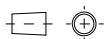


# A0 INSTALLATION DRAWING

IF THIS DOCUMENT IS PRINTED IN HARD COPY, IT IS FOR INFORMATION USE ONLY AND THEREFORE IS NOT SUBJECT TO UPDATING CONTROLS. ALWAYS REFER TO SOLIDWORKS VIEWER FOR LATEST ISSUE



FIRST ANGLE PROJECTION

THIS DRAWING IS CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT SHALL NOT BE LOANED OR COPIED OR DISCLOSED TO ANY OTHER PERSON OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF AP RACING LTD.



AP Racing  
Wheler Road  
Coventry  
CV3 4LB

Tel: +44 (0)24 7663 9595  
Fax: +44 (0)24 7663 9559  
e-mail: sales@apracings.co.uk

© AP Racing Ltd. 2005 Web site: HTTP://www.apracings.com

## 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 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 THROTTLE PEDALS.
- PEDAL BOX WEIGHT IS 1.9Kg  
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 (WITH PLUG) ON THROTTLE, SEE SHEET 2 FOR DETAILS

PART NUMBERS	CLEVIS THREADS		THROTTLE SENSOR	
	METRIC M8x1.25	IMPERIAL 5/16" UNF	INCLUDED	NOT INCLUDED
CP5500-625MTS	✓	✗	✓	✗
CP5500-625M	✓	✗	✗	✓
CP5500-625UTS	✗	✓	✓	✗
CP5500-625U	✗	✓	✗	✓

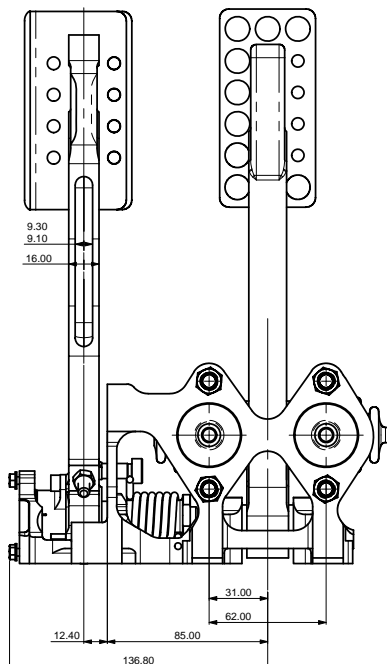
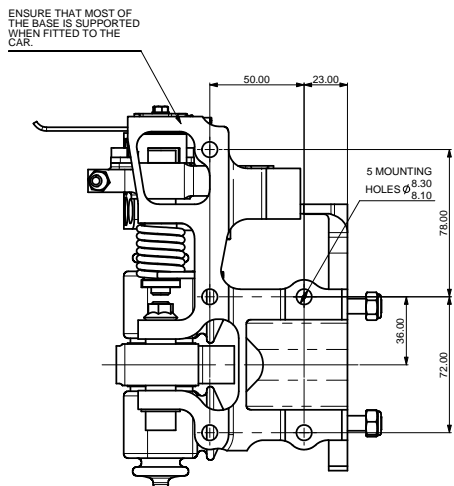
BORE SIZE	BRAKE PEDAL
Ø14.0mm (0.551")	CP2623-88PRM088
Ø15.0mm (0.591")	CP2623-89PRM088
Ø15.9mm (0.625") 5/8"	CP2623-90PRM088
Ø16.8mm (0.661")	CP2623-905PRM088
Ø17.8mm (0.700")	CP2623-91PRM088
Ø19.1mm (0.750") 3/4"	CP2623-92PRM088
Ø20.6mm (0.842") 13/16"	CP2623-93PRM088
Ø22.2mm (0.875") 7/8"	CP2623-94PRM088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

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

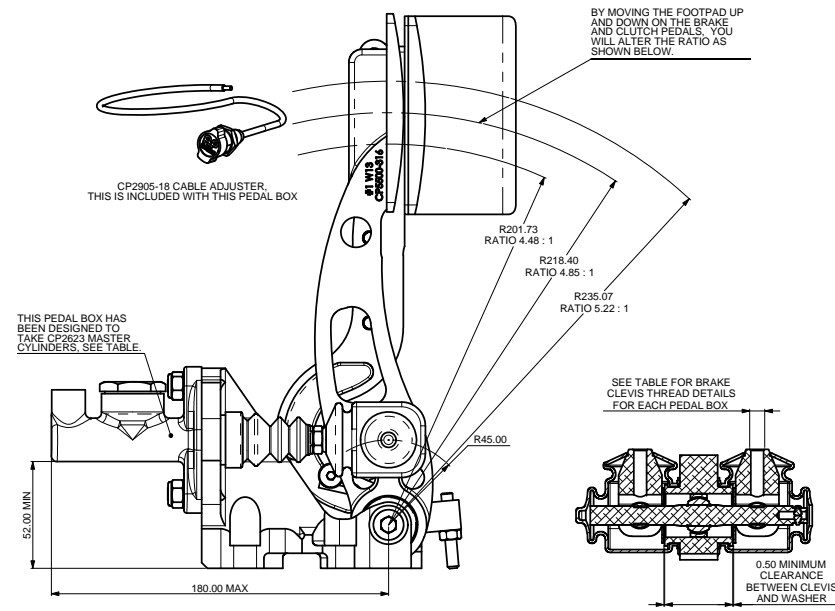
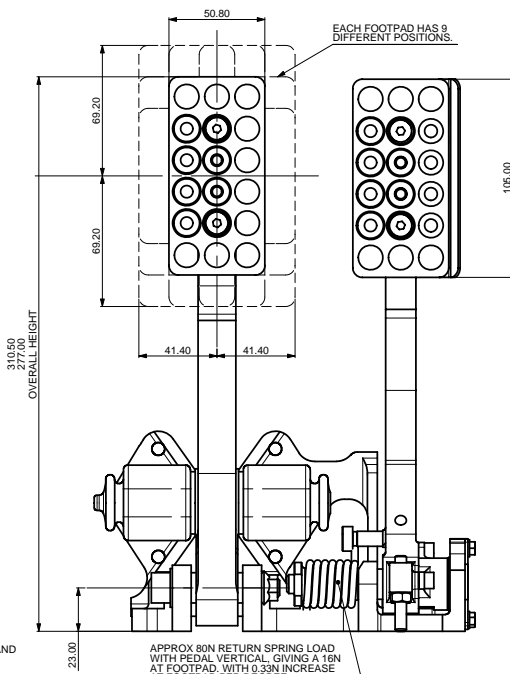
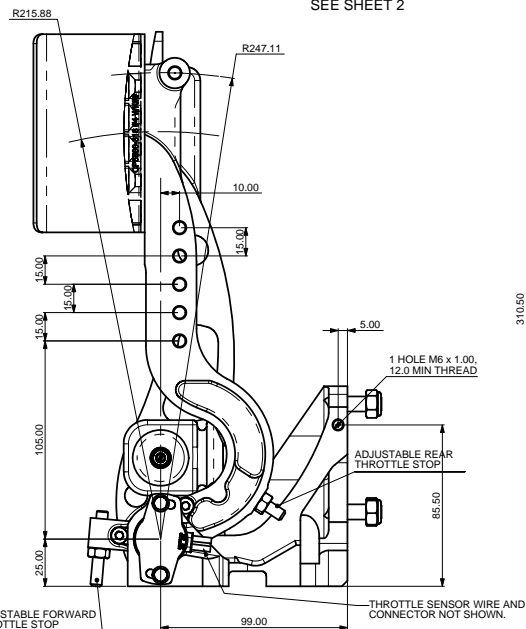
IF YOU ARE ORDERING THE CP5500-505UNF, THEN MAKE SURE YOU ORDER YOUR CYLINDERS WITH THE 'FRT' EXTENSION AND NOT THE 'PRM', eg CP2623-91PRT088.

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.



FOR OPTIONAL EXTRAS & SPARES SEE SHEET 2

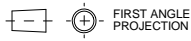


Alterations			Z-Comp	SAT
Date & No.	Particulars	By		
05/06/2014	FIRST ISSUE			
10/02/16	SHEET 3: ITEM 16 - CP5500-373 WAS CP5500-331 ITEM 22 - CP5500-374 WAS CP5500-336 BOLT AND BUSH NOTE ADDED			DW
14/09/16	SHEET 1: BRAKE CLEVIS THREAD NOTE UPDATED SHEET 3: ITEM 16: CP5500-379 WAS -373			C19 DW

SCALE 1:1	SHEET 1 OF 3
DRAWN Steve Thomas	
APPROVED	
DERIVED FROM	
TITLE GENERIC FLOOR MTG PEDAL BOX	
DRG NO.	CP5500-625CD

# A0 INSTALLATION DRAWING

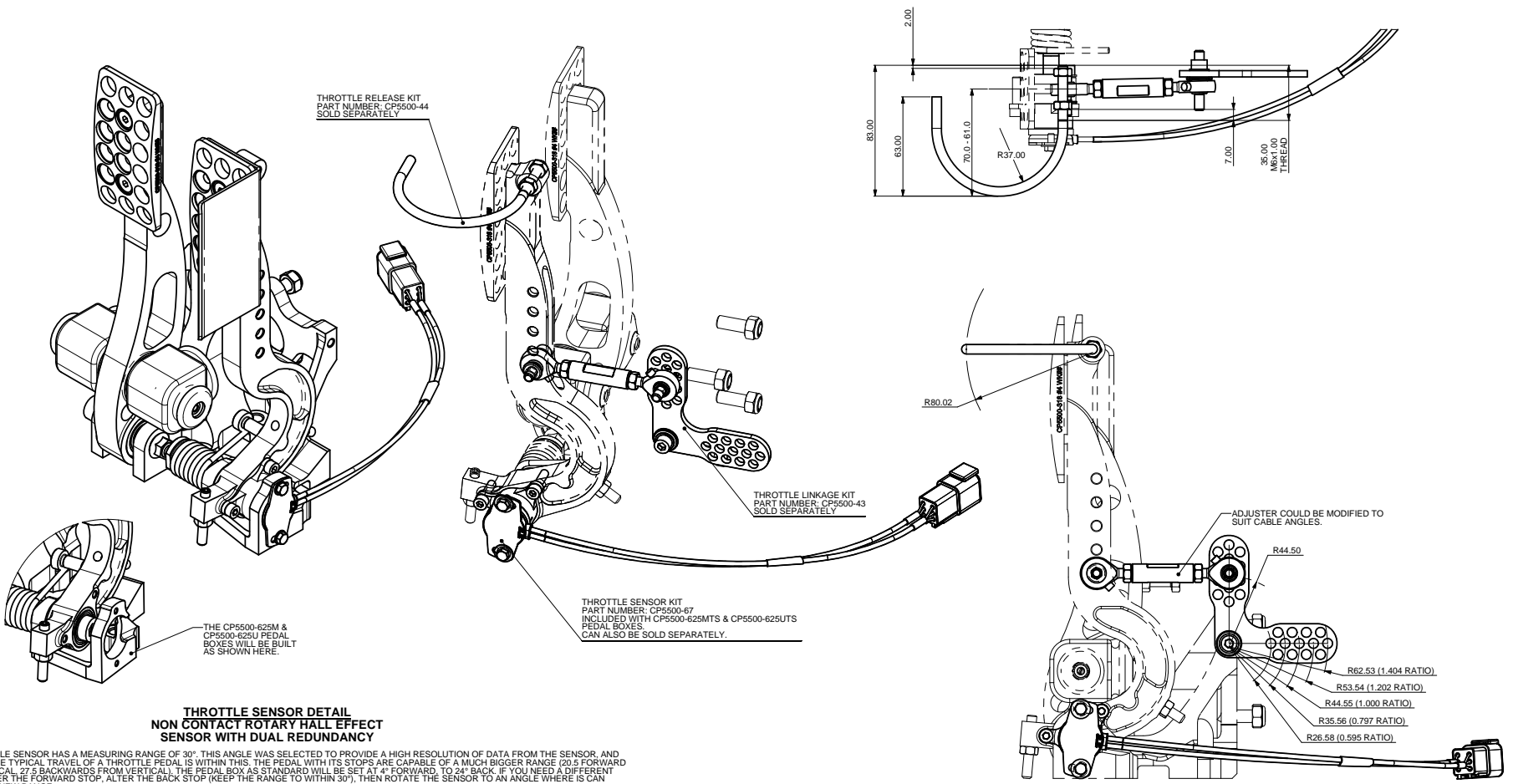
IF THIS DOCUMENT IS PRINTED IN HARD COPY, IT IS FOR INFORMATION USE ONLY AND THEREFORE IS NOT SUBJECT TO UPDATING CONTROLS. ALWAYS REFER TO SOLIDWORKS VIEWER FOR LATEST ISSUE



THIS DRAWING IS CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT SHALL NOT BE LOANED OR COPIED OR DISCLOSED TO ANY OTHER PERSON OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF AP RACING LTD.

**AP RACING**  
 AP Racing  
 Wheeler Road  
 Coventry  
 CV3 4LB  
 Tel: +44 (0)24 7663 9595  
 Fax: +44 (0)24 7663 9559  
 e-mail: sales@apracings.co.uk  
 © AP Racing Ltd. 2005  
 Web site: HTTP://www.apracings.com

## OPTIONAL EXTRAS



**Electrical**  
**Measurement range** 30° (BOTH CHANNELS)  
**Supply voltage** 5-40.5 Vdc  
**Over voltage protection** up to 10 Vdc (-40 to 60°C)  
**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** <±30 ppm/°C

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

**Analog Output**  
**Voltage output range Vdc** Ratimetric output voltage - 2 to 98% of V<sub>s</sub> 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  
**Output direction** Channel 1 - CW, Channel 2 - ACW

**Mechanical**  
**Mechanical angle** 360°, continuous  
**Maximum rotational speed** 3600°/sec  
**Weight** TBA g  
**Mounting** Use 2 x M4 socket head cap screws and M4 washer - maximum tightening torque 24Nm.  
**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.  
**Dither life** Contactless - no degradation due to shaft dither  
**Operational temperature #** -40°C to +140°C and +170°C for 72 hours  
**Storage temperature** -55°C to +140°C  
**Vibration** BS EN 60068-2-64:1995 Sec 8.4 (31.4gr rms) 20 to 2000Hz Random  
**Shock** 3m drop onto concrete and 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)

**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 +140°C and +170°C for 72 hours  
**Storage temperature** -55°C to +140°C  
**Vibration** BS EN 60068-2-64:1995 Sec 8.4 (31.4gr rms) 20 to 2000Hz Random  
**Shock** 3m drop onto concrete and 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)

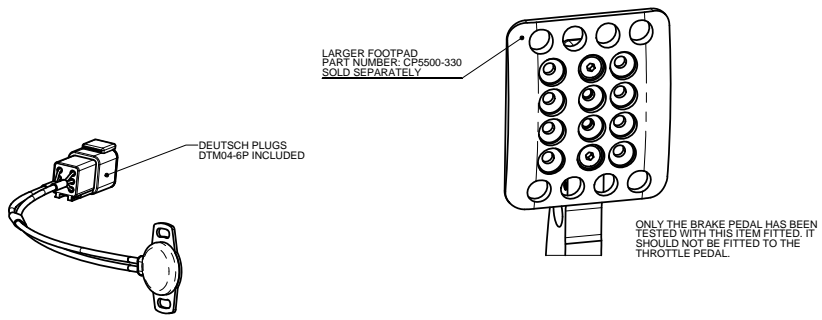
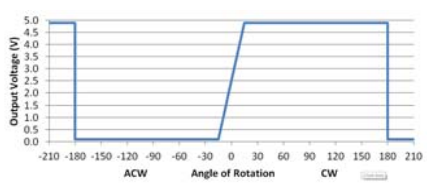
**OTHER**  
**Cable length** 0.25m  
**Electrical Connections** 2 x 250mm of 3-core cable: FDR-25 sheathed, with 55A spec (24AWG) cores, with 1 x Deutsch DTM04-6P connectors

**DTM Plug Pin Arrangement & description**  
 Pin 1 - Channel 2 +V supply  
 Pin 2 - Channel 2 Output + 2  
 Pin 3 - Channel 2 0V Supply (GND)  
 Pin 4 - Channel 1 +V supply  
 Pin 5 - Channel 1 Output + 2  
 Pin 6 - Channel 1 0V Supply (GND)

**MEASUREMENT RANGE**  
 30.00°

**CHANNELS MARKED ON BODY**

**THE GRAPH DATA IS TBC**



Alterations		Date & No.	Particulars	Drawn	Checked
0	00-02		SEE SHEET 1 FOR ISSUE INFORMATION.		

SCALE 1:1 SHEET 2 OF 3  
 DRAWN Steve Thomas  
 APPROVED  
 DERIVED FROM  
 TITLE  
 GENERIC FLOOR MTG  
 PEDAL BOX  
 DRG NO. CP5500-625CD

# A0 INSTALLATION DRAWING

IF THIS DOCUMENT IS PRINTED IN HARD COPY, IT IS FOR INFORMATION USE ONLY AND THEREFORE IS NOT SUBJECT TO UPDATING CONTROLS. ALWAYS REFER TO SOLIDWORKS VIEWER FOR LATEST ISSUE



FIRST ANGLE PROJECTION

THIS DRAWING IS CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT SHALL NOT BE LOANED OR COPIED OR DISCLOSED TO ANY OTHER PERSON OR USED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF AP RACING LTD.



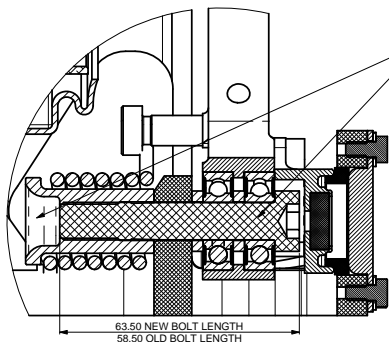
AP Racing  
Wheler Road  
Covenry  
CV3 4LB

Tel: +44 (0)24 7663 9595  
Fax: +44 (0)24 7663 9559  
e-mail: sales@apracings.co.uk

© AP Racing Ltd. 2005 Web site: HTTP://www.apracings.com

## 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	4	4
3	CP5518-127	SPACER	3	3
4	CP5500-40	BRAKE PEDAL SUB-ASSY	1	1
5	CP5500-124	WASHER	2	2
6	CP5500-312	CLEVIS - METRIC	2	-
7	CP5500-108	BARREL NUT	2	2
8	CP5500-150	RUBBER BOOT	2	2
9	CP5500-148	SNAP RING 0.4375"	2	2
10	CP5500-113st	SCREW M4 x 5	2	2
11	CP5500-105	BALANCE BAR	1	1
12	CP5500-318	FOOTPAD	2	2
13	CP7000-170	WASHER	2	2
14	CP4350-106	M6 x 14 SCREW, COUNTERSUNK	4	4
15	CP5500-46	THROTTLE PEDAL SUB-ASSY	1	1
16	CP5500-379	M10x57x1.50 BOLT	1	1
17	CP5500-338	M6 SCREW x 40, FLAT GRUB	1	1
18	ME21001	M6 x 1.00 NUT	2	2
19	CP5500-324	M6 SCREW x 30, FLAT GRUB	1	1
20	CP7033-111	M6 SCREW, Ø8 SHOULDER	1	1
21	CP5500-329	THROTTLE GUARD	1	1
22	CP5500-374	SPRING SUPPORT BUSH	1	1
23	CP5500-365	TORSION SPRING	1	1
24	CP5427-101	M10 KAYLOCK NUT	1	1
25	CP5200-173	M10x1.50 CAP HEAD BOLT	1	1
26	CP4612-109	M5 x 0.80 CAP HEAD	2	2
27	CP5500-364	DEBRIS SLEEVE	1	1
28	CP4028-114	M4 x 0.7 HEX HEAD SCREW, 8.00 LONG	2	2
29	CP5500-369	ROTARY SENSOR	1	1
30	CP5500-345	CLEVIS - UNF	-	2
31	CP5500-339	SPHERICAL BEARING	1	1
32	CP5500-363	MAGNET HOLDER	1	1
33	CP5500-346	M8 NYLOC NUT	4	4
34	CP5200-150	WASHER	1	1

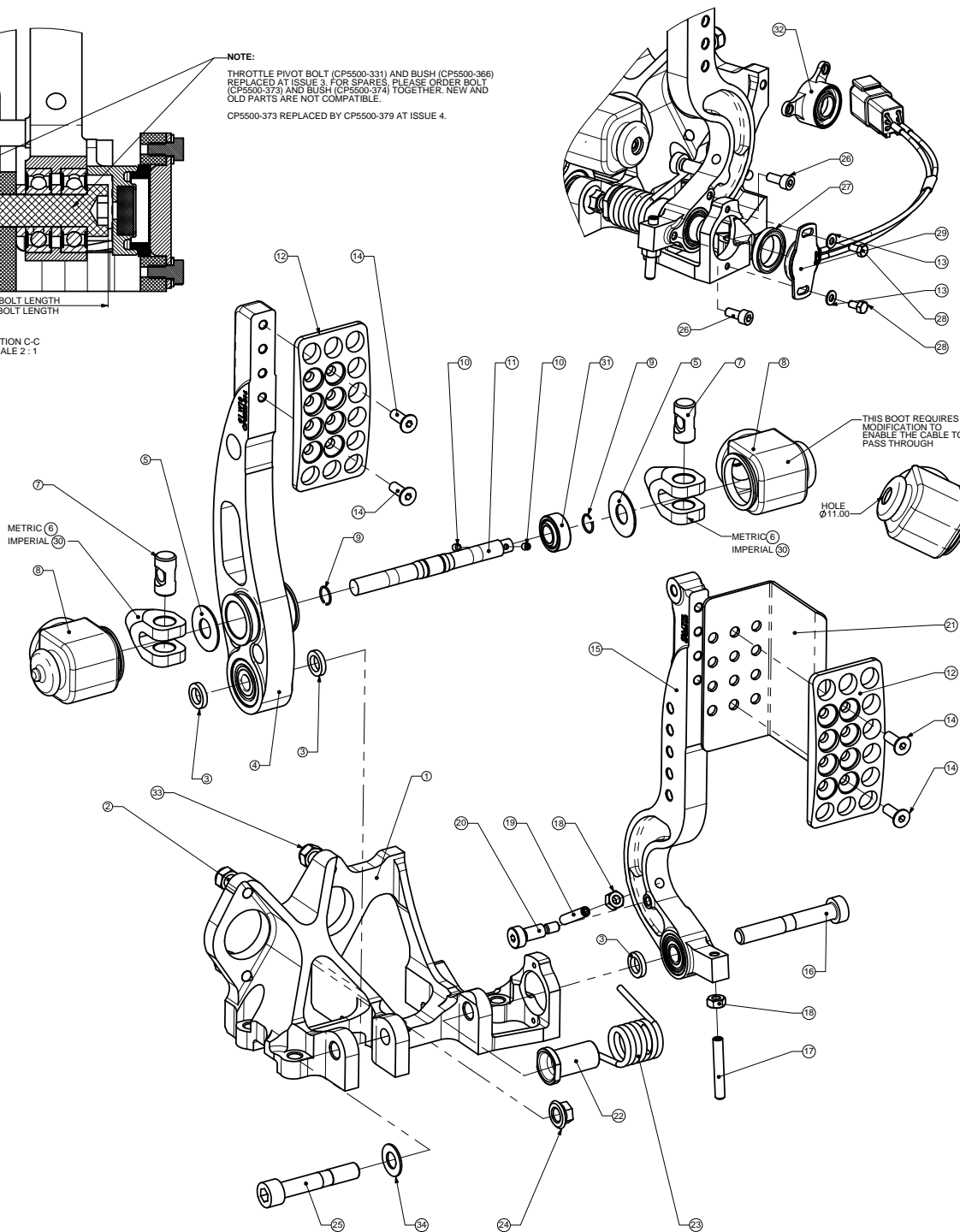


SECTION C-C  
SCALE 2:1

**NOTE:**

THROTTLE PIVOT BOLT (CP5500-331) AND BUSH (CP5500-366) REPLACED AT ISSUE 3. FOR SPARES, PLEASE ORDER BOLT (CP5500-373) AND BUSH (CP5500-374) TOGETHER. NEW AND OLD PARTS ARE NOT COMPATIBLE.

CP5500-373 REPLACED BY CP5500-379 AT ISSUE 4.



THIS BOOT REQUIRES MODIFICATION TO ENABLE THE CABLE TO PASS THROUGH

HOLE Ø11.00

METRIC (6)  
IMPERIAL (26)

METRIC (6)  
IMPERIAL (26)

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

SCALE 1:1	SHEET 3 OF 3
DRAWN Steve Thomas	
APPROVED	
DERIVED FROM	
TITLE GENERIC FLOOR MTG PEDAL BOX	
DRG NO. CP5500-625CD	