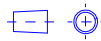


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FIRST ANGLE PROJECTION

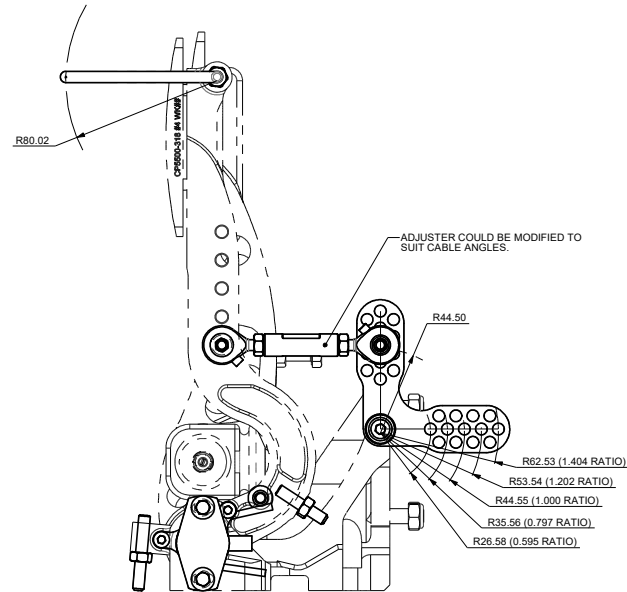
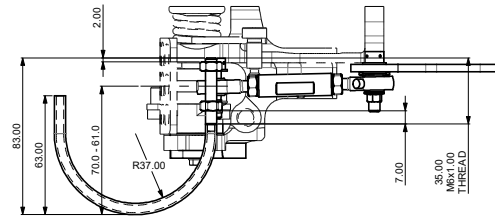
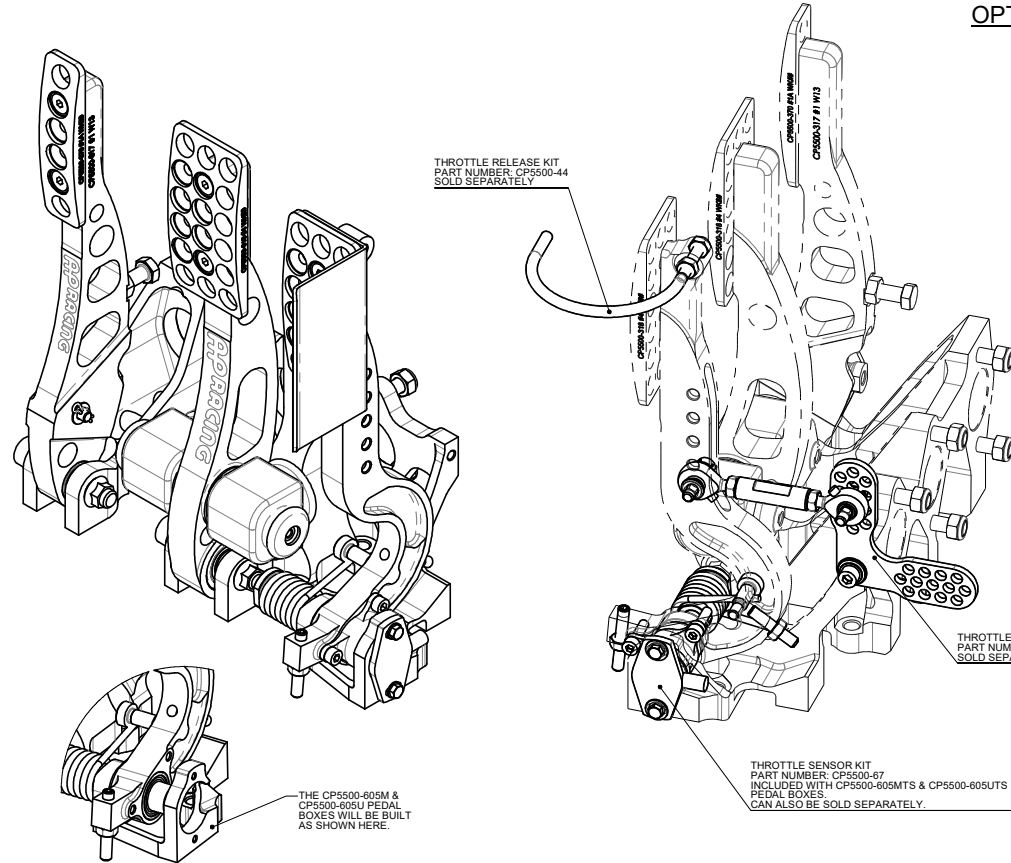
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Rev	Date & No.	Alterations		Zone	Initials
		Particulars			
1		SEE SHEET 1 FOR ISSUE INFORMATION.			

OPTIONAL EXTRAS



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 RANGE, ALTER THE FORWARD STOP, ALTER THE BACK STOP (KEEP THE RANGE TO WITHIN 30°), THEN ROTATE THE SENSOR TO AN ANGLE WHERE IT CAN READ YOUR NEW RANGE.

Electrical	
Measurement range	30° (BOTH CHANNELS)
Supply voltage	5 ± 0.5 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	<330 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

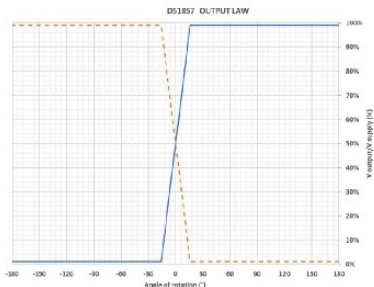
Mechanical	
Mechanical angle	360°, continuous
Maximum rotational speed	3600°/sec
Weight	<45 g
Mounting	Use 2 x M4 socket head cap screws and M4 washer - maximum tightening torque 2.0Nm. When magnet ident mark is facing toward the sensor and cable exit, output is at mid travel. The sensor housing allows for ±10° adjustment via the mounting flange slots.
Phasing	

Environmental	
Protection class	IP68 (to 2m depth for 2 hours) and IP69K
Life	This product has no contacting parts.
Dither life	Contactless - 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

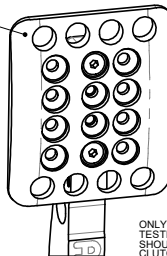
OTHER	
Cable length	0.5m
Electrical Connections	2 x 250mm of 3-core cable: FDR-25 sheathed, with 55A spec (24AWG) cores, with 1 x Deutsch DTMO4-6P connectors

DTM Plug Pin Arrangement & description	
Pin 1 (BLUE) - Channel 2	+V supply
Pin 2 (WHITE) - Channel 2	Output 2
Pin 3 (GREEN) - Channel 2	0V Supply (GND)
Pin 4 (RED) - Channel 1	+V supply
Pin 5 (YELLOW) - Channel 1	Output 1
Pin 6 (BLACK) - Channel 1	0V Supply (GND)



THE GRAPH DATA IS TBC

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.

SCALE 1:1 SHEET 2 OF 3

DRAWN Chris Arrowsmith

APPROVED

DERIVED FROM

TITLE

GENERIC FLOOR MTG

PEDAL BOX

DRG NO. CP5500-605CD

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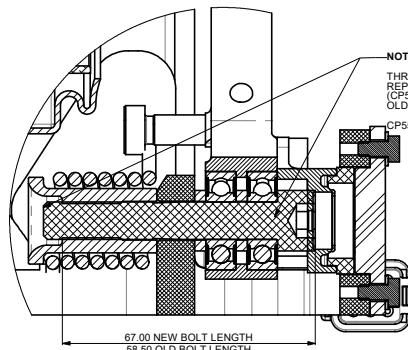


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SPARES LIST

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	CP7000-170	WASHER	2	2
23	CP4350-106	M6 x 14 SCREW, COUNTERSUNK	6	6
24	CP5500-46	THROTTLE PEDAL SUB-ASSY	1	1
25	CP5500-379	M10x57x1.50 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 Mtg BOLT	1	1
34	CP5200-150	WASHER	2	2
35	CP5427-101	M10 KAYLOCK NUT	2	2
36	CP5200-173	M10x58 CALIPER Mtg BOLT	1	1
37	CP4612-109	M5 x 0.80 CAP HEAD	2	2
38	CP5500-383	DEBRIS SLEEVE	1	1
39	CP4028-114	M4 x 0.7 HEX HEAD SCREW, 8.00 LONG	2	2
40	CP5500-385	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

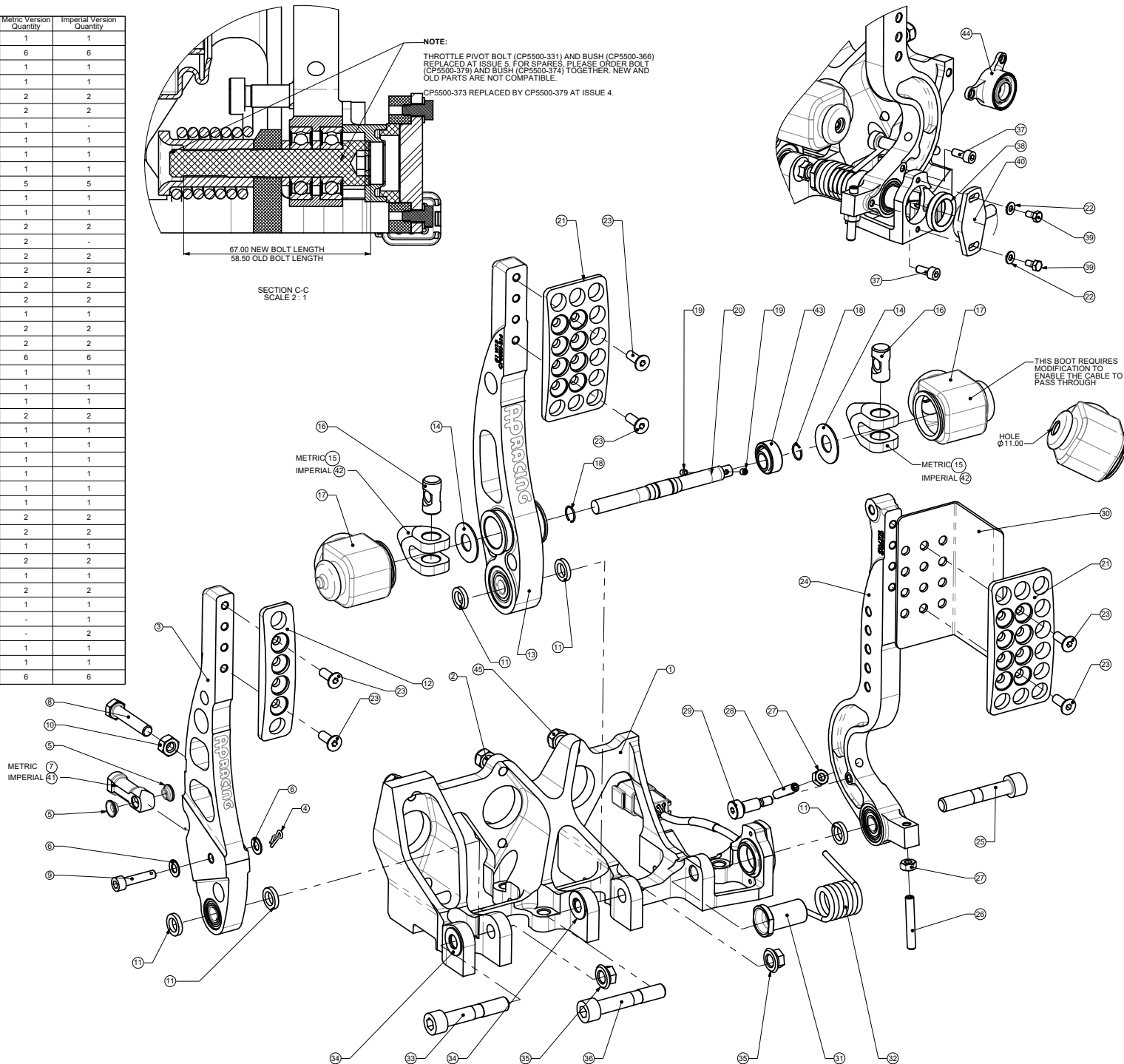


NOTE:

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.

SECTION C-C
SCALE 2:1



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Alterations

Date & No.

Particulars

SEE SHEET 1 FOR ISSUE INFORMATION.

Zone

Initials

Scale

Sheet

Part

Drawn

Checked

Approved

Derived From

Title

Generic Floor Mtg

Pedal Box

DRG NO.

CP5500-605CD

Scale 1:1

Sheet 3 of 3

Drawn

Chris Arrowsmith

Approved

Derived From

Title

Generic Floor Mtg

Pedal Box

DRG NO.

CP5500-605CD