



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

ULTRA-COOL® tube and fin style



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 ensure 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.

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

Transmission Oil Coolers

Ultra-Cool®

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 dissipation
- 3/8" push-on fittings for quick and easy installation.

All kits contain

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

Specifications

PART #	THICKNESS	OVERALL		CORE		FITTING SIZE	HEAT TRANSFER RATE (BTU/HR)
		LENGTH	WIDTH	LENGTH	WIDTH		
401	20	319	127	224	127	3/8" push on	9,000
403	20	316	191	224	191	3/8" push on	10,800
404	20	403	191	310	191	3/8" push on	12,000

Refer page 61 for model selection guide.

Accessories

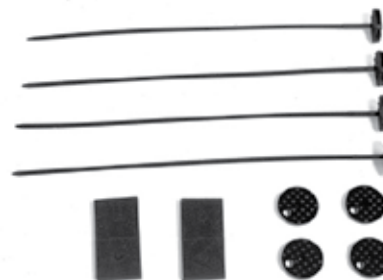
Quick Fit Kit

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	Quick Fit Kit – nylon ties x4	1



Part #0579 - Quick Fit Kit

Lightweight and compact, Hydra-Cool® transmission oil cooler's unique dimpled universal plate and fin design are rigidly constructed in full alloy which offers high heat transfer and corrosion resistance. The patented dimple plates re-direct oil flow and, in conjunction with the louvered fin design, provide highly efficient cooling with low pressure drop.



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
- Six sizes available to fit a wider range of applications
- Internal turbulence for efficient heat transfer
- 3/8" or 5/16" push-on fittings for quick and easy installation.

All kits contain

Part #	Description	Qty
	Cooler core	1
676 - 679	3/8" hose	1
686	5/16" hose	1
	Hose clamps	as req'd
	Detailed fitting instructions	1
0579	Quick Fit Kit – nylon ties x 4	1

Specifications

PART #	THICKNESS	OVERALL		CORE		FITTING SIZE	CORE PART #	# of PLATES	HEAT TRANSFER RATE (BTU/HR)
		LENGTH	WIDTH	LENGTH	WIDTH				
676	20	281	141	281	112	3/8" push on	0856	12	11,987
677	20	281	180	281	152	3/8" push on	0859	17	13,394
678	20	281	213	281	184	3/8" push on	0853	21	13,934
679 / 691	20	281	300	281	265	3/8" push on	0854	30	15,710
686	20	281	180	281	152	Universal 5/16"	0859	17	13,394

Refer page 61 for model selection guide.

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 turbulence for efficient heat transfer
- 3/8" or 5/16" push-on fittings for quick and easy installation.

All kits contain

Part #	Description	Qty
	Cooler core	1
680	3/8" hose	1
686 *	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

PART #	THICKNESS	OVERALL		CORE		FITTING SIZE	CORE PART #	# of PLATES	HEAT TRANSFER RATE (BTU/HR)
		LENGTH	WIDTH	LENGTH	WIDTH				
680 *	20	280	181	280	151	Ford EA-ED 3/8"	0857	17	11,000
686 **	20	281	180	281	152	Commodore VN-VS 5/16"	0859	17	13,394

* replaced by 677 (6cyl engines) or 678 (8cyl engines) ** Replaces part # 685

Transmission Oil Coolers

Part #691

The heavy duty 30-Plate Hydra-Cool® and DCSLX 10" Slimline Thermatic Fan Combo Kit offers increased transmission cooling and greater air flow control as the reverse polarity DCSLX 10" fan can be secured to operate in either 'push' or 'pull' mode.

Hydra-Cool® 30-plate Transmission Oil Cooler/Fan Combo Kit

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
- Internal turbulence for efficient heat transfer
- 3/8" push-on fittings for quick and easy installation.

See below for transmission oil cooler specifications, and page 23 for 10" Slimline 12 volt fan specifications (part # 0047). Refer opposite page for model selection guide.

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 (refer "Accessories", page 58).

Specifications

PART #	THICKNESS	OVERALL		CORE		FITTING SIZE	CORE PART #	# of PLATES	HEAT TRANSFER RATE (BTU/HR)
		LENGTH	WIDTH	LENGTH	WIDTH				
679 / 691	20	281	300	281	265	3/8" push on	0854	30	15,710

Refer opposite page for model selection guide.



Combo pack contents

Part #	Description	Qty
679	Hydra-Cool® 30-plate transmission oil cooler	1
	3/8" hose	1
	Hose clamps	4
	Detailed fitting instructions	1
0047	DCSLX10 10" Slimline Fan Kit (12V)	1
0579	Quick Fit Kits – nylon ties x4	2

Transmission Oil Coolers

Part #679

The 30-plate heavy duty Hydra-Cool® transmission oil cooler offers excellent cooling efficiency for Heavy Duty 4WD, V8 and commercial vehicle transmissions. It provides highly efficient cooling with low pressure drop for both race and road applications.

Hydra-Cool® 30-plate Transmission Oil Cooler

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
- Internal turbulence for efficient heat transfer
- 3/8" push-on fittings for quick and easy installation.

See above for transmission oil cooler specifications. Refer opposite page for model selection guide. If you wish to add a 24 volt fan, refer to page 23 for 10" Slimline 24 volt fan specifications (part # 0048).

When replacing a Transmission Oil Cooler, you will need to fit new nylon ties. Use only the Davies, Craig "Quick Fit Kit" – Part #0579 (refer "Accessories", page 58).



Kit contents

Part #	Description	Qty
	Hydra-Cool® 30-plate transmission oil cooler	1
	3/8" hose	1
	Hose clamps	4
	Detailed fitting instructions	1
0579	Quick Fit Kit – nylon ties x 4	1

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.



Power Steering Oil Cooler

Note: Power Steering Transmission Coolers are suitable for all vehicles

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.

When replacing a Power Steering Cooler, you will need to fit new nylon ties. Use only the Davies, Craig "Quick Fit Kit" – Part #0579 (refer "Accessories", page 58).

Kit contents

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

Specifications

PART #	THICKNESS	OVERALL		CORE		APPLICATION	HEAT TRANSFER RATE (BTU/HR)
		LENGTH	WIDTH	LENGTH	WIDTH		
1009	19	226	64	148	64	Vehicles with 3/8" ID power steering return hose	4,000

Transmission Oil Coolers – Model Selection Guide

UNIVERSAL KITS

VEHICLE TYPE	YEAR OF MANUFACTURE	ENGINE CAPACITY	APPLICATION	
			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	676 or 677
COMMERCIAL	Up to 1990*	Up to 2.0L	401	403
		2.0L - 4.0L	404	676 or 677
		4.0L & over	678 or 679 or 691	678 or 679 or 691
SEDAN/WAGON	1990 - Present	Up to 2.0L	676	677
		2.0L - 4.0L	677	678 or 679 or 691
		4.0L & over	678 or 679 or 691	678 or 679 or 691
COMMERCIAL	1990 - Present	Up to 2.0L	676	677 or 678
		2.0L - 4.0L	677	678 or 679 or 691
		4.0L & over	678 or 679 or 691	678 or 679 or 691
V8s & 4WDs	1990 - Present	Up to 2.0L	676	677
		2.0L - 4.0L	678 or 679 or 691	678 or 679 or 691
		4.0L & over	678 or 679 or 691	678 or 679 or 691

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

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

SPECIFIC VEHICLE KITS

VEHICLE TYPE	APPLICATION
VEHICLE TYPE	PART #
FORD EA-ED (all models) 6-cylinder & V8	680 *
COMMODORE VN-VS (all models) 6-cylinder & V8	686 **

POWER STEERING COOLER

VEHICLE TYPE	APPLICATION
VEHICLE TYPE	PART #
All vehicles	1009

* Replaced by #677 (6cyl engines) or #678 (8cyl engines) ** Replaces #685

Questions? Please see "frequently-asked questions" on our website: www.daviescraig.com.au