

# Transmission Oil Coolers

**Ultra-Cool® Hydra-Cool®**



**Power Steering Oil Cooler**



**DAVIES,  
CRAIG**

World's best auto cooling

## Transmission Oil Coolers

Ultra-Cool® & Hydra-Cool®

**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.

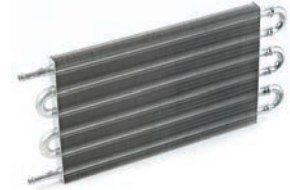
**Excessive transmission heat is caused by the following driving conditions:**

- 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

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.

#### HYDRA-COOL® plate and fin style

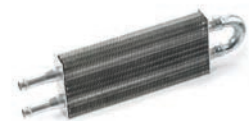
All Davies, Craig transmission oil coolers are 100% pressure tested to ensure the reliability and durability of the product. Both Ultra-Cool and Hydra-Cool come complete with the necessary accessories and instructions for quick and easy installation.



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

## Power Steering Oil Cooler

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. A reduction of just 11°C (20°F) can double the life of power steering, the fluid and all internal parts.



## Thermatic Fans

In 1971, belt-driven fans were the only option for automotive cooling. Searching for a more efficient method, Australian engineers Daryl Davies and Bill Craig created the Thermatic® / Electric Fan. Davies, Craig was formed to manufacture the new electric fans, and has since developed a comprehensive range, covering most makes of vehicles. Its innovation in electric cooling has now become a standard feature on most of the world's new cars.

A Davies, Craig Fan is suitable for both condenser and radiator cooling and provides constant air flow, increased fuel economy, better air conditioning performance, cooler engine running, and increased engine power. Our fans are fully reversible blades and polarity for mounting either side of the heat exchanger. (Except 11" & 14" Brushless Fans)



# Transmission Oil Cooler Selection

## Universal Kits - Model Selection Guide

Vehicle Type	Year of Manufacture	Engine Capacity	APPLICATION	
			Medium Duty Part #	Heavy Duty Part #
Sedan / Wagon	Up to 1990*	Up to 2.0 litre	401	403
		2.0 - 4.0 litre	403	404
		4.0 litre and over	404	676 or 677
Commercial	Up to 1990*	Up to 2.0 litre	401	403
		2.0 - 4.0 litre	404	676 or 677
		4.0 litre and over	678 or 679 or 691 or 698	678 or 679 or 691 or 698
Sedan / Wagon	1990 to Present	Up to 2.0 litre	676	677
		2.0 - 4.0 litre	677	678 or 679 or 691 or 698
		4.0 litre and over	678 or 679 or 691 or 698	678 or 679 or 691 or 698
Light Commercial (12 Volt circuit, Automatic Trans.)	1990 to Present	Up to 2.0 litre	676	677 or 678
		2.0 - 4.0 litre	677	678 or 679 or 691 or 698
		4.0 litre and over	678 or 679 or 691 or 698	678 or 679 or 691 or 698
Light Commercial (24 Volt circuit, Automatic Trans.)		Up to 2.0 litre	699 or 692	699 or 692
		2.0 - 4.0 litre	699 or 692	692
		4.0 litre and over	692	692
V8s & 4WDs	1990 to Present	Up to 2.0 litre	676	677
		2.0 - 4.0 litre	678 or 679 or 691 or 698	678 or 679 or 691 or 698
		4.0 litre and over	678 or 679 or 691 or 698	678 or 679 or 691 or 698
Ford EA-ED	all models	6 cyl.	677	677
Ford EA-ED	all models	V8	678	678
GM-Holden	all models	6 cyl. & V8	Select Part # as above plus #1005	Select Part # as above plus #1005

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

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

#1005 is an Adaptor Kit to suit 5/16" (8mm) inlet/outlet tube for GM transmissions

# Power Steering Oil Cooler

## Power Steering Selection Guide

Vehicle Type	PART #
All vehicles with 3/8" (9.5mm) Inlet/Outlet tube	1009



### WARRANTY STATEMENT

#### TRANSMISSION OIL COOLERS & POWER STEERING OIL COOLER

We hereby guarantee that for a period of two years from the date of purchase or 40,000km (whichever comes first) we shall carry out free of cost any repairs/replacements to the transmission oil cooler provided that such a fault is directly attributable to a defect in the workmanship or materials used in the manufacture of the transmission oil cooler. Labour and consequential costs excluded.



## Hydra-Cool® Transmission Oil Cooler

### 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" (9.5 mm) push-on fittings for quick and easy installation.
- Comprehensive fitting instructions



Specifications		OVERALL		CORE		INLET/OUTLET SIZE	CORE PART #	No. OF PLATES	HEAT TRANSFER RATE (BTU/hr)
PART #	THICKNESS mm	WIDTH mm	HEIGHT mm	WIDTH mm	HEIGHT mm				
<b>623</b>	20	281	229	247	200	3/8" (9.5 mm)	10861	23	13,937
<b>676</b>	20	281	141	281	112	3/8" (9.5 mm)	10856	12	11,987
<b>677</b>	20	281	180	281	152	3/8" (9.5 mm)	10859	17	13,394
<b>678 / 698</b>	20	281	213	281	184	3/8" (9.5 mm)	10853	21	13,934
<b>679 / 691</b>	20	281	300	281	265	3/8" (9.5 mm)	10854	30	15,710
<b>1005</b>	<b>5/16" (8 mm) Adaptor Kit</b> to suit GM transmissions (sold separately)								

## Ultra-Cool® Transmission Oil Coolers

### 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
- Comprehensive fitting instructions



Specifications		OVERALL		CORE		INLET/OUTLET SIZE	HEAT TRANSFER RATE (BTU/hr)
PART#	THICKNESS mm	WIDTH mm	HEIGHT mm	WIDTH mm	HEIGHT mm		
<b>401</b>	20	319	127	224	127	3/8" (9.5 mm)	9,000
<b>403</b>	20	316	191	224	191	3/8" (9.5 mm)	10,800
<b>404</b>	20	403	191	310	191	3/8" (9.5 mm)	12,000
<b>1005</b>	<b>5/16" (8 mm) Adaptor Kit</b> to suit GM transmissions (sold separately)						

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

### Kit features:

- 100% pressure tested at 150psi for quality assurance
- 33% more efficient than a comparable tube and fin design
- 10" Fan Kit
- 12 or 24 Volt model options
- Pre-drilled mounting plates for easy installation
- Internal turbulation for efficient heat transfer
- 3/8" (9.5 mm) push-on fittings for easy installation.
- Comprehensive fitting instructions

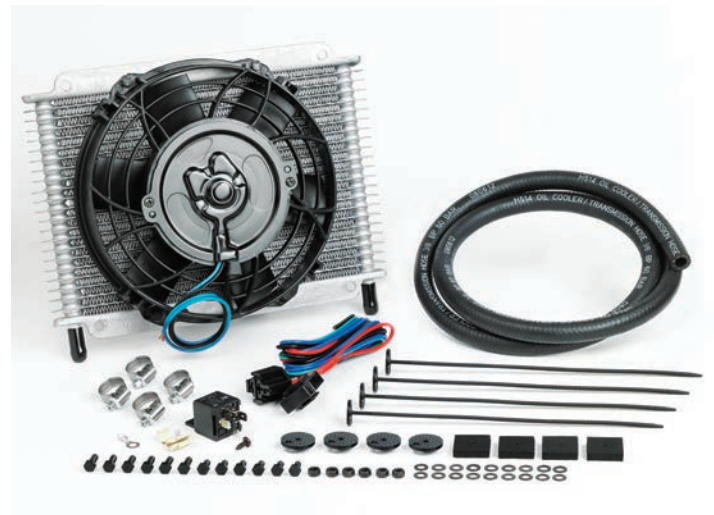


Specifications		OVERALL		CORE			INLET/OUTLET SIZE	CORE PART #	# OF PLATES	HEAT TRANSFER RATE (BTU/hr)
PART #	VOLTS	THICKNESS mm	WIDTH mm	HEIGHT mm	WIDTH mm	HEIGHT mm				
<b>691</b>	12 V	20	281	300	281	265	3/8" (9.5 mm)	0854	30	15,710
<b>692</b>	24 V	20	281	300	281	265	3/8" (9.5 mm)	0854	30	15,710
<b>1005</b>	<b>5/16" (8 mm) Adaptor Kit</b> to suit GM transmissions (sold separately)									

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

### Kit features:

- 100% pressure tested at 150psi for quality assurance
- 33% more efficient than a comparable tube and fin design
- 8" Thermatic Fan
- 12 or 24 Volt model options
- Pre-drilled mounting plates for easy installation
- Internal turbulation for efficient heat transfer
- 3/8" (9.5 mm) push-on fittings for easy installation.
- Comprehensive fitting instructions



Specifications		OVERALL		CORE			INLET/OUTLET SIZE	CORE PART #	No. OF PLATES	HEAT TRANSFER RATE (BTU/hr)
PART #	VOLTS	THICKNESS mm	WIDTH mm	HEIGHT mm	WIDTH mm	HEIGHT mm				
<b>698</b>	12 V	20	281	141	281	184	3/8" (9.5 mm)	10853	21	13,934
<b>699</b>	24 V	20	281	141	281	184	3/8" (9.5 mm)	10853	21	13,934
<b>1005</b>	<b>5/16" (8 mm) Adaptor Kit</b> to suit GM transmissions (sold separately)									

# Power Steering Oil Cooler

## Power Steering Oil Cooler

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”).

Note: Power Steering Transmission Coolers are suitable for all vehicles, please refer to Application chart.



Specifications		OVERALL		CORE		APPLICATION	HEAT TRANSFER RATE (BTU/hr)
PART #	THICKNESS mm	WIDTH mm	HEIGHT mm	WIDTH mm	HEIGHT mm		
<b>1009</b>	19	226	64	148	64	Vehicles with 3/8" (9.5 mm) inlet and outlet	4,000

# Accessories

## 5/16" (8 mm) Adaptor Kit

Kit contains everything you need fit our Transmission Oil Cooler to a General Motors Automatic Transmissions.

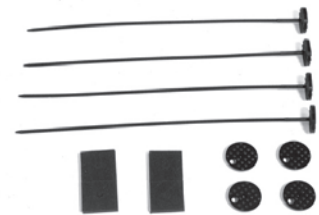
PART #	DESCRIPTION
<b>1005</b>	5/16" (8 mm) Adaptor Kit to suit GM Transmissions



## Quick Fit Kit

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

PART #	DESCRIPTION
<b>0579</b>	Quick Fit Kit suits Fans and core mounting.



## Digital Thermatic® Fan Switch

The Digital Thermatic® Fan Switch can sense air or coolant temperature to automatically activate the Thermatic® Fans at your set/targeted temperature when extra cooling is needed.

PART #	VOLTAGE	DESCRIPTION
<b>0444</b>	12 & 24	Digital Thermatic® Fan Switch



## Premium Digital Thermatic® Switch

The Premium Digital Thermatic® Switch automatically activates single or twin fans at your set/targeted temperature when extra cooling is required.

PART #	VOLTAGE	DESCRIPTION
<b>0455</b>	12 & 24	Digital Thermatic® Fan Switch



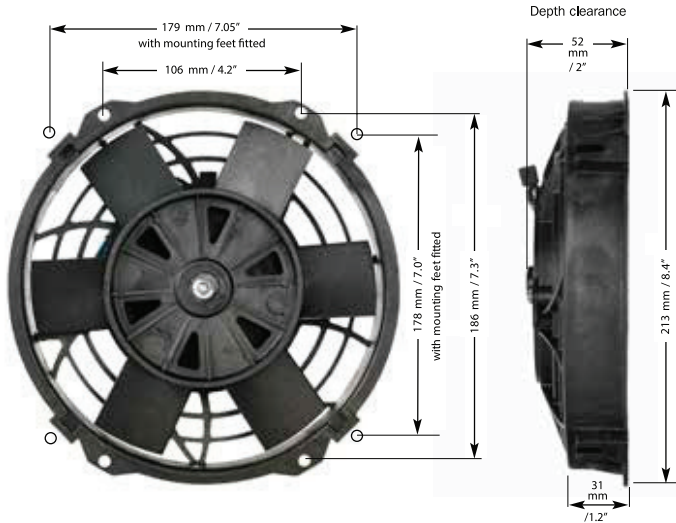
## 8" Thermatic Fan

### 8" Thermatic Fan

Davies Craig Thermatic® Fan is suitable for condenser and radiator cooling.

All Davies Craig Thermatic® Fans are packaged with fan assembly (motor, fan blade, shroud) and mounting feet.

#### Dimensions



#### Specifications

Airflow: 400 CFM (ft3/min)  
 Maximum Current : 5.0A (12 Volt) | 2.4A (24 Volt)  
 Weight : 0.88 kg (1.94 lb)

12 Volt	Part #	Description
	<b>0135</b>	8" Thermatic® Fan

24 Volt	Part #	Description
	<b>0136</b>	8" Thermatic® Fan

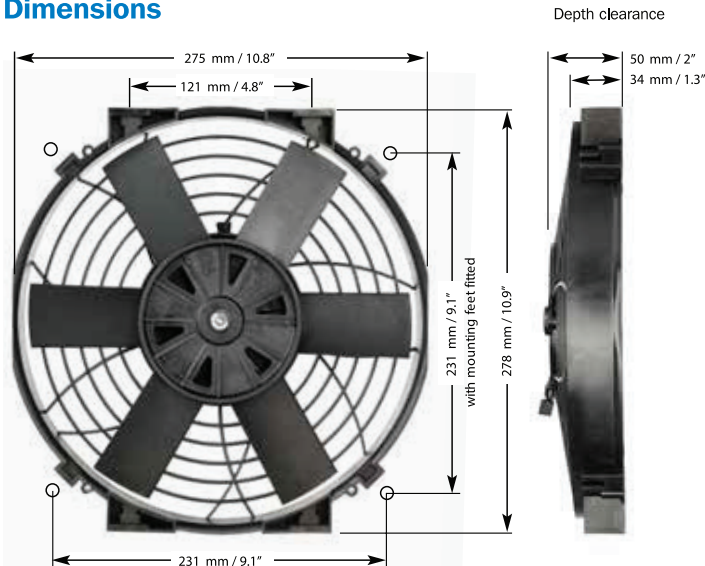
## 10" Slimline Thermatic Fan

### 10" Slimline Thermatic Fan

Davies Craig Thermatic® Fan is suitable for condenser and radiator cooling.

All Davies Craig Thermatic® Fans are packaged with fan assembly (motor, fan blade, shroud) and mounting feet.

#### Dimensions



#### Specifications

Airflow: 696 CFM (ft3/min)  
 Maximum Current: 7.0A (12 Volt) | 3.5A (24 Volt)  
 Weight: 1.13 kg (2.5 lb)

12 Volt	Part #	Description
	<b>0147</b>	10" Slimline Thermatic® Fan

24 Volt	Part #	Description
	<b>0148</b>	10" Slimline Thermatic® Fan

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Designed & Manufactured in Australia

US Patent No: 6425353, Australian Patent  
No: 756456, European Patent No: 1133624,  
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