

A1 INSTALLATION DRAWING

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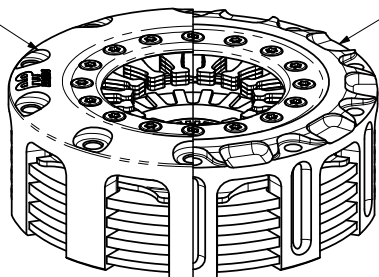
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CP8153 - Ø115mm (4.5") PUSH TYPE CARBON / CARBON CLUTCH ASSEMBLY.

SECTION OF AN ALUMINIUM COVER

SECTION OF A STEEL COVER



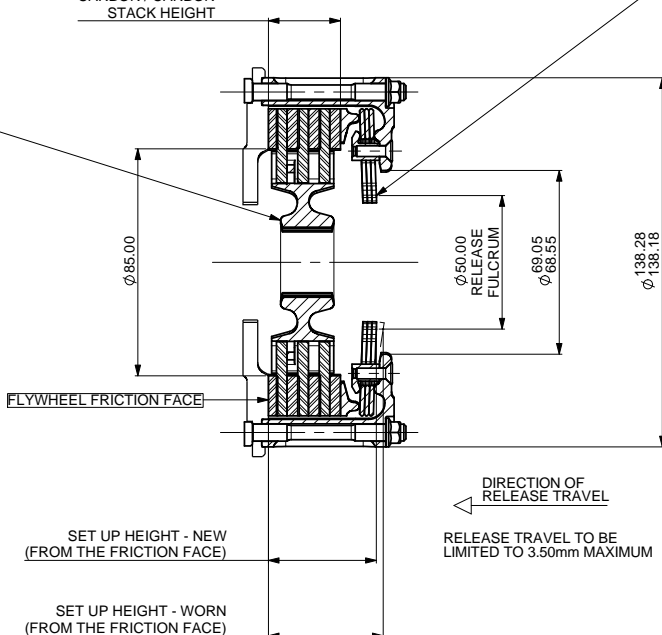
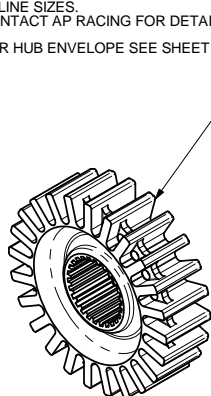
RECOMMENDED RELEASE BEARING :-

STEEL CAGED, ROUND NOSED BALL TYPE BEARING TO BE FREE OF SPRING FINGERS WHEN CLUTCH IS FULLY ENGAGED.
CP3457-2 STANDARD RELEASE BEARING (OUTER RACE ROTATES)
CP3457-6 HIGH SPEED RELEASE BEARING (INNER RACE ROTATES)

HUB PART No. CP5323-110 (S/T)
SPLINE 1.16" x 26 x 30°
HUB MATERIAL SUFFIX.
S = STEEL
T = TITANIUM

HUBS ARE AVAILABLE WITH OTHER SPLINE SIZES.
CONTACT AP RACING FOR DETAILS.
FOR HUB ENVELOPE SEE SHEET 2.

27.00
CARBON / CARBON
STACK HEIGHT



CP8153 CLUTCH FAMILY

MAXIMUM DYNAMIC TORQUE CAPACITY			
(Nm)	848	758	
(ft.lb)	625	559	
RELEASE LOAD			
Max. Peak Worn (N)	5750	4950	
Max. Peak New (N)	4700	4050	
WEAR IN (See Note)	0.50	0.50	
Set Up Height New	40.74	40.34	
Set Up Height Worn	42.29	42.09	
(Set Up Height is calculated from the flywheel friction face.)			
Release Ratio	3.46	3.46	
	Aluminium Cover	Steel Cover	Titanium Cover
Assembly Mass	1.60 kg	2.06 kg	n/a
Assembly Inertia	0.00368 kg.m ²	0.00531 kg.m ²	n/a
Estimated Driven Plate & STL Hub Inertia = 0.00061 kgm ²			
PERFORMANCE SUFFIX	DE	SE	
For Reference			
Diaphragm Spring Rate	GLD	SLV	
Clutch Ratio	EHR	EHR	

MATERIAL SUFFIX	COVER MATERIAL	PRESSURE PLATE MATERIAL	CARBON / CARBON TYPE
02	ALUMINIUM	STEEL	HEAVY DUTY
03	STEEL	STEEL	HEAVY DUTY

FLYWHEEL TYPE	SUFFIX	COMMENTS
STANDARD FLAT FLYWHEEL	FN	SEE SHEET 2
STANDARD STEPPED FLYWHEEL	SN	SEE SHEET 2
FLAT FLYWHEEL WITH CPS	FP	SEE SHEET 2
STEPPED FLYWHEEL WITH CPS	SP	SEE SHEET 2

Sample AP Racing Part No. **CP8153-DE03-SP**

WEAR IN
THIS CLUTCH HAS BEEN DESIGNED FOR THE WEAR IN INDICATED ABOVE, WHICH MUST BE COMPENSATED FOR BY USING PRESSURE PLATE "SHIMS" FROM THE KITS DETAILED BELOW.
THE MAXIMUM CARBON STACK WEAR FOR THIS ASSEMBLY IS 4.00mm

DE & SE - NONE CUSHION		DE & SE - CUSHION	
STANDARD KIT 0.50 TO 3.50 - 0.50 inc.	CP8153-9SS	STANDARD KIT 0.50 TO 3.50 - 0.50 inc.	CP8153-7
INTERMEDIATE KIT 0.25 TO 3.25 - 0.50 inc.	CP8153-10SS	INTERMEDIATE KIT 0.25 TO 3.25 - 0.50 inc.	CP8153-8
LOW KIT 0.25 TO 1.25 - 0.25 inc.	CP8153-15SS	n/a	n/a
MEDIUM KIT 1.50 TO 2.50 - 0.25 inc.	CP8153-16SS	n/a	n/a
HIGH KIT 2.75 TO 3.50 - 0.25 inc.	CP8153-17SS	n/a	n/a

Issue No.	Alterations			Zone	Initials
	Date & No.	Particulars			
1	19/12/05 C2803	FIRST ISSUE		#	JG
2	24/01/06	CUSHION PRESSURE PLATE SECTION, CUSHION PRESSURE PART No.'S AND KITS DELETED. TORQUE CAPACITIES : 758 WAS 884 1014 WAS 948		#	JG
3	02/08/07 C3196	CP8153-SE03-SN AND STEEL COVER VIEW ADDED.		#	JG
4	10/10/07 C3232	WEAR IN WAS 0.75		#	JG
5	11/10/07 C3232	PRESSURE PLATE KIT CONTENTS MODIFIED INLINE WITH WEAR IN CHANGE.		#	JG
6	24/10/07 C3232	CP8153-DE03-SN ADDED.		#	JG
7	29/10/07 C3232	Ø56.75 MIN. 3.30 MIN. 34.25 MAX. AND Ø10 MAX ADDED. Ø132.32/138.29 (OPTIONAL) ADDED.		#	JG
8	25/03/08 C3373	GEAR RING LOCATION DETAIL ADDED (STEEL COVER)		#	JG
9	03/11/08 C3522	PRESSURE PLATE KITS CP8153-15SS, -16SS AND -17SS ADDED. 'SS' ADDED TO CURRENT KITS -9 AND -10		#	JG
10	C3555 05/01/09	DIAPHRAGM FIXING CHANGED TO LATEST METHOD. STEEL COVER SECTION ADDED.		#	JG
11	28/11/13 RAC22116	REDRAWN TO LATEST FORMAT. CUSHION PRESSURE PLATE DETAILS ADDED. RELEASE LOADS - SE 4950N WAS 4700n 4050N (Max. Peak New) WAS 3400n (At Travel) RELEASE LOADS -DE 5750N WAS 5500n. 4700N (Max. Peak New) WAS 4000n (At Travel)		#	JG
12	24/08/15 C4953	FLAT FLYWHEEL OPTION ADDED		#	JG

SCALE 1:1	SHEET 1 OF 2
DRAWN	Jeremy Govan
APPROVED	
DERIVED FROM	
TITLE Ø115mm CARBON CARBON CLUTCH ASSEMBLY	
DRG NO.	CP8153CD

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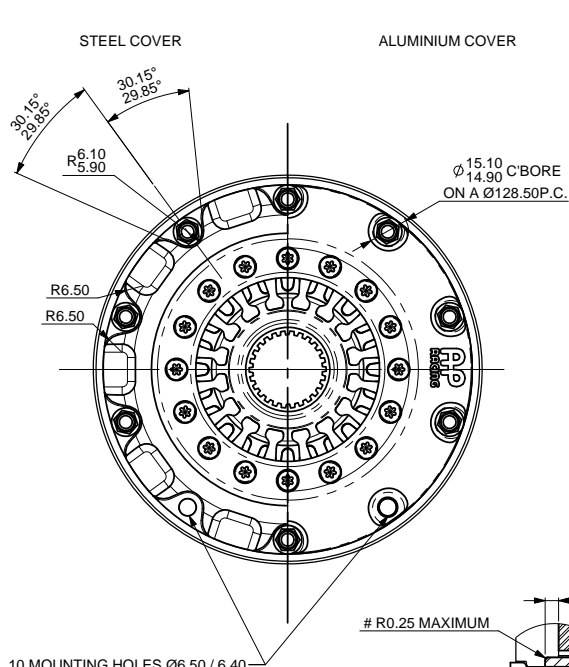
RECOMMENDED CLUTCH MOUNTING :

(FOR ALL TYPES OF ASSEMBLY)
1/4" UNF. CP4703 FAMILY STUD AND K-LOCK NUT.
TIGHTENING TORQUE : 10Nm (7.5 ft.lb)

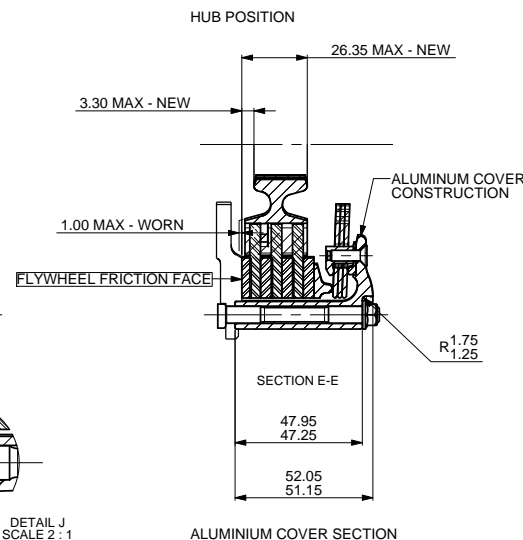
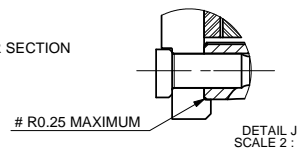
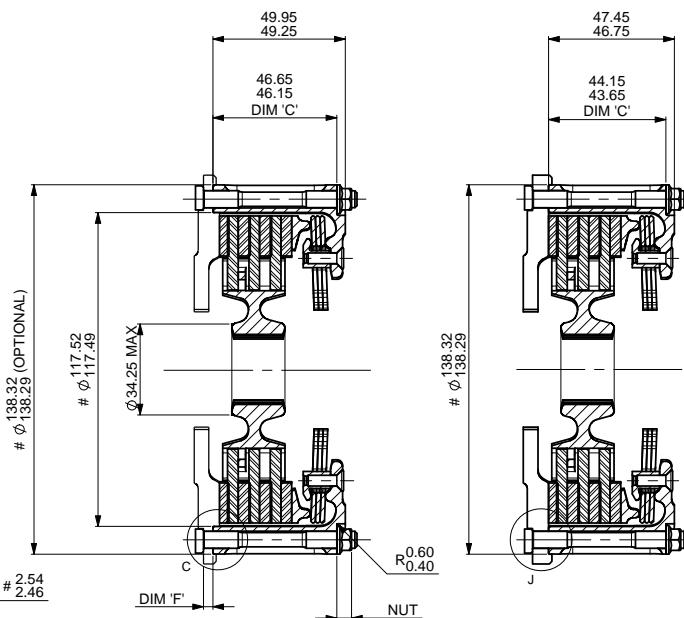
LENGTH OF STUD REQUIRED TO BE CALCULATED THUS :

STUD LENGTH = DIMENSIONS 'C' + 'F' + NUT

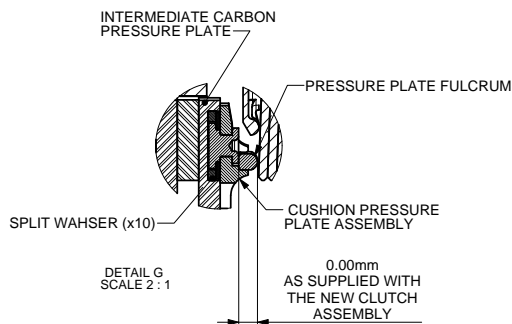
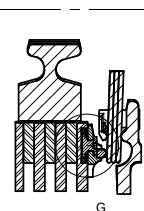
THIS CALCULATED LENGTH TO BE ROUNDED UP TO THE NEXT AVAILABLE STANDARD STUD LENGTH.



EQUI-SPACED
ON A
Ø127.50 P.C.
± 0.05

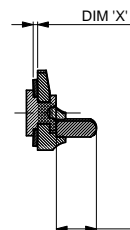


CUSHION PRESSURE PLATES ASSEMBLIES (SUFFIX "SP")



CUSHIONING REPLACEMENT CRITERIA

WITH TIME AND USE THE CUSHIONING EFFECT WILL DETERIORATE AND COMPONENTS SHOULD BE SERVICED WITH THE ABOVE KIT WHEN EITHER THE BELLEVILLES BECOME LOOSE OR WHEN DIMENSION 'X' FALLS BELOW 0.85, TAKEN AS THE AVERAGE OF 4 EQUALLY SPACED MEASUREMENTS AROUND THE CIRCUMFERENCE OF THE BELLEVILLE.



WEAR COMPENSATION IS ACHIEVED BY REPLACING THE PRESSURE PLATE FULCRUM RING AS SHOWN ABOVE. SEE SHEET ONE FOR KIT PART NUMBERS AND INCREMENT DETAILS.

Issue No.	Date & No.	Alterations	
		Particulars	Zone / Initials
11	28/11/13	SEE SHEET 1 FOR ISSUE DETAILS	# JO
12	24/08/15 C4953	FLAT FLYWHEEL OPTION ADDED	# JO

SCALE 1:1	SHEET 2 OF 2
DRAWN	Jeremy Govan
APPROVED	
DERIVED FROM	
TITLE	
Ø115mm CARBON CARBON CLUTCH ASSEMBLY	
DRG NO.	CP8153CD