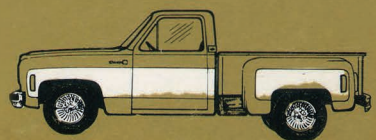
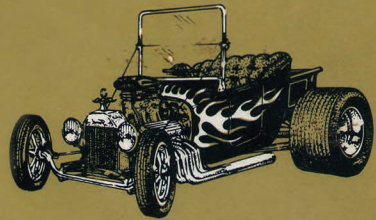
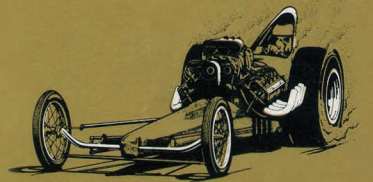
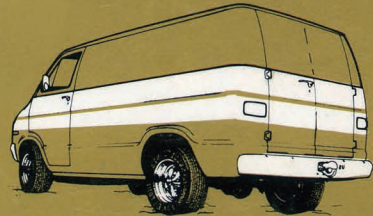
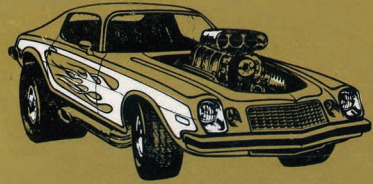


DERALE

PERFORMANCE



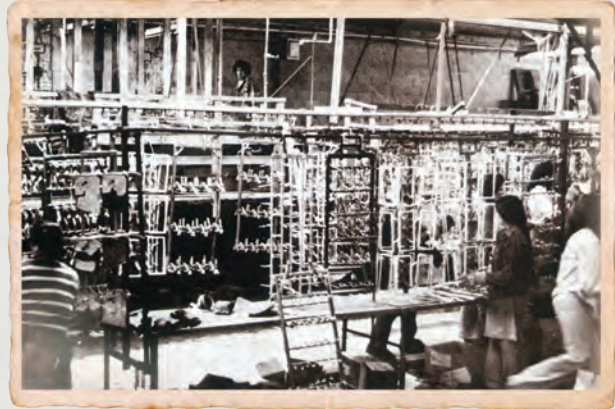
1955 - 2015

FAMILY OWNED AND OPERATED SINCE 1955

1968



ELECTRO PLATING LINE - Most versatile chrome plating machine in western United States



1975

JACK STAND PRODUCTION LINE - Capable of manufacturing 2400 jack stands per 8 hour shift



1966



1970

1976



LICENSE FRAME MANUFACTURING
Capable of manufacturing 5000 license frames per 8 hour shift

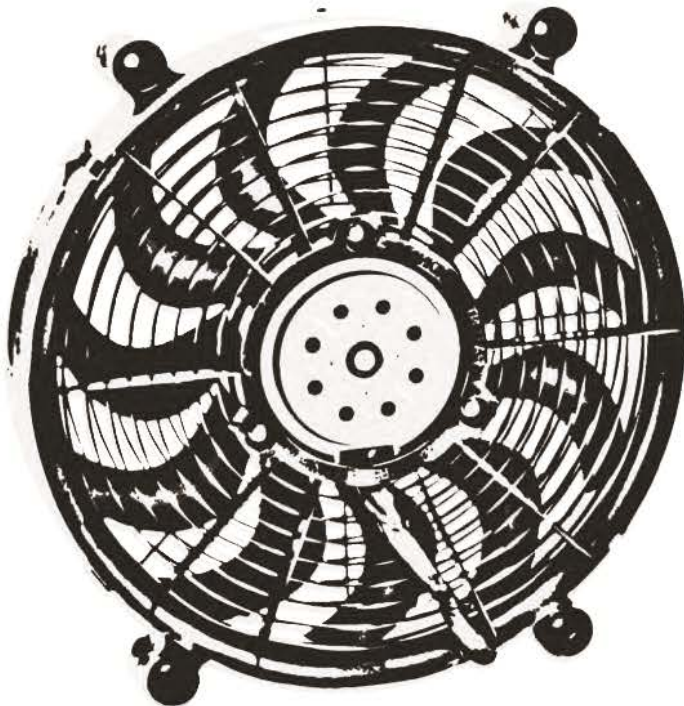
1982



1974

Derate

PERFORMANCE



MANUFACTURES OF

<i>ELECTRIC FAN ASSEMBLIES</i>	2-21
<i>ELECTRONIC FAN CONTROLLERS</i>	12-15
<i>BELT DRIVEN FANS</i>	22-27
<i>TRANSMISSION</i>	
<i>COOLING PANS</i>	28-31
<i>FLUID FILTRATION</i>	32-39
<i>FLUID COOLERS</i>	40-55
<i>COOLING</i>	
<i>ACCESSORIES</i>	56-58
<i>INDEX</i>	59-60

PERFORMANCE COOLING

3 GENERATIONS OF
AUTOMOTIVE PRODUCT MANUFACTURING



PERFORMANCE & DURABILITY





ELECTRIC FANS

SHROUDED POWERPAKS

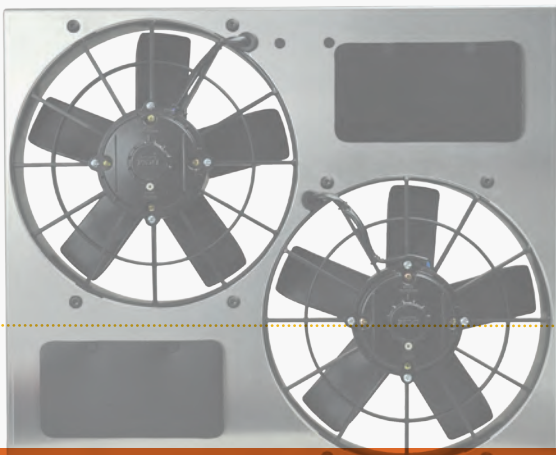
SHROUD
SIZE

15" - 19"
Width

19" - 24"
Width

24" - 31"
Width

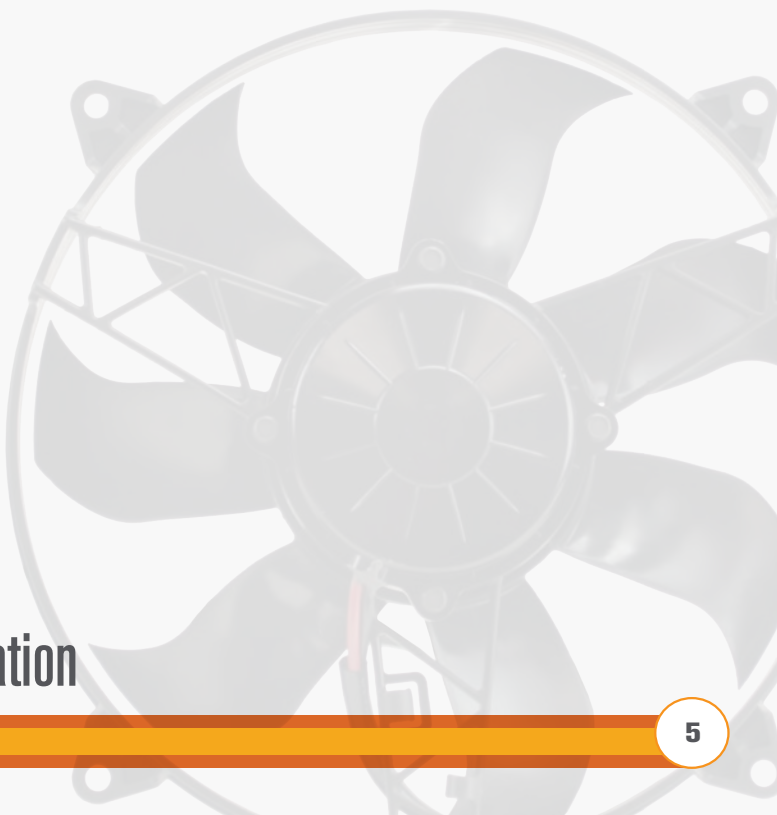
Width	Height	Overall Depth	CFM	Amp Draw	Description	Fan Kit Part No.	Page	Fan w/PWM Part No.	Page
15 3/4"	15 3/4"	3 1/4"	2000	23.4	M12 Powerpack, Single Fan	16926	10	//////////	//////
16 3/4"	17 5/8"	3"	2400	23.5	A17 Powerpack, Single Fan	16816	9	//////////	//////
17"	16 3/8"	2 3/4"	2100	22	A14 Powerpack, Single Fan	16817	9	66817	9
18"	13"	4"	2000	24.8	A12 Powerpack, Single Fan	16814	10	//////////	//////
18"	18"	3"	2400	23.5	A17 Powerpack, Single Fan	16818	9	66818	9
19 1/2"	18"	3 5/8"	2400	23.5	S17 Powerpack, Single Fan	16919	9	//////////	//////
20"	16 3/8"	2 3/4"	2100	22	A14 Powerpack, Single Fan	16820	9	66820	9
20 3/4"	17 5/8"	3"	2400	23.5	A17 Powerpack, Single Fan	16821	9	66821	9
21"	16 3/4"	3"	2400	23.5	A17 Powerpack, Single Fan	16823	9	66823	9
22 1/4"	17 5/8"	3"	2400	23.5	A17 Powerpack, Single Fan	16822	9	66822	9
23 3/4"	19 3/4"	4 1/2"	3750	18.7 Per Fan	A11 Powerpack, Dual Fans	16835	7	66835	7
22 1/2"	19"	4 1/2"	3750	18.7 Per Fan	A11 Powerpack, Dual Fans	16830	7	66830	7
24"	15 1/2"	4 1/2"	3750	18.7 Per Fan	A11 Powerpack, Dual Fans	16831	7	66831	7
23 7/16"	15 7/16"	2 3/4"	2100	22	A14 Powerpack, Single Fan	16827	7	66827	7
24"	17"	3"	2400	23.5	A17 Powerpack, Single Fan	16828	9	66828	9
24"	17"	4 1/2"	3750	18.7 Per Fan	A11 Powerpack, Dual Fans	16833	7	66833	7
24 3/4"	11 1/2"	3"	1360	4.8 Per Fan	M10 Powerpack, Dual Fans	16812	8	//////////	//////
25 5/8"	17 1/8"	4"	4000	24.8 Per Fan	A12 Powerpack, Dual Fans	16825	7	66825	7
25 5/8"	17 1/8"	4"	4000	24.8 Per Fan	A12 Powerpack, Dual Fans	16826	7	66826	7
25 3/4"	17 3/4"	4 1/8"	4000	24.8 Per Fan	M12 Powerpack, Dual Fans	16929	8	//////////	//////
26"	18"	4"	4000	24.8 Per Fan	A12 Powerpack, Dual Fans	16842	7	66842	7
26"	18"	4"	4000	24.8 Per Fan	S12 Powerpack, Dual Fans	16927	7	66927	7
26 3/8"	16"	4"	4000	24.8 Per Fan	A12 Powerpack, Dual Fans	16836	7	66836	7
27"	18"	4"	4000	24.8 Per Fan	A12 Powerpack, Dual Fans	16837	7	66837	7
28 1/4"	17"	4"	4000	24.8 Per Fan	A12 Powerpack, Dual Fans	16838	7	66838	7
28 5/8"	13 7/8"	3 1/4"	4000	23.4 Per Fan	M12 Powerpack, Dual Fans	16928	8	//////////	//////
31 3/8"	15 3/4"	3 1/4"	4000	23.4 Per Fan	M12 Powerpack, Dual Fans	16934	8	//////////	//////



**Increases Horsepower & Torque
Increased Fuel Economy**

SINGLE ELECTRIC FANS

FAN SIZE	Part No.	CFM	Amp Draw	Overall Depth	Airflow	Page	FAN SIZE	Part No.	CFM	Amp Draw	Overall Depth	Airflow	Page	
17"	16217	2400	23.5	2 5/8"	Reversible	17	10"	16110	802	9.2	2 1/16"	Puller	18	
	18217							16010	650	5.3	2 1/2"	Reversible	18	
16"	16016	2175	18.4	4 1/8"	Reversible	19		16620	625	6.4	2 3/8"	Reversible	20	
	16516							16910						
	16626							18910						590
	16116	2024	21	3 7/16"	Puller	18		9"	16309	475	5.5	2 1/4"	Reversible	20
	18916	1980	17.3	3 5/8"	Reversible	20			16509	570	5.4	2 1/2"	Reversible	19
	16136	1918	25.4	25.4"	Puller	20			16619					
16316	1680	15.5	3 7/8"	Reversible	20	16909		475	5.5	2 1/4"	Reversible	20		
16916														
14"	16214	2100	22	2 5/8"	Reversible	17	8"	16508	500	4.8	2 3/8"	Reversible	19	
	18214							16618						
	16114	1864	21.5	3 7/16"	Puller	18		16308	350	5.3	2 1/4"	Puller	20	
	16014							16908						
	16514	1350	10.5	3 1/4"	Reversible	19	7"	16507	400	4.8	2 3/8"	Reversible	19	
	16624							16617						
	18914	1230	9.7	3 1/8"	Reversible	20		5"	16105	315	3.6	2 1/4"	Puller	18
	16314	1225	12.4	3 1/4"	Reversible	20			4"	16104	125	1.9	2 3/8"	Puller
16914														
13"	16142	1640	21.8	3 3/4"	Puller	18								
	16924	2000	24.8	3 5/8"	Puller	11								
12"	16925	2000	23.4	3 1/8"	Puller	11								
	16212	1640	21.8	3 3/4"	Puller	17								
	18212													
	18912	1450	21	2 5/8"	Reversible	20								
	16918	1350	16	3 1/2"	Puller	18								
	16112	1328	14.2	2 7/16"	Puller	18								
	16012	880	8.8	2 1/2"	Reversible	19								
	16512													
	16622													
	16312	725	9	2 3/8"	Reversible	20								
16912														
11"	16920	1380	11	4"	Puller	18								



choose the right size for any application

HIGH OUTPUT RAD FAN

aluminum shroud kits

ELIMINATES FUEL & HORSEPOWER-ROBBING
BELT DRIVEN FANS



MAXIMUM PERFORMANCE

NOW AVAILABLE WITH BUILT IN

PWM CONTROLLER

PULSE WIDTH
MODULATION

get **COMPLETE** control
of your engine temperature

for complete details see page 13



HIGH OUTPUT DUAL RAD FANS ALUMINUM SHROUD

A12 Dual Powerpack

- Optional integrated PWM Fan Controller
- Optional top & side mounting
- Aircraft-quality natural satin aluminum finish can be polished, painted or anodized
- Puller (engine side) applications ONLY
- Water/Dust Proof
- High Output 300-watt motors
- 4000 CFM
12V | 49.6 AMP
- Air pressure relief vents (Excluding #16825 & 66825)



Part No.	W/PWM	Width	Height
16825	66825	25 5/8"	15 1/8"
16826	66826	25 5/8"	17 1/8"
16836	66836	26 3/8"	16"
16837	66837	27"	18"
16838	66838	28 1/4"	17"
16842	66842	26"	18"
Steel Shroud (Powdercoated Silver)			
16927	66927	26"	18"



3 1/8" Bracket Adjustment Range



A11 Dual Powerpack

- Optional integrated PWM Fan Controller
- Optional top & side mounting
- Aircraft-quality natural satin aluminum finish can be polished, painted or anodized
- Puller (engine side) applications ONLY
- Air pressure relief vents
- High Output 225-watt motors
- 3750 CFM
12V | 37.4 AMP
- 3 1/8" Bracket Adjustment Range

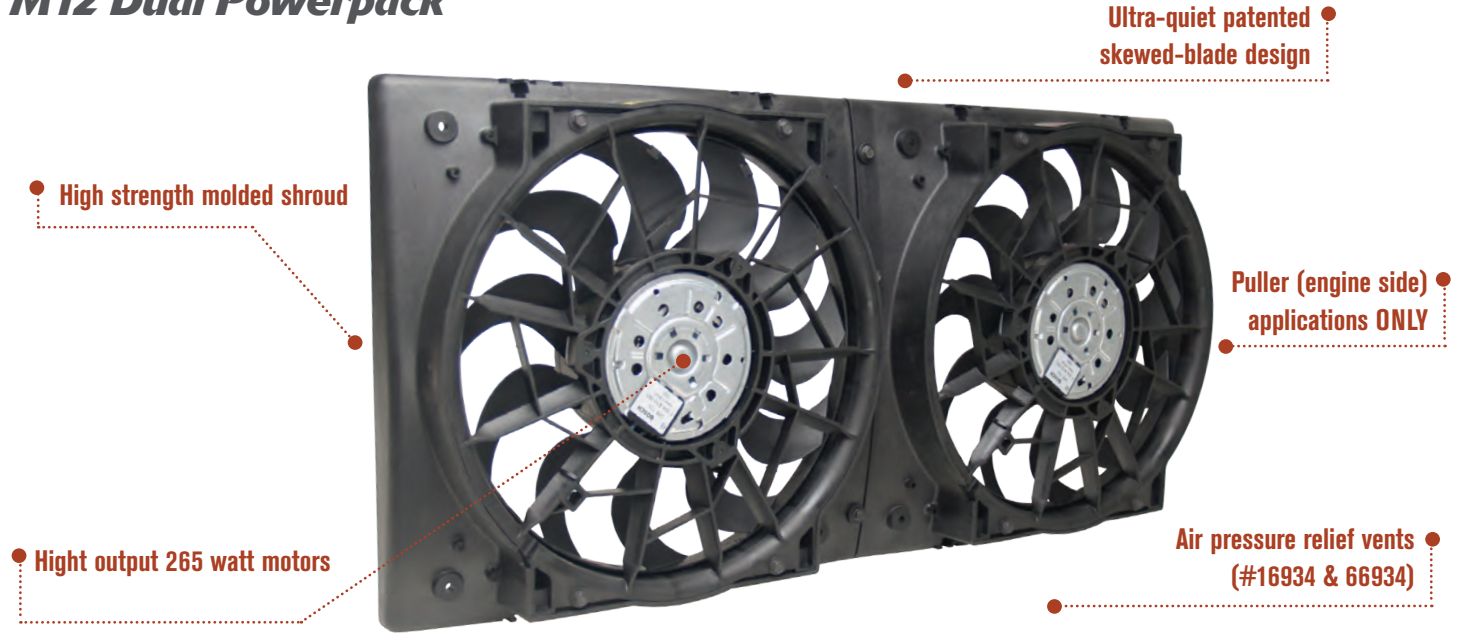


Part No.	W/PWM	Width	Height
16830	66830	22 1/2"	19"
16831	66831	24"	15 1/2"
16833	66833	24"	17"
16835	66835	23 3/4"	19 3/4"



HIGH OUTPUT DUAL RAD FANS MOLDED SHROUD

M12 Dual Powerpack

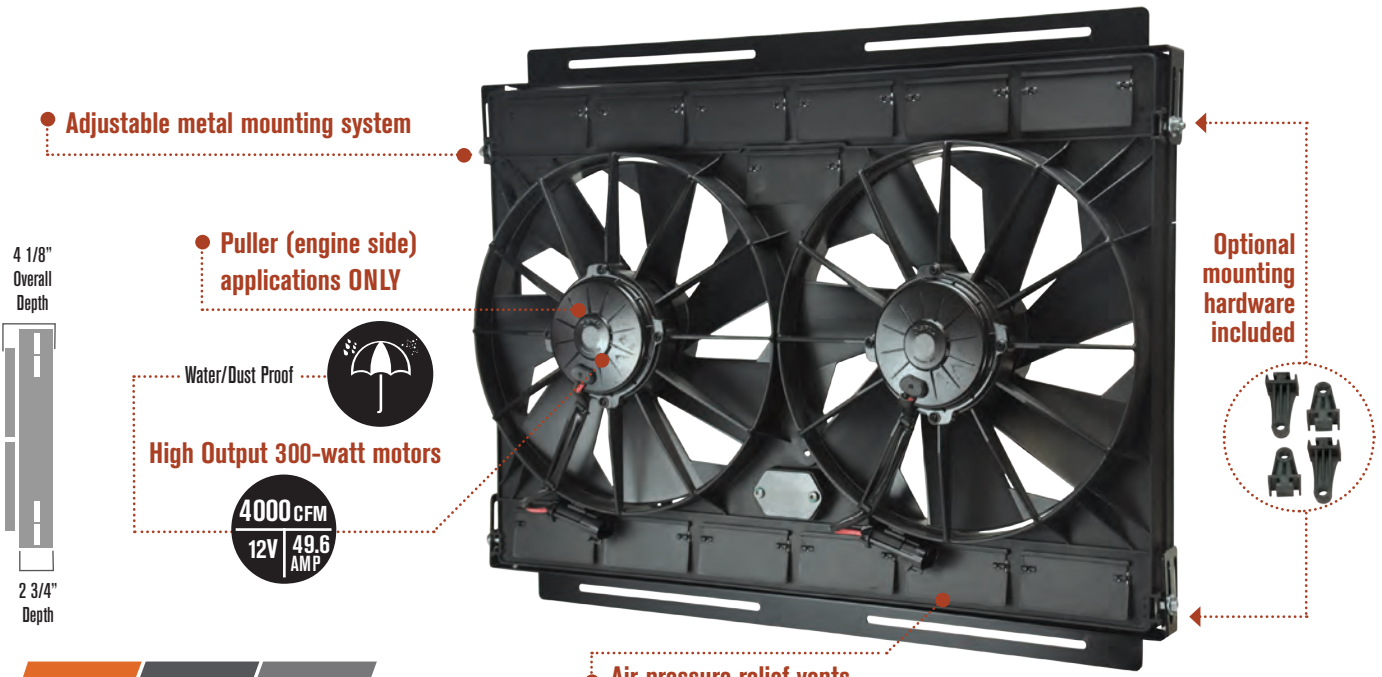


1300 CFM
12V | 9.6 AMP

4000 CFM
12V | 46.8 AMP

Part No.	Width	Height	Depth	Overall Depth
16928	28 5/8"	13 7/8"	1 1/2"	3 1/4"
16934	31 3/8"	15 3/4"	1 3/8"	3 1/4"
16812	24 3/4"	11 1/2"	1 3/4"	3"

M12 Dual Powerpack



4000 CFM
12V | 49.6 AMP

Part No.	Width	Height
16929*	25 3/4"	17 3/4"

*Dimensions do not include adjustable mounting brackets.

HIGH OUTPUT SINGLE RAD FANS ALUMINUM SHROUD

A17 Single Powerpack

- Aircraft-quality natural satin aluminum finish can be polished, painted or anodized
- Puller (engine side) applications ONLY
- High Output 265-watt two speed motors
- Air pressure relief vents
- Optional integrated PWM Fan Controller
- Optional top & side mounting

HIGH SPEED


2400 CFM

12V | 23.5 AMP


LOW SPEED

1800 CFM


12V | 17.4 AMP



Part No.	W/PWM	Width	Height
16816	//////	16 3/4"	17 5/8"
16818	66818	18"	18"
16819	66819	18 3/4"	17 5/8"
16821	66821	20 3/4"	17 5/8"
16822	66822	22 1/4"	17 5/8"
16823	66823	21"	16 3/4"
16828	66828	24"	17"
Steel Shroud (Powdercoated Black)			
16919	//////	19 1/2"	18"



3 1/8" Bracket Adjustment Range



3" Overall Depth
1 1/8" Depth

A14 Single Powerpack

- Aircraft-quality natural satin aluminum finish can be polished, painted or anodized
- Puller (engine side) applications ONLY
- High Output 265-watt two speed motors
- Air pressure relief vents
- Optional integrated PWM Fan Controller
- Optional top & side mounting

HIGH SPEED

2100 CFM

12V | 22 AMP

LOW SPEED

1500 CFM

12V | 16.2 AMP



Part No.	W/PWM	Width	Height
16817	66817	17"	16 3/8"
16820	66820	20"	16 3/8"
16827	66827	23 7/16"	15 7/16"



HIGH OUTPUT SINGLE RAD FAN ALUMINUM SHROUD

A12 Single Powerpack

Optional top & side mounting

Aircraft-quality natural satin aluminum finish can be polished, painted or anodized

Water/Dust Proof

High Output 300-watt motors

2000 CFM
12V | 24.8 AMP

Air pressure relief vents

Puller (engine side) applications ONLY

3 1/8" Bracket Adjustment Range

Part No.	Width	Height
16814	18"	13"

4" Overall Depth

2 3/4" Depth

HIGH OUTPUT SINGLE RAD FAN MOLDED SHROUD

M12 Single Powerpack

High strength molded shroud

Puller (engine side) applications ONLY

High Output 265-watt motors

2000 CFM
12V | 23.4 AMP

Ultra-quiet patented skewed-blade design

Air pressure relief vents

Part No.	Width	Height
16926	15 3/4"	15 3/4"

3 1/4" Overall Depth

1 1/8" Depth

HIGH OUTPUT SINGLE RAD FANS

Part No.	Fan Size	Width	Height	Part No.	Fan Size	Width	Height	Part No.	Fan Size	Width	Height
16913	14"	14 1/2"	14 1/2"	16925	12"	12 5/8"	12 5/8"	16924	12"	13 1/8"	13 1/8"
16917	17"	16 7/8"	16 7/8"								

D.I.Y

DO-IT-YOURSELF PULLER APPLICATION DROP-IN ELECTRIC FANS

DROP-IN SINGLE RAD FANS FOR THE D.I.Y. PROS AT HOME!

PUSHER APPLICATION

Mounting kit included for Pusher installation.
No shroud necessary

Choose from 1 of 4 pusher style fans that can be pullers by using your custom built shroud.*
All fans come complete with detailed drawing of all cut out and hole dimensions.



*Custom built shroud not included.

Electric FAN CONTROLLERS



PWM

*Electric Fan
Controller*

Get **COMPLETE** control of your engine temperature

SOFT START TECHNOLOGY

Continuous fan control without
damaging amp spikes

OPERATES
FROM **Zero**
to **100%**

65
amp capacity

**MULTIPLE
FAN CONTROL**

**INCLUDES AUTO
RESETTING CIRCUIT
BREAKER**

EXTENDS
ELECTRIC FAN LIFE

REDUCES ELECTRIC FAN NOISE



BUILT-IN A/C OVERRIDE CIRCUIT
CURRENT OVERLOAD
OVERHEATING PROTECTION

Part No. 16795

US Patent.
7006762



MADE IN U.S.A

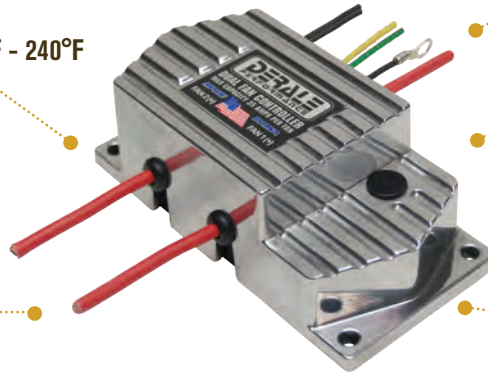
HIGH AMP. ADJUSTABLE FAN CONTROLLERS

SINGLE FAN CONTROLLER

Adjustable fan activation range from 150°F - 240°F

35 amp Capacity

Turn-off temperature preset at 15°F below activation setting



DUAL FAN CONTROLLER

Activate Fan #1 at desired temperature

Activates Fan #2 at temperature 10°F warmer than fan #1

70 amp Capacity
35 Per Fan

Turn-off temperature presets at 10°F below activation settings

CONTROLLERS also feature...

- Finned, die-cast aluminum housing with bright finish
- Interchangeable probe design available in both push-in radiator probe & 3/8" NPT thread in probe
- Automatic resetting circuit breaker
- Air conditioning override circuit built-in
- Measures: 4 5/8" L x 2 5/16" W x 1 1/2" H



MADE IN U.S.A

Application	Part No.
Dual Controller - Push-in probe	16788
Dual Controller - 3/8" NPT probe	16789
Single Controller - Push-in probe	16778
Single Controller - 3/8" NPT probe	16779
Replacement probe - Push-in	16752
Replacement probe - 3/8" NPT	16753

ADJUSTABLE FAN CONTROLLERS

Adjustable fan activation range from 150°F - 240°F

Turn-off temperature preset at 10°F below activation setting

25 amp Capacity

Interchangeable probe design
Push-in radiator or 3/8" NPT thread-in probe

Air conditioning override circuit built-in



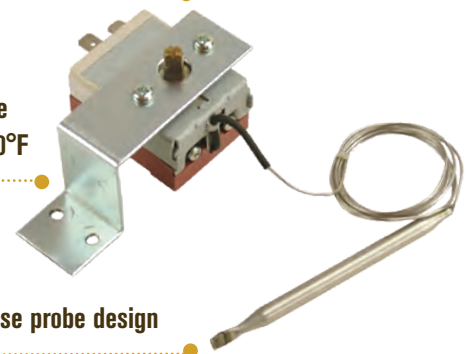
MECHANICAL FAN CONTROLLER

Turn-off temperature preset at 10°F below activation setting

16 amp Capacity

Adjustable fan activation range from 32°F - 240°F

Radiator hose probe design



Application	Part No.
3/8" NPT Thread-in probe	16749
Push-in radiator probe	16759
Rep. 3/8" NPT Thread-in probe	16750
Rep. Push-in radiator probe	16760

Measures: 3 3/4" L x 1 9/16" W x 2 1/2" H

Application	Part No.
Capillary tube	16769

HIGH OUTPUT SINGLE RAD FANS



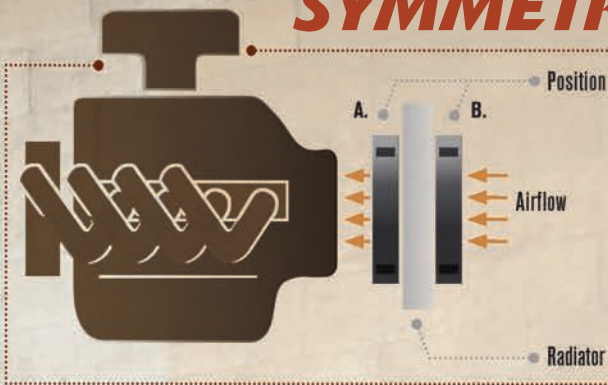
ULTRA QUIET PATENTED BLADES

PUSHER OR PULLER

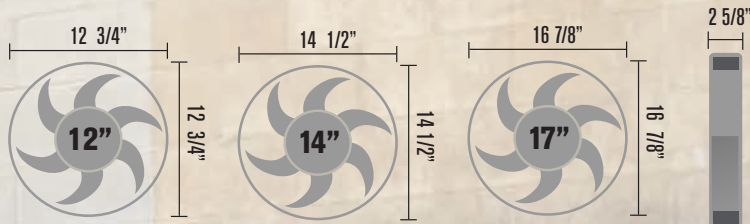
H.O. 265-WATT 2-SPEED MOTOR



State of the Art *SYMMETRICAL DESIGN*



Our High Output Single RAD Fans offer a state-of-the-art symmetrical design easily making the fan a Pusher or Puller. These fans pull hard through thick and tight configuration cores and eliminate the hassle of flipping fan blades or reversing polarities. Simply mount in position A. or B. for preferred airflow



12V

Premium Part No.	Standard Part No.	Fan Size	CFM	Amp Draw (High / Low)
16212	18212	12"	1450/1000	21 / 15
16214	18214	14"	2100/1500	22 / 16.2
16217	18217	17"	2400/1800	23.5 / 17.4



PREMIUM MOUNTING KITS

Patented ratchet mounting system allows for easy adjustable mounting. Available for single and dual fan set-ups. Compatible with Derale fans: 16212, 16214, 16217, 18212, 18214 & 18217



Single Rad Kit
Part No. 16746



Dual Rad Kit
Part No. 16200

H.O. EXTREME - ELECTRIC FANS

High performance primary cooling fans eliminate fuel & horsepower-robbing belt driven fans

Maximum performance at high static-pressure loads



Water/Dust Proof



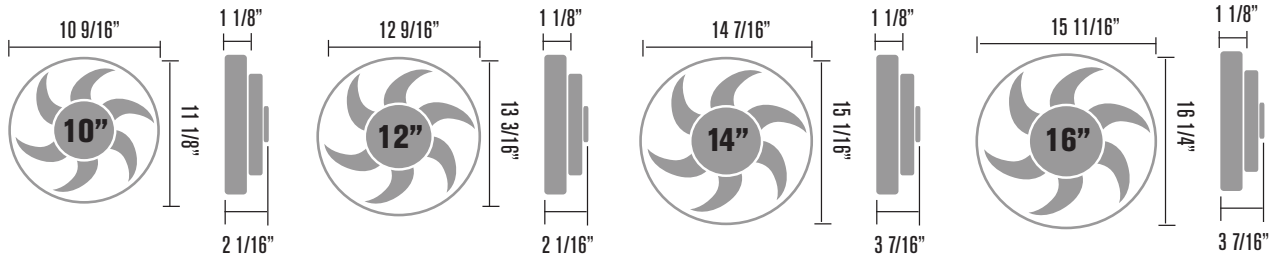
Powerful high-watt motors

12V

Perfect for off-road & extreme conditions

Puller (engine side) applications

Part No.	Fan Size	CFM	Amp Draw
16110	10"	802	9.2
16112	12"	1328	14.2
16114	14"	1864	21.5
16116	16"	2024	21.0



High performance primary cooling fans eliminate fuel & horsepower-robbing belt driven fans

Maximum performance at high static-pressure loads



Water/Dust Proof



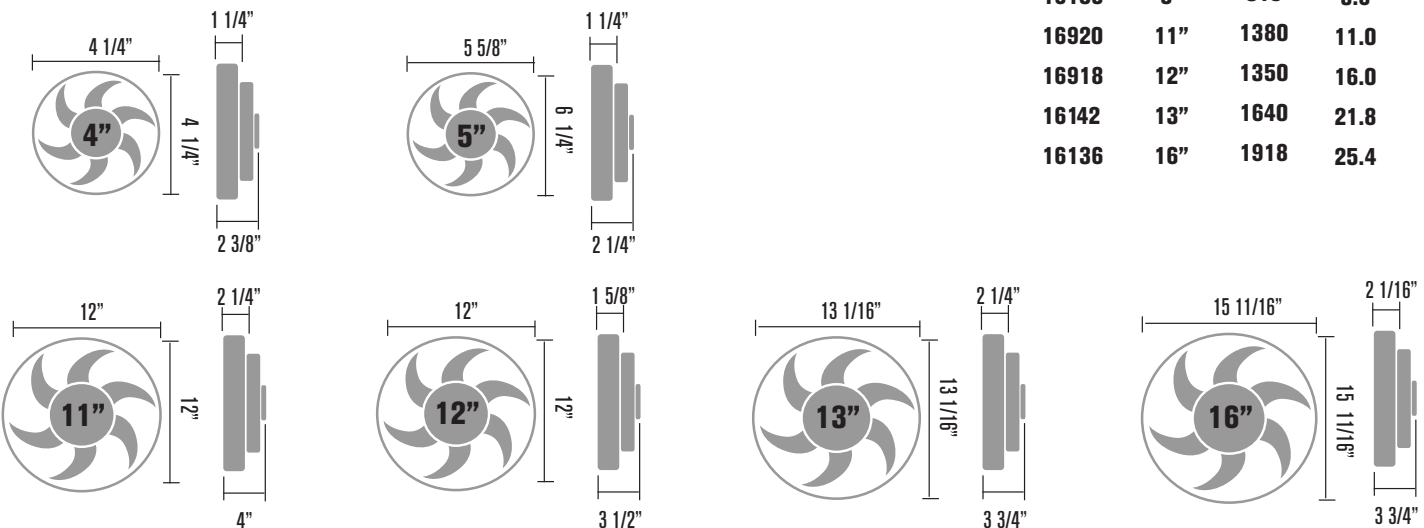
Powerful high-watt motors

12V

Perfect for off-road & extreme conditions

Puller (engine side) applications

Part No.	Fan Size	CFM	Amp Draw
16104	4"	125	1.9
16105	5"	315	3.6
16920	11"	1380	11.0
16918	12"	1350	16.0
16142	13"	1640	21.8
16136	16"	1918	25.4



TORNADO - ELECTRIC FANS



• High performance primary cooling fans eliminate fuel & horsepower-robbing belt driven fans

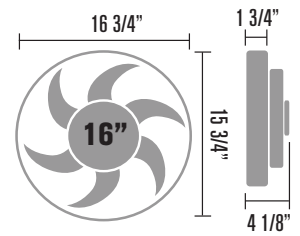
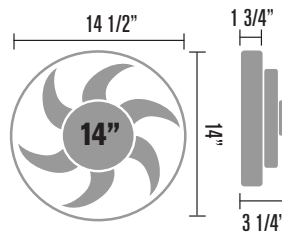
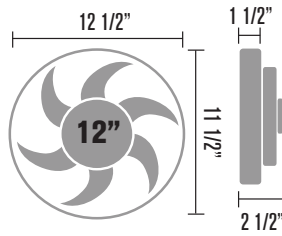
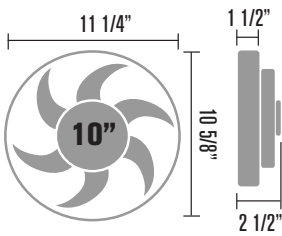
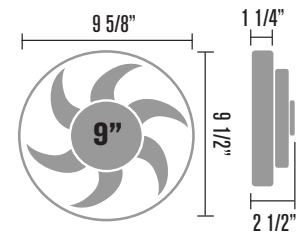
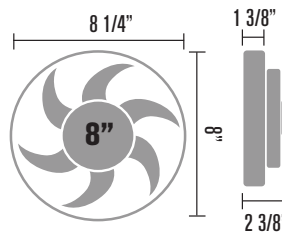
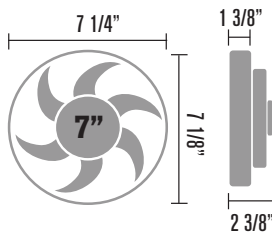


reversible

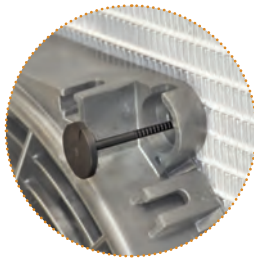


• Ultra-Quiet patented skewed blade design

Premium Part No.	Standard Part No.	Fan w/ Thermostat Part No.	Fan Size	CFM	Amp Draw
16507	16617	//////	7"	400	4.8
16508	16618	//////	8"	500	4.8
16509	16619	//////	9"	570	5.4
16510	16620	16010	10"	650	5.3
16512	16622	16012	12"	880	8.8
16514	16624	16014	14"	1350	10.5
16516	16626	16016	16"	2175	18.4



ELECTRIC FAN MOUNTING KITS



Part No.	Description
13001	Plastic Rod Mounting Kit
16745	Complete Plastic Rod Installation Kit



Part No.	Description
16744	Plastic Rod Kit w/ Mounting Feet
16742	Complete Installation Kit w/ Mounting Feet

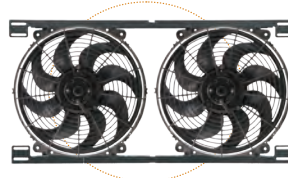


Part No.	Description
16743	Metal Rod Mounting Kit
16741	Complete Metal Rod Installation Kit

Tornado-Dual Fans with brackets

Brackets: Black Powdercoated Finish

Part No.	Fan Size	CFM	Amp Draw Fan 1 / 2
16824	Dual 12"	1760	8.8 / 8.8
16834	Dual 14"	2700	10.5 / 10.5
16701	Dual Fan Mounting Brackets Only		



Tornado Single Fan Mounting Bracket Kit

Brackets fit: 10", 12", 14" & 16" Tornado Fans
Clear Anodized Aluminum Finish

Part No.	Image
16700	

DYNO COOL - ELECTRIC FANS

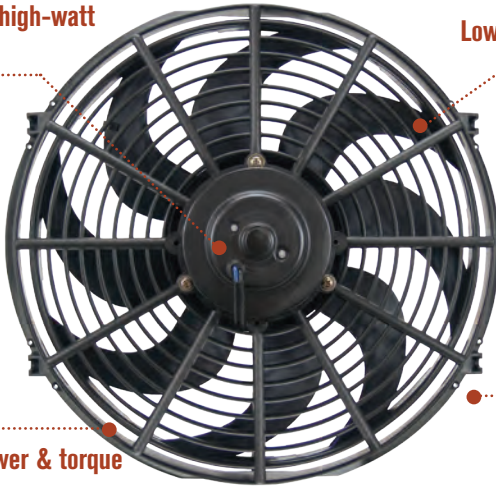
Powerful high-watt motors

Low-profile designs



reversible

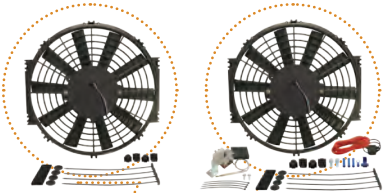
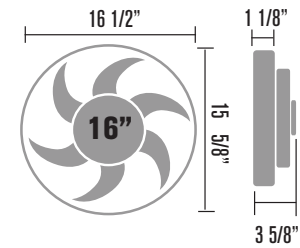
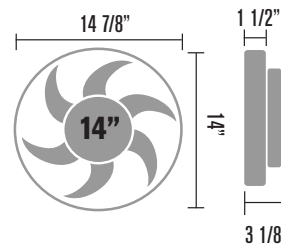
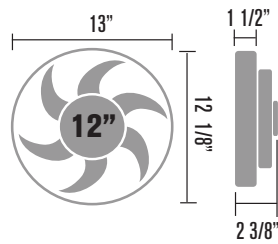
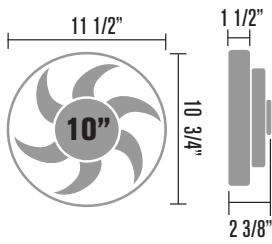
12V



Standard Part No.	Fan Size	CFM	Amp Draw
18910	10"	590	5.3
18912	12"	810	8.3
18914	14"	1230	9.7
18916	16"	1980	17.3

Quiet and efficient balanced curved blades

Increase horsepower & torque



Part No.	Fan w/ thermostat Part No.	Fan Size	CFM	Amp Draw
16908	16308	8"	350	5.3
16909	16309	9"	475	5.5
16910	16310	10"	625	6.4
16912	16312	12"	725	9.0
16914	16314	14"	1225	12.4
16916	16316	16"	1680	15.5

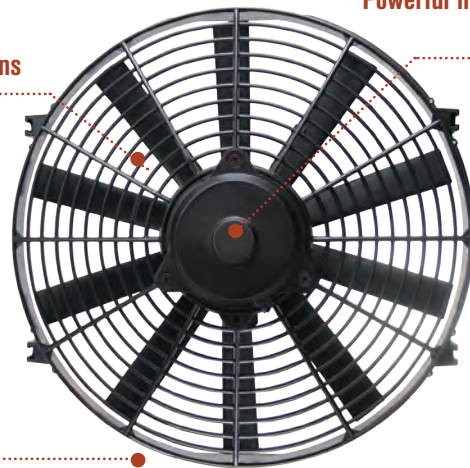
Low-profile designs



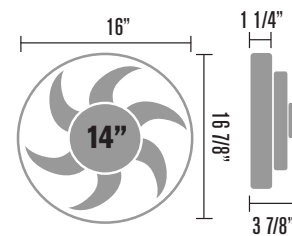
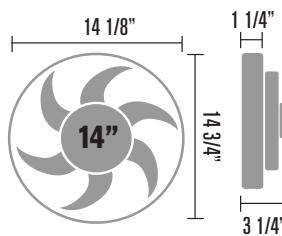
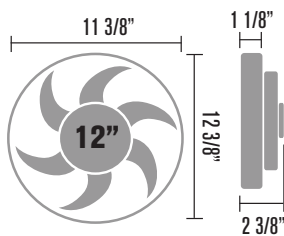
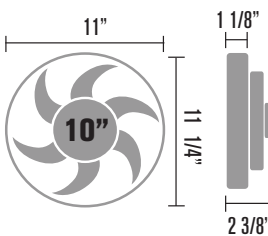
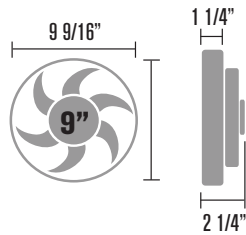
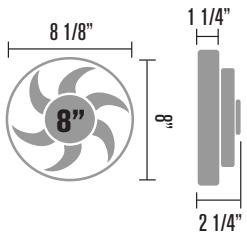
reversible
(8" Fans non-reversible)

12V

Powerful high-watt motors



Increase horsepower & torque



Performance Electric Fan

● High Output fan shroud assembly replaces factory fan clutch/shroud using factory mounting locations

● Perfect for off-road & water crossing use

● Aluminum shroud

● Radiator reservoir remount brackets included (used on some 4 & 6 cyl. applications)



3 3/4" Overall Depth

1 7/8" Depth

1987-1996 JEEP WRANGLER YJ
1997-2006 JEEP WRANGLER TJ
ALL 4 & 6 CYLINDER ENGINES

COMPLETE KITS INCLUDE EVERYTHING YOU NEED FOR A DO-IT-YOURSELF INSTALLATION



Water/Dust Proof

Powerful high-watt motors

1918 CFM
12V 25.6 AMP

● Power steering remount brackets included (used on some 4 cyl. applications)

Part No.	Fan Size	Width	Height
20161	16"	19 1/2"	18"

Automatic Transmission Cooler

500 CFM
12V 4.8 AMP

● 8" Electric fan

● Efficient 16 row Plate & Fin Cooler

● Reduces fluid temperatures 30°F - 40°F

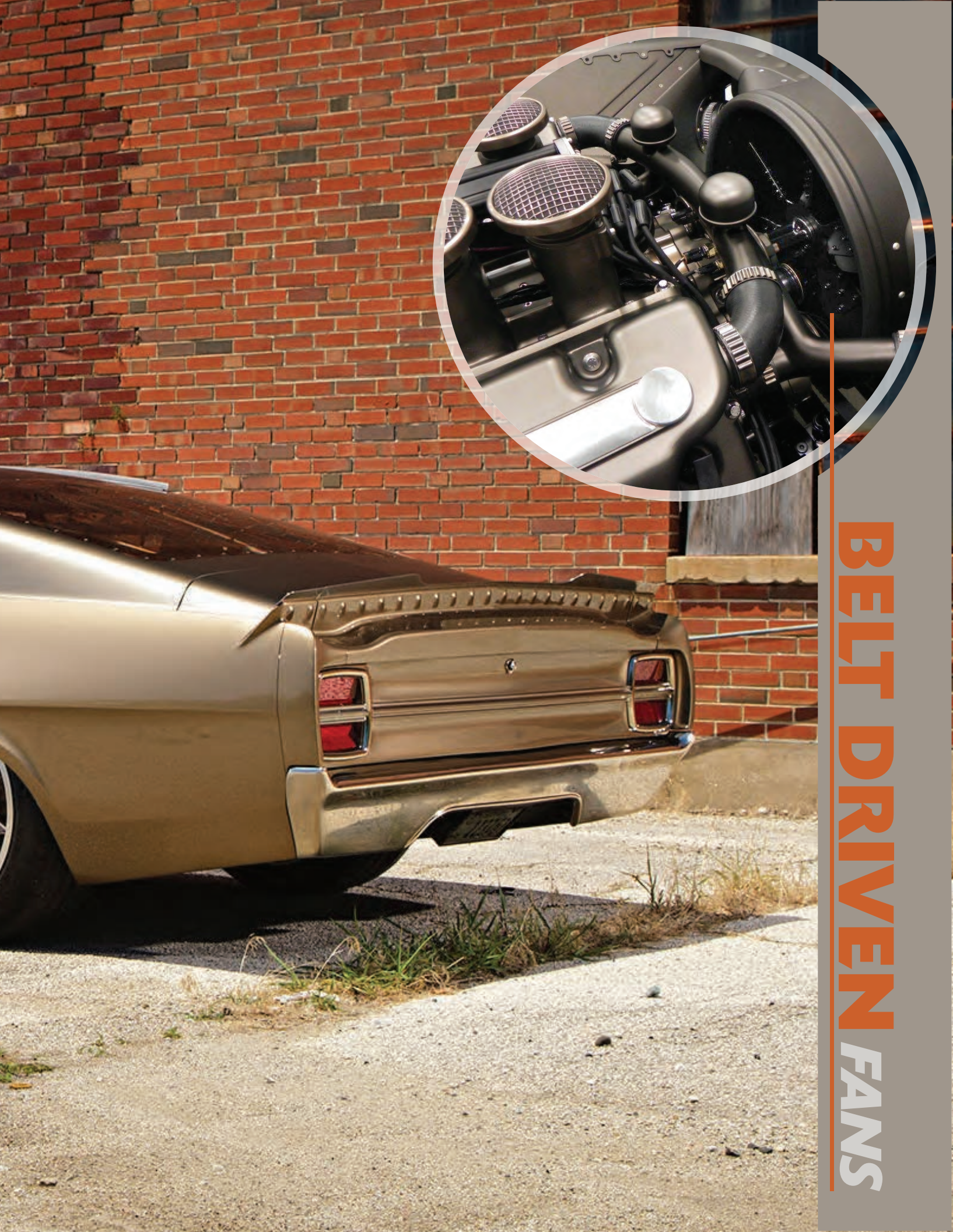


● Mounts to frame rail with no drilling

Part No.

- 20561 Complete Kit
- 13750 Replacement Cooler Assembly
- 20500 Frame Mount Bracket Set





BELT DRIVEN FANS

HEAVY DUTY

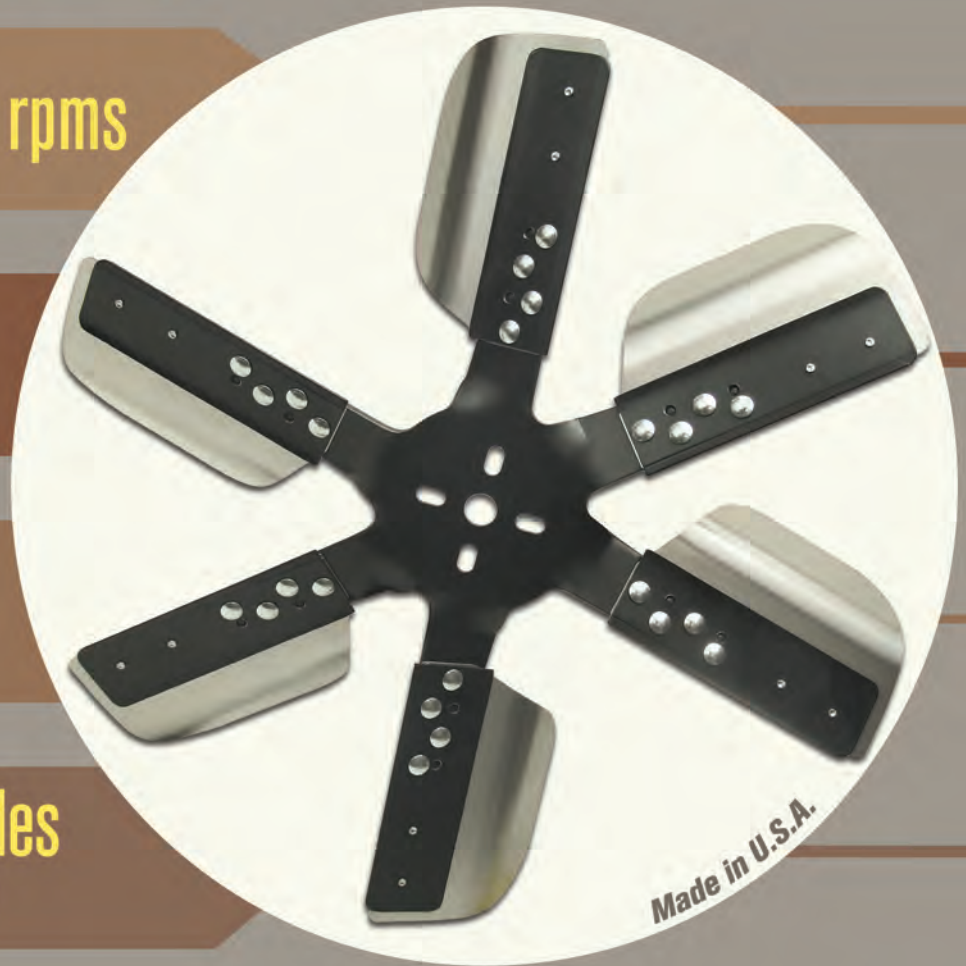
FLEX FANS

Rated up to 10,000 rpms

HD Steel Hub

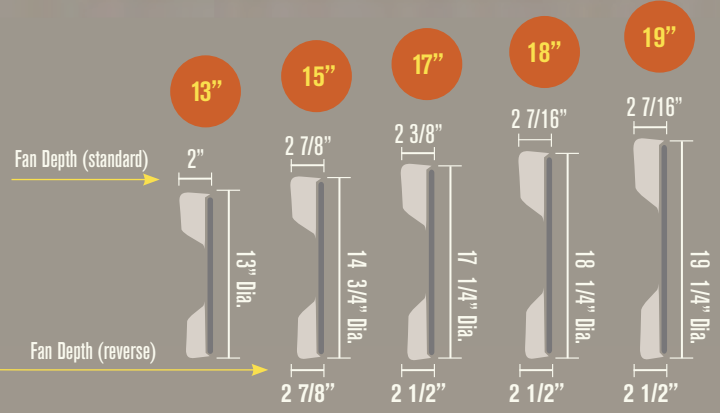
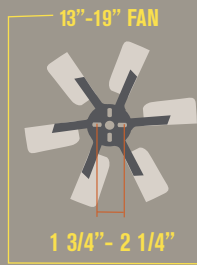
Available in...
Chrome or Black

Stainless Steel Blades
with built-in Rebound Vipers



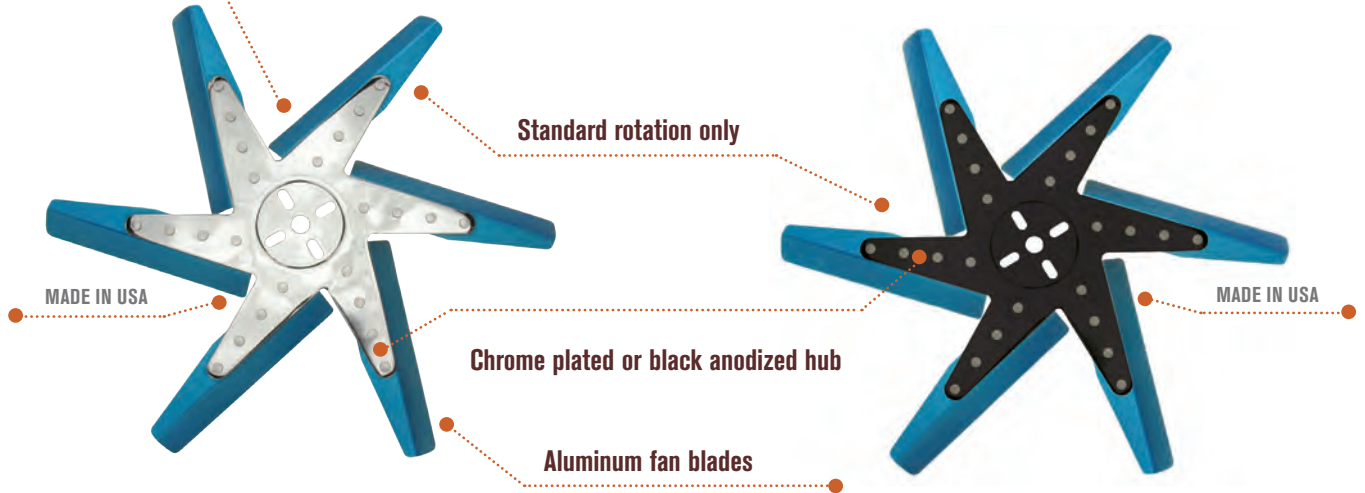
BELT DRIVEN

Rotation	Black Hub Part No.	Chrome Hub Part No.	Fan Size
Standard	17013	17213	13"
Standard	17015	17215	15"
Standard	17017	17217	17"
Standard	17018	17218	18"
Standard	17019	17219	19"
Reverse	17615	//////	15"
Reverse	17617	17817	17"
Reverse	17618	17818	18"
Reverse	17619	17819	19"

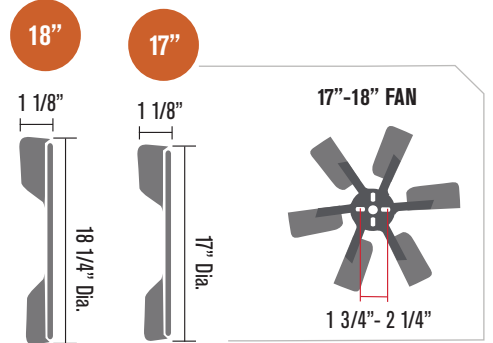


HIGH PERFORMANCE ALUMINUM FLEX FANS

Rated up to 8,000 rpms



Rotation	Black Hub Part No.	Chrome Hub Part No.	Fan Size	Fan Color
Standard	19817	19417	17"	Red
Standard	19818	19418	18"	Red
Standard	19917	19517	17"	Blue
Standard	19918	19518	18"	Blue



HIGH PERFORMANCE STAINLESS FLEX FANS

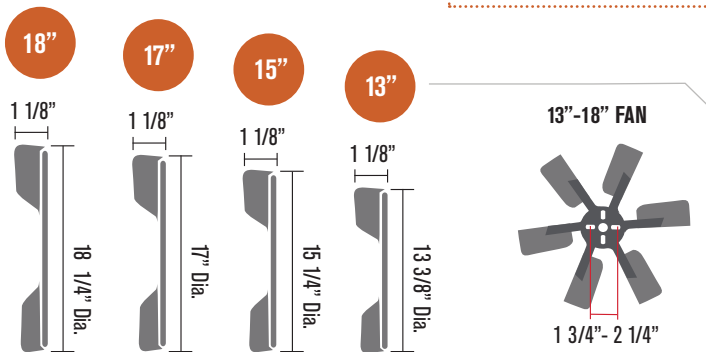
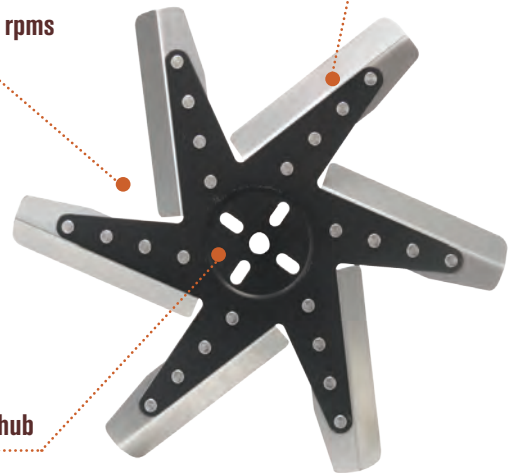
Rotation	Black Hub Part No.	Chrome Hub Part No.	Fan Size
Standard	19113	19213	13"
Standard	19115	19215	15"
Standard	19117	19217	17"
Standard	19118	19218	18"
Reverse	19313	19713	13"
Reverse	19315	19715	15"
Reverse	19317	19717	17"
Reverse	19318	19718	18"

Rated up to 8,000 rpms



Chrome plated or black powdercoated hub

Stainless steel blades



RIGID RACE STEEL BLADE FANS

Rated up to 8,000 rpm



Maximum full-time airflow

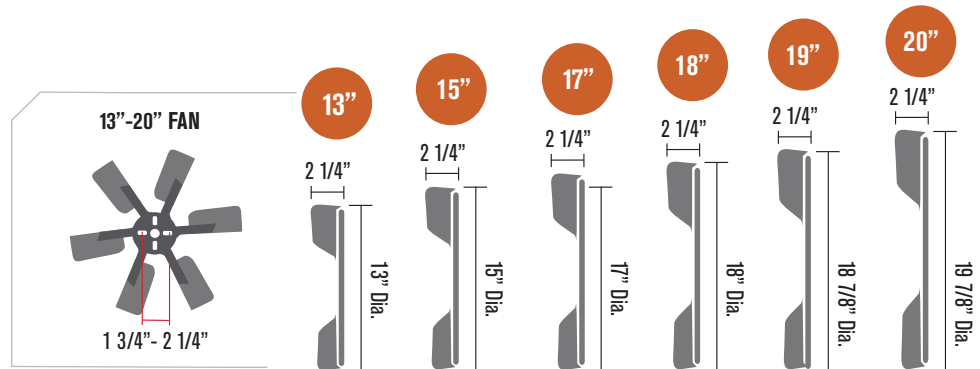
Standard or reverse rotation

Steel fan blades



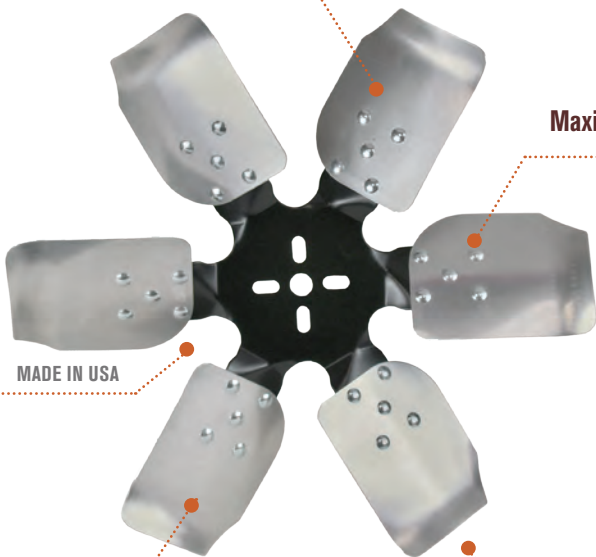
MADE IN U.S.A

Rotation	Part No.	Fan Size
Standard	17313	13"
Standard	17315	15"
Standard	17317	17"
Standard	17318	18"
Standard	17319	19"
Standard	17320	20"
Reverse	17413	13"
Reverse	17415	15"
Reverse	17417	17"
Reverse	17418	18"
Reverse	17419	19"
Reverse	17420	20"



Rated up to 8,000 rpm

RIGID RACE ALUMINUM BLADE FANS



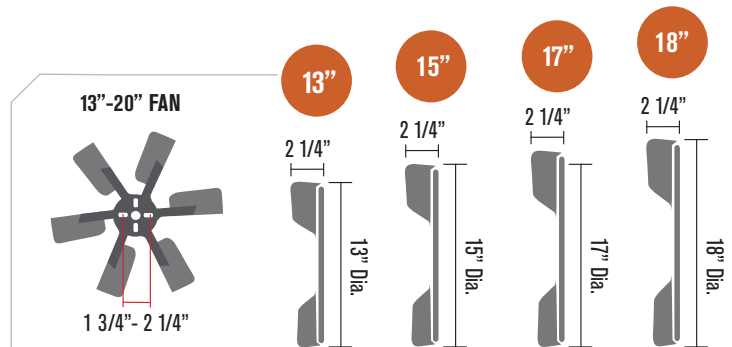
Maximum full-time airflow

Standard rotation only

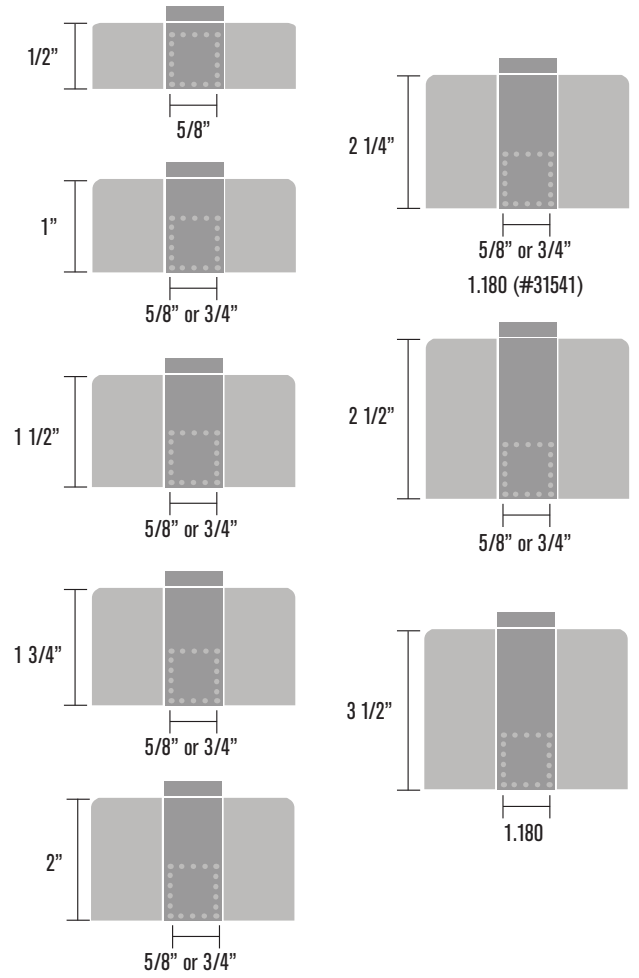
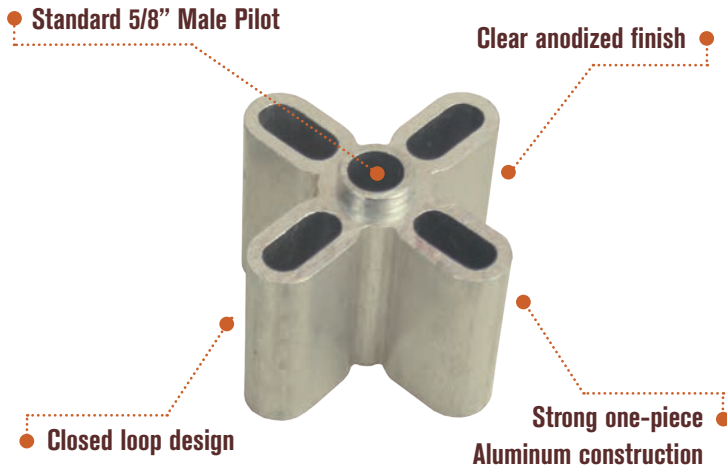
MADE IN USA

Aluminum fan blades

Rotation	Part No.	Fan Size
Standard	17513	13"
Standard	17515	15"
Standard	17517	17"
Standard	17518	18"



BELT DRIVEN FAN SPACERS

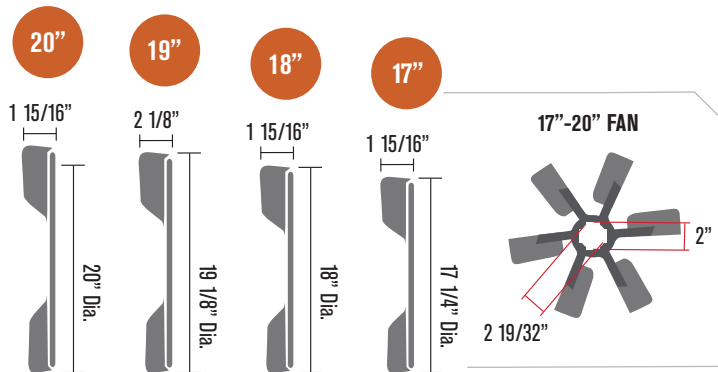
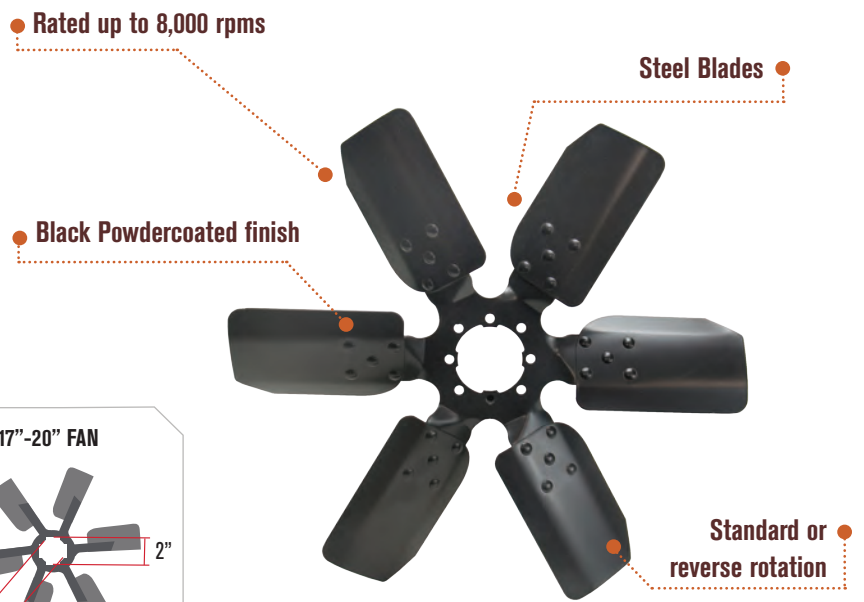


Part No.	Spacer Size	Bolts (4x)	Bolt Length
31500	1/2"	5/16"-18 / 5/16"-24	1 1/4"
31510	1"	5/16"-18 / 5/16"-24	1 3/4"
31515	1 1/2"	5/16"-18 / 5/16"-24	2 1/4"
31518	1 3/4"	5/16"-18 / 5/16"-24	2 1/2"
31520	2"	5/16"-18 / 5/16"-24	2 3/4"
31521	2"	8mm x 1.25	2 3/4"
31540	2 1/4"	5/16"-18 / 5/16"-24	3 1/8"
31541	2 1/4"	8mm x 1.25	3 1/8"
31547	2 1/4"	6mm x 1.00 / 8mm x 1.25	3 1/8"
31550	2 1/2"	5/16"-18 / 5/16"-24	3 1/4"
31551	3 1/2"	8mm x 1.25	4 3/8"

Rotation	Part No. Black Hub	Fan Size
Standard	17117	17"
Standard	17118	18"
Standard	17119	19"
Standard	17120	20"
Reverse	17917	17"
Reverse	17918	18"
Reverse	17919	19"
Reverse	17920	20"



FAN CLUTCH FANS



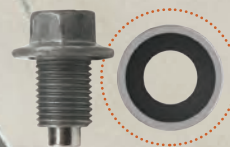
TRANSMISSION COOLING PANS

FORD E40D, 4R100, 5R110 & 5R110W

UP TO... **7 QTS**
THIRTY OUNCES
EXTRA CAPACITY

FEATURES:

Features rare earth magnetic drain plug with increased magnetic strength & reusable rubber/steel washer



5/8" O.D.
TURBULATOR
AIR TUBES

Part No
14208

Rep. Gasket Part No.
96908



DODGE/CHRYSLER COOLING PAN

Fits most Dodge/Chrysler
A727, A904, A518 & A618

Transmission	Part No.	Rep. Gasket
A727, A904, A518 & A618	14210	96905

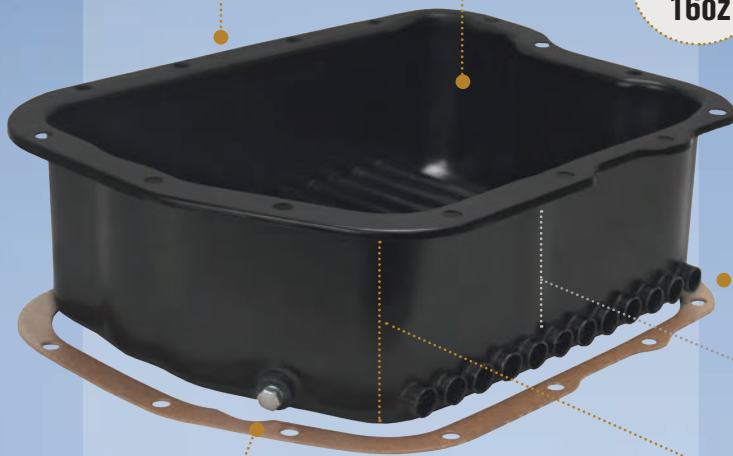


MADE IN U.S.A

Two stage heat-dissipating black finish

Extra Capacity

5qts
16oz



Features rare earth magnetic drain plug with increased magnetic strength & reusable rubber/steel washer

Tube Depth
3 5/8"

Pan Depth
4 1/2"

1/8" NPT temperature sender port

DEEP PAN FILTER EXTENDER

Extends filter 1"



Transmission

Part No.

A727, A904, A518 & A618

14010



MADE IN U.S.A



GM 4L80E COOLING PAN

4 qts
16 oz

Extra Capacity

Two stage heat-dissipating black finish

Tube Depth
2 3/4"

Pan Depth
4 1/16"

1/8" NPT temperature
sender port

Features rare earth magnetic drain
plug with increased magnetic strength
& reusable rubber/steel washer

Fits most GM 4L80E
1991-2008 applications

Transmission	Part No.	Rep. Gasket
4L80E	14207	96909



MADE IN U.S.A

GM 700R4 & 4L60E

Heat-dissipating two-stage black finish

Extra Capacity

2 qts
4 oz

Tube Depth
2 1/2"

1/8" NPT temperature
sender port

Pan Depth
3 5/8"

Features rare earth magnetic drain
plug with increased magnetic strength
& reusable rubber/steel washer

Fits most GM 700R4 & 4L60E
1982-1999 applications

Transmission	Part No.	Rep. Gasket
700R4, 4L60E	14204	96906



MADE IN U.S.A

GM TURBO 350 COOLING PAN

● Features rare earth magnetic drain plug with increased magnetic strength & reusable rubber/steel washer

● Two stage heat-dissipating black finish



Extra Capacity

2 qts

Fits most GM Turbo 350
1968-1986 applications

Tube Depth
2 3/8"

Pan Depth
3 1/4"

● 1/8" NPT temperature sender port

Transmission	Part No.	Rep. Gasket
Turbo 350	14200	96900



MADE IN U.S.A

GM TURBO 400 COOLING PANS

● Two stage heat-dissipating black finish

Up to
3qts
8oz

Extra Capacity



Tube Depth
3 1/16"

Pan Depth
4"

● Features rare earth magnetic drain plug with increased magnetic strength & reusable rubber/steel washer

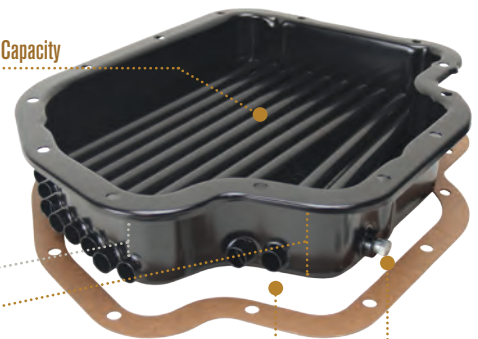
● 1/8" NPT temperature sender port

1qt
17oz

Extra Capacity

Tube Depth
2"

Pan Depth
2 7/8"



● Magnetic drain plug with increased magnetic strength

● 1/8" NPT temperature sender port

Standard: Fits most GM Turbo 400 / 1966-1990 applications
Deep Pan: Fits most GM Turbo 400 / 1978-1990 applications



MADE IN U.S.A

Deep Pan Filter Extender

Application	Part No.
TH400 Deep pan	14002



● Extends Filter 1 1/16"

Transmission	Part No.	Rep. Gasket
Turbo 400 Standard	14201	96901
Turbo 400 Deep	14202	96901



FILTRATION SYSTEMS

ENGINE / TRANSMISSION / POWER STEERING / FUEL



The look of...

Billet
without the cost

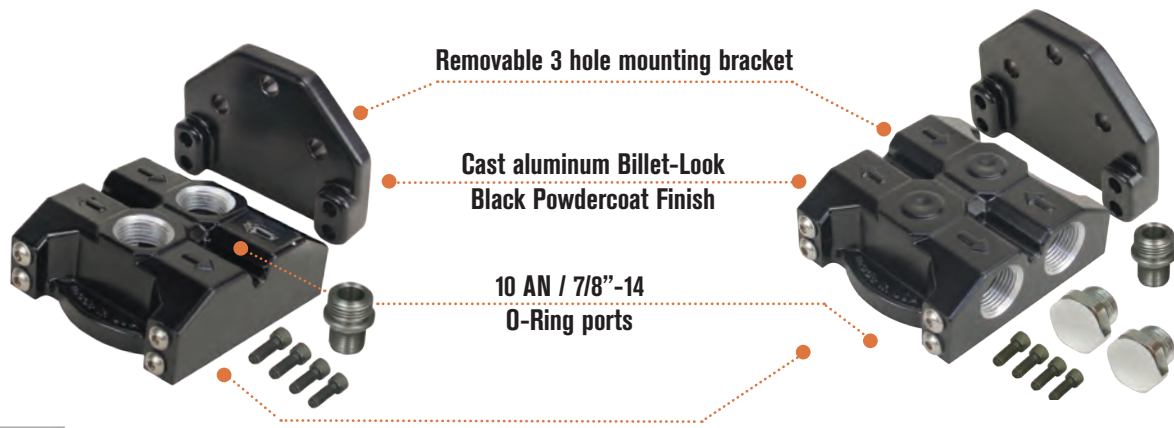


Perfect for
**ENGINE
TRANSMISSION
FUEL Filtration**



Reverse
FLOW DESIGN

PREMIUM SERIES FILTER MOUNTS



Designed to fit 2 1/2" to 3 1/2" oil filter



Ports Up Kit Part No.	Side - Single Kit Part No.	Side - Dual Kit Part No.	Filter Threads	Filter Landing	Inlet/Outlet Ports
35708	35709	35707	3/4"-16	2 1/2", 2 3/4" or 3 1/2"	-10 AN / 7/8"-14 O-ring
35728	35729	35727	13/16"-16	2 1/2", 2 3/4" or 3 1/2"	-10 AN / 7/8"-14 O-ring



REMOTE FILTER MOUNTS



● 3 Bolt Heavy Duty Mounting Flange

● Ultra Bright Cast Aluminum Finish



SINGLE - SIDE PORTS

Kit Part No.	Mount Part No.	Filter Threads	Filter Landing	Inlet/Outlet Ports	Replacement Nipple
13049	25049	3/4"-16	2 1/2", 2 3/4"	3/8" NPT	98020
15709	25709	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	98020
15729	25729	13/16"-16	2 1/2", 2 3/4", 3 1/2"	1/2" NPT	98021

SINGLE - PORTS UP

Kit Part No.	Mount Part No.	Filter Threads	Filter Landing	Inlet/Outlet Ports	Replacement Nipple
////////	25044	3/4"-16	2 1/2", 2 3/4"	1/4" NPT	98020
13005	25005	3/4"-16	2 1/2", 2 3/4"	3/8" NPT	98020
15708	25708	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	98020
15728	25728	13/16"-16	2 1/2", 2 3/4", 3 1/2"	1/2" NPT	98021

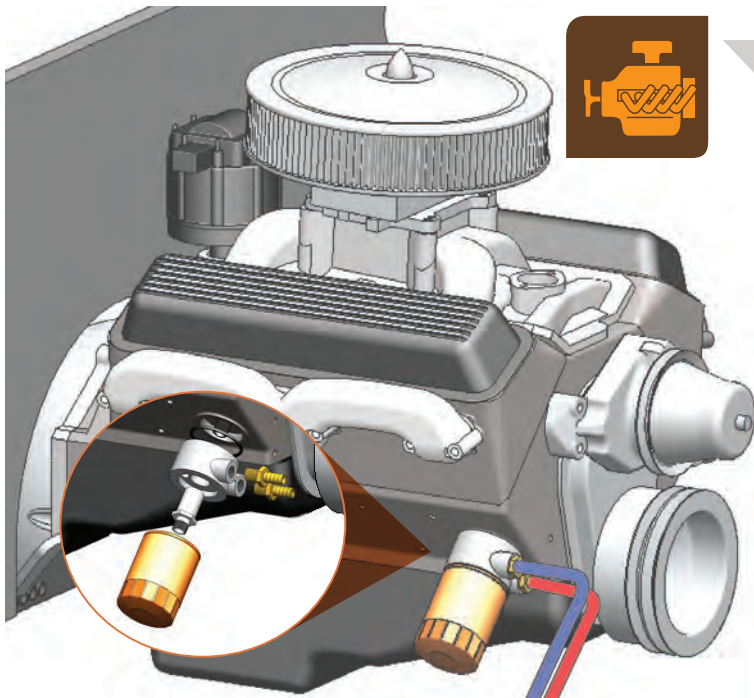
SINGLE - PORTS LEFT/RIGHT

Ports	Mount Part No.	Filter Threads	Filter Landing	Inlet/Outlet Ports	Replacement Nipple
Left	25750	3/4"-16	2 1/2", 2 3/4"	3/8" NPT	98020
Right	25751	3/4"-16	2 1/2", 2 3/4"	3/8" NPT	98020
Left	25752	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	98020
Right	25753	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	98020

DUAL - SIDE PORTS

Kit Part No.	Mount Part No.	Filter Threads	Filter Landing	Inlet/Outlet Ports	Replacement Nipple
15707	25707	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	98020

ENGINE SANDWICH ADAPTERS



ETS Engine Thread Size

APPLICATION GUIDE

3/4"-16

3/4"-16 Filter Thread Size
DODGE / CHRYSLER 1968-2003, FORD 1965-2007, JEEP 1965-2014, MAZDA 1991-2014, TOYOTA 1975-2014, VW 1978-2007

13/16"-16

13/16"-16 Filter Thread Size
GM 1963-2012 - SB & BB V8

18 x 1.5mm

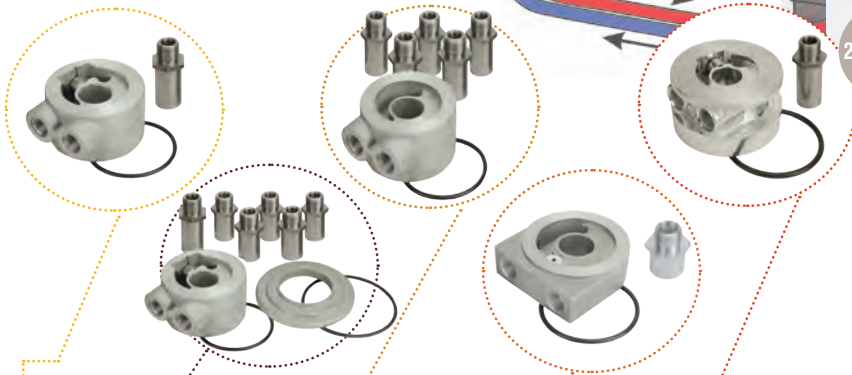
18 x 1.5mm Filter Thread Size
GM 1982-2007

20 x 1.5mm

20 x 1.5mm Filter Thread Size
DODGE / CHRYSLER 1971-1990, FORD 1984-1996, GM 1972-1985, HONDA / ACURA 1979-2014, ISUZU 1981-2004, JEEP 1987-1990 MAZDA 1978-2006, MITSUBISHI 1985-2014, NISSAN 1991-2014, SUBARU 1987-2014

22 x 1.5mm

22 X 1.5mm Filter Thread Size
DODGE / CHRYSLER 2004-2014, FORD 1979-2014, GM 2007-2014



Complete Kit Part No.	Kit Part No.	O-Ring Dia.	Thickness	Ports	Engine Thread Size
15702	25702	2 3/4"	1 3/4"	3/8" NPT	Thermostatic Universal (all listed engine threads)
15782	25782	2 3/4", 3 1/2"	1 3/4", 2 1/8"	3/8" NPT	Thermostatic w/ adapter ring Universal (all listed engine threads)
15730	25730	2 3/4"	1 3/4"	3/8" NPT	Thermostatic 3/4"-16
15731	25731	2 3/4", 3 1/2"	1 3/4", 2 1/8"	3/8" NPT	Thermostatic 13/16"-16
15732	25732	2 3/4"	1 3/4"	3/8" NPT	Thermostatic 20 x 1.5mm
15733	25733	2 3/4"	1 3/4"	3/8" NPT	Thermostatic 18 x 1.5mm
15734	25734	2 3/4"	1 3/4"	3/8" NPT	Thermostatic 22 x 1.5mm
15720	25720	3 1/2"	2 1/4"	1/2" NPT	Thermostatic GM Applications 13/16"-16
15735	////	2 1/2", 2 3/4"	1 3/4"	1/2" NPT	Non-Thermostatic Universal (all listed engine threads)
////	25770	2 1/2", 2 3/4"	1"	3/8" NPT	Low-Profile with Bypass 3/4"-16
////	25771	2 1/2", 2 3/4"	1"	3/8" NPT	Low-Profile with Bypass 13/16"-16
////	25772	2 1/2", 2 3/4"	1"	3/8" NPT	Low-Profile with Bypass 20 x 1.5mm
////	25773	2 1/2", 2 3/4"	1"	3/8" NPT	Low-Profile with Bypass 18 x 1.5mm
////	25774	2 1/2", 2 3/4"	1"	3/8" NPT	Low-Profile with Bypass 22 x 1.5mm
////	25783	2 1/2", 2 3/4"	1"	3/8" NPT	Low-Profile with Bypass Universal (all listed engine threads)

ENGINE SPIN-ON ADAPTERS

ETS Engine Thread Size

APPLICATION GUIDE

3/4"-16

3/4"-16 Filter Thread Size
DODGE / CHRYSLER 1968-2003, FORD 1965-2007, JEEP 1965-2014, MAZDA 1991-2014, TOYOTA 1975-2014, VW 1978-2007

13/16"-16

13/16"-16 Filter Thread Size
GM 1963-2012 - SB & BB V8

18 x 1.5mm

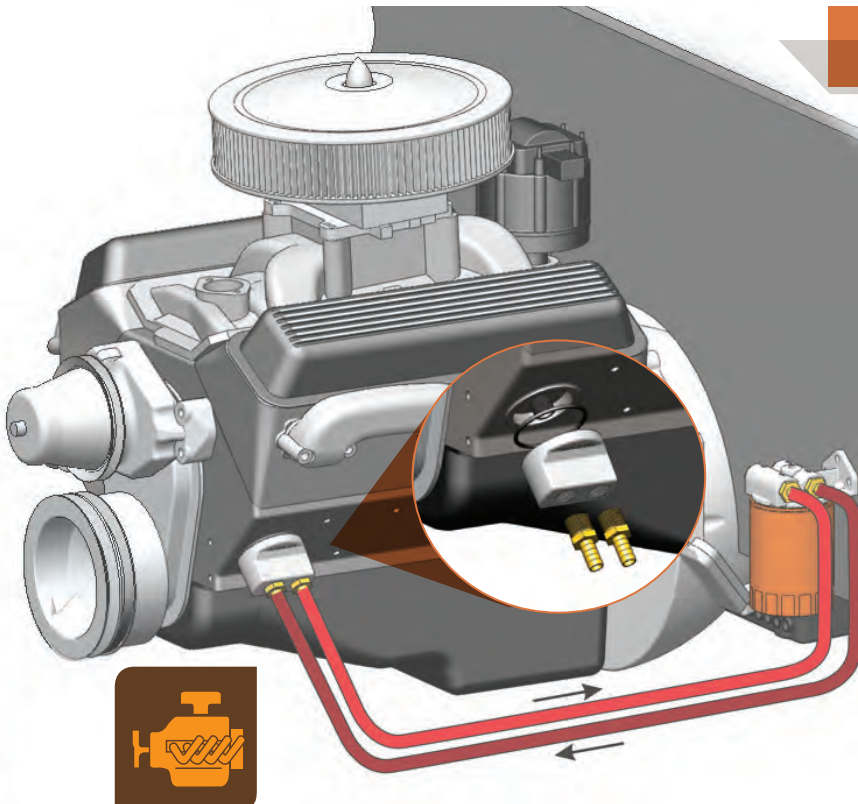
18 x 1.5mm Filter Thread Size
GM 1982-2007

20 x 1.5mm

20 x 1.5mm Filter Thread Size
DODGE / CHRYSLER 1971-1990, FORD 1984-1996, GM 1972-1985, HONDA / ACURA 1979-2014, ISUZU 1981-2004, JEEP 1987-1990 MAZDA 1978-2006, MITSUBISHI 1985-2014, NISSAN 1991-2014, SUBARU 1987-2014

22 x 1.5mm

22 X 1.5mm Filter Thread Size
DODGE / CHRYSLER 2004-2014, FORD 1979-2014, GM 2007-2014



Ports Up Standard Part No.	Ports	Ports Up Premium Part No.	Ports	Side Ports Part No.	Ports	O-Ring Dia.	Engine Thread Size
15747	1/2" NPT	35747	-10 AN/7/8"-14	//////	//////	2 1/2", 2 3/4", 3 1/2"	Universal (all listed engine threads)
15703	1/2" NPT	35703	-10 AN/7/8"-14	15746	1/2" NPT	2 1/2", 2 3/4"	3/4"-16
15704	1/2" NPT	35704	-10 AN/7/8"-14	//////	//////	2 1/2", 2 3/4"	18 X 1.5mm
15705	1/2" NPT	35705	-10 AN/7/8"-14	//////	//////	2 1/2", 2 3/4", 3 1/2"	13/16"-16
15706	1/2" NPT	35706	-10 AN/7/8"-14	//////	//////	2 1/2", 2 3/4"	20 x 1.5mm
15724	1/2" NPT	35724	-10 AN/7/8"-14	//////	//////	2 1/2", 2 3/4"	22 x 1.5mm

GM V8 - CANISTER TO SPIN-ON OIL FILTER ADAPTER

- Fits all 1956-1967 SB & BB V8's (except Chevy II) with canister style oil filter
- Requires factory GM oil bypass
- Converts factory canister style oil filter to a spin-on type oil filter



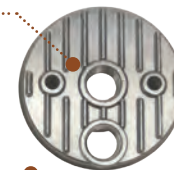
Uses Fram PH5, PH30 or equivalent



Kit Part No.	Inlet/Outlet Ports	Filter Landing
15761 98003	13/16" - 16 Rep. O-ring and gasket	3 1/2"

GM V8 - BOLT-ON ENGINE OIL FILTER ADAPTER

- Fits all 1956-1967 SB & BB V8's with canister style oil filter
- Finned aluminum design with 1/2" NPT ports
- Complete hardware kit
- Allows factory oil filter to be moved to a remote location



Kit Part No.	Inlet/Outlet Ports
15760 98004	1/2" NPT Rep. O-ring and gasket



FASTER & EASIER Oil changes

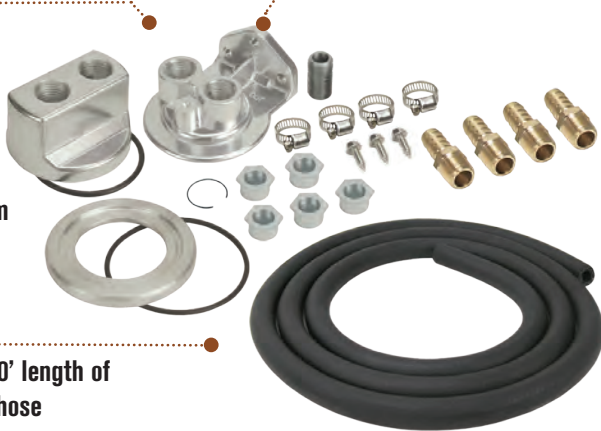


Allows oil filter to be moved to a more convenient location

Complete hardware kit included

Cast from high quality aluminum

All kits include 10' length of 1/2" OEM-Spec hose



ETS Engine Thread Size

APPLICATION GUIDE

3/4"-16

3/4"-16 Filter Thread Size
DODGE / CHRYSLER 1968-2003, FORD 1965-2007, JEEP 1965-2014, MAZDA 1991-2014, TOYOTA 1975-2014, VW 1978-2007

13/16"-16

13/16"-16 Filter Thread Size
GM 1963-2012 - SB & BB V8

18 x 1.5mm

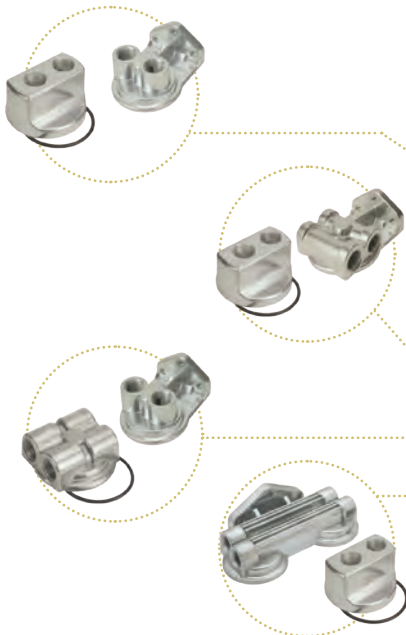
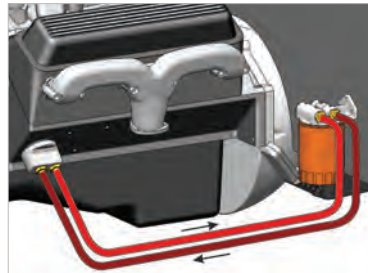
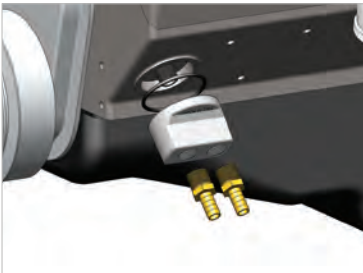
18 x 1.5mm Filter Thread Size
GM 1982-2007

20 x 1.5mm

20 x 1.5mm Filter Thread Size
DODGE / CHRYSLER 1971-1990, FORD 1984-1996, GM 1972-1985, HONDA / ACURA 1979-2014, ISUZU 1981-2004, JEEP 1987-1990 MAZDA 1978-2006, MITSUBISHI 1985-2014, NISSAN 1991-2014, SUBARU 1987-2014

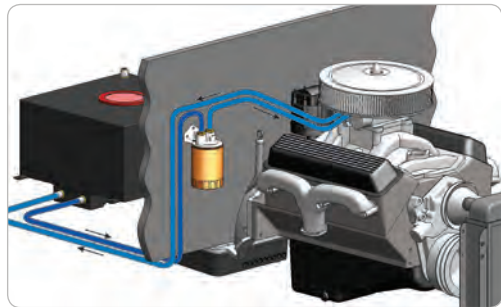
22 x 1.5mm

22 X 1.5mm Filter Thread Size
DODGE / CHRYSLER 2004-2014, FORD 1979-2014, GM 2007-2014



Description	Kit Part No.	Filter Threads	Filter Landing	Inlet/Outlet Ports	Engine Thread Size
● Spin-On - Ports Up Filter Mount - Ports Up	15715	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	3/4"-16
	15716	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	13/16"-16
	15717	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	18 x 1.5mm
	15718	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	20 x 1.5mm
	15725	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	22 x 1.5mm
	15748	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	Universal (all listed engine threads)
● Spin-On - Ports L/R Filter Mount - Ports Up	15781	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	3/4"-16
● Spin-On - Ports Up Filter Mount - Ports L/R	15780	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	Universal (all listed engine threads)
● Dual Filter Mount - Ports L/R Spin-On - Ports Up	15749	3/4"-16	2 1/2", 2 3/4"	1/2" NPT	Universal (all listed engine threads)

FILTRATION KITS



Single Mount L/R Ports - Part No.	Single Mount Ports Up - Part No.	Filter Landing	Inlet/Outlet Ports	Replacement Filter
13070	13072	2 1/2", 2 3/4"	1/2" NPT	13075

FUEL FILTER / WATER SEPARATOR



● Extend carburetor/fuel injector life

● Improves engine performance

● Designed for all fuel types



(13072 Shown)

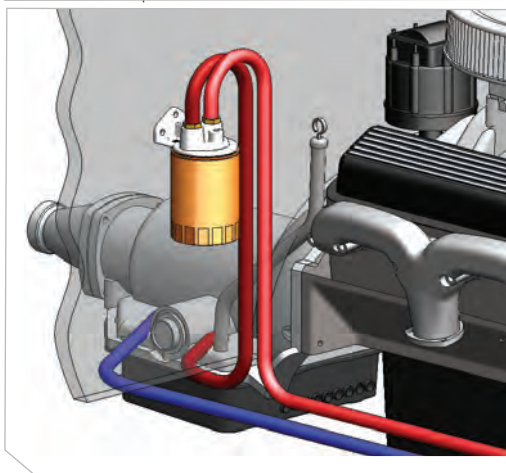
Filter Specs:

12 Micron
1" - 14 Thread size
Filter Size: 3 1/2" OD x 7 5/8" tall
Filter Seal
ID: 2.45" OD: 2.80"
100 P.S.I. Element burst pressure
300 P.S.I. Hydrostatic burst pressure

● Petcock allows for convenient draining of water ●

Filter Specs:

Thread Size: 3/4"-16
Filter Size: 3 1/2" OD x 3 1/8" Tall
Compact shell design reduces weight
Increased gasket height for improved seating & filter sealing
7% more efficient than older, larger unit
High Strength nylon core increased collapse pressure from 75 p.s.i.d. to 115 p.s.i.d.
Burst pressure increases from 235 p.s.i. to 350 p.s.i.
Patented pressure relief and anti-drain back valve delivers oil in cold start and clogged environments
Exceeds OE Requirements



● Extend transmission life

● Increases fluid capacity for added cooling ●



● Universal - Fits all automatic transmissions

● Filters out contaminants more efficiently than OE screen-type filters ●



Standard Kit Part No.	Premium Kit Part No.	Filter Landing	Inlet/Outlet Ports	Replacement
13090	13091	2 1/2", 2 3/4", 3 1/2"	3/8" NPT	13092



Transmission Filter Kits

FLUID COOLERS



REDUCE FLUID TEMPERATURES, ENHANCE
PERFORMANCE



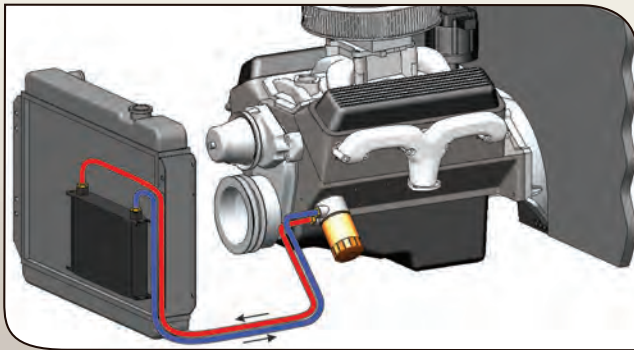
HEAT... THE NUMBER ONE CAUSE OF COMPONENT FAILURE!



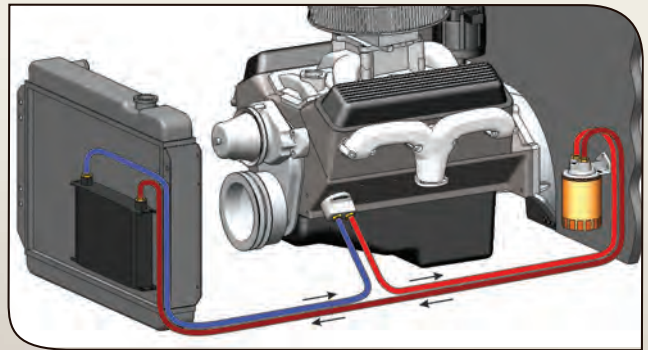
Engine Oil Coolers

An engine's coolant system cools the top end of an engine; the lower end depends on the oil for both lubrication and cooling. Coolers are an excellent, cost-effective method of extending engine life, maintaining oil viscosity and helping maintain factory tolerances of mating surfaces. Engine oil coolers can reduce the heat-exchanging requirements of a radiator, fan and coolant system by lowering coolant temperatures.

Typical engine Sandwich adapter oil cooler installation

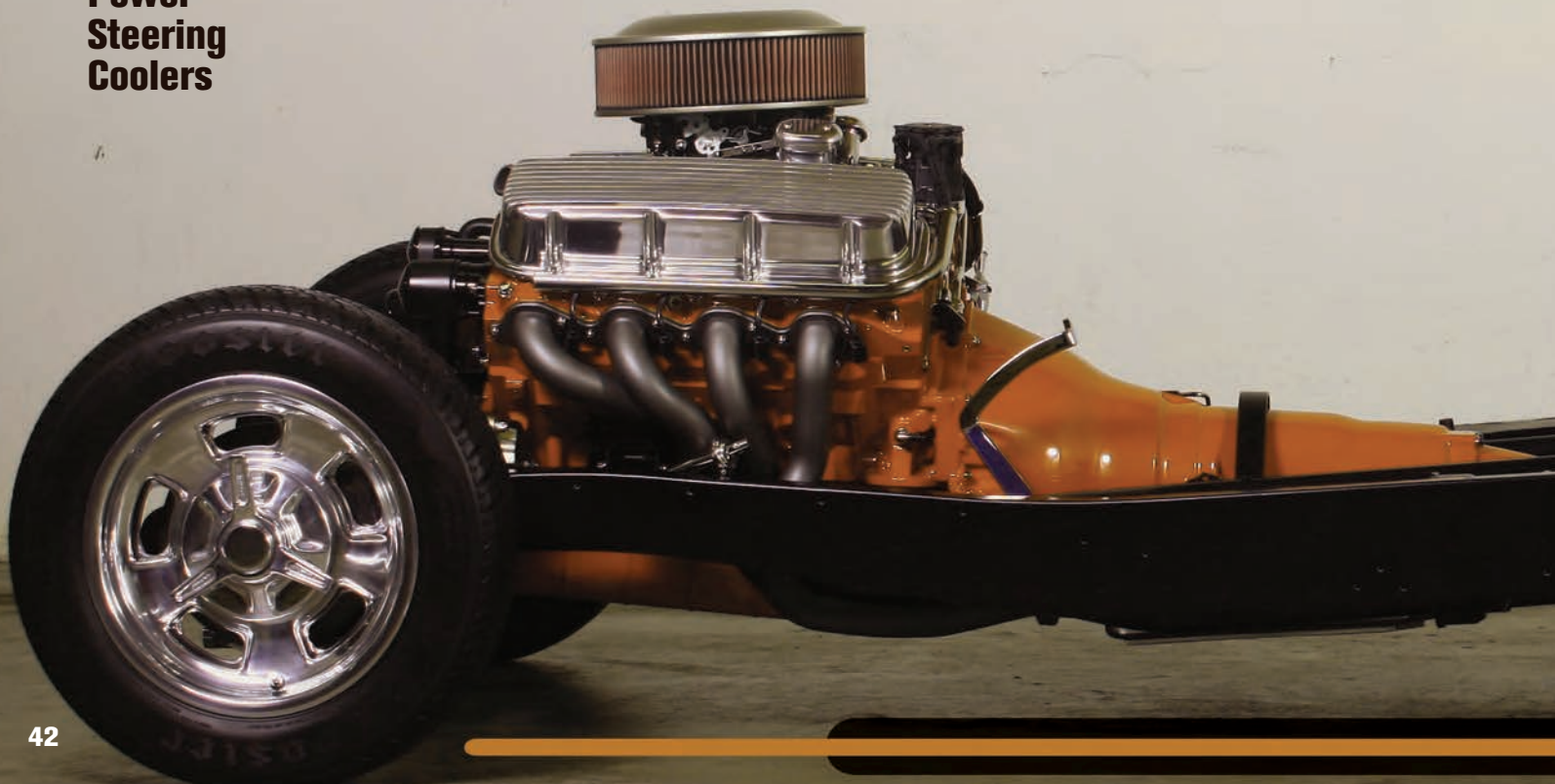


Typical Spin-On adapter and remote filter mount oil cooler installation



Power Steering Coolers

Power Steering Pumps are just one of the key components overlooked when it comes to "keeping it cool". Optimal operating temperature on a power steering pump is 180°F, as temperatures exceed 250°F, internal components are susceptible to failure. In extreme conditions such as road racing, it can mean the difference between winning or losing.

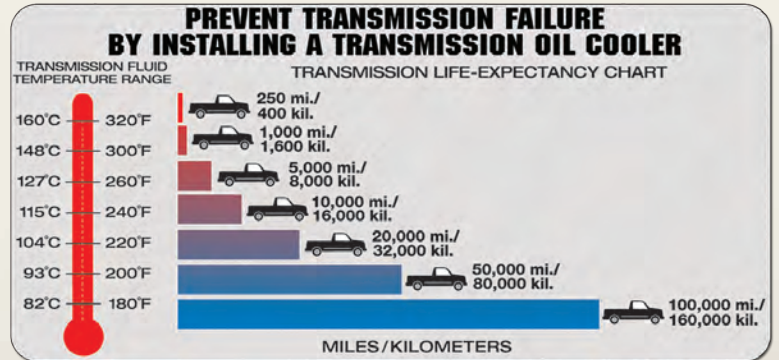
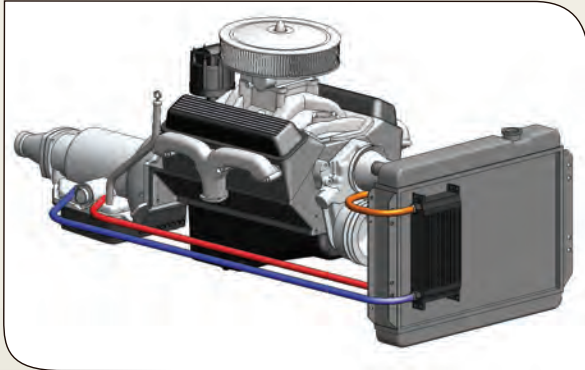




Transmission Oil Coolers

The main factor for transmission failure is heat. Operating temps average 180° to 200°, although transmission temperatures can quickly exceed 250°. At these temperatures, seals begin to harden, clutches begin to burn, and the fluid itself breaks down. A transmission cooler can be installed as a stand-alone unit or in conjunction with a factory cooling system.

Typical transmission cooler installation



REDUCE TEMPERATURES, INCREASE EFFICIENCY



Fuel Coolers

With today's advanced fuel systems, most enthusiasts don't realize the benefits of a fuel cooler. With under hood temps, road temperatures, exhaust and fuel line routing, heat can definitely become a factor. Although there are some economies, the most important reason for installing a fuel cooler, is to eliminate pump cavitation and vapor lock. Fuel temps should not exceed 140°F.



Differential Coolers

Do Rear differentials need Coolers? Believe it or not, rear differential temps can climb into the 200's fairly easily and even higher under extreme conditions. Operating temperature should not exceed 230°F.



HYPER-COOL EXTREME

Inlets	Cooler Part No.
-6 AN	13870
-8 AN	15870
-10 AN	15875
-12 AN	15876

Water/Dust Proof 

Powerful 10" electric fan
IP68 Certified, replacement fan #16110

800CFM
12V | 9.2 AMP

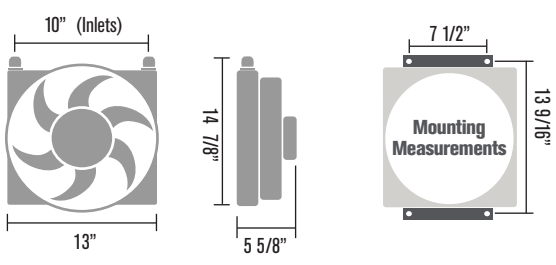
Clear anodized aluminum shroud

6061 Aluminum AN fittings
anodized finish
aluminum hose barb adapter
fittings included



Efficient 40 row stacked plate cooler
sturdy furnace-brazed aluminum construction
Replacement cooler #54078

26 oz FLUID CAPACITY



HYPER-COOL



Reversible

500CFM
12V | 4.8 AMP

Powerful 8" electric fan
Replacement fan #16618

16 oz FLUID CAPACITY

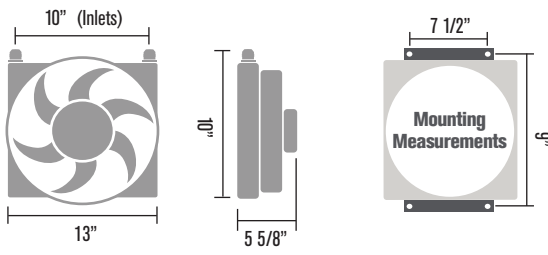
Efficient 25 row stacked plate cooler
sturdy furnace-brazed aluminum construction
Replacement cooler #52578



Clear anodized aluminum shroud



6061 Aluminum AN Fittings
anodized finish
aluminum hose barb adapter
fittings included



Inlets	Cooler Part No.	Transmission Cooler Kit	Engine Oil Cooler Kit - Sandwich
-6 AN	13760	13960	//////
-8 AN	15860	15960	15660
-10 AN	15865	//////	//////

HYPER-COOL DUAL

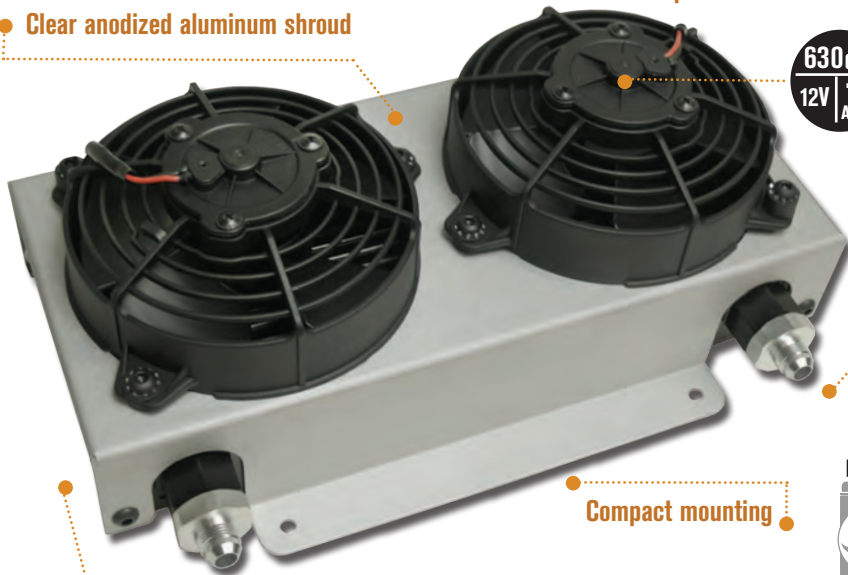
Water/Dust Proof 

Twin 5" electric fans, IP68 Certified
Replacement fan #16105

630 CFM
12V 7.2 AMP

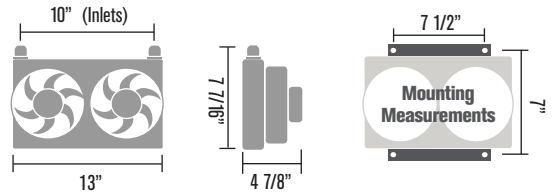
Inlets	Cooler Part No.
-6 AN	13740
-8 AN	15840
-10 AN	15845

Clear anodized aluminum shroud



6061 Aluminum AN fittings
anodized finish aluminum hose barb
adapter fittings included

Compact mounting



12 oz FLUID CAPACITY

Efficient 19 row stacked plate cooler
sturdy furnace-brazed aluminum construction
Replacement cooler #51978

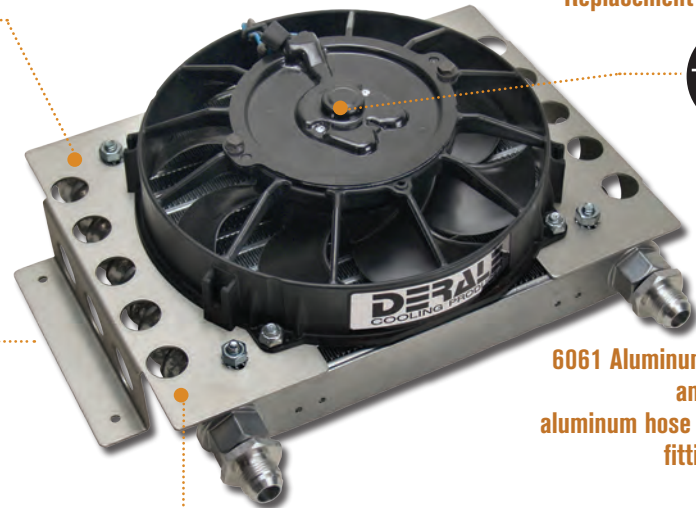
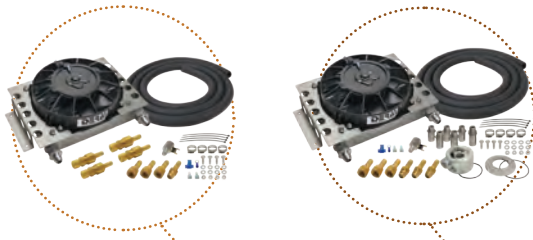
ATOMIC-COOL

Reversible 

Powerful 8" electric fan
Replacement fan #16118

500 CFM
12V 4.8 AMP

Clear anodized aluminum shroud

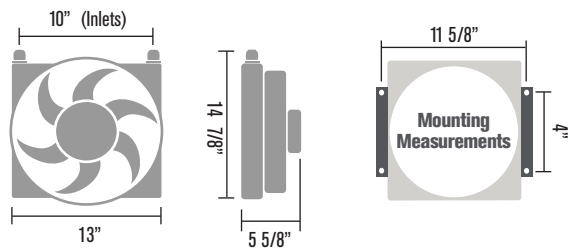


6061 Aluminum AN Fittings
anodized finish
aluminum hose barb adapter
fittings included

Inlets	Cooler Part No.	Transmission Cooler Kit	Engine Oil Cooler Kit - Sandwich
-6 AN	13750	13950	15450
-8 AN	15850	15950	15450

17 oz CAPACITY

Efficient 16 Row Plate & Fin Cooler
Sturdy Furnace-brazed Aluminum construction
Rep. Cooler #13751 (-6AN) #15851 (-8AN)



ELECTRA-COOL

Powerful 10" electric fan,
Replacement fan #16220



Reversible

650CFM
12V | 5.3 AMP

Clear anodized
aluminum bracket

Brass AN fittings
Aluminum hose barb adapter
Fittings included



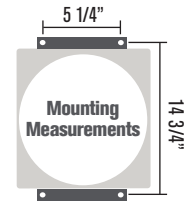
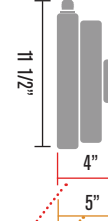
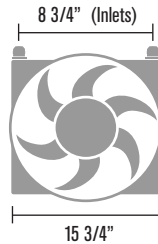
Efficient 16 or 8 pass
Copper/Aluminum
Tube & Fin Cooler

Inlets	Cooler Part No.	No. of Passes	Rep. Core	Transmission Cooler Kit	Engine Oil Cooler Kit - Sandwich
-6 AN	13700	16	13300	13900	//////////
-8 AN	15800	16	15300	15900	15500
-6 AN	13720	8	13300	//////////	//////////
-8 AN	15820	8	15320	//////////	//////////

19 oz

FLUID CAPACITY

9 oz



ELECTRA-COOL DUAL CIRCUIT

2-in-1 Cooler Design

Efficient 4 & 4 Pass or 8 & 8 Pass
Copper/Aluminum Tube & Fin Cooler Core
Rep. Cooler #15301 (8 & 8 pass) #13321 (4 & 4 pass)

Clear anodized
aluminum bracket

Powerful 10" electric fan,
Replacement fan #16220



Reversible

650CFM
12V | 5.3 AMP

Brass 8 AN Fittings
Aluminum AN Hose Barb Adapter
Fittings included

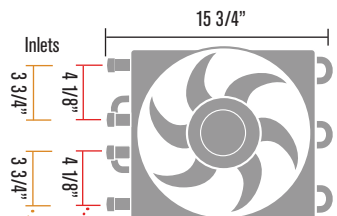
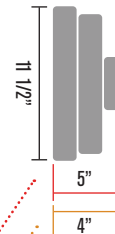
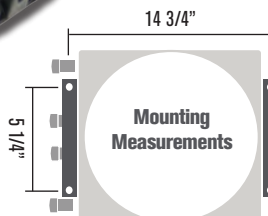
Inlets	Cooler Part No.	No. of Passes
	15200	8 & 8
	15220	4 & 4

9 oz

FLUID CAPACITY
(Per Circuit)

4.5 oz

FLUID CAPACITY
(Per Circuit)



ECONO-COOL

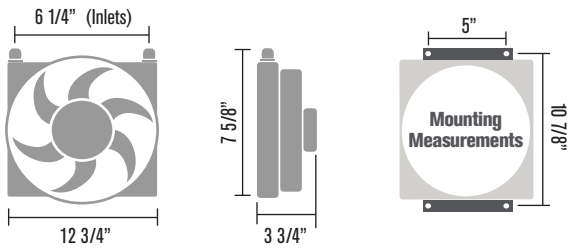
Inlets

Cooler Part No.

11/32" Barb 13730
1/2" Barb 15830

Efficient 6 Pass Copper/Aluminum Tube & Fin Cooler
Replacement cooler #13731 (11/32 barb) & #15831 (1/2 barb)

4 oz FLUID CAPACITY



11/32" or 1/2" Barb inlets



Clear anodized aluminum bracket

Reversible



7" Electric fan, Replacement fan #16617

400 CFM
12V 4.8 AMP

ECONO-COOL DUAL CIRCUIT

2-in-1 Cooler Design

Brass 8 AN Fittings
Aluminum AN hose barb adapter fittings included

Inlets Cooler Part No.
-8 AN 15230



Reversible



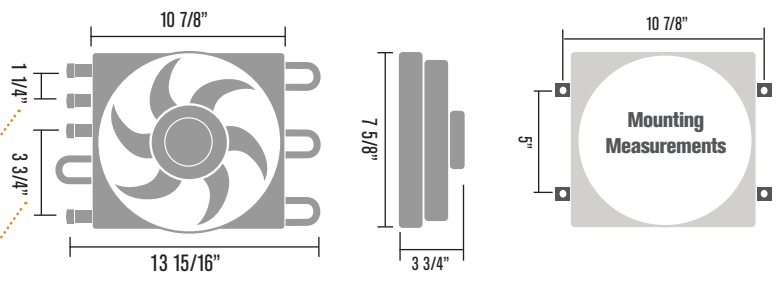
Powerful 7" electric fan, Replacement Fan #16617

400 CFM
12V 4.8 AMP

Clear anodized aluminum bracket

Efficient 4 Pass & 2 Pass Copper/Aluminum Tube & Fin Cooler
Rep. cooler #15331

FLUID CAPACITY
2 pass 2.25 oz
4 pass 4 oz



Low-Profile powerful electric fan,
Replacement fan #16909

475 CFM
12V | 5.5 AMP



Reversible

Black powdercoated steel bracket

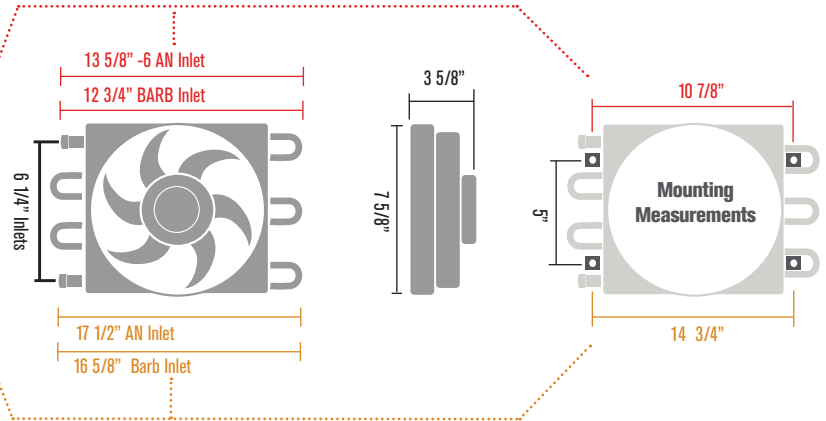
Available in
11/32" Barb or -6 AN Inlets

Efficient 6 Pass or 8 Pass
Copper/Aluminum Tube & Fin Cooler

Inlets	Cooler Part No.	No. of Passes	Rep. Core
--------	-----------------	---------------	-----------

-6 AN	12730	6 Short	13311	4 oz
11/32" Barb	12740	6 Short	13101	4 oz
-6 AN	12731	6 Long	13313	4.5 oz
11/32" Barb	12741	6 Long	13103	4.5 oz

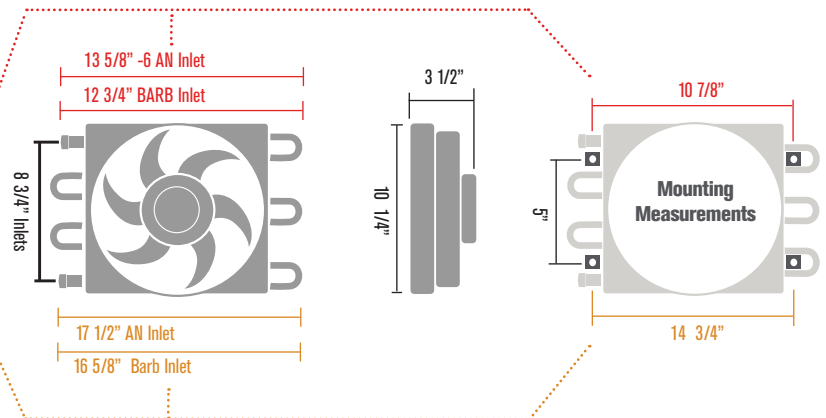
FLUID CAPACITY



Inlets	Cooler Part No.	No. of Passes	Rep. Core
--------	-----------------	---------------	-----------

-6 AN	12732	8 Short	13317	10 oz
11/32" Barb	12742	8 Short	13107	10 oz
-6 AN	12733	8 Long	13314	5 oz
11/32" Barb	12743	8 Long	13104	5 oz

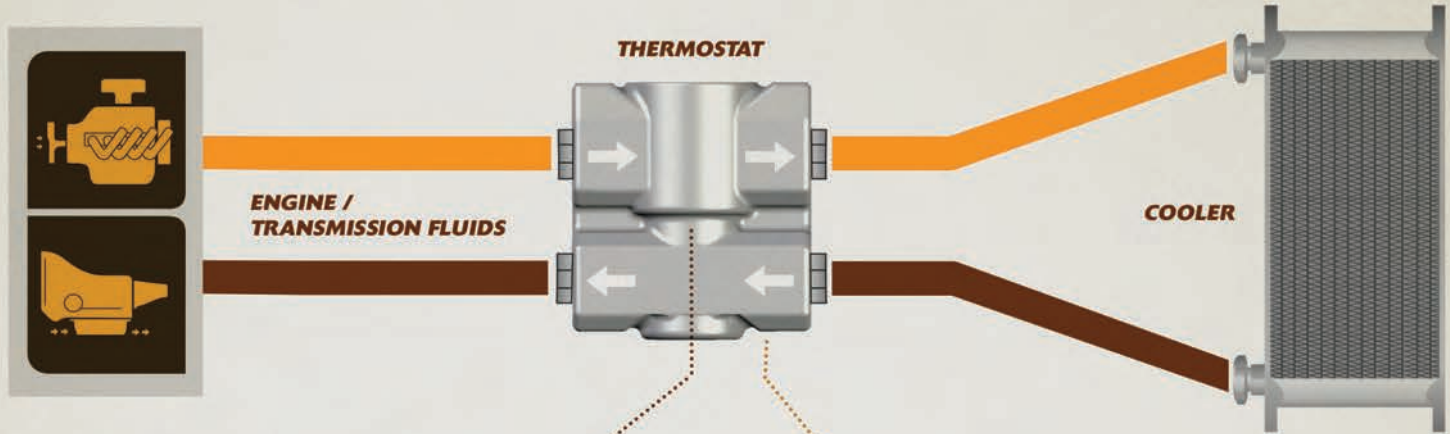
FLUID CAPACITY





FLUID CONTROL THERMOSTATS

ULTIMATE CONTROL OF ENGINE AND TRANSMISSION FLUID TEMPERATURES

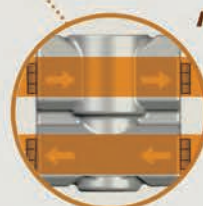


CONTROLLED CLOSED CIRCUIT

Below 180°F the valve opens, with 90% of the oil bypassing the cooler. The remaining 10% of the oil flows through the cooler, maintaining constant system pressure, preventing air pockets and eliminating cold oil shock.



20
GALLONS
PER MINUTE

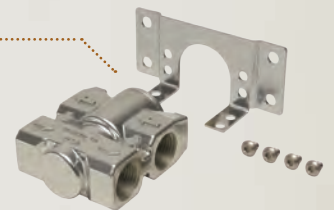


MAXIMUM FLOW

When temperatures exceed 180°F the thermostatic valve closes, allowing 100% flow through the oil cooler. This allows for ultimate control of oil temperatures under normal to extreme conditions.



Inlets	Thermostat Only	Thermostat w/ fittings	Thermostat w/ bracket kit	Installation Kit Only
3/8" NPT	25011	13011	25791	13026
1/2" NPT	25719	15719	25792	15726



IN-LINE FLUID THERMOSTATS



180°F turn-on temperature

Turn-off temperature is preset 15° below turn-on temperature

Anodized aluminum swivel housing allows T-stat to be clocked

Premium Series

Available in -6 AN, -8 AN or -10 AN aluminum housing

Part No.	Inlet
35020	-6 AN x -6 AN
35021	-8 AN x -8 AN
35022	-10 AN x -10 AN



180°F turn-on temperature

Turn-off temperature is preset 15° below turn-on temperature

Standard Series

Available in -6 AN or -8 AN aluminum housing

Part No.	Inlet
13021*	-6 AN x -6 AN
15721*	-8 AN x -8 AN

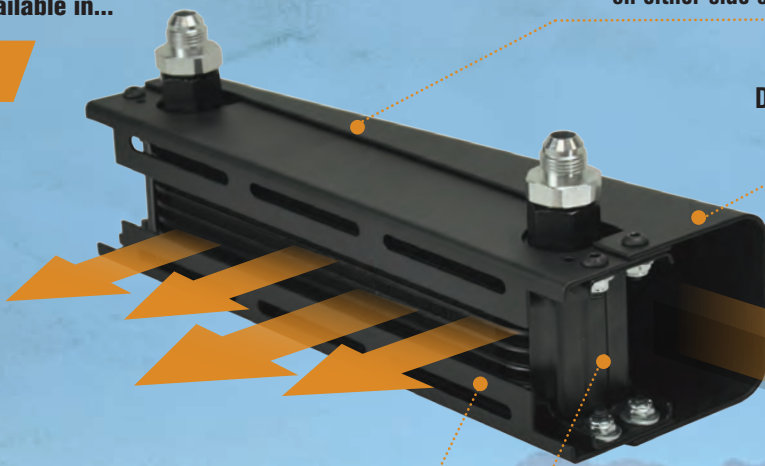
*Aluminum AN Hose Barb Adapter fittings included

Aluminum Cooler Fittings (not included) available in...

Inlets	Part No.
-6 AN	59006
-8 AN	59008
-10 AN	59010
-12 AN	59012

Scoop shroud can be mounted on either side of cooler

Designed to capture & redirect airflow for maximum cooling efficiency



SCOOP COOLERS

Inlets	No. of Rows	Part No.
-10 AN 7/8"-14 O-Ring	10	50100
Brackets Only	//////////	50021

Aluminum mounting system mounts to chassis rails for clean discrete look

Efficient 10 row stacked plate cooler

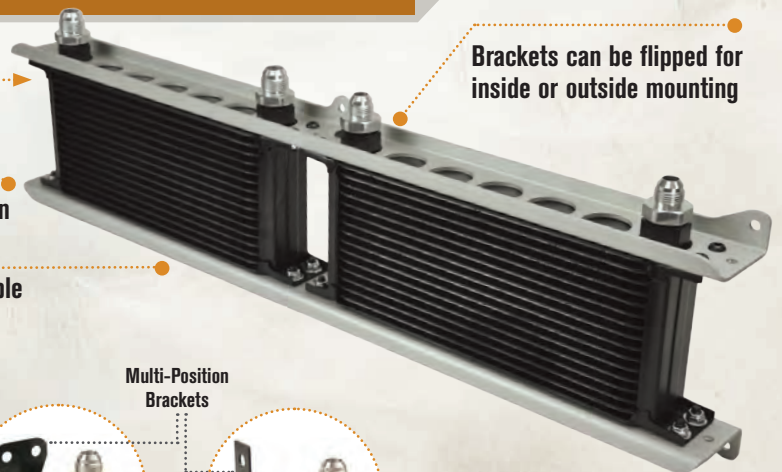


STACKED PLATE COOLER MOUNTING BRACKETS



SINGLE

DUAL



Brackets can be flipped for inside or outside mounting

Heavy duty aluminum construction
Clear anodized finish

Symmetrical design makes multiple mounting configurations possible

4 WAY

Black Powdercoated Steel Brackets

Multi-Position Brackets



Part No.

50023

Part No.

50020

Part No.

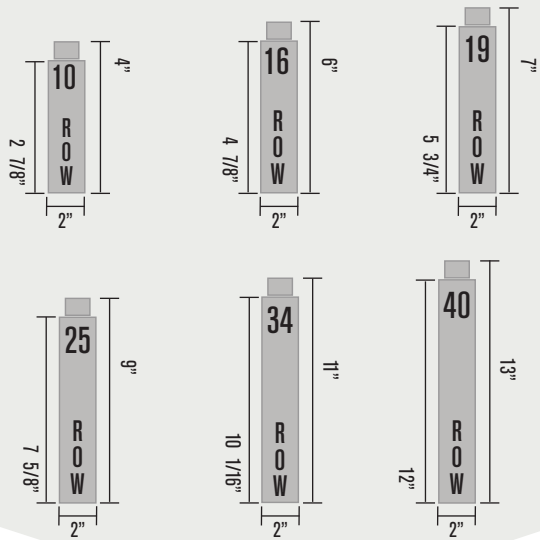
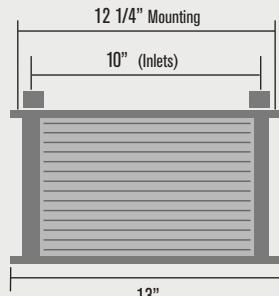
50022

STACKED PLATE COOLERS

Series 10000



Inlets	No. of Rows	Fluid Capacity	Cooler Part No.	Transmission Cooler Kit	Engine Oil Cooler Kit - Sandwich	Engine Oil Cooler Kit - Spin-On
7/8"-14 Female	10	6 oz	51078	//////	//////	//////
-6 AN	10	6 oz	51006	13401	//////	//////
-8 AN	10	6 oz	51008	//////	15605	15651
-10 AN	10	6 oz	51010	//////	//////	//////
7/8"-14 Female	16	10 oz	51678	//////	//////	//////
-6 AN	16	10 oz	51606	13402	//////	//////
-8 AN	16	10 oz	51608	//////	//////	//////
-10AN	16	10 oz	51610	//////	//////	//////
7/8"-14 Female	19	12 oz	51978	//////	//////	//////
-6 AN	19	12 oz	51906	13403	//////	//////
-8 AN	19	12 oz	51908	//////	//////	//////
-10 AN	19	12 oz	51910	//////	//////	//////
7/8"-14 Female	25	16 oz	52578	//////	//////	//////
-6 AN	25	16 oz	52506	//////	//////	//////
-8 AN	25	16 oz	52508	//////	//////	//////
-10 AN	25	16 oz	52510	//////	//////	//////
7/8"-14 Female	34	20 oz	53478	//////	//////	//////
-6 AN	34	20 oz	53406	//////	//////	//////
-8 AN	34	20 oz	53408	//////	//////	//////
-10 AN	34	20 oz	53410	//////	//////	//////
7/8"-14 Female	40	26 oz	54078	//////	//////	//////
-6 AN	40	26 oz	54006	//////	//////	//////
-8 AN	40	26 oz	54008	//////	//////	//////
-10 AN	40	26 oz	54010	//////	//////	//////



Available in -6 AN, -8 AN & -10 AN



-10 AN / 7/8"-14 O-ring cooler inlets

4 Integrated mounting points

250

MAX. PRESSURE

Sturdy furnace-brazed aluminum construction

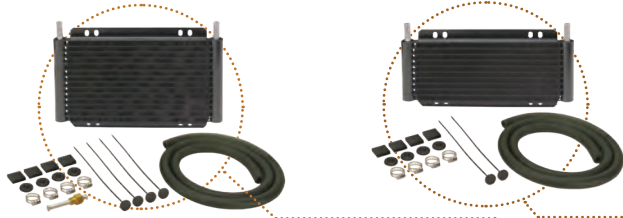


Built-in high-flow turbulators

Black Powdercoated Finish

PLATE & FIN COOLERS

Series 8000



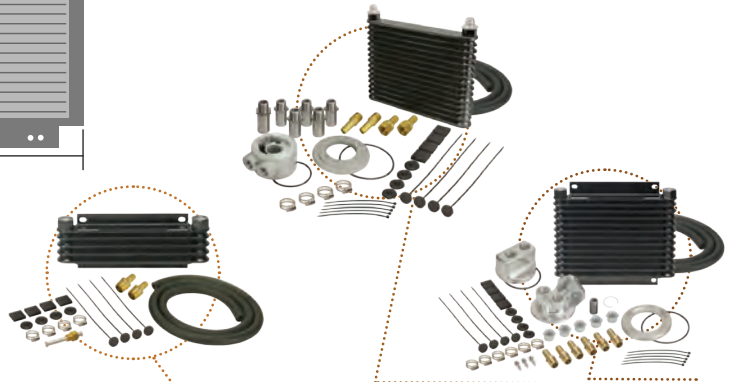
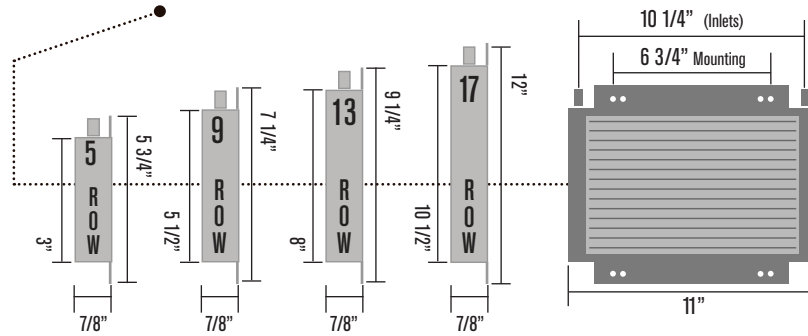
- 1 1/32" Hose barb inlets
- Prevent heat related component failure



250 MAX. PRESSURE
Sturdy furnace-brazed aluminum construction

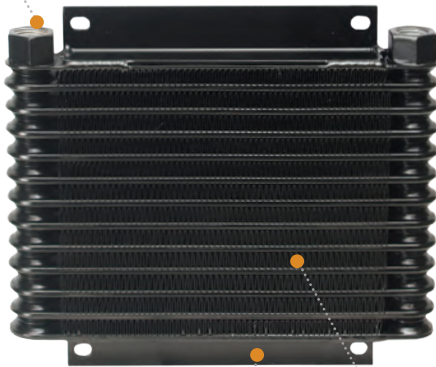
Integrated, high-flow turbulators for maximum cooling efficiency

Inlets	No. of Rows	Fluid Capacity	Cooler Part No.	Transmission Cooler Kit	Power Steering Cooler Kit
1 1/32" Barb	11	2.5 oz	33501	13501	13215
1 1/32" Barb	15	4 oz	33502	13502	//////
1 1/32" Barb	21	5.5 oz	33503	13503	//////
1 1/32" Barb	26	8 oz	33504	13504	//////



Series 9000

1/2" NPT Female cooler outlets

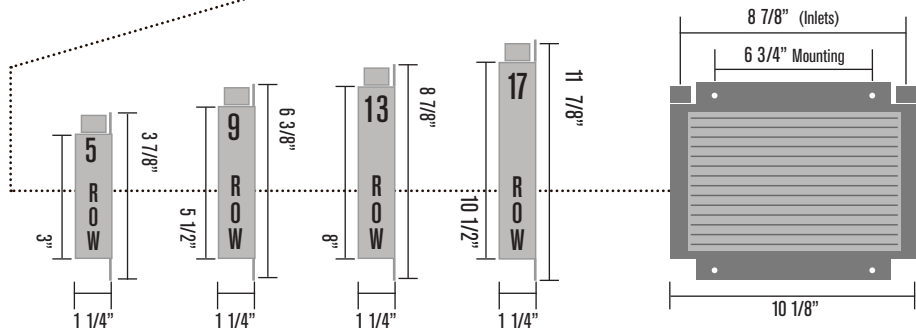


Integrated, high-flow turbulators

250 MAX. PRESSURE

Sturdy furnace-brazed aluminum construction

Inlets	No. of Rows	Fluid Capacity	Cooler Part No.	Transmission Cooler Kit	Engine Oil Cooler Kit - Sandwich	Engine Oil Cooler Kit - Spin-On
1/2" FPT	5	3 oz	33601	//////	//////	//////
1/2" FPT	9	6 oz	33602	//////	//////	//////
1/2" FPT	13	10 oz	33603	//////	//////	//////
1/2" FPT	17	12 oz	33604	//////	//////	//////
3/8" Barb	5	3 oz	//////	13611	//////	//////
3/8" Barb	9	6 oz	//////	13612	//////	//////
3/8" Barb	13	10 oz	//////	13613	//////	//////
3/8" Barb	17	12 oz	//////	13614	//////	//////
1/2" Barb	13	10 oz	//////	//////	15405	15451



TUBE & FIN COOLERS

Series 7000

Embossed turbulators in each tube agitate fluid for maximum heat transfer

Prevent heat-related component failure



Available in 11/32" Barb, 1/2" Barb or -6 AN Inlets



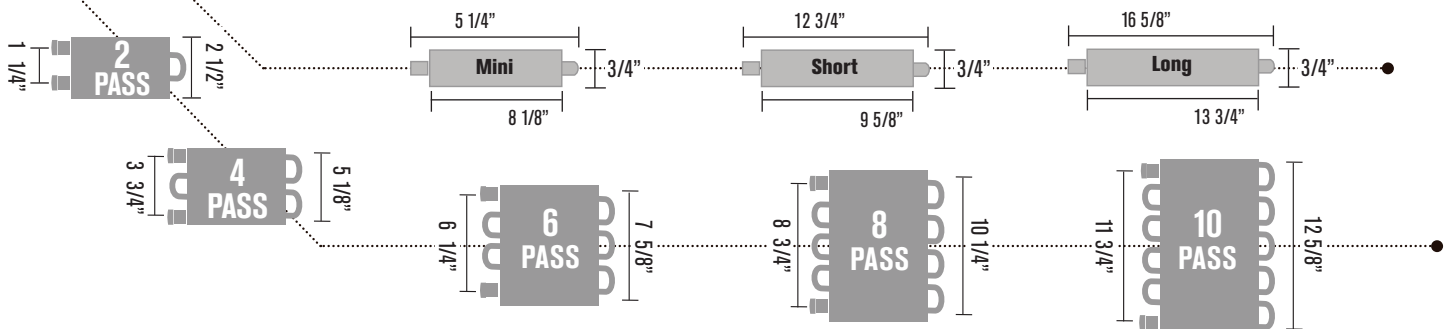
Black Powdercoated Finish

1/2" Copper tubing expanded into formed aluminum fins

Extruded plastic fin guards



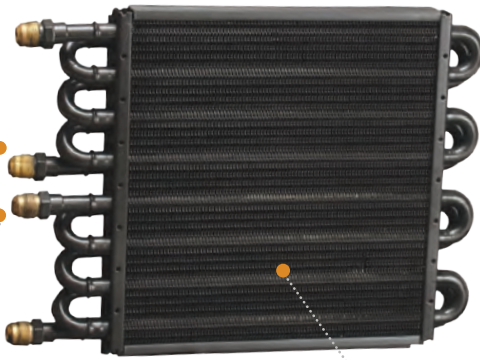
No. of Passes	Cooler Size	Fluid Capacity	Inlets	Cooler Part No.	Transmission Cooler Kit	Inlets	Transmission Cooler Kit	Power Steering Cooler Kit	Inlets	Cooler Part No.	Engine Oil Cooler Kit - Sandwich	Engine Oil Cooler Kit - Spin-On
2	Mini	1 oz	11/32" Barb	//////	//////	11/32" Barb	//////	13213	//////	//////	//////	//////
2	Short	2.25 oz	11/32" Barb	//////	//////	11/32" Barb	//////	13200	//////	//////	//////	//////
4	Mini	2.5 oz	-6AN	13309	//////	11/32" Barb	//////	13212	//////	//////	//////	//////
4	Short	4 oz	-6AN	13311	//////	11/32" Barb	13101	//////	//////	//////	//////	//////
4	Long	4.25 oz	-6AN	13312	//////	11/32" Barb	13102	//////	//////	//////	//////	//////
6	Short	6 oz	-6AN	13316	13306	11/32" Barb	13106	//////	//////	//////	//////	//////
6	Long	7 oz	-6AN	13313	13303	11/32" Barb	13103	//////	1/2" Barb	15302	15505	15551
8	Short	6.25 oz	-6AN	13317	//////	11/32" Barb	13107	//////	//////	//////	//////	//////
8	Long	11.5oz	-6AN	13314	13304	11/32" Barb	13104	//////	//////	//////	//////	//////
10	Short	8 oz	-6AN	13318	//////	11/32" Barb	13108	//////	//////	//////	//////	//////
10	Long	13.5 oz	-6AN	13315	//////	11/32" Barb	13105	//////	//////	//////	//////	//////



TUBE & FIN COOLERS

Dual-Circuit Fluid Coolers

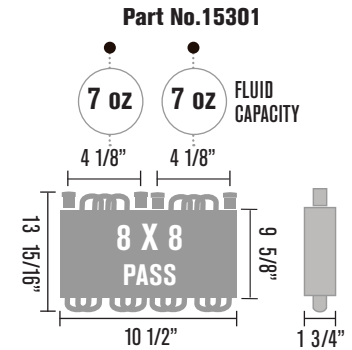
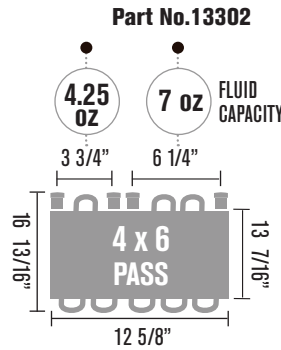
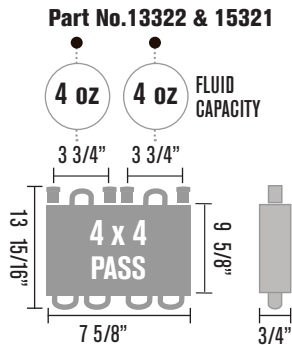
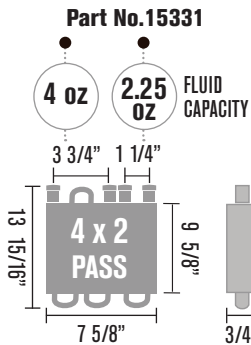
● Cools two systems with one compact package



● Available in -8 AN or Push-in Barb

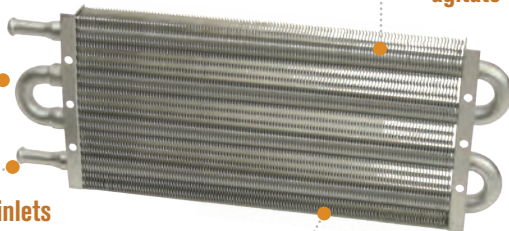
1/2" Copper tubing expanded into formed aluminum fins

Inlets	No. of Rows	Cooler Part No.
11/32" (2x) & 1/2" Barb (2x)	4 & 6	13302
11/32" (2x) & 1/2" Barb (2x)	4 & 4	13322
-8 AN (4x)	8 & 8	15301
-8 AN (4x)	4 & 4	15321
-8 AN (4x)	4 & 2	15331



Dyno-Cool Series 6000

● Prevent heat-related component failure



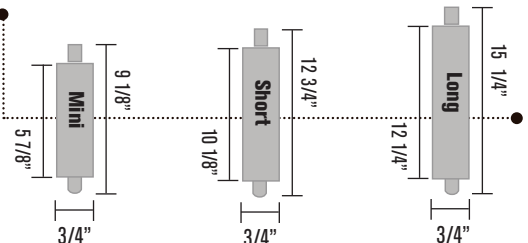
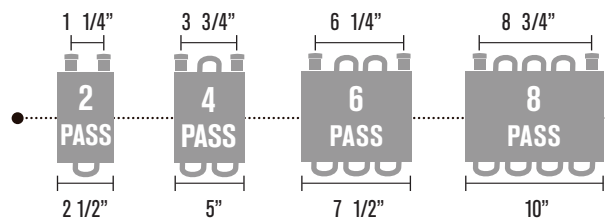
● Embossed turbulators in each tube agitate fluid for maximum heat transfer

● 11/32" Hose barb inlets

● 1/2" Aluminum tubing expanded into formed aluminum fins



Inlets	No. of Passes	Height	Fluid Capacity	Transmission Cooler Kit	Power Steering Cooler Kit
11/32" Barb	2	Mini	1.5 oz	////	12213
11/32" Barb	2	Short	2 oz	////	12200
11/32" Barb	4	Short	3.25 oz	12901	////
11/32" Barb	4	Long	4 oz	12902	////
11/32" Barb	6	Long	7 oz	12903	////
11/32" Barb	8	Long	11 oz	12904	////
11/32" Barb	6	Short	6 oz	12906	////
11/32" Barb	8	Short	6.5 oz	12907	////



FRAME RAIL COOLERS

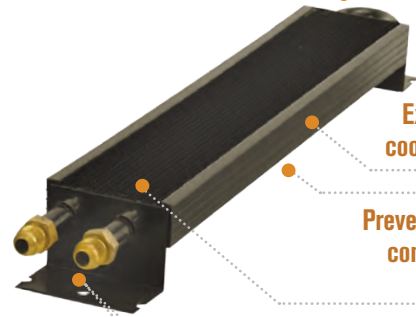


• 1/2" Copper tubing expanded into aluminum cooling fins

• Extruded plastic cooling fin guards

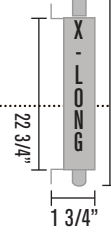
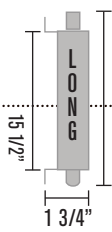
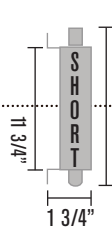
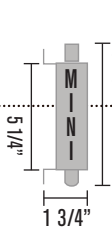
• Prevent heat-related component failure

• Embossed turbulators for maximum heat transfer



Available in 11/32" Barb or -6 AN Inlets

No. of Passes	Cooler Size	Fluid Capacity	Inlets	Cooler Part No.	Inlets	Transmission Cooler Kit	Power Steering Cooler Kit
2	Mini	1.5 oz	-6AN	13310	11/32" Barb	////	13210
2	Short	2.5 oz	-6AN	13223	11/32" Barb	13222	13211
2	Long	3.25 oz	-6AN	13221	11/32" Barb	13220	////
2	X Long	4.5 oz	-6AN	13225	11/32" Barb	13224	////



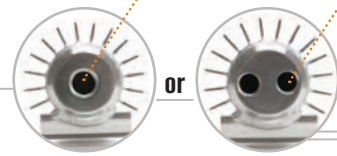
• External & Internal heat-dissipating fins

• Compact 3" diameter fits most frame rails

• High heat transfer

• Single Pass

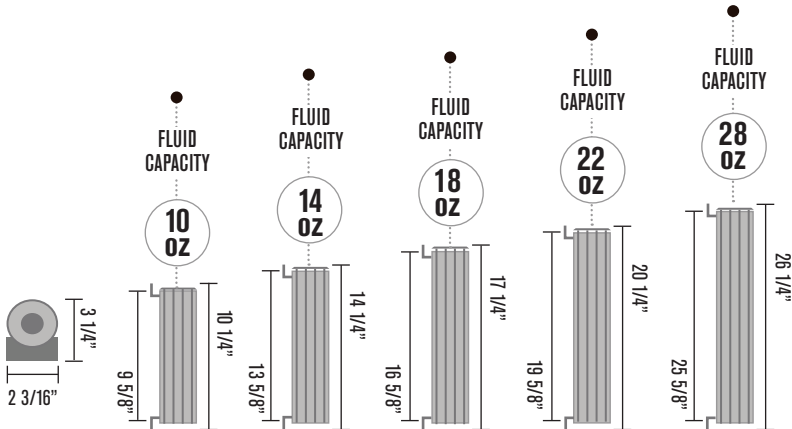
• Double Pass



HEAT SINK COOLERS



No. of Passes	Cooler Size	Inlets	Cooler Part No.	Transmission Cooler Kit	Power Steering Cooler Kit
1	10"	3/8" NPT	13249	////	13349
1	14"	3/8" NPT	13250	13253	13350
1	17"	3/8" NPT	13251	13254	////
1	20"	3/8" NPT	13252	13255	////
1	26"	3/8" NPT	13257	13256	////
2	14"	1/4" NPT	13260	13263	////
2	17"	1/4" NPT	13261	13264	////
2	20"	1/4" NPT	13262	13265	////
2	26"	1/4" NPT	13267	13266	////



TRANSMISSION COOLER FITTINGS

Dodge/Jeep

Part No.

13034

Fits 1999-2003 Dodge Trucks, Vans with 5.9L, 5.2L, 3.9L Engines



9/16"-24
45°SAE Fittings
Male & Female



1/4" NPT M/F
3/8" NPT Male Fittings

Insta-Dapt

Part No.

13004

Fits most vehicles with 5/16" transmission lines. Includes male and female threads.



Dodge/Jeep

Part No.

13028

Fits 1960-1997 Dodge Trucks with rubber transmission lines
Fits 1983-2012 Jeep with 5.2L, 4.2L, 4.0L, 2.5L Engines with rubber transmission lines



Barbed Splicer
Fittings

Dodge Dakota

Part No.

13030

Fits 1999-2005 Dodge Dakota



9/16"-18
37° JIC Fitting

Ford/Mercury

Part No.

13014

Fits 1983-2012 Ford/Mercury Cars, Trucks, Bronco, Expedition, Ranger, Vans w/ 7.5L, 7.3L, 6.9L, 6.6L, 5.8L, 5.4L, 5.0L, 4.9L, 4.7L, 4.6L, 4.2L, 4.0L, 3.8L, 3.0L, 2.9L, 2.8L, 2.5L, 2.3L Engines
Fits 1983-2007 Mercury Cars w/ 5.8L, 5.0L, 4.6L, 3.8L, 3.0L, 2.5L, 2.3L Engines



5/8" Inverted
Flare Fittings

Ford/Lincoln Trucks & SUV's

Part No.

13025

Fits 1998-2012 Ford/Lincoln Trucks & SUV's, Blackwood, Excursion, Expedition, Explorer, Navigator, Ranger with 7.3L, 6.9L, 6.8L, 5.4L, 5.0L, 4.6L, 4.0L, 3.0L, 2.5L Engines



1/2"-20 Inverted
Flare Fittings

Ford/Lincoln/Mercury

Part No.

13024

Fits 1983-2012 Ford/Lincoln/Mercury Cars, Trucks, Blackwood, Bronco, Expedition, Navigator, Ranger, Vans with 7.3L, 6.9L, 5.8L, 5.0L, 4.9L, 4.6L, 4.2L, 2.9L, 2.8L, 2.3L Engines



ADD AUXILIARY COOLER WITHOUT ALTERING FACTORY TRANSMISSION LINES

GM

Part No.

13018

Fits 1981-2000 Buick w/ 5.7L, 3.8L, 3.3L, 3.1L, 2.5L, 2.4L, 2.3L, 2.2L Engines
Fits 1988-2007 Cadillac Cars, Trucks with 6.2L, 6.0L, 5.7L, 5.3L, 4.9L, 4.6L, 4.5L, 4.1L, 3.0L Engines
Fits 1987-2012 Chevrolet Cars, SUVs, Chevrolet, GM Trucks, Vans w/ 8.1L, 7.4L, 6.5L, 6.0L, 5.7L, 5.3L, 5.0L, 4.8L, 4.3L, 3.8L, 3.4L, 3.2L, 2.4L, 2.3L, 2.2L Engines
Fits 1996-2001 Oldsmobile Bravada with 4.3L Engine
Fits 1983-2005 Pontiac Cars, SUVs with 5.7L, 5.0L, 3.8L, 3.4L, 3.1L, 2.4L, 2.2L, 1.6L Engines



5/8" Inverted
Flare Fittings

GM

Part No.

13035

Fits 1993-2012 Buick w/ 4.6L, 4.2 L, 3.9L, 3.8L, 3.6L, 3.5L, 3.4L, 3.3L, 3.1L, 2.5L, 2.4L, 2.3L, 2.2L Engines
Fits 1993-2012 Cadillac 6.2L, 6.0L, 5.7L, 5.3L, 4.9L, 4.6L, 4.5L, 4.1L, 3.0L Engines
Fits 2000-2012 Chevrolet Cars, SUVs, Chevrolet, GM Trucks, Vans with 3.8L, 3.4L, 6.0L, 5.3L, 4.8L, 4.3L, 4.2L, 3.7L, 3.5L, 3.4L, 2.9L, 2.8L Engines
Fits 2003-2007 Isuzu SUVs with 4.2L, 5.3L Engines
Fits 2002-2004 Oldsmobile Bravada w/ 4.2L Engine
Fits 2001-2007 Pontiac with 3.9L, 3.8L, 3.5L, 3.4L, 3.1L Engines



Snap in Tube
Fitting



5/16" Tube to 3/8" Barb

Part No.

Description

13031 5/16" Transmission Cooler Line to 3/8" NPT Hose Barb



3/8" Tube to 3/8" Barb

Part No.

Description

13032 3/8" Transmission Cooler Line to 3/8" NPT Hose Barb



1/2" Tube to 1/2" Barb

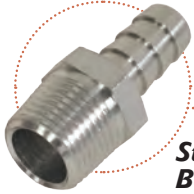
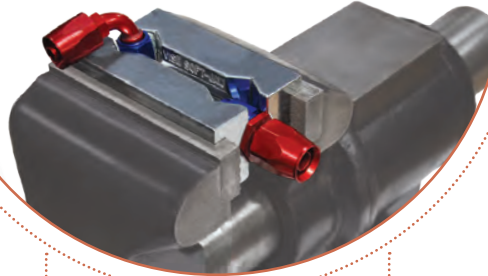
Part No.

Description

13033 1/2" Transmission Cooler Line to 1/2" NPT Hose Barb

Magnetic Aluminum Vise Jaws

Part No.	Description
35000	4" (one size) fits all vises



Straight NPT Hose Barb Fittings

Part No.	Description
98100	1/4" NPT Male x 3/8" Barb
98101	3/8" NPT Male x 3/8" Barb
98102	3/8" NPT Male x 1/2" Barb
98103	1/2" NPT Male x 1/2" Barb
98104	1/4" Female x 3/8" Barb
98105	3/8" Female x 3/8" Barb
98106	1/2" Female x 1/2" Barb



AN Swivel Hose Barb Fittings

Part No.	Description
98200	-6 AN Female x 3/8" Barb
98201	-8 Female x 3/8" Barb
98202	-8 Female x 1/2" Barb
98203	-10 Female x 1/2" Barb

AN Hose Barb Fittings

Part No.	Description
98204	-6 AN Male x 3/8" Barb
98205	-8 AN Male x 1/2" Barb



NPT Reducer Bushings

Part No.	Description
98450	3/8" Male x 1/8" Female
98451	1/2" Male x 1/8" Female
98452	1/2" Male x 3/8" Female



90° NPT Fittings

Part No.	Description
98333	3/8" NPT Female x 3/8" NPT Male
98344	1/2" NPT Female x 1/2" NPT Male

90° Hose Barb Fittings

Part No.	Description
98233	3/8" NPT Male x 3/8" Barb
98234	3/8" NPT Male x 1/2" Barb
98244	1/2" NPT Male x 1/2" Barb



Barb to Barb Fittings

Part No.	Description
98028	3/8" Barb x 3/8" Barb



Zinc Radiator Anode

Part No.	Description
98000	Fits radiator w/ 1/4" NPT drain petcock



AN Aluminum Adapter Fittings

Part No.	Description
59106	-6 AN x 5/8"-18 O-ring
59108	-8 AN x 5/8"-18 O-ring
59006	-6 AN x -10 AN O-ring
59008	-8 AN x -10 AN O-ring
59010	-10 AN x -10 AN O-ring
59012	-12 AN x -10 AN O-ring

AN Aluminum Swivel Fittings with 1/8" NPT Side Port

Part No.	Description
35920	-6 AN Male x -6 AN Female
35921	-8 AN Male x -8 AN Female
35922	-10 AN Male x -10 AN Female



Fluid Cooler ACCESSORIES



Hi-Temp. / Hi-Pressure Hose

Part No.	Hose ID	Length	Application
13003	1 1/32"	4 feet	Transmission
13007	1 1/32"	25 feet	Transmission
13016	3/8"	5 feet	Transmission
13017	3/8"	25 feet	Transmission
15700	1/2"	10 feet	Engine
15701	1/2"	5 feet	Engine
15740	1/2"	8 feet	Engine
15799	1/2"	25 feet	Engine

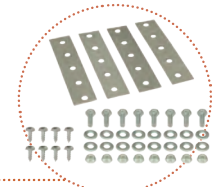
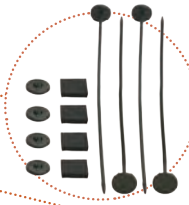


Part No. 13009 - Oil Temperature Gauge

- Transmission or Engine oil temperature
- 2-1/8" diameter electric gauge includes mounting bracket, 1/8" NPT sensor and transmission pan adapter/drain plug to mount sensor in pan

Fluid Cooler Mounting Kits

Part No.	Description	Hardware
13001	Plastic Insta-Mount Kit	(4) Rods, Pads & Buttons
13002	4 3/4" Rigid Mount Bracket Kit	(8) Screws
13062	4 3/4" Rigid Mount Bracket Kit	(8) Screws, Bolts, Nuts & Washers
13063	10" Rigid Mount Kit	(8) Screws, Bolts, Nuts & Washers



Transmission Cooler Installation Kits



Part No.	Description
12006	Plastic Rod Ram Air cooler kit-4' 11/32" Hose
13006	Plastic Rod/Metal Strap Ram Air kit-4' 11/32" Hose
13064	Metal Strap Ram Air kit-8' 11/32" Hose
13065	Plastic Rod/Metal Strap Ram Air kit-4' 11/32" Hose w/ANG fittings
13020	5/16" Cooler line kit for Remote Mount coolers-10' 11/32" Hose (includes In-line Thermostat)
13022	3/8" Cooler line kit for Remote Mount coolers-10' 3/8" Hose (includes In-line Thermostat)
13023	1/2" Cooler line kit for Remote Mount coolers-10' 1/2" Hose (includes In-line Thermostat)



Engine Oil Cooler Installation Kits



Part No.	Description
15751	Universal Sandwich Adapter kit for Ram Air engine oil coolers
15752	Universal Sandwich Adapter kit for Remote Mount oil coolers (includes In-line Thermostat)



Accessories

Part No.	Description
13008	5/16" band, grip range 1/2"-7/8" Stainless Hose Clamps
13019	1/2" band, grip range 5/8"-1" Stainless Hose Clamps
13010	Universal Drain Plug Kit
14000	Magnetic Drain Plug Kit



PART NUMBER INDEX

<u>Part No.</u>	<u>Page</u>	<u>Part No.</u>	<u>Page</u>	<u>Part No.</u>	<u>Page</u>	<u>Part No.</u>	<u>Page</u>	<u>Part No.</u>	<u>Page</u>	<u>Part No.</u>	<u>Page</u>
12006	58	13062	58	13302	54	14207	30	15735	36	16217	17
12200	54	13063	58	13303	53	14208	28	15740	58	16220	46
12213	54	13064	58	13304	53	14210	29	15746	37	16308	20
12730	47	13065	58	13306	53	15200	46	15747	37	16309	20
12731	47	13070	39	13309	53	15220	46	15748	38	16310	20
12732	47	13072	39	13310	55	15230	47	15749	38	16312	20
12733	47	13075	39	13311	47, 53	15300	46	15751	58	16314	20
12740	47	13090	39	13312	53	15301	46, 54	15752	58	16316	20
12741	47	13091	39	13313	47, 53	15302	53	15760	37	16507	19
12742	47	13092	39	13314	47, 53	15320	46	15761	37	16508	19
12743	47	13101	47, 53	13315	53	15321	54	15780	38	16509	19
12901	54	13102	53	13316	53	15331	47, 54	15781	38	16510	19
12902	54	13103	47, 53	13317	47, 53	15405	52	15782	36	16512	19
12903	54	13104	47, 53	13318	53	15450	45	15799	58	16514	19
12904	54	13105	53	13321	46	15451	52	15800	46	16516	19
12906	54	13106	53	13322	54	15500	46	15820	46	16617	19, 47
12907	54	13107	47, 53	13349	55	15505	53	15830	47	16618	19, 44
13001	19, 58	13108	53	13350	55	15551	53	15831	47	16619	19
13002	58	13200	53	13401	51	15605	51	15840	45	16620	19
13003	58	13210	55	13402	51	15651	51	15845	45	16622	19
13004	56	13211	55	13403	51	15660	44	15850	45	16624	19
13005	35	13212	53	13501	52	15700	58	15851	45	16626	19
13006	58	13213	53	13502	52	15701	58	15860	44	16700	19
13007	58	13215	52	13503	52	15702	36	15865	44	16701	19
13008	58	13220	55	13504	52	15703	37	15870	44	16720	15
13009	58	13221	55	13611	52	15704	37	15875	44	16721	15
13010	58	13222	55	13612	52	15705	37	15876	44	16730	15
13011	49	13223	55	13613	52	15706	37	15900	46	16731	15
13014	56	13224	55	13614	52	15707	35	15950	45	16735	15
13016	58	13225	55	13700	46	15708	35	15960	44	16738	15
13017	58	13249	55	13720	46	15709	35	16010	19	16739	15
13018	56	13250	55	13730	47	15715	38	16012	19	16740	15
13019	58	13251	55	13731	47	15716	38	16014	19	16741	19
13020	58	13252	55	13740	45	15717	38	16016	19	16742	19
13021	49	13253	55	13750	20, 45	15718	38	16104	18	16743	19
13022	58	13254	55	13751	45	15719	49	16105	18	16744	19
13023	58	13255	55	13760	44	15720	36	16105	45	16745	19
13024	56	13256	55	13870	44	15721	49	16110	18	16746	17
13025	56	13257	55	13900	46	15724	37	16110	44	16749	14
13026	49	13260	55	13950	45	15725	38	16112	18	16750	14
13028	56	13261	55	13960	44	15726	49	16114	18	16751	15
13030	56	13262	55	14000	58	15728	35	16116	18	16752	14
13031	56	13263	55	14002	31	15729	35	16118	45	16753	14
13032	56	13264	55	14010	29	15730	36	16136	18	16754	15
13033	56	13265	55	14200	31	15731	36	16142	18	16759	14
13034	56	13266	55	14201	31	15732	36	16200	17	16760	14
13035	56	13267	55	14202	31	15733	36	16212	17	16763	15
13049	35	13300	46	14204	30	15734	36	16214	17	16764	15

PART NUMBER INDEX

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
16765	15	16934	8	18910	20	25750	35	35920	57	66828	9
16769	14	17013	24	18912	20	25751	35	35921	57	66830	7
16778	14	17015	24	18914	20	25752	35	35922	57	66831	7
16779	14	17017	24	18916	20	25753	35	50020	50	66833	7
16788	14	17018	24	19113	25	25770	36	50021	50	66835	7
16789	14	17019	24	19115	25	25771	36	50022	50	66836	7
16795	13	17117	27	19117	25	25772	36	50023	50	66837	7
16812	8	17118	27	19118	25	25773	36	50100	50	66838	7
16814	10	17119	27	19213	25	25774	36	51006	51	66842	7
16816	9	17120	27	19215	25	25782	36	51008	51	66927	7
16817	9	17213	24	19217	25	25783	36	51010	51	96900	31
16818	9	17215	24	19218	25	25791	49	51078	51	96901	31
16819	9	17217	24	19313	25	25792	49	51606	51	96905	29
16820	9	17218	24	19315	25	31500	27	51608	51	96908	28
16821	9	17219	24	19317	25	31510	27	51610	51	96909	30
16822	9	17313	26	19318	25	31515	27	51678	51	98000	57
16823	9	17315	26	19417	25	31518	27	51906	51	98003	37
16824	19	17317	26	19418	25	31520	27	51908	51	98004	37
16825	7	17318	26	19517	25	31521	27	51910	51	98020	35
16826	7	17319	26	19518	25	31540	27	51978	45, 51	98021	35
16827	9	17320	26	19713	25	31541	27	52506	51	98028	57
16828	9	17413	26	19715	25	31547	27	52508	51	98100	57
16830	7	17415	26	19717	25	31550	27	52510	51	98101	57
16831	7	17417	26	19718	25	31551	27	52578	44, 51	98102	57
16833	7	17418	26	19817	25	33501	52	53406	51	98103	57
16834	19	17419	26	19818	25	33502	52	53408	51	98104	57
16835	7	17420	26	19917	25	33503	52	53410	51	98105	57
16836	7	17513	26	19918	25	33504	52	53478	51	98106	57
16837	7	17515	26	20101	20	33601	52	54006	51	98200	57
16838	7	17517	26	20500	20	33602	52	54008	51	98201	57
16842	7	17518	26	20561	20	33603	52	54010	51	98202	57
16908	20	17615	24	25005	35	33604	52	54078	44, 51	98203	57
16909	20, 47	17617	24	25011	49	35000	57	59006	50, 57	98204	57
16910	20	17618	24	25044	35	35020	49	59008	50, 57	98205	57
16912	20	17619	24	25049	35	35021	49	59010	50, 57	98233	57
16913	11	17817	24	25702	36	35022	49	59012	50, 57	98234	57
16914	20	17818	24	25707	35	35703	37	59106	57	98244	57
16916	20	17819	24	25708	35	35704	37	59108	57	98333	57
16917	11	17917	27	25709	35	35705	37	66817	9	98344	57
16918	18	17918	27	25719	49	35706	37	66818	9	98450	57
16919	9	17919	27	25720	36	35707	34	66819	9	98451	57
16920	18	17920	27	25728	35	35708	34	66820	9	98452	57
16924	11	18212	17	25729	35	35709	34	66821	9		
16925	11	18214	17	25730	36	35724	37	66822	9		
16926	10	18217	17	25731	36	35727	34	66823	9		
16927	7	18735	15	25732	36	35728	34	66825	7		
16928	8	18738	15	25733	36	35729	34	66826	7		
16929	8	18739	15	25734	36	35747	37	66827	9		