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PRO-LITE 350™ HOSE

USE WITH SWIVEL-SEAL™, AUTO-FIT™ OR
AUTO-CRIMP™ HOSE ENDS

HOSE & HOSE ENDS



EARL'S PRO LITE 350™ HOSE IS ONE OF THE LIGHTEST AND MOST DURABLE HOSES AVAILABLE ON THE MARKET TODAY!



SIZE	TYPICAL APPLICATION
4	Small Oil & Fuel Lines, Pressure Gauges, Vacuum Lines
6	Carburetor, Fuel & Oil Lines
8	Water, Fuel & Oil Lines
10	Oil & Fuel Lines, Heater Hoses
12	Water, Fuel & Oil Lines, Heater Hoses
16	Water, Dry Sump & Fuel Lines, Heater Hoses
20	Fuel, Water & Radiator Lines

Serious racers and street performers can benefit from the light weight, durability and temperature characteristics of our Pro Lite 350™ hose. With a maximum pressure rating of 350 psi and an operating temperature range of -40° F to +300° F, the Pro Lite 350™ hose can take the most demanding conditions and still deliver you to the winners circle. Replacing the existing steel braided oil, fuel and coolant hoses on a typical circle track car can save you as much as 30 lbs!

Constructed in the USA, the Pro Lite 350™ hose has a tough, abrasion resistant Nylon sheathing, bonded to the textile inner braid embedded in the synthetic rubber liner. This gives the hose incredible flexibility while maintaining the ability to withstand high vacuum (27 inches/hg) and hot oil temperatures.

Pro Lite 350™ hose has been specifically designed to use EARL'S Swivel Seal™, Auto-Fit™ and Auto Crimp™ Hose ends exclusively. The use of other manufacturers hose ends is not recommended and may compromise the pressure capabilities and durability of the hose. Insist on the brands you trust, EARL'S Pro Lite 350™ hose and Swivel Seal™, Auto-Fit and Auto Crimp™ hose ends.

Inner support spring pg.105

Hose Size AN	Hose I.D. (in)	Hose I.D. (mm)	Hose O.D. (in)	Hose O.D. (mm)	Max. Op. Press. (PSI)	Max. Op. Press. (Bar)	Min. Bend Radius (in)	Min. Bend Radius (mm)	Max Vacuum (inHg)	Max Vacuum (kPa)	Bulk P/N	3ft./0.9M P/N	6ft./1.8M P/N	10ft./3.0M P/N	20ft./6.1 P/N	33ft./10.1 P/N
-4	0.22	5.59	0.44	11.18	350	24.13	2.0	50.8	27	91.43	350004ERL	350304ERL	350604ERL	351004ERL	352004ERL	353304ERL
-6	0.35	8.89	0.55	13.97	350	24.13	2.25	57.15	27	91.43	350006ERL	350306ERL	350606ERL	351006ERL	352006ERL	353306ERL
-8	0.44	11.18	0.65	16.51	350	24.13	3.5	88.9	27	91.43	350008ERL	350308ERL	350608ERL	351008ERL	352008ERL	353308ERL
-10	0.57	14.48	0.8	20.32	350	24.13	4.0	101.6	27	91.43	350010ERL	350310ERL	350610ERL	351010ERL	352010ERL	353310ERL
-12	0.69	17.53	0.94	23.88	350	24.13	4.5	114.3	27	91.43	350012ERL	350312ERL	350612ERL	351012ERL	352012ERL	353312ERL
-16	0.88	22.35	1.16	29.46	300	20.68	5.5	139.7	22	74.50	350016ERL	350316ERL	350616ERL	351016ERL	352016ERL	353316ERL
-20	1.12	28.45	1.44	36.58	250	17.23	8.0	203.2			350020ERL	350320ERL	350620ERL	351020ERL	352020ERL	353320ERL



In recent years various fuel manufacturers may have added any number of new unpublished additives to their blends. It is therefore very difficult to know how the tube compound used in the inner liner of our Pro-Lite 350 or any other brand of elastomeric hose will react with a specific fuel. Because of the unknowns described above, we are unable to guarantee that the below listed hoses are the best possible products to use with any specific fuel. If in doubt use teflon lined hose. Pro-Lite 350™ hose is not to be used with brake fluid.

The Inner Liner constructed from synthetic rubber tube, clean and fast flowing, provides constant flow at operating temperatures from -40° to +300 F.



EASIER TO CUT AND WORK WITH!

Partial coverage textile inner braid is embedded outside inner liner.

Full Coverage Outer Braid of Nylon bonded to the hose liner provides 350 PSI maximum pressure capabilities, while maintaining the durability and flexibility that is responsible for the Pro-Lite 350™ hose.

PERFORM-O-FLEX™ HOSE

USE WITH SWIVEL-SEAL™, AUTO-FIT™ OR
AUTO-CRIMP™ HOSE ENDS

HOSE & HOSE ENDS



SIZE TYPICAL APPLICATION

4	Small Oil & Fuel Lines, Pressure Gauges, Vacuum Lines
6	Carburetor, Fuel & Oil Lines
8	Water, Fuel & Oil Lines
10	Oil & Fuel Lines, Heater Hoses
12	Water, Fuel & Oil Lines, Heater Hoses
16	Water, Dry Sump & Fuel Lines, Heater Hoses
20	Fuel, Water & Radiator Lines
24	Water & Radiator Lines

NOTE: Earl's reserves the right to substitute hose of comparable or improved quality.

Earl's PERFORM-O-FLEX™ stainless braid-protected synthetic rubber hose is the premium quality racing hose depended on by the top racing teams of every professional sanctioning body in the world.

PERFORM-O-FLEX™ features an inner liner of synthetic rubber. A partial coverage protective sheath of stainless steel braid is embedded in the liner during manufacturing. The reinforced hose liner is then bonded to a full-coverage outer protective sheath of high tensile stainless steel wire braid. Yet Perform-O-Flex™, with its inner liner, remains flexible at temperatures between -40 and +300 degrees F. Racing Greats have depended on PERFORM-O-FLEX™ hose and SWIVEL-SEAL™ hose ends since 1972. Look for Earl's distinctive marker wire.

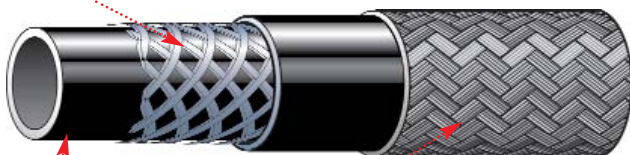
Perform-O-Flex™ hose is intended for use with Swivel-Seal™, Auto-Fit™ and Auto-Mate™ hose ends only. No other Earl's hose ends are intended for use with Perform-O-Flex™ hose. The use of other manufacturer's hose ends is not recommended.

If you are going to pay for the best—demand it. Insist on Earl's PERFORM-O-FLEX™ hose and SWIVEL-SEAL™ or AUTO-FIT™ hose ends.

Hose Size AN	Hose I.D.		Hose O.D.		Max. Op. Pressure (PSI)* (Bar)*		Min. Bend Radius (in) (mm)		Bulk P/N	3ft./0.9M P/N	6ft./1.8M P/N	10ft./3.0M P/N	20ft./6.1 P/N	33ft./10.1 P/N
-4	0.22	5.59	0.44	11.18	1500	103.40	2.0	50.8	400040ERL	413004ERL	416004ERL	410004ERL	420004ERL	433004ERL
-6	0.34	8.64	0.55	13.97	1500	103.40	2.25	57.15	400060ERL	413006ERL	416006ERL	410006ERL	420006ERL	433006ERL
-8	0.44	11.18	0.64	16.26	1500	103.40	3.5	88.9	400080ERL	413008ERL	416008ERL	410008ERL	420008ERL	433008ERL
-10	0.56	14.22	0.8	20.32	1250	86.16	4.0	101.6	400100ERL	413010ERL	416010ERL	410010ERL	420010ERL	433010ERL
-12	0.69	17.53	0.94	23.88	1000	68.93	4.5	114.3	400120ERL	413012ERL	416012ERL	410012ERL	420012ERL	433012ERL
-16	0.88	22.35	1.16	29.46	750	51.70	5.5	139.7	400160ERL	413016ERL	416016ERL	410016ERL	420016ERL	433016ERL
-20	1.12	28.45	1.44	36.58	500	34.47	8.0	203.2	400200ERL	413020ERL	416020ERL	410020ERL	420020ERL	
-24	1.38	35.05	1.7	43.18	250	17.23	9.0	228.6	400240ERL	413024ERL	416024ERL	410024ERL	420024ERL	

* When used with Auto-Fit™ or Swivel-Seal™ hose ends.

Partial Coverage Stainless Steel Inner Braid is woven into the inner liner of high-temperature synthetic rubber. The timing of the braiding and the curing of the rubber during construction are the key to achieving the desired flexibility and mechanical bond between the braiding layers. Beware of cheaper hoses that do not have this critical mechanical bond.



The Inner Liner constructed from synthetic rubber tube, clean and fast flowing, provides constant flow at operating temperatures from -40° to +300 F.

Full Coverage Outer Braid of High Tensile Stainless Steel bonded to the hose liner provides maximum pressure capabilities, while maintaining the beauty, and flexibility that is responsible for the popularity of PERFORM-O-FLEX™ hose.



In recent years various fuel manufacturers may have added any number of new unpublished additives to their blends. It is therefore very difficult to know how the tube compound used in the inner liner of our Super-stock, Auto Flex and Perform-O-Flex or any other brand of elastomeric hose will react with a specific fuel. Because of the unknowns described above, we are unable to guarantee that the below listed hoses are the best possible products to use with any specific fuel. If in doubt use teflon lined hose. Perform-O-Flex hose is not to be used with brake fluid.

AUTO-FLEX™ HOSE

USE WITH SWIVEL-SEAL™ AUTO-FIT™ OR AUTO-CRIMP™ HOSE ENDS

HOSE & HOSE ENDS



A stainless braided hose at a price competitive with the imports. Earl's AUTO-FLEX™ HTE stainless braid- protected synthetic rubber hose is manufactured to our specifications in the U.S.A.

Earl's AUTO-FLEX™ HTE hose features a recommended temperature range and maximum operating pressure equal to our premium quality Perform-O-Flex hose...at a much better price. A partial coverage textile inner braid is imbedded in the HTE liner during manufacture. The hose is finished with a full coverage stainless steel braid which is bonded to the reinforced HTE liner. Continuous use temperature rating is -40 to + 300 degrees F.

Auto-Flex™ hose is intended for use with Swivel-Seal™, Auto-Fit™ and Auto-Mate™ hose ends only. No other Earl's hose ends are intended for use with Auto-Flex™ hose. The use of other manufacturers hose ends is not recommended.

SIZE	TYPICAL APPLICATION
3/4	Small Oil & Fuel Lines, Pressure Gauges, Vacuum Lines
5	Fuel & Vacuum Lines where Hose is Clamped
6	Carburetor, Fuel & Oil Lines
7	Fuel, Vacuum & Oil Lines
8/9	Water, Fuel & Oil Lines
10/11	Oil & Fuel Lines, Heater Hoses
12	Water, Oil Lines & Heater Hoses
14	Water Lines
16	Water, Oil Lines & Heater Hoses
18	Water Lines
28	Water & Radiator Lines
32	Water & Radiator Lines

NOTE: Earl's reserves the right to substitute hose of comparable or improved quality.

FOR USE WITH SWIVEL-SEAL™, AUTO-FIT™ OR AUTO-CRIMP™ HOSE ENDS

Hose Size AN	Hose I.D. (in) (mm)		Hose O.D. (in) (mm)		Max. Op. Pressure (PSI)* (Bar)*		Min. Bend Radius (in) (mm)		Bulk P/N	3ft./0.9M P/N	6ft./1.8M P/N	10ft./3.0M P/N	20ft./6.1M P/N	33ft./10.1M P/N
-4	0.22	5.59	0.44	11.18	1500	103.40	2.0	50.8	300004ERL	303004ERL	306004ERL	310004ERL	320004ERL	333004ERL
-6	0.34	8.64	0.55	13.97	1500	103.40	2.5	63.5	300006ERL	303006ERL	306006ERL	310006ERL	320006ERL	333006ERL
-8	0.44	11.18	0.64	16.26	1500	103.40	3.5	88.9	300008ERL	303008ERL	306008ERL	310008ERL	320008ERL	333008ERL
-10	0.56	14.22	0.80	20.32	1250	86.16	4.0	101.6	300010ERL	303010ERL	306010ERL	310010ERL	320010ERL	333010ERL
-12	0.69	17.53	0.94	23.88	1000	68.93	4.5	114.3	300012ERL	303012ERL	306012ERL	310012ERL	320012ERL	333012ERL
-16	0.88	22.35	1.16	29.46	750	51.70	5.5	139.7	300016ERL	303016ERL	306016ERL	310016ERL	320016ERL	333016ERL

FOR USE WITH EARL'S ECON-O-FIT™ OR HOSE CLAMPS ONLY - NO HOSE ENDS AVAILABLE

Hose Size AN	Hose I.D. (in) (mm)		Hose O.D. (in) (mm)		Max. Op. Pressure (PSI)* (Bar)*		Min. Bend Radius (in) (mm)		Bulk P/N	3ft./0.9M P/N	6ft./1.8M P/N	10ft./3.0M P/N	20ft./6.1M P/N	33ft./10.1M P/N
-3	0.16	4.06	0.38	9.65	***	***	2.0	50.8	300003ERL	303003ERL	306003ERL	310003ERL	320003ERL	-
-5	0.25	6.35	0.50	12.70	***	***	2.0	50.8	300005ERL	303005ERL	306005ERL	310005ERL	320005ERL	-
-7	0.38	9.65	0.63	16.00	***	***	3.0	76.2	300007ERL	303007ERL	306007ERL	310007ERL	320007ERL	-
-9	0.50	12.70	0.72	18.29	***	***	3.5	88.9	300009ERL	303009ERL	306009ERL	310009ERL	320009ERL	-
-11	0.63	16.00	0.88	22.35	***	***	4.0	101.6	300011ERL	303011ERL	306011ERL	310011ERL	320011ERL	-
-14	0.75	19.05	1.00	25.40	***	***	5.0	127	300014ERL	303014ERL	306014ERL	310014ERL	320014ERL	-
-18	1.00	25.40	1.31	33.27	***	***	7.0	177.8	300018ERL	303018ERL	306018ERL	310018ERL	320018ERL	-
-28	1.50	38.10	1.84	46.74	***	***	11.0	279.4	300280ERL	303028ERL	306028ERL	310028ERL	320028ERL	-
-32	1.75	44.45	2.13	54.10	***	***	12.5	317.5	300320ERL	303032ERL	306032ERL	310032ERL	320032ERL	-

* When used with Swivel-Seal, Auto-Fit or Auto-Crimp hose ends.
 *** Limiting pressure will be hose clamp



In recent years various fuel manufacturers may have added any number of new unpublished additives to their blends. It is therefore very difficult to know how the tube compound used in the inner liner of our Super-stock, Auto Flex and Perform-O-Flex or any other brand of elastomeric hose will react with a specific fuel. Because of the unknowns described above, we are unable to guarantee that the below listed hoses are the best possible products to use with any specific fuel. If in doubt use teflon lined hose. Auto-Flex hose is not to be used with brake fluid.

Partial Coverage Textile Inner Braid is woven into the inner liner of Temprel high-temperature synthetic rubber. The timing of the braiding and the curing of the rubber during construction are the key to achieving the desired flexibility and mechanical bond between the braiding layers. Beware of cheap hoses that do not have this critical mechanical bond.



The Inner Liner constructed from Temprel synthetic rubber tube, clean and fast flowing, provides constant flow at operating temperatures from -40° to +300 F.

Full Coverage Outer Braid of High Tensile Stainless Steel bonded to the hose liner provides maximum pressure capabilities, while maintaining the beauty, and flexibility that is responsible for the popularity of AUTO-FLEX™ hose.

ULTRA-FLEX 650™ HOSE

HOSE & HOSE ENDS

NEW!



The packaging envelopes of the modern racing car become tighter each year - leaving less room for auxiliaries such as plumbing. At the same time it becomes more and more difficult to get the cars down to minimum weight. Earl's Ultra-Flex 650™ hose solves these issues. Earl's finest and lightest hose combines a woven Ultra-light Kevlar™ braid with a smooth bore Teflon™ tubing for increased flow and convoluted outside for incredible flexibility. It also has significantly higher flow and pressure ratings than conventional convoluted Teflon® hose. Ultra-Flex 650™ is 60% lighter than our stainless braid-protected synthetic rubber hose, and 15% lighter than our Pro-Lite 350™ hose. You have spent a lot of time, energy and money on your race engine and you should bring the life sustaining fluid to it with the best hose on the market today - Earl's Ultra-Flex 650™.

Temp. Rating: -94° F to 500° F / -70° C to 260° C

Hose Size AN	Hose I.D.		Hose O.D.		Max. Op. Pressure		Min. Bend Radius		Bulk P/N
	(in)	(mm)	(in)	(mm)	(PSI)*	(Bar)*	(in)	(mm)	
-4	.270	6.8	.378	9.6	1320	90	.75	19	650004ERL
-6	.394	10.0	.512	13.0	1180	80	.787	20	650006ERL
-8	.536	13.6	.650	16.5	1030	70	1.496	38	650008ERL
-10	.658	16.7	.819	20.8	955	65	1.772	45	650010ERL
-12	.780	19.8	.961	24.4	880	60	1.969	50	650012ERL
-16	1.0039	26.4	1.272	32.3	740	50	2.756	70	650016ERL

Crimper & Accessories pg. 9,10

Crimping Instructions on pg. 118,119



Ultra-Flex 650™ hose is intended for use with Ultra-Flex hose ends only. No other Earl's hose ends are intended for use with this hose. The use of other manufacturers hose ends is not recommended and may compromise the pressure capabilities and durability of the hose.

ULTRA-FLEX™ HOSE ENDS

SHORT NUT

HOSE & HOSE ENDS

Ultra-Flex Hose ends have been developed by Earl's to be used with our Ultra-Flex 650™ hose. The crimp design offers our lightest alternative in plumbing a race engine. The Mil Spec Type III hard anodizing also is impregnated with Teflon® to significantly reduce friction of the fluids running through the line assemblies. The advantages of the smooth bore teflon hose no longer ends at the hose end, but continues through the entire assembly!



NEW!



PART NO. STRAIGHT	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
650104ERL	4	4	4
650106ERL	6	6	6
650108ERL	8	8	8
650110ERL	10	10	10
650112ERL	12	12	12
650116ERL	16	16	16



PART NO. 90° LOW PROFILE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
659004ERL	4	4	4
659006ERL	6	6	6
659008ERL	8	8	8
659010ERL	10	10	10
659012ERL	12	12	12
659016ERL	16	16	16



PART NO. 30°	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
653004ERL	4	4	4
653006ERL	6	6	6
653008ERL	8	8	8
653010ERL	10	10	10
653012ERL	12	12	12
653016ERL	16	16	16



PART NO. 90° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
659104ERL	4	4	4
659106ERL	6	6	6
659108ERL	8	8	8
659110ERL	10	10	10
659112ERL	12	12	12
659116ERL	16	16	16



PART NO. 45° LOW PROFILE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
654504ERL	4	4	4
654506ERL	6	6	6
654508ERL	8	8	8
654510ERL	10	10	10
654512ERL	12	12	12
654516ERL	16	16	16



PART NO. 120° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
652004ERL	4	4	4
652006ERL	6	6	6
652008ERL	8	8	8
652010ERL	10	10	10
652012ERL	12	12	12
652016ERL	16	16	16



PART NO. 45° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
654604ERL	4	4	4
654606ERL	6	6	6
654608ERL	8	8	8
654610ERL	10	10	10
654612ERL	12	12	12
654616ERL	16	16	16



PART NO. 150° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
655004ERL	4	4	4
655006ERL	6	6	6
655008ERL	8	8	8
655010ERL	10	10	10
655012ERL	12	12	12
655016ERL	16	16	16



PART NO. 60° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
656004ERL	4	4	4
656006ERL	6	6	6
656008ERL	8	8	8
656010ERL	10	10	10
656012ERL	12	12	12
656016ERL	16	16	16



PART NO. 180° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
658004ERL	4	4	4
658006ERL	6	6	6
658008ERL	8	8	8
658010ERL	10	10	10
658012ERL	12	12	12
658016ERL	16	16	16

HOSE & HOSE ENDS

NOTE: Collars included with hose ends

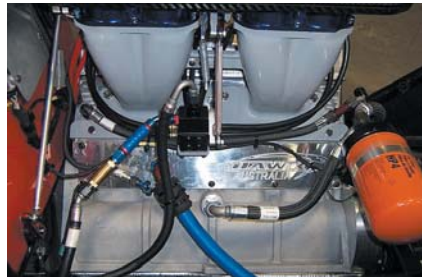
Crimper & Accessories pg. 9,10
Crimping Instructions on pg. 118,119

NOTE: 65 Series have a short nut

ULTRA-FLEX™ HOSE ENDS

STANDARD NUT

HOSE & HOSE ENDS



Ultra-Flex Hose ends have been developed by Earl's to be used with our Ultra-Flex 650™ hose. The crimp design offers our lightest alternative in plumbing a race engine. The Mil Spec Type III hard anodizing also is impregnated with Teflon® to significantly reduce friction of the fluids running through the line assemblies. The advantages of the smooth bore teflon hose no longer ends at the hose end, but continues through the entire assembly!



PART NO. STRAIGHT	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
670104ERL	4	4	4
670106ERL	6	6	6
670108ERL	8	8	8
670110ERL	10	10	10
670112ERL	12	12	12
670116ERL	16	16	16



PART NO. 30°	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
673004ERL	4	4	4
673006ERL	6	6	6
673008ERL	8	8	8
673010ERL	10	10	10
673012ERL	12	12	12
673016ERL	16	16	16



PART NO. 45° LOW PROFILE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
674504ERL	4	4	4
674506ERL	6	6	6
674508ERL	8	8	8
654510ERL	10	10	10
674512ERL	12	12	12
674516ERL	16	16	16



PART NO. 45° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
674604ERL	4	4	4
674606ERL	6	6	6
674608ERL	8	8	8
674610ERL	10	10	10
674612ERL	12	12	12
674616ERL	16	16	16



PART NO. 60° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
676004ERL	4	4	4
676006ERL	6	6	6
676008ERL	8	8	8
676010ERL	10	10	10
676012ERL	12	12	12
676016ERL	16	16	16



PART NO. 90° LOW PROFILE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
679004ERL	4	4	4
679006ERL	6	6	6
679008ERL	8	8	8
679010ERL	10	10	10
679012ERL	12	12	12
679016ERL	16	16	16



PART NO. 90° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
679104ERL	4	4	4
679106ERL	6	6	6
679108ERL	8	8	8
679110ERL	10	10	10
679112ERL	12	12	12
679116ERL	16	16	16



PART NO. 120° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
672004ERL	4	4	4
672006ERL	6	6	6
672008ERL	8	8	8
672010ERL	10	10	10
672012ERL	12	12	12
672016ERL	16	16	16



PART NO. 150° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
675004ERL	4	4	4
675006ERL	6	6	6
675008ERL	8	8	8
675010ERL	10	10	10
675012ERL	12	12	12
675016ERL	16	16	16



PART NO. 180° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
678004ERL	4	4	4
678006ERL	6	6	6
678008ERL	8	8	8
678010ERL	10	10	10
678012ERL	12	12	12
678016ERL	16	16	16

NOTE: Collars included with hose ends

Crimper & Accessories pg. 9,10
Crimping Instructions on pg. 118,119

NOTE: 67 Series have a standard length nut and are recommended for most racing applications.

ULTRA-FLEX™ QD HOSE ENDS

Manufactured to be used with Earl's new Ultra-Flex 650™ hose, Earl's QD hose ends are made to reduce time, space and weight issues in certain racing situations. These hose ends are threadless and the male and female designs are manufactured for smooth and effortless installations every time. They are coupled by a threadless clamshell closure that is manufactured by the leader in the industry – Adel Wiggins. Earl's QD hose ends are plated with the same Mil-Spec III hard anodizing and our exclusive Teflon® impregnation for a great reduction in the fluid flow friction. Our male ends also come with plasma coated nitrile o-rings installed for longer life.

NEW!



Male

PART NO. STRAIGHT	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
670408ERL	8	8	8
670410ERL	10	10	10
670412ERL	12	12	12

PART NO. 30°	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
674308ERL	8	8	8
674310ERL	10	10	10
674312ERL	12	12	12

PART NO. 90°	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
678808ERL	8	8	8
678810ERL	10	10	10
678812ERL	12	12	12

Female

PART NO. STRAIGHT	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
670508ERL	8	8	8
670510ERL	10	10	10
670512ERL	12	12	12

PART NO. 30°	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
674408ERL	8	8	8
674410ERL	10	10	10
674412ERL	12	12	12

PART NO. 90°	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
678908ERL	8	8	8
678910ERL	10	10	10
678912ERL	12	12	12

Straight (male)



45° (male)



90° (male)



Straight (female)



45° (female)



90° (female)



Crimper & Accessories pg. 9,10

HAND HELD CUTTER & BLADES

HAND HELD HOSE CUTTER

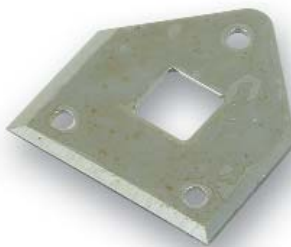
Stop wasting time and material with jagged or angled cuts on your hose assemblies. This hose cutter puts precision accuracy in the palm of your hand. The special v-block ensures a straight clean cut every time. This hand held cutter will cut Earl's Super Stock™, Pro-Lite 350™ and even our new Ultra-Flex 650™ Kevlar hose. This tool weighs only 12 oz. and the best part is that the blade is dual functioning. When one edge becomes dull simply rotate the blade and you have a fresh blade ready for hundreds of cuts.



D022ERL

REPLACEMENT HOSE CUTTER BLADE

Earl's also carries a 5 blade (10 with rotation) replacement set.



D023ERL

REPLACEMENT CRIMP COLLARS

PART NO.	HOSE END SIZE	PART NO.	HOSE END SIZE
698043ERL	-4	698103ERL	-10
698063ERL	-6	698123ERL	-12
698083ERL	-8	698163ERL	-16



CRIMPING ACCESSORIES

Earl's offers a full line of crimping accessories and an exclusively built mobile crimper for assembling all of our Ultra-Flex 650™ hose and Ultra-Flex™ hose ends. A complete set of dies covering all sizes -4 through -16, die ring, optional air over oil pump for direct air source, and a custom mounting plate are available. The perfect lasting investment for all of your Ultra-Flex assembly needs.

- Crimper has a cast aluminum body that weighs only 42 lbs!
- Manual pump (provided) or optional air over oil pump for direct air source.
- Full cycle time of 20 seconds to 3 minutes depending on what hose end or size of the hose is used.
- 10,000 PSI crimp force on the collar.
- Completely mobile.
- All parts designed exclusively for Earl's for the Ultra-Flex line.

NEW!

PART #	DESCRIPTION
D032ERL	Ultra-Flex crimping machine
D03200ERL	D032 Mounting Plate
D03201ERL	D032 Crimper Die Ring
D03202ERL	D032 Air over Oil Pump
D03204ERL	-4 Ultra-Flex die set
D03206ERL	-6 Ultra-Flex die set
D03208ERL	-8 Ultra-Flex die set
D03210ERL	-10 Ultra-Flex die set
D03212ERL	-12 Ultra-Flex die set
D03216ERL	-16 Ultra-Flex die set



D032ERL
Ultra-Flex crimping machine



D032_ ERL
Ultra-Flex die set

D03201ERL
D032 Crimper Die Ring



D03202ERL
D032 Air over Oil Pump

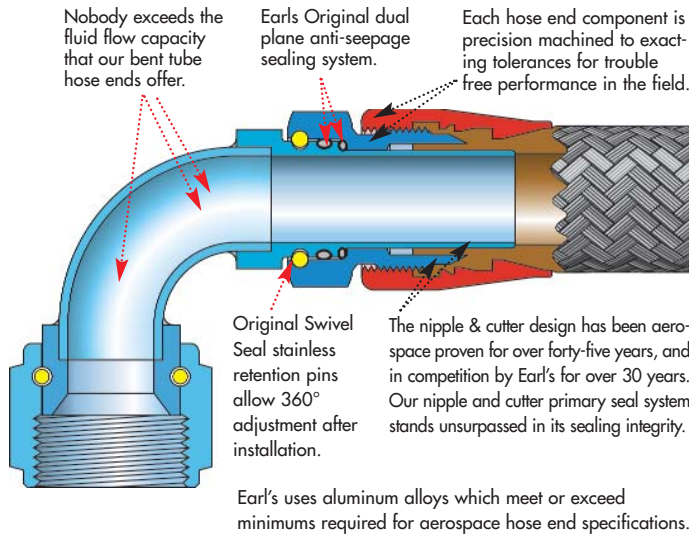


D03200ERL
D032 Mounting Plate

Crimping Instructions on pg. 118,119

SWIVEL-SEAL™ HOSE ENDS

HOSE & HOSE ENDS



Our Premium Hose End for rubber lined hose. Earl's invented the Swivel Seal™ Hose End in 1972 and it is still the most reliable and most widely sold swivel on the market.

Assembly instructions can be found on pg. 114
 Hose end specifications can be found on pg. 130
 Replacement sockets can be found on pg. 19



SWIVEL-SEAL hose ends are designed to be used with Earl's PERFORM-O-FLEX™, PRO-LITE 350™ and AUTO-FLEX™ braid-protected hose. Not intended for use on any other Earl's hose. Use with other manufacturers' hose is not recommended.

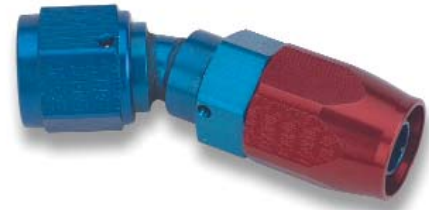
PART NO. STRAIGHT	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
800106ERL	6	6	6
800108ERL	8	8	8
800110ERL	10	10	10
800112ERL	12	12	12
800116ERL	16	16	16

STRAIGHT
8001__ERL



PART NO. 30° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
803106ERL	6	6	6
803108ERL	8	8	8
803110ERL	10	10	10
803112ERL	12	12	12
803116ERL	16	16	16

30° TUBE
8031__ERL



PART NO. 45° LOW PROFILE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
804506ERL	6	6	6
804508ERL	8	8	8
804510ERL	10	10	10
804512ERL	12	12	12
804516ERL	16	16	16

45° LOW PROFILE
8045__ERL



PART NO. 45° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
804606ERL	6	6	6
804608ERL	8	8	8
804610ERL	10	10	10
804612ERL	12	12	12
804616ERL	16	16	16

45° TUBE
8046__ERL



SWIVEL-SEAL™ HOSE ENDS

HOSE & HOSE ENDS



60° TUBE
8061__ERL

PART NO. 60° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
806106ERL	6	6	6
806108ERL	8	8	8
806110ERL	10	10	10
806112ERL	12	12	12
806116ERL	16	16	16



90° LOW PROFILE
8090__ERL

PART NO. 90° LOW PROFILE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
809006ERL	6	6	6
809008ERL	8	8	8
809010ERL	10	10	10
809012ERL	12	12	12
809016ERL	16	16	16



90° TUBE
8091__ERL

PART NO. 90° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
809106ERL	6	6	6
809108ERL	8	8	8
809110ERL	10	10	10
809112ERL	12	12	12
809116ERL	16	16	16



120° TUBE
8120__ERL

PART NO. 120° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
812006ERL	6	6	6
812008ERL	8	8	8
812010ERL	10	10	10
812012ERL	12	12	12
812016ERL	16	16	16



150° TUBE
8150__ERL

PART NO. 150° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
815006ERL	6	6	6
815008ERL	8	8	8
815010ERL	10	10	10
815012ERL	12	12	12
815016ERL	16	16	16



180° TUBE
8180__ERL

PART NO. 180° TUBE	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
818006ERL	6	6	6
818008ERL	8	8	8
818010ERL	10	10	10
818012ERL	12	12	12
818016ERL	16	16	16

SWIVEL-SEAL™ HOSE ENDS

DIRECT CONNECT

HOSE & HOSE ENDS

THIS UNIQUE LINE of hose ends has been developed to allow the hose end to be threaded directly into a female port without the bulk and complication of an adapter fitting. In all cases the coupler can be rotated independently of the hose end, this allows the coupler to be threaded into the part while the hose and hose end are held stationary. Both step-up and step-down coupler sizes are available as listed below.



MALE PIPE THREADS

MALE THREAD SIZE	USE HOSE SIZE	STRAIGHT PART NO.	45° PART NO.	90° PART NO.
1/8 NPT	6	820162ERL	824562ERL	829062ERL
1/4 NPT	6	820106ERL	824506ERL	829006ERL
3/8 NPT	6	820166ERL	824566ERL	829066ERL
3/8 NPT	8	820108ERL	824508ERL	829008ERL
1/2 NPT	8	820188ERL	824588ERL	829088ERL
3/8 NPT	10	820111ERL	824511ERL	829011ERL
1/2 NPT	10	820110ERL	824510ERL	829010ERL
1/2 NPT	12	820113ERL	824513ERL	829013ERL
3/4 NPT	12	820112ERL	824512ERL	829012ERL



MALE A.N. THREADS

MALE THREAD SIZE (AN)	USE HOSE SIZE	STRAIGHT PART NO. (FLARE / "O" RING)	45° PART NO. ("O" RING ONLY)	90° PART NO. ("O" RING ONLY)
7/16-20 (AN-4)	6	—	844564ERL	849064ERL
1/2-20 (AN-5)	6	—	844565ERL	849065ERL
9/16-18 (AN-6)	6	840106ERL	844506ERL	849006ERL
3/4-16 (AN-8)	6	—	844568ERL	849068ERL
9/16-18 (AN-6)	8	—	844586ERL	849086ERL
3/4-16 (AN-8)	8	840108ERL	844508ERL	849008ERL
7/8-14 (AN-10)	8	—	844581ERL	849081ERL
3/4-16 (AN-8)	10	—	844509ERL	849009ERL
7/8-14 (AN-10)	10	840110ERL	844510ERL	849010ERL
1 1/16-12 (AN-12)	10	—	844511ERL	849011ERL
7/8-14 (AN-10)	12	—	844513ERL	849013ERL
1 1/16-12 (AN-12)	12	840112ERL	844512ERL	849012ERL

Replacement O-rings pg.98

ANO-TUFF™ SWIVEL-SEAL HOSE ENDS

HOSE & HOSE ENDS

ANO-TUFF™ HARD ANODIZED ALUMINUM!

EARL'S uses Mil Spec Type III hard anodizing to add superior wear and corrosion resistance to their aluminum. Ideal for use with alcohol fuel and marine environments. Also helps to extend hose end life by reducing thread wear.

EARL'S Ano-Tuff™ Swivel-Seal™ hose ends are offered in a distinctive black hard anodized finish.



SWIVEL-SEAL™ hose ends are designed to be used with Earl's PERFORM-O-FLEX™, AUTO-FLEX™ & PRO-LITE 350™ braid-protected hose. Not intended for use on any other Earl's hose. Use with other manufacturers' hose is not recommended.

HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE	TYPICAL APPLICATION
6	6	6	Fuel Lines
8	8	8	Remote Oil Filter Lines
10	10	10	Dry, Sump, Remote Oil Filter Lines
12	12	12	Dry, Sump, Remote Oil Filter Lines
16	16	16	Dry, Sump & Oil Lines, Radiator Hose



STRAIGHT
AT8001__ERL

PART NO.	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
AT800106ERL	6	6	6
AT800108ERL	8	8	8
AT800110ERL	10	10	10
AT800112ERL	12	12	12
AT800116ERL	16	16	16



30° TUBE
AT8030__ERL

PART NO.	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
AT803006ERL	6	6	6
AT803008ERL	8	8	8
AT803010ERL	10	10	10
AT803012ERL	12	12	12
AT803016ERL	16	16	16



45° LOW PROFILE
AT8045__ERL

PART NO.	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
AT804506ERL	6	6	6
AT804508ERL	8	8	8
AT804510ERL	10	10	10
AT804512ERL	12	12	12
AT804516ERL	16	16	16



45° TUBE
AT8046__ERL

PART NO.	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
AT804606ERL	6	6	6
AT804608ERL	8	8	8
AT804610ERL	10	10	10
AT804612ERL	12	12	12
AT804616ERL	16	16	16



60° TUBE
AT8060__ERL

PART NO.	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
AT806006ERL	6	6	6
AT806008ERL	8	8	8
AT806010ERL	10	10	10
AT806012ERL	12	12	12
AT806016ERL	16	16	16

ANO-TUFF™ SWIVEL SEAL HOSE ENDS

HOSE & HOSE ENDS



90° LOW PROFILE
AT8090__ERL

PART NO.	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
AT809006ERL	6	6	6
AT809008ERL	8	8	8
AT809010ERL	10	10	10
AT809012ERL	12	12	12
AT809016ERL	16	16	16



90° TUBE
AT8091__ERL

Part NO.	Hose End Size	Use Hose Size	Adapter Size
AT809106ERL	6	6	6
AT809108ERL	8	8	8
AT809110ERL	10	10	10
AT809112ERL	12	12	12
AT809116ERL	16	16	16



120° TUBE
AT8120__ERL

Part NO.	Hose End Size	Use Hose Size	Adapter Size
AT812006ERL	6	6	6
AT812008ERL	8	8	8
AT812010ERL	10	10	10
AT812012ERL	12	12	12
AT812016ERL	16	16	16



150° TUBE
AT8150__ERL

Part NO.	Hose End Size	Use Hose Size	Adapter Size
AT815006ERL	6	6	6
AT815008ERL	8	8	8
AT815010ERL	10	10	10
AT815012ERL	12	12	12
AT815016ERL	16	16	16



180° TUBE
AT8180__ERL

Part NO.	Hose End Size	Use Hose Size	Adapter Size
AT818006ERL	6	6	6
AT818008ERL	8	8	8
AT818010ERL	10	10	10
AT818012ERL	12	12	12
AT818016ERL	16	16	16

See pg. 46-50 for AT Adapters

Assembly instructions can be found on pg. 114

AUTO-FIT™ HOSE ENDS

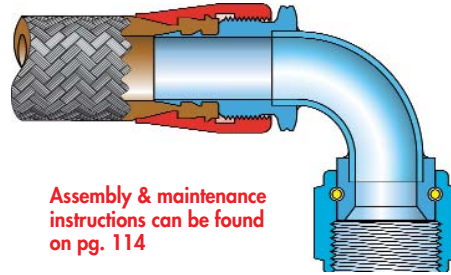
HOSE & HOSE ENDS

Earl's Auto-Fit™ design provides the reliability and appearance of Swivel-Seal™ but are easier to assemble and less expensive.

With the conventional single nipple hose end design used by some of our competitors, the nipple actually threads into the hose and is retained by the socket. The thread forms a part of the seal—and a possible spiral leak path.

The Auto-Fit™ nipple is barbed rather than threaded. In assembly the nipple is pushed into rather than threaded into the hose. The hose is compressed between the nipple and the socket, sealing at the barbs. Hose retention is positive (the same as SWIVEL-SEAL™) and there is no spiral path for possible leaks.

Auto-Fit™ hose ends are available in aluminum, steel and stainless steel. The lightweight aluminum hose ends are suitable for most applications. Steel Auto-Fit™ hose ends should be used when increased physical strength and/or where resistance to alcohol fuels is required. The stainless units offer maximum corrosion and temperature resistance and are recommended for marine or chemical use and for exotic fuels.



Assembly & maintenance instructions can be found on pg. 114

Hose end specifications can be found on pg. 124

Replacement sockets can be found on pg. 19

Size	Typical Application
4	Fuel Lines, Fuel and Oil Pressure Gauges
6	Fuel Lines
8	Fuel, Remote Oil Filter Lines
10	Dry Sump, Remote Oil Filter Lines
12	Dry Sump, Remote Oil Filter Lines
16	Dry Sump & Water Lines
20	Water Lines
24	Water Lines



SWIVEL-SEAL hose ends are designed to be used with Earl's PERFORM-O-FLEX™, PRO-LITE 350™ and AUTO-FLEX™ braid-protected hose. Not intended for use on any other Earl's hose. Use with other manufacturers' hose is not recommended.

STRAIGHT FITTINGS



HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE	ALUMINUM	STEEL	STAINLESS
			PART #	PART #	PART #
4	4	4	300104ERL	400104ERL	490104ERL
6	6	6	300106ERL	400106ERL	490106ERL
8	8	8	300108ERL	400108ERL	490108ERL
10	10	10	300110ERL	-	490110ERL
12	12	12	300112ERL	-	490112ERL*
16	16	16	300116ERL	-	490116ERL*
20	20	20	300120ERL	-	490120ERL*
24	24	24	300124ERL	-	490124ERL*

45° BENT TUBE FITTINGS



HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE	ALUMINUM	STEEL	STAINLESS
			PART #	PART #	PART #
4	4	4	304604ERL	404604ERL	494604ERL
6	6	6	304606ERL	404606ERL	494606ERL
8	8	8	304608ERL	404608ERL	494608ERL
10	10	10	304610ERL	-	494610ERL
12	12	12	304612ERL	-	494612ERL*
16	16	16	304616ERL	-	494616ERL*
20	20	20	304620ERL	-	494620ERL*
24	24	24	304624ERL	-	494624ERL*

* Available on a Special Order basis only.

AUTO-FIT™ HOSE ENDS

HOSE & HOSE ENDS

90° BENT TUBE FITTINGS



HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE	ALUMINUM PART #	STEEL PART #	STAINLESS PART #
4	4	4	309104ERL	409104ERL	499104ERL
6	6	6	309106ERL	409106ERL	499106ERL
8	8	8	309108ERL	409108ERL	499108ERL
10	10	10	309110ERL	-	499110ERL
12	12	12	309112ERL	-	499112ERL*
16	16	16	309116ERL	-	499116ERL*
20	20	20	309120ERL	-	499120ERL*
24	24	24	309124ERL	-	499124ERL*

120° BENT TUBE FITTINGS



HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE	ALUMINUM PART #	STEEL PART #	STAINLESS PART #
4	4	4	312004ERL	412004ERL	492004ERL
6	6	6	312006ERL	412006ERL	492006ERL
8	8	8	312008ERL	-	492008ERL
10	10	10	312010ERL	-	492010ERL
12	12	12	312012ERL	-	492012ERL*
16	16	16	312016ERL	-	492016ERL*
20	20	20	312020ERL*	-	492020ERL*
24	24	24	312024ERL*	-	492024ERL*

150° BENT TUBE FITTINGS



HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE	ALUMINUM PART #	STEEL PART #	STAINLESS PART #
4	4	4	315004ERL	415004ERL	495004ERL
6	6	6	315006ERL	415006ERL	495006ERL
8	8	8	315008ERL	-	495008ERL
10	10	10	315010ERL	-	495010ERL
12	12	12	315012ERL	-	495012ERL*
16	16	16	315016ERL	-	495016ERL*
20	20	20	315020ERL*	-	495020ERL*
24	24	24	315024ERL*	-	495024ERL*

180° BENT TUBE FITTINGS



HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE	ALUMINUM PART #	STEEL PART #	STAINLESS PART #
4	4	4	318004ERL	418004ERL	498004ERL
6	6	6	318006ERL	418006ERL	498006ERL
8	8	8	318008ERL	-	498008ERL
10	10	10	318010ERL	-	498010ERL
12	12	12	318012ERL	-	498012ERL*
16	16	16	318016ERL	-	498016ERL*
20	20	20	318020ERL*	-	498020ERL*
24	24	24	318024ERL*	-	498024ERL*

* Available on a Special Order basis only.

AUTO-FIT™ HOSE ENDS

UNANODIZED

HOSE & HOSE ENDS

Put away the oven and wheel cleaners for good! Earl's "UP" (unanodized - polished) Auto-Fit™ hose ends are tumble polished without anodizing so you can plate them any color you want to complete that custom plumbing system. You could also have them clear coated to keep that natural look of polished aluminum. We have replaced the stainless retaining pin in the female B-nut with an aluminum pin so you do not have to disassemble the nut from the body before plating. "UP" hose ends and adapters are the solution to that finishing touch to a custom system.



Auto-Fit hose ends are designed to be used with Perform-O-Flex™ & Auto-Flex™ hose. They are not recommended for use with any other manufacturers' hose. Before purchasing a single-nipple hose end that merely "looks good", check the pressure ratings of Auto-Fit™ hose ends when used with Perform-O-Flex™ and Auto-Flex™ hose.

NOTE: Unanodized hose ends and adapters must be clear coated or anodized before assembly.

STRAIGHT (unanodized)
UP3001__ERL



UNANODIZED PART NO.	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
UP300104ERL	4	4	4
UP300106ERL	6	6	6
UP300108ERL	8	8	8
UP300110ERL	10	10	10
UP300112ERL	12	12	12
UP300116ERL	16	16	16

45° (unanodized)
UP3046__ERL



UNANODIZED PART NO.	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
UP304604ERL	4	4	4
UP304606ERL	6	6	6
UP304608ERL	8	8	8
UP304610ERL	10	10	10
UP304612ERL	12	12	12
UP304616ERL	16	16	16

90° (unanodized)
UP3091__ERL



UNANODIZED PART NO.	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
UP309104ERL	4	4	4
UP309106ERL	6	6	6
UP309108ERL	8	8	8
UP309110ERL	10	10	10
UP309112ERL	12	12	12
UP309116ERL	16	16	16

120° (unanodized)
UP3120__ERL



UNANODIZED PART NO.	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
UP312004ERL	4	4	4
UP312006ERL	6	6	6
UP312008ERL	8	8	8
UP312010ERL	10	10	10
UP312012ERL	12	12	12
UP312016ERL	16	16	16

150° (unanodized)
UP3150__ERL



UNANODIZED PART NO.	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
UP315004ERL	4	4	4
UP315006ERL	6	6	6
UP315008ERL	8	8	8
UP315010ERL	10	10	10
UP315012ERL	12	12	12
UP315016ERL	16	16	16

180° (unanodized)
UP3180__ERL



UNANODIZED PART NO.	HOSE END SIZE	USE HOSE SIZE	ADAPTER SIZE
UP318004ERL	4	4	4
UP318006ERL	6	6	6
UP318008ERL	8	8	8
UP318010ERL	10	10	10
UP318012ERL	12	12	12
UP318016ERL	16	16	16

See pg. 51 for UP Adapters

AUTO-FIT™ HOSE ENDS

HOSE & HOSE ENDS

Direct Connect Auto-Fit™ hose ends eliminate the need for an adapter by threading directly into an NPT port.



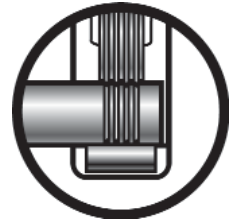
MALE PIPE THREAD

3201_ _ERL

Part No.	Size
320104ERL	-4 Hose to 1/8 NPT
320144ERL	-4 Hose to 1/4 NPT
320162ERL	-6 Hose to 1/8 NPT
320106ERL	-6 Hose to 1/4 NPT
320166ERL	-6 Hose to 3/8 NPT
320107ERL	-8 Hose to 1/4 NPT
320108ERL	-8 Hose to 3/8 NPT
320188ERL	-8 Hose to 1/2 NPT
320111ERL	-10 Hose to 3/8 NPT
320110ERL	-10 Hose to 1/2 NPT
320112ERL	-12 Hose to 3/4 NPT
320113ERL	-12 Hose to 1/2 NPT

TUBE-MATE AUTO-FIT™

IT IS OFTEN NECESSARY to connect a length of rigid metal tubing to a flexible stainless braid protected hose. The only methods available have been either to flare the tubing and use a connection tube nut and sleeve or to weld an adapter fitting to the metal tubing. Earl's TUBE-MATE is a unique fitting designed to connect flexible hoses to low pressure tubing (25 PSI max) without the necessity for welded adapters. **NOTE:** tubing should be flared, beaded or grooved for secure installation. See Plumbing Accessories pg. 101 for part #006 grooving wheel.



See page 43 for higher pressure options
Assembly instructions pg. 117

PART #	HOSE SIZE AN	TUBING O.D.		MAX. OPERATING PRESSURE	
		(IN)	(MM)	(PSI)	(BAR)
360104ERL	-4	0.25	6.35	25	1.72
360165ERL	-6	0.31	7.87	25	1.72
360106ERL	-6	0.38	9.65	25	1.72
360108ERL	-8	0.5	12.70	25	1.72
360110ERL	-10	0.63	16.00	25	1.72
360112ERL	-12	0.75	19.05	25	1.72

REPLACEMENT RUBBER BOOTS



Part No.	Description
360104BERL	Replacement rubber boot for Tube-Mate #360104ERL
360165BERL	Replacement rubber boot for Tube-Mate #360165ERL
360106BERL	Replacement rubber boot for Tube-Mate #360106ERL
360108BERL	Replacement rubber boot for Tube-Mate #360108ERL
360110BERL	Replacement rubber boot for Tube-Mate #360110ERL
360112BERL	Replacement rubber boot for Tube-Mate #360112ERL

SWIVEL-SEAL™ & AUTO-FIT™ REPLACEMENT SOCKETS

When you need to reuse a hose end and the sockets are damaged or worn, you can now order replacement sockets!



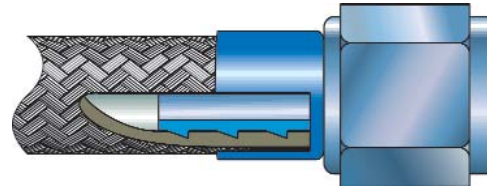
Hose Size	-4	-6	-8	-10	-12	-16	-20	-24
Replacement Sockets	898043ERL	898063ERL	898083ERL	898103ERL	898123ERL	898163ERL	898203ERL	898243ERL

AUTO-MATE™ & AUTO-CRIMP™ HOSE ENDS

HOSE & HOSE ENDS

The original and still the best barbed aluminum nipple, cover and clamp hose ends. AUTO-MATE is intended for use with either AUTO-FLEX™, PERFORM-O-FLEX™ stainless steel braid protected hose or PRO LITE 350™ hoses anywhere that reliable and professional plumbing is required at an economical price.

When combined with Pro-Lite 350™ hose. You have an assembly that is half the weight of traditional stainless braid and removable hose ends. Earl's offers the crimping sleeves (see below) and a crimping tool to allow field assembly of these attractive, cost effective and light-weight fittings. See page 100 for crimping tool details. Can also be used with Econ-O-Fit™ clamps.



AUTO-MATE™ hose ends are designed for use with stainless steel braid-protected hose & Pro-Lite 350™. They cannot be used with Earl's SUPER STOCK™ hose. Auto-Mate™ needs either Econ-O-Fit™ or crimped Auto-Crimp™ collar to function.

Assembly instructions can be found on pg. 115 & 117

Straight
7001__ERL



PART NO.	HOSE END SIZE	ADAPTER SIZE	HOSE SIZE
700104ERL	4	4	4
700106ERL	6	6	6
700108ERL	8	8	8
700110ERL	10	10	10
700112ERL	12	12	12
700116ERL	16	16	16

45°
7046__ERL



PART NO.	HOSE END SIZE	ADAPTER SIZE	HOSE SIZE
704604ERL	4	4	4
704606ERL	6	6	6
704608ERL	8	8	8
704610ERL	10	10	10
704612ERL	12	12	12
704616ERL	16	16	16

90°
7091__ERL



PART NO.	HOSE END SIZE	ADAPTER SIZE	HOSE SIZE
709104ERL	4	4	4
709106ERL	6	6	6
709108ERL	8	8	8
709110ERL	10	10	10
709112ERL	12	12	12
709116ERL	16	16	16

120°
7120__ERL



PART NO.	HOSE END SIZE	ADAPTER SIZE	HOSE SIZE
712004ERL	4	4	4
712006ERL	6	6	6
712008ERL	8	8	8
712010ERL	10	10	10
712012ERL	12	12	12
712016ERL	16	16	16

180°
7180__ERL



PART NO.	HOSE END SIZE	ADAPTER SIZE	HOSE SIZE
718004ERL	4	4	4
718006ERL	6	6	6
718008ERL	8	8	8
718010ERL	10	10	10
718012ERL	12	12	12
718016ERL	16	16	16

Auto Crimp Collars
798__ERL



PART NO.	HOSE END SIZE	HOSE SIZE
798043ERL	4	4
798063ERL	6	6
798083ERL	8	8
798103ERL	10	10
798123ERL	12	12
798163ERL	16	16

* Collar sold separately

Econ-O-Fit Clamp Housings pg. 95



AUTO-MATE™ & AUTO-CRIMP™ HOSE ENDS

ANO-TUFF™

HOSE & HOSE ENDS

With the Ano-Tuff™ Mil Spec Type III hard anodized finish added to these hose ends, you have a combination that cannot be beat. Superior wear and corrosion resistance with one of the lightest hose ends on the market today.



Straight
AT7001__ERL



PART NO.	HOSE END SIZE	ADAPTER SIZE	HOSE SIZE
AT700104ERL	4	4	4
AT700106ERL	6	6	6
AT700108ERL	8	8	8
AT700110ERL	10	10	10
AT700112ERL	12	12	12
AT700116ERL	16	16	16

45°
AT7046__ERL



PART NO.	HOSE END SIZE	ADAPTER SIZE	HOSE SIZE
AT704604ERL	4	4	4
AT704606ERL	6	6	6
AT704608ERL	8	8	8
AT704610ERL	10	10	10
AT704612ERL	12	12	12
AT704616ERL	16	16	16

90°
AT7091__ERL



PART NO.	HOSE END SIZE	ADAPTER SIZE	HOSE SIZE
AT709104ERL	4	4	4
AT709106ERL	6	6	6
AT709108ERL	8	8	8
AT709110ERL	10	10	10
AT709112ERL	12	12	12
AT709116ERL	16	16	16

120°
AT7120__ERL



PART NO.	HOSE END SIZE	ADAPTER SIZE	HOSE SIZE
AT712004ERL	4	4	4
AT712006ERL	6	6	6
AT712008ERL	8	8	8
AT712010ERL	10	10	10
AT712012ERL	12	12	12
AT712016ERL	16	16	16

150°
AT7150__ERL



PART NO.	HOSE END SIZE	ADAPTER SIZE	HOSE SIZE
AT715004ERL	4	4	4
AT715006ERL	6	6	6
AT715008ERL	8	8	8
AT715010ERL	10	10	10
AT715012ERL	12	12	12
AT715016ERL	16	16	16

180°
AT7180__ERL



PART NO.	HOSE END SIZE	ADAPTER SIZE	HOSE SIZE
AT718004ERL	4	4	4
AT718006ERL	6	6	6
AT718008ERL	8	8	8
AT718010ERL	10	10	10
AT718012ERL	12	12	12
AT718016ERL	16	16	16

Auto Crimp Collars
798__ERL



PART NO.	HOSE END SIZE	HOSE SIZE
798043ERL	4	4
798063ERL	6	6
798083ERL	8	8
798103ERL	10	10
798123ERL	12	12
798163ERL	16	16

* Collar sold separately

Auto Crimp Collars
(Stainless Steel)
798__ERL



PART NO.	HOSE END SIZE	HOSE SIZE
798049ERL	4	4
798069ERL	6	6
798089ERL	8	8
798109ERL	10	10
798129ERL	12	12
798169ERL	16	16

* Collar sold separately

Econ-O-Fit Clamp Housings pg. 95



Crimper & Dies pg. 100



AUTO-MATE™ hose ends are designed for use with stainless steel braided hose & Pro-Lite 350™. They cannot be used with Earl's SUPER STOCK™ hose. Auto-Mate™ needs either Econ-O-Fit™ or crimped Auto-Crimp™ collar to function.

SUPER STOCK™ HOSE

FOR USE WITH SUPER STOCK HOSE ENDS

HOSE & HOSE ENDS



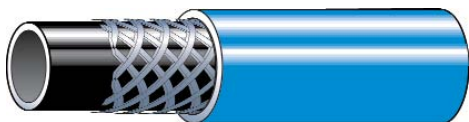
Earl's SUPER STOCK™ hose is a high quality synthetic rubber hose reinforced by a full coverage interior braided fabric sheath. This superior replacement hose for original equipment applications has found favor with professional racing teams and street performers alike. Available in blue or black SUPER STOCK™ is rated at 250 psi and 250° F. continuous service. To prevent collapse in suction service or for very tight bends, we can supply an internal spiral reinforcing wire. Suitable for fuel, oil and water.

Super Stock™ hose is intended for use with Super Stock™ hose ends only. It is also for use with hose nipples and beaded tubing. No other Earl's hose ends are intended for use with Super Stock™ hose.

Hose Size AN	Hose I.D.		Hose O.D.		Max. Op. Pressure		Min. Bend Radius		Bulk P/N	6ft./1.8M P/N	10ft./3.0M P/N	20ft./6.1 P/N	33ft./10.1 P/N
	(in)	(mm)	(in)	(mm)	(PSI)	(Bar)	(in)	(mm)					
Black -4	0.25	6.35	0.47	11.94	250	17.23	2.5	63.5	780004ERL	780604ERL	781004ERL	782004ERL	-
Blue -4	0.25	6.35	0.47	11.94	250	17.23	2.5	63.5	790004ERL	790604ERL	791004ERL	792004ERL	-
Black -6	0.38	9.65	0.63	16.00	250	17.23	3	76.2	780006ERL	780606ERL	781006ERL	782006ERL	783306ERL
Blue -6	0.38	9.65	0.63	16.00	250	17.23	3	76.2	790006ERL	790606ERL	791006ERL	792006ERL	793306ERL
Black -8	0.5	12.70	0.75	19.05	250	17.23	5	127	780008ERL	780608ERL	781008ERL	782008ERL	783308ERL
Blue -8	0.5	12.70	0.75	19.05	250	17.23	5	127	790008ERL	790608ERL	791008ERL	792008ERL	793308ERL
Black -10	0.63	16.00	0.94	23.88	250	17.23	6.0	152.4	780010ERL	780610ERL	781010ERL	782010ERL	-
Blue -10	0.63	16.00	0.94	23.88	250	17.23	6.0	152.4	790010ERL	790610ERL	791010ERL	792010ERL	-
Black -12	0.75	19.05	1	25.40	250	17.23	7	177.8	780012ERL	780612ERL	781012ERL	782012ERL	-
Blue -12	0.75	19.05	1	25.40	250	17.23	7	177.8	790012ERL	790612ERL	791012ERL	792012ERL	-



In recent years various fuel manufacturers have added any number of new unpublished additives to their blends. It is therefore very difficult to know how the tube compound used in the inner liner of our Super-stock, Auto Flex and Perform-O-Flex or any other brand of elastomeric hose will react with a specific fuel. Because of the unknowns described above, we are unable to guarantee that the above listed hoses are the best possible products to use with any specific fuel. If in doubt use teflon lined hose. Super Stock hose is not to be used with brake fluid. On applications where the maximum temperature range is expected, compression of the Super Stock collar is required.



INNER SUPPORT SPRING

The inner support spring is to be used with Super Stock™ Hose to prevent collapse when in suction service or when very tight bends must be made. It may also be used with other types of hose where it's determined that these conditions may occur.

HOSE NO.	4 FT. LENGTH
10	770410ERL
12	770412ERL

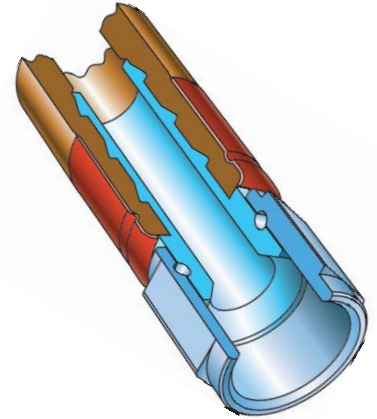


SUPER STOCK™ HOSE ENDS

HOSE & HOSE ENDS

Super Stock™ push-on hose ends are designed to be an attractive and lightweight direct replacement for the popular and economical brass push lock type. Machined from aluminum alloy and anodized in the familiar red and blue made famous by Earl's, they are available in all common AN 37° flare configurations and, as straight hose ends, with male NPT threads.

Designed to be used with our Super Stock™ hose, these hose ends are not intended for use with stainless braid-protected hoses or Pro-Lite 350™ or Teflon lined hose. While basically meant for street and marine applications, super stock hose and hose ends have found favor with professional racers and in limited production OEM applications.



Earl's Super Stock hose ends are designed to be used with Earl's SUPER STOCK hose. They cannot be used with stainless steel braid protected hose. On applications where the maximum temperature range is expected, compression of the Super Stock collar is required.

Straight
7001__ERL



SUPER STOCK PART NO.	A.N. FITTING SIZE	HOSE NO.	HOSE SIZE
700145ERL	4	4	1/4
700167ERL	6	6	3/8
700109ERL	8	8	1/2
700111ERL	10	10	5/8
700113ERL	12	12	3/4

45°
7046__ERL



704645ERL	4	4	1/4
704667ERL	6	6	3/8
704609ERL	8	8	1/2
704611ERL	10	10	5/8
704613ERL	12	12	3/4

90°
7091__ERL



709145ERL	4	4	1/4
709167ERL	6	6	3/8
709109ERL	8	8	1/2
709111ERL	10	10	5/8
709113ERL	12	12	3/4

120°
7120__ERL



712045ERL	4	4	1/4
712067ERL	6	6	3/8
712009ERL	8	8	1/2
712011ERL	10	10	5/8
712013ERL	12	12	3/4

150°
7150__ERL



SUPER STOCK PART NO.	A.N. FITTING SIZE	HOSE NO.	HOSE SIZE
715045ERL	4	4	1/4
715067ERL	6	6	3/8
715009ERL	8	8	1/2
715011ERL	10	10	5/8
715013ERL	12	12	3/4

180°
7180__ERL



718045ERL	4	4	1/4
718067ERL	6	6	3/8
718009ERL	8	8	1/2
718011ERL	10	10	5/8
718013ERL	12	12	3/4

Male Pipe Thread
7201__ERL



	NPT SIZE	HOSE NO.	HOSE SIZE
720142ERL	1/8	4	1/4
720164ERL	1/4	6	3/8
720166ERL	3/8	6	3/8
720186ERL	3/8	8	1/2
720111ERL	1/2	10	5/8
720113ERL	3/4	12	3/4

Assembly instructions pg. 115

Crimper & Dies pg. 100

TYPICAL APPLICATION

Size	Usage
4	Fuel Lines, Fuel and Oil Pressure Gauges
6	Fuel, Remote Oil Filter Lines
8	Dry Sump, Remote Oil Filter Lines
10	Dry Sump, Remote Oil Filter Lines
12	Dry Sump, Remote Oil Filter Lines

SUPER STOCK™ REPLACEMENT SLEEVES

Color: Red Quantity 1 ea.

Hose Size	-4	-6	-8	-10	-12
Replacement Sleeves	798045ERL	798067ERL	798009ERL	798011ERL	798013ERL



POWER STEERING HOSE & HOSE ENDS

HOSE & HOSE ENDS



A TRIPLE STEEL AND FABRIC braid-reinforced high pressure hose developed specifically to meet the demands of power steering systems, this flexible hose is also suitable for hydraulic and air lines. Available in size - 6 with a blue fabric outer covering.

The pressure rating shown is only valid when Earl's power steering hose is used with Earl's POWER STEERING hose ends. The use of other manufacturers' hose ends is not recommended.

Hose Size	Hose I.D.		Hose O.D.		Max. Op. Pressure		Burst Pressure		Min. Bend Radius		Bulk P/N	6ft./1.8M P/N	10ft./3.0M P/N	20ft./6.1 P/N
AN	(in)	(mm)	(in)	(mm)	(PSI)	(Bar)	(PSI)	(Bar)	(in)	(mm)				
-6	0.31	7.87	0.68	17.27	2250	155.09	9000	620.37	4	101.6	130006ERL	130606ERL	131006ERL	132006ERL

Due to extreme pressure spikes at the end of steering travel, power steering hose requirements are among the toughest in the industry. These steel hose ends have been developed specifically to meet these requirements.

ASSEMBLY & MAINTENANCE INSTRUCTIONS CAN BE FOUND ON PAGE 116



Earl's POWER STEERING HOSE ENDS are designed to be used only with EARL'S POWER STEERING HOSE. They cannot be used with stainless steel braid-protected hose SUPER STOCK hose™ PRO-LITE 350™ hose, SPEED-FLEX™ hose or ULTRA-FLEX 650 hose.



Straight
1301_ _ERL



45°
1346_ _ERL



90°
1391_ _ERL

JIC = 37° flare
SAE = 45° flare

PART NO.	HOSE SIZE	DESCRIPTION	THREAD
130106ERL	-6	JIC Str. Fem.	9/16-18
130107ERL	-6	SAE Str. Fem.	5/8-18

PART NO.	HOSE SIZE	DESCRIPTION	THREAD
134606ERL	-6	JIC 45° Fem.	9/16-18
134607ERL	-6	SAE 45° Fem.	5/8-18

Part No.	Hose Size	Description	Thread
139106ERL	-6	JIC 90° Fem.	9/16-18
139107ERL	-6	SAE 90° Fem.	5/8-18

BILLET FUEL LINE KITS

FUEL SYSTEM COMPONENTS

Earl's fuel kits are offered in Ano-Tuff™ MIL SPEC Type III hard anodizing (AT), for superior wear and corrosion resistance, and our traditional blue and red bright dip plating. Bowl fittings are contoured for maximum flow.



SINGLE INLET B-NUT DISASSEMBLY ANO-TUFF SWIVEL-SEAL™ - STAINLESS STEEL FUEL LINE

HOLLEY 4150/4150HP/REMAN
MODELS W/ 7/8-20 THREADS

SIZE

PART NO.



9.5"

-6 AN

AT101185ERL

-8 AN

AT101285ERL

SINGLE INLET B-NUT DISASSEMBLY ANO-TUFF SWIVEL-SEAL - PRO-LITE 350™ FUEL LINE

HOLLEY 4150/4150HP/REMAN
MODELS W/ 7/8-20 THREADS

SIZE

PART NO.



9.5"

-6 AN

AT101195ERL

-8 AN

AT101295ERL

DUAL INLET B-NUT DISASSEMBLY ANO-TUFF SWIVEL-SEAL - STAINLESS STEEL FUEL LINE

HOLLEY 4150/4150HP/REMAN
MODELS W/ 7/8-20 THREADS

SIZE

PART NO.



9.5"

-6 AN

AT101186ERL

-8 AN

AT101286ERL

BILLET FUEL LINE KITS

FUEL SYSTEM COMPONENTS



DUAL INLET B-NUT DISASSEMBLY ANO-TUFF SWIVEL-SEAL™ - PRO-LITE 350™ FUEL LINE

HOLLEY 4150/4150HP/REMAN
MODELS W/ 7/8-20 THREADS

SIZE

PART NO.



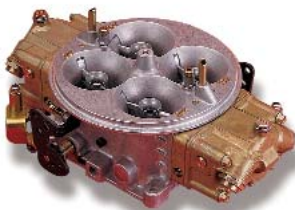
9.5"

-6 AN

AT101196ERL

-8 AN

AT101296ERL



SINGLE INLET B-NUT DISASSEMBLY ANO-TUFF™ SWIVEL-SEAL™ - STAINLESS STEEL FUEL LINE

HOLLEY 4500 DOMINATORS®/REMAN
MODELS WITH 7/8-20 THREADS

SIZE

PART NO.



12"

-6 AN

AT102185ERL

-8 AN

AT102285ERL

SINGLE INLET B-NUT DISASSEMBLY ANO-TUFF™ SWIVEL-SEAL™ - PRO-LITE 350™ FUEL LINE

HOLLEY 4500 DOMINATORS®/REMAN
MODELS WITH 7/8-20 THREADS

SIZE

PART NO.



12"

-6 AN

AT102195ERL

-8 AN

AT102295ERL

BILLET FUEL LINE KITS

FUEL SYSTEM COMPONENTS

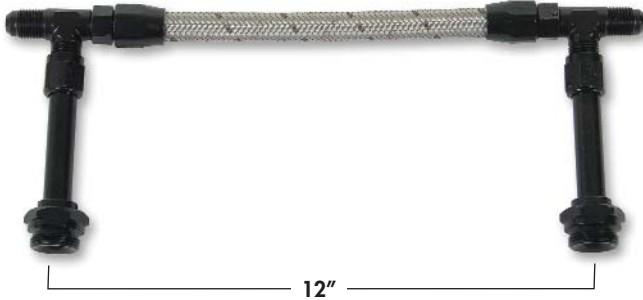


DUAL INLET B-NUT DISASSEMBLY ANO-TUFF™ SWIVEL-SEAL™ - STAINLESS STEEL FUEL LINE

HOLLEY 4500 DOMINATORS®/REMAN
MODELS WITH 7/8-20 THREADS

SIZE

PART NO.



-6 AN

AT102186ERL

-8 AN

AT102286ERL

DUAL INLET B-NUT DISASSEMBLY ANO-TUFF™ SWIVEL-SEAL™ - PRO-LITE 350™ FUEL LINE

HOLLEY 4500 DOMINATORS®/REMAN
MODELS WITH 7/8-20 THREADS

SIZE

PART NO.



-6 AN

AT102196ERL

-8 AN

AT102296ERL

UNIVERSAL SINGLE INLET BENT TUBE ANO-TUFF™ STAINLESS STEEL FUEL LINE

UNIVERSAL/REMAN FITS HOLLEY 4160, 4150 AND 4500 MODELS
WITH DUAL INLET BOWLS AND 7/8-20 THREADS

SIZE

PART NO.



3/8" NPT female inlet
tapped for 1/8" NPT
pressure gauge

AT105175ERL

BILLET FUEL LINE KITS

FUEL SYSTEM COMPONENTS

UNIVERSAL SINGLE INLET BENT TUBE ANO-TUFF PRO-LITE 350 FUEL LINE

UNIVERSAL/REMAN FITS HOLLEY 4160, 4150 AND 4500 MODELS WITH DUAL INLET BOWLS AND 7/8-20 THREADS

SIZE

PART NO.



3/8" NPT female inlet
tapped for 1/8" NPT
pressure gauge

AT105185ERL



SINGLE INLET BILLET SWIVEL-SEAL STAINLESS STEEL FUEL LINE

HOLLEY 4150/4150HP/REMAN MODELS W/ 7/8-20 THREADS

SIZE

PART NO.



-6 AN

101175ERL

-8 AN

101275ERL

9.5"

DUAL INLET BILLET SWIVEL-SEAL STAINLESS STEEL FUEL LINE

HOLLEY 4150/4150HP/REMAN MODELS W/ 7/8-20 THREADS

SIZE

PART NO.



-6 AN

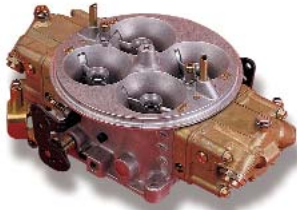
101176ERL

-8 AN

101276ERL

BILLET FUEL LINE KITS

FUEL SYSTEM COMPONENTS

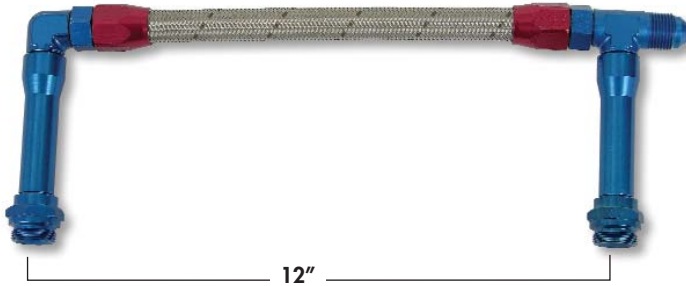


SINGLE INLET BILLET SWIVEL-SEAL STAINLESS STEEL FUEL LINE

HOLLEY 4500 DOMINATORS®/REMAN MODELS WITH 7/8-20 THREADS

SIZE

PART NO.



-8 AN

102275ERL

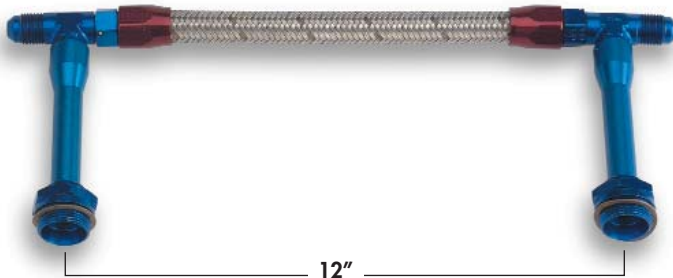
12"

DUAL INLET BILLET SWIVEL-SEAL STAINLESS STEEL FUEL LINE

HOLLEY 4500 DOMINATORS®/REMAN MODELS WITH 7/8-20 THREADS

SIZE

PART NO.



-8 AN

102276ERL

12"



SINGLE INLET BENT TUBE STAINLESS STEEL FUEL LINE

HOLLEY 4150/4150HP/REMAN MODELS W/ 7/8-20 THREADS

SIZE

PART NO.



3/8" NPT female inlet
tapped for 1/8" NPT
pressure gauge

103176ERL

9.5"

FUEL LINE REPLACEMENT HOSE ENDS & KITS

FUEL SYSTEM COMPONENTS

PART NO.	DESCRIPTION	REPLACEMENT FOR KIT(S) #
	849093LERL -6 forged "L" w/ pinned 7/8-20 extension	101175ERL, 101176ERL
	849393TERL -6 forged "T" w/ pinned 7/8-20 extension	101175ERL, 101176ERL
	849083LERL -8 forged "L" w/ pinned 7/8-20 extension	101275ERL, 101276ERL, 102275ERL, 102276ERL
	849383TERL -8 forged "T" w/ pinned 7/8-20 extension	101275ERL, 101276ERL, 102275ERL, 102276ERL
	AT850206LERL -6 forged "L" B-Nut/no extension	AT101185ERL, AT101186ERL, AT102185ERL, AT102186ERL
	AT849406TERL -6 forged "T" B-Nut/no extension	AT101185ERL, AT101186ERL, AT102185ERL, AT102186ERL
	AT915393LERL -6 forged B-Nut to 7/8-20 extension	AT101185ERL, AT101186ERL, AT102185ERL, AT102186ERL
	AT850208LERL -8 forged "L" B-Nut/no extension	AT101285ERL, AT101286ERL, AT102285ERL, AT102286ERL

FUEL LINE REPLACEMENT HOSE ENDS & KITS

FUEL SYSTEM COMPONENTS

PART NO.	DESCRIPTION	REPLACEMENT FOR KIT(S) #
	AT849408TERL -8 forged "T" B-Nut/no extension	AT101285ERL, AT101286ERL, AT102285ERL, AT102286ERL
	AT915383LERL -8 forged B-Nut to 7/8-20 extension	AT101285ERL, AT101286ERL, AT102285ERL, AT102286ERL
	103176LERL Push-on 90° tube 7/8-20 swivel	103176ERL
	103176TERL 3/8 fem inlet to push-on to 90° tube 7/8-20 1/8" NPT for gauge	103176ERL
	AT105175LERL push-on 90° tube 7/8-20 swivel	AT105175ERL, AT105185ERL
	AT105175TERL 3/8 fem. inlet to push-on to 90° tube 7/8-20 1/8" NPT for gauge	AT105175ERL, AT105185ERL
	AT982484ERL -8AN male tee with -4AN male on run	
	982484ERL -8AN male tee with -4AN male on run	

CARB SPECIALTY ADAPTERS

FUEL SYSTEM COMPONENTS

DIRECT TO CARBURETOR & FUEL PUMP HOSE ENDS



90° PART NO.	USE HOSE SIZE	USE HOSE SIZE	COMMON USAGE
849091ERL	12mm x 1.25	6	Dellorto, Solex, Mikuni
849092ERL	12mm x 1.50	6	Weber
849093ERL	7/8-20	6	Holley/Reman Large Inlet

SINGLE & DOUBLE BANJO HOSE ENDS



DOUBLE BANJO HOSE END
8079_ _ERL



SINGLE BANJO HOSE END
8076_ _ERL

Perfect for upgrading carburetion fuel systems. Includes banjo bolt and seals. For use with Perform-O-Flex™, Pro-Lite 350™ & Auto-Flex™ braided hose.

See chart

DOUBLE BANJO HOSE END (-6 HOSE SIZE)

PART NO.	DESCRIPTION	APPLICATION
807991ERL	12mm x1.25	Dellorto, Solex, Mikuni
807992ERL	12mm x1.5	Weber
807994ERL	9/16-24	Small Inlet Holley
807995ERL	1/2-20	Fuel Pump

SINGLE BANJO HOSE END (-6 HOSE SIZE)

807691ERL	12mm x1.25	Dellorto, Solex, Mikuni
807692ERL	12mm x1.5	Weber
807694ERL	9/16-24	Small Inlet Holley
807695ERL	1/2-20	Fuel Pump

NOTE: Swivel-seal™ hose ends may be used with Perform-O-Flex™, Pro-Lite 350™ & Auto-Flex™ hose.

REPLACEMENT BANJO BOLTS



REPLACEMENT BOLTS	DESCRIPTION	FOR PART NO.
997591ERL	12mm x1.25	807991ERL, 807691ERL



997592ERL	12mm x1.5	807992ERL, 807692ERL
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997594ERL	9/16-24	807994ERL, 807694ERL
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997595ERL	1/2-20	807995ERL, 807695ERL
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GAUGES & GAUGE ADAPTERS

FUEL SYSTEM COMPONENTS

FUEL PRESSURE GAUGE



Now you can know what your fuel pressure is in a glance with these easy to read 0-15 psi fuel pressure gauges.

PART NO.	DESCRIPTION
100195ERL	Fuel Pressure Gauge 1/8 NPT Male Thread
100189ERL	Fuel Pressure Gauge 1/8 NPT Male Thread, OIL FILLED

1 1/2" body diameter. 1/8" thread on back



PRESSURE GAUGE ADAPTERS

The ideal way to install a fuel pressure gauge (such as our 100195) is with an Earl's pressure gauge adapter. The selection below includes sizes to accommodate all popular fuel line sizes. Mounted or In-line adapters for either direct or remote mounted fuel pressure gauges



PART NO.	DESCRIPTION
100188ERL	-3 Male with 1/8 NPT Female



PART NO.	DESCRIPTION
100196ERL	-8 Male to -8 Male with 1/8 NPT in hex



100190ERL	-6 Male with 1/8 NPT Female
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100197ERL	-8 Male to 1/4 NPT with 1/8 NPT in hex
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100191ERL	-8 Male with 1/4 NPT Female
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100198ERL	-8 Male to 3/8 NPT with 1/8 NPT in hex
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100192ERL	-6 Male to -6 Male with 1/8 NPT in hex
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100199ERL	-6 Male to -6 Female with 1/8 NPT in hex
-----------	--



100193ERL	-6 Male to 1/4 NPT with 1/8 NPT in hex
-----------	--



100200ERL	-8 Male to -8 Female with 1/8 NPT in hex
-----------	--



100194ERL	-6 Male to 3/8 NPT with 1/8 NPT in hex
-----------	--



100201ERL	-4 Male to -4 Female with 1/8 NPT in hex
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GAUGE ADAPTERS / FUEL & OIL FILTERS

FUEL SYSTEM COMPONENTS

GAUGE HEAD ADAPTERS



STEEL PART NO.	ALUMINUM PART NO.	FTG. SIZE	DESCRIPTION
968604ERL	998604ERL	4	Male to -4 AN to Female 1/8 NPT -90°
968704ERL	998704ERL	4	Male to -4 AN to Female 1/8 NPT Str.
968603ERL	998603ERL	3	Male -3 AN to Female 1/8- NPT Female 90°
968703ERL	998703ERL	3	Male -3 AN to Female 1/8- NPT Str.

OIL PRESSURE ADAPTERS



STEEL PART NO.	FTG. SIZE	DESCRIPTION
968803ERL	3	Male to -3 AN to 1/8" NPT Male Extended
968804ERL	4	Male to -4 AN to 1/8" NPT Male Extended

SCREEN TYPE IN-LINE FUEL & OIL FILTERS

For use as "pre-" filters for fuel and oil systems. Easily disassembled for inspection and cleaning.



FUEL FILTER PART NO.	OIL FILTER PART NO.	FITTINGS SIZE
230204ERL (85 micron)	230304ERL (140 micron)	4
230206ERL (85 micron)	230306ERL (140 micron)	6
230208ERL (85 micron)	230308ERL (140 micron)	8

FUEL FILTER PART NO.	OIL FILTER PART NO.	FITTINGS SIZE
230210ERL (85 micron)	230310ERL (140 micron)	10

FUEL FILTER PART NO.	OIL FILTER PART NO.	FITTINGS SIZE
230212ERL (85 micron)	230312ERL (140 micron)	12
230216ERL (85 micron)	230316ERL (140 micron)	16



FUEL SYSTEM COMPONENTS

IN-LINE FUEL FILTERS

Earl's In-line 35 Micron sintered bronze element fuel filter can be easily disassembled for inspection and cleaning. Available with size 6 or 8 AN, or hose barb end fittings for use with Earl's high performance fuel line and fittings. Aircraft quality aluminum body and fittings with a blue anodized finish. Sintered bronze filter element also sold separately. 4 to 5 GPM flow.



PART NO.	DESCRIPTION
230103ERL	Barb 5/16"-3/8"



PART NO.	DESCRIPTION
230106ERL	6 AN Male
230108ERL	8 AN Male



PART NO.	DESCRIPTION
230107ERL	Element Only

SHUT-OFF VALVE

IDEAL FOR USE AS:

1. Emergency Fuel Shut Off Valve
 2. Anti-Theft Device
 3. Drain Valve
- 300 PSI Max



Part No.	Inlet Thread Size	Outlet Thread Size	Overall Length of Body	Material of Body
230501ERL	3/8 Fem. NPT	3/8 Fem. NPT	1-3/4"	Chrome Plated Brass



230502ERL	3/8 Fem. NPT	-6 AN Bulkhead	2-3/4"	Red Anodized Alum.
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230503ERL	3/8 Fem. NPT	-8 AN Bulkhead	2-3/4"	Red Anodized Alum.
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230504ERL	1/2 Fem. NPT	1/2 Fem. NPT	2-1/4"	Chrome Plated Brass
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230505ERL	1/2 Fem. NPT	-10 AN Bulkhead	2-3/4"	Red Anodized Alum.
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DISTRIBUTION BLOCKS & CHECK VALVES

FUEL SYSTEM COMPONENTS

DISTRIBUTION BLOCKS

TWO FULLY CNC MACHINED STYLES to choose from: Straight or "Y" for various applications. Straight unit features filter screen. Both feature 1/8 NPT outlet for fuel pressure gauge.

Blue Anodized /
Style A



PART NO.	INLET THREAD SIZE	OUTLET THREAD SIZE	NO. OF OUTLETS
100177ERL	8 AN	1/4 NPT	4
100178ERL	3/8 NPT	1/4 NPT	4
100180ERL	3/8 NPT	1/4 NPT	2
100182ERL	1/4 NPT	1/4 NPT	2

Bare Aluminum /
Style B Female Outlets



100176ERL	10 AN	10 AN	2
100179ERL	3/8 NPT	1/4 NPT	2
100183ERL	1/2 NPT	3/8 NPT	2
100184ERL	1/2 NPT	1/2 NPT	2

Bare Aluminum /
Style B Male Outlets



100181ERL	3/8 NPT	6 AN Male	2
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CHECK VALVES (ONE-WAY OR NON-RETURN VALVES)

THE SURPLUS UNITS were widely used in fuel systems for decades. However, the surplus synthetic rubber seals are not always compatible with current hydrocarbon fuels and/or additives. Earl's has redesigned the original surplus valves with modern elastomers which are not affected by most fuels and lubricants.



Same body for all fitting sizes

Part No.	Fitting Size	Flapper Style (Red Anodized Aluminum)
251004ERL	4	Reinforced Viton® with Aluminum Support 150 PSI Max .5 PSI to seal
251006ERL	6	Reinforced Viton® with Aluminum Support 150 PSI Max .5 PSI to seal
251008ERL	8	Reinforced Viton® with Aluminum Support 150 PSI Max .5 PSI to seal
251010ERL	10	Reinforced Viton® with Aluminum Support 150 PSI Max .5 PSI to seal

*400°F max

Viton® is a registered trademark of DuPont Performance Elastomers

CHECK VALVES, QUICK DISCONNECT, QDV REPAIR KITS

FUEL SYSTEM COMPONENTS

CHECK VALVES (ONE-WAY OR NON-RETURN VALVES)



Part No.	Fitting Size	Flapper Style	clearcoat
253004ERL	-4	All metal, Conventional Hinge	
253006ERL	-6		
253008ERL	-8		
253010ERL	-10		
253012ERL	-12		

NOTE: Check Valve features & specifications pg. 121



Part No.	Fitting Size	Flapper Size
253016ERL	-16	All metal, Conventional hinge

NOTE: Aircraft valve - limited to stock on hand

QUICK DISCONNECT FITTINGS

Earl's Quick Disconnect fittings allow instant disconnect and reconnect of fuel, lubricant, air and hydraulic lines with virtually no spillage. Flow restriction is minimal. Buna seals are compatible with most fuels and lubricants. Use Viton® fluoroelastomer seals for higher temperature and more severe applications.



ALUMINUM W/ BUNA SEALS	ALUMINUM W/ VITON® SEALS	MALE FITTING SIZE	PRESSURE RATING PSI	BAR
240103ERL	240303ERL	-3	2250	155.09
240104ERL	240304ERL	-4	2250	155.09
240106ERL	240306ERL	-6	2250	155.09
240108ERL	240308ERL	-8	1750	120.65
240110ERL	240310ERL	-10	1750	120.65
240112ERL	240312ERL	-12	1750	120.65
240116ERL	240316ERL	-16	1750	120.65

QDV REPAIR KITS



BUNA®



VITON®

BUNA® REPAIR KIT	VITON® REPAIR KIT
241103ERL	242103ERL
241104ERL	242104ERL
241106ERL	242106ERL
241108ERL	242108ERL
241110ERL	242110ERL
241112ERL	242112ERL
241116ERL	242116ERL

ALUMINUM & STEEL ADAPTERS

ADAPTERS

Earl's offers the most complete line of adapter fittings in the industry! In addition to the standard range of AN adapters in both aluminum and steel, over the past 30 years Earl's has designed and manufactured a wide selection of special adapter fittings to meet the needs of the racing industry. These specials include metric to AN, inverted flare to AN and power steering fittings.

For AN number to tube size conversion see pg. 111

PIPE THREAD TO A.N. ADAPTERS



STRAIGHT

ALUMINUM PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" PIPE THD. SIZE
981603ERL	961603ERL	3	1/8
981604ERL	961604ERL	4	1/8
981644ERL	961644ERL	4	1/4
981646ERL	961646ERL	4	3/8
981662ERL	961662ERL	6	1/8
981606ERL	961606ERL	6	1/4
981666ERL	961666ERL	6	3/8
981668ERL	-	6	1/2
981607ERL	-	8	1/4
981608ERL	-	8	3/8
981688ERL	-	8	1/2
981611ERL	-	10	3/8
981610ERL	-	10	1/2
981609ERL	-	10	3/4
981612ERL	-	12	3/4
981613ERL	-	12	1/2
981615ERL	-	16	3/4
981616ERL	-	16	1
981620ERL	-	20	1-1/4



45° ELBOW

ALUMINUM PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" PIPE THD. SIZE
982303ERL	962303ERL	3	1/8
982304ERL	962304ERL	4	1/8
982344ERL	-	4	1/4
982362ERL	-	6	1/8
982306ERL	962306ERL	6	1/4
982366ERL	-	6	3/8
982368ERL	-	6	1/2
982307ERL	-	8	1/4
982308ERL	-	8	3/8
982388ERL	-	8	1/2
982311ERL	-	10	3/8
982310ERL	-	10	1/2
982309ERL	-	10	3/4
982312ERL	-	12	3/4
982313ERL	-	12	1/2
982316ERL	-	16	1



90° ELBOW

ALUMINUM PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" PIPE THD. SIZE
982203ERL	962203ERL	3	1/8
982204ERL	962204ERL	4	1/8
982244ERL	962244ERL	4	1/4
982262ERL	962262ERL	6	1/8
982206ERL	962206ERL	6	1/4
982266ERL	962266ERL	6	3/8
982268ERL	-	6	1/2
982207ERL	-	8	1/4
982208ERL	-	8	3/8
982288ERL	-	8	1/2
982211ERL	-	10	3/8
982210ERL	-	10	1/2
982209ERL	-	10	3/4
982212ERL	-	12	3/4
982213ERL	-	12	1/2
982215ERL	-	16	3/4
982216ERL	-	16	1



TEE-PIPE THREAD ON SIDE

ALUMINUM PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" FTG. SIZE	"C" PIPE THD. SIZE
982503ERL	962503ERL	3	3	1/8
982504ERL	962504ERL	4	4	1/8
982506ERL	962506ERL	6	6	1/4
982508ERL	-	8	8	3/8
982510ERL	-	10	10	1/2
982512ERL	-	12	12	3/4



TEE-PIPE THREAD ON RUN

ALUMINUM PART NO.	STEEL PART NO.	"A" PIPE THD. SIZE	"B" FTG. SIZE	"C" FTG. SIZE
982603ERL	962603ERL	1/8	3	3
982604ERL	962604ERL	1/8	4	4
982606ERL	962606ERL	1/4	6	6
982608ERL	-	3/8	8	8
982610ERL	-	1/2	10	10
982612ERL	-	3/4	12	12
982616ERL	-	1	12	12

ALUMINUM & STEEL ADAPTERS

ADAPTERS

METRIC THREAD TO A.N. ADAPTERS

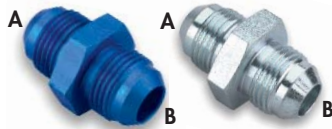


STRAIGHT

PART NO.	"A" FTG. SIZE	"B" THREAD SIZE
9919BFAERL	4	8MM x 1.5
9919BFCERL	4	10MM x 1.25
9919BFDERL	4	10MM x 1.5
9919BFGERL	4	12MM x 1.5
9919BFHERL	4	14MM x 1.5
9919DFCERL	6	10MM x 1.25
9919DFDERL	6	10MM x 1.5
9919DFGERL	6	12MM x 1.5
9919DFHERL	6	14MM x 1.5
9919DFJERL	6	16MM x 1.5
9919DFKERL	6	18MM x 1.5
9919DFLERL	6	20MM x 1.5
9919DFMERL	6	30MM x 1.5
9919DFNERL	6	30MM x 1.5
9919DFPERL	6	30MM x 1.5
9919DFQERL	6	30MM x 1.5
9919DFRERL	6	30MM x 1.5
9919DFSERL	6	30MM x 1.5
9919DFTERL	6	30MM x 1.5
9919DFUERL	6	30MM x 1.5
9919DFVERL	6	30MM x 1.5
9919DFWERL	6	30MM x 1.5
9919DFXERL	6	30MM x 1.5
9919DFYERL	6	30MM x 1.5
9919DFZERL	6	30MM x 1.5

PART NO.	"A" FTG. SIZE	"B" THREAD SIZE
9919FFHERL	10	14MM x 1.5
9919FFJERL	10	16MM x 1.5
9919FFKERL	10	18MM x 1.5
9919FFLERL	10	20MM x 1.5
9919GFHERL	12	14MM x 1.5
9919GFJERL	12	16MM x 1.5
9919GFKERL	12	18MM x 1.5
9919GFLERL	12	20MM x 1.5
9919GFRERL	12	30MM x 1.5
9919HFJERL	16	16MM x 1.5
9919HFKERL	16	18MM x 1.5
9919HFLERL	16	20MM x 1.5
9919HFRERL	16	30MM x 1.5

A.N. TO A.N. ADAPTERS



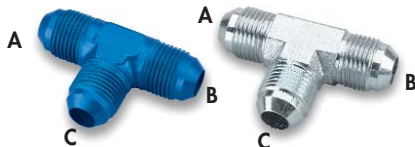
UNION - MALE

ALUMINUM PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
981503ERL	961503ERL	3	3
981504ERL	961504ERL	4	4
981506ERL	961506ERL	6	6
981508ERL	-	8	8
981510ERL	-	10	10
981512ERL	-	12	12
981516ERL	-	16	16
981520ERL	-	20	20

**UNION -
REDUCER**



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
991902ERL	4	3
991903ERL	5	4
991906ERL	6	4
991907ERL	6	5
991912ERL	8	6
991914ERL	10	6
991915ERL	10	8
991918ERL	12	6
991919ERL	12	8
991920ERL	12	10
991922ERL	16	10
991923ERL	16	12
991924ERL	20	16



AN TEE

ALUMINUM PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" FTG. SIZE	"C" FTG. SIZE
982403ERL	962403ERL	3	3	3
982404ERL	962404ERL	4	4	4
982406ERL	962406ERL	6	6	6
982408ERL	-	8	8	8
982410ERL	-	10	10	10
982412ERL	-	12	12	12
982416ERL	-	16	16	16

90° ELBOW

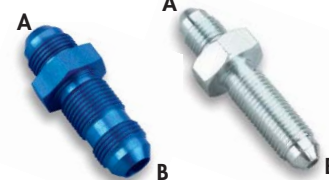


PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
982103ERL	3	3
982104ERL	4	4
982106ERL	6	6
982108ERL	8	8
982110ERL	10	10
982112ERL	12	12
982116ERL	16	16



**45°
BULKHEAD**

ALUMINUM PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
983703ERL	963703ERL	3	3
983704ERL	963704ERL	4	4
983706ERL	963706ERL	6	6
983708ERL	-	8	8
983710ERL	-	10	10
983712ERL	-	12	12



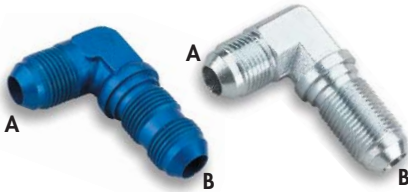
**STRAIGHT
BULKHEAD**

ALUMINUM PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
983203ERL	963203ERL	3	3
983204ERL	963204ERL	4	4
983206ERL	963206ERL	6	6
983208ERL	-	8	8
983210ERL	-	10	10
983212ERL	-	12	12
983216ERL	-	16	16

ALUMINUM & STEEL ADAPTERS

ADAPTERS

A.N. TO A.N. ADAPTERS



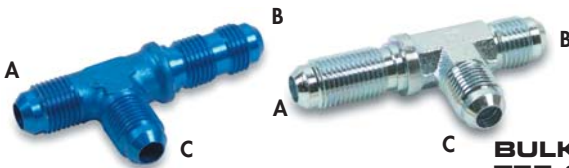
**90°
BULKHEAD**

ALUMINUM PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
983303ERL	963303ERL	3	3
983304ERL	963304ERL	4	4
983306ERL	963306ERL	6	6
983308ERL	-	8	8
983310ERL	-	10	10
983312ERL	-	12	12
983316ERL	-	16	16



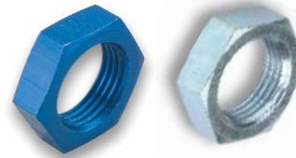
AN TEE

ALUMINUM PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" FTG. SIZE	"C" FTG. SIZE
983403ERL	963403ERL	3	3	3
983404ERL	963404ERL	4	4	4
983406ERL	963406ERL	6	6	6
983408ERL	-	8	8	8
983410ERL	-	10	10	10
983412ERL	-	12	12	12
983416ERL	-	16	16	16



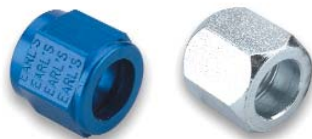
**BULKHEAD
TEE ON RUN**

ALUMINUM PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" FTG. SIZE	"C" FTG. SIZE
980403ERL	960403ERL	3	3	3
980404ERL	960404ERL	4	4	4
980406ERL	960406ERL	6	6	6
980408ERL	-	8	8	8
980410ERL	-	10	10	10
980412ERL	-	12	12	12
980416ERL	-	16	16	16



**BULKHEAD
NUT**

ALUMINUM PART NO.	STEEL PART NO.	QTY. PER PKG.	FTG. SIZE
592403ERL	502403ERL	2	3
592404ERL	502404ERL	2	4
592406ERL	502406ERL	2	6
992408ERL	-	1	8
992410ERL	-	1	10
992412ERL	-	1	12
992416ERL	-	1	16



**TUBE
NUT**

ALUMINUM PART NO.	STEEL PART NO.	QTY. PER PKG.	FTG. SIZE	TUBE SIZE
581803ERL	561803ERL	2	3	3/16
581804ERL	561804ERL	2	4	1/4
581805ERL	-	2	5	5/16
581806ERL	561806ERL	2	6	3/8
981808ERL	-	1	8	1/2
981810ERL	-	1	10	5/8
981812ERL	-	1	12	3/4
981816ERL	-	1	16	1



**TUBE
SLEEVE**

ALUMINUM PART NO.	STEEL PART NO.	QTY. PER PKG.	FTG. SIZE	TUBE SIZE
581903ERL	561903ERL	2	3	3/16
581904ERL	561904ERL	2	4	1/4
581905ERL	-	2	5	5/16
581906ERL	561906ERL	2	6	3/8
981908ERL	-	1	8	1/2
981910ERL	-	1	10	5/8
981912ERL	-	1	12	3/4
981916ERL	-	1	16	1

ALUMINUM & STEEL ADAPTERS

ADAPTERS

A.N. TO A.N. ADAPTERS

FEMALE AN TEE ("O" RING SEAL)



ALUMINUM PART NO.	"A" FTG. SIZE	"B" FTG. SIZE	"C" FTG. SIZE
993804ERL	4	4	4
993806ERL	6	6	6
993808ERL	8	8	8
993810ERL	10	10	10
993812ERL	12	12	12

AN REDUCER ("O" RING SEAL)



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
989404ERL	10	8
989409ERL	12	8
989410ERL	12	10
989411ERL	16	12
989443ERL	4	3
989464ERL	6	4
989486ERL	8	6

PIPE THREAD TO PIPE THREAD ADAPTERS

FEMALE COUPLING



PART NO.	PIPE THD. SIZE
991001ERL	1/8
991002ERL	1/4
991003ERL	3/8
991004ERL	1/2
991006ERL	3/4

MALE NIPPLE



PART NO.	PIPE THD. SIZE
991101ERL	1/8
991102ERL	1/4
991103ERL	3/8
991104ERL	1/2
991106ERL	3/4

PIPE NIPPLE - STEEL



PART NO.	PIPE THD. SIZE
901102ERL	1/8

45° ELBOW INTERNAL/EXTERNAL PIPE THREAD



PART NO.	"A" PIPE THD. SIZE	"B" PIPE THD. SIZE
991501ERL	1/8	1/8
991502ERL	1/4	1/4
991503ERL	3/8	3/8

90° ELBOW INTERNAL/EXTERNAL PIPE THREAD



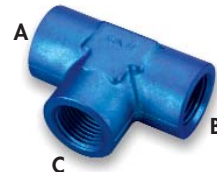
PART NO.	"A" PIPE THD. SIZE	"B" PIPE THD. SIZE
991401ERL	1/8	1/8
991402ERL	1/4	1/4
991403ERL	3/8	3/8

90° ELBOW INTERNAL PIPE THREAD



PART NO.	"A" PIPE THD. SIZE	"B" PIPE THD. SIZE
991601ERL	1/8	1/8
991602ERL	1/4	1/4
991603ERL	3/8	3/8

TEE INTERNAL PIPE THREAD



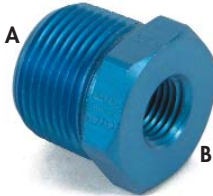
PART NO.	"A" PIPE THD. SIZE	"B" PIPE THD. SIZE	"C" PIPE THD. SIZE
991701ERL	1/8	1/8	1/8
991702ERL	1/4	1/4	1/4
991703ERL	3/8	3/8	3/8

ALUMINUM & STEEL ADAPTERS

ADAPTERS

PIPE THREAD TO PIPE THREAD ADAPTERS

REDUCER - PIPE BUSHING



PART NO.	"A" PIPE THD. SIZE	"B" PIPE THD. SIZE
991201ERL	1/4	1/8
991202ERL	3/8	1/4
991203ERL	3/8	1/8
991204ERL	1/2	3/8
991205ERL	1/2	1/4
991206ERL	1/2	1/8
991207ERL	3/4	1/2

PART NO.	"A" PIPE THD. SIZE	"B" PIPE THD. SIZE
991208ERL	3/4	3/8
991209ERL	3/4	1/4
991210ERL	1	3/4
991211ERL	1	1/2
991212ERL	1	3/8
991213ERL	1 1/4	3/4

HOSE BARB TO PIPE THREAD ADAPTERS

STRAIGHT



PART NO.	"A" HOSE SIZE	"B" FTG. SIZE
984004ERL	1/4	1/8
984006ERL	3/8	1/4
984008ERL	1/2	3/8
984010ERL	5/8	1/2
984012ERL	3/4	3/4

45° ELBOW



PART NO.	"A" HOSE SIZE	"B" FTG. SIZE
984404ERL	1/4	1/8
984406ERL	3/8	1/4
984408ERL	1/2	3/8
984410ERL	5/8	1/2
984412ERL	3/4	3/4

90° ELBOW



PART NO.	"A" HOSE SIZE	"B" FTG. SIZE
984204ERL	1/4	1/8
984206ERL	3/8	1/4
984208ERL	1/2	3/8
984210ERL	5/8	1/2
984212ERL	3/4	3/4

ALUMINUM & STEEL WELD FITTINGS

FEMALE NPT



ALUM. PART NO.	"A" FTG. SIZE
996701ERL	1/8"
996702ERL	1/4"
996703ERL	3/8"
996704ERL	1/2"
996706ERL	3/4"

FEMALE AN ("O" RING SEAL)



ALUM. PART NO.	"A" FTG. SIZE
987104ERL	4
987106ERL	6
987108ERL	8
987110ERL	10
987112ERL	12
987116ERL	16



MALE AN

ALUM. PART NO.	STEEL PART NO.	"A" FTG. SIZE
997103ERL	-	3
997104ERL	967104ERL	4
997106ERL	967106ERL	6
997108ERL	967108ERL	8
997110ERL	967110ERL	10
997112ERL	967112ERL	12
997116ERL	967116ERL	16
997120ERL	-	20
997124ERL	-	24

FEMALE NPT BOSS



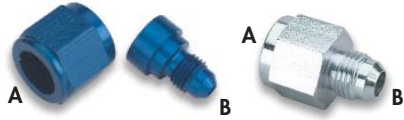
ALUM. PART NO.	"A" FTG. SIZE
986701ERL	1/8"
986702ERL	1/4"
986703ERL	3/8"
986704ERL	1/2"
986706ERL	3/4"

- 6061 bare aluminum
- Zinc plated steel

ALUMINUM & STEEL ADAPTERS

ADAPTERS

SPECIAL PURPOSE ADAPTERS



FLARE REDUCERS

ALUMINUM PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
-	9692043ERL	4	3
9892064ERL	969206ERL	6	4
9892084ERL	-	8	4
9892086ERL	969208ERL	8	6
9892104ERL	-	10	4
9892106ERL	-	10	6
9892108ERL	-	10	8
9892126ERL	-	12	6
9892128ERL	-	12	8
9892120ERL	-	12	10
9892160ERL	-	16	10
9892162ERL	-	16	12
9892206ERL	-	20	16

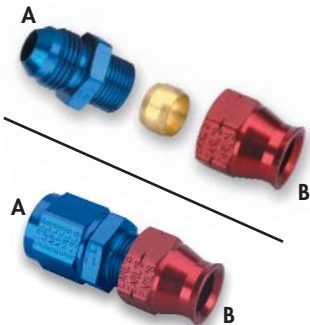


NEW!

FLARE EXPANDERS

ALUMINUM PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
9893034ERL	9693034ERL	3	4
9893046ERL	-	4	6
9893068ERL	-	6	8
9893810ERL	-	8	10
9893102ERL	-	10	12
9893126ERL	-	12	16

ALUMINUM TUBING ADAPTERS



PART NO.	"A" FTG. SIZE	"B" TUBE SIZE
165056ERL	-6 AN Male	5/16"
165006ERL	-6 AN Male	3/8"
165008ERL	-8 AN Male	1/2"
165010ERL	-10 AN Male	5/8"
165156ERL	-6 AN Female	5/16"
165106ERL	-6 AN Female	3/8"
165108ERL	-8 AN Female	1/2"
165110ERL	-10 AN Female	5/8"

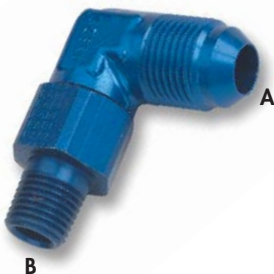
*50 PSI MAX

STRAIGHT AN SWIVEL TO MALE NPT



PART NO.	"A" FTG. SIZE	"B" NPT THREAD SIZE
916103ERL	3	1/8
916104ERL	4	1/8
916144ERL	4	1/4
916106ERL	6	1/4
916162ERL	6	1/8
916166ERL	6	3/8
916107ERL	8	1/4
916108ERL	8	3/8
916188ERL	8	1/2
916110ERL	10	1/2
916111ERL	10	3/8
916112ERL	12	3/4
916113ERL	12	1/2

90° MALE AN TO MALE SWIVEL NPT



PART NO.	"A" FTG. SIZE	"B" NPT THREAD SIZE
922103ERL	3	1/8
922104ERL	4	1/8
922144ERL	4	1/4
922106ERL	6	1/4
922162ERL	6	1/8
922166ERL	6	3/8
922107ERL	8	1/4
922108ERL	8	3/8
922188ERL	8	1/2
922110ERL	10	1/2
922111ERL	10	3/8
922112ERL	12	3/4
922113ERL	12	1/2

STRAIGHT FEMALE AN SWIVEL COUPLING



915186ERL



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
915103ERL	3	3
915104ERL	4	4
915106ERL	6	6
915186ERL	8	6
915108ERL	8	8
915110ERL	10	10
915112ERL	12	12
915116ERL	16	16
915120ERL	20	20

ALUMINUM ADAPTERS

ADAPTERS

SPECIAL PURPOSE ADAPTERS

45° FEMALE AN SWIVEL TO FEMALE AN SWIVEL - TUBE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
939203ERL	3	3
939204ERL	4	4
939206ERL	6	6
939208ERL	8	8
939210ERL	10	10
939212ERL	12	12
939216ERL	16	16

90° FEMALE AN SWIVEL TO FEMALE AN SWIVEL - TUBE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
935103ERL	3	3
935104ERL	4	4
935106ERL	6	6
935108ERL	8	8
935110ERL	10	10
935112ERL	12	12
935116ERL	16	16

45° FEMALE AN SWIVEL TO FEMALE AN SWIVEL LOW PROFILE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
939103ERL	3	3
939104ERL	4	4
939106ERL	6	6
939108ERL	8	8
939110ERL	10	10
939112ERL	12	12
939116ERL	16	16

90° FEMALE AN SWIVEL TO FEMALE AN SWIVEL LOW PROFILE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
934103ERL	3	3
934104ERL	4	4
934106ERL	6	6
934108ERL	8	8
934110ERL	10	10
934112ERL	12	12
934116ERL	16	16

45° FEMALE AN SWIVEL TO MALE AN



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
924103ERL	3	3
924104ERL	4	4
924106ERL	6	6
924108ERL	8	8
924110ERL	10	10
924112ERL	12	12

90° FEMALE AN SWIVEL TO MALE AN



BLUE PART NO.	STEEL PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
921103ERL	966303ERL	3	3
921104ERL	966304ERL	4	4
921106ERL	966306ERL	6	6
921108ERL		8	8
921110ERL		10	10
921112ERL		12	12

AN TEE FEMALE SWIVEL ON SIDE



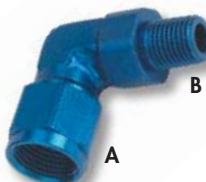
BLUE PART NO.	"A" FTG. SIZE	"B" FTG. SIZE	"C" FTG. SIZE
925103ERL	3	3	3
925104ERL	4	4	4
925106ERL	6	6	6
925108ERL	8	8	8
925110ERL	10	10	10
925112ERL	12	12	12

AN TEE FEMALE SWIVEL ON RUN



BLUE PART NO.	"A" FTG. SIZE	"B" FTG. SIZE	"C" FTG. SIZE
926103ERL	3	3	3
926104ERL	4	4	4
926106ERL	6	6	6
926108ERL	8	8	8
926110ERL	10	10	10
926112ERL	12	12	12

90° FEMALE AN TO MALE SWIVEL NPT (OR METRIC)



PART NO.	"A" FTG. SIZE	"B" NPT/ METRIC THREAD SIZE
923103ERL	3	1/8
923104ERL	4	1/8
923144ERL	4	1/4
923106ERL	6	1/4
923162ERL	6	1/8
923166ERL	6	3/8
923107ERL	8	1/4
923108ERL	8	3/8

PART NO.	"A" FTG. SIZE	"B" NPT/ METRIC THREAD SIZE
923188ERL	8	1/2
923110ERL	10	1/2
923111ERL	10	3/8
923113ERL	12	1/2
923112ERL	12	3/4
923191ERL	-6	12mm x 1.25
923192ERL	-6	12mm x 1.5



ALUMINUM ADAPTERS

ADAPTERS

SPECIAL PURPOSE ADAPTERS

AN PORT ADAPTER ("O" RING SEAL) (PORT END CONTOURED FOR MAXIMUM FLOW)



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
985064ERL	-6	7/16-20 (AN 4)
985065ERL	-6	1/2-20 (AN 5)
985006ERL	-6	9/16-18 (AN 6)
985068ERL	-6	3/4-16 (AN 8)
985086ERL	-8	9/16-18 (AN 6)
985008ERL	-8	3/4-16 (AN 8)
985081ERL	-8	7/8-14 (AN 10)
985009ERL	-10	3/4-16 (AN 8)
985010ERL	-10	7/8-14 (AN 8)
985011ERL	-10	11/16-12 (AN 12)
985013ERL	-12	7/8-14 (AN 10)
985012ERL	-12	1 1/16-12 (AN 12)
NEW! 985016ERL	-16	1 1/16-12 (AN 12)

90° MALE AN TO MALE SWIVEL A.N. (OR METRIC)



PART NO.	"A" FTG. SIZE	"B" THREAD SIZE
949064ERL	6	7/16-20
949065ERL	6	1/2-20
949006ERL	6	9/16-18
949068ERL	6	3/4-16
949091ERL	6	12mm x 1.25
949092ERL	6	12mm x 1.5
949093ERL	6	7/8-20
949094ERL	6	9/16-24
949096ERL	6	5/8-18
949086ERL	8	9/16-18
949008ERL	8	3/4-16
949081ERL	8	7/8-14
949083ERL	8	7/8-20
949009ERL	10	3/4-16
949010ERL	10	7/8-14
949011ERL	10	1 1/16-12
949013ERL	12	7/8-14
949012ERL	12	1 1/16-12

EXTENDED OIL PRESSURE FITTINGS



STEEL PART NO.	"A" FTG. SIZE	"B" NPT THREAD SIZE
968803ERL	3	1/8
968804ERL	4	1/8

CAPS & PLUGS

A.N. CAP



See pg. 105
for plastic plugs

PART NO.	QTY. PER PKG.	FTG. SIZE
592902ERL	2	2
592903ERL	2	3
592904ERL	2	4
592906ERL	2	6
992908ERL	1	8
992910ERL	1	10
992912ERL	1	12
992916ERL	1	16
992920ERL	1	20

A.N. PLUG



See pg. 105
for plastic plugs

PART NO.	QTY. PER PKG.	FTG. SIZE
580603ERL	2	3
580604ERL	2	4
580606ERL	2	6
980608ERL	1	8
980610ERL	1	10
980612ERL	1	12
980616ERL	1	16
980620ERL	1	20

PORT PLUG ("O" RING SEAL)



PART NO.	QTY. PER PKG.	FTG. SIZE
581403ERL	2	3
581404ERL	2	4
581406ERL	2	6
981408ERL	1	8
981410ERL	1	10
981412ERL	1	12
981416ERL	1	16

NPT PLUG- INTERNAL WRENCHING



PART NO.	QTY. PER PKG.	FTG. SIZE
593201ERL	2	1/16
593202ERL	2	1/8
593203ERL	2	1/4
593204ERL	2	3/8
993205ERL	1	1/2
993206ERL	1	3/4

NPT PLUG-HEX HEAD



PART NO.	FTG. SIZE
993301ERL	1/8
993302ERL	1/4
993303ERL	3/8
993304ERL	1/2
993306ERL	3/4

ANO-TUFF™ ADAPTERS

ADAPTERS

NEW!

The perfect match for our hugely popular Ano-Tuff™ hose ends. Ano-Tuff™ adapters feature the same Mil Spec hard anodized coating that penetrates the aluminum base to deliver superior wear and corrosion resistance.

STRAIGHT



PART NO.	"A" FTG. SIZE	"B" NPT THREAD SIZE
AT981604ERL	4	1/8
AT981644ERL	4	1/4
AT981662ERL	6	1/8
AT981606ERL	6	1/4
AT981666ERL	6	3/8
AT981668ERL	6	1/2
AT981607ERL	8	1/4
AT981608ERL	8	3/8
AT981688ERL	8	1/2
AT981611ERL	10	3/8
AT981610ERL	10	1/2
AT981609ERL	10	3/4
AT981613ERL	12	1/2
AT981612ERL	12	3/4
AT981615ERL	16	3/4
AT981616ERL	16	1

45° ELBOW



PART NO.	"A" FTG. SIZE	"B" NPT THREAD SIZE
AT982304ERL	4	1/8
AT982344ERL	4	1/4
AT982362ERL	6	1/8
AT982306ERL	6	1/4
AT982366ERL	6	3/8
AT982368ERL	6	1/2
AT982307ERL	8	1/4
AT982308ERL	8	3/8
AT982388ERL	8	1/2
AT982311ERL	10	3/8
AT982310ERL	10	1/2
AT982309ERL	10	3/4
AT982313ERL	12	1/2
AT982312ERL	12	3/4
AT982316ERL	16	1

90° ELBOW



PART NO.	"A" FTG. SIZE	"B" NPT THREAD SIZE
AT982204ERL	4	1/8
AT982244ERL	4	1/4
AT982262ERL	6	1/8
AT982206ERL	6	1/4
AT982266ERL	6	3/8
AT982268ERL	6	1/2
AT982207ERL	8	1/4
AT982208ERL	8	3/8
AT982288ERL	8	1/2
AT982211ERL	10	3/8
AT982210ERL	10	1/2
AT982209ERL	10	3/4
AT982213ERL	12	1/2
AT982212ERL	12	3/4
AT982215ERL	16	3/4
AT982216ERL	16	1

AN TEE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE	"C" FTG. SIZE
AT982403ERL	3	3	3
AT982404ERL	4	4	4
AT982406ERL	6	6	6
AT982408ERL	8	8	8
AT982410ERL	10	10	10
AT982412ERL	12	12	12
AT982416ERL	16	16	16

TEE-PIPE THREAD ON SIDE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE	"C" PIPE THD. SIZE
AT982503ERL	3	3	1/8
AT982504ERL	4	4	1/8
AT982506ERL	6	6	1/4
AT982508ERL	8	8	3/8
AT982510ERL	10	10	1/2
AT982512ERL	12	12	3/4

UNION - MALE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT981504ERL	4	4
AT981506ERL	6	6
AT981508ERL	8	8
AT981510ERL	10	10
AT981512ERL	12	12
AT981516ERL	16	16

TEE-PIPE THREAD ON RUN



PART NO.	"A" PIPE THD. SIZE	"B" FTG. SIZE	"C" FTG. SIZE
AT982603ERL	1/8	3	3
AT982604ERL	1/8	4	4
AT982606ERL	1/4	6	6
AT982608ERL	3/8	8	8
AT982610ERL	1/2	10	10
AT982612ERL	3/4	12	12
AT982616ERL	1	12	12

ADAPTERS

NEW!

The perfect match for our hugely popular Ano-Tuff™ hose ends. Ano-Tuff™ adapters feature the same Mil Spec hard anodized coating that penetrates the aluminum base to deliver superior wear and corrosion resistance.

UNION - REDUCER



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT991902ERL	4	3
AT991903ERL	5	4
AT991906ERL	6	4
AT991907ERL	6	5
AT991912ERL	8	6
AT991914ERL	10	6
AT991915ERL	10	8
AT991918ERL	12	6
AT991919ERL	12	8
AT991920ERL	12	10
AT991922ERL	16	10
AT991923ERL	16	12
AT991924ERL	20	16

45° BULKHEAD



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT983703ERL	3	3
AT983704ERL	4	4
AT983706ERL	6	6
AT983708ERL	8	8
AT983710ERL	10	10
AT983712ERL	12	12

90° BULKHEAD



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT983303ERL	3	3
AT983304ERL	4	4
AT983306ERL	6	6
AT983308ERL	8	8
AT983310ERL	10	10
AT983312ERL	12	12
AT983316ERL	16	16

STRAIGHT BULKHEAD



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT983203ERL	3	3
AT983204ERL	4	4
AT983206ERL	6	6
AT983208ERL	8	8
AT983210ERL	10	10
AT983212ERL	12	12
AT983216ERL	16	16

BULKHEAD NUT



PART NO.	QTY. PER PKG.	FTG. SIZE
AT592403ERL	2	3
AT592404ERL	2	4
AT592406ERL	2	6
AT992408ERL	1	8
AT992410ERL	1	10
AT992412ERL	1	12
AT992416ERL	1	16

AN TEE BULKHEAD



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE	"C" FTG. SIZE
AT983403ERL	3	3	3
AT983404ERL	4	4	4
AT983406ERL	6	6	6
AT983408ERL	8	8	8
AT983410ERL	10	10	10
AT983412ERL	12	12	12
AT983416ERL	16	16	16

TUBE NUT



PART NO.	QTY. PER PKG.	FTG. SIZE	TUBE SIZE
AT581803ERL	2	3	3
AT581804ERL	2	4	4
AT581805ERL	2	5	5
AT581806ERL	2	6	6
AT981808ERL	1	8	8
AT981810ERL	1	10	10
AT981812ERL	1	12	12
AT981816ERL	1	16	16

ANO-TUFF™ ADAPTERS

ADAPTERS

CAPS & PLUGS

NEW!

The perfect match for our hugely popular Ano-Tuff™ hose ends. Ano-Tuff™ adapters feature the same Mil Spec hard anodized coating that penetrates the aluminum base to deliver superior wear and corrosion resistance.

A.N. CAP



See pg. 105
for plastic caps

PART NO.	QTY. PER PKG.	FTG. SIZE
AT592902ERL	2	2
AT592903ERL	2	3
AT592904ERL	2	4
AT592906ERL	2	6
AT992908ERL	1	8
AT992910ERL	1	10
AT992912ERL	1	12
AT992916ERL	1	16
AT992920ERL	1	20

A.N. PLUG



See pg. 105
for plastic plugs

PART NO.	QTY. PER PKG.	FTG. SIZE
AT580603ERL	2	3
AT580604ERL	2	4
AT580606ERL	2	6
AT980608ERL	1	8
AT980610ERL	1	10
AT980612ERL	1	12
AT980616ERL	1	16
AT980620ERL	1	20

PORT PLUG ("O" RING SEAL)



PART NO.	QTY. PER PKG.	FTG. SIZE
AT581403ERL	2	3
AT581404ERL	2	4
AT581406ERL	2	6
AT981408ERL	1	8
AT981410ERL	1	10
AT981412ERL	1	12
AT981416ERL	1	16

NPT PLUG-INTERNAL WRENCHING



PART NO.	QTY. PER PKG.	FTG. SIZE
AT593201ERL	2	1/16
AT593202ERL	2	1/8
AT593203ERL	2	1/4
AT593204ERL	2	3/8
AT993205ERL	1	1/2
AT993206ERL	1	3/4

NPT PLUG-HEX HEAD



PART NO.	FTG. SIZE
AT993301ERL	1/8
AT993302ERL	1/4
AT993303ERL	3/8
AT993304ERL	1/2
AT993306ERL	3/4

SPECIAL PURPOSE ADAPTERS

FLARE REDUCERS



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT9892064ERL	6	4
AT9892084ERL	8	4
AT9892086ERL	8	6
AT9892104ERL	10	4
AT9892106ERL	10	6
AT9892108ERL	10	8
AT9892126ERL	12	6
AT9892128ERL	12	8
AT9892120ERL	12	10
AT9892160ERL	16	10
AT9892162ERL	16	12
AT9892206ERL	20	16

STRAIGHT FEMALE AN SWIVEL COUPLING



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT915103ERL	3	3
AT915104ERL	4	4
AT915106ERL	6	6
AT915186ERL	8	6
AT915108ERL	8	8
AT915110ERL	10	10
AT915112ERL	12	12
AT915116ERL	16	16
AT915120ERL	20	20

ANO-TUFF™ ADAPTERS

ADAPTERS

NEW!

The perfect match for our hugely popular Ano-Tuff™ hose ends. Ano-Tuff™ adapters feature the same Mil Spec hard anodized coating that penetrates the aluminum base to deliver superior wear and corrosion resistance.

45° FEMALE AN SWIVEL TO FEMALE AN SWIVEL - TUBE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT939203ERL	3	3
AT939204ERL	4	4
AT939206ERL	6	6
AT939208ERL	8	8
AT939210ERL	10	10
AT939212ERL	12	12
AT939216ERL	16	16

90° FEMALE AN SWIVEL TO FEMALE AN SWIVEL - TUBE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT935103ERL	3	3
AT935104ERL	4	4
AT935106ERL	6	6
AT935108ERL	8	8
AT935110ERL	10	10
AT935112ERL	12	12
AT935116ERL	16	16

45° FEMALE AN SWIVEL TO FEMALE AN SWIVEL LOW PROFILE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT939103ERL	3	3
AT939104ERL	4	4
AT939106ERL	6	6
AT939108ERL	8	8
AT939110ERL	10	10
AT939112ERL	12	12
AT939116ERL	16	16

90° FEMALE AN SWIVEL TO FEMALE AN SWIVEL LOW PROFILE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT934103ERL	3	3
AT934104ERL	4	4
AT934106ERL	6	6
AT934108ERL	8	8
AT934110ERL	10	10
AT934112ERL	12	12
AT934116ERL	16	16

45° FEMALE AN SWIVEL TO MALE AN



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT924103ERL	3	3
AT924104ERL	4	4
AT924106ERL	6	6
AT924108ERL	8	8
AT924110ERL	10	10
AT924112ERL	12	12

90° FEMALE AN SWIVEL TO MALE AN



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT921103ERL	3	3
AT921104ERL	4	4
AT921106ERL	6	6
AT921108ERL	8	8
AT921110ERL	10	10
AT921112ERL	12	12

AN TEE FEMALE SWIVEL ON SIDE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE	"C" FTG. SIZE
AT925103ERL	3	3	3
AT925104ERL	4	4	4
AT925106ERL	6	6	6
AT925108ERL	8	8	8
AT925110ERL	10	10	10
AT925112ERL	12	12	12

AN TEE FEMALE SWIVEL ON RUN



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE	"C" FTG. SIZE
AT926103ERL	3	3	3
AT926104ERL	4	4	4
AT926106ERL	6	6	6
AT926108ERL	8	8	8
AT926110ERL	10	10	10
AT926112ERL	12	12	12

ANO-TUFF™ ADAPTERS

ADAPTERS

NEW!

The perfect match for our hugely popular Ano-Tuff™ hose ends. Ano-Tuff™ adapters feature the same Mil Spec hard anodized coating that penetrates the aluminum base to deliver superior wear and corrosion resistance.

STRAIGHT AN SWIVEL TO MALE NPT



PART NO.	"A" FTG. SIZE	"B" NPT THREAD SIZE
AT916103ERL	3	1/8
AT916104ERL	4	1/8
AT916144ERL	4	1/4
AT916106ERL	6	1/4
AT916162ERL	6	1/8
AT916166ERL	6	3/8
AT916107ERL	8	1/4
AT916108ERL	8	3/8
AT916188ERL	8	1/2
AT916110ERL	10	1/2
AT916111ERL	10	3/8
AT916112ERL	12	3/4
AT916113ERL	12	1/2

90° MALE AN TO MALE SWIVEL NPT



PART NO.	"A" FTG. SIZE	"B" NPT THREAD SIZE
AT922103ERL	3	1/8
AT922104ERL	4	1/8
AT922144ERL	4	1/4
AT922106ERL	6	1/4
AT922162ERL	6	1/8
AT922166ERL	6	3/8
AT922107ERL	8	1/4
AT922108ERL	8	3/8
AT922188ERL	8	1/2
AT922110ERL	10	1/2
AT922111ERL	10	3/8
AT922112ERL	12	3/4
AT922113ERL	12	1/2

PORT ADAPTERS ("O" Ring seal)



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
AT985064ERL	-6	7/16-20 (AN 4)
AT985065ERL	-6	1/2-20 (AN 5)
AT985006ERL	-6	9/16-18 (AN 6)
AT985068ERL	-6	3/4-16 (AN 8)
AT985086ERL	-8	9/16-18 (AN 6)
AT985008ERL	-8	3/4-16 (AN 8)
AT985081ERL	-8	7/8-14 (AN 10)
AT985009ERL	-10	3/4-16 (AN 8)
AT985010ERL	-10	7/8-14 (AN 10)
AT985011ERL	-10	1 1/16-12 (AN 12)
AT985013ERL	-12	7/8-14 (AN 10)
AT985012ERL	-12	1 1/16-12 (AN 12)
AT985016ERL	-16	1 1/16-12 (AN 12)

90° MALE AN TO MALE SWIVEL A.N. (OR METRIC)



PART NO.	"A" FTG. SIZE	"B" THREAD SIZE
AT949064ERL	6	7/16-20
AT949065ERL	6	1/2-20
AT949006ERL	6	9/16-18
AT949068ERL	6	3/4-16
AT949091ERL	6	12mm x 1.25
AT949092ERL	6	12mm x 1.5
AT949093ERL	6	7/8-20
AT949094ERL	6	9/16-24
AT949096ERL	6	5/8-18
AT949086ERL	8	9/16-18
AT949008ERL	8	3/4-16
AT949081ERL	8	7/8-14
AT949083ERL	8	7/8-20
AT949009ERL	10	3/4-16
AT949010ERL	10	7/8-14
AT949011ERL	10	1 1/16-12
AT949013ERL	12	7/8-14
AT949012ERL	12	1 1/16-12

CARB ADAPTERS



PART NO.	"A" FTG. SIZE	"B" THREAD SIZE
AT991942ERL	6	9/16-24
AT991943ERL	6	7/8-20
AT991948ERL	8	7/8-20 long
AT991957ERL	8	7/8-20 short

UNANODIZED ADAPTERS

ADAPTERS

Earl's "UP" aluminum adapters are unplated and polished so you can finish your custom plumbing system by plating them the color of your choosing. You can also have them clear coated for a clean polished aluminum look.

***Adapters must be anodized, plated or clear coated before assembly.**

UNION - MALE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
UP981504ERL	4	4
UP981506ERL	6	6
UP981508ERL	8	8
UP981510ERL	10	10
UP981512ERL	12	12
UP981516ERL	16	16

90° ELBOW



PART NO.	"A" FTG. SIZE	"B" NPT THREAD SIZE
UP982204ERL	4	1/8
UP982244ERL	4	1/4
UP982262ERL	6	1/8
UP982206ERL	6	1/4
UP982266ERL	6	3/8
UP982268ERL	6	1/2
UP982207ERL	8	1/4
UP982208ERL	8	3/8
UP982288ERL	8	1/2
UP982211ERL	10	3/8
UP982210ERL	10	1/2
UP982209ERL	10	3/4
UP982213ERL	12	1/2
UP982212ERL	12	3/4
UP982215ERL	16	3/4
UP982216ERL	16	1

STRAIGHT



PART NO.	"A" FTG. SIZE	"B" NPT THREAD SIZE
UP981604ERL	4	1/8
UP981644ERL	4	1/4
UP981662ERL	6	1/8
UP981606ERL	6	1/4
UP981666ERL	6	3/8
UP981668ERL	6	1/2
UP981607ERL	8	1/4
UP981608ERL	8	3/8
UP981688ERL	8	1/2
UP981611ERL	10	3/8
UP981610ERL	10	1/2
UP981609ERL	10	3/4
UP981613ERL	12	1/2
UP981612ERL	12	3/4
UP981615ERL	16	3/4
UP981616ERL	16	1

AN TEE



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE	"C" FTG. SIZE
UP982404ERL	4	4	4
UP982406ERL	6	6	6
UP982408ERL	8	8	8
UP982410ERL	10	10	10
UP982412ERL	12	12	12
UP982416ERL	16	16	16

45° ELBOW



PART NO.	"A" FTG. SIZE	"B" NPT THREAD SIZE
UP982304ERL	4	1/8
UP982344ERL	4	1/4
UP982362ERL	6	1/8
UP982306ERL	6	1/4
UP982366ERL	6	3/8
UP982368ERL	6	1/2
UP982307ERL	8	1/4
UP982308ERL	8	3/8
UP982388ERL	8	1/2
UP982311ERL	10	3/8
UP982310ERL	10	1/2
UP982309ERL	10	3/4
UP982313ERL	12	1/2
UP982312ERL	12	3/4
UP982316ERL	16	1

STRAIGHT BULKHEAD



PART NO.	"A" FTG. SIZE	"B" FTG. SIZE
UP983203ERL	3	3
UP983204ERL	4	4
UP983206ERL	6	6
UP983208ERL	8	8
UP983210ERL	10	10
UP983212ERL	12	12
UP983216ERL	16	16

BULKHEAD NUT



PART NO.	QTY. PER PKG.	"A" FTG. SIZE	"B" FTG. SIZE
UP592403ERL	2	3	3
UP592404ERL	2	4	4
UP592406ERL	2	6	6
UP992408ERL	1	8	8
UP992410ERL	1	10	10
UP992412ERL	1	12	12
UP992416ERL	1	16	16

ALUMINUM & STEEL ADAPTERS

ADAPTERS

CARBURETOR / POWER STEERING / FUEL PUMP / FUEL INJECTION ADAPTERS

	PART NO.	HOSE END SIZE	APPLICATION
	991941ERL	6	Carter® / Edelbrock® with 5/8-20 thread size
	991942ERL	6	Single Inlet Holley/Reman with 9/16-24 thread size
	991943ERL	6	Dual Feed Holley/Reman (short) w/ 7/8-20 thread size
	991944ERL	6	Weber with 12mm X 1.50 thread size
	991945ERL	6	Dellorto / Solex / Mikuni with 12mm X 1.25 thread size
	991946ERL	6	Power Steering / Fuel Pump - 5/16 Tube Inverted Flare with 1/2-20 thread size
	961946ERL (Steel)	6	Power Steering / Fuel Pump - 5/16 Tube Inverted Flare with 1/2-20 thread size
	991947ERL	6	Power Steering / Fuel Pump - 3/8 Tube Inverted Flare with 5/8-18 thread size
	961947ERL (Steel)	6	Power Steering / Fuel Pump - 3/8 Tube Inverted Flare with 5/8-18 thread size
	991948ERL	8	Dual Feed Holley/Reman (extended) with 7/8-20 thread size

	PART NO.	HOSE END SIZE	APPLICATION
	991949ERL	6	Rochester with 7/8-20 thread size
	991950ERL	6	Power Steering - Inverted Flare with 11/16-18 thread size
	961950ERL (Steel)	6	Power Steering - Inverted Flare with 11/16-18 thread size
	991951ERL	6	Dellorto - Cupped Banjo for 7mm Banjo Bolt
	991952ERL	6	Rochester 75 up with 1"-20 thread size
	991953ERL	6	Weber with 10mm X 1 thread size
	991954ERL	6	Power Steering / Fuel Injection - O-Ring Seal 14mm X 1.5
	991955ERL	6	Power Steering / Fuel Injection - O-Ring Seal 16mm X 1.5
	961955ERL (Steel)	6	Power Steering / Fuel Injection - O-Ring Seal 16mm X 1.5
	991956ERL	6	Power Steering - O-Ring Seal with 18mm X 1.50 thread size
	961956ERL (Steel)	6	Power Steering - O-Ring Seal with 18mm X 1.50 thread size

ALUMINUM & STEEL ADAPTERS





ADAPTERS

CARBURETOR / POWER STEERING / FUEL PUMP / FUEL INJECTION ADAPTERS

PART NO.	HOSE END		APPLICATION
	SIZE	APPLICATION	
 991957ERL	8	Dual Feed Holley/Reman with 7/8-20 thread size	
 9894DBHERL	6	Fuel Injection Fem. O-Ring Seal with Fem. 14mm X 1.5 thread size	
 9894DBJERL	6	Fuel Injection Fem. O-Ring Seal with Fem. 16mm X 1.5 thread size	
 982484ERL	8	-8 AN male tee with -4 AN on run	

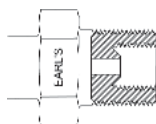
PART NO.	HOSE END		APPLICATION
	SIZE	APPLICATION	
 AT982484ERL*	8	-8 AN male tee with -4 AN on run * Hard Anodized	
 977606ERL	6	-6 AN male to 9/16 banjo	
 977646ERL	4	-4 AN male to 9/16 banjo NEWI	
 997596ERL	-	9/16 -18 Bolt NEWI	

BRAKE SYSTEM ADAPTERS

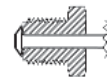
PART NO.	PKG QTY	THREAD SIZE	
		PKG QTY	THREAD SIZE
 501902ERL	2	-3 AN to 4 AN	
 581531ERL	2	-3 AN to 3/8-24 inverted flare short	
 581533ERL	2	-3 AN to 3/8-24 inverted flare long	
 591932ERL	2	-3 AN to 7/16-24 inverted flare	

PART NO.	PKG QTY	THREAD SIZE	
		PKG QTY	THREAD SIZE
 591941ERL	2	-4 AN to 7/16-20 inverted flare	
 591942ERL	2	-4 AN to 7/16-24 inverted flare	
 591972ERL	2	-4 AN to 3/8-24 inverted flare short	
 591982ERL	2	-4 AN to 3/8-24 inverted flare long	

CONVEX INVERTED FLARE



CONCAVE



ALUMINUM & STEEL ADAPTERS

ADAPTERS

BRAKE SYSTEM ADAPTERS

	PART NO.	PKG QTY	THREAD SIZE
	592032ERL	2	-3 AN to 10mm x1.0
	592035ERL	2	-3 AN to 10mm x1.25 inverted flare
	592042ERL	2	-4 AN to 10mm x1.0
	592045ERL	2	-4 AN to 10mm x1.25 inverted flare
	592046ERL (Aluminum)	2	-3 AN to 1/2-20 inverted flare
	592047ERL (Aluminum)	2	-4 AN to 1/2-20 inverted flare
	592048ERL (Aluminum)	2	-3 AN to 9/16-18 inverted flare
	592049ERL (Aluminum)	2	-4 AN to 9/16-18 inverted flare
	963243ERL	1	-3 AN Long Side, -4 AN Short Side

TUBING ADAPTER

	PART NO.	PKG QTY	THREAD SIZE
	989531ERL	1	-3 AN to 3/8-24 Fem.
	989543ERL	1	-3 AN to 3/8-24 Fem. inverted flare
	989534ERL	1	-3 AN to Fem. 10mm x1.0
	989535ERL	1	-3 AN to Fem. 10mm x1.25
	989545ERL	1	-3 AN to Fem. 10mm x1.0 inverted flare
	989536ERL	1	-3 AN to Fem. 10mm x1.25 inverted flare

ALUMINUM & STEEL ADAPTERS








ADAPTERS

BRAKE SYSTEM ADAPTERS





TUBING ADAPTER

	PART NO.	PKG QTY	THREAD SIZE
	989532ERL	1	-4 to 3/8-24 Fem. inverted flare
	989541ERL	1	-4 to 3/8-24 Fem.
	989542ERL	1	-4 to Fem. 10mm x1.0 inverted flare
	989544ERL	1	-4 to Fem. 10mm x1.0 inverted flare
	989546ERL	1	-4 AN to Fem. 10mm x1.25
	989547ERL	1	-4 AN to Fem. 10mm x1.25 inverted flare
	989537ERL	1	-3 AN to 10mm x1.0 inverted flare (Honda)
	989538ERL	1	-3 AN to 10mm x1.0 inverted flare (Toyota)
	989548ERL	1	-4 AN to 7/16-24 inverted flare
	989549ERL	1	-3 AN to 7/16-24 inverted flare
	989500ERL	1	-3 hose Clip-in Fairlead

BANJOS

	PART NO.	THD. SIZE	HOLE DIAMETER	HEIGHT
	997603ERL	-3 AN	3/8"	.425
	997604ERL	-4 AN	7/16"	.425
	997631ERL	-3 AN	10mm	.425
	997634ERL	-3 AN	7/16"	.425
	997635ERL	-3 AN	12mm	.425
	997641ERL	-4 AN	10mm	.425
	997643ERL	-4 AN	3/8"	.425

DOT BANJOS

	PART NO.	DESC.	HOLE	WIDTH	HEIGHT
	9976031ERL	Sq. Banjo Center	3/8"-10mm	0.75"	0.5"
	9976032ERL	Sq. Banjo Center	7/16"	0.75"	0.5"
	9977031ERL	10° Sq. Banjo Center	3/8"-10mm	0.75"	0.45"
	9977032ERL	10° Sq. Banjo Center	7/16"	0.75"	0.45"

ALUMINUM & STEEL ADAPTERS

ADAPTERS

BRAKE SYSTEM ADAPTERS

DOT BANJOS

PART NO.	DESC.	HOLE	WIDTH	HEIGHT
 9976033ERL	Sq. Banjo Offset	3/8"-10mm	0.75"	0.5"
 9976034ERL	Sq. Banjo Offset	7/16"	0.75"	0.5"
 9977033ERL	10° Sq. Banjo Offset	3/8"-10mm	0.75"	0.45"
 9977034ERL	10° Sq. Banjo Offset	7/16"	0.75"	0.45"
 9978031ERL	Lg. Rd. Banjo	3/8"-10mm	-	10mm
 9978032ERL	Lg. 7° Rd. Banjo	3/8"-10mm	-	10mm
 9978033ERL	Lg. 15° Rd. Banjo	3/8"-10mm	-	10mm
 9978034ERL	Lg. 30° Rd. Banjo	3/8"-10mm	-	10mm
 9978035ERL	Lg. 40° Rd. Banjo	3/8"-10mm	-	10mm
 9978036ERL	Lg. 25° side Rd. Banjo	3/8"-10mm	-	10mm

BANJO BOLTS

PART # FOR .425 BANJO HGHT.	PART # FOR 8mm BANJO HGHT.	THREAD SIZE	BANJO HOLE DIAMETER
 977503ERL	997503ERL	3/8-24 Single	3/8"
 977504ERL	997504ERL	7/16-20 Single	7/16"
 977513ERL	997513ERL	3/8-24 Double for 2 Banjos	3/8"
 977514ERL	-	7/16-20 Double for 2 Banjos	7/16"
 977515ERL	997515ERL	10mm x1.25 Single	10mm
 977516ERL	-	3/8-24 inverted flare	3/8"
 977517ERL	997517ERL	10mm x1.0 Single	10mm
 977518ERL	997518ERL	10mm x1.25 Double	10mm
 977519ERL	997519ERL	10mm x1.0 Double	10mm

ALUMINUM & STEEL ADAPTERS

ADAPTERS

BRAKE SYSTEM ADAPTERS

BANJO BOLTS

PART # FOR .425 BANJO HGHT.	PART # FOR 8mm BANJO HGHT.	THREAD SIZE	BANJO HOLE DIAMETER
977520ERL	997520ERL	10mm x1.50 Single	10mm

977521ERL	-	1/8 NPT Male to 3/8-24	3/8"
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977522ERL	-	7/16-24 Single	7/16"
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TEE

PART NO.	DESCRIPTION
961701ERL	1/8 NPT Fem. (all 3), no mounting hole

972050ERL	3/8-24 I.F. on sides, 3/8-24 straight thread on branch, 1/4 mounting hole
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972051ERL	7/16-24 I.F. on one run, 3/8-24 other run and branch, 7/16 mounting hole
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972051AERL	3/8-24 I.F. on branch, #3 AN male on one run, 7/16-24 I.F. on other run
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972051BERL	#3 AN male on branch, 3/8-24 I.F. on one run, 7/16-24 I.F. on other run
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972052ERL	3/8-24 I.F. all 3 ports, 7/16 mounting hole
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972053ERL	3/8-24 I.F. on branch, 3/8-24 at run, 5/8-18 mounting nut
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TEE

PART NO.	DESCRIPTION
972053AERL	3/8-24 I.F. on branch, 3/8-24 at run, 5/8-18 mount #3 AN male on other run

972053BERL	#3 AN male on branch, 3/8-24 I.F. on run and 5/8-18 mounting nut on run
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972054ERL	3/8-24 I.F. all runs 7/16 mounting hole
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972054AERL	3/8-24 I.F. on branch, #3 AN male on one run, 3/8-24 I.F. on other run
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972054BERL	#3 AN male on branch, 3/8-24 on both runs
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972055ERL	3/8-24 I.F. on branch, 3/8-24 on one run, 7/16-24 I.F. on other run. 7/16" Mount hole
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972056ERL	10mmx1 x 10mmx1 x 3/8-24 I.F. 5/8-18 mounting nut
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972057ERL	#3 AN male on branch, 10mm x 1.0 bubble flare on both runs
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972057BERL	#3 AN male on branch, 10mm x 1.0 bubble flare on both runs
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972058ERL	3/8-24 I.F. (all ports) 5/8-18 mounting nut
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972059ERL	Y-fitting 3/8-24 I.F. (all ports) 7/16 mount hole
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972060ERL	Y-fitting 3/8-24 I.F. (all ports)
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ADAPTERS

FORM-A-FLEX™ HOSE KITS

COOLING SYSTEM



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™. 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™ 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

RADIATOR HOSE KITS

1-PC: 1-3/4 DIA. FORM-A-FLEX®
& 2-END CONNECTORS

P/N UNIT CONNECTORS



121121ERL	1 ft. Kit	Red
121124ERL	2 ft. Kit	Red
121136ERL	3 ft. Kit	Red



121122ERL	1 ft. Kit	Blue
1211242ERL	2 ft. Kit	Blue
1211362ERL	3 ft. Kit	Blue



121123ERL	1 ft. Kit	Chrome
1211243ERL	2 ft. Kit	Chrome
1211363ERL	3 ft. Kit	Chrome



121125ERL	1 ft. Kit	Black
1211245ERL	2 ft. Kit	Black
1211365ERL	3 ft. Kit	Black

HEATER HOSE KITS

2-PCS: 3/4 DIA, 44" FORM-A-FLEX® &
4-END CONNECTORS

P/N CONNECTORS



122881ERL	Red
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122882ERL	Blue
-----------	------



122883ERL	Chrome
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122885ERL	Black
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DOUBLE ECON-O-FIT® FITTINGS

WITHOUT SILICONE HOSE

P/N DESCRIPTION CONNECTORS



9001115ERL	for 3/4 Hose	Red
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9002115ERL	for 3/4 Hose	Blue
------------	--------------	------



9003115ERL	for 3/4 Hose	Chrome
------------	--------------	--------



9005115ERL	for 3/4 Hose	Black
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9001133ERL	for 1-3/4 Hose	Red
------------	----------------	-----



9002133ERL	for 1-3/4 Hose	Blue
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WITHOUT SILICONE HOSE

P/N DESCRIPTION CONNECTORS



9003133ERL	for 1-3/4 Hose	Chrome
------------	----------------	--------



9005133ERL	for 1-3/4 Hose	Black
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FORM-A-FLEX® BULK

P/N

DESCRIPTION



121000ERL	1-3/4 Form-A-Flex® (per ft.)
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122000ERL	3/4 Form-A-Flex® (per ft.)
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121103ERL	1-3/4 Blue Silicone Hose for Double Econ-O-Fit® (3" length)
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122103ERL	3/4 Blue Silicone Hose (3")
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122104ERL	1-1/2 Reducer boot (1.5")
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TEMP-A-CURE™



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 liquid-air heat exchanger available.

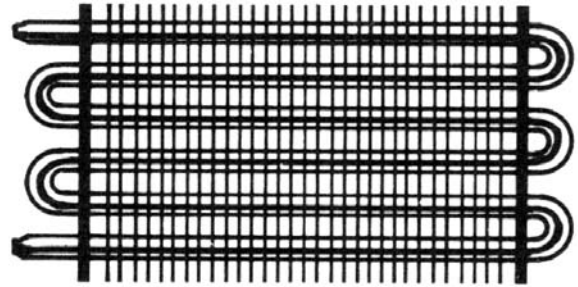
EARL'S TEMP-A-CURE OIL COOLERS OFFER THE FOLLOWING ADVANTAGES:

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
7. Every cooler is pressure checked to 175 psi. Periodic samples are burst tested to 350 psi.

TEMP-A-CURE™

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")

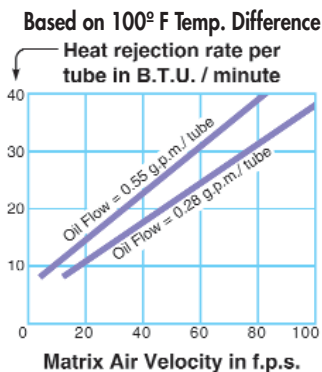
Cooler "A" in our chart below is of a popular stamped dish plate design; where the dish plates are the only components—no fins and no corrugated screen. This design, while extremely attractive to the manufacturer, sacrifices efficiency of heat transfer for ease of assembly.

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.

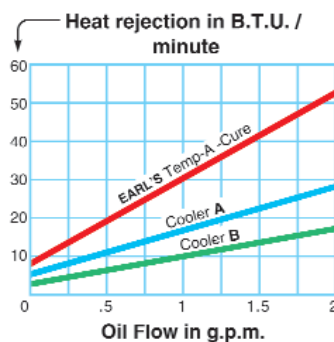
Earl's Temp-A-Cure oil coolers are properly termed "air to liquid heat exchangers". In order to operate efficiently, they must be mounted in a stream of moving air at ambient temperature. It is not a good idea to mount the oil cooler behind the water radiator where it will receive only heated air. It 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

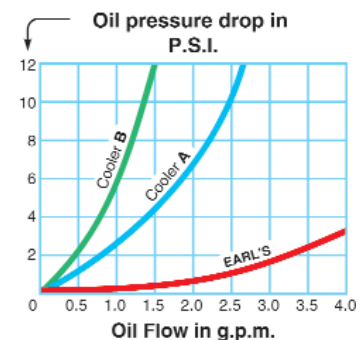
To obtain the heat rejection rate for a given Earl's Cooler, multiply the dissipation value from the chart by the number of tubes in the cooler.



Comparable heat rejection rates based on SAE 10 weight oil at 200° F. inlet temperature and 7 square inches of matrix area. Contact Earl's for specific comparison data.

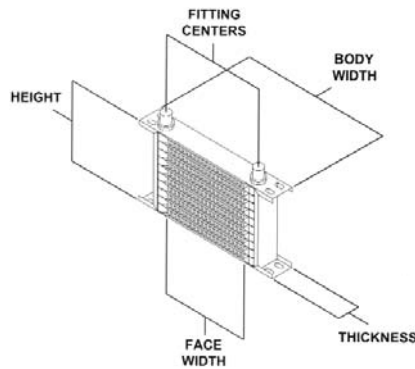


Comparable oil pressure drop across matrix with SAE 10 oil at 200° F. inlet temperature.



TEMP-A-CURE™ OIL COOLERS

COOLING SYSTEMS



TEMP-A-CURE™

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 # & HEIGHT	FITTING SIZE	GRAY-NARROW	BLACK-NARROW	GRAY-WIDE	BLACK-WIDE	GRAY-EXTRA WIDE	BLACK-EXTRA WIDE
7 Row Height 2"	Core Only	20700ERL	20700AERL	40700ERL	40700AERL	80700ERL	80700AERL
	-6 AN Male	20706ERL	20706AERL	40706ERL	40706AERL	80706ERL	80706AERL
	-8 AN Male	20708ERL	20708AERL	40708ERL	40708AERL	80708ERL	80708AERL
	-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	-	-	-	-	-
10 Row Height 3"	Core Only	21000ERL	21000AERL	41000ERL	41000AERL	81000ERL	81000AERL
	-6 AN Male	21006ERL	21006AERL	41006ERL	41006AERL	81006ERL	81006AERL
	-8 AN Male	21008ERL	21008AERL	41008ERL	41008AERL	81008ERL	81008AERL
	-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	-	-	-	-	-
13 Row Height 4"	Core Only	21300ERL	21300AERL	41300ERL	41300AERL	81300ERL	81300AERL
	-6 AN Male	21306ERL	21306AERL	41306ERL	41306AERL	81306ERL	81306AERL
	-8 AN Male	21308ERL	21308AERL	41308ERL	41308AERL	81308ERL	81308AERL
	-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*
16 Row Height 5"	Core Only	21600ERL	21600AERL	41600ERL	41600AERL	81600ERL	81600AERL
	-6 AN Male	21606ERL	21606AERL	41606ERL	41606AERL	81606ERL	81606AERL
	-8 AN Male	21608ERL	21608AERL	41608ERL	41608AERL	81608ERL	81608AERL
	-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*
19 Row Height 5-7/8"	Core Only	21900ERL	21900AERL	41900ERL	41900AERL	81900ERL	81900AERL
	-6 AN Male	21906ERL	21906AERL	41906ERL	41906AERL	81906ERL	81906AERL
	-8 AN Male	21908ERL	21908AERL	41908ERL	41908AERL	81908ERL	81908AERL
	-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*

TEMP-A-CURE OIL COOLERS

COOLING SYSTEMS

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
25 Row Height 7-3/4"	Core Only	22500ERL	22500AERL	42500ERL	42500AERL	82500ERL	82500AERL
	-6 AN Male	22506ERL	22506AERL	42506ERL	42506AERL	82506ERL	82506AERL
	-8 AN Male	22508ERL	22508AERL	42508ERL	42508AERL	82508ERL	82508AERL
	-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*
34 Row Height 10-1/2"	Core Only	23400ERL	23400AERL	43400ERL	43400AERL	83400ERL	83400AERL
	-6 AN Male	23406ERL	23406AERL	43406ERL	43406AERL	83406ERL	83406AERL
	-8 AN Male	23408ERL	23408AERL	43408ERL	43408AERL	83408ERL	83408AERL
	-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

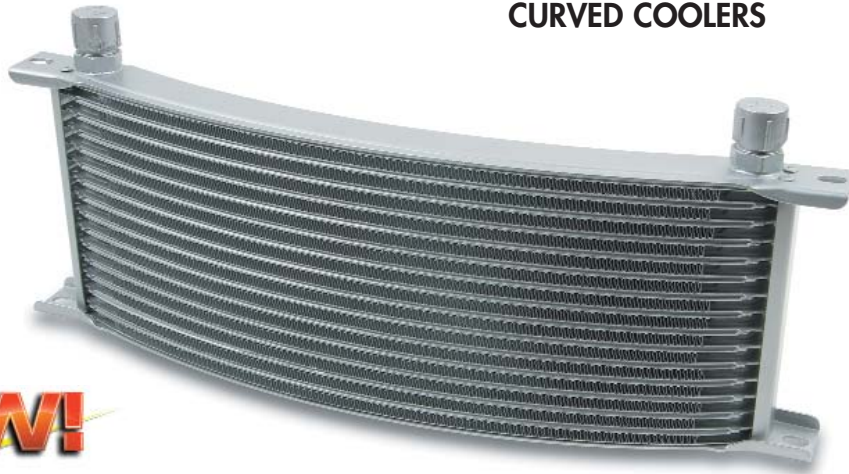
FACE WIDTH (BETWEEN TANKS)	4"	4"	9"	9"	11"	11"
FITTING CENTERS	5-1/8"	5-1/8"	9-3/4"	9-3/4"	12-1/8"	12-1/8"
BODY WIDTH	8-1/4"	8-1/4"	13"	13"	14"	14"
THICKNESS	2"	2"	2"	2"	2"	2"

ROW # & HEIGHT	FITTING SIZE	GRAY-NARROW	BLACK-NARROW	GRAY-WIDE	BLACK-WIDE	GRAY-EXTRA WIDE	BLACK-EXTRA WIDE
42 Row Height 13"	Core Only	24200ERL	24200AERL	44200ERL	44200AERL	84200ERL	84200AERL
	-6 AN Male	24206ERL	24206AERL	44206ERL	44206AERL	84206ERL	84206AERL
	-8 AN Male	24208ERL	24208AERL	44208ERL	44208AERL	84208ERL	84208AERL
	-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
50 Row Height 15-1/2"	Core Only	25000ERL	25000AERL	45000ERL	45000AERL	85000ERL	85000AERL
	-6 AN Male	25006ERL	25006AERL	45006ERL	45006AERL	85006ERL	85006AERL
	-8 AN Male	25008ERL	25008AERL	45008ERL	45008AERL	85008ERL	85008AERL
	-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
60 Row Height 18-1/2"	Core Only	26000ERL	26000AERL	46000ERL	46000AERL	86000ERL	86000AERL
	-6 AN Male	26006ERL	26006AERL	46006ERL	46006AERL	86006ERL	86006AERL
	-8 AN Male	26008ERL	26008AERL	46008ERL	46008AERL	86008ERL	86008AERL
	-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

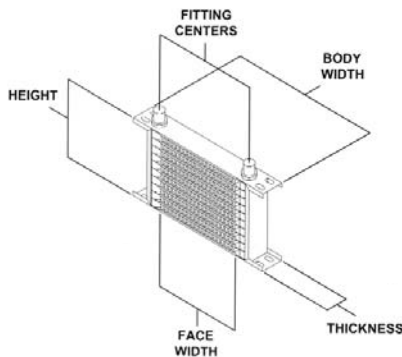
TEMP-A-CURE™ OIL COOLERS

COOLING SYSTEMS

TEMP-A-CURE™ CURVED COOLERS



NEW!



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 Height 3.050 nom	-6 AN Male	71006ERL	71006AERL	91006ERL	91006AERL
	-8 AN Male	71008ERL	71008AERL	91008ERL	91008AERL
13 Row Height 3.977 nom	-6 AN Male	71306ERL	71306AERL	91306ERL	91306AERL
	-8 AN Male	71308ERL	71308AERL	91308ERL	91308AERL
16 Row Height 4.919 nom	-6 AN Male	71606ERL	71606AERL	91606ERL	91606AERL
	-8 AN Male	71608ERL	71608AERL	91608ERL	91608AERL

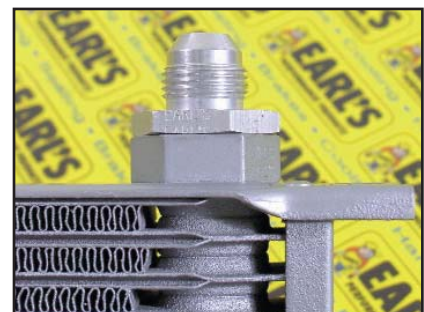
SUGGESTED TOOLS:

- 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 contact 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!**



OIL COOLER ADAPTERS

TEMP-A-CURE™ 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™ cooler. Manufactured from a custom aluminum extrusion and then ball burnished to a high luster, this bracket securely holds the TEMP-A-CURE™ cooler preventing vibration damage. The bracket is pre-drilled 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™ cooler will give a long service life.

NARROW COOLER PART NO.	WIDE COOLER PART NO.	EXTRA WIDE COOLER PART NO.	DESCRIPTION
1707ERL	1807ERL	1607ERL	Alum. Mounting Bracket Kit 7 Row Cooler
1710ERL	1810ERL	1610ERL	Alum. Mounting Bracket Kit 10 Row Cooler
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
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"
1910ERL	2.8"
1913ERL	3.8"
1916ERL	4.8"
1919ERL	5.6"
1925ERL	7.6"
1934ERL	10.3"
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
	TYPICAL APPLICATIONS* Most Ford, Chrysler, Toyota, Nissan & V-W vehicles with spin-on filter. Many other foreign makes.				
	1277ERL	13/16-16	1/2 NPT	2-3/4" & 3-3/8" (inner 69.2mm) (outer 85mm)	.139
	TYPICAL APPLICATIONS* Most General Motors and American Motors vehicles with spin-on filter				
	1377ERL	Bolt on (Chevy) 1/4-20 & 5/16 -18 Bolts	1/2 NPT	-	-
	TYPICAL APPLICATIONS* 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 APPLICATIONS* Some General Motors vehicles with spin-on filter.				
	1677ERL	Bolt-On (V.W.)	3/8 NPT	-	-
	TYPICAL APPLICATIONS* V-W Type 1 and 2, 3/8 NPT ports				

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

OIL FILTER BY-PASS ADAPTERS


	PART NO.	THREAD	PORT SIZE	O-RING O.D.	CROSS SECTION
	1777ERL	Bolt-On (VW)	1/4 NPT	-	-
	TYPICAL APPLICATIONS* VW Type 1 and 2, 1/4 NPT ports				
	1877ERL	22mm x 1.5	1/2 NPT	2-3/4" (69.2mm)	.139
	TYPICAL APPLICATIONS* Many Honda and Acura vehicles. Some Ford.				
	1977ERL	20mm x 1.5	1/2 NPT	2-3/4" & 3-3/8" (inner 69.2mm) (outer 85mm)	.139
	TYPICAL APPLICATIONS* Many Honda and Acura vehicles. Some Ford.				
	1118ERL	3/4-16	1/2 NPT	2-1/2 (65mm)	.210
	TYPICAL APPLICATIONS* Nissan, Toyota, Suzuki				
	1119ERL	20mm x 1.5	1/2 NPT	2-1/2 (65mm)	.210
	TYPICAL APPLICATIONS* Nissan, Subaru, Holden				
	1120ERL	13/16-16	1/2 NPT	2-1/2 (65mm)	.210
	TYPICAL APPLICATIONS* GM - small canister				
	1121ERL	22mm x 1.5	1/2 NPT	2-1/2 (65mm)	.210
	TYPICAL APPLICATIONS* 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.

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
USE FILTER: Fram filters PH-8 or HP-1 (or equivalent)			

	SINGLE PART NO.	CENTER THREAD	PORT SIZE
	2178ERL	3/4-16	1/2 NPT
	2177ERL	3/4-16	1/2 NPT
USE FILTER: Fram filters PH-8 or HP-1 (or equivalent)			
	2277ERL	3/4-16	1/2 NPT
USE FILTER: Fram filters PH-8 or HP-1 (or equivalent)			
	2477ERL	13/16-16	1/2 NPT
USE FILTER: Fram HP-2 (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






*See page 121 for proper inline assembly

OIL COOLER COMPONENTS

COOLING SYSTEMS




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 3.387	.139
	Typical Applications* Most Ford, Chrysler, Toyota, Nissan & V-W vehicles with spin-on filter. Many other foreign makes.				
	503ERL	13/16-16	10 AN Female O-Ring Seal	inner 2.887, outer 3.387	.139
	Typical Applications* Most General Motors and American Motors vehicles with spin-on filter.1				
	504ERL	13/16-16	10 AN Female O-Ring Seal	inner 2.887, outer 3.387, spacer 3.77	.139 .210
	Typical Applications* Most Chevy V8 with spin on filter. All V8 through 1989 and some through 1996. 1990 and later may have metric threads.				

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
	Typical Applications* Many Honda & Acura. Some Ford.				
	510ERL	3/4-16	3/8 NPT	2-3/4 (69.2mm)	.139
	Typical Applications* Most Ford, Chrysler, Toyota, Nissan & V-W vehicles with spin-on filters. Many other foreign makes.				
	511ERL	18mm x 1.5	3/8 NPT	2-3/4 (69.2mm)	.139
	Typical Applications* Some General Motors vehicles with spin on filter.				

COOLING SYSTEMS

SANDWICH FILTER ADAPTERS

	PART NO.	CENTER PORT SIZE	PORT SIZE	O-RING O.D.	O-RING CROSS SECTION
	512ERL	13/16-16	3/8 NPT	2-3/4 & 3-3/8 (inner 69.2mm) (outer 85mm)	.139
	Typical Applications* Most General Motors and American Motors vehicles with spin-on filter, except Chevy V8				
	513ERL	13/16-16 (Chevy)	3/8 NPT	3-3/8 (85mm)	.139
	Typical Applications* Most General Motors and American Motors vehicles with spin-on filter, except Chevy V8				
	514ERL	20mm x 1.5	3/8 NPT	2-3/4 & 3-3/8 (inner 69.2mm) (outer 85mm)	.139
	Typical Applications* Many Honda and Acura vehicles. Some Ford.				
	515ERL	18mm x 1.5	3/8 NPT	2-1/2 (65mm)	.210
	Typical Applications* GM				
	516ERL	3/4-16	3/8 NPT	2-1/2 (65mm)	.210
	Typical Applications* Toyota, VW, Suzuki, Nissan				
	517ERL	20mm x 1.5	3/8 NPT	2-1/2 (65mm)	.210
	Typical Applications* Honda, Acura, Nissan, Mazda, Subaru, Hyundai, KIA, Holden				
	518ERL	13/16-16	3/8 NPT	2-1/2 (65mm)	.210
	Typical Applications* GM				
	519ERL	22mm x 1.5	3/8 NPT	2-1/2 (65mm)	.210
	Typical Applications* Honda, Acura, some Ford				

HYDRAULIC SYSTEMS

Standard automotive flexible brake hoses are manufactured from synthetic rubber and reinforced with multiple layers of fabric braid. They were designed and developed for use with drum brake systems. When disc brakes were developed for racing cars, line pressure requirements increased considerably. With the larger and heavier cars, like Ford's GT-40s, enough of the available brake pedal travel was used up in expanding the flexible brake hoses so that there was insufficient pedal travel left for safe braking.



In the mid-1960s, Earl's pioneered the use of armored flex hose of extruded teflon to solve this problem. The stiffness of the teflon liner combined with the tightly woven high tensile stainless steel outer braid solved the pedal travel problem. By eliminating the line swell it also dramatically increased the firmness and feel of the brake pedal which allowed the drivers to modulate the brakes more efficiently. Improved abrasion resistance and increased temperature capacity are secondary advantages.

Since brake actuation produces high pressure with very little fluid displacement, we recommend -2 & -3 SPEED-FLEX™ for brake systems. Clutch actuation, on the other hand, requires moderate pressure but considerable displacement of fluid. For hydraulic clutch systems we recommend the use of -4 SPEED-FLEX™.

FUEL & LUBRICATION SYSTEMS

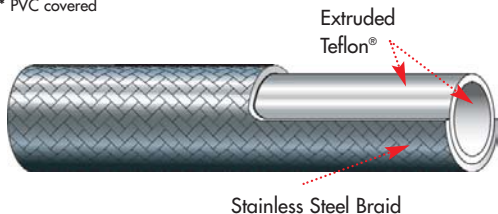
In recent years various fuel manufacturers have added any number of new unpublished additives to their blends rendering some of them incompatible with synthetic rubber lined hose. Earl's Speed-Flex™ Teflon™ lined stainless braided hose is impervious to any automotive fuel blend known to us and may be the best choice for use with modern racing gasolines. All SPEED-FLEX™ hoses are compatible with gasoline, hydrocarbon fuels, alcohols, nitro-methane, mineral and synthetic lubricants, and high density fuel additives. Size 6 and 8 are carbon lined to dissipate static electricity.

Some caution is necessary in the selection of armored Teflon™ hose. The teflon liner is manufactured in two wall thicknesses, commercial (.030") and aircraft specification (.040"), Earl's uses the thicker and stronger wall. There are also hoses in the marketplace manufactured in such a manner that the stainless braid is loose on the teflon liner. These hoses offer good pressure capacity but limited expansion resistance. **Earl's SPEED-FLEX™ hose is the standard of the industry.**

Hose Size AN	Hose I.D. (in)	Hose I.D. (mm)	Hose O.D. (in)	Hose O.D. (mm)	Max. Op. Press. (PSI)*	Max. Op. Press. (Bar)*	Min. Bend Radius (in)	Min. Bend Radius (mm)	Bulk P/N	3ft./0.9M P/N	6ft./1.8M P/N	10ft./3.0M P/N	20ft./6.1M P/N	33ft./10.1M P/N
-2	0.08	2.03	0.2	5.08	2000	137.86	1.5	38.1	600002ERL	603002ERL	606002ERL	610002ERL	620002ERL	633002ERL
-3	0.13	3.30	0.25	6.35	2000	137.86	1.5	38.1	600003ERL	603003ERL	606003ERL	610003ERL	620003ERL	633003ERL
-3**clear	0.13	3.30	0.29	7.73	2000	137.86	1.5	38.1	6000031ERL	6030031ERL	6060031ERL	6100031ERL	6200031ERL	6330031ERL
-3**smoke	0.13	3.30	0.29	7.73	2000	137.86	1.5	38.1	6000032ERL	6030032ERL	6060032ERL	6100032ERL	6200032ERL	6330032ERL
-4	0.19	4.83	0.44	11.18	2000	137.86	1.5	38.1	600004ERL	603004ERL	606004ERL	610004ERL	620004ERL	633004ERL
-6*	0.34	8.64	0.55	13.97	1500	103.40	4	101.6	600006ERL	603006ERL	606006ERL	610006ERL	620006ERL	633006ERL
-8*	0.56	14.22	0.65	16.51	1000	68.93	5	127	600008ERL	603008ERL	606008ERL	610008ERL	620008ERL	633008ERL

* Carbon lined for static dissipation.

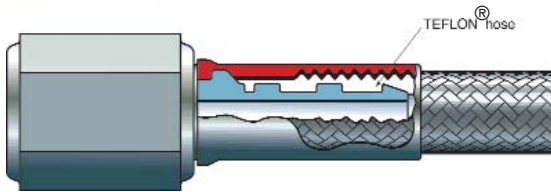
** PVC covered



When considering the replacement of stock rubber brake hoses with stainless braid-protected hose of extruded Teflon® you should consider the following facts:

Speed-Flex hose is intended for use with Speed-Seal hose ends only. No other Earl's hose end is intended for use with Speed-Flex hose. The use of other manufacturers hose ends is not recommended. The use of stainless braid protected teflon brake hose assemblies will result in a firmer brake pedal, improved brake pedal "feel" and better brake modulation. These hoses will not necessarily provide longer hose life or any other advantage. We have independent test lab reports on file showing that prototype assemblies exceeded D.O.T. recommendations in all categories. The only continuing test program however, is a 4000 P.S.I. hydrostatic pressure test of every assembly that we make. We do not claim that any individual hose assembly is certifiable to D.O.T. standards and we therefore must advise you that they are sold to be used on off-road applications only. We make no claim of useability or suitability for highway or road use. Teflon brake hoses must be installed by an experienced professional mechanic. After installation each hose must be both clean and free flowing. There must be no possibility that the installed hose assemblies can stretch, crimp or kink under any conditions of wheel travel and steering angle. As with any hose installation, periodic inspection of hose condition is essential.

BRAKE SYSTEMS



CONSTRUCTION: These factory assembled hoses are made from the same SPEED-FLEX™ stainless steel braid protected hose of extruded teflon that is the world wide standard of the racing industry for flexible brake, clutch and instrument hoses. Hoses are assembled with Earl's SPEED-FLEX™ crimp and/or swaged permanently installed hose ends. Each hose is pressure tested to 4,000 psi.

MAXIMUM OPERATING PRESSURE: 2,000 psi.












APPLICATION:

- Medium pressure hydraulic systems
- Flexible brake and clutch hoses
- Instrument hoses (most racing sanctioning bodies forbid the use of unarmored hoses in the cockpit area)
- Available in many configurations in lengths from 6" to 72"

Refer to the adapter section for adapter fittings, banjo bolts and plumbing accessories section for crush washers for use with these hoses.

*Teflon is a Du Pont trademark.

TEFLON® LINED HYDRAULIC MEDIUM PRESSURE HOSE ASSEMBLIES - OFF-ROAD/RACING

 <p>630101_ _ERL -3 AN female swivel both ends size 3 hose</p>	 <p>See adapter section for banjo bolts 630202_ _ERL -10mm/3/8" banjo** (.425 thick) both ends size 3 hose</p>	 <p>See adapter section for banjo bolts 631616_ _ERL 7/16" banjo to 7/16" banjo (.425 thick) size 3 hose</p>
 <p>See adapter section for banjo bolts 630102_ _ERL -3 AN female swivel to 10mm/3/8" Banjo** (.425 thick) size 3 hose</p>	 <p>630405_ _ERL 3/16" tube inverted flare (3/8-24) female to 3/16" inverted flare (3/8-24) male size 3 hose</p>	 <p>641919_ _ERL -4 AN female swivel both ends size 4 hose</p>
 <p>See adapter section for banjo bolts 630116_ _ERL -3 AN female swivel to 7/16" Banjo (.425 thick) size 3 hose</p>	 <p>630707_ _ERL 10mm x 1 female to 10mm x 1 female size 3 hose</p>	 <p>641515_ _ERL 1/8" NPT male both ends size 4 hose</p>
 <p>630117_ _ERL -3 AN female swivel straight to -3 female swivel 90° size 3 hose</p>	 <p>630710_ _ERL 10mm x 1 female to 10mm x male size 3 hose</p>	<p>**For use with 10mm or 3/8-24 UNF Banjo Bolts.</p> <p>_ERL = Hose length in inches</p>



When considering the replacement of stock rubber brake hoses with stainless braid-protected hose of extruded teflon you should consider the following facts:

The use of stainless braid protected teflon brake hose assemblies will result in a firmer brake pedal, improved brake pedal "feel" and better brake modulation. These hoses will not necessarily provide longer hose life or any other advantage. We have independent test lab reports on file showing that prototype assemblies exceeded D.O.T. recommendations in all categories. The only continuing test program however, is a 4000 P.S.I. hydrostatic pressure test of every assembly that we make. We do not claim that any individual hose assembly is certifiable to D.O.T. standards and we therefore must advise you that they are sold to be used on off-road applications only. We make no claim of useability or suitability for highway or road use. Teflon brake hoses must be installed by an experienced professional mechanic. After installation each hose must be both clean and free flowing. There must be no possibility that the installed hose assemblies can stretch, crimp or kink under any conditions of wheel travel and steering angle. As with any hose installation, periodic inspection of hose condition is essential.

SPEED-SEAL™ HOSE ENDS

SPEED-SEAL™ hose ends are available in stainless steel, steel and anodized aluminum, in both low profile and bent tube construction and in adjustable and non-adjustable configurations. For use with SPEED-FLEX™ Smooth Bore Teflon™ Hose



HOSE SIZE	NUT SIZE	STAINLESS PART #
-2	2	6001902ERL
-2	3	6001923ERL



HOSE SIZE	NUT SIZE	STAINLESS PART #
-2	2	6045902ERL
-2	3	6045923ERL



HOSE SIZE	NUT SIZE	STAINLESS PART #
-2	2	6090902ERL
-2	3	6090923ERL

STRAIGHT FITTINGS



HOSE SIZE	NUT SIZE	ALUMINUM PART #
-3	3	600133ERL
-3	4	-
-4	4	600134ERL
-6	6	600136ERL
-8	8	600138ERL



HOSE SIZE	NUT SIZE	STEEL PART #
-3	3	600103ERL
-3	4	600143ERL
-4	4	600104ERL
-6	6	600106ERL
-8	8	-



HOSE SIZE	NUT SIZE	STAINLESS PART #
-3	3	600193ERL
-3	4	-
-4	4	600194ERL
-6	6	600196ERL
-8	8	-

NON-ADJUSTABLE LOW PROFILE 45°



HOSE SIZE	NUT SIZE	STEEL PART #
-3	3	604403ERL
-4	4	604404ERL



HOSE SIZE	NUT SIZE	STAINLESS PART #
-3	3	604493ERL
-4	4	604494ERL

ADJUSTABLE LOW PROFILE 45°



HOSE SIZE	NUT SIZE	ALUMINUM PART #
-3	3	604533ERL
-4	4	604534ERL
-6	6	604536ERL
-8	8	604538ERL



HOSE SIZE	NUT SIZE	STEEL PART #
-3	3	604503ERL
-4	4	604504ERL
-6	6	604506ERL
-8	8	-



HOSE SIZE	NUT SIZE	STAINLESS PART #
-3	3	604593ERL
-4	4	604594ERL
-6	6	604596ERL
-8	8	-

NON-ADJUSTABLE TUBE 45°



HOSE SIZE	NUT SIZE	ALUMINUM PART #
-3	3	604633ERL
-4	4	604634ERL



HOSE SIZE	NUT SIZE	STEEL PART #
-3	3	604603ERL
-4	4	604604ERL



HOSE SIZE	NUT SIZE	STAINLESS PART #
-3	3	604693ERL
-4	4	604694ERL

SPEED-SEAL™ HOSE ENDS

For use with SPEED-FLEX™ Smooth Bore Teflon™ Hose

ADJUSTABLE TUBE 45°



HOSE SIZE	NUT SIZE	ALUMINUM	STEEL	STAINLESS
		PART #	PART #	PART #
-3	3	604733ERL	604703ERL	604793ERL
-4	4	604734ERL	604704ERL	604794ERL
-6	6	604736ERL	604706ERL	604796ERL
-8	8	604738ERL	-	-

NON-ADJUSTABLE LOW PROFILE 90°



HOSE SIZE	NUT SIZE	STEEL	STAINLESS
		PART #	PART #
-3	3	608903ERL	608993ERL
-4	4	608904ERL	608994ERL

ADJUSTABLE LOW PROFILE 90°



HOSE SIZE	NUT SIZE	ALUMINUM	STEEL	STAINLESS
		PART #	PART #	PART #
-3	3	609033ERL	609003ERL	609093ERL
-4	4	609034ERL	609004ERL	609094ERL
-6	6	609036ERL	609006ERL	609096ERL
-8	8	609038ERL	-	-

NON-ADJUSTABLE TUBE 90°



HOSE SIZE	NUT SIZE	ALUMINUM	STEEL	STAINLESS
		PART #	PART #	PART #
-3	3	609133ERL	609103ERL	609193ERL
-4	4	609134ERL	609104ERL	609194ERL

ADJUSTABLE TUBE 90°



HOSE SIZE	NUT SIZE	ALUMINUM	STEEL	STAINLESS
		PART #	PART #	PART #
-3	3	609233ERL	609203ERL	609293ERL
-4	4	609234ERL	609204ERL	609294ERL
-6	6	609236ERL	609206ERL	609296ERL
-8	8	609238ERL	-	-

SPEED SEAL™ HOSE ENDS

For use with SPEED-FLEX™ Smooth Bore Teflon™ Hose

ADJUSTABLE TUBE 120°



HOSE SIZE	NUT SIZE	ALUMINUM	STEEL	STAINLESS
		PART #	PART #	PART #
-3	3	612133ERL	612103ERL	612193ERL
-4	4	612134ERL	612104ERL	612194ERL
-6	6	612136ERL	612106ERL	612196ERL
-8	8	612138ERL	-	-

ADJUSTABLE TUBE 180°



HOSE SIZE	NUT SIZE	ALUMINUM	STEEL	STAINLESS
		PART #	PART #	PART #
-3	3	618133ERL	618103ERL	618193ERL
-4	4	618134ERL	618104ERL	618194ERL
-6	6	618136ERL	618106ERL	618196ERL
-8	8	618138ERL	-	-

ALUMINUM SPEED-SEAL: EARL'S ALUMINUM SPEED-SEAL HOSE ENDS ARE NOT RECOMMENDED FOR USE ON AUTOMOTIVE BRAKE SYSTEMS. AVOIDANCE OF OVER TORQUING IS ESPECIALLY IMPORTANT WITH ALUMINUM SOCKETS.



TO REDUCE brake line swell under extreme pressure and consequent loss of pedal travel and firmness, stainless braid protected hose of extruded teflon® (Earl's SPEED-FLEX) is used throughout the racing industry as flexible brake and clutch hoses. Earl's proven record of reliability and unmatched range of configurations has made SPEED-SEAL reusable hose ends the choice of professional race teams world wide. Since brake system hose ends are often subject to fatigue from extreme vibration, Earl's adjustable SPEED-SEAL -3 forged hose ends feature an 80% greater wall thickness than those of our competitors. In recent years various fuel manufacturers have added any number of new unpublished additives to their blends rendering some of them incompatible with synthetic rubber lined hose. Earl's Speed-Flex teflon lined stainless braided hose is impervious to any automotive fuel blend known to us and may be the best choice for use with modern racing gasolines. All SPEED-FLEX hoses are compatible with gasoline,

hydrocarbon fuels, alcohols, nitro-methane, mineral and synthetic lubricants, and high density fuel additives. Not recommended for use with any other manufacturers hose. (Not for use with any other Earl's hose.) Some caution is necessary in the selection of armored teflon hose. The teflon® liner is manufactured in two wall thicknesses, commercial (.030") and aircraft specifications (.040"), Earl's uses the thicker and stronger wall. There are also hoses in the marketplace manufactured in such a manner that the stainless braid is loose on the teflon liner. These hoses offer good pressure capacity but limited expansion resistance.

SPEED-SEAL hose ends are available in stainless steel, steel and anodized aluminum, in both low profile and bent tube construction and in adjustable and non-adjustable configurations.



The high performance plumbing industry offers two wall thicknesses in stainless braid protected extruded teflon hose—Earl's utilizes the thicker and stronger .040 wall thickness. This means that Earl's SPEED-SEAL hose ends are not compatible with thin walled hose from other sources.

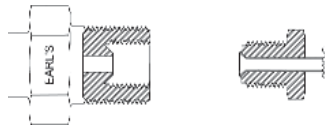
In order to adjust the radial positioning of Earl's adjustable SPEED-SEAL hose ends, first loosen the swivel nut approximately 1/2 turn. Adjust the hose end and then retighten the swivel nut. Do not attempt to adjust the hose end without loosening the swivel nut.

*Teflon is a Du Pont trademark.

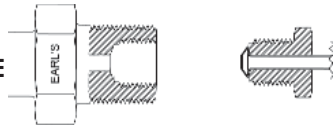
SPEED-SEAL™ HOSE ENDS

BRAKE SYSTEMS












CONVEX INVERTED FLARE



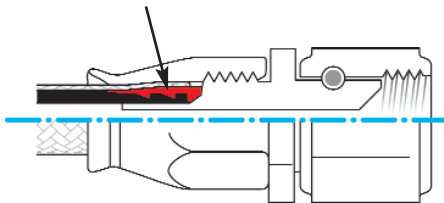
CONCAVE



For use with SPEED-FLEX™ Smooth Bore Teflon™ Hose

	PART NO.	HOSE SIZE	THREAD SIZE		PKG NO.	HOSE SIZE	THREAD SIZE
	640103ERL	3	Male 3/8-24 I.F.		640703ERL	3	Female 10mm x1.25 Convex (IF)
	640203ERL	3	-3 AN Male Bulkhead		640803ERL	3	Male 10mm x1 Long Concave
	640303ERL	3	Male 10mm x1 Convex (IF)		640903ERL	3	Female 10mm x1 Convex (Honda)
	640403ERL	3	Male 10mm x1.25 Concave		641003ERL	3	Female 10mm x1 Convex (Toyota)
	640503ERL	3	Female 3/8-24 Convex (IF)		641103ERL	3	Female 10mm x1 Concave
	640603ERL	3	Female 10mm x1 Convex (IF)				

REPLACEMENT OLIVES FOR SPEED-SEAL™ SMOOTH BORE TEFLON™ HOSE ENDS



NOTE: Olives for .040 wall hose only



Size	Brass Part No.	Alum. Part No.	Stainless Part No.
-2	699020ERL	—	699029ERL
-3	699030ERL	699033ERL	699039ERL
-4	699040ERL	699043ERL	699049ERL
-6	699060ERL	699063ERL	699069ERL
-8	-	699083ERL	-

SPEED-SEAL™ HOSE ENDS

BANJOS

STRAIGHT NON-ADJUSTABLE SHORT



HOSE SIZE	BANJO BOLT DIA.	.425" ALUMINUM			.425" STEEL			.425" STAINLESS		
		PART #			PART #			PART #		
-3	3/8" or 10mm	600333ERL	-	-	600303ERL	600343ERL	600393ERL	-	-	-
-3	7/16"	-	-	-	600341ERL	-	-	-	-	-
-4	3/8" or 10mm	-	-	-	600304ERL	-	-	-	-	-
-4	7/16"	-	-	-	-	-	-	-	-	-

STRAIGHT NON-ADJUSTABLE LONG



HOSE SIZE	BANJO BOLT DIA.	.425" ALUMINUM			.425" STEEL			.425" STAINLESS		
		PART #			PART #			PART #		
-3	3/8" or 10mm	600733ERL	-	-	600703ERL	600793ERL	-	-	-	-
-3	7/16"	-	-	-	600743ERL	-	-	-	-	-

STRAIGHT ADJUSTABLE LONG



HOSE SIZE	BANJO BOLT DIA.	.425" ALUMINUM			.425" STEEL			.425" STAINLESS		
		PART #			PART #			PART #		
-3	3/8" or 10mm	600433ERL	-	-	600403ERL	600493ERL	-	-	-	-

20° BENT NON-ADJUSTABLE LONG



HOSE SIZE	BANJO BOLT DIA.	.425" ALUMINUM			.425" STEEL			.425" STAINLESS		
		PART #			PART #			PART #		
-3	3/8" or 10mm	600933ERL	-	-	600903ERL	600993ERL	-	-	-	-
-3	7/16"	-	-	-	600943ERL	-	-	-	-	-

30° BENT NON-ADJUSTABLE LONG



HOSE SIZE	BANJO BOLT DIA.	.425" ALUMINUM			.425" STEEL			.425" STAINLESS		
		PART #			PART #			PART #		
-3	3/8" or 10mm	600833ERL	-	-	600803ERL	600893ERL	-	-	-	-
-3	7/16"	-	-	-	600843ERL	-	-	-	-	-

BANJOS

30° BENT ADJUSTABLE LONG

HOSE SIZE	BANJO BOLT DIA.	.425" ALUMINUM PART #	.425" STEEL PART #	.425" STAINLESS PART #
-3	3/8" or 10mm	600533ERL	600503ERL	600593ERL

45° BENT NON-ADJUSTABLE LONG

HOSE SIZE	BANJO BOLT DIA.	.425" ALUMINUM PART #	.425" STEEL PART #	.425" STAINLESS PART #
-3	3/8" or 10mm	601633ERL	601603ERL	601693ERL

90° BENT NON-ADJUSTABLE LONG

HOSE SIZE	BANJO BOLT DIA.	.425" ALUMINUM PART #	.425" STEEL PART #	.425" STAINLESS PART #
-3	3/8" or 10mm	601533ERL	601503ERL	601593ERL

20° BENT SIDE BENT NON-ADJUSTABLE

HOSE SIZE	BANJO BOLT DIA.	.425" ALUMINUM PART #	.425" STEEL PART #	.425" STAINLESS PART #
-3	3/8" or 10mm	601133ERL	601103ERL	601193ERL

20° BENT SIDE BENT ADJUSTABLE

HOSE SIZE	BANJO BOLT DIA.	.425" ALUMINUM PART #	.425" STEEL PART #	.425" STAINLESS PART #
-3	3/8" or 10mm	601233ERL	601203ERL	601293ERL

SPEED-SEAL™ HOSE ENDS

BANJOS AND TEES

**8MM
STRAIGHT
NON-ADJ.
LONG**



PART NO.	HOSE SIZE	HEIGHT/MATERIAL	BANJO BOLT DIAMETER
601703ERL	-3	8mm/Steel	3/8" or 10mm

**8MM
30° BENT
NON-ADJ.
LONG**



PART NO.	HOSE SIZE	HEIGHT/MATERIAL	BANJO BOLT DIAMETER
601803ERL	-3	8mm/Steel	3/8" or 10mm



HOSE SIZE	MOUNT BOLT DIA.	ALUMINUM	STEEL	STAINLESS
-3	#10 or 3/16"	6453533ERL	6453503ERL	6453593ERL



HOSE SIZE	MOUNT BOLT DIA.	ALUMINUM	STEEL	STAINLESS
		PART #	PART #	PART #
-3	3/8" or 10mm	6453233ERL	6453203ERL	6453293ERL



HOSE SIZE	MOUNT BOLT DIA.	ALUMINUM	STEEL	STAINLESS
		PART #	PART #	PART #
-3	3/8" or 10mm	6453033ERL	6453003ERL	6453093ERL

NOTE: As listed Earl's offers many configurations of adjustable and non-adjustable Banjo hose ends in both the U.S. .425" and the U.K. and European 8mm heights. It is important to use the correct Banjo bolts for each height.

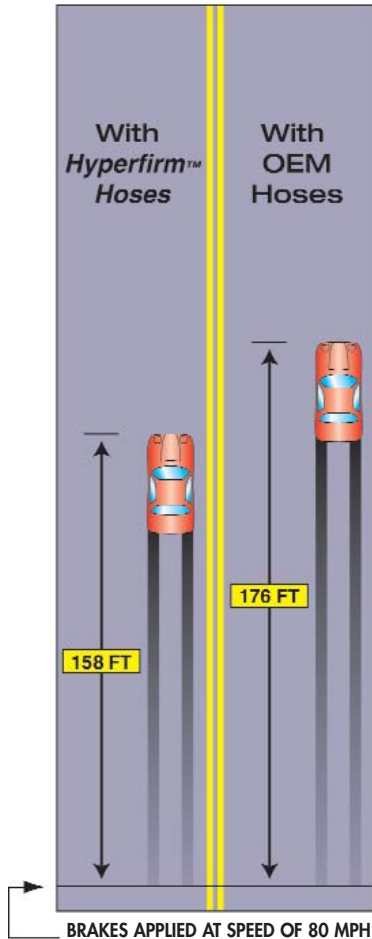


Aluminum SPEED-SEAL:
Earl's aluminum SPEED-SEAL hose ends are not recommended for use on automotive brake systems. Avoidance of over torquing is especially important with aluminum sockets.

HYPERFIRM™ BRAKE LINE KITS

BRAKE SYSTEMS

AVERAGE STOPPING DISTANCE



This illustration represents the results of our initial comparison testing. The vehicle used was a 1996 Toyota Supra, equipped with anti-lock brakes. Professional drivers were used on a closed course.



HYPERFIRM® brake hoses not only meet all D.O.T., T.U.V and J.W.A. standards and specifications for flexible brake hoses, including SAE J 1401 (Jan 81) and FMVSS 106-74-38 FR31302 1973. They are individually inspected and tested before shipment. Batch testing, the industry standard, is not acceptable at Earl's. Each individual hose assembly is pressure tested at 4000 psi after manufacture.

Serious race car owners have used flexible brake hoses of extruded Teflon™ for decades. They are protected against abrasion and swelling by a sheath of tightly braided stainless steel wire. The resistance to "line swell" both improves the firmness or "feel" of the brake pedal and reduces the time required for effective pressure to reach the brakes and begin to slow the car.

Equally important in street vehicles, improvement in pedal firmness and feel make brake modulation easier and more efficient—right up to the time that the anti-lock brake system is actuated. The familiar brake pedal "thump" of anti-lock brake systems is significantly reduced. The decreased system reaction time reduces stopping distance in emergency situations—as much as 18 feet at 80 miles per hour.

The Teflon™/stainless steel brake hoses have not been available for legal use on street driven vehicles until recently. All safety-related components on street vehicles must meet stringent requirements and tests set forth by the National Highway Traffic Safety Administration of the U.S. Department of Transportation. The most demanding test for brake hoses is the "whip test," designed to simulate the continuous flexing of the hoses during suspension and steering movement. Until Earl's developed and patented their exclusive "whip dampener," Teflon™/stainless steel hoses were not able to pass this extremely rigorous test.

The D.O.T. does not "approve" any products. It calls out specifications and test procedures that the components must meet. The manufacturers then self-certify that they are in compliance. The D.O.T. may randomly require that components be tested by an independent certified laboratory selected by the D.O.T.

CERTAIN HYPER FIRM BRAKE HOSE ASSEMBLIES ARE COVERED BY US PATENT NO. 5,908,090.

HYPERFIRM™ BRAKE LINE KITS

BRAKE SYSTEMS

ACURA

Integra	94	All	28J020ERL
Integra	90-93	All	28J010ERL
CL 2.2/2.3/3.2	97-99	All	28L250ERL
CL 3.0	97	All	28L300ERL
NSX	91-96	All	28J030ERL

AUDI

4000S	83-85	4 whl Disc, exc. Quattro	28M050ERL
Coupe	86-87	4 whl Disc	28M050ERL
80, exc. Quattro	88-89	4 whl Disc	28M070ERL
90, exc. Quattro	88-89	4 whl Disc	28M070ERL

BUICK

Century, Regal,	77	All	28A100ERL
Skylark	79		28A110ERL
Skylark	77-78		28A100ERL
Skylark/Special,	69-72	4w drum	28A470ERL
Skylark/Special,	69-72	front disc	28A480ERL

CHEVROLET

Camaro	98-99	4 Wheel Disc	28A460ERL
Camaro	93-97	Front discs	28A020ERL
Camaro	93-97	4-wh. discs	28A030ERL
Camaro	85-92	Perform. Pkg. 4-wh. discs	28A190ERL
Camaro	84-92	Front discs	28A180ERL
Camaro	85-88	4-wh. discs, Excl Hi Perf.	28A520ERL
Camaro	84	4-wh. discs	28A510ERL
Camaro	82-83	Front discs	28A090ERL
Camaro	79-81	Front discs	28A110ERL
Camaro	77-78	Front discs, excl Hi Perf.	28A100ERL
Camaro	74-76	Front discs	28A170ERL
Camaro	72-73	Front discs	28A200ERL
Camaro	70-71	Front discs	28A210ERL
Camaro	69	All drums	28A150ERL
Camaro	69	Front discs	28A160ERL
Camaro	68	Front discs	28A220ERL
Camaro	68	4 Wheel Drum	28A450ERL
Camaro	67	All drums	28A120ERL
Camaro	67	Front discs	28A130ERL
Chevelle	68-72	4w drum	28A470ERL
Chevelle	68-72	front disc	28A480ERL
Corvette	97-98	All	28A040ERL
Corvette,	93-96	All	28A010ERL
Corvette	88-92	All	28A050ERL
Corvette	84-87	All	28A080ERL
Corvette	84-87	All	28A080ERL
Corvette	63-66	exc HD Susp	28A070ERL
Corvette	53-62	All	28A060ERL
El Camino	77	All	28A100ERL
Impala SS	94-96	4-wh. discs	28A140ERL
Malibu	77	All	28A100ERL
Monte Carlo	77	All	28A100ERL
Monte Carlo	70-72	All	28A480ERL
Nova	77-78	All	28A100ERL
Nova	79	All	28A110ERL
Nova	70-72	4 Wheel Drums	28A150ERL
Nova	70-72	Front Discs	28A160ERL

CHEVROLET & GMC TRUCKS

Pick up C-1500	88-98	4x2 excl Diesel	28A230ERL
Pick up C-10/R-10	81-87	4x2, 4900-560 GVW, excl Diesel	28A240ERL
Pick up C-10/R-10	81-87	4x2, Diesel and HD opt.	28A250ERL
Pick up C-10	79-80	4x2, all;	28A250ERL
Pick up C-2500	92-99	4x2, 7200 GVW	28A390ERL
Pick up C-2500	89-92	4x2, 8600 GVW	28A390ERL
Pick up C-20/R-20	81, 83-88	4x2, up to 7200 GVW	28A250ERL
Pick up C-3500	90-91	4x2, w/single rear wheels,	28A390ERL
Pick up C-3500	88-89	4x2, all	28A390ERL
Pick up C-30	81-86	4x2, all;	28A400ERL
Pick up C-30	74-80	4x2, HD opt., 9000-10000 GVW	28A400ERL
Pick up K-1500	88-98	4x4;	28A260ERL
Pick up K-10/V10	81-87	4x4;	28A270ERL
Pick up K-10	79-80	4x4, up to 6800GVW	28A280ERL
Pick up K-2500	88-98	4x4, excl. 89-98 w/8600 GVW	28A260ERL
Pick up K-2500	89-94	4x4, w/8600 GVW	28A320ERL
Pick up K-20	81-87	4x4, 8600GVW, excl. Diesel	28A310ERL
Pick up K-20	81-86	4x4, 6600-6800 GVW,	28A270ERL
Pick up K-20	79-80	4x4, up to 6800GVW	28A280ERL
Pick up K-3500	90-94	4x4, w/single rear wheels	28A320ERL
Pick up K-3500	88-89	4x4, all	28A320ERL
Pick up R-30	87-91	4x2, all	28A400ERL
Pick up S-10	94	excl High Wide Pkg	28A340ERL
Pick up S-10	92-93	4x2	28A340ERL
Pick up S-10	91	4x2, w/Interim Design Change	28A330ERL
Pick up S-10	82-91	4x2, Before Design Change	28A290ERL
Tahoe C-1500	95-98	4x2	28A230ERL
Blazer C-10	79-82	4x2, all	28A250ERL
Blazer K-10/V10	81-91	4x4	28A270ERL
Blazer K-10	79-80	4x4 up to 6800GVW	28A280ERL
Blazer S-10	Late 91-93	4x2, w/Interim Design Change	28A340ERL
Blazer S-10	82-91	4x2, Before Design Change	28A290ERL
Silverado	99-03	2WD 3 line kit	28A660ERL
Suburban	99-03	2WD 5 line kit	28A640ERL
Suburban/Yukon XL	00-03	2WD	28A650ERL
Suburban C-1500	92-99	4x2, excl. Diesel	28A230ERL
Suburban C-10/R-10	79-91	4x2, all;	28A250ERL
Suburban C-2500	92	4x2, 8600 GVW;	28A390ERL
Suburban C-20	81, 83-88	4x2, up to 7200 GVW	28A250ERL
Suburban K-1500	94	4x4, Diesel	28A320ERL
Suburban K-1500	92-94	4x4, excl. 94 Sub w/Diesel	28A260ERL
Suburban K-10/V-10	81-91	4x4	28A270ERL
Suburban K-10	79-80	4x4, up to 6800GVW	28A280ERL
Suburban K-2500	92-94	4x4, 8600GVW	28A320ERL
Suburban V-20	88-91	4x4, all	28A310ERL
Suburban V-20	87	4x4, 8600 GVW	28A310ERL
Suburban K-20	82-86	4x4, all	28A310ERL
Suburban K-20	81	4x4, 6800 GVW	28A270ERL
Suburban K-20	81	4x4, above 7300 GVW	28A310ERL
Suburban K-20	79-80	4x4, up to 6800 GVW	28A280ERL
Astrovan	90-99	4x4	28A580ERL
Astrovan	00-01	2WD	28A530ERL
Astrovan	00-01	AWD	28A540ERL

CHRYSLER

Sebring	95-98	rear drum, exc. 98 Conv.	28K070ERL
Sebring, exc. Conv.	95-98	rear disc	28K080ERL
Sebring, Conv.	95-97	rear drum	28K070ERL
Sebring, Conv.	95-96	rear disc	28K080ERL

HYPERFIRM™ BRAKE LINE KITS

BRAKE SYSTEMS

DODGE & DODGE TRUCKS

D150 P/U	89-93	4x2;	28H040ERL
D100/150 P/U	82-88	4x2;	28H030ERL
D250 P/U	89-93	4x2;	28H040ERL
D250 P/U	84-88	4x2;	28H030ERL
D350 P/U	89-93	4x2	28H040ERL
D350 P/U	82-88	4x2	28H030ERL
AD 150 Ramcharger	90-93	4x2;	28H040ERL
AD 150 Ramcharger	84-89	4x2;	28H030ERL
AW 150 Ramcharger	89-93	4x4;	28H110ERL
AW 150 Ramcharger	85-88	4x4;	28H100ERL
AW 150 Ramcharger	82-84	4x4;	28H090ERL
AW100/150 Ramcharger	76-81	4x4;	28H080ERL
W150 P/U	89-93	4x4;	28H110ERL
W150 P/U	85-88	4x4;	28H100ERL
W150 P/U	82-84	4x4;	28H090ERL
W100/150 P/U	76-81	4x4;	28H080ERL
W250 P/U	89-93	4x4, excl 4500 Front Axle	28H110ERL
W250 P/U	85-88	4x4, excl 4500 Front Axle	28H100ERL
W250 P/U	82-84	4x4, excl 4500 Front Axle	28H090ERL
W250 P/U	76-81	4x4, excl 4500 Front Axle	28H080ERL
W350 P/U	90	4x4, excl 4500 Front Axle	28H110ERL
W350 P/U	84-88	4x4, excl 4500 Front Axle	28H100ERL
W350 P/U	82-83	4x4, excl 4500 Front Axle	28H090ERL
Avenger	95-98	rear drum	28K070ERL
Avenger	95-98	rear disc	28K080ERL
Stealth	92-94	4x2	28K090ERL
Stealth	91	4x2, turbo, ABS	28K090ERL

EAGLE

Talon	97-98	rear drum	28K070ERL
Talon	97-98	4w disc	28K080ERL
Talon	95-96	All	28K080ERL
Talon	92-94	2 Wheel Drive	28K020ERL
Talon	92-94	4 Wheel Drive	28K040ERL

FIAT

X1/9	All		28S010ERL
124	69-85		28S020ERL
850	All		28S030ERL

FORD

Contour	95-96	Front discs	28B110ERL
Escort GT	91-96		28B530ERL
Fairmont	80-82	Police Option	28B140ERL
Fairmont	83	All	28B140ERL
Fairmont	79-82	exc. Police Option	28B150ERL
Granada	81-82	All	28B150ERL
LTD	83-84	All	28B140ERL
Mustang	05	4 WH. disc	28B600ERL
Mustang	94-95	exc. Cobra	28B010ERL
Mustang	94-95	Cobra	28B020ERL
Mustang	89-93	V-8 & Front discs	28B040ERL
Mustang	87-88	Front discs & Dual exhaust	28B050ERL
Mustang	86	Front discs (not SVO) with V-8 & Dual Exhaust	28B060ERL
Mustang	86	4-wh. discs SVO	28B070ERL
Mustang	85	Front discs (not SVO) with V-8 & Dual Exhaust	28B080ERL
Mustang	85	4-wh. discs SVO	28B090ERL
Mustang	84	Front discs (not SVO)	28B100ERL
Mustang	(from 5/84) 84	SVO, 4w Disc	28B120ERL
Mustang	84 Early	4-wh. discs SVO	28B130ERL
Mustang	83	exc. Non-Turbo 4 cyl.	28B140ERL
Mustang	82	Front discs	28B150ERL
Thunderbird	80-82	All	28B150ERL
Taurus	94-95	SHO	28B460ERL

FORD TRUCK

F150	05	2WD	28B590ERL
F150 PU EXT. PU	97-03	2WD	28B520ERL
F150 PU	94-96	4x2	28B030ERL
F150 PU	94-96	4x4	28B250ERL
F150 PU	92-93	4x2	28B210ERL
F150 PU	92-93	4x4	28B240ERL
F150 PU	90-91	4x2	28B200ERL
F150 PU	90-91	4x4	28B230ERL
F150 PU	80-89	4x2	28B190ERL
F100/F150 PU	80-Mid 89	4x4	28B220ERL
F250 P/U	80-85	4x2, single piston cal.	28B190ERL
Bronco	94-96	4x4, Full size	28B280ERL
Bronco	93	4x4, Full size	28B270ERL
Bronco	90-92	4x4, Full size	28B200ERL
Bronco	80-89	4x4, Full size	28B190ERL
Bronco	76-77	4x4	28B300ERL
Bronco	71-75	4x4	28B290ERL
Bronco	67-70	4x4	28B260ERL
Bronco I	90	All	28B350ERL
Bronco I	89	All	28B340ERL
Bronco I	87-88	4x4	28B320ERL
Bronco I	86-88	4x2	28B330ERL
Bronco I	86	4x4	28B310ERL
Explorer	93-94	All	28B380ERL
Explorer	Late 92	All	28B370ERL
Explorer	91-Early 92	All	28B360ERL
Ranger	90-94	4x2	28B450ERL
Ranger	89	4x2	28B440ERL
Ranger	87-88	4x2	28B420ERL
Ranger	86	4x2	28B330ERL
Ranger	83-85	4x2	28B420ERL
Ranger	Late 92-94	4x4	28B370ERL
Ranger	91-Early 92	4x4	28B360ERL
Ranger	87-88	4x4 w/ STX or Ride Hgt.	28B320ERL
Ranger	86-88	4x4 excl. STX or Ride Hgt.	28B330ERL
Ranger	83-85	4x4	28B390ERL
Ranger	90	4x4	28B410ERL
Ranger	89	4x4	28B400ERL

HONDA

Accord	98-99	2 Dr & 4 Dr w/rear Drums	28L150ERL
Accord	98-99	2 Dr & 4 Dr W/4 Wheel disc	28L160ERL
Accord	97	2 Dr Ex	28L250ERL
Accord	95-97	All excl w/ABS	28L260ERL
Accord	95-97	4Dr w/ABS	28L300ERL
Accord	95-96	2Dr LX w/ABS	28L300ERL
Accord	95-96	EX	28L300ERL
Accord	94	2Dr & 4 Dr excl EX	28L260ERL
Accord	94	2Dr & 4Dr w/ABS excl LX	28L290ERL
Accord	90-93	All	28L010ERL
Civic	99	Si	28L240ERL
Civic	96-99	2 Door DX & HX	28L220ERL
Civic	96-99	3 Door All	28L220ERL
Civic	96-99	4 Door excl w/ABS	28L220ERL
Civic	96-99	2 Door excl EX w/ABS	28L220ERL
Civic	92-95	All w/4 wheel Disc	28J020ERL
Civic	92-95	All excl w/ABS	28L280ERL
Civic	89-91	Rear Drums	28L040ERL
Civic	90-91	4 Door EX	28L210ERL
Civic	92-95	All w/4 wheel Disc	28L050ERL
CRX	90-91	Si	28L030ERL
CRX	89-91	Rear Drums	28L040ERL

HYPERFIRM™ BRAKE LINE KITS

BRAKE SYSTEMS

HONDA

De Sol	96-97	VTEC All	28L200ERL
De Sol	93-97	S	28L190ERL
De Sol	94-95	VTEC Si w/ABS	28L200ERL
De Sol	94-97	Si	28L270ERL
Prelude	97-99	excl SH	28L180ERL
Prelude	92-96	All	28L020ERL
S2000	00-01	All	28L330ERL

INFINITY

Infinity G35 Coupe	03	includes Brembo	28C180ERL
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JEEP

Wrangler	3/94-95	All	28Q090ERL
Wrangler	90-92	All	28Q080ERL
Wrangler	93-2/94	w/o ABS	28Q080ERL
Wrangler	87-89	All 4 W/D	28Q070ERL
CJ-6,7,8	82-86		28Q060ERL
CJ-5	84-86		28Q060ERL
CJ-5	82-83		28Q050ERL
CJ	81	All	28Q040ERL
CJ	79-80	All	28Q030ERL
CJ	78	hose w/round end	28Q020ERL
CJ	77	Front Disc	28Q020ERL
CJ	76-77	4w Drum	28Q010ERL
Full Size Cherokee	94-96	All	28Q190ERL
Mid Size Cherokee	92-93	4-WD	28Q190ERL
Mid Size Cherokee	92-93	2-WD	28Q180ERL
Mid Size Cherokee	91	2-WD	28Q170ERL
Mid Size Cherokee	90-91	4-WD	28Q160ERL
Mid Size Cherokee	90	2-WD	28Q150ERL
SJ Cherokee	79-91	Full Size, exc.79-84 Wide Trac	28Q120ERL
SJ Cherokee	76-78	Full Size, Front Disc	28Q110ERL
SJ Cherokee	74-75	SJ Full Size, Front Disc	28Q100ERL
Mid Size Cherokee	86-89	All	28Q140ERL
Mid Size Cherokee	84-85	All	28Q130ERL
SJ Grand Wagoneer	79-91	Full Size, exc.79-84 Wide Trac	28Q120ERL
SJ Grand Wagoneer	76-78	Full Size, Front Disc	28Q110ERL
SJ Grand Wagoneer	74-75	SJ Full Size, Front Disc	28Q100ERL
SJ Wagoneer	74-75	SJ Full Size, Front Disc	28Q100ERL
SJ Wagoneer	76-78	Full Size, Front Disc	28Q110ERL
SJ Wagoneer	79-91	Full Size,excl,79-84 WideTrac	28Q120ERL

MAZDA

RX-8	04	All	28i170ERL
626-MX-6	81-82	rear drum	28i090ERL
Navajo	91-Early 92	All	28B360ERL

MERCURY

Capri	80-81	excl Non Turbo 4cyl.	28B160ERL
Capri	79	V-8	28B170ERL
Cougar	80-82	XR7	28B170ERL
Zepher	79-82	exc. Police Option	28B170ERL
Zepher	80-82	Police Option	28B140ERL
Zepher	83	All	28B140ERL

MITSUBISHI

Eclipse	89-(5/90)	excl 4x4	28K010ERL
Eclipse	(after 5/90)-91	excl 4x4	28K020ERL
Eclipse	90-94	4x4	28K040ERL
Eclipse	95-97	rear drum	28K070ERL
Eclipse	95-97	4w Disc	28K080ERL
Lancer EVO8	04		28K120ERL
3000 GT	91-93	Excl All Wheel Drive	28K090ERL

NISSAN

350 ZX	03	Incl. Brembo	28C180ERL
300 ZX	90-96	All	28C010ERL
300 ZX	84-89	All	28C020ERL
280 ZX	82-83	All	28C030ERL
280 ZX	79-81	All	28C040ERL
240, 260, 280-Z	70-78	All	28C050ERL
240 SX	89-94	w/ ABS	28C080ERL
200 SX	84-88	4-cyl. w/o Turbo	28C060ERL
200 SX	84-88	4-cyl. w/ Turbo	28C070ERL
Maxima	95-97	4w Disc	28C170ERL
NX 1600	91	4w Disc	28C090ERL
NX 2000	91	4w Disc	28C090ERL
Sentra	91	2dr, 2.0L,Nichirin type Hose	28C090ERL
Sentra	92-94	4w Disc & Nichirin Hose	28C090ERL

OLDSMOBILE

Cutlass	77	All	28A100ERL
Cutlass, F-85, 442	72	4w drum	28F020ERL
Cutlass, F-85, 442	72	front disc	28F030ERL
Cutlass, F-85, 442	69-71	front disc	28A480ERL
Cutlass, F-85, 442	68-71	4w drum	28A470ERL
Omega	79	All	28A110ERL
Omega	77-78	All	28A100ERL
Vista Cruiser	77	All	28A100ERL

PLYMOUTH

Laser	92-94	excll 4x4	28K020ERL
Laser	92-94	4x4	28K040ERL
Trail Duster	76-81	4 Wheel Dr.	28H080ERL

PONTIAC

Firebird	89-92	w/ 4-wh. Discs	28A300ERL
Firebird	85-92	Perform. Pkg. 4-wh. discs	28A190ERL
Firebird	84-92	Front discs	28A180ERL
Firebird	82-83	Front discs	28A090ERL
Firebird	79-81	Front Disc	28A110ERL
Firebird	77-78	Front discs	28A100ERL
Firebird	74-75	Front discs	28A170ERL
Firebird	72-73	Front discs	28A200ERL
Firebird	69	Front Disc	28A160ERL
Firebird	69	4w drums	28A220ERL
Grand AM	77	All	28A100ERL
Le Mans	77	All	28A100ERL
Lemans, GTO	71-72	front disc	28F030ERL
Lemans, 442	69-72	front disc	28A480ERL
Lemans, GTO	69-71	4w drum	28A470ERL
Phoenix	77-78	All	28A100ERL
Phoenix	79	All	28A110ERL
Ventura, Ventura II	72		28A150ERL

HYPERFIRM™ BRAKE LINE KITS

BRAKE SYSTEMS

PORSCHE

911 Porsche	84-88	All	28E020ERL
911 Porsche	69-83	All	28E010ERL
924 Porsche	86-88	All	28E040ERL
924 Porsche	77-82	w/ Sport Equipment	28E040ERL
928 Porsche	82-95	All	28E060ERL
944	89-91	excl. Turbo;	28E080ERL
944	87-88	All;	28E080ERL
944	86	excl Turbo	28E040ERL
944 Porsche	83-85	All	28E040ERL
968	92-94	excl. Sport Suspension	28E080ERL

SUBARU

WRX	01-03		28V010ERL
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TOYOTA

MR-2	91-94		28G020ERL
MR-2	85-89		28G010ERL
Supra	93-95		28G040ERL
Supra	Mid 86-92		28G030ERL
Celica	92-93	ST & GT Convertible	28G050ERL
Celica	92-93	GT Coupe & GT-S	28G060ERL

TOYOTA TRUCK

Pick-up	95-97	Tacoma	28G120ERL
T-100	93-95	4x4	28G110ERL
Pick-up	89-95	4x4 / not Tacoma	28G100ERL
Pick-up	89-95	4x2, 1/2 ton,	28G170ERL
Pick-up	86-88	4x4	28G090ERL
Pick-up	84-88	4x2, 1/2 ton,	28G160ERL
Pick-up	84-85	4x4	28G080ERL
Pick-up	84	4x2, 3/4 ton	28G160ERL
Pick-up	79-83	4x4	28G070ERL
Pick-up	79-83	4x2, 1/2 ton	28G140ERL
Pick-up	79-83	4x2, 3/4 ton	28G150ERL
Pick-up, Heavy	89-91	All 1 ton	28G170ERL

TOYOTA TRUCK

Pick-up, Heavy	85-88	All 1 ton	28G160ERL
Pick-up, Heavy	84	All	28G160ERL
4-Runner	(from 4/89)-95		28G130ERL
4-Runner	86-Mid 89		28G090ERL
4-Runner	84-85		28G080ERL

VOLKSWAGEN

Karmann Ghia	61-66	All	28M010ERL
Karmann Ghia	67	All	28M090ERL
Karmann Ghia	68 & Later	stick shift	28M090ERL
Beetle	68 & Later	excl. AutoTrans, Super Beetle	28M180ERL
Beetle	67-68	All	28M030ERL
Beetle	65-66	All	28M020ERL
Beetle	54-64	All	28M010ERL
Type II (Transporter)	61-67	All	28M020ERL
Type III	64-66	All	28M030ERL
Type IV	71-74	All	28M130ERL
Rabbit (Westmoreland)	(from 4/79)-84	All	28M040ERL
Rabbit	(from 11/78)-80	w/ATE type	28M040ERL
Scirocco	(from 11/78)-80	w/ATE type	28M040ERL
Scirocco	84-85	All	28M040ERL
Scirocco	89-93	excl. 16 valve	28M060ERL
Scirocco	88	16 valve	28M070ERL
Jetta	80-84	w/ATE type	28M040ERL
Jetta	85-86	GLI 4 wheel Disc	28M050ERL
Jetta	87-88	4 wheel Disc	28M070ERL
Rabbit Conv.	84-85	All	28M040ERL
Cabriolet	86	All	28M040ERL
Cabriolet	87-93	All	28M060ERL
Fox	87-93	excl. SW	28M080ERL
Golf	87-91	GTI	28M070ERL
Golf	85-86	excl. GTI	28M040ERL
Golf	85-86	GTI 4 wheel Disc	28M050ERL
Jetta	87-89	Rear Drum	28M060ERL
Jetta	85-86	excl. GLI	28M040ERL



HYPERFIRM™ U-SPEC-IT™ KITS

BRAKE SYSTEMS

The U-SPEC-IT™ System is designed to reduce the inventory requirements of the dealer or installer. Each hose assembly is certified by Earl's to pass all D.O.T. test requirements of SAE J 1401 for an assembly of its specific length.

Brake hoses not only meet all D.O.T., T.U.V. and J.W.A. standards and specifications for flexible brake hoses including SAE J 1401 (Jan 81) and FMVSS 106-74-38 FR31302 1973, they are individually inspected and tested before shipment. Batch testing, the industry standard, is not acceptable at Earl's. Each individual hose assembly is pressure tested at 4000 psi after manufacture.



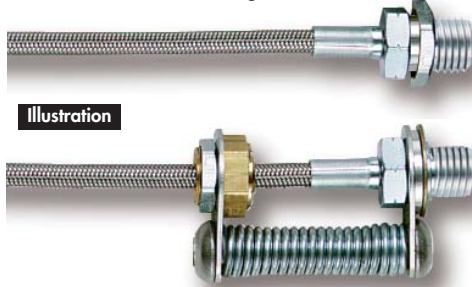
It remains the responsibility of the installer to select the proper hose length and the correct adapter fittings for a specific application. Be absolutely certain that the mechanic doing your installation is qualified to do the job.

EARL'S HYPERFIRM® flexible brake hoses offer several performance advantages:

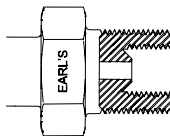
- Firmer brake pedal, allowing better brake modulation and improved vehicle control
- Significant reduction of stopping distance during emergency braking conditions
- Anti-lock braking system pedal "thump" is significantly reduced.

DOT BRAKE ADAPTERS CAN BE FOUND ON PAGES 55-57

STYLE A - Available in lengths of 9"-11" & 18"-28"

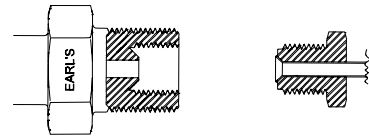


280103_ ERL



3/8"-24 INVERTED FLARE, FEMALE CHASSIS MOUNT

280104_ ERL



10MM X 1.0 INVERTED FLARE, FEMALE CHASSIS MOUNT

STYLE B - Available in lengths of 12"-17"

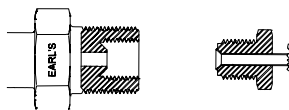
_ERL = length of hose in inches

NOTE:

12" to 17" brake hoses include Earl's patented whip dampener.

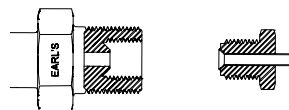
All hoses are supplied with a female AN-3 on one end.

280105_ ERL



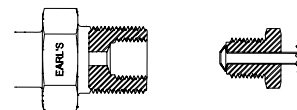
10MM X 1.25 INVERTED FLARE, FEMALE CHASSIS MOUNT

280106_ ERL



7/16"-24 INVERTED FLARE, FEMALE CHASSIS MOUNT

280107_ ERL



10MM X 1.0 BUBBLE FLARE, FEMALE CHASSIS MOUNT

BRAKE SYSTEMS



Brake bleeding has always been an inconvenient and messy job. Commercial shops typically use an expensive pressure bleeder—which, unless used properly, can introduce air bubbles into the system through cavitation. Vacuum bleeders are less expensive but can also introduce air into the system.

The time honored manual method (still universally used in racing) requires two people: one to pump the pedal, and another to open and close each bleed screw in sequence. Again, proper procedure and coordination are required to prevent air inclusion.

Earl's **SOLO-BLEED™** bleeder screws solve both problems. A direct replacement for the original equipment bleeders, **SOLO-BLEED™** allows one person to safely bleed brakes without a mess and with no chance of air inclusion.

SAE

PART NO REPLACES FOLLOWING DIAM. & LENGTH

280023ERL	1/4"-28 x 59/64" Thread SOLO-BLEED (pair)
280043ERL	1/4"-28 x 1-1/4" Thread SOLO-BLEED (pair)
280035ERL	5/16"-24 x 1" Thread SOLO-BLEED (pair)
280032ERL	5/16"-24 x 1-3/16" Thread SOLO-BLEED (pair)
280021ERL	3/8"-24 x 1-11/64" Thread SOLO-BLEED (pair)
280033ERL	3/8"-24 x 1-1/2" Thread SOLO-BLEED (pair)
280037ERL	3/8"-24 x 1-1/2" Thread SOLO-BLEED (pair)
280036ERL	7/16"-24 x 1-15/32" Thread SOLO-BLEED (pair)
280030ERL	7/16"-20 x 1-1/4" Thread SOLO-BLEED (pair)
280034ERL	7/16"-20 x 1-11/16" Thread SOLO-BLEED (pair)
280045ERL	7/16"-20 x 2-1/8" Thread SOLO-BLEED (pair)
280046ERL	7/16"-20 x 2-5/8" Thread SOLO-BLEED (pair)

METRIC

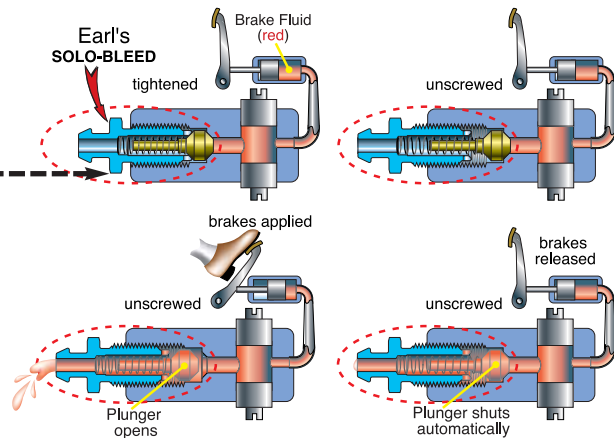
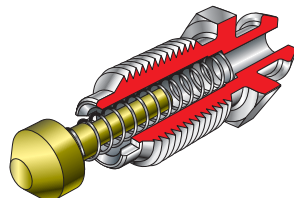
PART NO REPLACES FOLLOWING DIAM. & LENGTH

280031ERL	6mm x 1.0 x 37mm Thread SOLO-BLEED (pair)
280025ERL	7mm x 1.0 x 34mm Thread SOLO-BLEED (pair)
280027ERL	8mm x 1.0 x 25mm Thread SOLO-BLEED (pair)
280024ERL	8mm x 1.25 x 23mm Thread SOLO-BLEED (pair)
280022ERL	10mm x 1.0 x 27mm Thread SOLO-BLEED (pair)
280040ERL	10mm x 1.0 x 32mm Thread SOLO-BLEED (pair)
280041ERL	10mm x 1.0 x 35mm Thread SOLO-BLEED (pair)
280039ERL	10mm x 1.0 x 38mm Thread SOLO-BLEED (pair)
280047ERL	10mm x 1.0 x 54mm Thread SOLO-BLEED (pair)
280028ERL	10mm x 1.25 x 33mm Thread SOLO-BLEED (pair)
280029ERL	10mm x 1.5 x 27mm Thread SOLO-BLEED (pair)

How SOLO-BLEED™ works:



Must be in this Position during operation of vehicle!



BRAKE SYSTEMS

PART NO.	APPLICATION	YEARS	SIZE	
280022ERL	Acura	86-89	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280028ERL	Acura	86-94	10mm x 1.25 Thread, 33mm length	Front & Rear
280024ERL	Acura	91-94	8mm x 1.25 thread, 23.5mm length	Slave Cyl.
280022ERL	Alfa Romeo	81-89	10mm x 1.0 Thread, 38.5mm length	Front
280025ERL	Alfa Romeo	82-91	7mm x 1.0 thread, 32 mm length	Front & Rear
280023ERL	AMC	61-83	1/4"-28 Thread, 59/64" length	Front & Rear
280021ERL	AMC	61-88	3/8"-24 Thread, 1 11/64" length	Front & Rear
280021ERL	AMC	72-78	3/8"-24 Thread, 1 11/64" length	Front & Rear
280024ERL	AMC	79-89	8mm x 1.25 thread, 23.5mm length	Front & Rear
280029ERL	AMC	79-89	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280025ERL	Audi	68-93	7mm x 1.0 thread, 32 mm length	Front & Rear
280029ERL	Audi	75-91	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280022ERL	Audi	89-97	10mm x 1.0 Thread, 27.5mm length	Front
280022ERL	Audi	89-97	10mm x 1.0 Thread, 27.5mm length	Rear
280022ERL	Audi	90-94	10mm x 1.0 Thread, 38.5mm length	Front & Rear
280031ERL	Audi 4000, Fox,100LS	74-87	6mm x 1.0 thread, 37.1mm length	Rear
280022ERL	BMW	94	10mm x 1.0 Thread, 27.5mm length	Front
280029ERL	BMW	77-90	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280025ERL	BMW	77-94	7mm x 1.0 thread, 32 mm length	Front
280025ERL	BMW	91-94	7mm x 1.0 thread, 32 mm length	Rear
280029ERL	Buick	64-95	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280021ERL	Buick	76-80	3/8"-24 Thread, 1 11/64" length	Front & Rear
280024ERL	Buick	92-94	8mm x 1.25 thread, 23.5mm length	Rear
280021ERL	Cadillac	71-78	3/8"-24 Thread, 1 11/64" length	Front & Rear
280035ERL	Cadillac	71-78	5/16"-24 Thread, 1" length	Rear
280029ERL	Cadillac	79-92	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280024ERL	Cadillac	79-92	8mm x 1.25 thread, 23.5mm length	Rear
280022ERL	Capri	71-78	10mm x 1.0 Thread, 27.5mm length	Front
280024ERL	Chevy	95	8mm x 1.25 thread, 23.5mm length	Rear
280021ERL	Chevy	64-80	3/8"-24 Thread, 1 11/64" length	Front
280035ERL	Chevy	64-80	5/16"-24 Thread, 1" length	Rear
280024ERL	Chevy	76-78	8mm x 1.25 thread, 23.5mm length	Rear
280024ERL	Chevy	76-87	8mm x 1.25 thread, 23.5mm length	Rear
280029ERL	Chevy	79-95	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280022ERL	Chevy	84-94	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280025ERL	Chevy	85-89	7mm x 1.0 thread, 32 mm length	Rear
280030ERL	Chevy Truck	70-89	7/16"-20 Thread, 2 1/8" length	Rear
280022ERL	Chevy Truck	72-81	10mm x 1.0 Thread, 32.75mm length	Front
280022ERL	Chevy Truck	72-82	10mm x 1.0 Thread, 32.75mm length	Rear
280025ERL	Chevy Truck	72-93	7mm x 1.0 thread, 32 mm length	Front & Rear
280029ERL	Chevy Truck	72-94	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280021ERL	Chevy Truck	74-78	3/8"-24 Thread, 1 11/64" length	Front & Rear
280024ERL	Chevy Truck	79-94	8mm x 1.25 thread, 23.5mm length	Rear
280022ERL	Chevy Truck	89-93	10mm x 1.0 Thread, 32.75mm length	Front
280022ERL	Chevy Truck	89-93	10mm x 1.0 Thread, 27.5mm length	Front
280022ERL	Chevy Truck LUV	81-82	10mm 1.0 Thread, 35mm length	Front
280035ERL	Chrysler	61-62	5/16"-24 Thread, 1 3/16" length	Front & Rear
280023ERL	Chrysler	61-67	1/4"-28 Thread, 59/64" length	Front & Rear
280021ERL	Chrysler	66-93	3/8"-24 Thread, 1 11/64" length	Front
280035ERL	Chrysler	66-93	5/16"-24 Thread, 1" length	Front
280035ERL	Chrysler	91-93	5/16"-24 Thread, 1 3/16" length	Rear
280022ERL	Chrysler Imports	73-93	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280022ERL	Chrysler Imports	78-81	10mm x 1.0 Thread, 49.75mm length	Rear
280022ERL	Chrysler Imports	78-89	10mm 1.0 Thread, 35mm length	Front
280029ERL	Chrysler Imports	79-92	10mm x 1.5 Thread, 25.5mm length	Rear
280025ERL	Chrysler Imports	85-93	7mm x 1.0 thread, 32 mm length	Front
280029ERL	Chrysler Imports	89-92	10mm x 1.5 Thread, 25.5mm length	Front
280022ERL	Chrysler Imports	91-93	10mm x 1.0 Thread, 38.5mm length	Front
280025ERL	Daihatsu	88-93	7mm x 1.0 thread, 32 mm length	Front & Rear
280022ERL	Daihatsu	90-93	10mm x 1.0 Thread, 38.5mm length	Rear
280022ERL	Daihatsu	90-93	10mm x 1.0 Thread, 32.75mm length	Front
280035ERL	Dodge	95	5/16"-24 Thread, 1" length	Rear
280021ERL	Dodge	66-95	3/8"-24 Thread, 1 11/64" length	Front & Rear
280022ERL	Dodge	88-93	10mm x 1.0 Thread, 27.5mm length	Front
280035ERL	Dodge	92-93	5/16"-24 Thread, 1 3/16" length	Rear
280021ERL	Dodge Truck	61-93	3/8"-24 Thread, 1 11/64" length	Rear
280035ERL	Dodge Truck	61-93	5/16"-24 Thread, 1" length	Rear
280029ERL	Dodge Truck	90-94	10mm x 1.5 Thread, 25.5mm length	Front
280022ERL	Dodge Truck	92-93	10mm x 1.0 Thread, 38.5mm length	Front
280022ERL	Eagle	88-93	10mm x 1.0 Thread, 32.75mm length	Front
280022ERL	Eagle	88-93	10mm x 1.0 Thread, 27.5mm length	Front
280022ERL	Eagle	88-93	10mm x 1.0 Thread, 27.5mm length	Rear
280035ERL	Eagle	89-92	5/16"-24 Thread, 1" length	Front & Rear
280025ERL	Eagle Talon	93	7mm x 1.0 thread, 32 mm length	Front
280024ERL	Fiat	75-79	8mm x 1.25 thread, 23.5mm length	Front & Rear
280022ERL	Fiesta	78-89	10mm x 1.0 Thread, 27.5mm length	Front
280021ERL	Ford	74	3/8"-24 Thread, 1 1/2" length	Front
280023ERL	Ford	61-80	1/4"-28 Thread, 59/64" length	Front & Rear
280021ERL	Ford	61-94	3/8"-24 Thread, 1 11/64" length	Front & Rear
280029ERL	Ford	70-92	10mm x 1.5 Thread, 25.5mm length	Front
280035ERL	Ford	73-75	5/16"-24 Thread, 1 3/16" length	Front & Rear
280022ERL	Ford	78-80	10mm x 1.0 Thread, 38.5mm length	Front & Rear
280023ERL	Ford	81-89	1/4"-28 Thread, 59/64" length	Rear
280022ERL	Ford	82-94	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280027ERL	Ford	88-97	8mm x 1.0 Thread, 25.4mm length	Rear

BRAKE SYSTEMS

PART NO.	APPLICATION	YEARS	SIZE	
280027ERL	Ford	89-94	8mm x 1.0 Thread, 31.9mm length	Rear
280022ERL	Ford	90-94	10mm x 1.0 Thread, 27.5mm length	Front
280025ERL	Ford	90-94	7mm x 1.0 thread, 32 mm length	Front & Rear
280021ERL	Ford Truck	61-94	3/8"-24 Thread, 1 11/64" length	Front & Rear
280030ERL	Ford Truck	70-94	7/16"-20 Tread, 1 17/64" length	Front
280035ERL	Ford Truck	71-75	5/16"-24 Thread, 1 3/16" length	Front & Rear
280023ERL	Ford Truck	71-77	1/4"-28 Thread, 59/64" length	Front
280021ERL	Ford Truck	71-94	3/8"-24 Thread, 1 1/2" length	Front
280022ERL	Ford Truck	81-85	10mm x 1.0 Thread, 38.5mm length	Rear
280035ERL	Ford Truck	83-93	5/16"-24 Thread, 1" length	Front
280021ERL	Ford Truck	86-92	3/8"-24 Thread, 1 1/2" length	Front
280035ERL	Ford Truck	90-94	5/16"-24 Thread, 1" length	Rear
280030ERL	Ford Truck		7/16"-20 Thread, 1 11/16" length	
280025ERL	Ford Truck, Courier	77-83	7mm x 1.0 thread, 32 mm length	Front
280029ERL	GEO	89-92	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280022ERL	GEO	93-94	10mm x 1.0 Thread, 32.75mm length	Rear
280025ERL	GEO	93-94	7mm x 1.0 thread, 32 mm length	Front & Rear
280021ERL	GM	61-65	3/8"-24 Thread, 1 1/2" length	Front & Rear
280021ERL	GM	61-80	3/8"-24 Thread, 1 11/64" length	Front & Rear
280024ERL	GM	76-93	8mm x 1.25 thread, 23.5mm length	Front & Rear
280025ERL	GM	83-93	7mm x 1.0 thread, 32 mm length	Front & Rear
280022ERL	GM	84-93	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280022ERL	GM	89-93	10mm x 1.0 Thread, 27.5mm length	Front
280035ERL	GM	61-80	5/16"-24 Thread, 1" length	Rear
280023ERL	GMC truck	60-63	1/4"-28 Thread, 1 3/8" length	Rear
280021ERL	GMC Truck	61-78	3/8"-24 Thread, 1 11/64" length	Front & Rear
280021ERL	GMC Truck	63-71	3/8"-24 Thread, 1 1/2" length	Front & Rear
280030ERL	GMC Truck	70-89	7/16"-20 Thread, 2 1/8" length	Rear
280024ERL	GMC Truck	71-9-4	8mm x 1.25 thread, 23.5mm length	Rear
280036ERL	GMC truck	74-76	7/16"-24 Thread, 1 15/32" length	Rear
280025ERL	GMC Truck	79-93	7mm x 1.0 thread, 32 mm length	Front & Rear
280029ERL	GMC Truck	79-94	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280022ERL	GMC Truck	89-93	10mm x 1.0 Thread, 32.75mm length	Front
280022ERL	GMC Truck	89-93	10mm x 1.0 Thread, 27.5mm length	Front
280030ERL	GMC Truck		7/16"-20 Thread, 1 11/16" length	
280022ERL	Honda	74-94	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280024ERL	Honda	75-94	8mm x 1.25 thread, 23.5mm length	Rear
280022ERL	Honda	77-79	10mm 1.0 Thread, 35mm length	Front
280025ERL	Honda	77-79	7mm x 1.0 thread, 32 mm length	Front
280028ERL	Honda	88-94	10mm x 1.25 Thread, 33mm length	Front & Rear
280022ERL	Honda Truck	94	10mm x 1.0 Thread, 38.5mm length	Rear
280022ERL	Hyundai	83-93	10mm x 1.0 Thread, 32.75mm length	Front
280022ERL	Hyundai	86-89	10mm 1.0 Thread, 35mm length	Rear
280022ERL	Hyundai	89-95	10mm x 1.0 Thread, 27.5mm length	Front
280022ERL	Hyundai	89-95	10mm x 1.0 Thread, 27.5mm length	Rear
280035ERL	Hyundai	90-91	5/16"-24 Thread, 1" length	Rear
280022ERL	Hyundai	90-95	10mm x 1.0 Thread, 32.75mm length	Rear
280030ERL	IH Truck		7/16"-20 Thread, 2 5/8" length	
280030ERL	IH Truck		7/16"-20 Thread, 1 11/16" length	
280022ERL	Infiniti	90-94	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280022ERL	Isuzu	81-84	10mm x 1.0 Thread, 32.75mm length	Front
280022ERL	Isuzu	81-93	10mm x 1.0 Thread, 38.5mm length	Rear
280025ERL	Isuzu	81-93	7mm x 1.0 thread, 32 mm length	Rear
280022ERL	Isuzu	88-91	10mm 1.0 Thread, 35mm length	Rear
280022ERL	Isuzu Truck	81-92	10mm x 1.0 Thread, 32.75mm length	Front
280029ERL	Isuzu Truck	81-92	10mm x 1.5 Thread, 25.5mm length	Front
280022ERL	Isuzu Truck	88-94	10mm 1.0 Thread, 35mm length	Rear
280022ERL	Isuzu Truck	91-94	10mm x 1.0 Thread, 38.5mm length	Rear
280022ERL	Jaguar	73-90	10mm x 1.0 Thread, 32.75mm length	Front
280021ERL	Jaguar	74-76	3/8"-24 Thread, 1 11/64" length	Rear
280022ERL	Jaguar	86-90	10mm x 1.0 Thread, 32.75mm length	Rear
280021ERL	Jeep	61-77	3/8"-24 Thread, 1 11/64" length	Front & Rear
280023ERL	Jeep	61-77	1/4"-28 Thread, 59/64" length	Front
280021ERL	Jeep	65-93	3/8"-24 Thread, 1 11/64" length	Front & Rear
280024ERL	Jeep	79-92	8mm x 1.25 thread, 23.5mm length	Front & Rear
280029ERL	Jeep	79-93	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280035ERL	Jeep	90-93	5/16"-24 Thread, 1" length	Rear
280025ERL	Lexus	90-93	7mm x 1.0 thread, 32 mm length	Front & Rear
280021ERL	Lincoln	81-93	3/8"-24 Thread, 1 11/64" length	Front & Rear
280022ERL	Lincoln	92-94	10mm x 1.0 Thread, 27.5mm length	Front & Rear
280025ERL	Mazda	72-93	7mm x 1.0 thread, 32 mm length	Front & Rear
280027ERL	Mazda	79-92	8mm x 1.0 Thread, 31.9mm length	Rear
280021ERL	Mazda	92-93	3/8"-24 Thread, 1 1/2" length	Front & Rear
280035ERL	Mazda Truck	94	5/16"-24 Thread, 1" length	Rear
280021ERL	Mazda Truck	91-94	3/8"-24 Thread, 1 1/2" length	Front & Rear
280029ERL	Mazda	73-92	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280027ERL	Mazda 323	86	8mm x 1.0 Thread, 25.4mm length	Front
280027ERL	Mazda 323	90	8mm x 1.0 Thread, 25.4mm length	Front
280027ERL	Mazda 323	92-94	8mm x 1.0 Thread, 25.4mm length	Front
280027ERL	Mazda 626	81-82	8mm x 1.0 Thread, 25.4mm length	Front
280027ERL	Mazda GLC	83-85	8mm x 1.0 Thread, 25.4mm length	Front
280027ERL	Mazda Miata MX5	94	8mm x 1.0 Thread, 25.4mm length	Front
280027ERL	Mazda MX3	94	8mm x 1.0 Thread, 25.4mm length	Front
280027ERL	Mazda MX6	93-94	8mm x 1.0 Thread, 25.4mm length	Rear
280027ERL	Mazda Protege	92-94	8mm x 1.0 Thread, 25.4mm length	Front

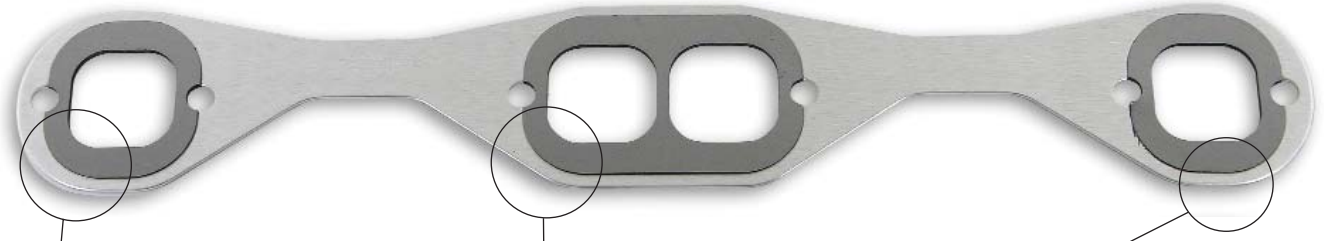
BRAKE SYSTEMS

BRAKE SYSTEMS

PART NO.	APPLICATION	YEARS	SIZE	
280027ERL	Mazda RX7	94	8mm x 1.0 Thread, 25.4mm length	Front
280027ERL	Mazda RX7	86-87	8mm x 1.0 Thread, 25.4mm length	Front
280027ERL	Mazda Truck	93-94	8mm x 1.0 Thread, 25.4mm length	Front
280025ERL	Medallion	88-90	7mm x 1.0 thread, 32 mm length	Front & Rear
280024ERL	Mercedes Benz	84-94	8mm x 1.25 thread, 23.5mm length	Front & Rear
280023ERL	Mercury	81-89	1/4"-28 Thread, 59/64" length	Rear
280021ERL	Mercury	81-93	3/8"-24 Thread, 1 11/64" length	Front & Rear
280022ERL	Mercury	86-94	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280027ERL	Mercury	87-94	8mm x 1.0 Thread, 31.9mm length	Rear
280022ERL	Mercury	90-94	10mm x 1.0 Thread, 27.5mm length	Front & Rear
280027ERL	Mercury	91-94	8mm x 1.0 Thread, 25.4mm length	Front
280027ERL	Mercury	91-94	8mm x 1.0 Thread, 25.4mm length	Rear
280022ERL	Mercury Truck	93-94	10mm x 1.0 Thread, 27.5mm length	Rear
280022ERL	MG	65-80	10mm x 1.0 Thread, 27.5mm length	Front
280022ERL	Mitsubishi	83-85	10mm 1.0 Thread, 35mm length	Front
280022ERL	Mitsubishi	83-93	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280022ERL	Mitsubishi	90-93	10mm x 1.0 Thread, 38.5mm length	Front & Rear
280022ERL	Mitsubishi Truck	92-94	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280029ERL	Nissan	69-92	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280022ERL	Nissan	69-94	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280025ERL	Nissan	79-93	7mm x 1.0 thread, 32 mm length	Rear
280022ERL	Nissan	81-85	10mm 1.0 Thread, 35mm length	Front
280022ERL	Nissan	89-94	10mm x 1.0 Thread, 38.5mm length	Front & Rear
280022ERL	Nissan Truck	86-94	10mm x 1.0 Thread, 32.75mm length	Front
280022ERL	Nissan Truck	88-94	10mm x 1.0 Thread, 32.75mm length	Rear
280021ERL	Nissan Truck	93-94	3/8"-24 Thread, 1 11/64" length	Front
280022ERL	Nissan Truck	93-94	10mm x 1.0 Thread, 27.5mm length	Rear
280021ERL	OH Truck	57-80	3/8"-24 Thread, 1 1/2" length	Front & Rear
280029ERL	Oldsmobile	79-94	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280025ERL	Peugeot	81-89	7mm x 1.0 thread, 32 mm length	Rear
280022ERL	Peugeot	89-90	10mm x 1.0 Thread, 27.5mm length	Front
280025ERL	Plymouth	93	7mm x 1.0 thread, 32 mm length	Front
280035ERL	Plymouth	66-95	5/16"-24 Thread, 1" length	Rear
280021ERL	Plymouth	81-95	3/8"-24 Thread, 1 11/64" length	Front & Rear
280022ERL	Plymouth	90-93	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280035ERL	Plymouth	92-93	5/16"-24 Thread, 1 3/16" length	Rear
280022ERL	Pontiac	94	10mm x 1.0 Thread, 32.75mm length	Rear
280029ERL	Pontiac	79-92	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280022ERL	Porsche	89	10mm x 1.0 Thread, 38.5mm length	Front & Rear
280025ERL	Porsche	73-89	7mm x 1.0 thread, 32 mm length	Front
280022ERL	Porsche	87-95	10mm x 1.0 Thread, 27.5mm length	Front & Rear
280025ERL	Renault	76-89	7mm x 1.0 thread, 32 mm length	Front
280027ERL	Renault Alliance	83-87	8mm x 1.0 Thread, 25.4mm length	Rear
280027ERL	Renault Encore	84-86	8mm x 1.0 Thread, 25.4mm length	Rear
280027ERL	Renault GTA	87	8mm x 1.0 Thread, 25.4mm length	Rear
280029ERL	Saab	79-92	10mm x 1.5 Thread, 25.5mm length	Rear
280024ERL	Saab	90-92	8mm x 1.25 thread, 23.5mm length	Rear
280025ERL	Saab	90-94	7mm x 1.0 thread, 32 mm length	Rear
280022ERL	Saturn	91-94	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280022ERL	Sterling	87-91	10mm x 1.0 Thread, 27.5mm length	Front & Rear
280023ERL	Studebaker	61-66	1/4"-28 Thread, 59/64" length	Front & Rear
280029ERL	Subaru	72-92	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280025ERL	Subaru	76-93	7mm x 1.0 thread, 32 mm length	Front & Rear
280022ERL	Subaru	79-89	10mm x 1.0 Thread, 38.5mm length	Front & Rear
280022ERL	Subaru	82-94	10mm x 1.0 Thread, 32.75mm length	Front
280022ERL	Subaru	84-85	10mm 1.0 Thread, 35mm length	Front
280022ERL	Suzuki	86-94	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280022ERL	Suzuki	89-94	10mm 1.0 Thread, 35mm length	Front & Rear
280025ERL	Suzuki	92-93	7mm x 1.0 thread, 32 mm length	Rear
280022ERL	Suzuki Truck	90-94	10mm x 1.0 Thread, 32.75mm length	Front
280022ERL	Suzuki Truck	91-94	10mm x 1.0 Thread, 32.75mm length	Rear
280022ERL	Suzuki Truck	92-94	10mm 1.0 Thread, 35mm length	Rear
280029ERL	Toyota	67-92	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280022ERL	Toyota	67-93	10mm x 1.0 Thread, 32.75mm length	Front
280022ERL	Toyota	68-94	10mm x 1.0 Thread, 38.5mm length	Front & Rear
280025ERL	Toyota	75-93	7mm x 1.0 thread, 32 mm length	Front & Rear
280022ERL	Toyota Truck	89-94	10mm x 1.0 Thread, 38.5mm length	Front & Rear
280022ERL	Toyota Truck	91-94	10mm x 1.0 Thread, 32.75mm length	Front & Rear
280022ERL	Volvo	94	10mm x 1.0 Thread, 27.5mm length	Rear
280022ERL	Volvo	83-91	10mm x 1.0 Thread, 27.5mm length	Front
280025ERL	Volvo	83-91	7mm x 1.0 thread, 32 mm length	Rear
280022ERL	Volvo	84-94	10mm x 1.0 Thread, 32.75mm length	Front
280023ERL	Volvo	87-92	1/4"-28 Thread, 59/64" length	Front
280029ERL	Volvo	87-92	10mm x 1.5 Thread, 25.5mm length	Rear
280022ERL	Volvo	89-92	10mm x 1.0 Thread, 32.75mm length	Rear
280024ERL	Volvo	91-94	8mm x 1.25 thread, 23.5mm length	Rear
280025ERL	VW	65-93	7mm x 1.0 thread, 32 mm length	Front & Rear
280029ERL	VW	75-92	10mm x 1.5 Thread, 25.5mm length	Front & Rear
280022ERL	VW	84-95	10mm x 1.0 Thread, 38.5mm length	Rear
280022ERL	VW	87-94	10mm x 1.0 Thread, 38.5mm length	Rear
280031ERL	VW Golf, Jetta, Quantum, Rabbit, Scirocco	74-87	6mm x 1.0 thread, 37.1mm length	Rear
280031ERL	VW Golf, Jetta, Quantum, Rabbit, Scirocco	93-95	6mm x 1.0 thread, 37.1mm length	Rear
280030ERL	White Truck		7/16 -20 Thread, 2 5/8" length	
280024ERL	Yugo	86-90	8mm x 1.25 thread, 23.5mm length	Front & Rear

SEALING SYSTEMS

PRESSURE MASTER™ SEALS, designed and manufactured for Earl's by Parker Hannifin Corporation, were the first high performance seals developed to solve automotive sealing problems using Aerospace Technology.



REUSABILITY/ADAPTABILITY













The graphite foil sealing inserts are replaceable in the aluminum retainer, making it an economical solution to tough sealing problems.










VIRTUALLY LEAKPROOF

Leak down tests show Earl's Pressure Master™ seals up to 1200% better under pressure than leading gasket systems.

SUPERIOR TORQUE RETENTION

TORQUE TESTS show the fastener pre-load is longer lasting. Earl's 90% break loose torque compares to 65% for our nearest competition.

PART NO.	DESCRIPTION
 CHEVY SMALL BLOCK 265-400 29D03BERL	Header Seals with 1.50" x 1.50" ports (pair)
 29D03B1ERL	replacement insert set (1.50" x 1.50" ports)
 29DA3BERL	Header Seals with D-Port LT-1 ports (pair)
 29D03B3ERL	replacement insert set (D-Port LT-1 ports)
 29DB3BERL	Header Seals with 1.36" x 1.36" ports (pair)
 29D03B4ERL	replacement insert set (1.36" x 1.36" ports)
 29DC3BERL	Header Seals with Round 1.59" Dia. ports (pair)
 29D03B5ERL	replacement insert set (Round 1.59" Dia. ports)
 29DD3BERL	Header Seals with D-Port 1.55" x 1.63" ports (pair)
 29D03B6ERL	replacement insert set (D-Port 1.55" x 1.63" ports)
 29DE3BERL	Header Seals with uncut centers (pair)
 29D03B2ERL	replacement insert set (uncut centers)

PART NO.	DESCRIPTION
 CHEVY BIG BLOCK 396-502 29D04BERL	Header Seals for Chevy with 1.50" x 1.50" ports (pair)
 29D04B1ERL	replacement insert set (1.50" x 1.50" ports)
 29D04B2ERL	replacement insert set (uncut centers)
 FORD SMALL BLOCK 289-302-351W 29D03AERL	Header Seals for Ford 289-302-351W (pair) (Except Boss)
 29D03A1ERL	replacement insert set (standard)
 29D03A2ERL	replacement insert set (uncut centers)
 FORD BIG BLOCK 429-460 29D04AERL	Header Seals for Ford 429-460 (pair)
 29D04A1ERL	replacement insert set (standard)
 29D04A2ERL	replacement insert set (uncut centers)

PRESSURE MASTER™ COLLECTOR SEALS

SEALING SYSTEMS

EARL'S PRESSURE MASTER™ COLLECTOR SEALS have all of the superior features as our header seals to solve your exhaust sealing problems.

COLLECTOR SEALS



29D15ZERL

3 Bolt 2-1/2" Dia. (pair)



29D10ZERL

3 Bolt 3" Dia. (pair)



29D20ZERL

3 Bolt 3-1/2" Dia. (pair)

REPLACEMENT INSERTS



29D15Z1ERL

3 Bolt 2-1/2" Dia. (pair)



29D10Z1ERL

3 Bolt 3" Dia. (pair)



29D20Z1ERL

3 Bolt 3-1/2" Dia. (pair)

SEALING SYSTEMS

EARL'S PRESSURE MASTER™ VALVE COVER SEALS were developed for high performance and racing engines. The sealing material is designed for long life by use of high temperature resistant silicone elastomer.

SEALABILITY

Pressure Master™ Seals provide complete and reliable sealing without the use of adhesives.

INSTALLATION

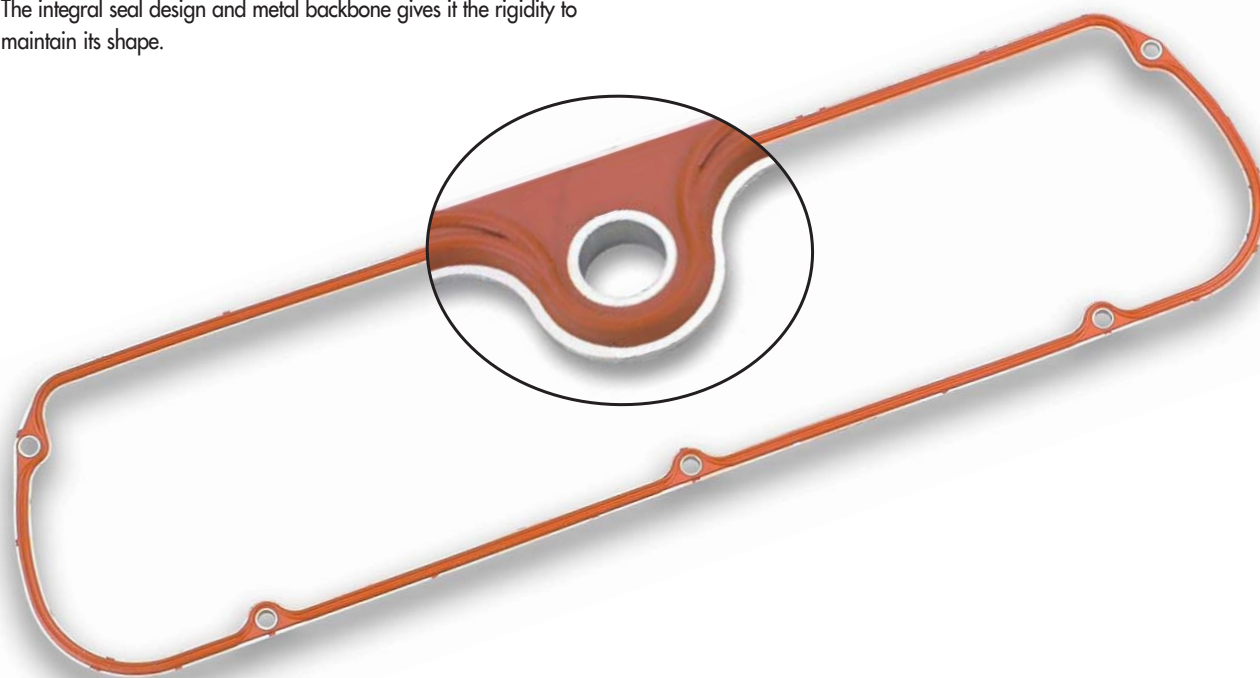
The integral seal design and metal backbone gives it the rigidity to maintain its shape.

REUSABILITY

The seals are designed for extended life by establishing optimum squeeze on the seal element. The metal inserts around the screw holes control the amount of squeeze on the rubber, preventing over tightening of the seal.

LATEST TECHNOLOGY

Bolt load is transmitted through the metal insert at the screw holes, which assures positive closure and optimum bolt pre-load



PART NO.	DESCRIPTION
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29E03BERL

Small Block Chevy
265-400 (pair)



29E04BERL

Big Block Chevy
395-502 (pair)

PART NO.	DESCRIPTION
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29E03AERL

Small Block Ford
289-302-351W (except boss)

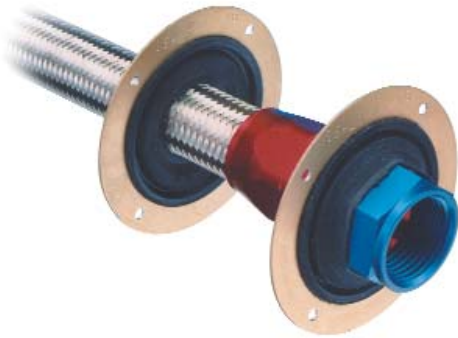


29E04AERL

Big Block Ford
429-460 (pair)

FIREWALL GROMMET SEALS

SEALING SYSTEMS



SEALS-IT has designed this unique seal that will stretch to allow the fitting to pass, yet will grip the hose, not allowing fumes or debris to pass through. Made from a fire retardant rubber bonded to an anodized aluminum bezel.

PART NO.	DESCRIPTION
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29G001ERL Blank seal



29G006ERL -6 hose and fitting



29G008ERL -8 hose and fitting



29G010ERL -10 hose and fitting

PART NO.	DESCRIPTION
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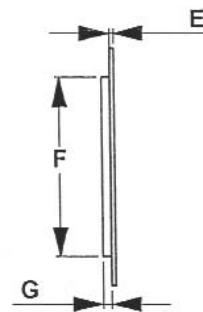
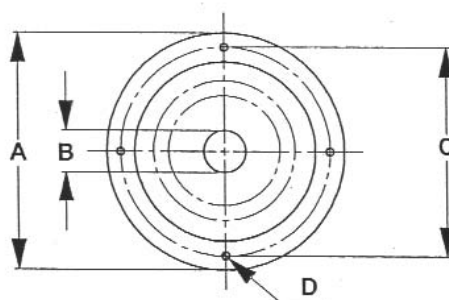
29G012ERL -12 hose and fitting



29G016ERL -16 hose and fitting



29G020ERL -20 hose and fitting



PART NO.	A	B	C	D	E	F	G
29G001ERL	3.000	NO HOLE	2.65	.125	.040	2.250	.120
29G006ERL	3.000	.375	2.65	.125	.040	2.250	.120
29G008ERL	3.000	.500	2.65	.125	.040	2.250	.120
29G010ERL	3.000	.625	2.65	.125	.040	2.250	.120
29G012ERL	3.000	.750	2.65	.125	.040	2.250	.120
29G016ERL	3.000	.950	2.65	.125	.040	2.250	.120
29G020ERL	3.000	1.180	2.65	.125	.040	2.385	.120

COMPONENTS AND ACCESSORIES

ECON-O-FIT™ HOSE CLAMPS

ECON-O-FIT™ is the original anodized aluminum hose clamp cover. Its appearance dresses up any installation. ECON-O-FIT's specially designed interior grooving prevents the hose from "hanging up" on the clamp and ensures proper placement of the worm gear type clamp with respect to the end of the hose. ECON-O-FITs are machined from aluminum alloy and are available in red, blue, chrome and black.

Body is hexagonal on sizes 3 through size 16.

Body is round on sizes 18 through size 36.



NEW!

ECON-O-FIT SIZE	ECON-O-FIT I.D.	FITS STAINLESS HOSE SIZE	HOSE O.D.	TYPICAL APPLICATION	PART NO. RED	PART NO. BLUE	PART NO. CHROME	PART NO. BLACK
3	7/16"	4 or 5	3/8"	Vacuum Line	900103ERL	900203ERL	900303ERL	N/A
4	1/2"	4 or 5	7/16" - 1/2"	Fuel Lines - Vacuum Lines	900104ERL	900204ERL	900304ERL	900504ERL
5	35/64"	4 or 5	1/2"	Fuel Lines	900105ERL	900205ERL	900305ERL	900505ERL
6	5/8"	6	35/64"	Fuel Lines - Oil Lines	900106ERL	900206ERL	900306ERL	900506ERL
7	21/32"	7	5/8"	Fuel Lines - Oil Lines	900107ERL	900207ERL	900307ERL	900507ERL
8	11/16"	7 or 8	5/8" - 41/64"	Vent Lines - Oil Cooler Lines	900108ERL	900208ERL	900308ERL	900508ERL
10	13/16"	10	51/64"	Oil Cooler Lines - Heater Hoses	900110ERL	900210ERL	900310ERL	900510ERL
12	15/16"	12	15/16"	Heater Hoses	900112ERL	900212ERL	900312ERL	900512ERL
14	1 - 1/8"	12 or 14	15/16" - 1-1/32"	Heater Hoses	900114ERL	900214ERL	900314ERL	900514ERL
16	1-3/16"	16	1-5/32"	Heater - Radiator Hoses	900116ERL	900216ERL	900316ERL	900516ERL
18	1-3/8"	16 or 18	1-5/32" - 1-5/16"	Heater - Radiator Hoses	900118ERL	900218ERL	900318ERL	N/A
20	1-1/2"	20	1-7/16"	Heater - Radiator Hoses	900120ERL	900220ERL	900320ERL	N/A
24	1-3/4"	24	1-45/64"	Radiator Hoses	900124ERL	900224ERL	900324ERL	N/A
28	1-15/16"	28	1-27/32"	Radiator Hoses	900128ERL	900228ERL	900328ERL	N/A
32	2-3/16"	32	2-1/8"	Radiator Hoses	900132ERL	900232ERL	900332ERL	N/A
34	2-5/16"	**	**	Radiator Hoses	900134ERL	900234ERL	900334ERL	N/A
36	2-3/8"	**	**	Radiator Hoses	900136ERL	900236ERL	900336ERL	N/A

** No stainless braided hose this size. Intended for use with TUBE BRAID over existing radiator hose.
ECON-O-FIT HOSE ENDS ARE COVERED BY U.S. PATENTS NO 4135744-DES 251676 AND 251918

STAINLESS STEEL HOSE CLAMPS

Despite our best efforts, there are still places where it makes sense to use an old fashioned hose clamp.



PKG. PART NO.	PKG. QTY.	I.D. MIN.	I.D. MAX.
174002ERL	4	.219	.625
174003ERL	4	.375	.875
174004ERL	4	.500	1.250
174005ERL	4	.500	1.500
174006ERL	4	.500	1.750
174008ERL	4	.750	2.500

HOSE & TUBING SEPARATORS

Crafted from 6061-T6 billet aluminum alloy these clamps are the finest available to finish off a professional plumbing installation. Clamps come with counter sunk allen head screws in a variety of colors and sizes for separating, isolating and securing fuel, oil and brake lines.



SIZE	RED ANODIZED	BLUE ANODIZED	POLISHED	QTY. PER PKG.	PERFORM-O-FLEX™ AUTO-FLEX™ PRO-LITE 350™	SPEED-FLEX™	SUPER STOCK™
3/16	167003ERL	167103ERL	167203ERL	3	—	—	—
1/4	167004ERL	167104ERL	167204ERL	3	—	-3	—
5/16	167005ERL	167105ERL	167205ERL	3	—	-4	—
3/8	167006ERL	167106ERL	167206ERL	2	-3	—	—
7/16	167007ERL	167107ERL	167207ERL	2	-4	-6	—
1/2	167008ERL	167108ERL	167208ERL	2	-5	—	-4
9/16	167009ERL	167109ERL	167209ERL	2	-6	-8	—
5/8	167010ERL	167110ERL	167210ERL	2	—	—	-6
11/16	167011ERL	167111ERL	167211ERL	2	-9	—	—
3/4	167012ERL	167112ERL	167212ERL	2	—	—	-8
13/16	167013ERL	167113ERL	167213ERL	2	-10	—	—
7/8	167014ERL	167114ERL	167214ERL	2	-11	—	—
15/16	167015ERL	167115ERL	167215ERL	2	-12	—	-10
1	167016ERL	167116ERL	167216ERL	2	—	—	—
1-1/16	167017ERL	167117ERL	167217ERL	2	-14	—	-12
17/32	167019ERL	167119ERL	167219ERL	2	—	—	—
19/32	167020ERL	167120ERL	167220ERL	2	-7	—	—
21/32	167022ERL	167122ERL	167222ERL	2	-8	—	—

LINE CLAMPS



CLAMP I.D. SIZE	RED ANODIZED	BLUE ANODIZED	POLISHED	QTY. PER PKG.	PERFORM-O-FLEX™ AUTO-FLEX™ PRO-LITE 350™	SPEED-FLEX™	SUPER STOCK™
3/16	170003ERL	170103ERL	170203ERL	6	—	—	—
1/4	170004ERL	170104ERL	170204ERL	6	—	-3	—
5/16	170005ERL	170105ERL	170205ERL	6	—	-4	—
3/8	170006ERL	170106ERL	170206ERL	4	-3	—	—
7/16	170007ERL	170107ERL	170207ERL	4	-4	-6	—
1/2	170008ERL	170108ERL	170208ERL	3	-5	—	-4
9/16	170009ERL	170109ERL	170209ERL	3	-6	-8	—



To determine which separator or clamp will fit your hose, measure the outside diameter of your hose and check the corresponding inside size of the separator or clamp and choose the closest one.

CLAMPS, WASHERS & SEALS

COMPONENTS AND ACCESSORIES

CUSHIONED TUBING CLAMPS

These clamps are designed to support and locate hoses. They are attached to the supporting structure either with a machine screw and nut or, in blind applications, with a machine screw and a rivet or plate nut.



PKG. PART # ALUM. FINISH	PKG. PART # RED ANODIZED	PKG. PART # BLUE ANODIZED	FITS TUBE OR HOSE O.D.	PKG. QTY.
171003ERL	171103ERL	171203ERL	3/16"	10
171004ERL	171104ERL	171204ERL	1/4"	10
171005ERL	171105ERL	171205ERL	5/16"	10
171006ERL	171106ERL	171206ERL	3/8"	10
171008ERL	171108ERL	171208ERL	1/2"	5
171010ERL	171110ERL	171210ERL	5/8"	5
171012ERL	171112ERL	171212ERL	3/4"	5
171016ERL	171116ERL	171216ERL	1"	5
171018ERL	171118ERL	171218ERL	1-1/8"	2
171020ERL	171120ERL	171220ERL	1-1/4"	2
171024ERL	171124ERL	171224ERL	1-1/2"	2
171028ERL	171128ERL	171228ERL	1-3/4"	2
171030ERL	171130ERL	171230ERL	1-7/8"	2
171032ERL	171132ERL	171232ERL	2"	2

AN 901 ALUMINUM CRUSH WASHERS

To be used with straight threaded adapter fittings when sealing at a port which has no relief for an "O" ring.

PKG. PART NO.	PKG. QTY.	FTG. SIZE	I.D.
177003ERL	10	3	3/8"
177004ERL	10	4	7/16"
177005ERL	10	5	1/2"
177006ERL	10	6	9/16"
177008ERL	5	8	3/4"
177010ERL	5	10	7/8"
177012ERL	5	12	1-1/16"
177016ERL	2	16	1-5/16"
177100ERL	10	10mm	10mm



COPPER

PKG. PART NO.	PKG. QTY.	FTG. SIZE	I.D.
177101ERL	10	10mm	10mm
177102ERL	10	4	7/16"



STAT-O-SEALS

The Stat-O-Seal consists of a synthetic rubber "O" ring mechanically locked to the I.D. of an aluminum washer. When tightened the "O" ring is compressed, forcing the sealing surfaces around the bolt shank. They will form a positive seal over a temperature range of -85° to +450° F.



PART NO.	PKG. QTY.	I.D.	FITS AN FITTING
178003ERL	2	3/16"	—
178004ERL	2	1/4"	—
178005ERL	2	5/16"	—
178006ERL	2	3/8"	3
178007ERL	2	7/16"	4
178008ERL	2	1/2"	5
178009ERL	2	9/16"	6
178010ERL	2	5/8"	—
178012ERL	2	3/4"	8
178014ERL	2	7/8"	10

DOWTY SEALS

Dowty seals are similar in concept to our Stat-O-Seals, but are considerably smaller in diameter (and thicker in cross section).



PART NO.	PKG. QTY.	I.D.	FITS AN FITTING
178103ERL	2	3/16"	—
178104ERL	2	1/4"	—
178105ERL	2	5/16"	—
178106ERL	2	3/8"	3
178107ERL	2	7/16"	4
178108ERL	2	1/2"	5
178109ERL	2	9/16"	6
178110ERL	2	5/8"	—
178112ERL	2	3/4"	8
178114ERL	2	7/8"	10
178117ERL	2	1-1/16"	12

"O" RINGS

EARL'S STOCKS "O" ring seals in both the traditional BUNA N synthetic rubber and in VITON®. The BUNA compound is compatible with most fuels, hydraulic fluids and lubricants up to a temperature limit of 275° F. VITON® is preferred for synthetic lubricants, oxygen bearing fuels and additives and non-ether based brake fluids. VITON® also has more scuff resistance, a longer service life and a higher temperature rating of 400° F.

Viton® is a registered trademark of DuPont Performance Elastomers



Viton®			Buna N®		
PKG. PART NO.	PKG. QTY.	FTG. SIZE	PKG. PART NO.	PKG. QTY.	FTG. SIZE
176103ERL	10	3	176003ERL	10	3
176104ERL	10	4	176004ERL	10	4
176106ERL	10	6	176006ERL	10	6
176108ERL	10	8	176008ERL	10	8
176110ERL	5	10	176010ERL	5	10
176112ERL	5	12	176012ERL	5	12
176116ERL	5	16	176016ERL	5	16

CONICAL SEALS

IMMEDIATE AND PERMANENT field repairs for damaged hose end and 37° adapter fitting cones and seats.

Easily installed by simply pushing over the male cone and assembling the hose end in the normal manner.

PART NO.	DESCRIPTION
169101ERL	Conical Seal Assortment, contains 4 of each of the following sizes: -3, -4, -6, -8, -10, -12, -16
169103ERL	package of 4, size -3
169104ERL	package of 4, size -4
169106ERL	package of 4, size -6
169108ERL	package of 4, size -8
169110ERL	package of 4, size -10
169212ERL	package of 2, size -12
169216ERL	package of 2, size -16



TEFLON® TAPE

EVERY TIME you install a tapered pipe threaded fitting it is essential to use some form of anti-seize to prevent galling. Our teflon tape is not only the easiest and least messy form of anti-seize available, it also forms a positive seal.

PKG. PART NO.	DESCRIPTION
175002ERL	1/2x520"



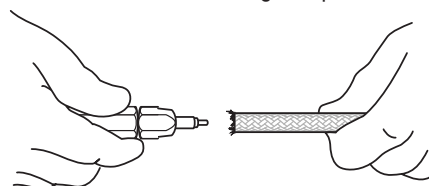
EARL'S BRAID SPREADER FOR -3 AND -4 TEFLON HOSE

IN ORDER to insert the "olive" into Speed-Flex Hose, the stainless protective braid must be separated from the teflon liner. This can be more difficult than it sounds. Earl's braid spreader solves the problem—and eliminates the tiresome probability of poking holes in your fingers. In use the tool is simply inserted into the cut end of the hose and pushed—spreading the braid. The olive is then placed on the tool mandrel, pushed over the hose liner and under the braid until the liner bottoms against the shoulder of the olive.

The tool mandrel is double ended—one for -3 hose and one for -4. The handle contains a recess for storage of spare olives.



PART NO.	SIZE
007ERL	-3 and -4 Hose



COMPONENTS AND ACCESSORIES

HOSE END WRENCHES

THESE WRENCHES ARE specifically designed for use with Earl's fittings and hose ends. The short handles allow usage in cramped areas and discourages over-tightening. Color coded for quick size identification. Reduces damage to aluminum.

PART NO.	HEX SIZE	NUT SIZE	COLOR
230406ERL	11/16	6 Nut	Black
230408ERL	7/8	8 Nut	Blue
230410ERL	1"	10 Nut	Purple
230412ERL	1-1/4	12 Nut	Red
230416ERL	1-1/2	16 Nut	Bronze
230420ERL	1-13/16	20 Nut	Gold
230402ERL	Set of all six		



DOUBLE-ENDED HOSE END WRENCHES

DOUBLE-ENDED wrenches make it easier than ever to assemble Earl's hose and hose ends correctly without damaging ends. Finished in anodized color coded aluminum. Pick up a complete set for your tool box today.

PART NO.	HEX SIZE	FITS	COLOR
230405ERL	9/16x1/2	4 nut - 3 nut	Natural
230407ERL	11/16x5/8	6 nut - 4 socket	Black
230409ERL	7/8x3/4	8 nut - 6 socket	Blue
230411ERL	1x7/8	10 nut - 8 socket	Purple
230413ERL	1-1/4x1-1/16	12 nut - 10 socket	Red
230415ERL	1-1/2x1-3/16	16 nut - 12 socket	Bronze
230419ERL	2"x1-7/16	20 nut - 16 socket	Gold
230401ERL	Set of all seven		



ULTRA-FLEX™ HAND HELD HOSE CUTTER

Stop wasting time and material with jagged or angled cuts on your hose assemblies. This hose cutter puts precision accuracy in the palm of your hand. The special v-block ensures a straight clean cut every time. This hand held cutter will cut Earl's Super Stock™, Pro-Lite 350™ and even our new Ultra-Flex 650™ Kevlar hose. This tool weighs only 12 oz. and the best part is that the blade is dual functioning. When one edge becomes dull simply rotate the blade and you have a fresh blade ready for hundreds of cuts.

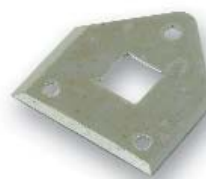
D022ERL



ULTRA-FLEX™ REPLACEMENT HOSE CUTTER BLADE

Earl's also carries a 5 blade (10 with rotation) replacement set.

D023ERL



NEW!

ULTRA-FLEX™ CRIMPING ACCESSORIES

Earl's offers a full line of crimping accessories and an exclusively built mobile crimper for assembling all of our Ultra-Flex 650™ hose and Ultra-Flex™ hose ends. A complete set of dies covering all sizes -4 through -16, die rings, optional air over oil pump for direct air source, and a custom mounting plate are available. The perfect lasting investment for all of your Ultra-Flex assembly needs.

- Crimper has a cast aluminum body that weighs only 42 lbs!
- Manual pump (provided) or optional air over oil pump for direct air source.
- Full cycle time of 20 seconds to 3 minutes depending on what hose end or size of the hose is used.
- 10,000 PSI crimp force on the collar.
- Completely mobile.
- All parts designed exclusively for Earl's for the Ultra-Flex line.



D032ERL
Ultra-Flex crimping machine



D03201ERL
D032 Crimper Die Ring

D032_ERL
Ultra-Flex die set



PART #	DESCRIPTION
D032ERL	Ultra-Flex crimping machine
D03200ERL	D032 Mounting Plate
D03201ERL	D032 Crimper Die Ring
D03202ERL	D032 Air over Oil Pump
D03204ERL	-4 Ultra-Flex die set
D03206ERL	-6 Ultra-Flex die set
D03208ERL	-8 Ultra-Flex die set
D03210ERL	-10 Ultra-Flex die set
D03212ERL	-12 Ultra-Flex die set
D03216ERL	-16 Ultra-Flex die set

ULTRA-FLEX HOSE & HOSE ENDS PGS. 5-8
Crimping Instructions on pg. 118,119



D03202ERL
D032 Air over Oil Pump



D03200ERL
D032 Mounting Plate

AUTO-CRIMP TOOLS & DIES

CRIMPING TOOL

Crimping tool and dies are used to crimp the aluminum collar on Auto Crimp hose ends. Designed to give a maximum pressure rating to Auto-Crimp hose ends when using Pro-Lite 350™ hose.

**LEVER TYPE
CRIMPING
MACHINE
PART NO.**

D031ERL



PART NO.
D031_ERL



CRIMPING DIES

The crimping tool is sold without dies. You will need to order the correct die for each size Auto-Crimp™ hose ends. These dies will only work with Auto-Crimp hose ends. Dies are also available for Super Stock™ hose and hose ends.

AUTO-CRIMP CRIMPING DIES PART NO.	SIZE
D03104ERL	4
D03106ERL	6
D03108ERL	8
D03110ERL	10
D03112ERL	12
D03116ERL	16

SUPER-STOCK CRIMPING DIES PART NO.	SIZE
D03145ERL	1/4"
D03167ERL	3/8"
D03109ERL	1/2"
D03111ERL	5/8"
D03113ERL	3/4"

COMPONENTS AND ACCESSORIES

EARL'S ALUMINUM VISE JAWS FOR HOSE ASSEMBLY

THESE HANDY vise jaw liners help prevent scratching of anodized aluminum hose ends during assembly. Internal magnets hold the extruded aluminum liners securely to most popular bench vises. The jaws are available in both of the standard jaw widths and are designed to hold almost any soft part without marking its surface.

PART NO.	DESCRIPTION
004ERL	Aluminum Vise Jaws 3" Wide
005ERL	Aluminum Vise Jaws 5" Wide



AUTO-CRIMP INSTALLATION WHEEL

ORIGINALLY intended for OEM and Speed Shop accounts, this simple tool allows field assembly of AUTO-CRIMP hose ends with Earl's anodized aluminum crimping sleeves. The result is an economical and extremely lightweight permanent assembly. Crimping Wheel fits Imperial-Eastman TC 1000 tube cutter (not included).

019ERL



TUBE-MATE GROOVING WHEEL

IN ORDER to use Earl's TUBE-MATE hose end, the rigid tubing to which the hose end attaches must be either grooved or beaded. Our grooving tool is available as a wheel to fit Imperial-Eastman TC 1000 (not included).

006ERL



EARL'S EZ-BEADER™ TUBING BEADER

Patent NO. 5,186,033

EARL'S patented EZ (ROLLER) BEADER is a fresh approach to an old problem. In order to securely attach rubber water hose to rigid aluminum tubing, the end of the tubing must be beaded. Compact enough to be used on already installed tubing, Earl's EZ-BEADER produces a properly positioned and perfectly radiused bead on aluminum tubing with wall thicknesses from .035" to .065". This is one tool that no serious racing mechanic can afford to be without.



PART NO.	TUBE O.D.
008ERL	3/8"
009ERL	1/2"
010ERL	5/8"
011ERL	3/4"
012ERL	1"
013ERL	1-1/4"
014ERL	1-1/2"
015ERL	1-3/4"
016ERL	2"
018ERL	Set of all 9

PRESSURE TEST KITS

EVERY HOSE assembly should be pressure tested prior to installation. Earl's PRESSURE TEST KIT makes it easy to test field-assembled kits with either compressed air or nitrogen. Consists of fitting with air valve in each size and matching plugs.

Covers sizes 3 through 16.

D016ERL



ASSEMBLY LUBE

184004ERL

EARL'S ASSEMBLY LUBE is specifically mil-spec formulated to ease the installation of hose ends onto synthetic rubber hose. Comes in 8 oz. squeeze bottle.



EARL'S PIPE SEALANT

D024ERL

Earl's instant pipe sealant secures metal pipes and fittings by filling the space between threaded metal parts. Thread sealants prevent leakage caused by tape shredding, vibration loosening, solvent evaporation and damaged threads. Pipe sealant can be used for both low and high pressure applications and seals to the burst strength of most piping systems. Because of the lubricating properties, fitting assembly is easy. It works on any liquid, gas, fuel, air, oil lines and has an anti-galling compound to work with stainless and aluminum fittings. Parts can be disassembled with basic hand tools. Comes in a 50ML tube.

Operating Temperature: -65° F to +400° F

Full Cure Time: 24 Hours @ 68° F

Pressure Resistance: 10,000 PSI

NEW!



EARL'S COPPER-GRAPHITE ANTI-SEIZE

D025ERL

This versatile product is a general purpose copper paste that lubricates, resists seizing and galling and helps defend against galvanic attack. This product also prevents excessive wear and corrosion. Earl's copper-graphite anti-seize can be used on softer metals such as copper and brass, including plastics and non-metallic gaskets. It also allows studs, bolts flanges and gaskets to be removed more easily. Comes in a 4 Oz. can with an attached brush in the lid.

NEW!



EARL'S NICKEL-GRAPHITE ANTI-SEIZE

D026ERL

Earl's nickel-graphite anti-seize is a high temperature resistant anti-seize paste that lubricates during assembly, providing protection against seizing, galling and excessive wear even in the most adverse conditions. This versatile lubrication can be used in automotive, marine and aircraft applications. Nickel is a hard metal that keeps surfaces apart so this product is particularly well suited for applications that involve the use of different metals such as brass to steel. Comes in a 4 oz. can with a brush attached in the lid.

NEW!



COMPONENTS AND ACCESSORIES

PUSH-IN VALVE COVER BREATHER*

Push-In Valve Cover Breather—Machined from 6061-T6 Billet aluminum, these breathers feature a unique dual baffle design to virtually eliminate oil blowing out breather. Replaces existing push-in breathers.

Not legal for sale or use in California on pollution controlled motor vehicles.



3434112ERL

PCV BREATHER

PCV Breather—Machined from 6061-T6 Billet aluminum, the PCV Breather matches Earl's breather in appearance. The difference is the PCV Valve hidden inside. These breathers are available with either 3/8" slip-on hose connection or -6 AN hose end. Now you can eliminate that unsightly PCV valve.

Billet aluminum with Blue anodized fitting



Breathers come complete with a rubber grommet to permit installation of Earl's push-in breather on valve covers using either push-in or twist-in breathers. Breathers require minimum hole diameter of 1.22".

PART NO.	QTY. PER PKG.	FINISH	DESCRIPTION
3434110ERL	1	Mill	PCV Breather AN -6
3434114ERL	1	Mill	PCV Breather Slip-On 3/8"
3434116ERL	1 Pair*	Mill	PCV Breather AN -6
3434118ERL	1 Pair**	Mill	PCV Breather Slip-On 3/8"

* Includes 1 Each #3434112 & 3434110

** Includes 1 Each #3434112 & 3434114



3434114ERL



3434110ERL

WATER NECKS

These filler necks are CNC machined and are ready for welding. They come with a 1/4" barb overflow fitting attached



PART NO. OPENING

166014ERL 32mm



166015ERL 1.5"

PROTECTIVE HOSE COVERING

COMPONENTS AND ACCESSORIES

FLAME GUARD INSULATION

IT IS OFTEN necessary to insulate hoses (or cables) from extreme heat sources. Earl's non-asbestos flame guard is a very efficient insulating sleeve for hose assemblies. **Color:** Brick Red

PART NO	I.D.	PERFORM-O-FLEX, PRO-LITE & AUTO-FLEX	SPEED FLEX SMOOTH BORE	SUPER STOCK
730006ERL	3/8	-	-3 & -4	-
730008ERL	1/2	-3,-4,& -5	-6	-4
730010ERL	3/4	-6,-7,-8, & -9	-8	-6 & -8
730012ERL	1	-10,-11, & -12	-	-10
730014ERL	1 1/4	-14 & -16	-	-12
730016ERL	1 1/2	-18 & -20	-	-



OPERATING TEMPERATURE
-65° F TO +500° F
W/ SPLASHES TO 2000° F

FLAME GUARD INSULATION - Full cut lengths

PART NO	1FT./0.3M	3FT./0.9M	6FT./1.8M	10FT./3.0M
730006ERL	730106ERL	730306ERL	730606ERL	731006ERL
730008ERL	730108ERL	730308ERL	730608ERL	731008ERL
730010ERL	730110ERL	730310ERL	730610ERL	731010ERL
730012ERL	730112ERL	730312ERL	730612ERL	731012ERL
730014ERL	730114ERL	730314ERL	730614ERL	731014ERL
730016ERL	730116ERL	730316ERL	730616ERL	731016ERL

FLAME GUARD TAPE

Available in 1" width on a 12 foot roll.

Color: Brick Red



731001ERL

OPERATING TEMPERATURE
-65° F TO +500° F
W/ SPLASHES TO 2000° F

STAINLESS TUBE-BRAID™ PROTECTIVE COVERING

Earl's Tube-Braid™ is the least expensive way to finish off any custom engine modification. Stainless Tube-Braid™ is actually stainless steel that slips over existing hoses, and gives the look of the expensive line. Stainless Tube-Braid™ works ideally with Econ-O-Fit hose ends for the finished appearance of professional plumbing. They are also excellent for covering individual wires and cables and for containment of wire bundles.

I.D. RANGE	BULK PART NO.
1/4" to 3/8"	920010ERL
3/8" to 5/8"	920013ERL
3/4" to 1"	920001ERL
1" to 1-3/4"	920007ERL
1-1/4" to 2"	920008ERL
1-1/2" to 3"	920004ERL



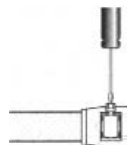
IMPORTANT NOTE 1: Whenever using Tube-Braid™ we suggest most strongly that as it makes visual inspection of the hose underneath impossible, you will need to apply it to a NEW original equipment hose to ensure as long and trouble-free hose life as possible.

IMPORTANT NOTE 2: Each size of Tube-Braid™ sleeve covers a range of hose diameters. If your hose diameter is near the top of the Tube-Braid™ size range, you are likely to need MORE length of sleeve than the actual length of the hose you are intending to cover. So make allowances when ordering!

TUBE BRAID™ HOSE COVER - STAINLESS TUBE BRAID



1. Tape end first to avoid fraying
2. Cut with fine tooth blade or shear
3. Slide Tube-Braid onto hose and clamp one end using Econ-O-Fit™ hose end
4. Work Tube-Braid along hose and stretch to fit snugly



5. Install Econ-O-Fit™ hose end on other end of hose and secure tightly

ECON-O-FIT™ HOSE ENDS



1. Slide Econ-O-Fit™ over hose
2. Slide assembly over nipple
3. Tighten onto fitting

COMPONENTS AND ACCESSORIES

ALUMINUM TUBING

ANNEALED ALUMINUM TUBING is easily hand-formed to virtually any requirement. The tubing can be used with Earl's TUBE-MATE AUTO-FIT hose ends, it can be flared and used with Earl's 5818 tube nut and 5819 tube sleeve or an adapter can be welded onto the end(s) of the tube, or the ends can be beaded and used with Earl's ECON-O-FIT hose ends or with standard hose clamps. For clamping hose, tubing should be beaded.



PART NO.	O.D.	LENGTH	FINISH
100031ERL	1/4	10' (3m)	Unanodized
100034ERL	3/8	10' (3m)	Unanodized
100037ERL	1/2	10' (3m)	Unanodized

INNER SUPPORT SPRING

IS USED WITH Pro-Lite 350™ hose. A Support Spring is recommended for suction applications or when very tight bends must be made.

Pro-Lite 350™ hose pg. 2

HOSE NO.	4' LENGTH
6	773406ERL
8	773408ERL
10	773410ERL
12	773412ERL
16	773416ERL



SAFETY WIRE

Earl's safety wire is packaged in a convenient one-pound dispenser. The wire pulls and uncoils from the inside with no tangles. The wire is constructed of Mil-Spec 20995 TYPE 302 Stainless Steel wire.

PART NO.	WIRE (DIA.)	FOOTAGE(APPROX.)
D002ERL	.025	600 ft
D003ERL	.032	350 ft
D004ERL	.041	225 ft



CAPS & PLUGS

Earl's plastic caps and plugs are great for plugging fittings when hoses are disconnected and for keeping debris from entering hoses when they are being stored.



CAP PART NO.	DESCRIPTION	PLUG PART NO.	QTY. DESCRIPTION	QTY. PER PKG.
179103ERL	Plastic Caps -3	179203ERL	Plastic Plugs -3	25
179104ERL	Plastic Caps -4	179204ERL	Plastic Plugs -4	25
179106ERL	Plastic Caps -6	179206ERL	Plastic Plugs -6	25
179108ERL	Plastic Caps -8	179208ERL	Plastic Plugs -8	15
179110ERL	Plastic Caps -10	179210ERL	Plastic Plugs -10	15
179112ERL	Plastic Caps -12	179212ERL	Plastic Plugs -12	10
179116ERL	Plastic Caps -16	179216ERL	Plastic Plugs -16	10

START UP PLAN-O-GRAM & HOSE & HOSE END DISPLAY

MERCHANDISING

START UP PLAN-O-GRAM

GET INTO THE PLUMBING BUSINESS WITH ONE PART NUMBER!

EPG-1ERL

Includes:

- 50 of Earl's most popular part numbers (2 each)
 - Assortment of Swivel Seal™ and Ano-Tuff™ hose ends
 - Assortment of adapters
 - In-line #6 and #8 filters
 - #6 shut off valve
 - 10 foot sections of #6 and #8 Auto-Flex hose
 - 12" x 36" full color header card with tech data
 - 60 Reorder Reminder decals
 - 18" x 36" Earl's banner
 - 20 contingency decals
 - Diagram sheet to show you how to layout the plan-o-gram
 - 5 Earl's master catalogs
- (peg board and hooks not included)



36-341
Earl's Banner

36-282
Earl's Decal

NOTE: Banner and decals are available seperately



Reorder
Reminder
decals (36-342)
included with
plan-o-gram

HOSE & HOSE END DISPLAY

This display board explains the different hose and hose ends Earl's offers on an attractive 4 color, 2' X 2' point of purchase (POP). Hang it on your plumbing wall, under the counter or anywhere you have your Earl's Plumbing.

36-377

START & FINISH the job with EARL'S PERFORMANCE PLUMBING

Earl's has been the industry leading brand of performance plumbing for over 40 years. Earl's has the hoses, quality hose ends and hose ends available for the purpose of transferring fluid in a safe and dependable manner. Earl's has the maximum line of adapters, hose fittings, line accessories, custom hose ends and tools, and you will see that the Earl's line can easily equip modern and every plumbing requirement.

Hoses

- (1) Pro-Line™ Hose
- (2) Perform-O-Flex™ Hose
- (3) Auto-Flex™ Hose
- (4) Ultra-Flex GPO™ Hose
- (5) Super-Stack™ Hose
- (6) Power Steering Hose
- (7) Speed-Flex™ Hose

Hose Ends

- (A) Swivel-Seal™ Hose Ends
- (B) Auto-Pit™ Hose Ends
- (C) Auto-Mate™ & Auto-Crimp™ Hose Ends
- (D) Ultra-Flex™ Hose Ends
- (E) Super-Stack™ Hose Ends
- (F) Power Steering Hose Ends
- (G) Speed-Seal™ Hose Ends

Hose Ends Grid:

Hose Ends	Pro-Line	Perform-O-Flex	Auto-Flex	Ultra-Flex GPO	Super-Stack	Power Steering	Speed-Flex
Swivel-Seal	•	•	•	•	•	•	•
Auto-Pit	•	•	•	•	•	•	•
Auto-Mate	•	•	•	•	•	•	•
Auto-Crimp	•	•	•	•	•	•	•
Ultra-Flex	•	•	•	•	•	•	•
Super-Stack	•	•	•	•	•	•	•
Power Steering	•	•	•	•	•	•	•
Speed-Seal	•	•	•	•	•	•	•

www.earlspumbing.com

MERCHANDISING

RETRO T-SHIRT

10001-__ERL

Artwork is by renowned artist Chris Froggett. The back of the shirt features a vintage sprint car complete with knock off wheels, wrapped in Firestone® dirt track tires, and sporting big chrome side pipes. This little number is on its way to the races behind a customized '56 GMC pickup with candy apple scallops, chrome reverse wheels, and a spare mill in the bed. A stack-injected small block is printed on the front of the shirt proudly displaying its Earl's plumbing and Weiland accessories. Classic Earl's logos with that famous "Little Guy" complete the look and let everyone know whose high-performance plumbing you run on your ride.

- High quality Hanes 100% cotton, preshrunk Beefy-T white shirt with a cool retro graphic on front lapel and on the back.
- Available in sizes from small to triple extra large.
- Add SM, MD, LG, XL, XXL or XXXL to part number when placing order.



(Back)

(Front)



METAL SIGN

10000ERL

Dress up any shop with this retro Earl's stamped metal sign. This 24" x 8.25" Earl's metal sign with embossed logo is a must for any Earl's enthusiast.



BANNER

36-341

Hang this 18" x 36" vinyl Earl's banner in your garage and let everyone know who you turn to for performance plumbing.



The Earl's technical section contains details of what is meant by AN, NPT and various other esoteric names and numbers used in plumbing, plus outline drawings of common thread sizes. It also has instructions on assembling the various types of hose ends to the hose. We recommend that you have a look at this section before doing anything.

Automotive Plumbing is like a jigsaw puzzle, lots of bits and pieces all looking much the same and no real guide as to where they go.

The Earl's® catalog shows you the bits and pieces. The following notes will help novice plumbers to sort out which ones to use and hopefully provide a start to developing skills which will make more advanced plumbing a lot easier when you come to it.

TOOLS YOU WILL NEED

Basic plumbing requires:

- **Vice with soft jaws** to avoid marking aluminum fittings - available from Earl's® (P/N 004ERL and 005ERL - page 101)
- **Fine bladed hacksaw, angle grinder or chop saw** - for cutting hose.
- **Set of wrenches.** **NOTE:** Aluminum wrenches which reduce marking of aluminum adapters and hose ends are available from Earl's. (Page 99)
- **Ruler** - or preferably Vernier gauge - for measuring hose and barb fitting diameters.
- **Tape measure** - minimum extended length 10ft (3m) for measuring hose and hose run lengths.
- **Length of string or thin wire** - to assist in measuring lengths of existing or planned hoses.
- **Screwdrivers** - flat blade type.
- **Good straight Tin Snips** - recommended for cutting and trimming TUBE-BRAID™ sleeves.
- **Duct Tape or similar to wrap hose** - prior to cutting. (ALWAYS wrap to prevent fraying).
- **Earl's® Assembly lube (P/N 184004ERL - page 102), Sewing machine oil or clean engine oil** - used on hose end threads before assembling ends to hose.

If you intend to assemble Speed-Flex™ brake lines in sizes 3 or 4 with reusable Speed-Seal™ hose ends you will need a Earl's® braid spreader (P/N 007ERL - page 98) and a utility knife.

THE MOST IMPORTANT BASIC CONCEPTS

1. **Hose diameter.** The inside diameter of an original hose is most important - it is this which determines what sizes of stainless braided hose you will use to replace it. The outer diameter is only of use when determining which size of Earl's® Tube-Braid™ Sleeve or Flame Guard or Econ-O-Fit™ to apply if covering the old hose rather than replacing it.

2. **Hose sizes.** You will find each type in the Earl's® catalog has a size number - 4,5,6 etc. Nearly all the hose ends and adapters also have a size number. For each size, there is a whole family of parts whose part number usually ends in the size number to go with the size of hose. A hose end of 6 will fit the hose size 6. **For example:** Auto-Flex™ hose 300006ERL works with Auto-Fit™ hose ends 300106ERL, 309106ERL, etc. and adapters 981666ERL, 982206ERL, etc. And such parts as in-line filter 230106ERL.

3. **Thread sizes.** The Earl's® catalog provides outlines of the most common NPT and AN threads on pg. 111. If in complete doubt, a thread gauge may be useful to you. Metric threaded adapters to convert from metric holes to AN hose end threads are shown in the Earl's® catalog as well.

BASIC STREET MACHINE PLUMBING

You will be looking most often at the following product types: Auto-Flex™ and Pro-Lite 350™ hoses, Tube-Braid™ stainless steel sleeving, Econ-O-Fit™ clamps, Auto-Fit™ and Swivel Seal™ hose ends, fuel line kits, pipe thread to AN adapters and carburetor/power steering/fuel pump adapters.

1. **Radiator hoses.** Due to their often complex curvature and wide range of sizes pre-braided Auto-Flex™ or Perform-O-Flex™ hose usually cannot be used. Instead we recommend the use of Earl's® Tube-Braid™ sleeve (Page 104) or Form-A-Flex™ radiator hose (Page 59).

2. **Heater hoses.** These may be covered with Tube-Braid™ sleeve, but should preferably be replaced with Auto-Flex™ hose as over a long length its pre-braided cover looks much better! Usually sizes 10 or 12 is suitable. Measure either the inside diameter of the hose you are replacing or the outside diameter of the barb that the old hose pushed over and this will tell you what size of hose to use. Size 12 hose (11/16") will clamp down OK onto 5/8" barbs. Fix in place with Econ-O-Fit™ hose ends of the correct size for the hose or for the old hose + sleeve + tape. Usually sizes 10 or 12 for proper braided hose, size 14 if you used Tube-Braid™ sleeves.

3. **Fuel lines.** Normally you will do these using size 5,6,7 or 8 Pre-braided hose or Pro-Lite 350™ hose to replace the original hose, and appropriate hose ends or Econ-O-Fit™ hose clamps.

4. If you have replaced your carburetor with, lets say, a Holley® carburetor, and a Holley® regulator, you will need to look at going to a complete AN replacement for your plumbing system. Hose ends, hose, adapters and a fuel kit of the appropriate sizes.

5. **Other hoses.** There may be other hoses, breathers, overflows, etc. that you want to replace with Earl's® stainless braided hose and fittings. Just measure internal diameter and length and select the appropriate hose, hose ends or Econ-O-Fit™ clamps to suit.

6. **Oil & Transmission coolers.** If you want to fit an engine or transmission cooler to your vehicle, first work out where you want to put it and determine the space available. Select a cooler from Earl's® extensive range of Temp-A-Cure™ coolers (Page 62). Then the right sandwich adapter to enable you to plumb the cooler to the vehicle. Oil coolers generally use size 10 hose and hose ends and pipe thread to AN adapters. Transmission coolers generally use size 6 or 8 to plumb the cooler.

7. A table with suggested engine oil cooler sizes follows. Note that climactic conditions, degree of engine tune and modifications etc. may mean the suggested cooler is not to be the exact one you need - consult your dealer or Earl's® tech line **1-310-609-1602**.

ENGINE SIZE	COOLER NO.
1000-1500 cc	41310ERL
1501-2500 cc	41610ERL
2501-4000 cc	41910ERL
4001-5000 cc	42510ERL
5001-6000 cc	43410ERL

MOST IMPORTANT OF ALL...

Don't despair if you don't get it all, or don't get it all right the first time around. If your dealer is conveniently close, don't buy everything at once. Get a little at a time until you gain confidence. And if you bought something that doesn't fit, the dealer may, although he is under no obligation to do so, take it back in part exchange for what you really needed all along, as long as you haven't damaged or marked the part you didn't want!

BRAKE HOSES

These days road-going vehicles in most countries have to have flexible brake hoses complying with various rules and regulations. So if your vehicle is street registered, we suggest you use Earl's Hyperfirm™ street legal hoses.

If your vehicle does not have to comply with such regulations, Earl's® huge range of reusable Speed-Seal™ hose ends for Speed-Flex™ Teflon™ hose will let you do pretty much anything. For adapters to suit most brake system components, check out steel brake hydraulic adapters. We strongly suggest you use sizes 2 or 3 Speed-Flex™ for brakes and size 4 Speed-Flex™ for clutch hoses.

ONLY use Earl's® Speed-Flex™ Teflon™ hose for brakes and clutches. Other types of Earl's® hose are totally unsuited to the brake and clutch application and may cause accidents leading to injury or death.

RACE CAR AND SPEED BOAT PLUMBING

Mechanics plumbing high performance competition vehicles and boats will usually have considerable experience in the use of stainless braided and other hoses, so here are only a few general notes too follow.

1. **Hose to use.** We suggest Earl's® Perform-O-Flex™ hose to provide the ultimate in reliability for almost all your needs.. If the chemicals in some modern fuels and lubricants cause a problem, sometimes shown by a smell of petrol, consider using Teflon® lined Speed-flex™ hose. Where ease of use, reduced weight and low pressure are a consideration, Earl's® Super Stock™ & Pro-Lite 350™ hose may be suitable. For high end plumbing requirements use our premium smooth bore Teflon™/Kevlar™ covered Ultra-Flex 650™ hose.

2. **Hose ends to use.** With Perform-O-Flex™ hose use Swivel-Seal™ or Auto-Fit™ hose ends. Super Stock™ hose ends should be used with Super Stock™ hose. Speed-Seal™ hose ends must be used with Speed-Flex™ hose. Pro-Lite 350™ hoses uses Swivel-Seal™, Auto-Fit™ or Auto-crimp™ hose ends. Ultra-Flex 650™ hose must use Ultra-Flex hose ends.

3. **Adapters to use.** The Earl's® catalog list a range of adapters suited to all Earl's® hose ends. Where lack of space make life awkward, consider using the special Swivel-Seal™ hose ends which have adapters built into them. Dry sump pumps and similar pumps usually work best with Earl's® Port adapters in them. Note that when using NPT pipe thread adapters you should apply Teflon® tape or pipe sealant, Loctite 567 or similar products to the tapered threads before wrenching them up.





INSTALLATION

While Earl's hose and hose ends make a pretty fool-proof combination, there are a few general rules to follow to make sure that you end up with a sanitary and trouble-free installation:

1. Make sure that there is adequate clearance between the hose ends and anything that they might be able to contact. While the hose is flexible, the hose ends are not!
2. Do not allow the hose to contact a sharp corner, nut, bolt, rivet stem or anything else that might cause damage. At any point where a hose passes through a panel, install a grommet for chafe protection.
3. Do not allow the hose to rub against anything—even if the surface on which it rubs is flat. The stainless steel braid is a very efficient low speed file and will abrade through anything that it moves against. In order to prevent chafing and to keep your hoses where you meant for them to be support the hoses every 18" or so with either a cushion clamp or a ty-wrap.
4. Do not force the hose into too tight a bend. Follow the minimum bend radius chart. Do not kink the hose, either by too tight a bend, by misalignment between the hose end and the part or adapter on short assemblies or by getting the whole assembly into a helix on long assemblies. Align the hose end with the adapters so that the hose is not placing strain on the hose end or on the adapter. The SWIVEL-SEAL design reduces these problems, but only care in installation will eliminate them. We manufacture enough hose end and adapter configurations to allow a sanitary and sound solution to just about any installation problem.
5. Keep the hoses as far away from extreme heat sources (like turbochargers and exhaust systems) as possible. If you must run close to such things, use an air gap insulating panel and/or fire resistant Flame Guard (pg 104) sheathing. Do not run fuel lines in proximity to hot fluid lines (or anything hot) or you will end up with either hot fuel and low power or vapor lock. Do not run hot fluid lines near cool fluid lines or near to the driver.
6. Do not over-tighten the hose ends onto the adapter fittings or parts. The seal is achieved by the design of the mating surfaces—not by muscle. It helps a lot to use the wrenches made for the job. (See page 99)

MAINTENANCE

Virtually no maintenance is required. Basically, maintaining Earl's high performance plumbing hose ends is a question of preventing abuse.

1. Inspect the plumbing installation frequently for signs of chafing, abrasion, kinking, crushing or seepage.
2. Take care not to crush, stretch, kink or otherwise damage the hose assemblies when changing engines etc.
3. Keep both hoses and fittings CLEAN.
 - (a) Before removing any hose end from its adapter or port, wash the assembly down with solvent—or even gasoline—and blow it clean and dry so that no grit can find it's way into the threads or the sealing surfaces.
 - (b) As soon as the hose end has been removed, install a CLEAN protective plug into the hose end and a CLEAN cap onto the adapter. This will keep dirt out of the lines and the fittings and will keep the fluid off the floor, the machine and the mechanic.
 - (c) Always inspect both hose ends and adapters for dirt before reassembly.
 - (d) Correctly assembled Earl's hose ends will not leak if they, and the adapters are undamaged, clean and properly tightened. The only way to be certain that every hose end is properly tightened is to form the habit of NEVER leaving the adapter, a hose end (or anything else) loose, finger tight or partially tightened. Even when you know that you are going to take the thing right off again, correctly tighten it—every time.

LEAKS

If it leaks, it has probably been assembled incorrectly or the sealing surfaces on the adapter and the nipple have been damaged—or just possibly someone has attempted to assemble an AN 37° seat hose end into a 45° SAE cone. Damage to the cone or the seat can be caused by a multitude of sins—dirt and over-tightening being the most common.

RE-USE

All of Earl's removable hose ends are completely reusable as is the hose and as are most of the competing brands. As usual, Earl's has an edge. When disassembling a nipple and cutter type hose end, it is very common for the inner tube of the liner, which is captured between the nipple and cutter, to be torn off and to remain in place. If this happens, the rubber must be removed before the hose end can be reused—and it is a bear to get out. With SWIVEL-SEAL the chances of this happening are greatly diminished because the cutter can rotate with respect to the nipple so that the rubber is faced with only one moving surface. The procedure is as follows: Place the socket in a vise, and with a wrench on the nipple and another on the cutter, hold the nipple and turn the cutter until the socket is disengaged. Then pull the hose off the nipple. All parts of the SWIVEL-SEAL are ready for reuse as soon as they have been cleaned and relubricated.

TECHNICAL SECTION

“AN” THREAD SIZES

“AN” (Army-Navy) Sizes were established by the Aerospace industry years ago and were the designated O.D. of the rigid metal tube that each size fitting is used with. (The chart to the right will clarify this point.)

The numbers assigned equate to the O.D. (outside diameters) of the tubing in 1/16". Since tubing and hoses are to be found with assorted wall thicknesses we can now understand that the designated size number does not necessarily tell you how large the inside diameter will be. (For example, the inside diameter of an Earl's size 6 hose end is nearly as large as the inside diameter of some other manufacturers' -8 hose ends.)

Each AN size number has its own standard thread size which can be seen in column three of the chart. Again, these are the same thread sizes that have been used in aircraft and industrial applications for many years.

AN SIZE	METAL TUBE O.D.	THREAD SIZE
2	1/8	5/16-24 SAE
3	3/16	3/8-24 SAE
4	1/4	7/16-20 SAE
5	5/16	1/2-20 SAE
6	3/8	9/16-18 SAE
8	1/2	3/4-16 SAE
10	5/8	7/8-14 SAE
12	3/4	1-1/16-12 SAE
16	1"	1-5/16-12 SAE
20	1-1/4	1-5/8-12 SAE
24	1-1/2	1-7/8-12 SAE
28	1-3/4	2-1/4-12 SAE
32	2"	2-1/2-12 SAE



National Pipe Threads (NPT) are the next most popular thread size used in “Competition Plumbing.” We can actually find a resemblance between the size call outs and the I.D. (inside diameter) of the fitting as shown in the chart below.

“NPT” THREAD SIZES

Some of the most popular adapter fittings shown in our catalog are AN to NPT adapters. While many variations are offered, column four in the chart shows which AN size corresponds to each NPT size when inside diameters (flow dimensions) are considered.

All Earl's Swivel-Seal™ hose ends are designed to provide little or no restriction when used with the corresponding AN fitting size.

PIPE THREAD SIZE	THREADS PER INCH	THEORETICAL I.D. OF FTG.	CLOSEST AN FTG. SIZE
1/16"	27	1/16"	
1/8"	27	1/8"	4
1/4"	18	1/4"	6
3/8"	18	3/8"	8
1/2"	14	1/2"	10
3/4"	14	3/4"	12
1"	11-1/2	1"	16
1-1/4"	11-1/2	1-1/4"	20
1-1/2"	11-1/2	1-1/2"	24
2"	11-1/2	2"	32

We also offer a number of Metric threads to AN fitting adapters.



B-NUT SIZES & HOSE-TO-HOSE END CHART

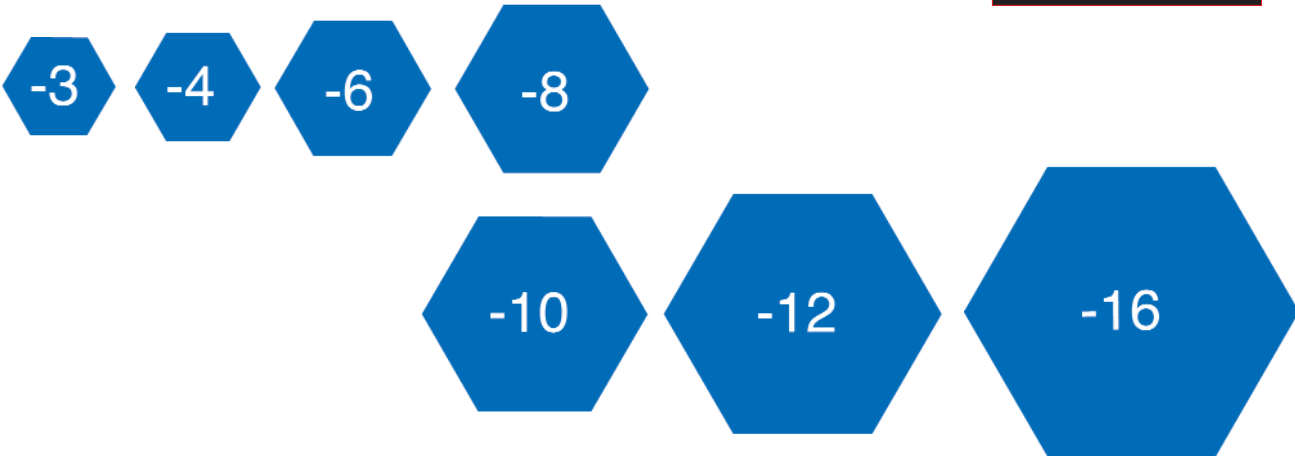
TECHNICAL SECTION

B-NUT CHART

The following chart are the actual size of B nuts used on hose ends and adapters.



Pressure Test All Hose Assemblies Before Installation!



HOSE TO HOSE END COMPATIBILITY CHART

Hose Ends	Hoses						
	Swivel-Seal™	Auto-Fit™	Auto-Crimp™	Auto Mate™	Ultra-Flex™	Super Stock™	Power Steering
Pro-Lite 350™	●	●	●				
Perform-O-Flex™	●	●		●			
Auto-Flex™	●	●		●			
Ultra-Flex 650™					●		
Super Stock™						●	
Power Steering™							●
Speed-Flex™							●

TORQUE VALUES & ULTRA-FLEX 650™ CRIMP DIMENSIONS

TECHNICAL SECTION

TORQUE VALUES

The table below gives the torque tightening values for JIC (AN) fittings in both stainless steel and aluminum. When a combination of aluminum and stainless steel fittings are being mated always use the aluminum fitting torque values

DASH SIZE	ALUMINUM		STAINLESS STEEL	
	INCH/LVS MIN-MAX	NEWTON/m MIN-MAX	INCH/LBS MIN-MAX	NEWTON/m MIN-MAX
-02	50 - 80	5.64 - 9.03	75 - 120	8.47 - 13.55
-03	70 - 105	7.90 - 11.86	95 - 140	10.73 - 15.81
-04	100 - 104	11.29 - 15.81	135 - 190	15.25 - 21.46
-05	130 - 180	14.68 - 20.33	170 - 240	19.20 - 27.11
-06	150 - 195	16.94 - 22.03	215 - 280	24.29 - 31.63
-08	270 - 350	30.50 - 39.54	470 - 550	53.08 - 62.14
-10	360 - 430	40.67 - 48.58	620 - 745	70.05 - 84.17
-12	460 - 550	51.97 - 62.14	855 - 1055	96.60 - 119.18
-16	700 - 840	79.08 - 94.90	1140 - 1370	128.80 - 154.78
-20	850 - 1020	96.03 - 115.24	1520 - 1825	171.73 - 206.19
-24	900 - 1080	101.68 - 122.02	1900 - 2280	214.67 - 257.60
-32	1800 - 2000	203.37 - 255.97	2660 - 2940	300.54 - 332.17

The torque values apply to machined fitting connections only, not flared tube or compression. Fitting mating faces and threads should be lubricated prior to assembly. Generally the system working fluid (engine oil, hydraulic etc.) is used. If another lubricant is used, insure it is compatible with the working fluid and system. Dry assembly should be avoided if all possible.

It is important not to over tighten hose fittings to their mating adapters. Over tightening causes permanent deformation of the fitting seat (37° AN flare) and will result in the mating adapter sealing face to be made concave, this will inhibit repeated reliable use of both the fitting and the adapter.

ULTRA-FLEX 650™ CRIMP DIMENSIONS

The target settings for the Earl's Ultra-Flex 650™ Kevlar & Stainless Steel covered hose, to be applied when using the Earl's Ultra-Flex Crimper and dies, are provided to aid in establishing actual diameters. While the Earl's Ultra-Flex crimper and dies for our Ultra-Flex hose will give crimp diameters close to, or at, specified diameters, the machine operator must check to verify actual dimensions.

SIZE	Dia. after Crimp (in.)	Dia. After Crimp (mm)
-4	Ø 0.465 +/- .005	Ø11.81mm +/- .12mm
-6	Ø 0.606 +/- .005	Ø15.39mm +/- .12mm
-8	Ø 0.800 +/- .005	Ø20.32mm +/- .12mm
-10	Ø 0.930 +/- .005	Ø23.6mm +/- .12mm
-12	Ø 1.151 +/- .005	Ø29.23mm +/- .12mm
-16	Ø 1.345 +/- .005	Ø33.63mm +/- .12mm

Failure to follow these instructions could result in serious injury or property damage during crimping. Improperly crimped fittings can be dangerous to the user of the hose assembly.

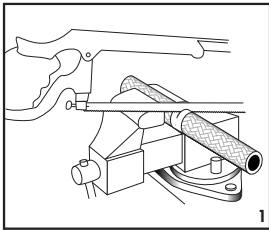
- Do not crimp Earl's hose or fittings with another manufacturer's hose or fitting.
- These dimensions are for Earl's Ultra-Flex Kevlar & Stainless covered hose and Ultra-Flex hose ends only.
- Wear safety glasses and keep hands away from moving objects.
- Always check for proper crimping dimensions

Always test assemblies for leakage prior to installation.

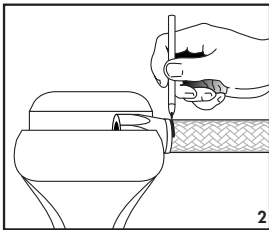


Pressure Test All Hose Assemblies Before Installation!

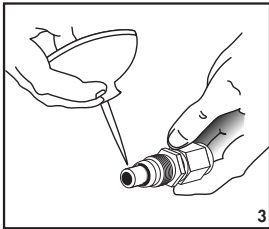
SWIVEL-SEAL™ HOSE ENDS WITH PERFORM-O-FLEX™, PRO-LITE 350™ OR AUTO-FLEX™ HOSE



1. Cut the hose to the required length.
 - a. Measure distance between ports or adapter fittings along the path that the hose run will follow —allowing for bend radius, hose end length and offset to obtain length and hose required.
 - b. Cut the hose square with a radiac wheel or a sharp 32 teeth per inch hacksaw blade. It is necessary to wrap it tightly with electrical or masking tape before cutting and to cut through the tape. This helps to prevent the stainless wire braid from fraying.
 - c. Trim any frayed ends of the braid with a sharp pair of metal snips or diagonal cutters and remove the tape.

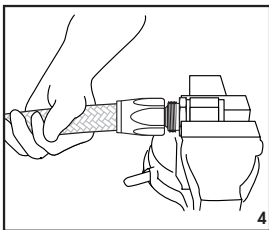


2. Place the socket in a vise and insert the end of the hose into the socket until the hose butts against the bottom of the threads provided for the cutter. Gently pull the hose back until there is a 1/16" to 1/8" gap between the end of the hose and the bottom of the threads — mark hose at bottom of socket with a felt pen so that you can detect any tendency of the hose to be pushed out as you complete the assembly.



3. Lubricate the inside of the hose, the cutter threads and the socket threads with Earl's assembly lube or engine oil. Place the nipple in a vise.

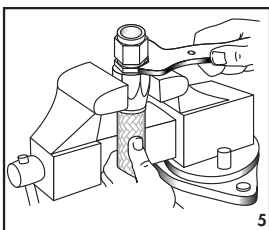
4. Holding the hose and not the socket, push the hose and the socket onto the nipple until the socket threads can be started on the cutter. Holding the hose and not the socket, start the threads and go as far as you can by hand. Depending on the size of the hose, some force may be necessary in this part of the operation.



5. To complete the assembly it doesn't matter whether the nipple or the socket is held in the vise. Holding one or the other in the vise and using a suitable wrench on the other, tighten the socket onto the cutter threads until the socket is within .060" of bottoming on the nipple. Do not use an adjustable or over-size wrench or you will damage either the nipple or the socket.

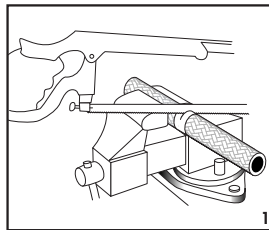
6. Check the mark that you made on the hose in Step 2. If the hose has backed more than about 1/16" out of the socket as you assembled it, return to Step 3.

7. Clean the hose and the hose ends with CLEAN solvent.

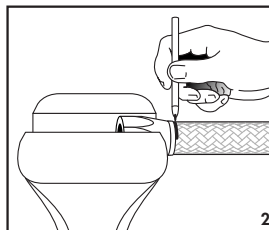


8. Pressure test the assembly before letting it out of your sight. Further check the assembly by running the system at full pressure while you observe the hose, hose ends, and adapters for leaks.

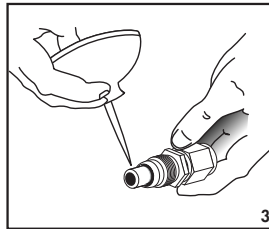
AUTO-FIT™ HOSE ENDS WITH PERFORM-O-FLEX™, AUTO-FLEX™, OR PRO-LITE 350™ HOSE



1. Cut the hose to the required length.
 - a. Measure distance between ports or adapter fittings along the path that the hose run will follow —allowing for bend radius, hose end length and offset to obtain length and hose required.
 - b. Cut the hose square with a radiac wheel or a sharp 32 teeth per inch hacksaw blade. It is necessary to wrap it tightly with electrical or masking tape before cutting and to cut through the tape. This helps to prevent the stainless wire braid from fraying.
 - c. Trim any frayed ends of the braid with a sharp pair of metal snips or diagonal cutters and remove the tape.

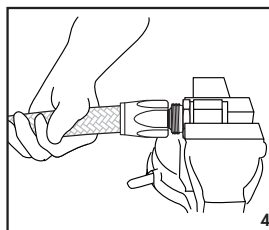


2. Place the socket in a vise and insert the end of the hose into the socket until the hose butts against the bottom of the threads. Gently pull the hose back until there is a 1/16" to 1/8" gap between the end of the hose and the bottom of the socket —mark hose at bottom of socket with a felt pen so that you can detect any tendency of the hose to be pushed out as you complete the assembly.



3. Lubricate the inside of the hose, the nipple threads and the socket threads with Earl's Assembly Lube or Engine Oil. Place the nipple in a vise.

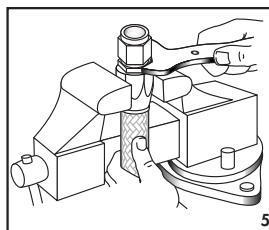
4. Holding the hose and not the socket, push the hose and the socket onto the nipple until the socket threads can be started on the nipple. Holding the hose and not the socket, start the threads and go as far as you can by hand. Depending on the size of the hose, some force may be necessary in this part of the operation.



5. To complete the assembly it doesn't matter whether the nipple or the socket is held in the vise. Holding one or the other in the vise and using a suitable wrench on the other, tighten the socket onto the cutter threads until the socket is within .060" of bottoming on the nipple. Do not use an adjustable or over-size wrench or you will damage either the nipple or the socket.

6. Check the mark that you made on the hose in Step 2. If the hose has backed more than about 1/16" out of the socket as you assembled it, return to Step 3.

7. Clean the hose and the hose ends with CLEAN solvent.



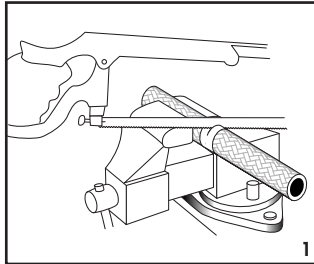
8. Pressure test the assembly before letting it out of your sight. Further check the assembly by running the system at full pressure while you observe the hose, hose ends, and adapters for leaks.

TECHNICAL SECTION

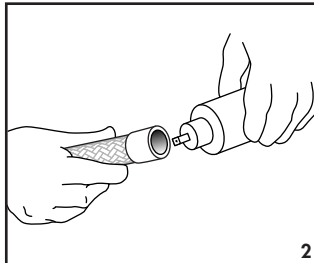


Pressure Test All Hose Assemblies Before Installation!

AUTO-CRIMP™ Hose Ends with PERFORM-O-FLEX™, PRO-LITE 350™ or AUTO-FLEX™ Hose



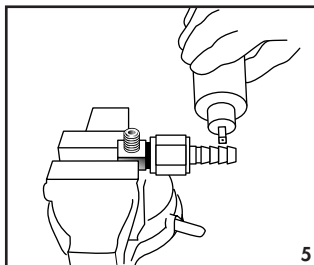
1. Cut the hose square with a radiac wheel or a fine tooth hacksaw. It is necessary to wrap the hose tightly with masking or electrical tape and to cut through the tape. This helps to prevent the stainless braid from fraying.



2. Trim any frayed ends of the braid with sharp snips or diagonal cutters and remove the tape.

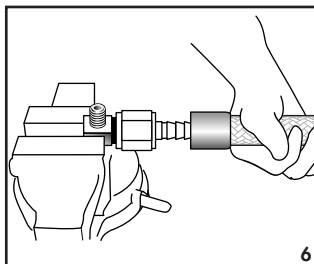
3. Slip the AUTO-CRIMP collar over the end of the hose.

4. Lubricate the inside of the hose and the outside of the AUTO-MATE nipple.



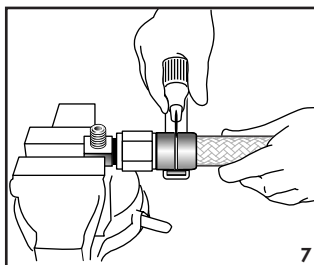
5. Place a suitable adapter fitting in a vise. Screw the AUTO-MATE hose end onto the adapter and tighten.

6. Push the AUTO-MATE hose end into the hose until it bottoms against the collar.

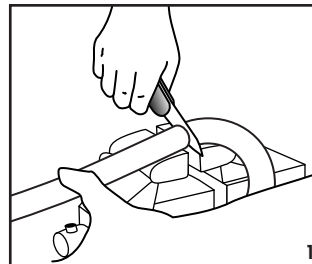


7. Place the AUTO-CRIMP tool approximately in the center of the collar. Tighten the roller until it contacts the collar. Alternately turning the handle and tightening the roller, crimp the collar until its diameter has been reduced sufficiently to show the hose end barbs as ridges in the collar.

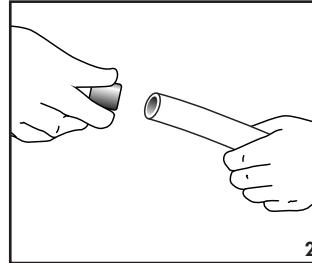
8. Blow the assembly clean and pressure test before running the car.



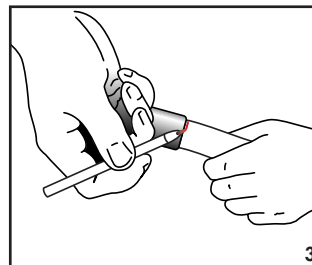
SUPER STOCK™ Hose Ends with SUPER-STOCK™ Hose



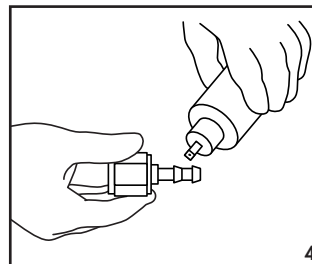
1. Cut the hose square with a sharp knife.



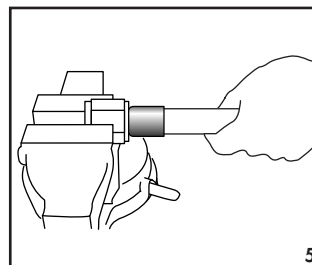
2. Slip the aluminum collar over the hose.



3. Mark the hose at the back of the collar.



4. Lubricate the inside of the hose and the outside of the nipple. Use assembly lube or engine oil. Do not use a silicon-based lube.



5. Push the hose end into the hose until it bottoms.

6. Check the mark made on the hose in Step 3 to ensure that the hose end has indeed bottomed against the end of the hose.

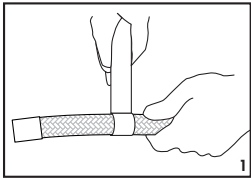
7. Blow the assembly clean and pressure test before running the car.

***Hose ends should be crimped if close to 250 PSI max.**

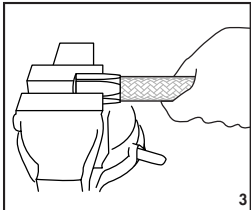


Pressure Test All Hose Assemblies Before Installation!

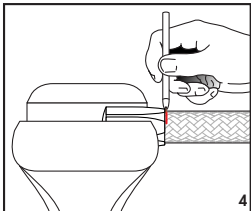
POWER STEERING HOSE ENDS WITH POWER STEERING HOSE



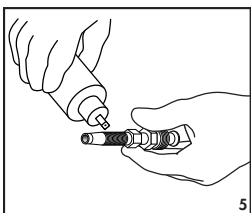
1. Cut the hose square with a ratchet wheel or a fine tooth hacksaw. It is necessary to wrap the hose tightly with masking or electrical tape and to cut through the tape. This helps to prevent the steel braid from fraying.



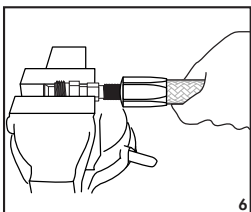
2. Trim any frayed ends of the braid with sharp snips or diagonal cutters and remove the tape.



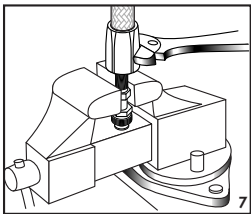
3. Thread the socket over the end of the hose until it bottoms. NOTE: Thread is left handed.



4. Mark the hose at the back end of the socket.



5. Lubricate the inside of the hose and the outside of the nipple (including the threads).



6. Push the hose end into the hose and thread the nipple onto the hose end as far as possible by hand.

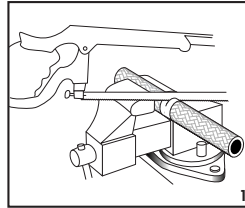


7. Clamp the nipple in a vise and tighten the hose end until it bottoms against the nipple.

8. Check the mark made on the hose in Step 3 to ensure that the hose did not back out of the socket while tightening.

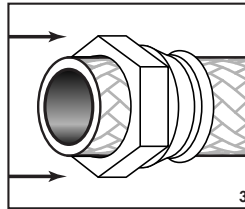
9. Blow the assembly clean and pressure test before running the car.

SPEED-SEAL™ HOSE ENDS WITH SPEED-FLEX™ HOSE

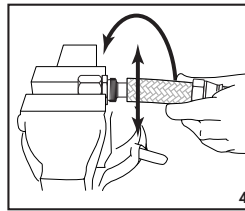


BRAKE LINES are critical items. The potential penalties for improper assembly are severe. Although there is nothing complicated about the procedure and no special tools are required, extreme care must be used in assembly. We strongly recommend that the following procedures be used:

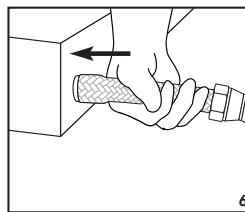
1. Cut the hose to the required length. We recommend the use of a ratchet wheel but it can be done satisfactorily with a 32 teeth per inch hacksaw blade. In either case, the hose must be tightly wrapped with electrical or masking tape and the cut made through the tape. Do not cut SPEED-FLEX hose with a chisel, snips, pliers, or a shear as these may crush the Teflon liner.



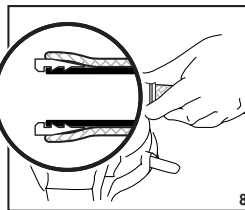
2. De-burr the Teflon and trim any loose ends of braid with sharp snips or diagonal cutting pliers.



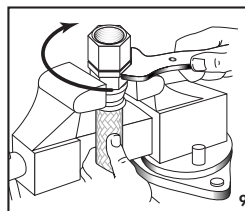
3. Install the socket on the hose with the threaded end of the socket toward the cut end of the hose. This will be a lot easier and you will end up with fewer holes in your hand if you clamp the socket in a vise. Push socket on well beyond end.



4. Place the hex portion of the nipple in the vise. Insert the end of the hose into the nipple and bottom the hose against the chamfer seat of the nipple with a rotary motion of the hose. This will size the I.D. of the Teflon tube.



5. Separate the braid from the O.D. of the Teflon tube. The best way is to use Earl's special braid spreader tool for sizes 3+4 (see Plumbing Accessories Section). In the absence of the tool, separate the braid with a small screwdriver or a scribe. Be careful not to scratch or nick the Teflon.



6. Install the sleeve between the braid and the Teflon tube. Make sure that none of the braid is trapped between the Teflon and the sleeve. Bottom the tube against the shoulder of the sleeve and make sure that the sleeve is inserted square.

7. With the nipple held in the vise, push the hose and the sleeve onto the nipple until the sleeve bottoms. Remove the hose and make sure that the Teflon tube is still bottomed against the shoulder of the sleeve and that the sleeve is still square.

8. Push the hose and sleeve back onto the nipple and bottom against the chamfer. Oil the nipple threads. Start the socket onto the nipple threads and hand tighten.

9. Place the socket in the vise and complete the assembly by tightening the nipple onto the socket with a wrench until the gap between the face of the socket and the hex of the nipple .023" to .046" —use a feeler gauge.

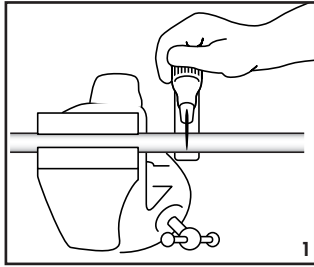
10. Blow the assembly clean and pressure test before running the car.

TECHNICAL SECTION

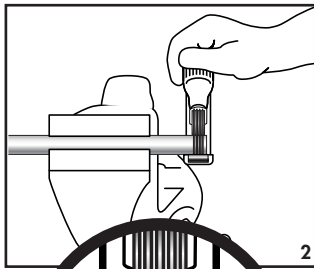


Pressure Test All Hose Assemblies Before Installation!

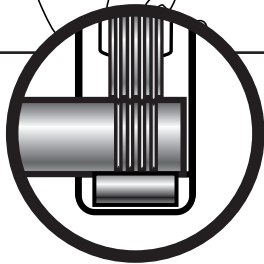
TUBE-MATE™, AUTO-FIT™ HOSE ENDS



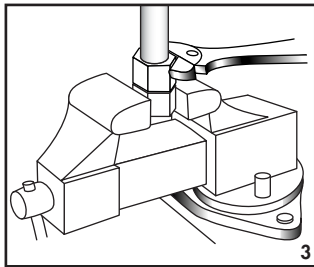
1. Assemble the tube-mate end onto the hose onto the hose per Auto-Fit hose and instructions.
2. Cut and de-burr the tubing. The cut must be square.



3. Using the TUBE-MATE grooving tool, groove the tubing. The tubing may also be beaded (or barbed). See Earl's new tube beading tool.

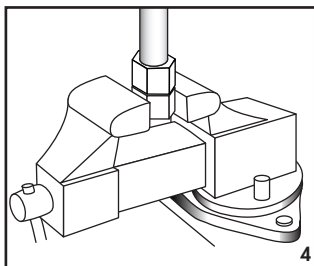


4. Push the tubing into the correct size Tube-Mate until it bottoms.



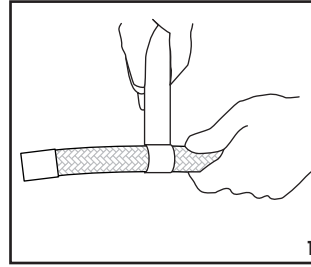
5. Tighten the TUBE-MATE nut.

6. Blow the assembly clean and pressure test before running the car.

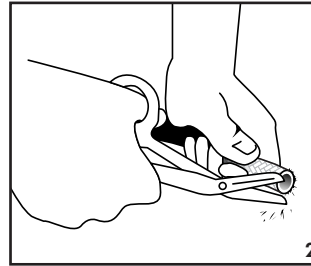


7. Blow the assembly clean and pressure test before running the car.
- NOTE:** TUBE-MATE hose ends are designed to be used only with beaded, barbed or grooved rigid tubing at no more than 25 psi working pressure.

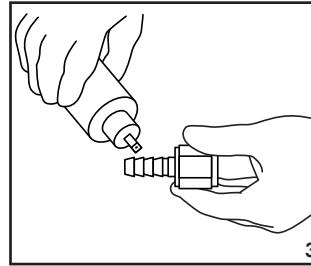
AUTO-MATE™ HOSE ENDS WITH PERFORM-O-FLEX™ AUTO-FLEX™ OR PRO-LITE 350™ HOSE



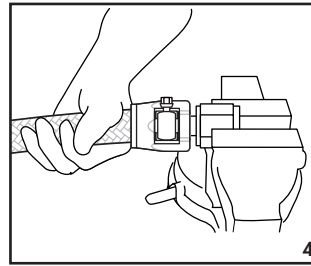
1. Cut the hose square with a Radiac wheel or a fine tooth hacksaw. It is necessary to wrap the hose tightly with masking or electrical tape and to cut through the tape. This helps to prevent the stainless braid from fraying.



2. Trim any frayed ends of the braid with sharp snips or diagonal cutters and remove the tape.

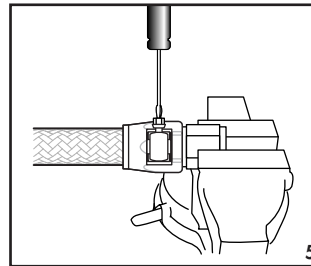


3. Slip the ECON-O-FIT collar over the end of the hose.



4. Lubricate the inside of the hose and the outside of the AUTO-MATE nipple.

5. Push the AUTO-MATE into the hose until it bottoms against the socket.



6. Tighten the ECON-O-FIT hose clamp.

7. Blow the assembly clean and pressure test before running the car.

ULTRA-FLEX™ HOSE ENDS WITH ULTRA-FLEX 650™ HOSE



1. Prepare to cut UltraFlex 650 hose. Wrap hose tightly with thin packing tape to prevent Kevlar braid from fraying during cutting.



2. Use the Earl's UltraFlex Hand Hose Cutter to cut hose. Use a sharp blade as to not crush the Teflon® hose during the cutting process.



3. Cut hose square or perpendicular to centerline of hose. No loose or fraying Kevlar braids are to be present.



4. Insert crimp collar onto UltraFlex hose. Do not remove thin tape as adhesive from tape might unravel Kevlar braid.



5. Push UltraFlex hose into crimp collar and verify that hose end bottoms inside of collar.



6. Insert UltraFlex fitting nipple into collar and hose assembly as shown.



7. Prepare the UltraFlex Crimper for operation.



8. Verify correct size crimp die. When inserting die into crimper insure that the bottom of die (shown) mates correctly with die bowl and diamond shaped features in die bowl.



9. Top of crimp die shown in die bowl. Verify die sets correctly in die bowl!

ASSEMBLY INSTRUCTIONS

TECHNICAL SECTION

ULTRA-FLEX™ HOSE ENDS WITH ULTRA-FLEX 650™ HOSE - (CONT'D)



10. Gently push down onto crimp die to insert and center die ring on top of crimp die below pusher. Verify that bottom of crimp die is seated correctly in die bowl. Prepare to install pusher onto crimper.



11. Insert and position the hose and fitting assembly into crimp from below. Verify that crimp collar seats correctly in crimp die.



12. While holding hose and fitting into position, begin pumping hand pump until die ring contacts crimper base plate. Release pressure by turning triangular knob on valve.



13. Remove hose and fitting assembly through bottom of die ring and inspect crimp on hose assembly.



14. Measure crimp diameter to ensure proper crimp diameter has been achieved. Refer to crimp chart dimension chart.

ULTRA-FLEX 650™ CRIMP DIMENSIONS

The target settings for the Earl's Ultra-Flex 650™ Kevlar & Stainless Steel covered hose, to be applied when using the Earl's Ultra-Flex Crimper and dies, are provided to aid in establishing actual diameters. While the Earl's Ultra-Flex crimper and dies for our Ultra-Flex hose will give crimp diameters close to, or at, specified diameters, the machine operator must check to verify actual dimensions.

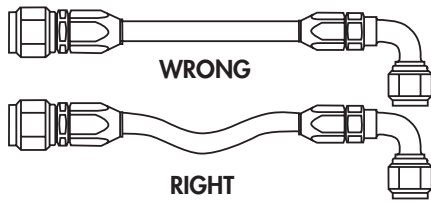
SIZE	Dia. after Crimp (in.)	Dia. After Crimp (mm)
-4	Ø 0.465 +/- .005	Ø11.81mm +/- .12mm
-6	Ø 0.606 +/- .005	Ø15.39mm +/- .12mm
-8	Ø 0.800 +/- .005	Ø20.32mm +/- .12mm
-10	Ø 0.930 +/- .005	Ø23.6mm +/- .12mm
-12	Ø 1.151 +/- .005	Ø29.23mm +/- .12mm
-16	Ø 1.345 +/- .005	Ø33.63mm +/- .12mm

Failure to follow these instructions could result in serious injury or property damage during crimping. Improperly crimped fittings can be dangerous to the user of the hose assembly.

- Do not crimp Earl's hose or fittings with another manufacturer's hose or fitting.
- These dimensions are for Earl's Ultra-Flex Kevlar & Stainless covered hose and Ultra-Flex hose ends only.
- Wear safety glasses and keep hands away from moving objects.
- Always check for proper crimping dimensions

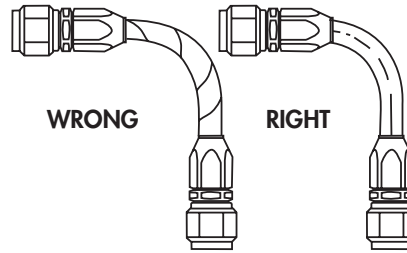
Always test assemblies for leakage prior to installation.

1. Provide for length change.



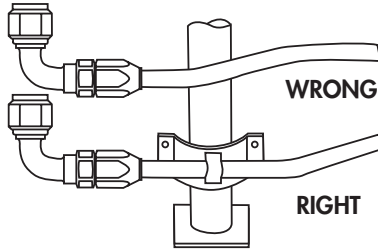
In straight hose installations, allow enough slack in the hose line to provide for changes in length that will occur when pressure is applied. This change in length can be from +2% to -4%.

2. Avoid twisting and orient properly.



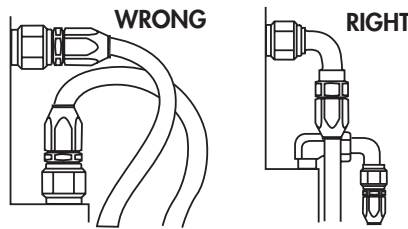
Do not twist during installation. This can be determined by the printed layline on the hose. Pressure applied to a twisted hose can cause hose failure or loosening of connections.

3. Protect from hazardous environment.



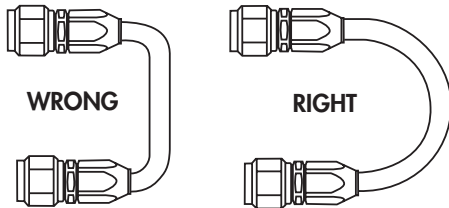
Keep hose away from hot parts. High ambient temperature will shorten hose life. If you can not route it away from heat source, insulate it.

4. Avoid mechanical strain.



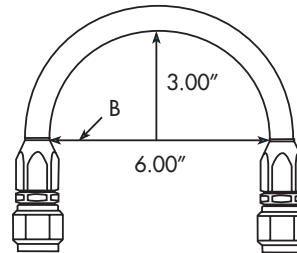
Use elbows and adapters in the installation to relieve strain on the assembly and to provide easier and neater installation that are accessible for inspection and maintenance.

5. Use proper bend radius.



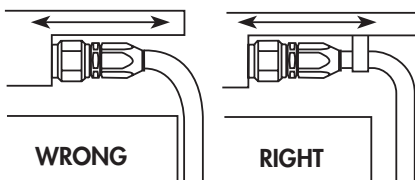
Keep the bend radius of the hose as large as possible to avoid collapsing of the hose and restriction of flow. Follow catalog specs on minimum bend radii.

6. Use proper bend radius (cont'd).



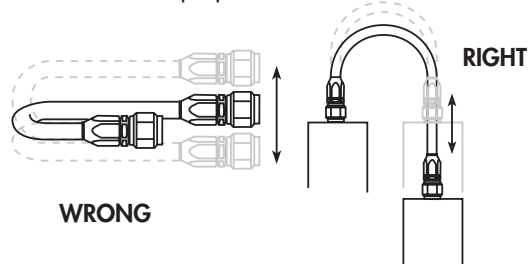
Minimum bend radius is measured on the inside bend of the hose. To determine minimum bend, divide the total distance between ends (B length) by 2. For example, B=6, minimum bend radius=3.

7. Secure for protection.



Install hose runs to avoid rubbing or abrasion. Use Earl's Hose Clamps to support long runs of hose or to keep away from moving parts. It is important that the clamps not allow the hose to move. This movement will cause abrasion and temperature hose failure.

8. Avoid improper hose movement..



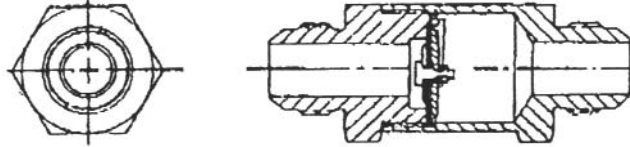
Make sure relative motion of the machine components produces bending rather than twisting of the hose. Hose should be routed so that the flex is in the same plane as the equipment movement.

CHECK VALVE FEATURES & SPECIFICATIONS

TECHNICAL SECTION

FEATURES

ZERO LEAKAGE (Less Than 1 D.P.M.)
FULL FLOW with Low Opening Pressure



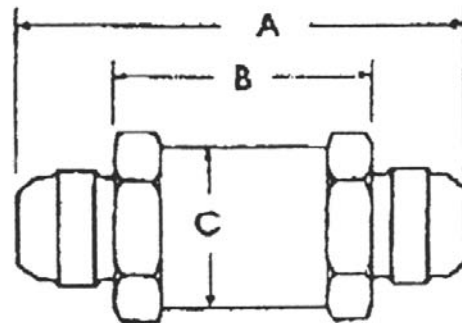
SPECIFICATIONS

Service Application: Water, Fuel, Oil
Temperature Range: -70 F to 350 F
Type of Port: Male 37 Flare with SAE thread

MATERIALS

Body and Cap: 6061 T6 Aluminum Alloy - Hard Anodized
Internal Parts: 6061 T6 Aluminum Alloy - Hard Anodized and Stainless Steel
Seal: Aluminum Crush Washer
Seat: Reinforced Viton®

Pressure Range: -6 to -12, 350 P.S.I.
Sizes: -4, -6, -8, -10, -12
Internal Leakage: .01 cc/min. Max
Mounting: Hinge Facing Up



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 DuPont Performance Elastomers

Check Valves pg.37

PART NO.	SAE THREAD SIZE	TUBE SIZE	A + OR -.005	B + OR -.005	C + OR -.005	HEX
253004ERL	7/16-20	1/4	2.375	1.270	.865	7/8
253006ERL	9/16-18	3/8	2.370	1.260	.865	7/8
253008ERL	3/4-16	1/2	2.645	1.335	.925	15/16
253010ERL	7/8-14	5/8	3.285	1.770	1.230	1-1/4
253012ERL	1-1/16-12	3/4	3.535	1.810	1.480	1-1/2

HEAT EXCHANGER VALUES & COOLING COMPARISON CHART

TECHNICAL SECTION

EARL'S HEAT EXCHANGER VALUES

BTU RATING/HOUR

0.55 GPM/TUBE @ 55MPH

ROWS	Narrow Cooler P/N: 2XXXX 16 BTU/Min/Tube 960 BTU/HR	Wide Cooler P/N: 4XXXX 38 BTU/Min/Tube 2280 BTU/HR	Extra-Wide Cooler P/N: 8XXXX 49 BTU/Min/Tube 2940 BTU/HR
7	6720	15960	20508
10	9600	22800	29400
13	12480	29640	38220
16	15360	36480	47040
19	18240	43320	55860
25	24000	57000	73500
34	32640	74520	99960
42	40320	95760	123480
50	48000	114000	147000
60	57600	136800	176400

We tested our coolers against a leading tube & fin stack plate design on a high performance engine dyno. The test compared the pressure drop between the oil inlet and outlet of each cooler and the temperature drop during the test. The heat exchangers were plumbed with -10AN Pro-Lite 350™ hose to a Chevrolet 355 cubic inch Holley carbureted engine with headers. The test engine was mounted inside an engine dyno test cell. The tests were conducted with engine water temperature stabilized at 180° Fahrenheit and engine oil temperature stabilized at 227° Fahrenheit. Test cell ambient temperature was 94° Fahrenheit. All testing was done with engine speed at 2800 RPM. To simulate road speed, a cooling fan was erected to force air through the coolers at approximately 60ft/sec (41 mph).

Part #	41310	Tube/Fin
Surface Area(In ²)	34	67.5
Engine Water Temp. (F°)	177	180
Oil Temp - In (F°)	227	221
Oil Temp - Out (F°)	207	203
Oil Temp Difference	-20	-18
Oil Pressure - In (PSI)	58.6	59
Oil Pressure - Out (PSI)	57.6	56
Oil Pressure Difference	-1.0	-3.0
Engine Speed (RPM)	2800	2800

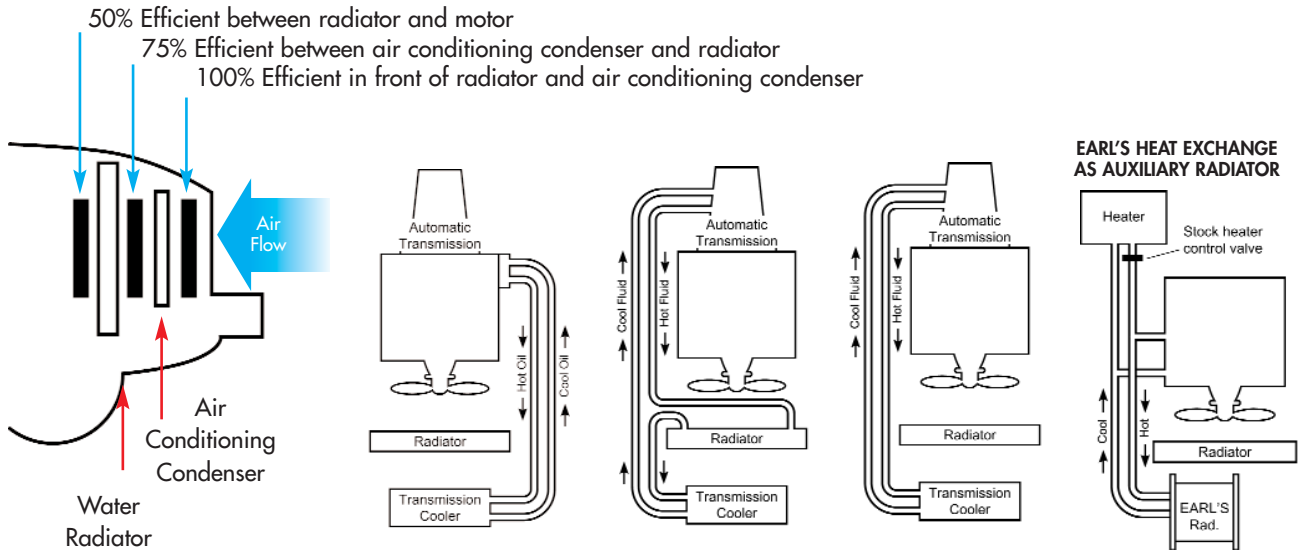
Conclusion:

Tube style & fin style cooler needed to be twice the size in surface area for the same heat rejection compared to the Earl's oil cooler.

TYPICAL PLUMBING OF COOLER

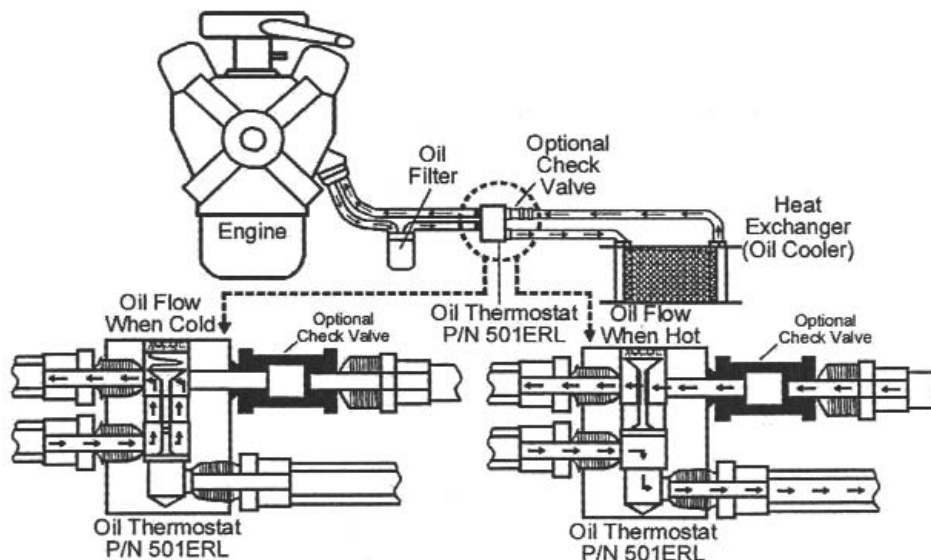
TECHNICAL SECTIONS

TYPICAL PLUMBING OF COOLER



The outstanding heat transfer characteristic of our Tep-A-Cure™ Oil Coolers is achieved in part by using very thin aluminum sheets for the oil tubes. Every cooler is tested to 175 psi at our plant. Burst tests indicate pressures of up to 350 psi are tolerated before cooler failure.

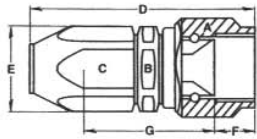
Stomping on the accelerator while the engine is still cold with a sticky bypass valve on your engine can combine to create a pressure spike far exceeding 350 psi. If you can't break the "throttle stomping while the engine is still cold" habit, you must install a check valve (FCV) and a thermostat (P/N 501ERL) in your oil system, as shown in the diagram.



1. Place the flapper Check Valve (FCV) in the return line **FROM** the cooler **TO** the thermostat.
2. The direction of free flow through the FCV **MUST** be **towards** the thermostat.
3. See the drawing for the location of the thermostat. The port marked "INLET" on the thermostat is the inlet from the engine. Be sure to plumb the thermostat according to the drawing

HOSE END SPECIFICATIONS

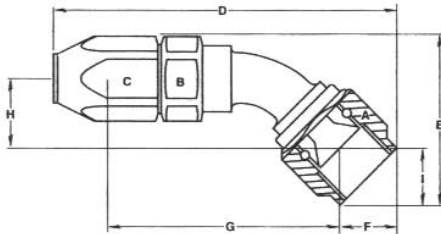
TECHNICAL SECTION



**Straight
Aluminum
Auto-Fit
Hose End**

3001

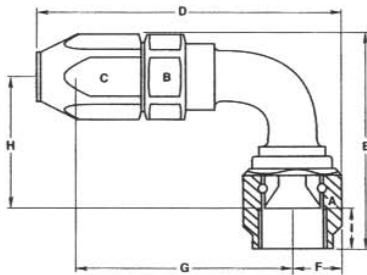
3001		04	06	08	10	12	16	20	24
NUT HEX	A	9/16	11/16	7/8	1	1 1/4	1 1/2	2	2 1/4
BODY HEX	B	9/16	11/16	7/8	1	1 1/4	1 1/2	2	2 1/4
SOCKET HEX	C	5/8	3/4	7/8	1 1/16	1 3/16	1 7/16	1 3/4	1 15/16
.O.A. LENGTH	D	1 5/8	1 7/8	2 3/16	2 3/8	2 1/2	2 7/8	3 3/16	3 7/8
WIDTH (MAX)	E	23/32	7/8	1 1/32	1 7/32	1 7/16	1 3/4	2 5/16	2 19/32
FLARE TO END	F	11/32	3/8	7/16	1/2	17/32	5/8	11/16	13/16
CUT-OFF	G	7/8	15/16	1 1/8	1 1/4	1 5/16	15/16	1 9/16	1 5/8
OPERATING P.S.I.		1500	1500	1500	1250	1000	750	500	250
BURST EXCEEDS		6000	6000	6000	5000	4000	3000	2000	1000



**45°
Tubular
Auto-Fit
Hose End**

3046

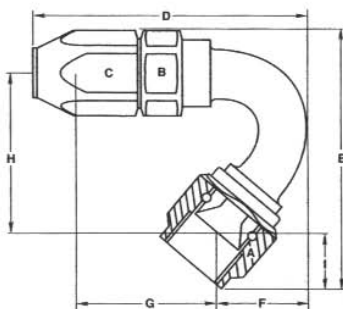
6150		4	6	8	10	12	16	20	24
NUT HEX	A	9/16	11/16	7/8	1	1 1/4	1 1/2	2	2 1/4
BODY HEX	B	9/16	11/16	7/8	1	1 1/4	1 1/2	1 3/4	2
SOCKET HEX	C	5/8	3/4	7/8	1 1/16	1 3/16	1 7/16	1 3/4	1 15/16
.O.A. LENGTH	D	2 1/8	2 17/32	2 29/32	3 5/32	3 7/16	4 1/8	4 3/4	5 1/4
WIDTH (MAX)	E	1 1/8	1 5/16	1 23/32	1 15/16	2 3/16	2 1/2	2 15/16	3 7/16
FLARE TO END	F	7/16	17/32	9/16	21/32	3/4	15/16	1 3/16	1 7/16
CUT-OFF	G	1 9/32	1 7/16	1 5/8	1 7/8	2 1/16	2 5/16	2 3/4	3
C.L. TO FLARE	H	11/32	7/16	9/16	5/8	23/32	11/16	13/16	31/32
EDGE TO FLARE	I	7/16	1/2	19/32	23/32	13/16	1 1/32	1 3/16	1 1/4
OPERATING P.S.I.		1500	1500	1500	1250	1000	750	500	250
BURST EXCEEDS		6000	6000	6000	5000	4000	3000	2000	1000



**90°
Tubular
Auto-Fit
Hose End**

3091

3091		4	6	8	10	12	16	20	24
NUT HEX	A	9/16	11/16	7/8	1	1 1/4	1 1/2	2	2 1/4
BODY HEX	B	9/16	11/16	7/8	1	1 1/2	1 1/2	1 3/4	2
SOCKET HEX	C	5/8	3/4	7/8	1 1/16	1 3/16	1 7/16	1 3/4	1 15/16
.O.A. LENGTH	D	1 13/16	2 11/32	2 1/2	2 3/4	3 3/16	3 7/8	4 5/8	5
WIDTH (MAX)	E	1 5/8	1 13/16	2	2 1/4	2 5/8	3 1/8	3 5/8	4 1/16
FLARE TO END	F	11/32	13/32	1/2	9/16	23/32	7/8	1 5/32	1 5/16
CUT-OFF	G	1 1/16	1 5/16	1 3/8	1 9/16	1 13/16	2 3/16	2 5/8	2 3/4
C.L. TO FLARE	H	13/16	1 1/32	1 1/16	1 5/32	1 7/16	1 11/16	2 3/32	2 9/32
EDGE TO FLARE	I	11/32	3/8	7/16	1/2	1/2	11/16	1 1/16	1 3/16
OPERATING P.S.I.		1500	1500	1500	1250	1000	750	500	250
BURST EXCEEDS		6000	6000	6000	5000	4000	3000	2000	1000



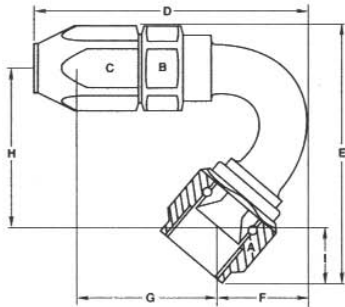
**120°
Tubular
Auto-Fit
Hose End**

3120

3091		4	6	8	10	12	16
NUT HEX	A	9/16	11/16	7/8	1	1 1/4	1 1/2
BODY HEX	B	9/16	11/16	7/8	1	1 1/2	1 1/2
SOCKET HEX	C	5/8	3/4	7/8	1 1/16	1 3/16	1 7/16
.O.A. LENGTH	D	1 21/32	1 15/16	2 7/32	2 1/2	2 3/4	3 7/16
WIDTH (MAX)	E	1 15/16	2 1/16	2 5/16	2 25/32	3 1/8	3 11/16
FLARE TO END	F	7/16	17/32	5/8	11/16	13/16	15/16
CUT-OFF	G	15/16	1 5/16	1 3/8	1 9/16	1 13/16	2 3/16
C.L. TO FLARE	H	13/16	13/16	1 1/16	1 1/4	1 5/16	1 5/8
EDGE TO FLARE	I	1/2	1/2	9/32	11/16	3/4	15/16
OPERATING P.S.I.		1500	1500	1500	1250	1000	750
BURST EXCEEDS		6000	6000	6000	5000	4000	3000

HOSE END SPECIFICATIONS

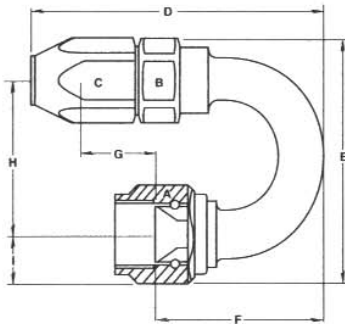
TECHNICAL SECTION



**150°
Tubular
Auto-Fit
Hose End**

3150

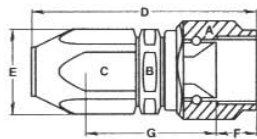
3150		4	6	8	10	12	16
NUT HEX	A	9/16	11/16	7/8	1	1 1/4	1 1/2
BODY HEX	B	9/16	11/16	7/8	1	1 1/2	1 1/2
SOCKET HEX	C	5/8	3/4	7/8	1 1/16	1 3/16	1 7/16
.O.A. LENGTH	D	1 5/8	1 31/32	2 11/32	2 5/8	2 15/16	3 9/16
WIDTH (MAX)	E	1 7/8	2 3/32	2 1/2	3	3 5/8	4 5/16
FLARE TO END	F	13/16	13/32	1 1/8	1 1/4	1 11/16	1 1/2
CUT-OFF	G	7/16	5/8	3/4	13/16	3/4	1
C.L. TO FLARE	H	1 1/8	13/16	1 15/32	1 3/4	2 5/32	2 1/2
EDGE TO FLARE	I	13/32	1/2	9/16	21/32	13/16	1
OPERATING P.S.I.		1500	1500	1500	1250	1000	750
BURST EXCEEDS		6000	6000	6000	5000	4000	3000



**180°
Tubular
Auto-Fit
Hose End**

3180

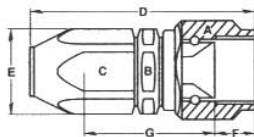
3180		4	6	8	10	12	16
NUT HEX	A	9/16	11/16	7/8	1	1 1/4	1 1/2
BODY HEX	B	9/16	11/16	7/8	1	1 1/2	1 1/2
SOCKET HEX	C	5/8	3/4	7/8	1 1/16	1 3/16	1 7/16
.O.A. LENGTH	D	1 3/4	2 1/4	2 17/32	2 7/8	3 1/2	4
WIDTH (MAX)	E	1 13/16	2 5/16	2 17/32	3 3/16	4 7/16	4 11/16
FLARE TO END	F	1 7/32	1 7/16	1 5/8	1 15/16	2 9/16	2 5/8
CUT-OFF	G	5/16	5/16	3/8	11/32	7/16	1/2
C.L. TO FLARE	H	1 1/8	1 1/2	1 1/2	2	3	3
EDGE TO FLARE	I	11/32	13/32	1/2	9/16	23/32	7/8
OPERATING P.S.I.		1500	1500	1500	1250	1000	750
BURST EXCEEDS		6000	6000	6000	5000	4000	3000



**Straight
Speed Seal
Hose End**

6001

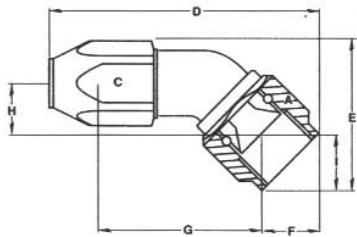
6001		03	33	93	43	04	34	94
NUT HEX	A	1/2	1/2	1/2	9/16	9/16	9/16	9/16
BODY HEX	B	1/2	1/2	1/2	9/16	9/16	9/16	9/16
SOCKET HEX	C	7/16	1/2	7/16	7/16	9/16	5/8	9/16
.O.A. LENGTH	D	1 3/8	1 3/8	1 3/8	1 13/32	1 9/16	1 9/16	1 9/16
WIDTH (MAX)	E	37/64	37/64	37/64	21/32	21/32	11/16	21/32
FLARE TO END	F	5/16	5/16	5/16	11/32	11/32	11/32	11/32
CUT-OFF	G	23/32	23/32	23/32	3/4	25/32	25/32	25/32
OPERATING P.S.I.		2000	2000	2000	2000	2000	2000	2000
BURST EXCEEDS		8000	8000	8000	8000	8000	8000	8000



**Straight
Speed Seal
Hose End**

6001

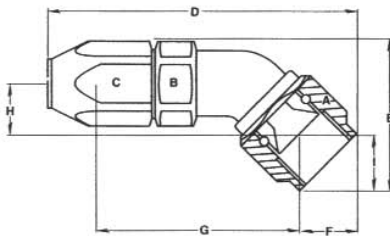
6001		06	36	96	38
NUT HEX	A	11/16	11/16	11/16	7/8
BODY HEX	B	11/16	11/16	11/16	7/8
SOCKET HEX	C	11/16	3/4	11/16	7/8
.O.A. LENGTH	D	1 23/32	1 23/32	1 23/32	2
WIDTH (MAX)	E	51/64	7/8	51/64	1 1/64
FLARE TO END	F	3/8	3/8	3/8	7/16
CUT-OFF	G	27/32	27/32	27/32	15/16
OPERATING P.S.I.		1500	1500	1500	1000
BURST EXCEEDS		6000	6000	6000	4000



**45°
Non-Adjustable
Low Profile
Speed Seal
Hose End**

6044

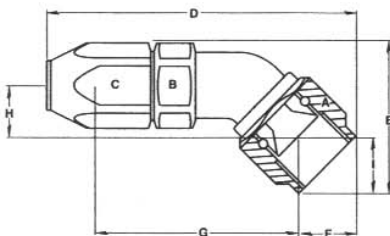
6044		03	04
NUT HEX	A	1/2	9/16
SOCKET HEX	C	7/16	9/16
.O.A. LENGTH	D	1 5/8	1 3/4
WIDTH (MAX)	E	15/16	1 1/16
FLARE TO END	F	7/16	7/16
CUT-OFF	G	7/8	15/16
C.L. TO FLARE	H	5/16	5/16
EDGE TO FLARE	I	7/16	7/16
OPERATING P.S.I.		2000	2000
BURST EXCEEDS		8000	8000



**45°
Adjustable
Low Profile
Speed Seal
Hose End**

6045

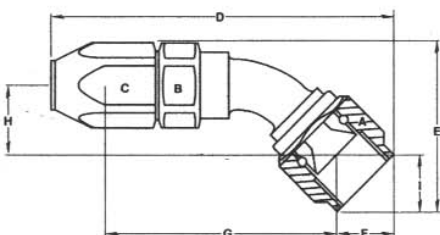
6045		03	33	93	04	34	94
NUT HEX	A	1/2	1/2	1/2	9/16	9/16	9/16
SWIVEL HEX	B	1/2	1/2	1/2	9/16	9/16	9/16
SOCKET HEX	C	7/16	1/2	7/16	9/16	5/8	9/16
.O.A. LENGTH	D	1 7/8	1 7/8	1 7/8	2 1/32	2 1/32	2 1/32
WIDTH (MAX)	E	1	1 1/32	1	1 1/16	1 1/32	1 1/16
FLARE TO END	F	7/16	7/16	7/16	15/32	15/32	15/32
CUT-OFF	G	1 1/8	1 1/8	1 1/8	1 5/32	1 5/32	1 5/32
C.L. TO FLARE	H	1/4	1/4	1/4	5/16	5/16	5/16
EDGE TO FLARE	I	7/16	7/16	7/16	15/32	15/32	15/32
OPERATING P.S.I.		2000	2000	2000	2000	2000	2000
BURST EXCEEDS		8000	8000	8000	8000	6000	6000



**45°
Adjustable
Low Profile
Speed Seal
Hose End**

6045

6045		06	36	96	38
NUT HEX	A	11/16	11/16	11/16	7/8
SWIVEL HEX	B	11/16	11/16	11/16	7/8
SOCKET HEX	C	11/16	3/4	11/16	7/8
.O.A. LENGTH	D	2 7/32	2 7/32	2 7/32	2 11/16
WIDTH (MAX)	E	1 9/32	1 5/16	1 9/32	1 5/8
FLARE TO END	F	17/32	17/32	17/32	9/16
CUT-OFF	G	1 9/32	1 9/32	1 9/32	1 9/16
C.L. TO FLARE	H	3/8	3/8	3/8	9/16
EDGE TO FLARE	I	1/2	1/2	1/2	19/32
OPERATING P.S.I.		1500	1500	1500	1000
BURST EXCEEDS		6000	6000	6000	4000



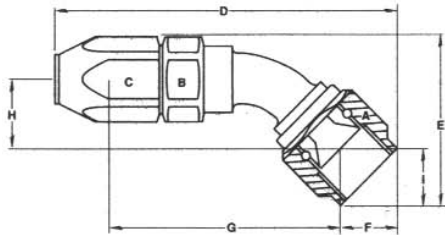
**45° Tubular
Non-Adjustable
Speed Seal
Hose End**

6046

6046		03	33	04	34
NUT HEX	A	1/2	1/2	9/16	9/16
BODY HEX	B	1/2	1/2	9/16	9/16
SOCKET HEX	C	7/16	1/2	9/16	5/8
.O.A. LENGTH	D	1 15/16	1 15/16	2	2
WIDTH (MAX)	E	1 1/8	1 1/8	1 1/8	1 1/8
FLARE TO END	F	7/16	7/16	7/16	7/16
CUT-OFF	G	1 1/4	1 1/4	1 1/4	1 1/4
C.L. TO FLARE	H	5/16	5/16	5/16	5/16
EDGE TO FLARE	I	7/16	7/16	7/16	7/16
OPERATING P.S.I.		2000	2000	2000	2000
BURST EXCEEDS		8000	8000	8000	8000

HOSE END SPECIFICATIONS

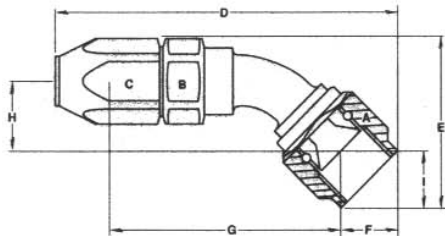
TECHNICAL SECTION



**45° Tubular
Adjustable
Speed Seal
Hose End**

6047

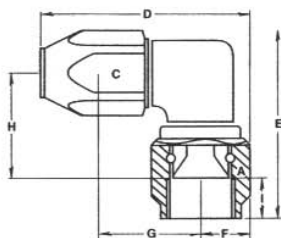
6047		03	33	93	04	34	94
NUT HEX	A	1/2	1/2	1/2	9/16	9/16	9/16
SWIVEL HEX	B	1/2	1/2	1/2	9/16	9/16	9/16
SOCKET HEX	C	7/16	1/2	7/16	9/16	5/8	9/16
.O.A. LENGTH	D	2 1/16	2 1/16	2 1/16	2 3/16	2 3/16	2 3/16
WIDTH (MAX)	E	1 1/16	1 1/16	1 1/16	1 3/16	1 7/32	1 3/16
FLARE TO END	F	7/16	7/16	7/16	15/32	15/32	15/32
CUT-OFF	G	1 5/16	1 5/16	1 5/16	1 11/32	1 11/32	1 11/32
C.L. TO FLARE	H	5/16	5/16	5/16	11/32	11/32	11/32
EDGE TO FLARE	I	7/16	7/16	7/16	15/32	15/32	15/32
OPERATING P.S.I.		2000	2000	2000	2000	2000	2000
BURST EXCEEDS		8000	8000	8000	8000	8000	8000



**45° Tubular
Adjustable
Speed Seal
Hose End**

6047

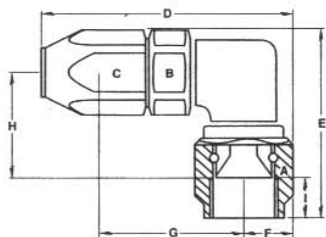
6047		06	36	96	38
NUT HEX	A	11/16	11/16	11/16	7/8
SWIVEL HEX	B	11/16	11/16	11/16	7/8
SOCKET HEX	C	11/16	3/4	11/16	7/8
.O.A. LENGTH	D	2 5/8	2 19/32	2 5/8	2 15/16
WIDTH (MAX)	E	1 3/8	1 5/16	1 3/8	1 23/32
FLARE TO END	F	17/32	17/32	17/32	9/16
CUT-OFF	G	1 21/32	1 5/8	1 21/32	1 3/4
C.L. TO FLARE	H	17/32	7/16	17/32	9/16
EDGE TO FLARE	I	17/32	17/32	17/32	9/16
OPERATING P.S.I.		1500	1500	1500	1000
BURST EXCEEDS		6000	6000	6000	4000



**90°
Low Profile
Non-Adjustable
Speed Seal
Hose End**

6089

6089		03	04
NUT HEX	A	1/2	9/16
SOCKET HEX	C	7/16	9/16
.O.A. LENGTH	D	1 13/32	1 1/2
WIDTH (MAX)	E	1 17/32	1 9/32
FLARE TO END	F	9/32	11/32
CUT-OFF	G	11/16	11/16
C.L. TO FLARE	H	19/32	5/8
EDGE TO FLARE	I	11/32	11/32
OPERATING P.S.I.		2000	2000
BURST EXCEEDS		8000	8000



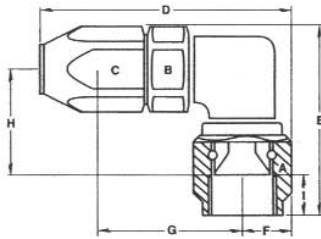
**90°
Low Profile
Adjustable
Speed Seal
Hose End**

6090

6090		03	33	93	04	34	94
NUT HEX	A	1/2	1/2	1/2	9/16	9/16	9/16
SWIVEL HEX	B	1/2	1/2	1/2	9/16	9/16	9/16
SOCKET HEX	C	7/16	1/2	7/16	9/16	5/8	9/16
.O.A. LENGTH	D	1 17/32	1 17/32	1 17/32	1 23/32	1 23/32	1 23/32
WIDTH (MAX)	E	1 7/32	1 7/32	1 7/32	1 9/32	1 11/32	1 9/32
FLARE TO END	F	7/32	9/32	9/32	11/32	11/32	11/32
CUT-OFF	G	15/16	15/16	15/16	29/32	29/32	29/32
C.L. TO FLARE	H	19/32	19/32	19/32	5/8	5/8	5/8
EDGE TO FLARE	I	11/32	11/32	11/32	11/32	11/32	11/32
OPERATING P.S.I.		2000	2000	2000	2000	2000	2000
BURST EXCEEDS		8000	8000	8000	8000	8000	8000

HOSE END SPECIFICATIONS

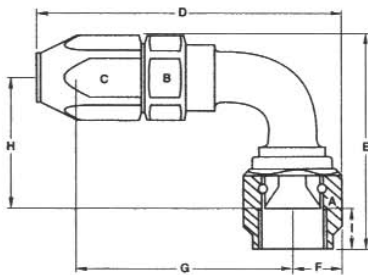
TECHNICAL SECTION



90°
Low Profile
Adjustable
Speed Seal
Hose End

6090

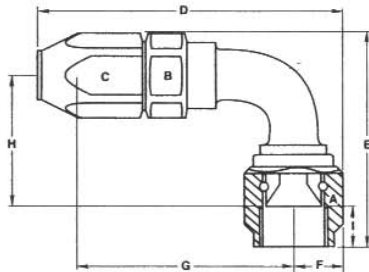
6090		06	36	96	38
NUT HEX	A	11/16	11/16	11/16	7/8
SWIVEL HEX	B	11/16	11/16	11/16	7/8
SOCKET HEX	C	11/16	3/4	11/16	7/8
.O.A. LENGTH	D	1 15/16	1 15/16	1 15/16	2 11/32
WIDTH (MAX)	E	1 9/16	1 9/16	1 9/16	1 7/8
FLARE TO END	F	13/32	13/32	13/32	1/2
CUT-OFF	G	1	1	1	1 1/4
C.L. TO FLARE	H	3/4	3/4	3/4	15/16
EDGE TO FLARE	I	3/8	3/8	3/8	7/16
OPERATING P.S.I.		1500	1500	1500	1000
BURST EXCEEDS		6000	6000	6000	4000



90°
Non-Adjustable
Speed Seal
Hose End

6091

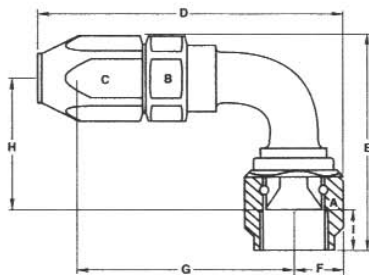
6091		03	33	04	34
NUT HEX	A	1/2	1/2	9/16	9/16
BODY HEX	B	1/2	1/2	9/16	9/16
SOCKET HEX	C	7/16	1/2	9/16	5/8
.O.A. LENGTH	D	1 9/16	1 9/16	1 13/16	1 13/16
WIDTH (MAX)	E	1 5/16	1 3/8	1 9/16	1 5/8
FLARE TO END	F	9/32	9/32	5/16	5/16
CUT-OFF	G	7/8	7/8	1 1/8	1 1/8
C.L. TO FLARE	H	11/16	11/16	13/16	13/16
EDGE TO FLARE	I	11/32	11/32	11/32	11/32
OPERATING P.S.I.		2000	2000	2000	2000
BURST EXCEEDS		8000	8000	8000	8000



90° Tubular
Adjustable
Speed Seal
Hose End

6092

6092		03	33	93	04	34	94
NUT HEX	A	1/2	1/2	1/2	9/16	9/16	9/16
SWIVEL HEX	B	1/2	1/2	1/2	9/16	9/16	9/16
SOCKET HEX	C	7/16	1/2	7/16	9/16	5/8	9/16
.O.A. LENGTH	D	1 3/4	1 13/16	1 3/4	2	2	2
WIDTH (MAX)	E	1 7/16	1 1/2	1 17/16	1 19/32	1 17/32	1 19/32
FLARE TO END	F	9/32	9/32	9/32	11/32	3/8	11/32
CUT-OFF	G	1 3/16	1 1/4	1 3/16	1 7/32	1 7/32	1 7/32
C.L. TO FLARE	H	13/16	7/8	13/16	1	7/8	1
EDGE TO FLARE	I	11/32	11/32	11/32	11/32	11/32	11/32
OPERATING P.S.I.		2000	2000	2000	2000	2000	2000
BURST EXCEEDS		8000	8000	8000	8000	8000	8000



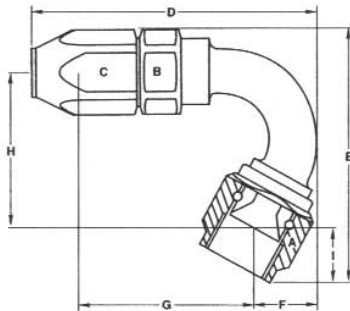
90° Tubular
Adjustable
Speed Seal
Hose End

6092

6092		06	36	96	38
NUT HEX	A	11/16	11/16	11/16	7/8
SWIVEL HEX	B	11/16	11/16	11/16	7/8
SOCKET HEX	C	11/16	3/4	11/16	7/8
.O.A. LENGTH	D	2 13/32	2 5/16	2 13/32	2 19/32
WIDTH (MAX)	E	1 15/16	1 13/16	1 15/16	1 31/32
FLARE TO END	F	7/32	9/32	9/32	1/2
CUT-OFF	G	15/16	15/16	15/16	1 1/2
C.L. TO FLARE	H	1 1/8	1 1/32	1 1/8	1 1/16
EDGE TO FLARE	I	3/8	3/8	3/8	7/16
OPERATING P.S.I.		1500	1500	1500	1000
BURST EXCEEDS		6000	6000	6000	4000

HOSE END SPECIFICATIONS

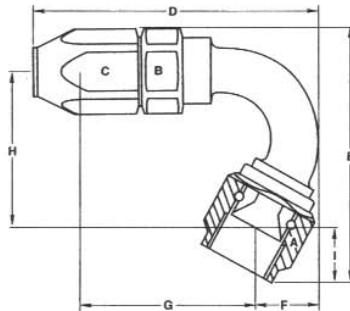
TECHNICAL SECTION



**120°
Tubular
Adjustable
Speed Seal
Hose End**

6121

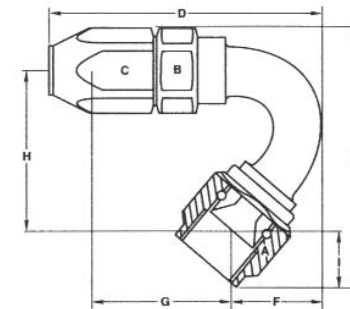
6121		03	33	93	04	34	94
NUT HEX	A	1/2	1/2	1/2	9/16	9/16	9/16
SWIVEL HEX	B	1/2	1/2	1/2	9/16	9/16	9/16
SOCKET HEX	C	7/16	1/2	7/16	9/16	5/8	9/16
.O.A. LENGTH	D	1 1/2	1 23/32	1/2	1 15/16	1 7/8	1 15/16
WIDTH (MAX)	E	1 19/32	1 7/8	1 17/32	1 7/8	1 15/16	1 7/8
FLARE TO END	F	13/32	1/2	13/32	17/32	17/32	17/32
CUT-OFF	G	13/16	1 1/16	13/16	1 5/32	1 1/16	1 5/32
C.L. TO FLARE	H	7/8	1 1/16	7/8	1 1/8	1 1/8	1 1/8
EDGE TO FLARE	I	3/8	3/8	3/8	1/2	1/2	1/2
OPERATING P.S.I.		2000	2000	2000	2000	2000	2000
BURST EXCEEDS		8000	8000	8000	8000	8000	8000



**120°
Tubular
Adjustable
Speed Seal
Hose End**

6121

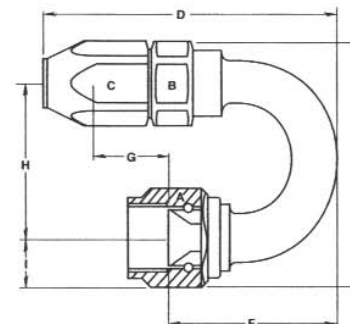
6121		06	36	96	38
NUT HEX	A	11/16	11/16	11/16	7/8
SWIVEL HEX	B	11/16	11/16	11/16	7/8
SOCKET HEX	C	11/16	3/4	11/16	7/8
.O.A. LENGTH	D	1 1/2	1 23/32	1/2	1 7/8
WIDTH (MAX)	E	2 1/4	2 1/32	2 1/4	2 5/16
FLARE TO END	F	17/32	17/32	17/32	5/8
CUT-OFF	G	1 1/16	1 1/8	1 1/16	1 7/32
C.L. TO FLARE	H	1 1/8	1 1/8	1 1/8	1 1/4
EDGE TO FLARE	I	1/2	1/2	1/2	19/32
OPERATING P.S.I.		1500	1500	1500	1000
BURST EXCEEDS		6000	6000	6000	4000



**150°
Tubular
Adjustable
Speed Seal
Hose End**

6151

6151		38
NUT HEX	A	7/8
SWIVEL HEX	B	7/8
SOCKET HEX	C	7/8
.O.A. LENGTH	D	2 1/2
WIDTH (MAX)	E	2 1/8
FLARE TO END	F	1 1/8
CUT-OFF	G	3/4
C.L. TO FLARE	H	1 7/16
EDGE TO FLARE	I	9/16
OPERATING P.S.I.		1000
BURST EXCEEDS		4000



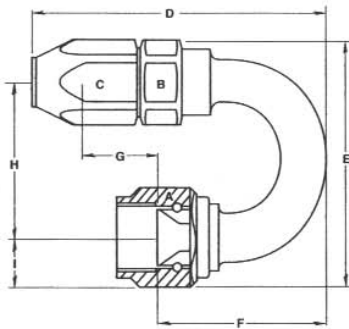
**180°
Tubular
Adjustable
Speed Seal
Hose End**

6181

6181		03	33	04	34	06	36
NUT HEX	A	1/2	1/2	1/2	9/16	9/16	9/16
SWIVEL HEX	B	1/2	1/2	1/2	9/16	9/16	9/16
SOCKET HEX	C	7/16	1/2	7/16	9/16	5/8	9/16
.O.A. LENGTH	D	1 11/16	1 7/8	1 11/16	2	2	2
WIDTH (MAX)	E	1 9/16	1 11/16	1 9/16	1 1/8	1 1/8	1 1/8
FLARE TO END	F	1	1 1/8	1	1 1/8	1 1/8	1 1/8
CUT-OFF	G	5/16	7/16	5/16	7/16	7/16	7/16
C.L. TO FLARE	H	1	1 1/8	1	1 1/8	1 1/8	1 1/8
EDGE TO FLARE	I	9/32	9/32	9/32	11/32	11/32	11/32
OPERATING P.S.I.		2000	2000	2000	2000	2000	2000
BURST EXCEEDS		8000	8000	8000	8000	8000	8000

HOSE END SPECIFICATIONS

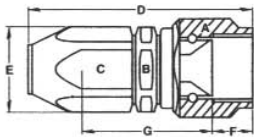
TECHNICAL SECTION



**180°
Tubular
Adjustable
Speed Seal
Hose End**

6181

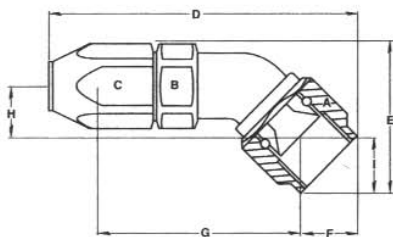
6181		06	36	96	38
NUT HEX	A	11/16	11/16	11/16	7/8
SWIVEL HEX	B	11/16	11/16	11/16	7/8
SOCKET HEX	C	11/16	3/4	11/16	7/8
.O.A. LENGTH	D	2 11/32	2 11/32	2 11/32	2 5/8
WIDTH (MAX)	E	2 5/16	2 11/32	2 5/16	2 17/32
FLARE TO END	F	1 7/16	1 7/16	1 7/16	1 5/8
CUT-OFF	G	15/32	15/32	15/32	1/2
C.L. TO FLARE	H	1 1/2	1 1/2	1 1/2	1 1/2
EDGE TO FLARE	I	13/32	13/32	13/32	1/2
OPERATING P.S.I.		1500	1500	1500	1000
BURST EXCEEDS		6000	6000	6000	4000



**Straight
Swivel Seal
Hose End**

8001

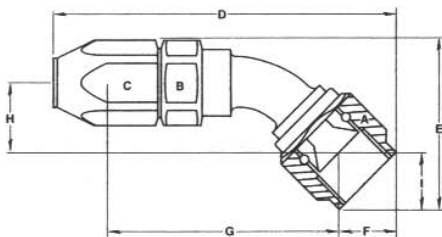
8001		06	08	10	12	16
NUT HEX	A	11/16	7/8	1	1 1/4	1 1/2
CUTTER HEX	B	11/16	7/8	1	1 1/4	1 1/2
SOCKET HEX	C	3/4	7/8	1 1/16	1 3/16	1 7/16
.O.A. LENGTH	D	1 25/32	2 3/16	2 7/16	2 1/2	2 15/16
WIDTH (MAX)	E	7/8	1 1/32	1 7/32	1 7/16	1 3/4
FLARE TO END	F	3/8	7/16	1/2	17/32	1/2
CUT-OFF	G	15/16	1 3/16	1 5/16	1 5/16	1 9/16
OPERATING P.S.I.		1500	1500	11250	1000	750
BURST EXCEEDS		6000	6000	5000	4000	3000



**45°
Low Profile
Swivel Seal
Hose End**

8045

8045		06	08	10	12	16
NUT HEX	A	11/16	7/8	1	1 1/4	1 1/2
CUTTER HEX	B	5/8	13/16	15/16	1 1/16	1 1/2
SOCKET HEX	C	3/4	7/8	1 1/16	1 3/16	1 7/16
.O.A. LENGTH	D	2 1/2	3 1/32	3 5/16	3 11/16	4 1/4
WIDTH (MAX)	E	1 5/16	1 5/8	1 13/16	2 3/16	2 1/2
FLARE TO END	F	17/32	9/16	21/32	3/4	15/16
CUT-OFF	G	1 1/2	1 13/16	1 15/16	2 7/32	2 1/2
C.L. TO FLARE	H	3/8	9/16	9/16	23/32	11/16
EDGE TO FLARE	I	1/2	19/32	23/32	13/16	1 1/32
OPERATING P.S.I.		1500	1500	1250	1000	750
BURST EXCEEDS		6000	6000	5000	4000	3000



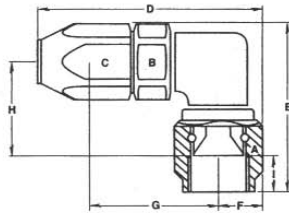
**45° Tubular
Swivel Seal
Hose End**

8046

8046		06	08	10	12	16
NUT HEX	A	11/16	7/8	1	1 1/4	1 1/2
CUTTER HEX	B	5/8	13/16	15/16	1 1/16	1 5/16
SOCKET HEX	C	3/4	7/8	1 1/16	1 3/16	1 7/16
.O.A. LENGTH	D	2 7/8	3 3/16	3 1/2	4	4 3/8
WIDTH (MAX)	E	1 5/16	1 23/32	1 15/16	2 3/16	2 1/2
FLARE TO END	F	17/32	9/16	21/32	3/4	15/16
CUT-OFF	G	1 15/16	2 1/8	2 3/16	2 5/8	2 3/4
C.L. TO FLARE	H	7/16	9/16	5/8	23/32	11/16
EDGE TO FLARE	I	1/2	19/32	23/32	13/16	1 1/32
OPERATING P.S.I.		1500	1500	1250	1000	750
BURST EXCEEDS		6000	6000	5000	4000	3000

HOSE END SPECIFICATIONS

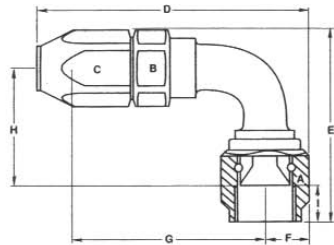
TECHNICAL SECTION



**90°
Low Profile
Swivel Seal
Hose End**

8090

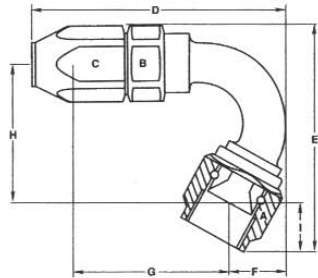
8090		06	08	10	12	16
NUT HEX	A	11/16	7/8	1	1 1/4	1 1/2
CUTTER HEX	B	5/8	13/16	15/16	1 1/16	1 5/16
SOCKET HEX	C	3/4	7/8	1 1/16	1 3/16	1 7/16
.O.A. LENGTH	D	2 1/8	2 1/2	2 13/16	3 5/16	3 45/64
WIDTH (MAX)	E	1 9/16	1 7/8	2 3/16	2 9/16	2 47/64
FLARE TO END	F	13/32	1/2	9/16	23/32	27/32
CUT-OFF	G	1 5/16	1 3/8	1 9/16	1 7/8	2 1/8
C.L. TO FLARE	H	3/4	15/16	1 1/16	1 3/8	5/8
EDGE TO FLARE	I	3/8	7/16	1/2	1/2	11/16
OPERATING P.S.I.		1500	1500	1250	1000	750
BURST EXCEEDS		6000	6000	5000	4000	3000



**90° Tubular
Swivel Seal
Hose End**

8091

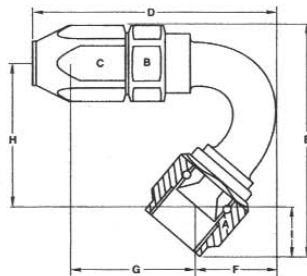
8091		06	08	10	12	16
NUT HEX	A	11/16	7/8	1	1 1/4	1 1/2
CUTTER HEX	B	5/8	13/16	15/16	1 1/16	1 5/16
SOCKET HEX	C	3/4	7/8	1 1/16	1 3/16	1 7/16
.O.A. LENGTH	D	2 7/16	2 25/32	3 1/8	3 5/8	4 3/16
WIDTH (MAX)	E	1 13/16	2	2 1/4	2 5/8	3 1/8
FLARE TO END	F	13/32	1/2	9/16	25/32	7/8
CUT-OFF	G	1 5/8	1 3/4	1 15/16	2 1/4	2 5/8
C.L. TO FLARE	H	1 1/32	1 1/16	1 5/32	1 7/16	1 11/16
EDGE TO FLARE	I	3/8	7/16	1/2	1/2	11/16
OPERATING P.S.I.		1500	1500	1250	1000	750
BURST EXCEEDS		6000	6000	5000	4000	3000



**120°
Tubular
Swivel Seal
Hose End**

8120

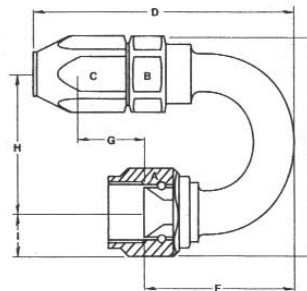
8120		06	08	10	12	16
NUT HEX	A	11/16	7/8	1	1 1/4	1 1/2
CUTTER HEX	B	5/8	13/16	15/16	1 1/16	1 5/16
SOCKET HEX	C	3/4	7/8	1 1/16	1 3/16	1 7/16
.O.A. LENGTH	D	2 3/16	2 17/32	2 27/32	3 3/16	3 3/4
WIDTH (MAX)	E	2 1/16	2 5/8	2 25/32	3 1/8	3 11/16
FLARE TO END	F	17/32	5/8	11/16	13/16	15/16
CUT-OFF	G	1 5/16	1 3/8	1 1/2	1 3/4	2 1/8
C.L. TO FLARE	H	1 1/8	1 1/4	1 17/32	1 13/16	2 1/32
EDGE TO FLARE	I	1/2	19/32	11/16	3/4	15/16
OPERATING P.S.I.		2000	2000			
BURST EXCEEDS		6000	6000			



**150°
Tubular
Swivel Seal
Hose End**

8150

8150		06	08	10	12	16
NUT HEX	A	11/16	7/8	1	1 1/4	1 1/2
CUTTER HEX	B	5/8	13/16	15/16	1 1/16	1 5/16
SOCKET HEX	C	3/4	7/8	1 1/16	1 3/16	1 7/16
.O.A. LENGTH	D	2 1/4	2 5/8	2 15/16	3 7/16	3 15/16
WIDTH (MAX)	E	2 3/32	2 1/2	3	3 5/8	4 5/16
FLARE TO END	F	13/16	1 1/8	1 1/4	1 11/32	1 1/2
CUT-OFF	G	7/8	1	1 1/8	1 3/8	1 21/32
C.L. TO FLARE	H	1 3/16	1 15/32	1 3/4	2 5/32	2 1/2
EDGE TO FLARE	I	1/2	9/16	21/32	13/16	1
OPERATING P.S.I.		1500	1500	1250	1000	750
BURST EXCEEDS		6000	6000	5000	4000	3000



**180°
Tubular
Swivel Seal**

8180

8180		06	08	10	12	16
NUT HEX	A	11/16	7/8	1	1 1/4	1 1/2
CUTTER HEX	B	5/8	13/16	15/16	1 1/16	1 5/16
SOCKET HEX	C	3/4	7/8	1 1/16	1 3/16	1 7/16
.O.A. LENGTH	D	1 1/2	2 7/8	3 1/4	3 15/16	4 3/8
WIDTH (MAX)	E	1 5/16	2 17/32	3 3/16	4 7/16	4 11/16
FLARE TO END	F	1 7/16	1 5/8	1 15/16	2 9/16	2 5/8
CUT-OFF	G	21/32	3/4	23/32	3/4	1
C.L. TO FLARE	H	1 1/2	1 1/2	2	3	3
EDGE TO FLARE	I	13/32	1/2	9/16	23/32	7/8
OPERATING P.S.I.		1500	1500	1250	1000	750
BURST EXCEEDS		6000	6000	5000	4000	3000

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005ERL	101	167008ERL	96	171212ERL	97	20712ERL	62	23412ERL	63	28A100ERL	84
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010ERL	101	167013ERL	96	171228ERL	97	20716ERL	62	240104ERL	37	28A110ERL	84
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100197ERL	33	167207ERL	96	176112ERL	98	21608AERL	62	24210AERL	63	28A280ERL	82
100198ERL	33	167208ERL	96	176116ERL	98	21608ERL	62	24210ERL	63	28A280ERL	82
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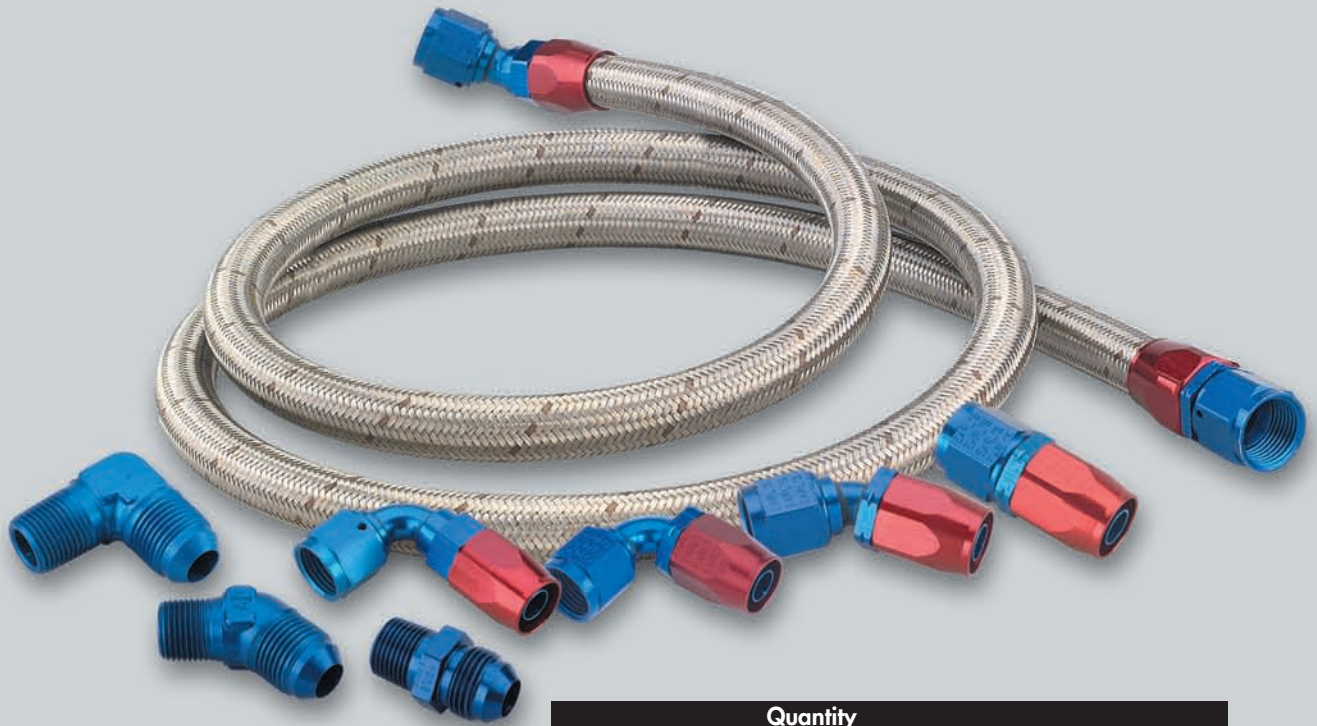
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85016ERL	63	916108ERL	43	960405ERL	40	981412ERL	45	983406ERL	40	991212ERL	42
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991945ERL	52	AT101195ERL	25	A1812016ERL	15	AT949083ERL	50	AT983416ERL	47	UP304604ERL	18
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991951ERL	52	AT102185ERL	26	A1818006ERL	15	AT949096ERL	50	AT983712ERL	47	UP309104ERL	18
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991953ERL	52	AT102195ERL	26	A1818010ERL	15	AT980610ERL	48	AT985008ERL	50	UP309108ERL	18
991954ERL	52	AT102196ERL	27	A1818012ERL	15	AT980612ERL	48	AT985009ERL	50	UP309110ERL	18
991955ERL	52	AT102285ERL	26	A1818016ERL	15	AT980616ERL	48	AT985010ERL	50	UP309112ERL	18
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993304ERL	45	AT709108ERL	21	AT922144ERL	50	AT982262ERL	46	AT992910ERL	48	UP981668ERL	51
993306ERL	45	AT709110ERL	21	AT922162ERL	50	AT982266ERL	46	AT992912ERL	48	UP981688ERL	51
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996701ERL	42	AT712010ERL	21	AT924108ERL	49	AT982308ERL	46	AT993302ERL	48	UP982210ERL	51
996702ERL	42	AT712012ERL	21	AT924110ERL	49	AT982309ERL	46	AT993303ERL	48	UP982211ERL	51
996703ERL	42	AT712016ERL	21	AT924112ERL	49	AT982310ERL	46	AT993304ERL	48	UP982212ERL	51
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997103ERL	42	AT715008ERL	21	AT925106ERL	49	AT982313ERL	46	D003ERL	105	UP982216ERL	51
997104ERL	42	AT715010ERL	21	AT925108ERL	49	AT982314ERL	46	D00316ERL	105	UP982244ERL	51
997106ERL	42	AT715012ERL	21	AT925110ERL	49	AT982334ERL	46	D016ERL	101	UP982262ERL	51
997108ERL	42	AT715016ERL	21	AT925112ERL	49	AT982362ERL	46	D022ERL	9	UP982266ERL	51
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997112ERL	42	AT718006ERL	21	AT926104ERL	49	AT982368ERL	46	D023ERL	9	UP982288ERL	51
997116ERL	42	AT718008ERL	21	AT926106ERL	49	AT982388ERL	46	D023ERL	100	UP982304ERL	51
997120ERL	42	AT718010ERL	21	AT926108ERL	49	AT982403ERL	46	D023ERL	99	UP982306ERL	51
997124ERL	42	AT718012ERL	21	AT926110ERL	49	AT982404ERL	46	D024ERL	102	UP982307ERL	51
997503ERL	56	AT718016ERL	21	AT926112ERL	49	AT982406ERL	46	D025ERL	102	UP982308ERL	51
997504ERL	56	AT934106ERL	14	AT926103ERL	49	AT982408ERL	46	D0310ERL	100	UP982309ERL	51
997513ERL	56	AT800108ERL	14	AT934104ERL	49	AT982410ERL	46	D03104ERL	100	UP982310ERL	51
997515ERL	56	AT800110ERL	14	AT934106ERL	49	AT982412ERL	46	D03106ERL	100	UP982311ERL	51
997517ERL	56	AT800112ERL	14	AT934108ERL	49	AT982416ERL	46	D03108ERL	100	UP982312ERL	51
997518ERL	56	AT800116ERL	14	AT934110ERL	49	AT982484ERL	31	D03109ERL	100	UP982313ERL	51
997519ERL	56	AT803006ERL	14	AT934112ERL	49	AT982484ERL	53	D03110ERL	100	UP982314ERL	51
997520ERL	57	AT803008ERL	14	AT934116ERL	49	AT982503ERL	46	D03111ERL	100	UP982334ERL	51
997591ERL	32	AT803010ERL	14	AT935103ERL	49	AT982504ERL	46	D03112ERL	100	UP982362ERL	51
997592ERL	32	AT803012ERL	14	AT935104ERL	49	AT982506ERL	46	D03113ERL	100	UP982366ERL	51
997594ERL	32	AT803016ERL	14	AT935106ERL	49	AT982508ERL	46	D03116ERL	100	UP982368ERL	51
997595ERL	32	AT804506ERL	14	AT935108ERL	49	AT982510ERL	46	D03145ERL	100	UP982388ERL	51
997596ERL	53	AT804508ERL	14	AT935110ERL	49	AT982512ERL	46	D03167ERL	100	UP982404ERL	51
9976031ERL	55	AT804510ERL	14	AT935112ERL	49	AT982603ERL	46	D031ERL	100	UP982406ERL	51
9976032ERL	55	AT804512ERL	14	AT935116ERL	49	AT982604ERL	46	D03200ERL	10	UP982408ERL	51
9976033ERL	56	AT804516ERL	14	AT939103ERL	49	AT982606ERL	46	D03200ERL	100	UP982412ERL	51
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MASTER PACKS

The basic parts that you never want to be out of, in quantities that you need to stock.

- The Master Pack Program consists of the 46 most popular part numbers, each of which is pre-packaged in Earl's four color clam shell in large quantities.
- An average of 5% savings per item buying in the bulk quantities.

Item #	Quantity Per Pack	Part Description - Each
MP300104ERL	40 ea - 300104ERL	-4 St. Auto-Fit
MP300106ERL	80 ea - 300106ERL	-6 St. Auto-Fit
MP300108ERL	80 ea - 300108ERL	-8 St. Auto-Fit
MP300110ERL	40 ea - 300110ERL	-10 St. Auto-Fit
MP300112ERL	20 ea - 300112ERL	-12 St. Auto-Fit
MP304604ERL	40 ea - 304604ERL	-4 45 Degree Auto-Fit
MP309104ERL	40 ea - 309104ERL	-4 90 Degree Auto-Fit
MP410004ERL	14 ea - 410004ERL	10 Ft. -4 Perform-O-Flex
MP410006ERL	10 ea - 410006ERL	10 Ft. -6 Perform-O-Flex
MP410008ERL	8 ea - 410008ERL	10 Ft. -8 Perform-O-Flex
MP410010ERL	8 ea - 410010ERL	10 Ft. -10 Perform-O-Flex
MP410012ERL	5 ea - 410012ERL	10 Ft. -12 Perform-O-Flex
MP420004ERL	14 ea - 420004ERL	20 Ft. -4 Perform-O-Flex
MP420006ERL	10 ea - 420006ERL	20 Ft. -6 Perform-O-Flex
MP420008ERL	8 ea - 420008ERL	20 Ft. -8 Perform-O-Flex
MP420010ERL	5 ea - 420010ERL	20 Ft. -10 Perform-O-Flex
MP420012ERL	5 ea - 420012ERL	20 Ft. -12 Perform-O-Flex
MP800106ERL	80 ea - 800106ERL	-6 St. Swivel-Seal
MP800108ERL	80 ea - 800108ERL	-8 St. Swivel-Seal
MP800110ERL	40 ea - 800110ERL	-10 St. Swivel-Seal
MP800112ERL	20 ea - 800112ERL	-12 St. Swivel-Seal
MP804606ERL	40 ea - 804606ERL	-6 45 Degree Tube Swivel-Seal
MP804608ERL	40 ea - 804608ERL	-8 45 Degree Tube Swivel-Seal
MP804610ERL	40 ea - 804610ERL	-10 45 Degree Tube Swivel-Seal
MP804612ERL	20 ea - 804612ERL	-12 45 Degree Tube Swivel-Seal
MP809106ERL	40 ea - 809106ERL	-6 90 Degree Tube Swivel-Seal
MP809108ERL	40 ea - 809108ERL	-8 90 Degree Tube Swivel-Seal
MP809110ERL	40 ea - 809110ERL	-10 90 Degree Tube Swivel-Seal
MP809112ERL	20 ea - 809112ERL	-12 90 Degree Tube Swivel-Seal
MP981604ERL	80 ea - 981604ERL	St. -4 to 1/8" NPT Adapter
MP981606ERL	80 ea - 981606ERL	St. -6 to 1/4" NPT Adapter
MP981608ERL	80 ea - 981608ERL	St. -8 to 3/8" NPT Adapter
MP981610ERL	80 ea - 981610ERL	St. -10 to 1/2" NPT Adapter
MP981612ERL	40 ea - 981612ERL	St. -12 to 3/4" NPT Adapter
MP981666ERL	80 ea - 981666ERL	St. -6 to 3/8" NPT Adapter
MP981668ERL	80 ea - 981668ERL	St. -6 to 1/2" NPT Adapter
MP982204ERL	40 ea - 982204ERL	90 Deg. -4 to 1/8" NPT Adapter
MP982206ERL	40 ea - 982206ERL	90 Deg. -6 to 1/4" NPT Adapter
MP982208ERL	40 ea - 982208ERL	90 Deg. -8 to 3/8" NPT Adapter
MP982210ERL	40 ea - 982210ERL	90 Deg. -10 to 1/2" NPT Adapter
MP982212ERL	20 ea - 982212ERL	90 Deg. -12 to 3/4" NPT Adapter
MP982304ERL	40 ea - 982304ERL	45 Deg. -4 to 1/8" NPT Adapter
MP982306ERL	40 ea - 982306ERL	45 Deg. -6 to 1/4" NPT Adapter
MP982308ERL	40 ea - 982308ERL	45 Deg. -8 to 3/8" NPT Adapter
MP982310ERL	40 ea - 982310ERL	45 Deg. -10 to 1/2" NPT Adapter
MP982312ERL	20 ea - 982312ERL	45 Deg. -12 to 3/4" NPT Adapter