

**TRU-COOL®**



**Tru-Cool®**

# ***Transmission & Engine Coolers***



[www.TruCool.com](http://www.TruCool.com)

## Frequently Asked Questions

### What is the difference between “tube & fin” and Tru-Cool coolers?

A Tru-Cool cooler has many plates for ATF to flow more efficiently. It also has more “live” surface area than tube & fin, which further enhances cooling. Finally, though both designs are made of aluminum, the design and manufacturing processes behind Tru-Cool coolers make them much more durable.

### How can larger tube & fin coolers offer less cooling?

Bigger isn't always better. Tube & fin designs are inefficient and have a lot of dead space, while the Tru-Cool stacked plate design puts most of the oil close to the surfaces that are in contact with passing air. In fact, when it comes to cooling, the Tru-Cool cooler is up to 30% more efficient than tube & fin designs.

### Which cooler should I use for a diesel application?

In most diesel applications, the transmission line is large. The cooler's fitting should not be smaller than the lines. The smaller lines will restrict the transmission fluid flow.

### The fittings supplied do not work with my application. What should I do?

We have supplied fittings for the four most common applications. Compression fittings can be purchased separately from your local distributor. Part numbers are as follows:

- 735-9139 for 5/16 lines
- 735-9140 for 3/8 lines

### Where should I install the cooler?

If possible, locate the cooler in an area where it will be exposed to ram air. This helps maximize cooling. Install the cooler in series and downstream of the radiator in-tank oil cooler. This maximizes heat transfer and decreases transmission warm-up times in colder weather. Most OEM installations are plumbed this way.

### How should I mount the oil cooler fittings?

Fittings can be located up, down or sideways. This advantage, plus their compact design, makes installation of our coolers quick and easy.

### Should I disconnect the radiator in-tank oil cooler when I install a Tru-Cool cooler?

Whenever possible, do not disconnect the in-tank oil cooler. It offers additional cooling and helps preheat the transmission. In colder climates, the in-tank oil cooler should never be disconnected from the system.

### Will putting an oil cooler in front of the radiator increase the engine operating temperature?

Not normally. Putting an auxiliary oil cooler system in the system decreases the temperature in the radiator in-tank oil cooler, and this in turn puts less of a load on the radiator. From a total system standpoint, the engine operating temperatures should vary little from where they were before the oil cooler was installed.

### Will installing an oil cooler affect my vehicle customer warranty?

It could, depending on which cooler you install. Vehicle manufacturers do not normally approve of the installation of tube & fin coolers, since they are very flow-restrictive. LPD oil coolers, though, are virtually the only cooler now being used for OEM factory installations. Contact your local dealer for approval.



◀  
Stop-and-go traffic



◀  
Dana-backed  
quality



**Drive Hard. Rest Easy.** Get longer life from your transmission and reduce the risk of costly repair bills. Tru-Cool transmission oil coolers help maintain lower operating temperatures, significantly extending the lives of both your lubricant and your transmission. Protect your work, your warranties and your reputation with Tru-Cool—and get the advantage that comes from Dana-backed quality.

## Tru-Cool Engineering Backed by Dana

Tru-Cool technology combines optimal heat transfer with improved protection against lube system failure. When automatic transmission fluid (ATF) is cold, it is more viscous. Unique Tru-Cool engineering enables ATF to flow more efficiently through two open bypass channels positioned at the top of the cooler. As operating temperatures increase, ATF becomes hotter and thinner. It is then directed through the core where it is cooled. The result is a longer life for your transmission.



### Engine Oil Coolers

- Can be used for transmission applications (cores only)
- Components sold as a Universal Kit (seen here) or separately
- Available in four sizes, with 1/2" NPT female fittings
- Universal Kits only work with spin-on filters with these thread sizes
 

– 3/4" x 16	– 18 x 1.5 mm
– 13/16" x 16	– 20 x 1.5 mm
– 1" x 12	– 22 x 1.5 mm



### Mounting Hardware

- \* Components sold separately or as a complete kit.

Off-roading ▶



▲  
Circle track





### Tru-Cool LPD Transmission Oil Coolers

- 30% more cooling and 15 times less flow restriction than traditional tube & fin design
- Self-regulating for maximum cooling and running protection
- Durable brazed aluminum construction with a lifetime guarantee
- Available in stacked plate or fin & plate configurations
- Available in 13 sizes



### Tru-Cool Max

- The perfect choice when an auxiliary transmission oil cooler is your only option
- Same durable brazed aluminum construction, double the cooling performance of the Tru-Cool LPD
- Precise fin spacing for efficient air flow and cooling
- Remote thermal cold weather bypass and installation hardware included

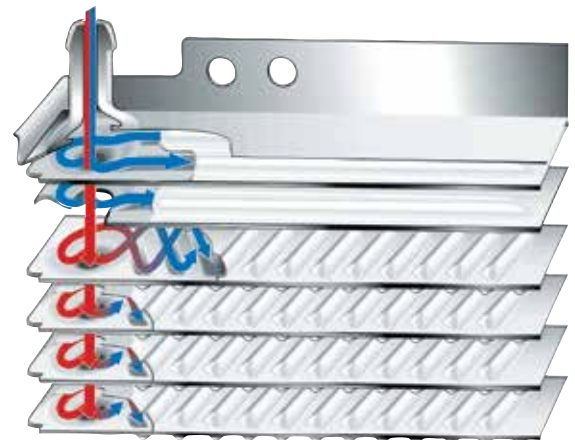
### Better by Design

With their unique design, Tru-Cool transmission and engine coolers help keep the vehicles you rely on running cool, and that can save you major repair costs.

#### Here's how it works:

- Automatic transmission fluid (ATF) is more viscous when it's colder. Tru-Cool transmission and engine coolers enable that colder, thicker ATF to flow more efficiently through the two open bypass channels at the top of the system.
- As operating temperatures increase, the ATF heats up and becomes thinner. The Tru-Cool system then directs the ATF through the core where it is cooled.
- You get optimal heat transfer and improved protection against lube system failure.

Drive hard. Rest easy. Check out our line of Tru-Cool products today!












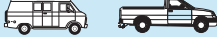






◀  
Towing



◀  
Climbing  
steep  
grades

## Tru-Cool Product Line

Part Number	# of Plates	Cooler Size (in.)	GVW Rating	Vehicle Type	BTU Rating	Fitting Size (in.)		
LPD4451	18	4 x 11 x ¾	11,500		7,500	11/32 hose barb	Stacked Plate: Transmission	
LPD4452	27	5¾ x 11 x ¾	14,500		9,800	11/32 hose barb		
LPD4454	36	7¼ x 11 x ¾	18,000		13,000	11/32 hose barb		
LPD4490	60	12 x 11 x ¾	22,000		20,000	11/32 hose barb		
LPD4588	24	5¾ x 11 x 1½	19,000		14,400	11/32 hose barb		
LPD4589	36	8 x 11 x 1½	24,000		21,000	11/32 hose barb		
LPD4590	48	11 x 11 x 1½	28,000		24,000	11/32 hose barb		
LPD4541	12	3¾ x 11 x ¾	14,000		9,000	3/8 hose barb	Fin & Plate: Transmission	
LPD4542	17	5½ x 11 x ¾	16,000		12,000	3/8 hose barb		
LPD4543	23	7¼ x 11 x ¾	20,000		15,000	3/8 hose barb		
LPD4544	30	9½ x 11 x ¾	22,000		20,000	3/8 hose barb		
LPD4707	23	8¼ x 11 x ¾	20,000		16,000	5/16 inverted flare		
LPD4711	23	8¼ x 11 x ¾	20,000		16,000	3/8 inverted flare		
B7B	12	2¾ x 11 x 1½		Small engine applications	7,500	½ NPT	Stacked Plate: Engine	
L7B	24	5¾ x 11 x 1½		Heavy duty V6 cars, Medium duty V8 cars, Compact pickups, Minivans	15,000	½ NPT		
M7B	36	8 x 11 x 1½		Heavy duty V8 cars, Full size pickups, Vans, High performance applications	20,500	½ NPT		
H7B	48	11 x 11 x 1½		High performance applications, Recreational vehicles, Industrial applications	29,200	½ NPT		
TRU 4269P34 – Universal Kit				[ Kit includes L7B Cooler and hardware ]				
TRU 4269P35 – Universal Kit				[ Kit includes M7B Cooler and hardware ]				
LPD4739	13	8½ x 22 x 1¼	40,000		45,000	3/8 inverted flare HEX	Fin & Plate	
LPD47391 > as above but without cold weather bypass								
LPD4921	12	6 x 23 x ¾	34,000		34,000	3/8 hose barb		
LPD49211 > as above but without cold weather bypass								
LPD4920	8	4 x 23 x ¾	24,000		22,000	3/8 hose barb		
LPD49201 > as above but without cold weather bypass								

**WARNING:** If vehicle is operated in temperatures below 32°F or 0°C, the cold weather bypass will be required when using Tru-Cool Max coolers.

Tru-Cool Max transmission oil cooler has durable brazed aluminum construction and is designed for those applications that bypass the internal tank cooler for extra cooling or due to contamination. Tru-Cool Max can also be installed in series for those applications where the intank oil cooler is not damaged or contaminated.

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## Tru-Cool Hardware

62K-5126	Installation Kit		723-4318	TOC Hose 3/8	5 feet
735-1101	Steel Mount Hardware	Re-installation	723-9130	TOC Hose 11/32	25 feet
735-1201	Quick Mount Nylon Ties	Re-installation	723B-4585	TOC Hose 5/16	25 feet
735-9139	Compression Fitting	5/16 trans lines (2 per kit)	723B-9129	TOC Hose 3/8	25 feet
735-9140	Compression Fitting	3/8 trans lines (2 per kit)	723A-4269	TOC Hose 1/2	25 feet
708-4739	Cold Weather Bypass	3/8 hose barb			

Dana Aftermarket Group  
PO Box 321  
Toledo, Ohio 43697-0321

1.800.621.8084

[www.TruCool.com](http://www.TruCool.com)

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