

frequently asked questions:

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

A Tru-Cool cooler has many plates for the 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, Tru-Cool coolers are much more durable due to their design and manufacturing process.

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 cooler’s stacked plate design puts most of the oil close to 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 less expensive tube & fin designs.

What cooler should I use for a diesel application?

In most diesel applications the transmission line is large. The cooler’s fittings 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 do I do?

We have supplied fittings for the four most common applications. Compression fittings can be purchased separately from your local distributor. Part numbers: **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, make installation of our coolers quick and easy.

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

Wherever 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 in the system decreases the temperature in the radiator in-tank oil cooler and this in turn puts less 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 as opposed to LPD oil coolers which are virtually the only cooler now being used for OEM factory installations. Contact your local dealer for approval.



Long Manufacturing is the world’s leading manufacturer of oil coolers, with current production exceeding 20 million units annually.

Founded in 1903, Long originated in Detroit as a radiator manufacturer supplying America’s pioneer auto

industry. Today, our parent company is Dana Corporation, and we continue our reputation for engineering quality.

With over 11 manufacturing locations, Long is a major OE supplier to leading automotive, motorcycle, heavy duty, lawn & garden, and industrial manufacturers.

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drive hard
[rest easy]

TRU-COOL LPD



LONG MANUFACTURING LTD.
A SUBSIDIARY OF DANA CORPORATION

Genuine OEM
Transmission
& Engine Coolers

Many things can impact

the life expectancy

of a transmission.

Controlling operating

temperatures is the

key to extending

transmission life

and reducing the risk

of costly repair bills.

Our coolers help

maintain lower

operating temperatures

to significantly

extend the lives

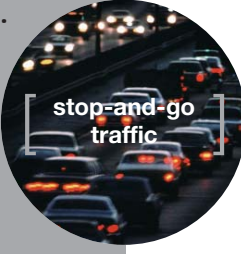
of the lubricant and

the transmission. Install

a Long-built oil

cooler so you can

Drive Hard & Rest Easy.



TRU-COOL LPD.

Protect your work, your warranties and your reputation with Tru-Cool® — the OEM advantage.

[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
- » available in 13 sizes

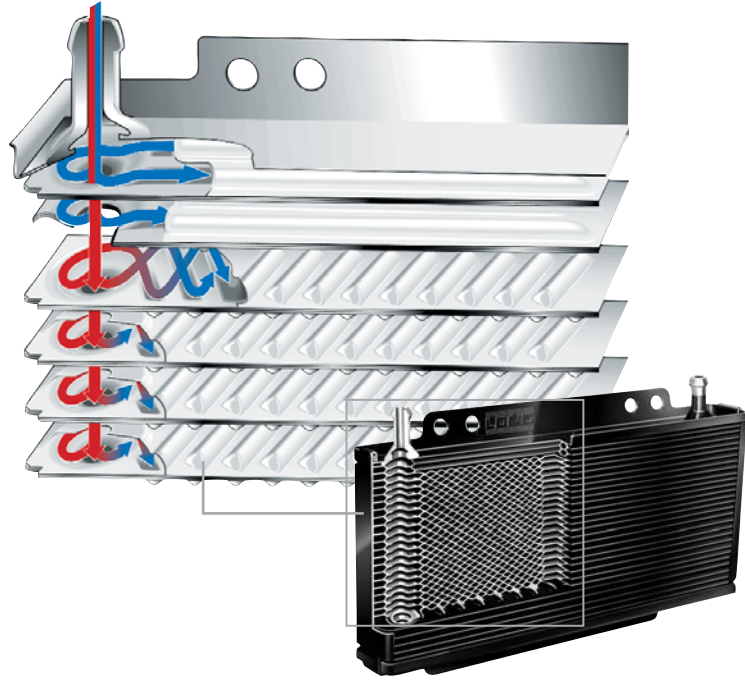
[transmission hardware]



- » components sold as a complete kit or separately

How Tru-Cool transmission coolers work:

- » When Automatic Transmission Fluid (ATF) is cold it is viscous. The unique Tru-Cool design allows the colder, thicker ATF to flow more efficiently through two open bypass channels positioned at the top of the cooler.
- » As operating temperatures increase, the ATF becomes hotter and thinner. It is then directed through the core where it is cooled.
- » Tru-Cool's highly efficient cooling technology combines improved protection against lube system failure with optimal heat transfer.



[engine oil coolers]

- » can be used for transmission applications (*cores only*)
 - » purchase individually or as a Universal Kit (*as shown*)
 - » available in 4 sizes, with 1/2" NPT female fittings
 - » Universal Kits only work with spin-on filters
- Thread sizes:
3/4" x 16, 13/16" x 16, 1" x 12,
18 x 1.5mm, 20 x 1.5mm, 22 x 1.5mm

TRU-COOL[®] max

[maximum protection]

- » the perfect choice when an auxiliary transmission oil cooler is your only option
- » double the cooling performance of our other coolers
- » durable brazed aluminum construction with a lifetime guarantee
- » precise fin spacing for efficient air flow and cooling
- » remote thermal cold weather bypass and installation hardware included



Tru-Cool product line:

Part Number	# of plates	Cooler Size [inches]	GVW Rating	Vehicle Type	BTU Rating	Fitting Size [inches]
LPD4451	18	4 x 11 x 3/4	11,500		7,500	11/32 hose barb
LPD4452	27	5 3/4 x 11 x 3/4	14,500		9,800	11/32 hose barb
LPD4454	36	7 1/4 x 11 x 3/4	18,000		13,000	11/32 hose barb
LPD4490	60	12 x 11 x 3/4	22,000		20,000	11/32 hose barb
LPD4588	24	5 3/4 x 11 x 1 1/2	19,000		14,400	11/32 hose barb
LPD4589	36	8 x 11 x 1 1/2	24,000		21,000	11/32 hose barb
LPD4590	48	11 x 11 x 1 1/2	28,000		24,000	11/32 hose barb
LPD4541	12	3 3/4 x 11 x 3/4	14,000		9,000	3/8 hose barb
LPD4542	17	5 1/2 x 11 x 3/4	16,000		12,000	3/8 hose barb
LPD4543	23	7 1/4 x 11 x 3/4	20,000		15,000	3/8 hose barb
LPD4544	30	9 1/2 x 11 x 3/4	22,000		20,000	3/8 hose barb
LPD4707	23	8 1/4 x 11 x 3/4	20,000		16,000	5/16 inverted flare
LPD4711	23	8 1/4 x 11 x 3/4	20,000		16,000	3/8 inverted flare
B7B	12	2 3/4 x 11 x 1 1/2	Small engine applications		7,500	1/2 NPT
L7B	24	5 3/4 x 11 x 1 1/2	Heavy duty V6 cars, Medium duty V8 cars, Compact pickups, Minivans		15,000	1/2 NPT
M7B	36	8 x 11 x 1 1/2	Heavy duty V8 cars, Full size pickups, Vans, High performance applications		20,500	1/2 NPT
H7B	48	11 x 11 x 1 1/2	High performance applications, Recreational vehicles, Industrial applications		29,200	1/2 NPT
TRU 4269P34 - Universal Kit				[Kit includes L7B Cooler and hardware]		
TRU 4269P35 - Universal Kit				[Kit includes M7B Cooler and hardware]		

STACKED PLATE: Transmission — FIN & PLATE: Transmission — TRU-COOL — STACKED PLATE: Engine

Part Number	# of plates	Cooler Size [inches]	GVW Rating	BTU Rating	Fitting Size [inches]	Vehicle Type
LPD4739	13	8 1/2 x 22 x 1 1/4	40,000	45,000	3/8 inverted flare HEX	
LPD47391	> as above but without cold weather bypass					
LPD4921	12	6 x 23 x 3/4	30,000	34,000	3/8 hose barb	
LPD49211	> as above but without cold weather bypass					
LPD4920	8	4 x 23 x 3/4	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.

Tru-Cool hardware:

62K-5126	Installation Kit	Re-installation	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			

FIN & PLATE: TRU-COOL MAX