

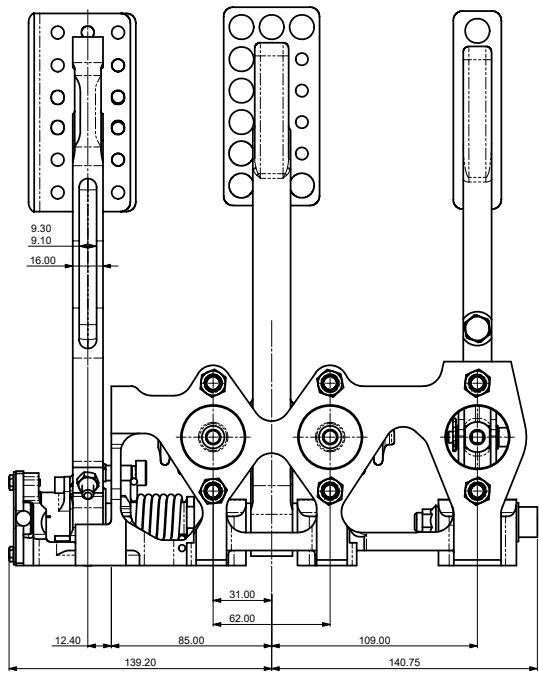
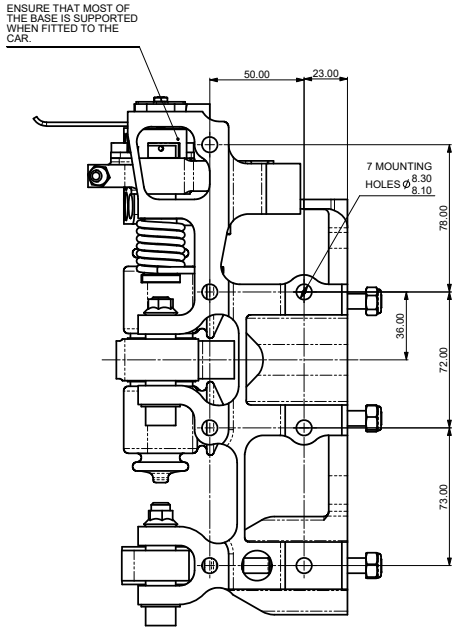
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GENERAL DESCRIPTION
THIS PEDAL BOX IS A GENERIC RACING PEDAL BOX DESIGN, DESIGNED FOR COMFORT AND CONTROL. THIS UPDATED PEDAL BOX HAS A NEW OPTIMISED MACHINED FROM BILLET BASEPLATE AND PEDALS. THE THROTTLE HAS BEEN UPDATED TO ADD ADDITIONAL FEATURES TO AID CONNECTION TO BELL CRANKS AND CABLES.

- FEATURES**
- OPTIMISED, LIGHTWEIGHT, MACHINED FROM BILLET BASE PLATE.
 - OPTIMISED, LIGHTWEIGHT CLUTCH AND BRAKE PEDAL, WITH IMPROVED TWIST DISPLACEMENT.
 - NEW THROTTLE PEDAL WITH ADDITIONAL FEATURES.
 - ADJUSTABLE RATIO PEDALS.
 - ALL THREADS ARE METRIC, EXCEPT THOSE MENTIONED BELOW.
 - Ø10 BALANCE BAR
 - ADJUSTABLE STOPS ON CLUTCH AND THROTTLE PEDALS.
 - PEDAL BOX WEIGHT IS 2.8 Kg
BALANCE BAR ADJUSTER CABLE WEIGHT 236 g
(CP2623 MASTER CYLINDERS APPROX 0.31Kg EACH)
 - CABLE ADJUSTER INCLUDED.
 - ALL PEDALS HAVE BALL BEARING PIVOTS.
 - OPTIONAL ROTARY HALL EFFECT SENSOR ON THROTTLE, SEE SHEET 2 FOR DETAILS

PART NUMBERS	CLEVIS THREADS		THROTTLE SENSOR	
	METRIC M8x1.25	IMPERIAL 5/16" UNF	INCLUDED	NOT INCLUDED
CP5500-605MTS	✓	✗	✓	✗
CP5500-605M	✓	✗	✗	✓
CP5500-605UTS	✗	✓	✓	✗
CP5500-605U	✗	✓	✗	✓

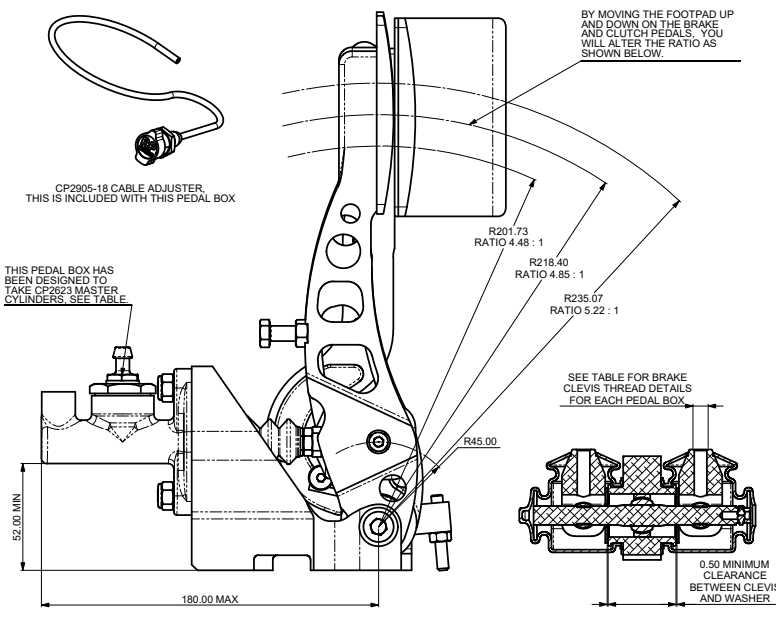
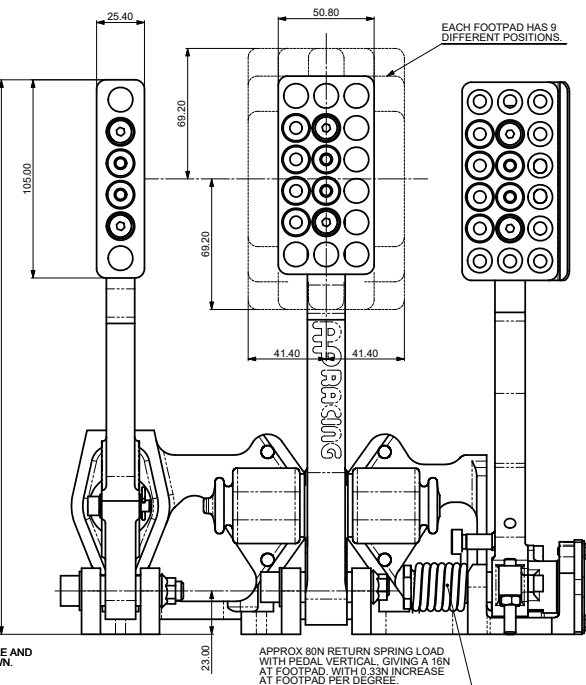
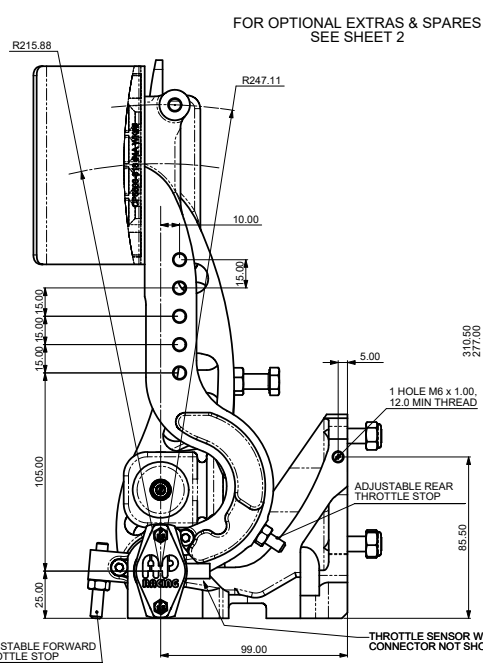
BORE SIZE	BRAKE PEDAL	CLUTCH PEDAL
Ø14.0mm (0.551")	CP2623-88PRM088	CP2623-88PRM088
Ø15.0mm (0.591")	CP2623-89PRM088	CP2623-89PRM088
Ø15.9mm (0.625") 5/8"	CP2623-90PRM088	CP2623-90PRM088
Ø16.8mm (0.661")	CP2623-905PRM088	CP2623-905PRM088
Ø17.8mm (0.700")	CP2623-91PRM088	CP2623-91PRM088
Ø19.1mm (0.750") 3/4"	CP2623-92PRM088	CP2623-92PRM088
Ø20.6mm (0.842") 13/16"	CP2623-93PRM088	CP2623-93PRM088
Ø22.2mm (0.875") 7/8"	CP2623-94PRM088	CP2623-94PRM088
Ø23.8mm (0.937") 15/16"	CP2623-95PRM088	CP2623-95PRM088
Ø25.4mm (1.000")	CP2623-96PRM088	CP2623-96PRM088

THIS TABLE SHOWS THE RECOMMENDED PUSHROD LENGTHS FOR CYLINDERS IN THIS BOX.

IF YOU ARE ORDERING THE CP5500-505UNF, THEN MAKE SURE YOU ORDER YOUR CYLINDERS WITH THE "FRT" EXTENSION AND NOT THE "PRM", eg CP2623-91PRT088

CP2623 CYLINDERS HAVE IMPERIAL THREADS ON THE INLET AND OUTLET. FOR METRIC THREADS ORDER CP5623 VERSIONS INSTEAD.

CYLINDERS WITH LONGER PUSHRODS CAN BE CUT DOWN.



Rev	Alterations		Drawn	Checked
	Date & No.	Particulars		
1	19/01/2013	FIRST ISSUE	#	COA
2	22/01/2013	CLUTCH FOOTPAD MODIFIED. B6637	#	COA
3	18/02/2013	BOMS UPDATED ON SHEET 3. B6637	#	COA
4	06/04/2013	SENSOR PIN NUMBERS ADDED SPARES TABLE UPDATED.	#	COA
5	03/02/16	SHEET 3: ITEM 25 - CP5500-373 WAS CP5500-331 ITEM 31 - CP5500-374 WAS CP5500-336 IMPERIAL CLUTCH CLEVIS 41 WAS 44 IMPERIAL BRAKE CLEVIS 42 WAS 45 BOLT AND BUSH NOTE ADDED	K1	DW
			J1	
			E4	
			J9	
			R11	
6	14/09/16	SHEET 1: BRAKE CLEVIS THREAD NOTE UPDATED SHEET 3: ITEM 26: CP5500-379 WAS 373	K1	NK
			C18	
7	10/08/20	NEW TIPS AND DEBRIS SLEEVE ADDED - VIEWS UPDATED TO REFLECT THIS CHANGE SHEET 3: ITEM 38 - CP5500-383 WAS CP5500-394 ITEM 40 - CP5500-385 WAS CP5500-389	#	FL
8	06/05/2022	SHEET 2: ELECTRICAL CONNECTION NOTE UPDATED TO NEW SPEC. GRAPH DATA TO TBC NOTE REMOVED DTM PLUG REMOVED	E2	ADR
			A2	
9	18/11/2022	SHEET 3: ITEM 22 - 1x CP5500-390 WAS 2x CP7000-170 ITEM 39 - 2x CP4333-148 WAS 2x CP4028-114	N18	ROW
			M18	

SCALE 1:1 SHEET 1 OF 3

DRAWN Chris Anonawith

APPROVED

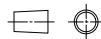
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TITLE
GENERIC FLOOR MTG
PEDAL BOX

DRG NO. CP5500-605CD

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FIRST ANGLE PROJECTION

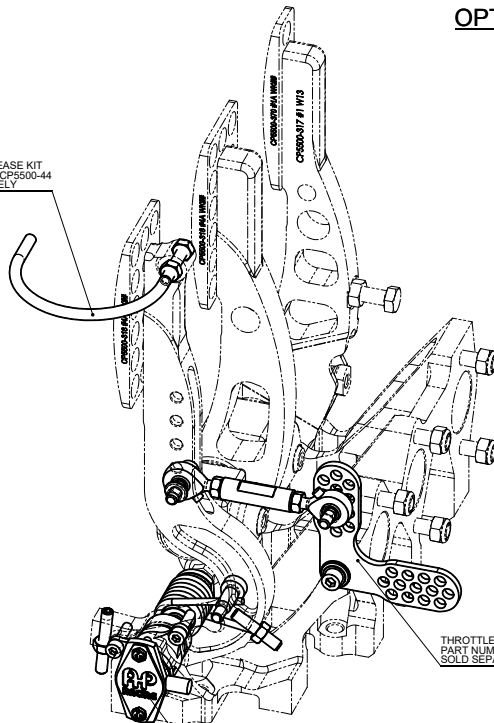
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OPTIONAL EXTRAS

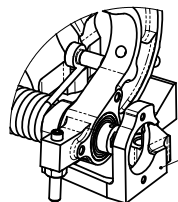
THROTTLE RELEASE KIT
PART NUMBER: CP5500-44
SOLD SEPARATELY



THROTTLE LINKAGE KIT
PART NUMBER: CP5500-43
SOLD SEPARATELY

THROTTLE SENSOR KIT
PART NUMBER: CP5500-67
INCLUDED WITH CP5500-605MTS & CP5500-605UTS
PEDAL BOXES CAN ALSO BE SOLD SEPARATELY

THE CP5500-605M & CP5500-605U PEDAL BOXES WILL BE BUILT AS SHOWN HERE.



THROTTLE SENSOR DETAIL NON CONTACT ROTARY HALL EFFECT SENSOR WITH DUAL REDUNDANCY

THE THROTTLE SENSOR HAS A MEASURING RANGE OF 30°. THIS ANGLE WAS SELECTED TO PROVIDE A HIGH RESOLUTION OF DATA FROM THE SENSOR, AND BECAUSE THE TYPICAL TRAVEL OF A THROTTLE PEDAL IS WITHIN THIS, THE PEDAL WITH ITS STOPS ARE CAPABLE OF A MUCH BIGGER RANGE (20.5° FORWARD FROM VERTICAL, 27.5° BACKWARDS FROM VERTICAL). THE PEDAL BOX AS STANDARD WILL BE SET AT 4° FORWARD, TO 24° BACK. IF YOU NEED A DIFFERENT RANGE, ALTER THE FORWARD STOP, ALTER THE BACK STOP (KEEP THE RANGE TO WITHIN 30°), THEN ROTATE THE SENSOR TO AN ANGLE WHERE IS CAN READ YOUR NEW RANGE.

Electrical	
Measurement range	30° (BOTH CHANNELS)
Supply voltage	5 to 5 Vdc
Over voltage protection	up to 10 Vdc
Maximum supply current	<12.5 mA each independent supply (<25mA total)
Reverse polarity protection	Yes
Short circuit protection:	
Output to GND	Yes
Output to supply	Yes
Power-on settlement time	<1 s
Resolution	0.025% of measurement range (12 Bit)
Non-linearity*	<±0.4 %
Temperature coefficient	<±20 ppm/°C

* Non-linearity is measured using the Least-Squares method on a computerised calibration system

Analog Output	
Voltage output range Vdc	Ratiometric output voltage - 4% to 98% of Vs over measurement
Monotonic range Vdc	0.05 (1%) and 4.95 (99%) nominal
Load resistance	10k minimum (resistive to GND)
Output noise	<1 mVrms
Input/output delay	<2 ms Typ.
Output direction	Channel 1 - CW, Channel 2 - ACW

Mechanical	
Mechanical angle	360°, continuous
Maximum rotational speed	3600°/sec
Weight	<45 g
Mounting	Use 2 x M4 socket head cap screws and M4 washer - maximum tightening torque 2.0Nm.

Phasing
When magnet ident mark is facing toward the sensor and cable exit, output is at mid travel. The sensor housing allows for ±10° adjustment via the mounting flange slots.

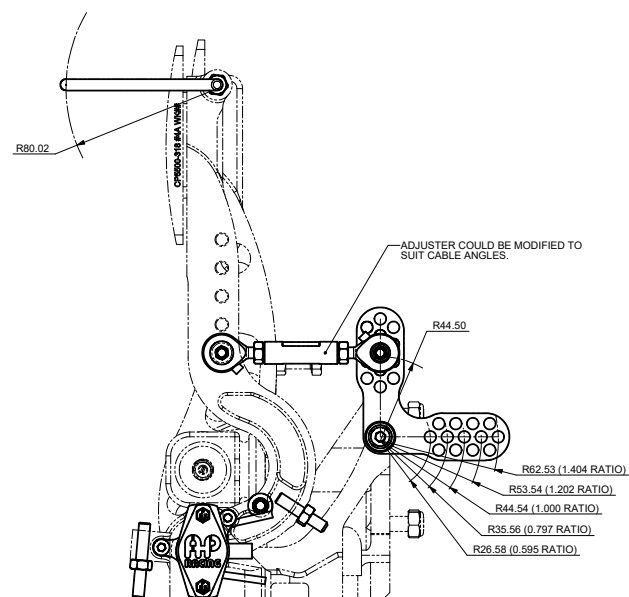
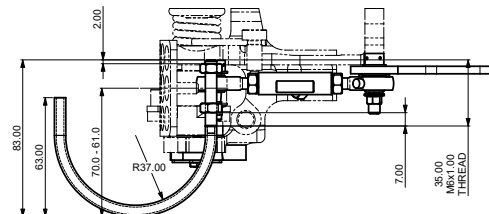
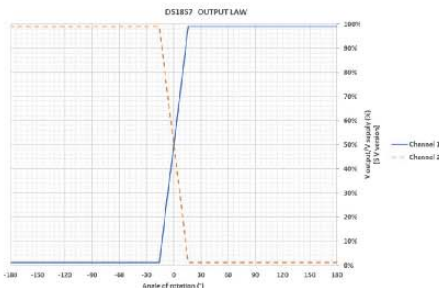
Environmental	
Protection class	IP68 (to 2m depth for 2 hours) and IP69K
Life	This product has no contacting parts.
Other life	Corrosion - no degradation due to shaft dither
Operational temperature	-40°C to +120°C
Storage temperature	-40°C to +120°C
Vibration	BS EN 60068-2-64: 2008 Sec 8.4 (31.4gn rms) 20 to 2000Hz Random
Shock	2500g
EMC immunity level	BS EN 61000-4-3:1999, to 100V/m, 80MHz to 1GHz and 1.4GHz to 2.7GHz (2004/108/EC)

If the maximum operating temperature is exceeded, the voltage regulator will shut down to protect the device from overheating



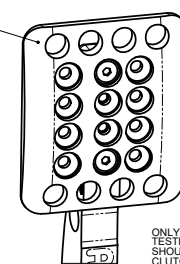
OTHER	
Cable length	0.5m
Electrical Connections	6-core cable, DR-25 jacket 28 AWG Spec 44A wires Minimum bend radius is six the cable OD for static applications (20.5mm) and 10x the cable OD for dynamic applications (41mm)

Sensor wire Arrangement & description	
BLUE - Channel 2	+V supply
WHITE - Channel 2	Output 2
GREEN - Channel 2	0V Supply (GND)
RED - Channel 1	+V supply
YELLOW - Channel 1	Output 1
BLACK - Channel 1	0V Supply (GND)



ADJUSTER COULD BE MODIFIED TO SUIT CABLE ANGLES.

LARGER FOOTPAD
PART NUMBER: CP5500-330
SOLD SEPARATELY



ONLY THE BRAKE PEDAL HAS BEEN TESTED WITH THIS ITEM FITTED. IT SHOULD NOT BE FITTED TO THE CLUTCH OR THROTTLE PEDALS.

Alterations	
Date & No.	Particulars
0	SEE SHEET 1 FOR ISSUE INFORMATION.

SCALE 1:1	SHEET 2 OF 3
DRAWN	Chris Arowamth
APPROVED	
DERIVED FROM	
TITLE	GENERIC FLOOR MTG PEDAL BOX
DRG NO.	CP5500-605CD

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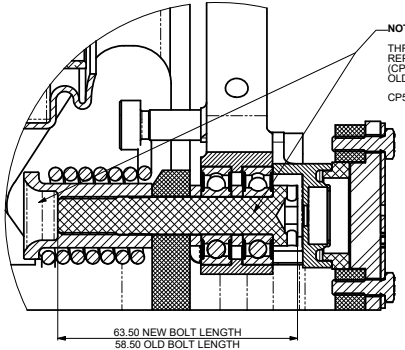


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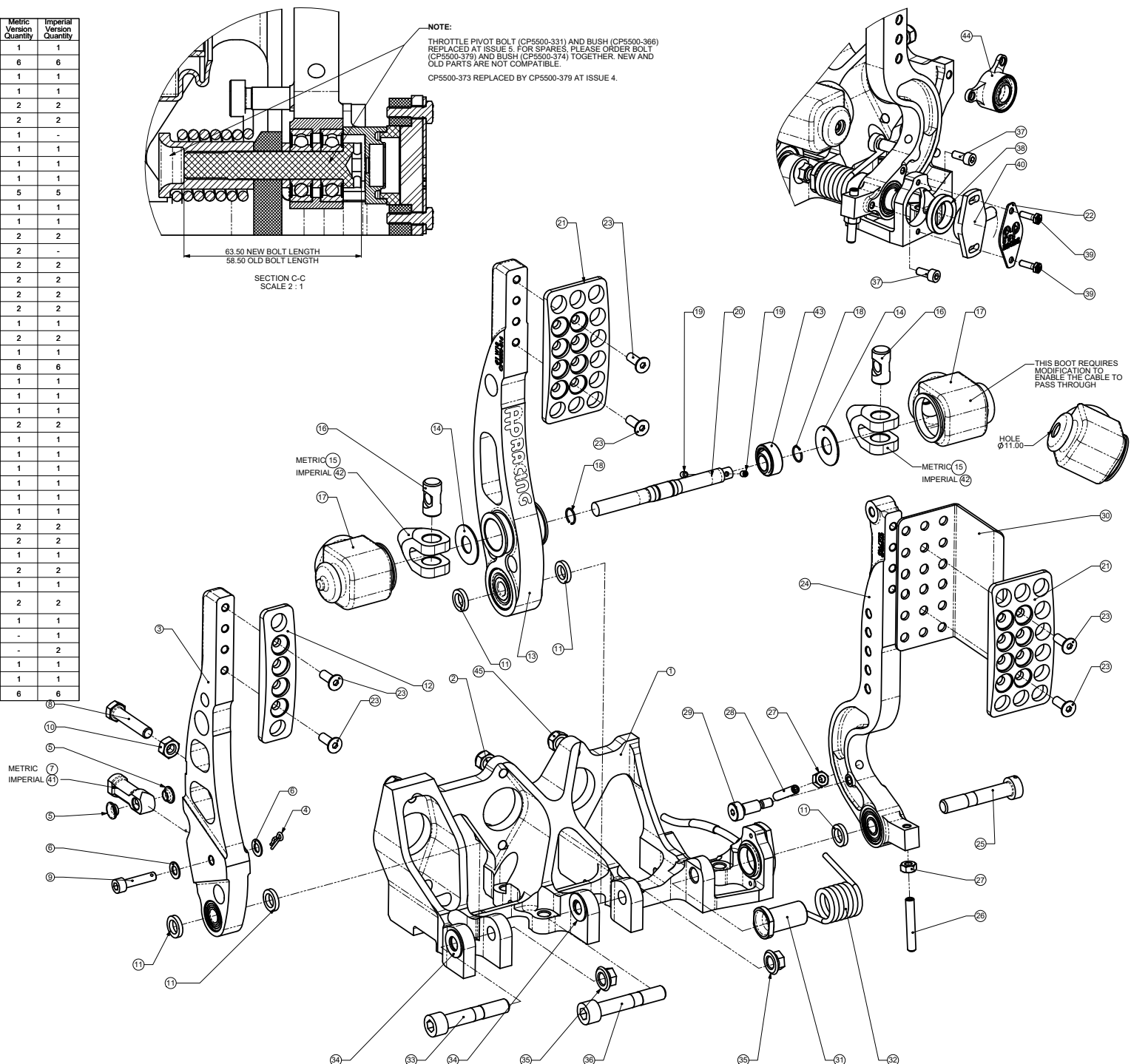
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SPARES LIST

ITEM NO.	PART NUMBER	DESCRIPTION	Metric Version Quantity	Imperial Version Quantity
1	CP5500-360	BASE PLATE	1	1
2	CP5500-133	STUD M8x1.25, 28.0 LONG	6	6
3	CP5500-41	CLUTCH PEDAL SUB-ASSY	1	1
4	CP5119-134	RETAINING R CLIP	1	1
5	CP5507-131	GLYD RING BEARING	2	2
6	CP2494-1305	WASHER	2	2
7	CP5500-314	METRIC CLUTCH CLEVIS	1	-
8	CP5500-134	M8 x 1.50 HEX BOLT	1	1
9	CP5500-323	CLUTCH CLEVIS PIVOT RETAINER	1	1
10	ME21002	M8 LOCK NUT	1	1
11	CP5518-127	SPACER	5	5
12	CP5500-370	FOOTPAD	1	1
13	CP5500-40	BRAKE PEDAL SUB-ASSY	1	1
14	CP5500-124	WASHER	2	2
15	CP5500-312	CLEVIS - METRIC	2	-
16	CP5500-108	BARREL NUT	2	2
17	CP5500-150	RUBBER BOOT	2	2
18	CP5500-148	SNAP RING 0.4375"	2	2
19	CP5500-113at	SCREW M4 x 5	2	2
20	CP5500-105	BALANCE BAR	1	1
21	CP5500-318	FOOTPAD	2	2
22	CP5500-390	SENSOR BACK PLATE	1	1
23	CP4350-106	M6 x 14 SCREW, COUNTERSUNK	6	6
24	CP5500-46	THROTTLE PEDAL SUB-ASSY	1	1
25	CP5500-379	M10x5x1.50 BOLT	1	1
26	CP5500-338	M6 SCREW x 40, FLAT GRUB	1	1
27	ME21001	M6 x 1.00 NUT	2	2
28	CP5500-324	M6 SCREW x 30, FLAT GRUB	1	1
29	CP7033-111	M6 SCREW, Ø8 SHOULDER	1	1
30	CP5500-329	THROTTLE GUARD	1	1
31	CP5500-374	SPRING SUPPORT BUSH	1	1
32	CP5500-365	TORSION SPRING	1	1
33	CP5000-425	M10x58 CALIPER M1g BOLT	1	1
34	CP5200-150	WASHER	2	2
35	CP5427-101	M10 KAYLOCK NUT	2	2
36	CP5200-173	M10x58 CALIPER M1g BOLT	1	1
37	CP4612-109	M5 x 0.80 CAP HEAD	2	2
38	CP5500-383	DEBRIS SLEEVE	1	1
39	CP4333-148	M4 x 0.7 HEX HEAD SCREW, 14.00 LONG	2	2
40	CP5500-382	ROTARY SENSOR	1	1
41	CP5500-336	UNF CLUTCH CLEVIS	-	1
42	CP5500-345	CLEVIS - UNF	-	2
43	CP5500-339	SPHERICAL BEARING	1	1
44	CP5500-363	MAGNET HOLDER	1	1
45	CP5500-346	M8 NYLOC NUT	6	6



NOTE:
 THROTTLE PIVOT BOLT (CP5500-331) AND BUSH (CP5500-366) REPLACED AT ISSUE 5. FOR SPARES, PLEASE ORDER BOLT (CP5500-379) AND BUSH (CP5500-374) TOGETHER. NEW AND OLD PARTS ARE NOT COMPATIBLE.
 CP5500-373 REPLACED BY CP5500-379 AT ISSUE 4.



Alterations	
Date & No.	Particulars
	SEE SHEET 1 FOR ISSUE INFORMATION.

SCALE 1:1 SHEET 3 OF 3
 DRAWN Chris Arowsmith
 APPROVED
 DERIVED FROM
 TITLE
 GENERIC FLOOR MTG
 PEDAL BOX
 DRG NO. CP5500-605CD