# FORM-A-FLEX™ HOSE KITS

## **COOLING SYSTEM**



Wormgear hose clamps are machined from a billet of 6061-T6 aircraft aluminum and available in anodized red, blue, black and chrome plate

Connector sleeves are made from silicon rubber

Original Equipment - Type Molded Black Rubber Hoses, while efficient and inexpensive, leave a lot to be desired in appearance. The tortuous bends often required to clear front engine accessories usually preclude the use of relatively inflexible stainless steel braid protected elastomeric hoses such as Earl's Auto-Flex<sup>™</sup>. Further the inherent stiffness of this type of hose imposes substantial loads on the soldered radiator inlet and outlet necks - especially when the engine rocks on flexible mounts.

With Earl's Form-A-Flex<sup>™</sup> there is no plating to flake or rust through, because they are constructed from 300 series stainless steel tubing. They can be permanently bent by hand in tight radii and still remain flexible enough to absorb engine vibration and rock. The clamp housings are billet 6061-T6 and come in a variety of colors.

# FORM-A-FLEX™ HOSE KITS

### **COOLING SYSTEMS**

Red

Red

Red

Blue

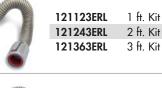
Blue

Blue

Chrome

Chrome

#### **RADIATOR HOSE KITS** 1-PC: 1-3/4 DIA. FORM-A-FLEX® & 2-END CONNECTORS P/N UNIT CONNECTORS 121121ERL 1 ft. Kit 2 ft. Kit 121241ERL 121361ERL 3 ft. Kit 1 ft. Kit 121122ERL 121242ERL 2 ft. Kit 121362ERL 3 ft. Kit





121363ERL	3 <del>II</del> . Kit	Chrome
121125ERL	1 ft. Kit	Black
121245ERL	2 ft. Kit	Black
121365ERL	3 ft. Kit	Black

WITHOUT SILICONE

9001115ERL for 3/4 Hose

9002115ERL for 3/4 Hose

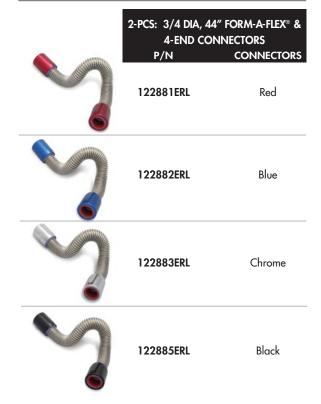
9003115ERL for 3/4 Hose

9005115ERL for 3/4 Hose

## **DOUBLE ECON-O-FIT® FITTINGS**

P/N

## **HEATER HOSE KITS**



THOUT SILICONE DESCRIPTION C			WI P/N		ITHOUT SILICONE HOSE DESCRIPTION CONNECTORS		
for 3/4 Hose	Red	and a	9003133ERL	for 1-3/4 Hose	Chrome		
for 3/4 Hose	Blue		9005133ERL	for 1-3/4 Hose	Black		
		FORM-A-FLE	X® BULK				
for 3/4 Hose	Chrome		P/N	DESCRIPTI	ION		
		Sum and	121000ERL	1-3/4 Form-A-Fle	ex® (per ft.)		
for 3/4 Hose	Black	0 Jun	122000ERL	3/4 Form-A-Fle>	k®(per ft.)		
			121103ERL	1-3/4 Blue Silica or Double Econ-O-Fi			
for 1-3/4 Hose	Red		122103ERL	2/1 Plue Siliane	Hana (2")		
			IZZIUJEKL	3/4 Blue Silicone	Hose (S)		



9001133ERL	for 1-3/4 Hose	Red
9002133ERL	for 1-3/4 Hose	Blue

tech line: 310-609-1602

122104ERL

# 59

1-1/2 Reducer boot (1.5")

## TEMP-A-CURE™ OIL COOLERS

#### **COOLING SYSTEMS**



Today's high performance car packs a lot of power in a smaller package. In order to save both weight and space, the typical OEM cooling system is designed for "normal" driving conditions. When driven hard for extended periods, the cooling system may prove less than adequate. Earl's offers the solution to marginal cooling systems—race proven lightweight and efficient oil coolers designed to fit in the smallest practical space.

Any performance vehicle can benefit from the TEMP-A-CURE difference. Tow vehicles, motor homes, passenger cars and even motorcycles can realize extended engine and/or transmission efficiency and life with an Earl's TEMP-A-CURE oil cooler.

Racing cars have always required oil coolers. Since World War II, most racing cars, world wide, have utilized brazed aluminum "modular" oil coolers. The basic design of the modular oil cooler dates back to the early 1930s when it was developed for use with the Rolls Royce Merlin engine that powered the Spitfires and Hurricanes that won the Battle of Britain. This type of cooler with its internal turbulator plates and dense air fins provides maximum liquid side and air side surface area. The large collector tanks ensure minimum flow restriction. The fully brazed construction results in the most efficient possible thermal transfer path between liquid and air. All of this adds up to the most thermally efficient liquidto-air heat exchanger available.

# EARL'S TEMP-A-CURE OIL COOLERS OFFER THE FOLLOWING ADVANTAGES:

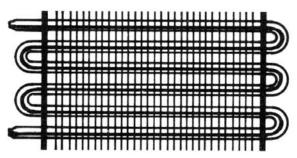
- 1. Manufactured in the U.S.A. from aircraft spec aluminum alloy, using the latest vacuum brazing technology.
- 2. Corrugated screen internal turbulator plates increase both thermal efficiency and mechanical strength resulting in the most efficient, smallest and lightest practical package (typically half the size of traditional tube & fin cooler).
- 3. Manufactured from thin aluminum plates for fastest possible heat transfer.
- 4. Inlet and outlet fittings seal with an o-ring to the top plate assembly for worry free performance.
- 5. Designed for the range of oil flows and air speeds encountered in high performance automobiles.
- 6. Available in three widths with inlet and outlet fittings, male AN -6 to -16
- Every cooler is pressure checked to 175 psi. Periodic samples are burst tested to 350 psi.

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#### EARL'S DESIGN

For many years, professional racers have been using modular style oil coolers almost exclusively. Virtually every Formula One, Indy and GTP or Trans-Am car depends on these type units for engine and transaxle cooling. Temp-A-Cure coolers have been developed specifically for use in all types of engines and transmissions subjected to temperature extremes, including competition and high performance uses. They are designed for the range of air speeds and oil flows normally encountered in automotive use, but built to aircraft standards of quality. They are constructed of high grade aluminum and are completely furnace brazed to insure the most thermally efficient joint possible between the oil tubes and air fins. The internal design of the oil tubes and the large area collector tanks provide maximum surface area with minimum pressure drop. The highly concentrated air fins offer maximum heat transfer to the outside air.



#### **TYPICAL TUBE & FIN DESIGN**

The tube and fin cooler has little to offer in the way of efficient oil cooling. Its typical serpentine design has a large pressure drop due to the tube length and to the restricted bends. The tube and fin cooler cannot approach the cooling efficiency of Earl's Fin density and oil side to air side mechanical bond.

#### **TEST COMPARISON PG.122**

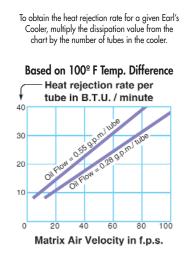
#### AIR VELOCITY: THE CRITICAL FACTOR IN HEAT DISSIPATION

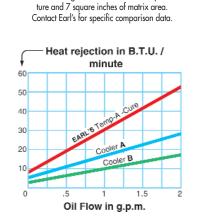
EARL'S TEMP-A-CURE OIL COOLERS are designed to efficiently use all of the air that passes through them. The center chart below shows that a Temp-A-Cure cooler of comparable size is between two and three times more efficient in terms of heat rejection as a typical tube and fin type cooler. ("B")

Cooler "A" in our chart below is of a popular stamped dish plate design; where the dish plates are the only components—no fins and no corrugated screen. This design, while extremely attractive to the manufacturer, sacrifices efficiency of heat transfer for ease of assembly.

The right hand chart below represents testing to determine pressure drop. It shows that the Temp-A-Cure cooler can handle a larger volume of oil (four times the volume!) with less than half the pressure drop of a typical tube and fin style oil cooler. Earl's Temp-A-Cure oil coolers are properly termed "air to liquid heat exchangers". In order to operate efficiently, they must be mounted in a stream of moving air at ambient temperature. It is not a good idea to mount the oil cooler behind the water radiator where it will receive only heated air. It is not enough to lead air to the cooler—the heated air must have somewhere to go after it passes through the core. Remember, air always obeys the immutable laws of fluid dynamics. Simply put, air will only flow from a region of relatively high pressure to a region of relatively low pressure. Any attempt on our part to convince it to do otherwise is doomed to failure.

#### **BTU RATINGS PG.122**

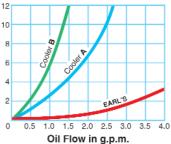




Comparable heat rejection rates based on

SAE 10 weight oil at 200° F. inlet tempera-

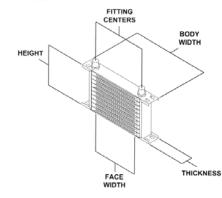
Comparable oil pressure drop across matrix with SAE 10 oil at 200° F. inlet temperature.



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# TEMP-A-CURE™ OIL COOLERS

#### **COOLING SYSTEMS**



**TEMP-A-CURE oil coolers** are designed to suit any application. The chart below will assist you in choosing the correct model for your needs.

NOTE: All of our Temp-A-Cure Coolers are available with male AN fittings -6 to -16

Cooler fitting instructions pg. 65 & typical plumbing of cooler pg. 123

FACE WIDTH (BETWEEN TANKS)	4"	4"	9"	9"	11″	11″
FITTING CENTERS	5-1/8"	5-1/8"	9-3/4"	9-3/4"	12-1/8″	12-1/8″
BODY WIDTH	8-1/4"	8-1/4"	13"	13"	14″	14″
THICKNESS	2″	2″	2″	2″	2″	2″



ROW # & HEIGH	T FITTING SIZE	GRAY-NARROW	BLACK-NARROW	GRAY-WIDE	BLACK-WIDE	GRAY-EXTRA WIDE	BLACK-EXTRA WIDE
	Core Only	20700ERL	20700AERL	40700ERL	40700AERL	80700ERL	80700AERL
	-6 AN Male	20706ERL	20706AERL	40706ERL	40706AERL	80706ERL	80706AERL
7 Row Height 2"	-8 AN Male	20708ERL	20708AERL	40708ERL	40708AERL	80708ERL	80708AERL
Heighi z	-10 AN Male	20710ERL	20710AERL	40710ERL	40710AERL	80710ERL	80710AERL
	-12 AN Male	20712ERL	20712AERL	40712ERL	40712AERL	80712ERL	80712AERL
	-16 AN Male	20716ERL*	20716AERL*	40716ERL*	40716AERL*	80716ERL*	80716AERL*
	12mmx1.5 female	20745ERL	-	-	-	-	-
	Core Only	21000ERL	21000AERL	41000ERL	41000AERL	81000ERL	81000AERL
	-6 AN Male	21006ERL	21006AERL	41006ERL	41006AERL	81006ERL	81006AERL
10 Row	-8 AN Male	21008ERL	21008AERL	41008ERL	41008AERL	81008ERL	81008AERL
Height 3"	-10 AN Male	21010ERL	21010AERL	41010ERL	41010AERL	81010ERL	81010AERL
	-12 AN Male	21012ERL	21012AERL	41012ERL	41012AERL	81012ERL	81012AERL
	-16 AN Male	21016ERL*	21016AERL*	41016ERL*	41016AERL*	81016ERL*	81016AERL*
	12mmx1.5 female	21045ERL	-	-	-	-	-
	Core Only	21300ERL	21300AERL	41300ERL	41300AERL	81300ERL	81300AERL
	-6 AN Male	21306ERL	21306AERL	41306ERL	41306AERL	81306ERL	81306AERL
13 Row	-8 AN Male	21308ERL	21308AERL	41308ERL	41308AERL	81308ERL	81308AERL
Height 4"	-10 AN Male	21310ERL	21310AERL	41310ERL	41310AERL	81310ERL	81310AERL
	-12 AN Male	21312ERL	21312AERL	41312ERL	41312AERL	81312ERL	81312AERL
	-16 AN Male	21316ERL*	21316AERL*	41316ERL*	41316AERL*	81316ERL*	81316AERL*
	Core Only	21600ERL	21600AERL	41600ERL	41600AERL	81600ERL	81600AERL
	-6 AN Male	21606ERL	21606AERL	41606ERL	41606AERL	81606ERL	81606AERL
16 Row	-8 AN Male	21608ERL	21608AERL	41608ERL	41608AERL	81608ERL	81608AERL
Height 5"	-10 AN Male	21610ERL	21610AERL	41610ERL	41610AERL	81610ERL	81610AERL
	-12 AN Male	21612ERL	21612AERL	41612ERL	41612AERL	81612ERL	81612AERL
	-16 AN Male	21616ERL*	21616AERL*	41616ERL*	41616AERL*	81616ERL*	81616AERL*
	Core Only	21900ERL	21900AERL	41900ERL	41900AERL	81900ERL	81900AERL
	-6 AN Male	21906ERL	21906AERL	41906ERL	41906AERL	81906ERL	81906AERL
19 Row	-8 AN Male	21908ERL	21908AERL	41908ERL	41908AERL	81908ERL	81908AERL
Height 5-7/8"	-10 AN Male	21910ERL	21910AERL	41910ERL	41910AERL	81910ERL	81910AERL
	-12 AN Male	21912ERL	21912AERL	41912ERL	41912AERL	81912ERL	81912AERL
	-16 AN Male	21916ERL*	21916AERL*	41916ERL*	41916AERL*	81916ERL*	81916AERL*

FACE WIDTH (BETWEEN TANKS)	4"	4"	9"	9"	11″	11″
FITTING CENTERS	5-1/8"	5-1/8"	9-3/4"	9-3/4"	12-1/8″	12-1/8″
BODY WIDTH	8-1/4"	8-1/4"	13"	13"	14″	14″
THICKNESS	2″	2″	2″	2″	2″	2″



ROW # & HEIGHT	FITTING SIZE	GRAY-NARROW	BLACK-NARROW	GRAY-WIDE	BLACK-WIDE	GRAY-EXTRA WIDE	BLACK-EXTRA WIDE
	Core Only	22500ERL	22500AERL	42500ERL	42500AERL	82500ERL	82500AERL
	-6 AN Male	22506ERL	22506AERL	42506ERL	42506AERL	82506ERL	82506AERL
25 Row	-8 AN Male	22508ERL	22508AERL	42508ERL	42508AERL	82508ERL	82508AERL
Height 7-3/4"	-10 AN Male	22510ERL	22510AERL	42510ERL	42510AERL	82510ERL	82510AERL
	-12 AN Male	22512ERL	22512AERL	42512ERL	42512AERL	82512ERL	82512AERL
	-16 AN Male	22516ERL*	22516AERL*	42516ERL*	42516AERL*	82516ERL*	82516AERL*
	Core Only	23400ERL	23400AERL	43400ERL	43400AERL	83400ERL	83400AERL
	-6 AN Male	23406ERL	23406AERL	43406ERL	43406AERL	83406ERL	83406AERL
34 Row	-8 AN Male	23408ERL	23408AERL	43408ERL	43408AERL	83408ERL	83408AERL
Height 10-1/2"	-10 AN Male	23410ERL	23410AERL	43410ERL	43410AERL	83410ERL	83410AERL
	-12 AN Male	23412ERL	23412AERL	43412ERL	43412AERL	83412ERL	83412AERL
	-16 AN Male	23416ERL*	23416AERL*	43416ERL*	43416AERL*	83416ERL*	83416AERL*

\* -16 special order only

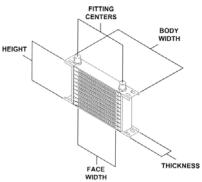
## SPECIAL ORDER OIL COOLERS

FACE WIDTH (BE	TWEEN TANKS)	4"	4"	9"	9"	11″	11″
FITTING CENTERS		5-1/8"	5-1/8"	9-3/4"	9-3/4"	12-1/8″	12-1/8″
BODY WIDTH		8-1/4"	8-1/4"	13"	13"	14″	14″
THICKNESS		2″	2″	2″	2″	2″	2″
ROW # & HEIGHT	FITTING SIZE	GRAY-NARROW	BLACK-NARROW	GRAY-WIDE	BLACK-WIDE	GRAY-EXTRA WIDE	BLACK-EXTRA WIDE
	Core Only	24200ERL	24200AERL	44200ERL	44200AERL	84200ERL	84200AERL
	-6 AN Male	24206ERL	24206AERL	44206ERL	44206AERL	84206ERL	84206AERL
42 Row	-8 AN Male	24208ERL	24208AERL	44208ERL	44208AERL	84208ERL	84208AERL
Height 13"	-10 AN Male	24210ERL	24210AERL	44210ERL	44210AERL	84210ERL	84210AERL
	-12 AN Male	24212ERL	24212AERL	44212ERL	44212AERL	84212ERL	84212AERL
	-16 AN Male	24216ERL	24216AERL	44216ERL	44216AERL	84216ERL	84216AERL
	Core Only	25000ERL	25000AERL	45000ERL	45000AERL	85000ERL	85000AERL
	-6 AN Male	25006ERL	25006AERL	45006ERL	45006AERL	85006ERL	85006AERL
50 Row	-8 AN Male	25008ERL	25008AERL	45008ERL	45008AERL	85008ERL	85008AERL
Height 15-1/2"	-10 AN Male	25010ERL	25010AERL	45010ERL	45010AERL	85010ERL	85010AERL
	-12 AN Male	25012ERL	25012AERL	45012ERL	45012AERL	85012ERL	85012AERL
	-16 AN Male	25016ERL	25016AERL	45016ERL	45016AERL	85016ERL	85016AERL
	Core Only	26000ERL	26000AERL	46000ERL	46000AERL	86000ERL	86000AERL
	-6 AN Male	26006ERL	26006AERL	46006ERL	46006AERL	86006ERL	86006AERL
60 Row	-8 AN Male	26008ERL	26008AERL	46008ERL	46008AERL	86008ERL	86008AERL
Height 18-1/2"	-10 AN Male	26010ERL	26010AERL	46010ERL	46010AERL	86010ERL	86010AERL
-	-12 AN Male	26012ERL	26012AERL	46012ERL	46012AERL	86012ERL	86012AERL
	-16 AN Male	26016ERL	26016AERL	46016ERL	46016AERL	86016ERL	86016AERL

# TEMP-A-CURE™ OIL COOLERS

## COOLING SYSTEMS





Earl's curved coolers are constructed with the same high grade aluminum and the same internal design as our standard 2" coolers, but have a curved design to fit neatly between the front forks of a motorcycle for maximum heat dissipation. The curved design allows for full wheel travel no matter where it is mounted on the forks. These coolers are only 1-1/4" thick and are available in two widths, three different heights and male -6 or -8 inlet and outlet fittings.

FACE WIDTH (BETWEEN TANKS)	8"	8"	11″	11″
FITTING CENTERS	9.05"	9.05"	11.618″	11.618″
BODY WIDTH	11.562"	11.562"	14.125″	14.125″
THICKNESS	1.25″	1.25″	1.25″	1.25″



ROW # & HEIGHT	FITTING SIZE	GRAY-NARROW	BLACK-NARROW	GRAY-WIDE	BLACK-WIDE
10 Row	-6 AN Male	71006ERL	71006AERL	91006ERL	91006AERL
Height 3.050 nom	-8 AN Male	71008ERL	71008AERL	91008ERL	91008AERL
13 Row	-6 AN Male	71306ERL	71306AERL	91306ERL	91306AERL
Height 3.977 nom	-8 AN Male	71308ERL	71308AERL	91308ERL	91308AERL
16 Row	-6 AN Male	71606ERL	71606AERL	91606ERL	91606AERL
Height 4.919 nom	-8 AN Male	71608ERL	71608AERL	91608ERL	91608AERL

# TEMP-A-CURE OIL COOLERS

## **COOLING SYSTEMS**

#### SUGGESTED TOOLS:

- Two Aluminum AN Hose End Wrenches (1-1/8")
- Earl's Performance Assembly Lube

## TEMP-A-CURE OIL COOLER FITTING INSTALLATION

- 1. Inspect oil cooler threaded boss and AN fitting for nicks or burrs in O-ring con tact area that might cause O-ring failure.
- 2. Lubricate O-ring by coating with Earl's Performance Products Assembly Lube or light petroleum oil and install the O-ring onto the fitting. (Fig. 1)
- 3. Screw male AN cooler fitting into the straight female thread boss on oil cooler. (Fig. 2)
- 4. Using two AN wrenches, tighten AN fitting until hexagon face contacts the face of the hexagon boss on cooler as shown in picture. Always use two wrenches to tighten fitting onto cooler. Using only one wrench and cooler as leverage will cause cooler to fail. (Fig. 3)
- 5. Do Not Over Tighten. Tighten to just snug. The O-ring is the sealing component. This is not a pipe thread.

#### **NOTE: FAILURE TO FOLLOW ABOVE INSTALLATION PROCEDURES** VOIDS COOLER WARRANTY!



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**COOLING SYSTEMS** 





# **OIL COOLER COMPONENTS**

#### **COOLING SYSTEMS**

## **OIL COOLER ADAPTERS**

TEMP-A-CURE<sup>™</sup> Coolers are manufactured with removable, interchangeable fittings that feature a contoured port side with an O-ring seal for worry free performance. You can stock your most common cooler cores and fittings, and mix and match to each customer's needs. This means you can lower your inventory, increase customer service, and increase inventory turns all at the same time!



PART NO.	AN FTG. SIZE	PORT FTG. SIZE
585106ERL	-6	-10
585108ERL	-8	-10
585110ERL	-10	-10
585112ERL	-12	-10

NOTE: Fitting instructions pg. 65

#### **ALUMINUM MOUNTING BRACKETS**

Here is the strongest, most convenient and the best method for mounting an Earl's TEMP-A-CURE<sup>TM</sup> cooler. Manufactured from a custom aluminum extrusion and then ball burnished to a high luster, this bracket securely holds the TEMP-A-CURE<sup>TM</sup> cooler preventing vibration damage. The bracket is predrilled for ease of mounting to any surface, and comes complete with tension rods and the proper aircraft hardware. Check the chart below and choose the kit that matches the face height (number of rows) on your cooler. With proper installation the TEMP-A-CURE<sup>TM</sup> cooler will give a long service life.

NARROW COOLER PART NO.	WIDE COOLER PART NO.	EXTRA WIDE COOLER PART NO.	DESCRIPTION	1. 6
1707ERL	1807ERL	1607ERL	Alum. Mounting Bracket Kit 7 Row Cooler	
1710ERL	1810ERL	1610ERL	Alum. Mounting Bracket Kit 10 Row Cooler	0666
1713ERL	1813ERL	1613ERL	Alum. Mounting Bracket Kit 13 Row Cooler	
1716ERL	1816ERL	1616ERL	Alum. Mounting Bracket Kit 16 Row Cooler	
1719ERL	1819ERL	1619ERL	Alum. Mounting Bracket Kit 19 Row Cooler	
1725ERL	1825ERL	1625ERL	Alum. Mounting Bracket Kit 25 Row Cooler	
1734ERL	1834ERL	1634ERL	Alum. Mounting Bracket Kit 34 Row Cooler	· · /
1742ERL	1842ERL	1642ERL	Alum. Mounting Bracket Kit 42 Row Cooler	କ ହାକି କି
1750ERL	1850ERL	1650ERL	Alum. Mounting Bracket Kit 50 Row Cooler	
1760ERL	1860ERL	1660ERL	Alum. Mounting Bracket Kit 60 Row Cooler	
			-	

#### **STEEL MOUNTING BRACKETS**

The benefits of the TEMP-A-CURE design are provided in part by using very thin brazing sheet in the construction of the tubes. Occasionally, in an especially rough competition application, vibration and shock will cause a fatigue crack between the plates resulting in seepage. Improper mounting has been found to be the cause of most of these incidents of fatigue.

Earl's Research & Development Department designed a saddle mounting bracket that securely mounts any size TEMP-A-CURE cooler. We strongly recommend the use of these brackets for all Off Road applications.

PART NO.	FACE HEIGHT	
1907ERL	2"	1
1910ERL	2.8"	1
1913ERL	3.8"	
1916ERL	4.8"	
1919ERL	5.6"	
1925ERL	7.6"	5
1934ERL	10.3"	100
1942ERL	12.6"	
1950ERL	15.2"	
1960ERL	18.0"	



(Will fit all 3 widths)

## UNIVERSAL MOUNTING KIT - PART NO. 1901ERL

This kit includes four special ties and four vibration isolators for mounting the cooler directly to the front of the vehicle's radiator.

### **OIL FILTER BY-PASS ADAPTERS**

Many installations, particularly oil cooler installations, require the oil filter to be relocated. Earl's has bypass adapters for most spin-on and many bolt-on applications They are quick and easy to install. All ports are 1/2" NPT female unless otherwise noted.

	PART NO.	THREAD	PORT SIZE	O-RING O.D.	O-RING CROSS SECTION		
	1177ERL	3/4-16	1/2 NPT	2-3/4″ (69.2mm)	.139		
	1178ERL	3/4-16	1/2 NPT	2-3/4″ (69.2mm)	.139		
	<b>TYPICAL APP</b> Most Ford, C		ssan & V-W veh	cles with spin-on filter. Ma	ny other foreign makes.		
	1277ERL	13/16-16	1/2 NPT (ir	2-3/4″ & 3-3/8″ iner 69.2mm) (outer 85mn	.139 n)		
	TYPICAL APP Most General		rican Motors veh	icles with spin-on filter			
	1377ERL	Bolt on (Chevy) 1/4-20 & 5/16 -18 Bolts	1/2 NPT	-	-		
	<b>TYPICAL APPLICATIONS*</b> Chevrolet V-8 without spin-on filter. (Includes both bolt sizes and supercedes 1477).						
	1577ERL	18mm x 1.5	1/2 NPT	2-3/4″ (69.2mm)	.139		
	1578ERL	18mm x 1.5	1/2 NPT	2-3/4″ (69.2mm)	.139		
	TYPICAL APP Some Genero	LICATIONS* Il Motors vehicles v	with spin-on filter				
	1677ERL	Bolt-On (V.W.)	3/8 NPT	-	-		
Co.	TYPICAL APP V-W Type 1 o	LICATIONS* and 2, 3/8 NPT po	orts				

\*If you are unsure which adapter your vehicle requires or don't find your vehicle listed, please call factory for correct part number.

# **OIL COOLER COMPONENTS**

**COOLING SYSTEMS** 

## **OIL FILTER BY-PASS ADAPTERS**

	PART NO.	THREAD	PORT SIZE	O-RING O.D.	CROSS SECTION
	1777ERL	Bolt-On (VW)	1/4 NPT	-	-
	TYPICAL APPL VW Type 1 an	ICATIONS* Id 2, 1/4 NPT por	ts		
	1877ERL	22mm x 1.5	1/2 NPT	2-3/4" (69.2mm)	.139
		and Acura vehicles	s.Some Ford.		
	1977ERL	20mm x 1.5	1/2 NPT (inne	2-3/4″ &3-3/8″ r 69.2mm) (outer 85mm)	.139
	<b>TYPICAL APPL</b> Many Honda d	CATIONS* and Acura vehicles	s. Some Ford.		
No.	1118ERL	3/4-16	1/2 NPT	2-1/2 (65mm)	.210
	TYPICAL APPLI Nissan, Toyota				
1	1119ERL	20mm x 1.5	1/2 NPT	2-1/2 (65mm)	.210
	TYPICAL APPL Nissan, Subar				
44	1120ERL	13/16-16	1/2 NPT	2-1/2 (65mm)	.210
	<b>TYPICAL APPLI</b> GM - small ca				
	1121ERL	22mm x 1.5	1/2 NPT	2-1/2 (65mm)	.210
	<b>TYPICAL APPL</b> Honda, Acura				

\*If you are unsure which adapter your vehicle requires or don't find your vehicle listed, please call factory for correct part number.

# **OIL COOLER COMPONENTS**

### **COOLING SYSTEMS**

#### **REMOTE OIL FILTER MOUNTS**

**USE THESE TEMP-A-CURE quality** oil filter mounts from Earl's to relocate your oil filter. Machined from billet or cast from lightweight aluminum, these remote mounts are especially useful in high performance vehicles where quick, easy access to an oil filter is desired.

DOUBLE PART NO.	CENTER THREAD	PORT SIZE
2377ERL	3/4-16	1/2 NPT
<b>USE FILTER:</b> Fram filters PH	-8 or HP-1 (or	equivalent)



#### **OIL THERMOSTAT**

**TO INSURE quick warm up** under cold weather conditions, use our oil-stat. This uniquely designed product controls oil temperature like a thermostat controls water temperature in a radiator. The three sensor ports allow monitoring of oil temperature, flow and pressure. Designed for passenger car, marine and truck usage with Earl's TEMP-A-CURE oil coolers.

PART #	501ERL
Fitting Size	-10 AN Female O-Ring Seal
Starts to Open	160° Fahrenheit
Fully Open	180° Fahrenheit



## BILLET ALUMINUM SANDWICH STYLE OIL THERMOSTAT

As in our remote oil thermostat these units facilitate quick oil warm up. These units mount between the oil filter mounting boss and the oil filter itself. **Opening starts at 160°** / **Fully open at 180°** 

	PART NO.	CENTER PORT SIZE	PORT SIZE	O-RING O.D.	O-RING CROSS SECTION
	502ERL	3/4-16	10 AN Female O-Ring Seal	inner 2.887, outer 3.38	7 .139
10 9 4	<b>Typical Application</b> Most Ford, Chrys		& V-W vehicles wit	th spin-on filter. Many ot	ner foreign makes.
	503ERL	13/16-16	10 AN Female O-Ring Seal	inner 2.887, outer 3.38	7.139
10 8 0	<b>Typical Applicati</b> Most General Ma	ons* otors and American	Motors vehicles wi	ith spin-on filter.1	
	504ERL	13/16-16	10 AN Female O-Ring Seal	inner 2.887, outer 3.38 spacer 3.77	7, .139 .210
the mil	Typical Application Most Chevy V8 w have metric three	vith spin on filter. A	ll V8 through 1989	and some through 1990	5. 1990 and later may

# SANDWICH FILTER ADAPTERS

**THESE UNITS allow** the adaptation of an oil cooler to any engine while maintaining the stock oil filter location. These adapters add approximately 1" to the length of the filter (except 513) and have 3/8 female pipe threads.

	PART NO.	CENTER PORT SIZE	PORT SIZE	O-RING O.D.	O-RING CROSS SECTION
	509ERL	22mm x 1.5	3/8 NPT	2-3/4 (69.2mm)	.139
10 10	<b>Typical Applic</b> Many Honda	<b>ations*</b> & Acura. Some Ford.			
	510ERL	3/4-16	3/8 NPT	2-3/4 (69.2mm)	.139
	Typical Applic Most Ford, Ch	<b>ations*</b> rysler, Toyota, Nissan	& V-W vehicles with	h spin-on filters. Many other	foreign makes.
	511ERL	18mm x 1.5	3/8 NPT	2-3/4 (69.2mm)	.139
12 11	Typical Applic Some General N	<b>ations*</b> Notors vehicles with spin	n on filter.		
*	you are unsure of wh	iich adapter your vehicle rec	quires or don't find your v	ehicle listed, please call factory fo	or correct part number at 310-609

## SANDWICH FILTER ADAPTERS

	PART NO.		PORT SIZE	O-RING O.D. CR	O-RING OSS SECTION	
	512ERL	<b>PORT SIZE</b> 13/16-16	3/8 NPT	2-3/4 & 3-3/8 (inner 69.2mm) (outer 85mm)	.139	
	Typical Applica Most General		n Motors vehicles	with spin-on filter, except Chev	ry V8	
	513ERL	13/16-16 (Chevy)	3/8 NPT	3-3/8 (85mm)	.139	
	<b>Typical Applic</b> Most General		n Motors vehicles	with spin-on filter, except Che	vy V8	
	514ERL	20mm x 1.5	3/8 NPT	2-3/4 & 3-3/8 (inner 69.2mm) (outer 85mm)	.139	
	<b>Typical Applic</b> Many Honda a	a <b>tions*</b> and Acura vehicles. S				
	515ERL	18mm x 1.5	3/8 NPT	2-1/2 (65mm)	.210	
	<b>Typical Applic</b> GM	ations*				
	516ERL	3/4-16	3/8 NPT	2-1/2 (65mm)	.210	
	<b>Typical Applica</b> Toyota, VW, S					
0	517ERL	20mm x 1.5	3/8 NPT	2-1/2 (65mm)	.210	
	<b>Typical Applications*</b> Honda, Acura, Nissan, Mazda, Subaru, Hyundai, KIA, Holden					
	518ERL	13/16-16	3/8 NPT	2-1/2 (65mm)	.210	
	<b>Typical Applic</b> GM	ations*				
	519ERL	22mm x 1.5	3/8 NPT	2-1/2 (65mm)	.210	
	<b>Typical Applic</b> Honda, Acura			*If you are unsure of which adapter yo vehicle listed, please call factory for co	ur vehicle requires or don't rrect part number at 310-60	