

# Transmission, Engine and Power Steering Oil Coolers



# **The Leader in Automotive Cooling**

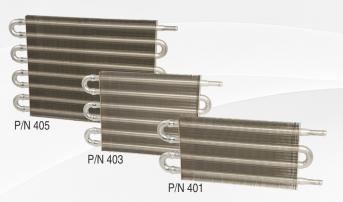
Hayden<sup>®</sup> Automotive engineers, manufactures and supplies a wide range of products designed to keep your car, truck or performance vehicle running cool. Hayden<sup>®</sup> oil coolers remove destructive heat generated in the transmission, engine and power steering systems to increase component life.

### **Ultra-Cool® Transmission Oil Coolers**

The industry's first transmission cooler, the Ultra-Cool<sup>®</sup> transmission oil cooler is available in six sizes to fit a wide range of applications from sub-compacts to motorhomes.

#### Features

- Ultrasonically soldered for reliability
- 100% pressure tested at 150 PSI for quality assurance
- High efficiency turbulation
- 3/8" push-on fittings for quick and easy installation



PART #	SIZE THICKNESS X HEIGHT X LENGTH	CORE	<b>FITTING TYPE</b>	APPLICATION
401	3/4" x 5" x 12-1/2"	8-3/4"	3/8" Push-on	Compact and sub-compact cars
402	3/4" x 5" x 15-7/8"	12-1/8"	3/8" Push-on	Up to full size vehicles, towing up to 2,500 lbs
403	3/4" x 7-1/2" x 12-1/2"	8-3/4"	3/8" Push-on	Up to full size vehicles, towing up to 2,500 lbs
404	3/4" x 7-1/2" x 15-7/8"	12-1/8"	3/8" Push-on	Up to class "C" motorhomes, towing up to 5,000 lbs
405	3/4" x 10" x 15-7/8"	12-1/8"	3/8" Push-on	Up to class "A" motorhomes, towing up to 10,000 lbs
1015	1-1/2" x 12" x 15-1/8"	11-1/8"	3/8" Push-on	Towing with class "A" motorhomes or towing more than 10,000 lbs

## **Rapid-Cool® Transmission Oil Coolers**

Rapid-Cool<sup>®</sup>'s unique plate and fin design offers excellent cooling efficiency in a compact, space-efficient design.

Features

- 33% more efficient than a comparable tube fin design
- Pre-drilled mounting plates for easy installation
- Four sizes available to fit a wide range of applications
- Patented internal turbulation for increased heat transfer and minimal pressure drop (Patent No. 6478080)

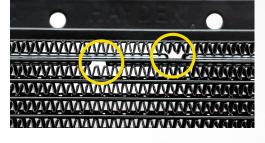


PART #	SIZE THICKNESS X HEIGHT X LENGTH	CORE	FITTING TYPE APPLICATION		GVWR
676	3/4" x 6" x 11"	3-15/16"	3/8" Push-on	Compact and sub-compact cars	10,000
677	3/4" x 7-1/2" x 11"	5-1/2"	3/8" Push-on	Up to full size vehicles, towing up to 2,500 lbs	14,000
678	3/4" x 9-1/2" x 11"	7-3/8"	3/8" Push-on	Up to class "C" motorhomes, towing up to 5,000 lbs	18,000
679	3/4" x 11-5/8" x 11"	9-1/2"	3/8" Push-on	Up to class "A" motorhomes, towing up to 10,000 lbs	22,000
687	3/4" x 7-1/2" x 11"	5-1/2"	9/16"-18, 37 JIC Male Flare (-6 AN) Up to full size vehicles, towing up to 2,500 lbs		14,000
689	3/4" x 11-5/8" x 11"	9-1/2"	9/16"-18, 37 JIC Male Flare (-6 AN)	Up to class "A" motorhomes, towing up to 10,000 lbs	22,000

### **By-Pass Transmission Oil Coolers**

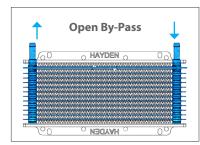
Hayden's new patented internal pressure by-pass coolers allow the vehicle's transmission to reach optimum operating temperature quickly by routing the fluid through the by-pass channel of the cooler until fluid temperature increases. This new design allows vehicles in colder climates to reach proper operating temps faster which improves fuel economy and helps reduce friction of internal components. Hayden's internal pressure by-pass design incorporates an integrated valve that eliminates the need for external valves and additional plumbing at installation.

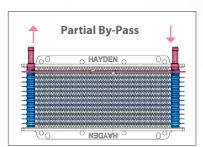


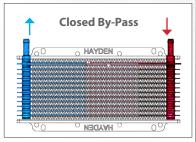


- Bi-directional flow
- 33% more efficient than traditional coolers
- · High efficiency louvered fins and special oil turbulators
- 100% brazed aluminum construction offers superior strength and reliability

PART #	LONG P/N	SIZE	FITTING CONNECTION	SERVICE APPLICATION	GVWR
696	4541	3/4" x 11" x 6"	3/8" Push-on	Normal Duty Driving Compact and mid-size cars	10,000 lbs
697	4542	3/4" x 11" x 7-1/2"	3/8" Push-on	Medium Duty Driving Mid-size and full size cars, pick ups, towing up to 2,500 lbs	14,000 lbs
698	4543	3/4" x 11" x 9-1/2"	3/8" Push-on	Heavy Duty Driving 8" Push-on Pick ups, vans, towing up to 5,000 lbs, class "C" motorhomes, travel trailers up to 24 ft	
699	4544	3/4" x 11" x 11-5/8"	3/8" Push-on	Extra Heavy Duty Driving Class "A" motorhomes, large travel trailers, 5th wheel trailers, towing up to 10,000 lbs	22,000 lbs







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### **High Performance Transmission Oil Coolers**



Available in three sizes for medium to heavy duty applications, these high performance coolers are designed to provide outstanding cooling, as well as to complement other high performance accessories.

#### Features

- SAE 45° fittings for maximum reliability
- All aluminum lightweight construction
- · Powder coated to prevent corrosion

PART #	OVERALL SIZE THICKNESS, HEIGHT, LENGTH	CORE	FITTING SIZE	APPLICATION
512	3/4" x 7-1/2" x 12-1/2"	8-3/4"	9/16"-18 S.A.E. Flare	Up to full size vehicles, towing up to 2,500 lbs.
514	3/4" x 7-1/2" x 15-7/8"	12-1/8"	9/16"-18 S.A.E. Flare	Up to class "C" motorhomes, towing up to 5,000 lbs
516	3/4" x 10" x 15-7/8"	12-1/8"	9/16"-18 S.A.E. Flare	Up to class "A" motorhomes, towing up to 10,000 lbs

### **Remote Transmission Oil Cooling Systems**

Our remote transmission coolers help keep temperatures down when ram air is unavailable. These coolers feature our 10" compact, efficient electric fan mounted to our high performance cooler (P/N 525) or our plate fin cooler (P/N 526), ready for installation out of the box. All remote coolers are compatible with all Hayden fan controllers or can be operated via manual switch (not included).

Features

- · Powder coated aluminum brackets
- Fan and cooler preassembled
- Remote mounting



P/N 526 -

Rapid-Cool®

P/N 525 - High

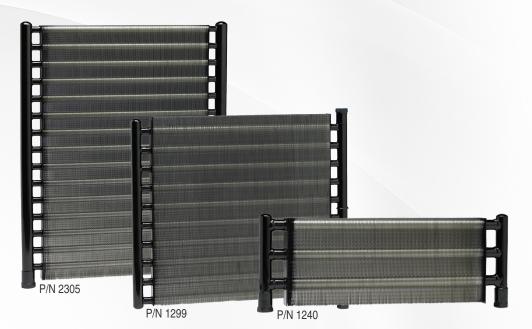
Performance

PART #	OVERALL SIZE THICKNESS, HEIGHT, LENGTH	FITTING SIZE	APPLICATION			
525	3-1/2" x 11" x 18-1/2"	9/16"-18 S.A.E. Flare	Threaded cooler fittings for maximum dependability			
526	3-1/2" x 11" x 13-4/5"	3/8" Push-on	Ultra compact design provides same cooling as the high performance model			

### **Heavy Duty Oil Coolers**

Designed for rugged, heavy duty use, our coolers can be used for many different cooling applications, including transmission, engine, gear box, hydraulic oils and diesel fuel.

Our heavy duty coolers feature brazed copper tubes with aluminum fin construction. Turbulators in every tube provide 3 1/2 times more cooling surface than bare tubing.



PART		INTING	OVERALL SIZE HEIGHT, LENGTH,		NUMBER OF PASSES		GPM FLOW	COOLING BTU/HR. @2500 AIRFLOW @ 100°F ITD	PACKED WEIGHT
#	QTY.	P/N	THICKNESS	OF ROWS	OFPASSES	SIZE FPT	RANGE	OIL TO AIR	IN POUNDS
Two-Pass Coolers									
1233	1	210	10 x 12-1/4 x 3/4	1	2	3/8	2 - 10	7,300 - 12,000	4
1299	3	238	22-1/8 x 24 x 1-1/2	1	2	3/4	2.5 - 20	36,500 - 61,000	17
1271	2	238	26-3/4 x 30 x 1-1/2	1	2	1	3 - 12	49,300 - 89,600	26
One-Pa	ass Co	olers							
1215	1	238	4-1/2 x 15 x 1-1/2	1	1	1/2	1 - 8	6,000 - 8,500	3
1234	2	238	6-1/2 x 15 x 1-1/2	1	1	1/2	1.5 - 12	9,000 - 12,800	4
1240	2	238	6-1/2 x 18 x 1-1/2	1	1	1/2	1.5 - 12	10,900 - 16,200	4
1236	2	238	8-1/2 x 18 x 1-1/2	1	1	1/2	2 - 16	14,500 - 21,500	6
1241	2	238	8-1/2 x 21 x 1-1/2	1	1	1/2	2 - 16	16,900 - 25,900	7
1268	2	238	12-3/4 x 18 x 1-1/2	1	1	3/4	3 - 24	21,200 - 31,200	8
1260	2	238	12-3/4 x 24 x 1-1/2	1	1	3/4	3 - 24	28,100 - 44,300	11
1284	3	238	16-3/4 x 24 x 1-1/2	1	1	3/4	4 - 32	37,500 - 59,000	14
1290	3	238	18-3/4 x 24 x 1-1/2	1	1	3/4	4.5 - 36	42,200 - 66,400	15
1292	3	238	25 x 24 x 1-1/2	1	1	1	6 - 48	55,200 - 86,400	20
2305	4	238	31 x 24 x 1-1/2	1	1	1	7.5 - 60	70,000 - 108,000	26
2306	4	238	31 x 30 x 1-1/2	1	1	1	7.5 - 60	83,600 - 139,800	32
1297	4	238	37-1/4 x 30 x 1-1/2	1	1	1-1/4	9 - 72	99,000 - 164,600	38
1298	4	238	37-1/4 x 40 x 1-1/2	1	1	1-1/4	9 - 72	122,600 - 226,100	51
2312	4	238	41-3/4 x 43 x 1-1/2	1	1	2	10 - 80	149,600 - 264,500	94
Two-Ro	ow Coo	lers							
2271	4	238	20-1/4 x 24 x 3	2	1	1	9 - 36	89,900 - 114,300	38
2292	1	107	26-7/8 x 24 x 3	2	1	1	12 - 96	83,500 - 152,400	51
2297	1	183	45 x 42 x 3	2	1	2-1/2	18 - 144	235,900 - 415,700	134

### HD-Cool<sup>™</sup> Heavy Duty

Hayden's 37mm heavy duty plate fin coolers are ideal for transmission and engine oil cooling applications requiring higher flow range and increased heat transfer capacity in a compact space.

#### Features

- Pre-drilled mounting brackets for easy installation
- 4 sizes available to handle a wide range of applications
- Patented internal turbulation for increased heat transfer and minimal pressure drop (Patent No. 6,478,080)
- 37° JIC male flare (-12 AN) fittings for maximum flow capacity



	P/N 77	78	P/N / / / P/N /	6		
PART #	SIZE THICKNESS X HEIGHT X LENGTH	NUMBER OF PLATES	FITTING TYPE	RECOMMENDED FLOW RANGE	COOLING BTU / HR (1)	GVW
776	1.7" x 4.3" x 12.9"	7	Female 7/8-14 o-ring x 37° JIC male flare (-12 AN)	1-5 GPM	5,200-10,400	14,000
777	1.7" x 6.6" x 12.9"	14	Female 7/8-14 o-ring x 37° JIC male flare (-12 AN)	1-5 GPM	7,900-18,500	18,000
778	1.7" x 9" x 12.9"	21	Female 7/8-14 o-ring x 37° JIC male flare (-12 AN)	1-5 GPM	9,600-20,800	24,000
779	1.7" x 11.2" x 12.9"	28	Female 7/8-14 o-ring x	1-5 GPM	10,000-23,500	29,000

(1) @ 100°F oil to air differential temperature

### **HD-Cool<sup>™</sup> - Heavy Duty Commercial**

37° JIC male flare (-12 AN)



Hayden's 40mm heavy duty bar and plate coolers are ideal for commercial, high performance or off-road oil cooling. The thick core and wide length are designed for applications requiring higher flow range and increased heat transfer capacity.

#### Features

- Brazed aluminum plates
- Extended core width for maximum heat transfer
- Pre-drilled mounting brackets for easy installation
- Two 37° JIC male flare (-12 AN) fittings for maximum flow capacity

PART #	SIZE THICKNESS X HEIGHT X LENGTH	CORE	FITTING TYPE	RECOMMENDED FLOW RANGE	COOLING BTU / HR (1)	GVW
801	1.6" x 4.3" x 30.1"	24.4"	Female 7/8-14 o-ring x 37° JIC male flare (-12 AN)	1-6 GPM	16,700-40,000	30,000

(1) @ 100°F oil to air differential temperature

### **Power Steering Oil Coolers**

Hayden's power steering oil coolers remove destructive heat generated within a power steering system, especially in vehicles with large tires such as motorhomes and off-road vehicles. Installation of a power steering oil cooler will prolong the life of the system's pump, hoses, fluid and seals.

PART #	SIZE THICKNESS X HEIGHT X LENGTH	CORE	FITTING TYPE	APPLICATION
1009	3/4" x 11" x 6"	5-3/4"	3/8" Push-on	Light duty
1010	3/4" x 11" x 7-1/2"	8-3/4"	3/8" Push-on	Medium duty
1011	3/4" x 11" x 9-1/2"	5-3/4"	3/8" Push-on	Heavy duty
1012	3/4" x 11" x 11-5/8"	12-1/2"	3/8" Push-on	Trucks & SUVs



### Ultra-Cool<sup>®</sup> Engine Oil Coolers - Light Duty

- · Lightweight, all aluminum construction
- Ultrasonically soldered for maximum reliability
- High-efficiency turbulators
- Part #462 specially designed for Chevrolet V8 engines
- For vehicles that require fitting M22 x 1.5, please use P/N 271

PART #	SIZE THICKNESS X HEIGHT X LENGTH	CORE	FITTING TYPE	APPLICATION
459	3/4" x 7-1/2" x 12-1/2"	8-3/4"	1/2" Push-on	All except Chevy V8
462	3/4" x 7-1/2" x 12-1/2"	8-3/4"	1/2" Push-on	Chevy V8 only
1230	3/4" x 7-1/2" x 12-1/2"	8-3/4"	1/2" Push-on	Cooler only



## **Ultra-Cool® Engine Oil Coolers - Medium Duty**

- Two-pass, thin-line headered design for increased cooling
- 100% hand-brazed construction
- · Turbulators in every tube for efficient cooling
- Part #461 specially designed for Chevrolet V8 engines
- For vehicles that require fitting M22 x 1.5, please use P/N 271

PART #	SIZE THICKNESS X HEIGHT X LENGTH	CORE	FITTING TYPE	APPLICATION
457	3/4" x 10-1/2" x 12-1/4"	8-5/8"	3/8" FPT	All except Chevy V8
461	3/4" x 10-1/2" x 12-1/4"	8-5/8"	3/8" FPT	Chevy V8 only



## Swirl-Cool® Engine Oil Coolers - Heavy Duty

- Copper header and tube construction
- · Turbulators in every tube for efficient cooling
- Vibration absorbing rubber block mounting
- 1-1/2" thick headered design for increased cooling and efficiency
- · Minimal pressure loss due to headered design
- Kit #1046 specially designed for Chevrolet V8 engines
- For vehicles that require fitting M22 x 1.5, please use P/N 271

PART #	SIZE THICKNESS X HEIGHT X LENGTH	CORE	FITTING TYPE	APPLICATION
1040	1-1/2" x 6-1/2" x 18"	14-1/4"	1/2" FPT	All except Chevy V8
1046	1-1/2" x 6-1/2" x 18"	14-1/4"	1/2" FPT	Chevy V8 only







### Blue Streak Performance<sup>™</sup> Cooler Combos

Blue Streak Performance<sup>™</sup> offers two remote mounted cooler combos featuring some of our most popular cooling components that create a self-contained, compact cooling machine. Each unit comes completely assembled with powder coated brackets for increased durability.

### P/N 527 Includes:

#### 8" HD Electric Fan P/N 3660

- · Heavy duty, high performance four pole motor for increased output & endurance
- · Staggered angle, high velocity blades to maximize airflow
- Molded stabilizer ring to reduce airflow by-pass

#### 37mm HD Cooler P/N 778

- Patented baffle turbulation design
- High flow design of up to 5 GPM allows increased heat transfer with over 20,000 BTU/HR
- JIC male flare fitting (-12 AN) included





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### P/N 528 Includes:

12" Electric Fan P/N 3910

- Puller design
- · IP68 rated waterproof and dust proof
- · Compatible with all Hayden fan controllers

#### 37mm HD Cooler P/N 779

- · Patented internal turbulation for increased heat transfer and minimal pressure drop
- High flow design of up to 5 GPM allows increased heat transfer with over 23,000 BTU/HR
- 37° JIC male flare (-12 AN) fittings for maximum flow capacity



Discover other performance transmission parts on our website.