

essex

2015 INDYCAR CATALOG





Table of Context

<p>Clutch Control Unit (CCU)</p> <p>Pages 1-3</p>	<p>Clutch</p> <p>Pages 4-6</p>
<p>Slave Cylinder and release bearings</p> <p>Page 7</p>	<p>Hyperco Products</p> <p>Page 8-9</p>
<p>Öhlins / GWC Inerters</p> <p>Page 10-11</p>	<p>AP Racing Radi-CAL™ Brake Fluids</p> <p>Page 12</p>
<p>Professional Services (Brake dyno and Burnishing services)</p> <p>Page 13</p>	<p>Contact us</p> <p>Page 14</p>



CP9800 Clutch Control Unit



AP Racing Part Number	Essex Part #	Description	Team Pricing
CP9800-115:IRL	24.01.00001	CCU	\$9,989.00
CP9800-102:IRL	24.01.00002	CLUTCH PADDLE ASSEMBLY	\$ 889.00
CP9800-10:IRL	24.01.00003	BENCH LOOM FOR CCU	\$1,296.00
CP9800-116:IRL	24.01.00004	CCU DOWNLOAD CABLE	\$ 532.00
SU47-2	24.01.00005	GOLD MAGNET FOR CLUTCH PADDLE	\$ 86.39
CP9800-118:IRL	24.01.00006	POSTION SENSOR ASSEMBLY	\$2,241.00
CP9800-IRL2-RECON	24.00.00002	CCU REFURB SERVICE LEVEL 2 (SINGLE)	\$4,335.00
CP9800-IRL2-RECON	24.00.00003	CCU REFURB SERVICE LEVEL 2 (GROUP)	\$3,255.00

CP8153 Carbon-Carbon Clutch



FEATURES:

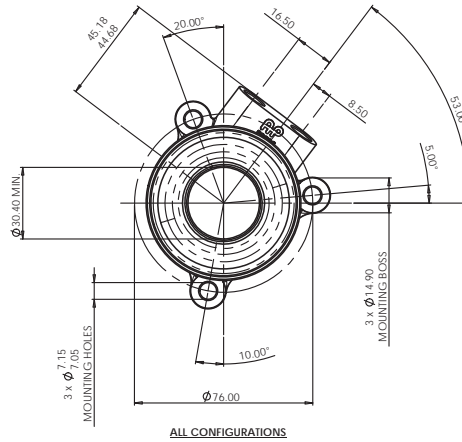
- 10 Bolt, One piece cover and lugs.
- Heavy duty carbon.
- Clutch Ratio = EHR (Extra High).
- Stepped Flywheel fixing.
- Inner diameter location.
- Interchangeable with CP6073 Sintered Race clutch.

AP Racing Part #	Essex Part #	Description	Team Price
CP8153-DE03-SN	24.09.00001	INDYCAR CARBON CLUTCH	\$7,994.00
CP5323-110S	24.09.00002	CLUTCH HUB	\$ 869.00
CP8153-15SS	24.09.00003	PRESS PLATE KIT LOW	\$1,123.60
CP8153-16SS	24.09.00004	PRESS PLATE KIT MED	\$1,123.60
CP8153-17SS	24.09.00005	PRESS PLATE KIT HIGH	\$ 839.00
CP8153-IRL1-RECON	24.00.00010	STANDARD CARBON CLUTCH RECON	\$ 986.00
CP8153-IRL2-RECON	24.00.00011	STANDARD CARBON CLUTCH RECON +CC STACK	\$6,004.00



Slave Cylinder and Release Bearings

CP6859-50 Slave Cylinder



DESCRIPTION

THE CP6859 SERIES CONCENTRIC SLAVE CYLINDER IS A LIGHTWEIGHT, HYDRAULICALLY SELF-CONTAINED UNIT WITH HIGH TEMPERATURE SEALS. ALL SEALING SURFACES ARE PROTECTED BY A HARD WEARING / LOW FRICTION COATING WHICH HELPS PROLONG SEAL LIFE.

ENSURE THAT THE UNIT IS INSTALLED AT THE SPECIFIED ANGLE, WITH THE BLEED PORT UPPERMOST. ALL FITTINGS INTENDED TO SEAT AT THE BOTTOM OF THE HYDRAULIC PORTS MUST HAVE AN INCLUDED ANGLE OF 90°

BODY MATERIAL: ALUMINIUM ALLOY (FORGED)
PISTON MATERIAL: ALUMINIUM ALLOY

EFFECTIVE AREA: 920 mm² (1.426 sq. in.)
MAXIMUM STROKE: REFER TO TABLE
MAXIMUM PRESSURE: 8.6 N/mm² (1250 psi)

CALCULATED WEIGHTS
CP6859-XX 381 g
CP6859-12XX 257 g
CP6859-12XX-IN 346 g

HYDRAULIC PORTS: M10x1.0x11.5 MIN. FULL THREAD
HYDRAULIC FLUID: APR550 OR 600 BRAKE FLUID

REPLACEMENT SEAL KIT - CP3759-3

HYDRAULIC FITTING KIT (STEEL ADAPTOR 7/16" : 4") - CP3759-6
HYDRAULIC FITTING KIT (STEEL ADAPTOR 3/8" : 3") - CP3759-5
FITTINGS TO BE TIGHTENED TO 28 Nm (21 ft.lb)

NOTE:

WHEN LARGE DIAMETER SPLINES ARE USED PLEASE CHECK CLEARANCE OF THE SPLINE IN THE SLAVE CYLINDER BODY.

LARGER SPLINES ALSO HAVE AN INCREASED DRIVEN PLATE HUB BOSS. PLEASE CHECK THE CLEARANCE OF THE DRIVEN PLATE AT MAXIMUM SLAVE TRAVEL. SEE THE CLUTCH ASSEMBLY INSTALLATION DRAWING FOR DETAILS.

MINERAL OIL VERSIONS OF ALL THE ASSEMBLIES ON THIS DRAWING ARE AVAILABLE

FOR FURTHER INFORMATION PLEASE CONTACT AP RACING. SEE CP8084-1CD FOR MINERAL OIL COMPATIBLE ASSEMBLIES

Features:

- Forged Aluminium Alloy Body.
- Aluminium alloy Piston.
- 18mm Max Stroke.
- Use with PRF660, 600 or other high quality brake fluids.
- Cylinders are supplied with release bearing.
- Hydraulic Fitting kits available for -3 or -4 aeroquip:
 - 7/16" (Aluminium adaptor) for -4 aeroquip - CP3759-6
 - 3/8" (Steel adaptor) for -3 aeroquip - CP3759-5
- Fittings to be tightened to 28Nm (21ft/lb)

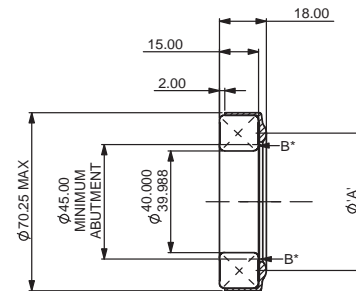
HIGH SPEED RELEASE BEARING - Inner Race Rotates

- CP3457-11 Release Fulcrum Dia 'A' = 50mm.

NOTE: CP6859 supercedes CP3859 Cylinder series BUT IS NOT IDENTICAL.

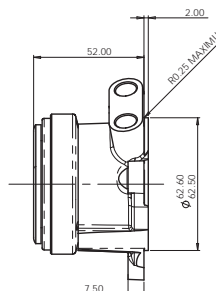
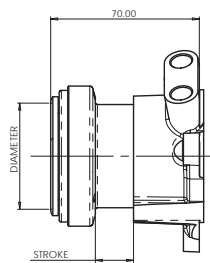
CP3859 / CP6859 Differences:

- Hydraulic port geometry and thread now M10 was M12.
- Reduced port height, now 44.92mm was 59.12mm



STANDARD RELEASE BEARING (Ø40.00mm LOCATION DIAMETER) OUTER RACE ROTATES

Product Update – CP6859 to replace CP3589 Concentric Push Type Slave Cylinder Assemblies



AP Racing Part #	Essex Part #	Description	Team Price
CP6859-50	24.09.00010	SLAVE CYLINDER	\$469.00
CP3759-3	24.02.00000	SLAVE CYLINDER SEAL KIT	\$ 27.65
CP4900-166	08 04 703	INNER SEAL	\$ 10.45
CP4900-163	08 04 706	OUTER SEAL	\$ 10.45
CP3457-11	24.09.00011	RELEASE BEARING	\$159.50
CP3457-107	24.09.00012	RELEASE BEARING FULCRUM	\$ 89.00



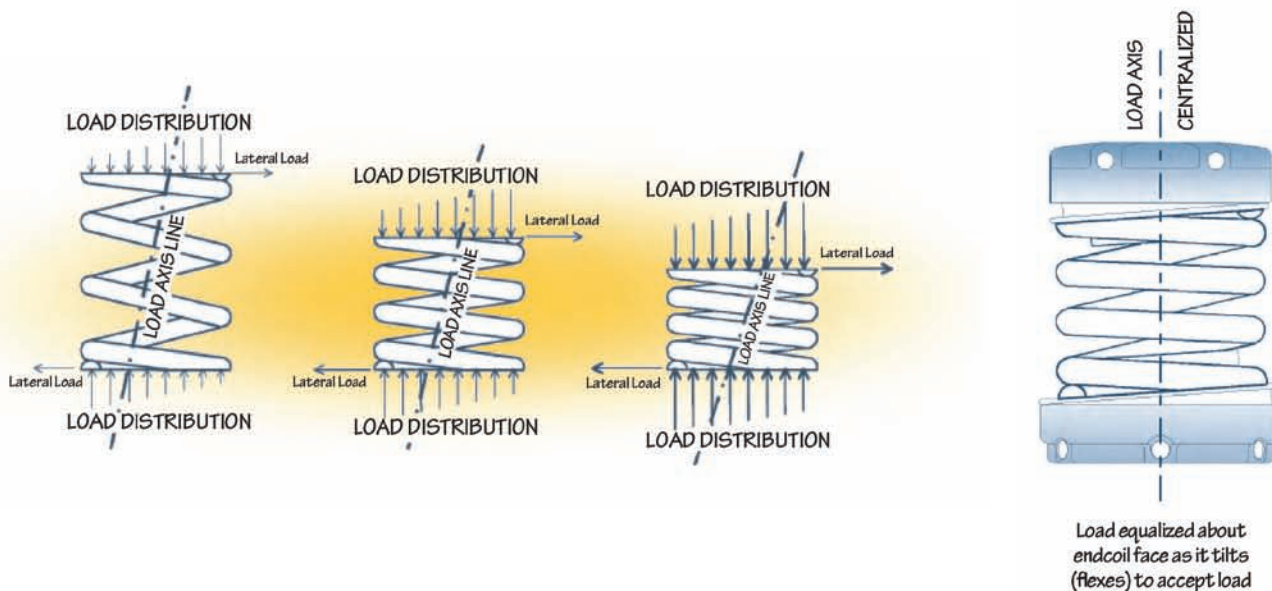
Hydraulic Spring Perches

Hyperco/ICP has made an astounding breakthrough in tire grip enhancement with their load centering Hydraulic Perch. This unique patented device significantly reduces the side loads produced by suspension springs that load the shock body. These bending loads increase friction and wear in your coil-over dampers. Friction in racing suspensions reduces the performance of your race car by decreasing the grip available at the tire contact patch.



The forces in a compressed spring are NOT centered on the spring central axis. Instead, coil over spring designs lead to non-uniform load distributions around the face of the end coil. Typically, the center of that load is located near the tip of the spring. This offset center of pressure, imposes a bending moment on the damper. This moment becomes a lateral force between the damper piston and body, increasing friction within the damper. The more the spring is compressed, the higher the sideloads are significant and their effect on suspension behavior has been widely measured and documented. For the springs to center its forces, its endcoils must be allowed to flex as they apply load. It is ONLY through this flexing that the load can be evenly distributed about the face of the end coil.

The Hyperco/ICP Hydraulic Perch consists of an annular piston mated to an annular cylinder, sealed by O-rings, and filled with hydraulic fluid. As a load is applied to the spring, the perch tilts in response to the uneven load distribution, until the load on the coil face has been balanced. The load on the tilted piston is transferred to oil in the cavity, and is automatically transferred to damper as near the centerline as possible.





Hyperco con't

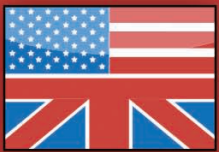
HYDRAULIC LOAD CENTERING SPRING PERCH HARDWARE

ADD ON/SLIDE ON PERCH		THREAD ON (O.E. REPLACING) SHOCK BODY PERCH		THREAD ON (O.E. REPLACING) TOP PERCH	
Part #	Price	Part #	Price	Part #	Price
HHPERCH- 2.00	\$180.00/ea.	AST5200BOD-2.25	\$192.00/ea.	HHTOPPENSKE-2.00	\$192.00/ea.
HHPERCH- 2.25L	\$180.00/ea.	HHBODPENSKE-2.25	\$192.00/ea.	HHTOPPENSKE-2.25	\$192.00/ea.
HHPERCH- 2.50	\$180.00/ea.	HHBODOHLINS-2.25	\$192.00/ea.	HHTOPOHLINS-2.00	\$192.00/ea.
		HHBODOHLINS-2.00 (TT40/TTX)	\$192.00/ea.	HHTOPOHLINS-2.25	\$192.00/ea.
		HHBODPENSKE8175-2.25	\$192.00/ea.	HCD-PERCH COVERS	\$ 22.00/ea.
		HHBODPENSKE8175-2.50	\$192.00/ea.		
		HHBODOHLINS(LMJ)-2.50	\$192.00/ea.		

SPRINGS



Part #	Description	Price
184A0300 through 184A3400	2.25" I.D. SPRINGS/ 4" FREE LENGTH 2.25/4/300 through 2.25/4/3400	\$ 103.00
185A0300 through 185A0950	2.25" I.D. SPRINGS/ 5" FREE LENGTH 2.25/5/300 through 2.25/5/950	\$ 81.00
185A1000 through 185A2600	2.25" I.D. SPRINGS/ 5" FREE LENGTH 2.25/5/1000 through 2.25/5/2600	\$ 103.00
185A2700 through 185A3800	2.25" I.D. SPRINGS/ 5" FREE LENGTH 2.25/5/2700 through 2.25/5/3800	\$ 215.00
186A0200 through 186A0950	2.25" I.D. SPRINGS/ 6" FREE LENGTH 2.25/6/200 through 2.25/6/950	\$ 81.00
186A1000 through 186A2000	2.25" I.D. SPRINGS/ 6" FREE LENGTH 2.25/6/1000 through 2.25/6/2000	\$ 103.00
186A2200 through 186A2500	2.25" I.D. SPRINGS/ 6" FREE LENGTH 2.25/6/2200 through 2.25/6/2500	\$ 215.00
184C0350 through 184C3600	2" I.D. SPRINGS/ 4" FREE LENGTH 2.00/4/350 through 2.00/4/3600	\$ 103.00
185C0250 through 185C3000	2" I.D. SPRINGS/ 5" FREE LENGTH 2.00/5/250 through 2.00/5/3000	\$ 103.00
186C0350 through 186C2000	2" I.D. SPRINGS/ 6" FREE LENGTH 2.00/6/350 through 2.00/6/2000	\$ 103.00
181-0300-HT through 181-4500-HT	DALLARA - HT PARTS/1.417" I.D. DALLARA FRONT 36MM ID / 300 Through 4500	\$ 136.00
181-0800-HT-4 through 181-2000-HT-4	DALLARA - HT PARTS/1.417" I.D./4.00" FREE LENGTH DALLARA FRONT 36MM / 4 / 800 through 2000	\$ 105.00



essex
parts services inc.



Öhlins Suspension



ADVANCED SUSPENSION TECHNOLOGY



Essex offers the full line of Öhlins parts and services. Please contact Joey Petree (joey.petree@essexparts.com) for more information or technical assistance.





GWC Inerters



Essex Part #	Description	Quantity per Unit	Team Price
23.G-N300T-36	COMPLETE INERTER ASSEMBLY (36mm)	-	\$4,300.00
23.G-N300T-40	COMPLETE INERTER ASSEMBLY (40mm)	-	\$4,300.00
23.G-N3T-101	DRIVE GEAR	3	\$ 498.15
23.G-N3T-102	IDLER GEAR	3	\$ 432.75
23.G-N3T-901T	WEIGHT, TUNGSTEN	3	\$ 197.97
23.G-N3T-121	TOP CAP	1	\$ 866.67
23.G-N3T-122	WEIGHT HOUSING	1	\$ 764.81
23.G-N3-103	PUMP PLATE	1	\$1,527.78
23.G-N3-105	BOTTOM PLATE	1	\$ 688.89
23.G-N336-104	SEALING PLATE, 36MM	1	\$ 398.15
23.G-N9206-033	36MM SEALING O-RING	1	\$ 1.00
23.G-N340-104	SEALING PLATE, 40MM	1	\$ 398.15
23.G-N9206-037	40MM SEALING O-RING	1	\$ 1.00
23.G-N91985A105	BEARING RETAINING RING	3	\$ 1.99
23.G-NS5-40-1.45	COVER SCREW	3	\$ 2.65
23.G-N9262K441	SCREW O-RING	3	\$ 0.94
23.G-N2154	SEALING SCREW	3	\$ 1.50
23.G-N30-98	SEALING SCREW O-RING	3	\$ 1.04
23.G-N9262K693	CAP O-RING	1	\$ 1.17
23.G-N91251A102	INTERNAL SCREW	3	\$ 1.08
23.G-N98381A441	DOWEL PIN	3	\$ 0.91
23.G-HA5P58L02	BEARING	12	\$ 16.06
23.00110-05	SHAFT BEARING	1	\$ 6.12
23.01027-05	SHAFT SEAL, X-RING	1	\$ 2.69
23.01032-05	SHAFT SEAL BACKUP RING	1	\$ 6.80

AP Racing Radi-Cal™ Brake Fluids



AP Racing's established range of brake & clutch fluids have been refreshed and re-branded to embrace our Radi-CAL™ philosophy. Following last years successful launch of Radi-CAL™ R4 racing fluid, AP Racing has chosen to re-align its full range of fluids by renaming PRF660, 600, 551 and Formula Dot 5.1, changing the bottle and caps.

AP Racing Brake Fluids have been developed specifically for use under the arduous conditions encountered at the highest levels of motorsport. All AP Racing Brake Fluids with the exception of R4 are compatible with all hydraulic brake systems designed to conform to S.A.E. J1703 requirements.

- Radi-CAL™ R4 has been designed to perform better than any other product at the extremes of heavy duty braking performance in the top levels of racing. With the highest dry boiling point of any racing brake fluid currently available at 340°C, R4 stands alone.

- PRF 660, Re-branded as Radi-CAL™ R3 - Silver Bottle with Yellow cap. R3 developed for use in high temperature racing conditions . Conforms to and exceeds FMVSS 116 DOT 4 and SAE J1703 and J1704.

- AP 600, Re-branded as Radi-CAL™ R2 - Silver Bottle with Blue cap.
R2 Brake Fluid is intended for competition use only.

- AP 551, Re-branded as Radi-CAL™ R1 - Silver Bottle with Black cap.
R1 can be used for either competition or road use.

- Formula DOT 5.1, Re-branded as Factory R Dot 5.1 - Yellow Bottle with Yellow cap Brake Fluid conforms to S.A.E. J1703 specifications and is ideal for High Performance Road Applications, Competition and Track Days.

All AP Racing Brake Fluids are Polyalkalene Glycol Ether based and are not a silicone based fluid.
AP Racing do not sell and do not recommend using a silicone based brake fluid with any of its products.

Colour variations may occur in AP 600 / R2 brake fluids due to its manufactured process.
This has no effect on the quality and the performance of this product.



Brake Dyno and Burnishing Services



“I had a vibration” is something you never want to hear from your driver. The root of the problem is typically the brakes, tires, or suspension, but is often tough to isolate. A simple and inexpensive preparation step can often eliminate the brakes as a potential culprit, and you won’t have to cringe so much when the driver is on the radio screaming about the dreaded thump, thump, thump he’s feeling.

If your rotors aren’t being properly prepared for driver abuse by experienced technicians, you’re not only leaving performance on the table, you’re exposing yourself to potential judder, vibration, and rotor cracking issues.

You’re also wasting time and money. Track time is expensive. The more time your driver spends behind the wheel performing an elaborate pad and rotor break-in procedure, the less time you’ll spend gathering real data and preparing for the race.

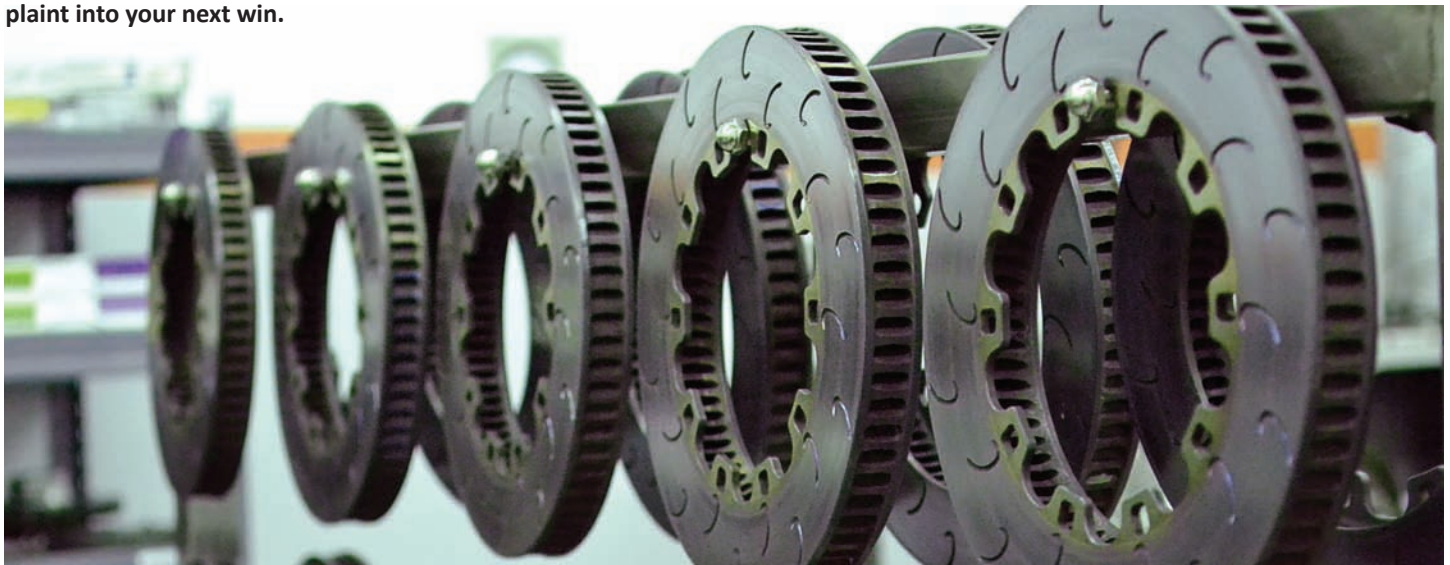
Finally, your driver will be frustrated. He’ll be ready to fire off some hot laps, and you’ll be telling him to take it easy and cool his brakes, putting your team members at odds.

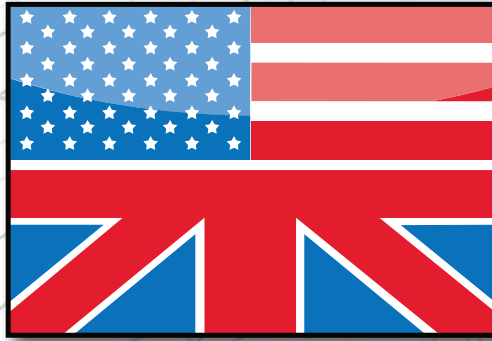
These are all serious and costly problems that can quickly turn a potential win into a very long weekend for the entire team. Fortunately, this scenario can be avoided.

The answer is to have Essex Dyno Burnish your brake pads and discs at the time of order. They’ll arrive in matched sets, ready to drop on the car for instant combat.

Essex burnishes thousands of discs for the top teams each year, and we’re intimately familiar with all of the available pad and rotor combos. After countless hours of experimentation, and extensive feedback from the top drivers and teams, we can squeeze the most reliable performance out of each setup on the market.

Give us a call today. We’ll work with you to develop a custom burnishing procedure for your specific setup. With competitive rates, quick turnaround times, and delivery service, we’ll put something in your hands that can help turn your next driver complaint into your next win.





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