АР	APPLICATION		
VEHICLE TYPE	YEAR OF MANUFACTURE	ENGINE CAPACITY	MEDIUM DUTY Part #	HEAVY DUTY Part #	
SEDAN/WAGON	Up to 1990*	Up to 2.0L	401	403	
		2.0L - 4.0L	403	404	
		4.0L & over	404	677	
COMMERCIAL	Up to 1990*	Up to 2.0L	401	403	
		2.0L - 4.0L	404	677	
		4.0L & over	678	678	
SEDAN/WAGON	1990 - Present	Up to 2.0L	676	677	
		2.0L - 4.0L	677	678	
		4.0L & over	678	678	
COMMERCIAL	1990 - Present	Up to 2.0L	676	677	
		2.0L - 4.0L	677	678	
		4.0L & over	678	678	
4WDs	1990 - Present	Up to 2.0L	677	677	
		2.0L - 4.0L	678	678	
		4.0L & over	678	678	

^{*} Note: Ultra-Cool Transmission Coolers are only recommended for vehicles manufactured prior to 1990

SPECIFIC VEHICLE KITS

VEHICLE TYPE	PART #
FORD EA-ED (all models) 6-cylinder & V8	680
COMMODORE VN-VS (all models) 6-cylinder & V8	685

POWER STEERING COOLER

VEHICLE TYPE	PART #
All vehicles	1009

FAQS Transmission Oil Coolers*

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How much cooling can be expected with a Davies, Craig transmission oil cooler?	4

1. What size transmission oil cooler do I need for my vehicle?

The correct model for any vehicle depends on a number of variables, such as:

- the type of vehicle,
- · if there is a load the vehicle will be expected to pull and
- · the climate and terrain in which the vehicle will be operating.

Always consult your Davies, Craig catalogue for the correct model.

2. Where should I mount my Davies, Graig transmission oil cooler?

For some vehicles, customised mounting brackets are provided in the kits; ie, Ford Falcon – EA to ED / Commodore – VN to VS. All other models will use the universal mounting kit.

Maximum efficiency is achieved when the transmission oil cooler is mounted to the condenser or radiator to receive the coolest air and the maximum amount of ram air as well as fan air. This is usually directly in front of the radiator or condenser.

Consult your Davies, Craig selection guide.

3. What position should I mount my transmission oil cooler in reference to the hose connections?

The Davies, Craig transmission oil cooler may be mounted with the hose connections in any direction as long as they do not cause the hose to bend too much.

Our recommendation is a maximum bend radius of 75mm (3").

4. How much cooling can be expected with a Davies, Craig transmission oil cooler?

The amount of cooling depends on the vehicle, cooler size, type of cooler, mounting location and ambient air temperature.

Most transmission oil coolers, when properly selected and installed will achieve at least 10°C to 30°C (50° to 86°F) drop in fluid temperature, with a 20°C (68°F) drop being average. Every 10°C (50°F) drop in temperature can double oil and equipment life.

Power Steering Oil Cooler Part #1009

A power steering oil cooler removes destructive heat generated within a power steering system, especially in vehicles with large tyres such as performance vehicles, off-road vehicles and vehicles used for towing or carrying heavy loads.

Installation of a power steering oil cooler will prolong the life of the system's pump, hoses, and seals. A reduction of just 11°C (20°F) can double the life of power steering, the fluid and all internal parts.

Kit Contents

Part #	Description	Qty
1009	3/8" hose	1
	Hose clamps	4
	Detailed fitting instructions	1
0579	Quick Fit Kit – nylon ties x4	1

Specifications

		OVERALL		CORE		
PART #	THICKNESS	LENGTH	WIDTH	LENGTH	WIDTH	APPLICATION
1009	19	226	64	148	64	Vehicles with 3/8" ID power steering return hose

Accessories

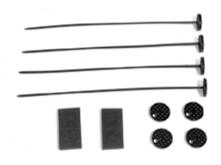
Quick Fit Kit

When replacing a Transmission Oil Cooler or Power Steering Cooler, you will need to fit new nylon ties.

Use only the Davies, Craig "Quick Fit Kit" - Part #0579

Contents

Part #	Description	Qty
0579	Nylon ties x4	1



Part #0579 - Quick Fit Kit