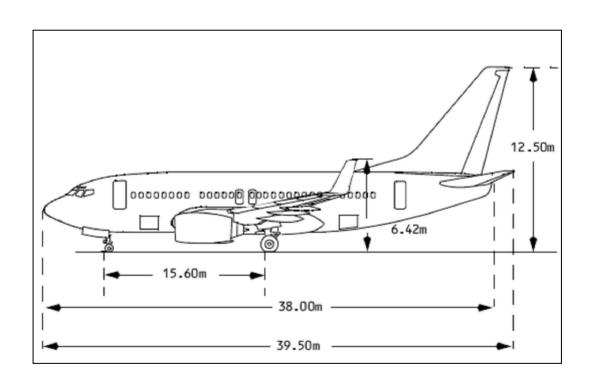
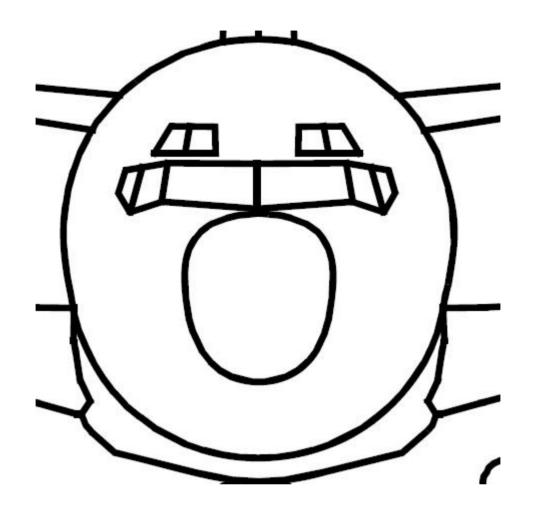
# BOEING 737 MEASUREMENTS for HOME FLIGHT SIMULATOR FLIGHT DECK BUILDING

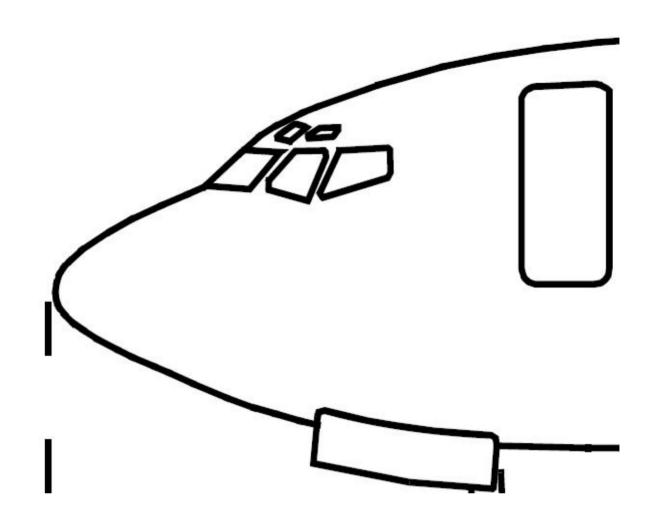


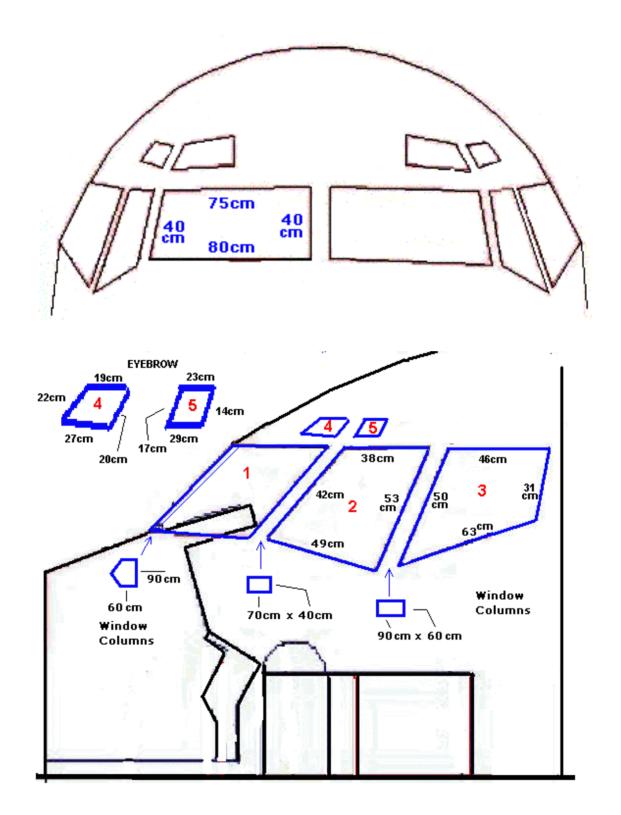
# **TABLE of CONTENTS**

- FLIGHT DECK SHELL
- FLIGHT DECK PLAN
- MAIN INSTRUMENT PANEL
  - FMC / CDU & LDU PANEL
    - CONTROL STAND
    - FIRE CONTROL PANEL
      - AVIONICS PANEL
    - GLARESHIELD PANEL
- FORWARD OVERHEAD PANEL
  - AFT OVERHEAD PANEL
    - SIDEWALL PANELS
    - CIRCUIT BREAKERS
      - REAR BULKHEAD
    - FLIGHT CONTROLS

# FLIGHT DECK SHELL

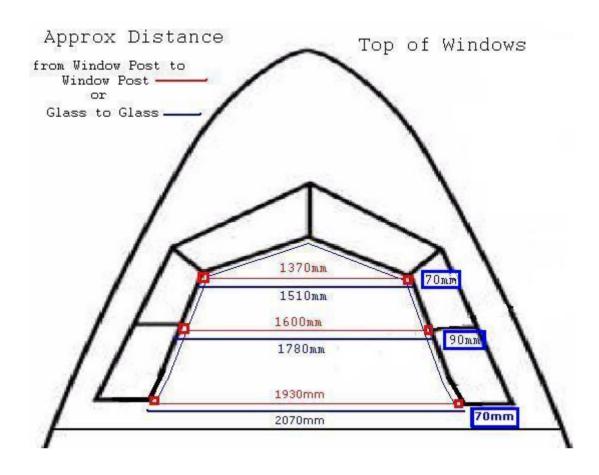


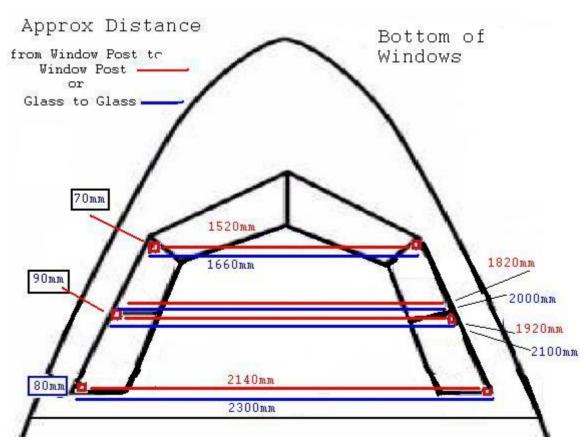




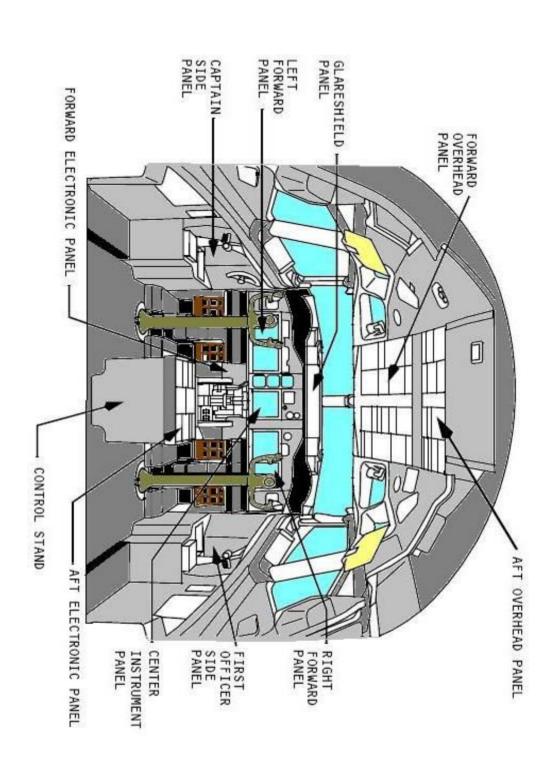
Fwd Window Column 90cm wide 60cm deep; Window 1 / 2 70cm long x 40cm wide; Window 2 / 3 90cm long x 60cm wide

### Frame Dimensions

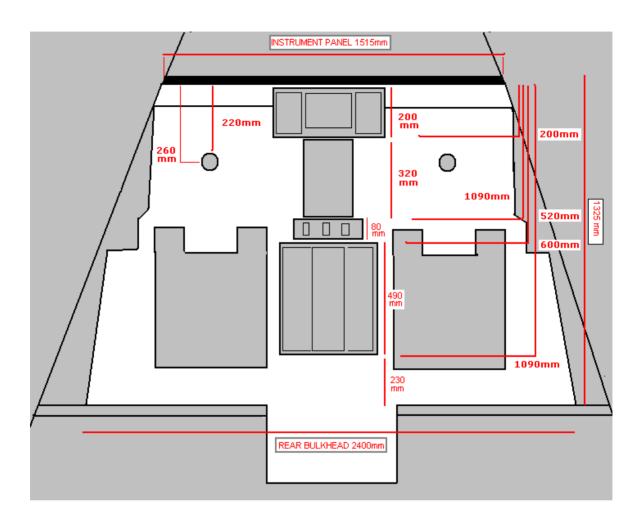


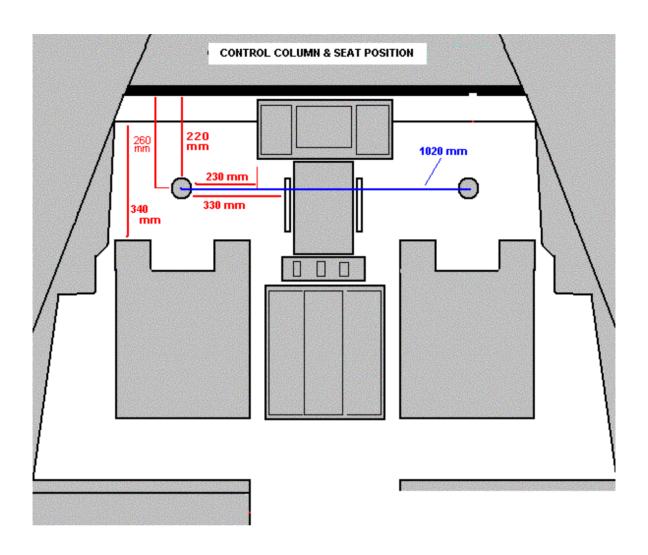


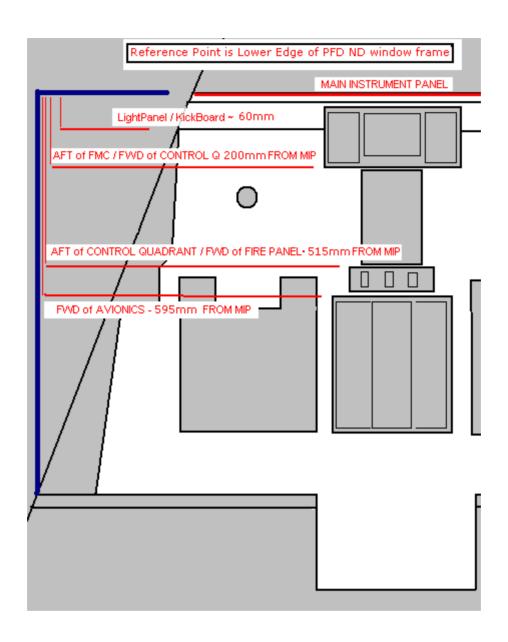
### FLIGHT DECK PLAN

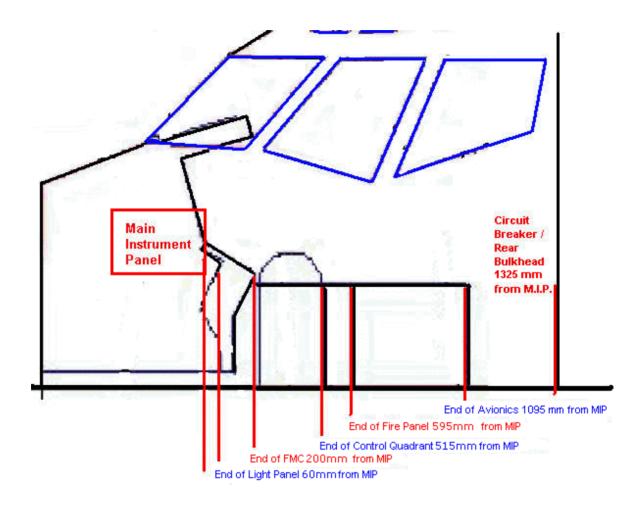


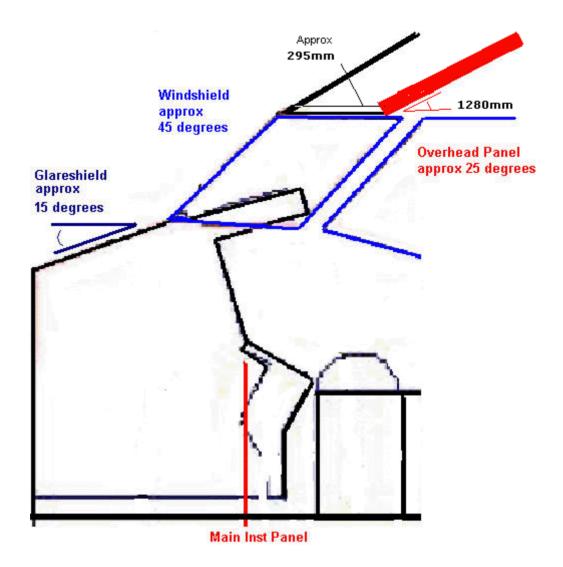
# MEARSUREMENTS referenced from the MAIN INSTRUMENT PANEL





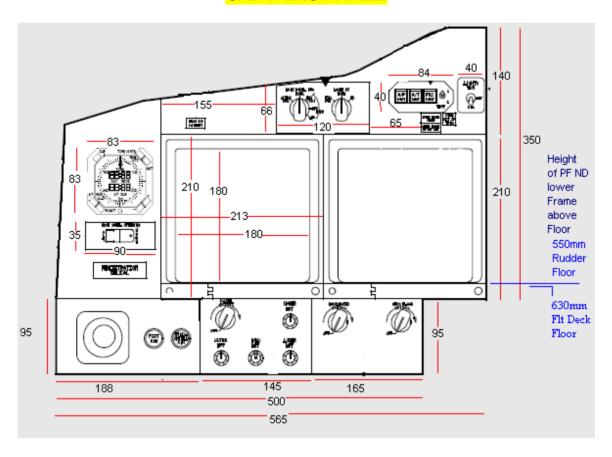






# MAIN INSTRUMENT PANEL

### **CAPTAINS PANEL**



### · Height of Panel.

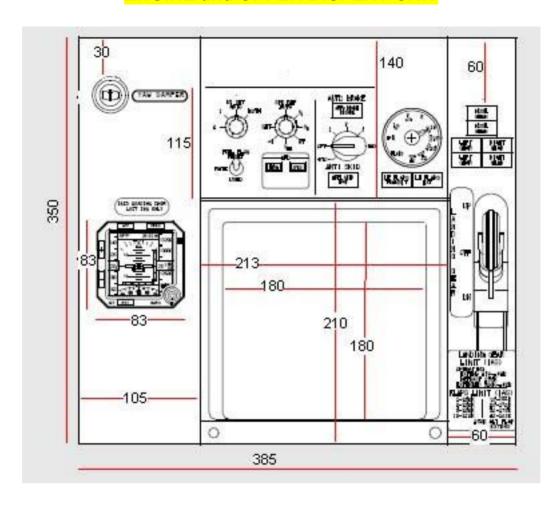
• Lower edge of the Primary Flight Display / Nav Display is
550mm above the Rudder Floor Level

Position of Main Instrument Panel =
00 mm from Main Instrument Panel (measured from lower edge of MIP)
THIS IS THE POINT AT WHICH I HAVE USED AS A DATUM
OR

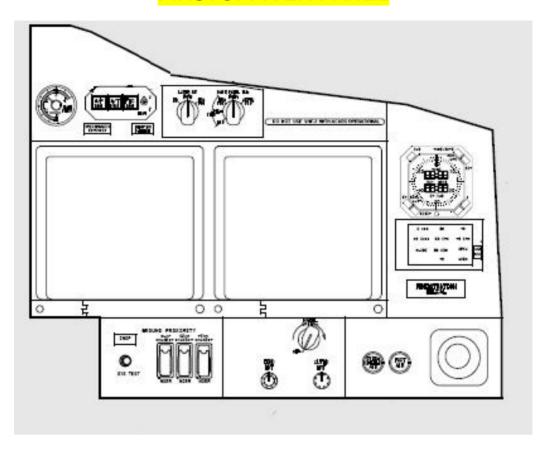
REFERENCE POINT FOR ALL MY MEASUREMENTS

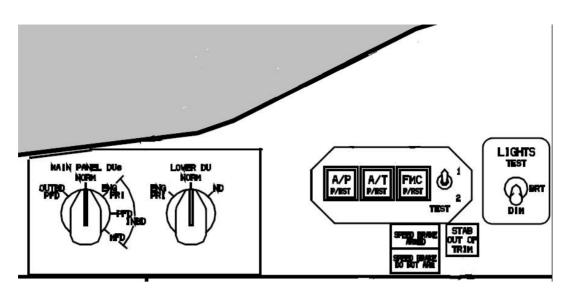
Position of Main Instrument Panel = 1325 mm from Aft Wall Bulkhead

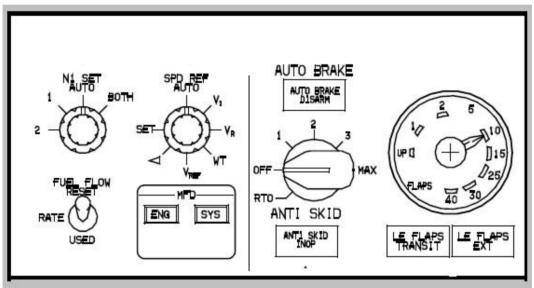
### **ENGINE and UPPER DISPLAY UNIT**

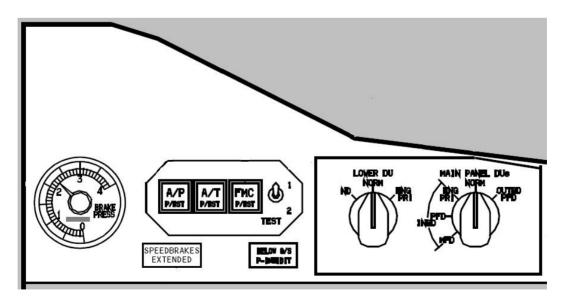


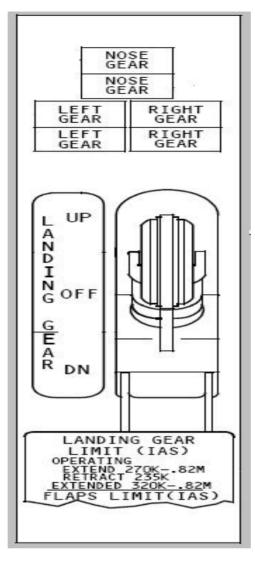
### **FIRSTOFFICER PANEL**

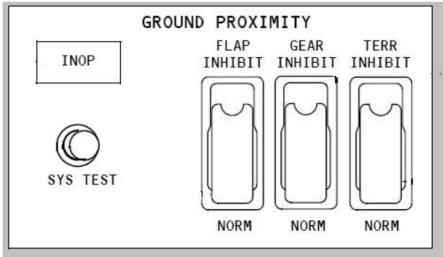




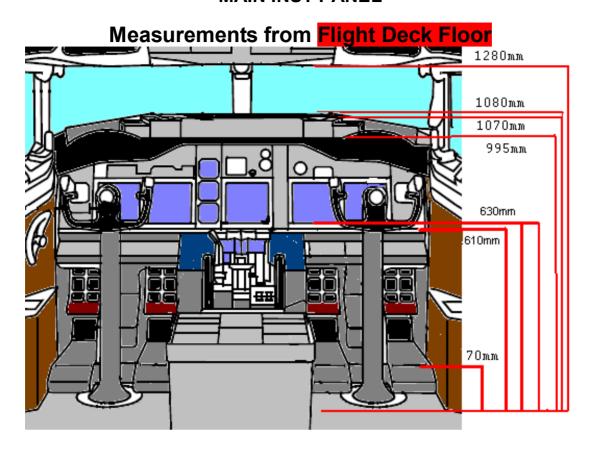


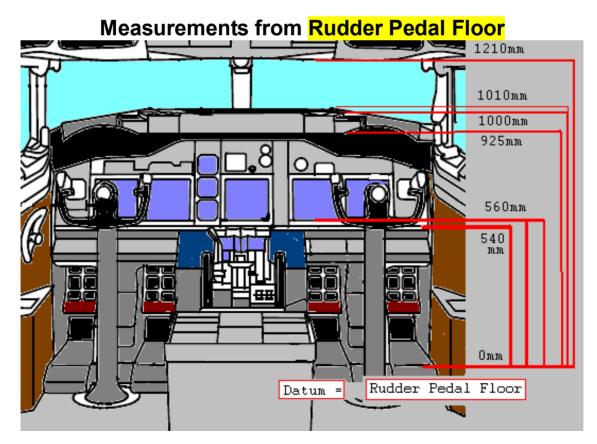




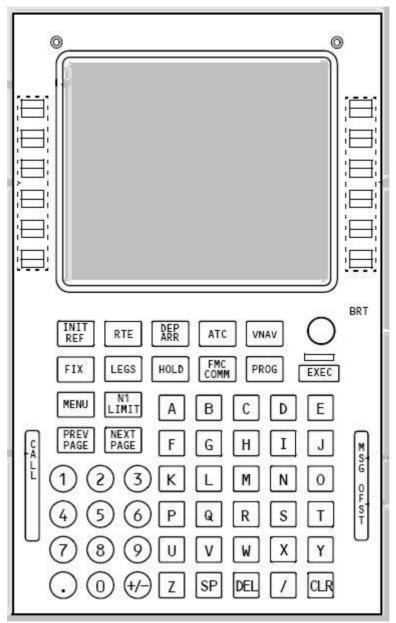


### **MAIN INST PANEL**





# FMC / CDU & LDU PANEL

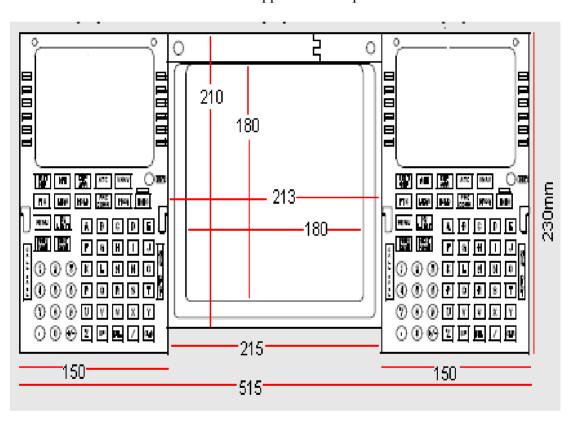


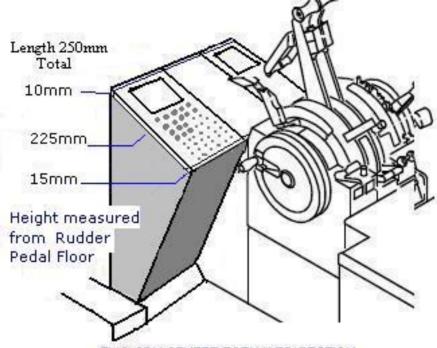
FMC PANEL POSITION in the FLIGHT DECK

Position of Forward Edge = 05 mm from Main Instrument Panel upper edge abuts the lower edge of the M.I.P.

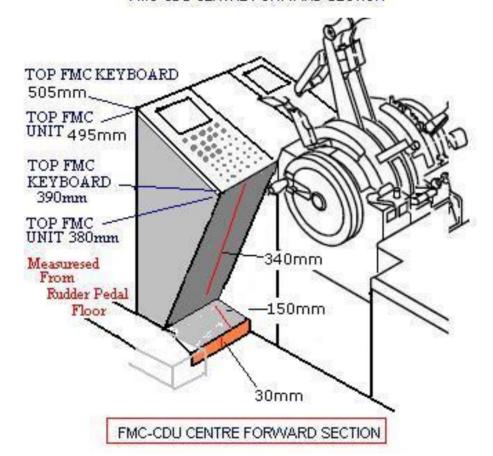
### **FMC & LDU MEASUREMENTS**

- approximate length mm 225 mm
- approximate width mm 515 mm
- Height at Top of FMC Unit 505 mm from (rudder) floor @ top of FMC unit
- Height at Bottom of FMC Unit 390 mm from (rudder) floor @ bottom of FMC keyboard
  - SLOPE Approx 30 ° slope

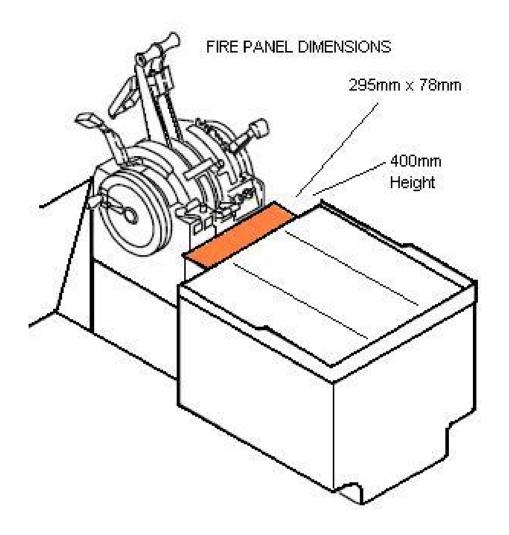




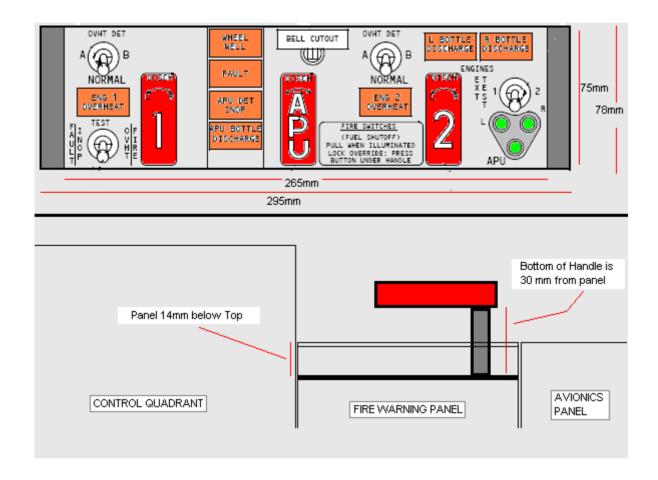
FMC-CDU CENTRE FORWARD SECTION



# FIRE CONTROL PANEL



FIRE WARNING PANEL DIMENSIONS		
• approximate UNIT length mm •	78 mm	
Approx Fire Panel length	75 mm	
• approximate width mm •	295 mm for the panel width with space	
	either side of panel	
• approximate panel width mm •	265 mm for the Fire Warning Panel width	
• approximate height mm •	400 mm for the top edge of the panel	
	frame.	
•	Panel is 14 mm below the top edge of the	
	panel frame.	

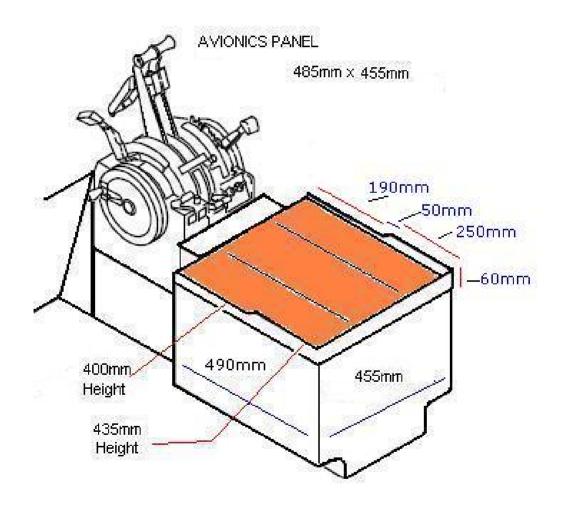


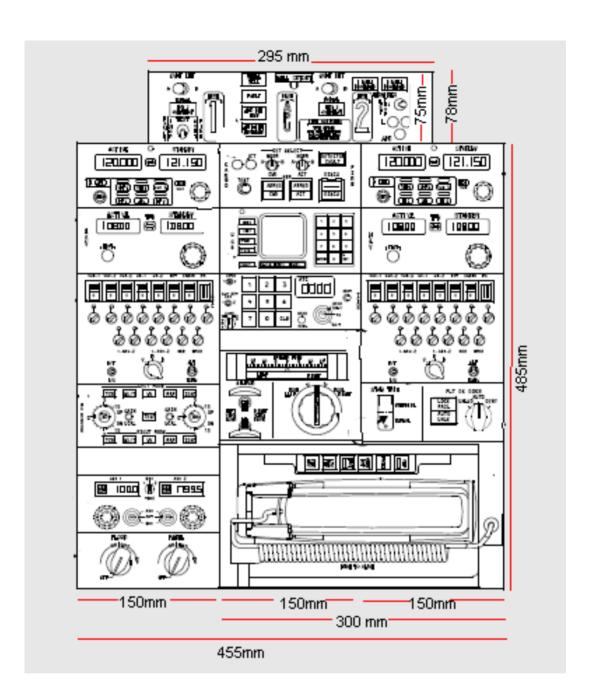
### FIRE WARNING PANEL POSITION in the FLIGHT DECK

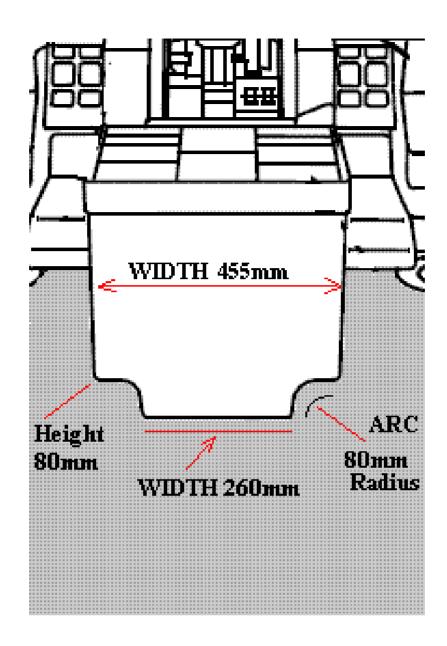
Position of Forward Edge = 515 mm from Main Instrument Panel

# **AVIONICS PANEL**

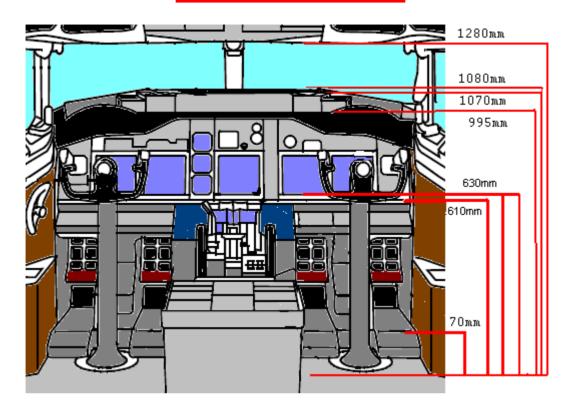
AVIONICS PANEL DIMENSIONS			
-			
approximate length mm	• 485 mm internal panel measurement		
• approximate length mm •	490 mm external - end to end measurement		
( Panel Lengths 475mm plus 7mm space at fwd edge and about 3 mm at aft edge =			
485mm)			
• approximate width mm •	455 mm		
( Panels 147mm wide. $3x147 = 441$ plus gap between panels = 450 to 455mm )			
• approximate height mm •	400 mm fwd edge / 435 mm aft edge.		
( Raised edge proceeds forward until the volume controls on the AudioSelectPanel and			
then reduces to Panel level height.)			

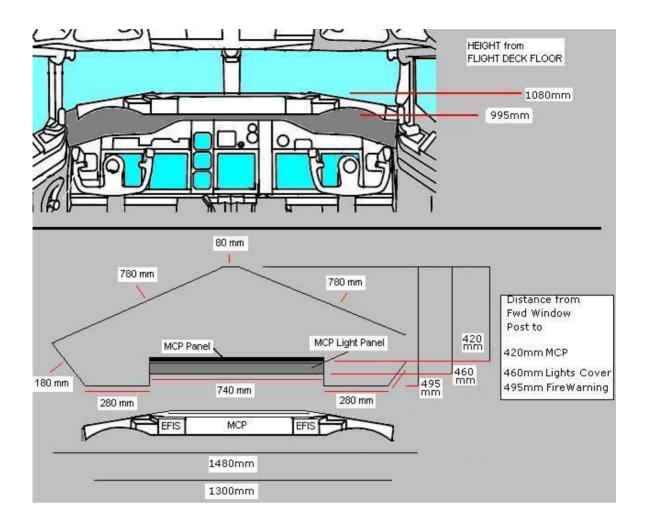




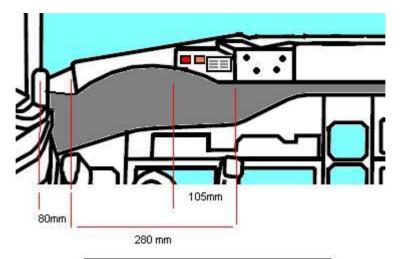


# **GLARESHIELD PANEL**

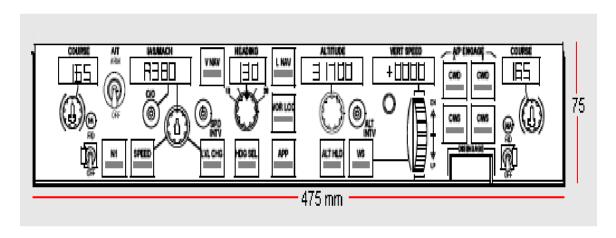


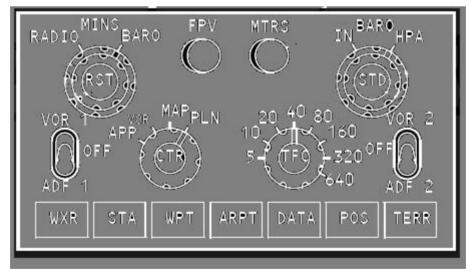


GLARESHIELD DIMENSIONS		
WARNING LIGHTS / SYSTEM CAUTION / EFIS PANEL / MODE CONTROL		
PANEL		
<ul> <li>approximate depth mm</li> </ul>	• _495 / 460 / 420 mm	
<ul> <li>approximate width mm</li> </ul>	•80 mm across the back of the unit ( near forward	
	window post )	
<ul> <li>approximate width mm</li> </ul>	• 1480 mm across the middle of the unit (between	
	window post )	
<ul> <li>approximate width mm</li> </ul>	• 1300 mm across the front of the unit ( at the front of	
	the glareshield )	
<ul> <li>approximate height mm</li> </ul>	• 85 mm( 75mm for MCP panel + 10 mm for light	
	panel)	

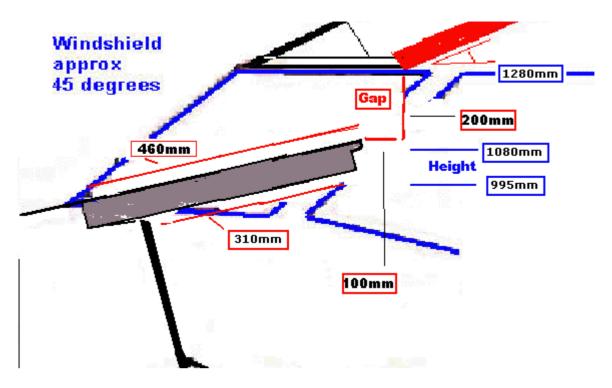


GLARESHHIELD & WARNING / CAUTION SYSTEM

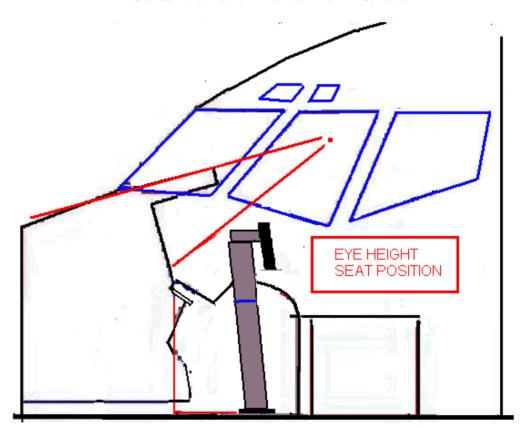




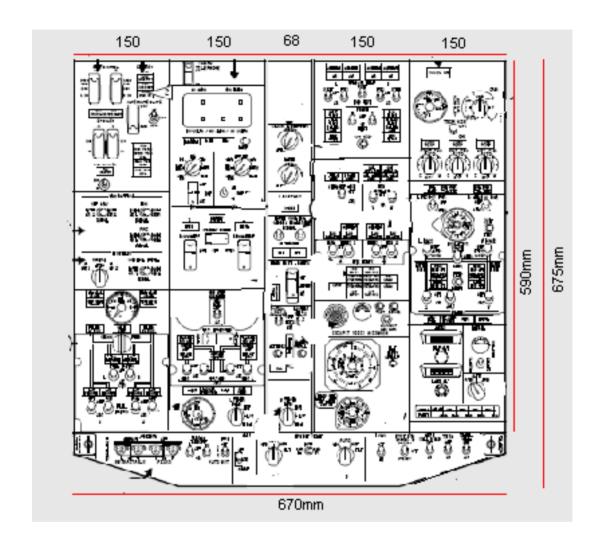
EFIS 115mm x 62mm



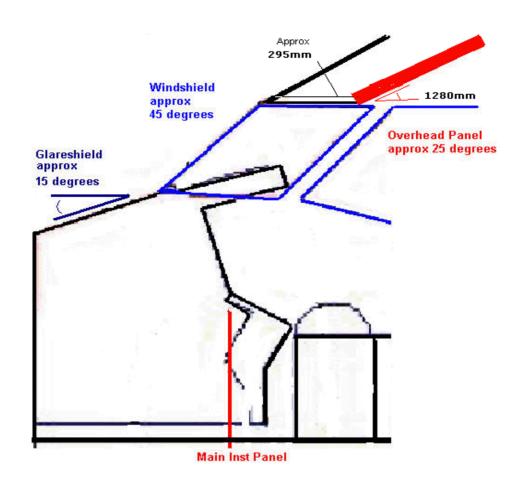
Glareshield = 310mm aft of Main Inst Panel



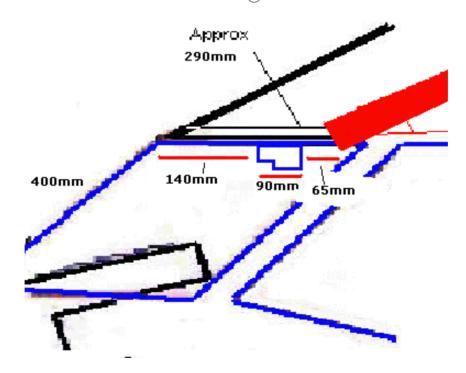
### **FORWARD OVERHEAD PANEL**

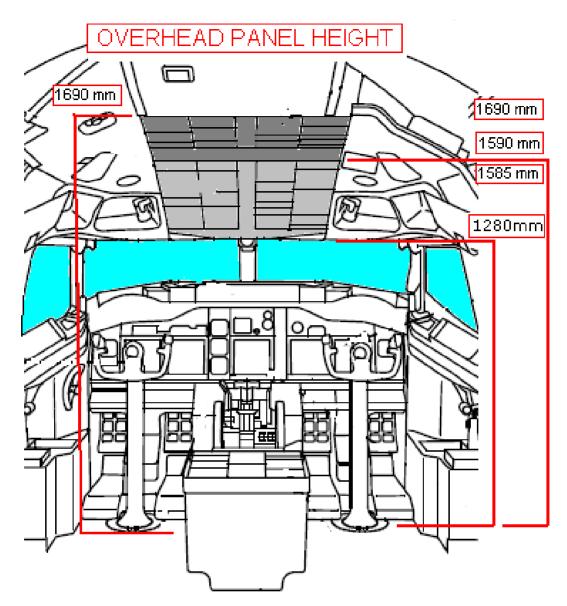


FORWARD OVERHEAD		
• approximate length mm •	675 mm	
• approximate width mm •	670 mm	
• approximate height mm •	1285 mm fwd edge from Flt Deck Floor	
• approximate height mm •	1585 mm aft edge from Flt Deck Floor	
• approximate slope•	approx 25 degrees	



FORWARD OVERHEAD @ 25 DEGREE SLOPE

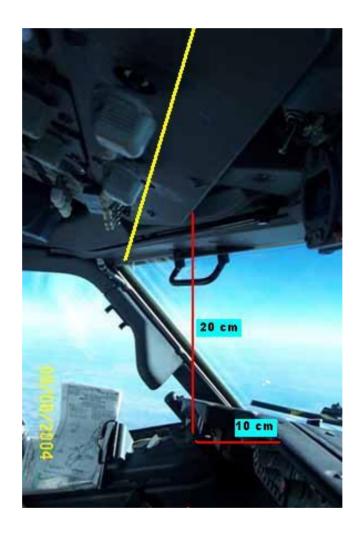




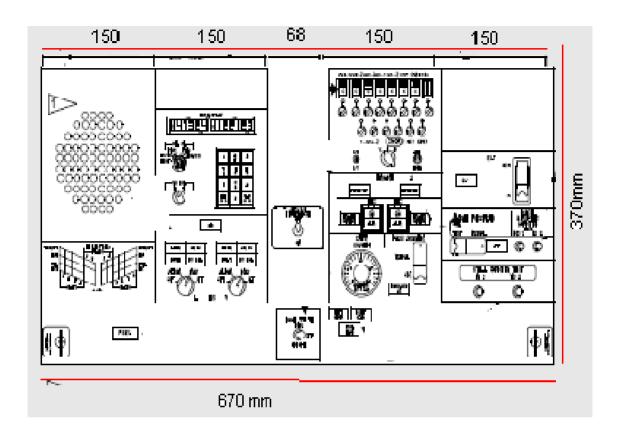
### **OVERHEAD HEIGHT**

FWD HEIGHT = 1280mm AFT HEIGHT = 1585 mm

Approximate Panel Position		
•	• lower forward edge of panel is	• 100mm aft of the MCP panel.
•	• lower forward edge of the panel is	if you draw a line along the light switches, the line intersects the top rear corner of the number one window

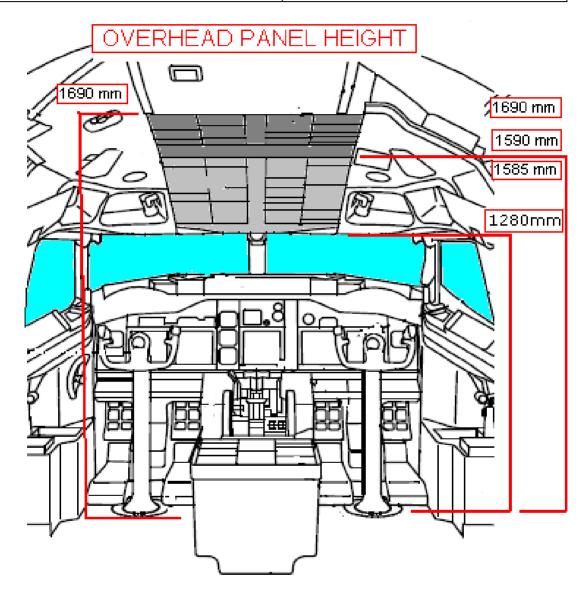


### AFT OVERHEAD PANEL

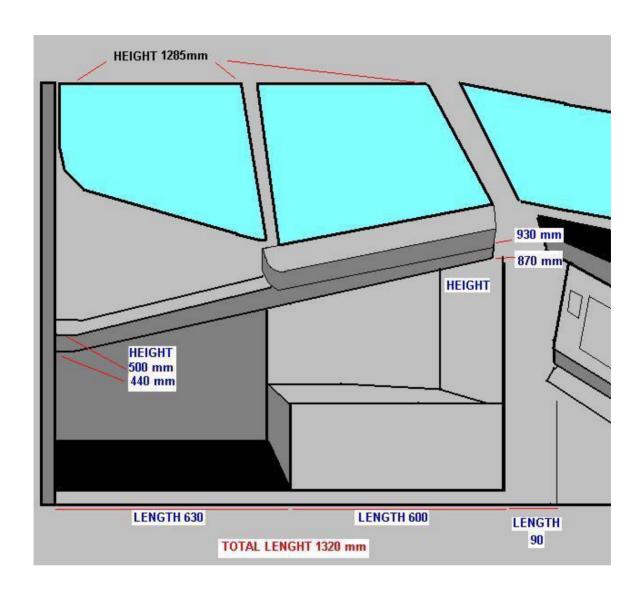


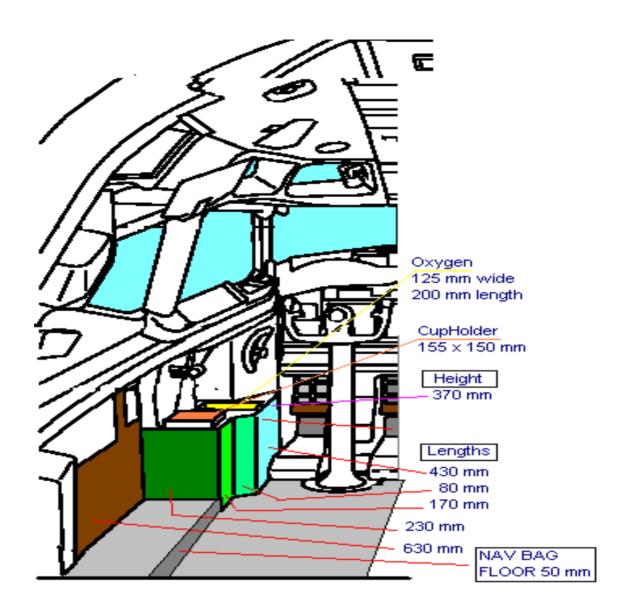
### **AFT OVERHEAD**

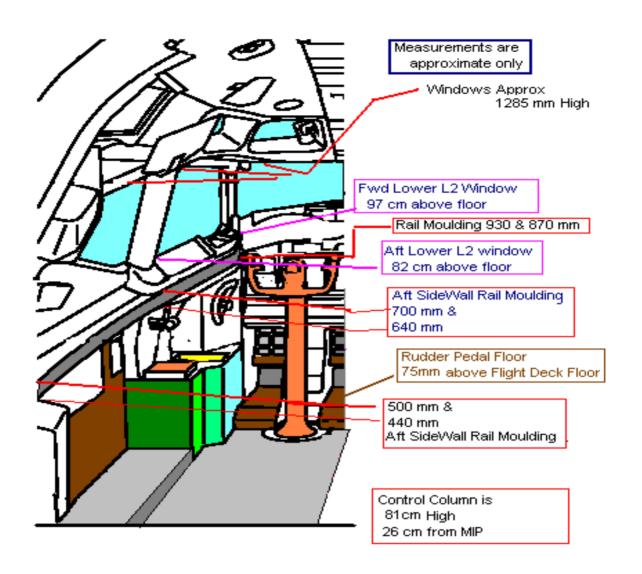
<ul> <li>approximate length mm</li> </ul>	• 370 mm
<ul> <li>approximate width mm</li> </ul>	• 670 mm
<ul> <li>approximate height mm</li> </ul>	• 1590 mm fwd edge from Flt Deck Floor
<ul> <li>approximate height mm</li> </ul>	• 1690 mm aft edge from Flt Deck Floor
<ul><li>approximate slope</li></ul>	• approx 171/2 degrees
<ul><li>approximate position</li></ul>	• top / aft edge of panel is level with aft
	bulkhead wall.



# SIDEWALL PANELS

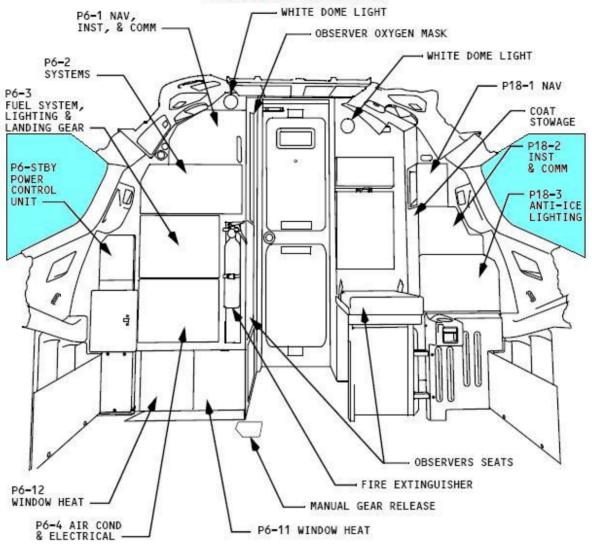






# **CIRCUIT BREAKERS**

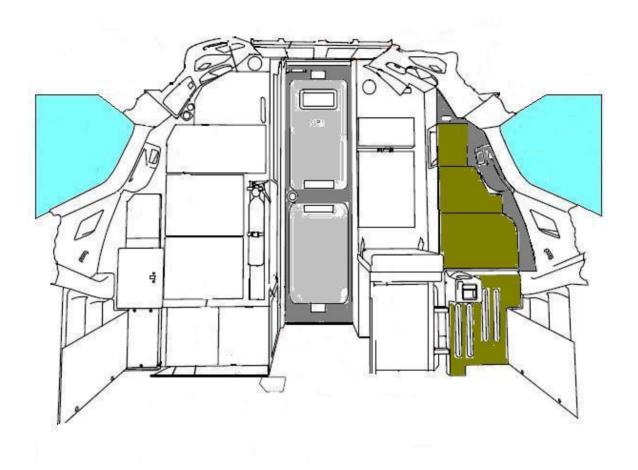
#### **B737 AFT FLIGHT MEASUREMENTS**



AFT FLIGHT DECK OVERVIEW

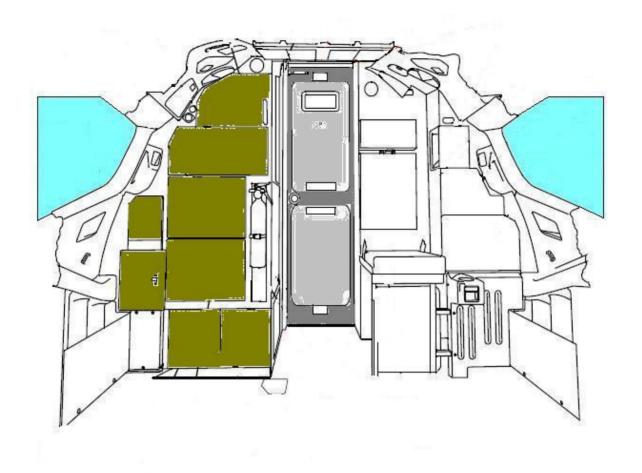
#### **B737 AFT FLIGHT MEASUREMENTS**

#### P18 PANEL



#### **B737 AFT FLIGHT MEASUREMENTS**

#### P6 PANELS



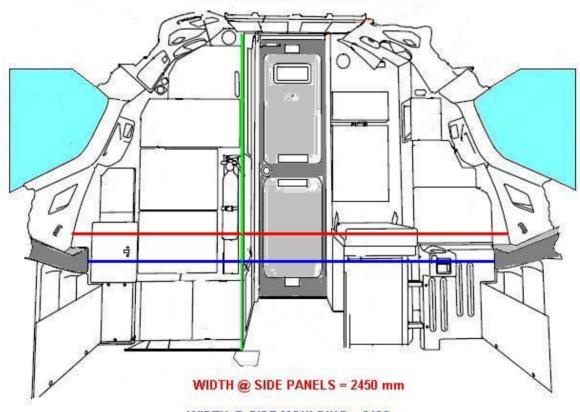
### **REAR BULKHEAD**

approximate width mm • 2400 mm ( Circuit Breaker Panels ) approximate width mm • 2450 mm ( Sidewall of Fuselage )

approximate height mm • 1690 mm ( Top of Overhead Panel ) approximate height mm • 1890 mm ( Top of Flt Deck Door )

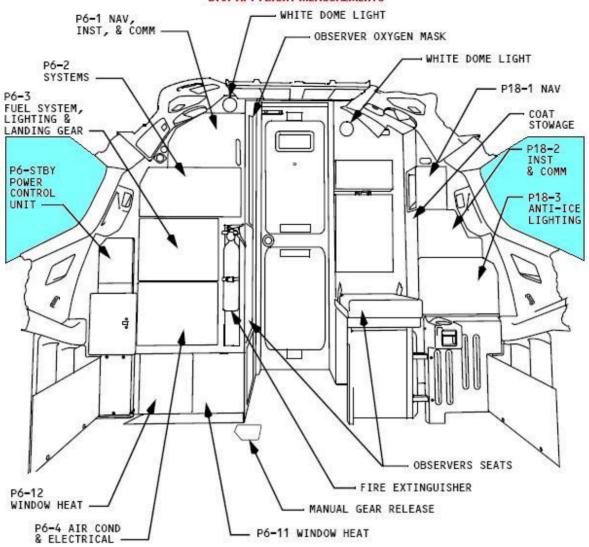
#### **B737 AFT FLIGHT MEASUREMENTS**

#### HEIGHT @ REAR BULKHEAD = 1690 mm



WIDTH @ SIDE MOULDING = 2400 mm

#### **B737 AFT FLIGHT MEASUREMENTS**



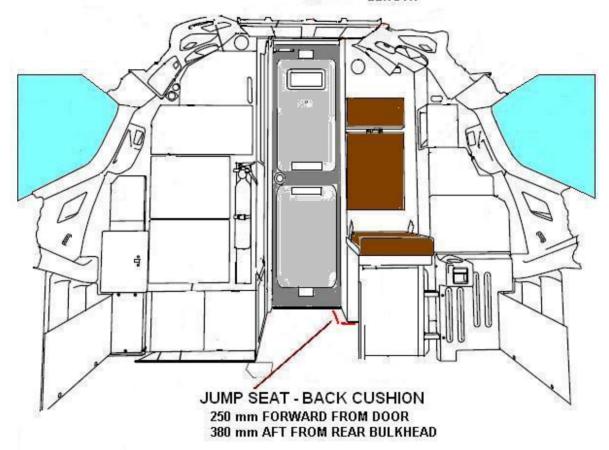
AFT FLIGHT DECK OVERVIEW

FLIGTH DECK DOOR	
• 560 mm	• width
• 1890 mm	• height
• 630 mm aft	from read bulkhead

# THE JUMP SEAT B737 AFT FLIGHT MEASUREMENTS

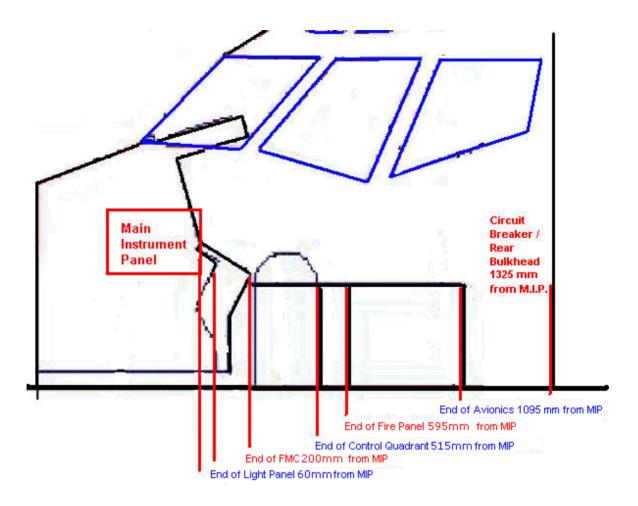
JUMP SEAT 600 mm HEIGHT FROM FLOOR

410 mm WIDTH 420 mm LENGTH



THE JUMP SEAT	
60 mm	Height
410 mm	Wide
420 mm	Long
250 mm forward from door	- backrest
380 mm from aft bulhead	- backrest

# **AFT BULKHEAD 1325mm from MAIN INST PANEL**

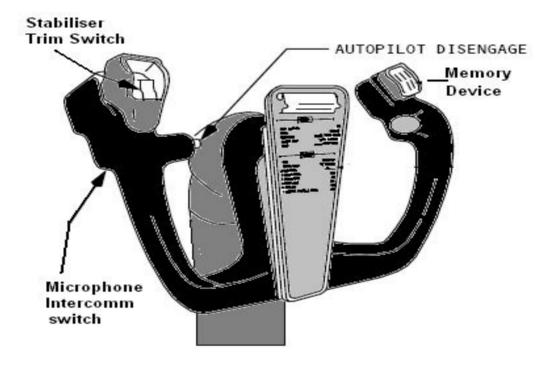


AFT BULKHEAD POSITION	
Position of Aft Bulkhead =	1320 mm from Main Instrument Panel
	(measuresed from lower edge of MIP)
Position of Aft Bulkhead =	0 mm mm from Aft Wall Bulkhead
Position of Flt Deck Door =	630 mm Aft of Aft Wall Bulkhead

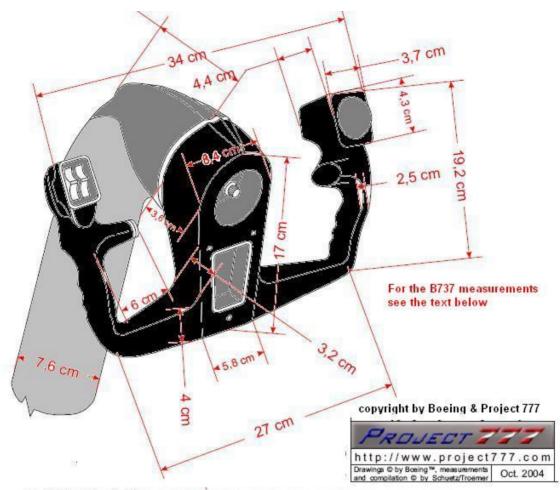
# **FLIGHT CONTROLS**

- **CONTROL YOKE**
- CONTROL COLUMN
  - RUDDER PEDALS
- SPEEDBRAKE LEVER
  - THRUST LEVER
    - FLAP LEVER
  - START LEVERS
- STABILISER TRIM WHEEL

# **CONTROL YOKE**



CAPTAIN CONTROL WHEEL DETAIL

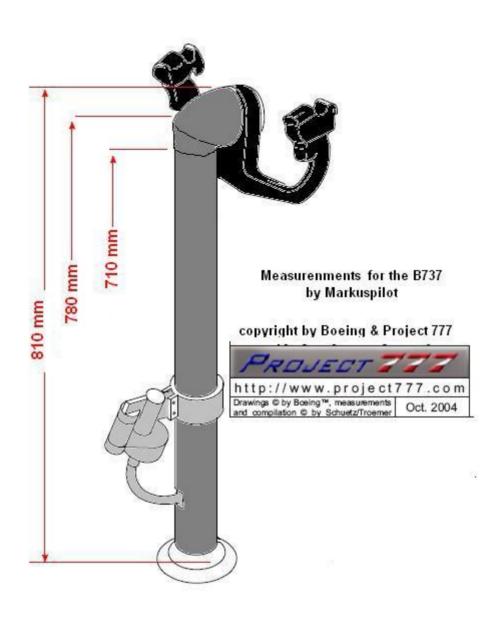


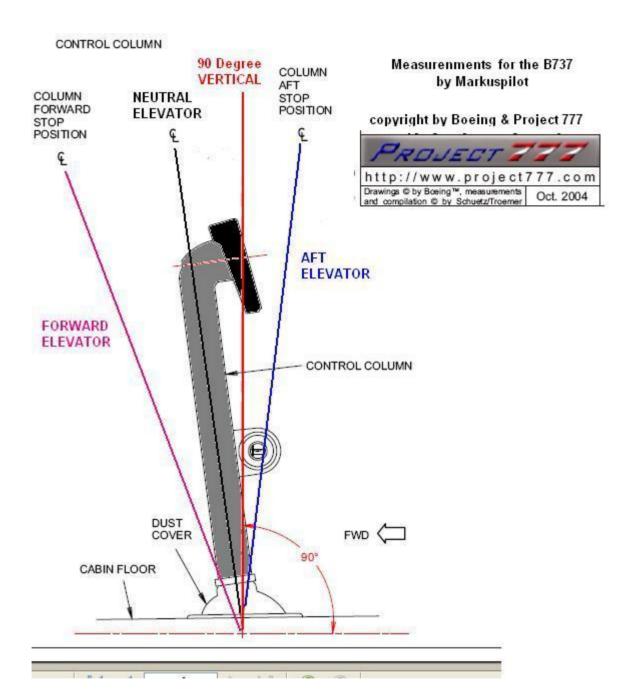
GENERAL JET or BOEING STYLE CONTROL COLUMN

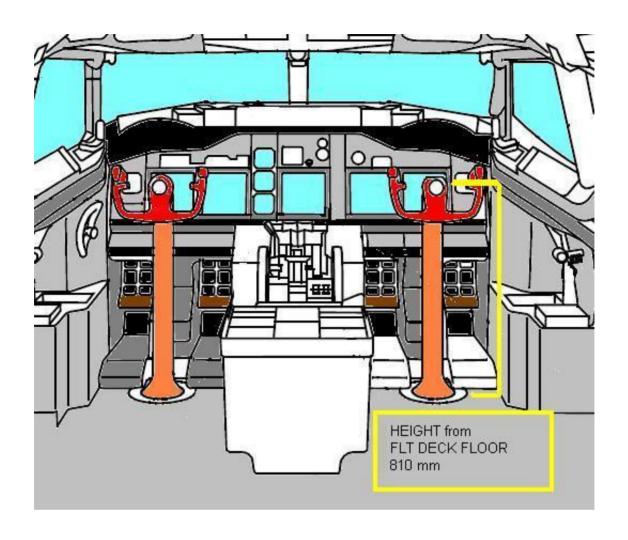
### **CONTROL YOKE DATA**

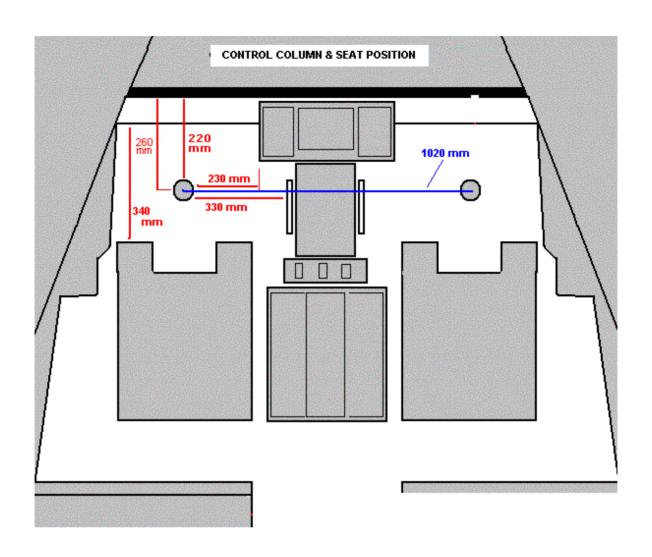
DATA for BOEING 737 TYPE CONTROL YOKE	
Width at Top of Yoke	345 mm
Width at Bottom of Yoke	260 mm
Height of Yoke	195 mm
Diameter of Yoke Handle or Thinkness of Yoke	32 - 36 mm
Position of AutoPilot Disconnect	80 mm above lower yoke
Length of AutoPilot Disconnect Assemble	60 mm
Width of the ClipBoard at the Top	95 mm
Width of the ClipBoard at the Bottom	65 mm
Length of the ClipBoard	195 mm

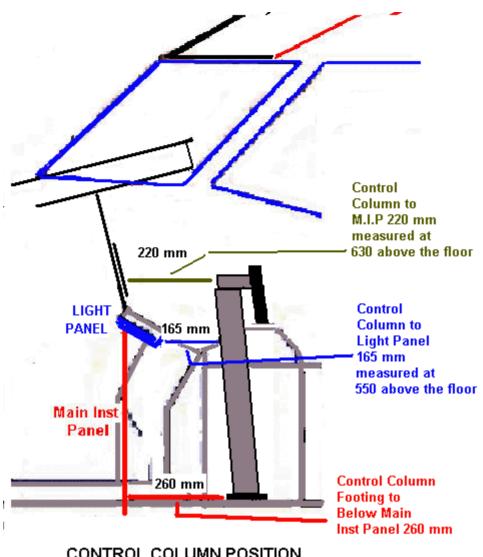
### **CONTROL COLUMN**











CONTROL COLUMN POSITION

#### POSITION of CONTROL COLUMN

165 mm measured at 500 mm height from flight deck Distance from Light Panel

floor

Distance from Main Inst Panel 220 mm measured at 630 mm height from flight deck @ PFD ND lower edge

floor

260 mm measured below MIP along floor to base of Distance from Main Inst Panel column

Distance from FMC Panel 230 mm from side of FMC panel

Distance from Stab Trim Wheel 330 mm from side of Stabiliser Trim Wheel

#### **CONTROL COLUMN DATA**

Height of Control Column 790 mm measured at back of Control Column

810 mm measured at top of Control Column / Yoke Height of Control Column

Axis

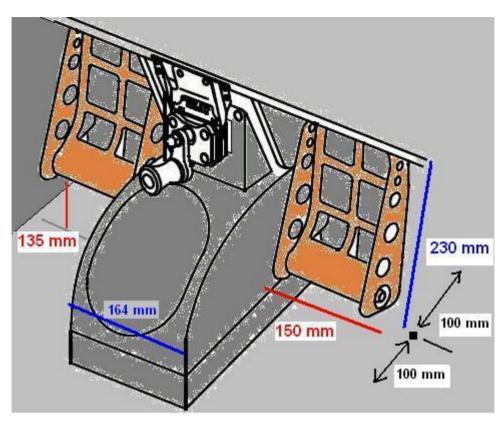
Diameter of Control Column 80 mm diameter

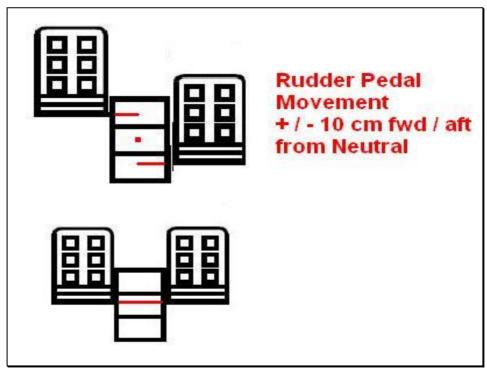
Slope of Control Column approx 10 degrees forward slope in Neutral Elevator Position

Movement of Control Column approx 10 degrees forward for "down elevator"

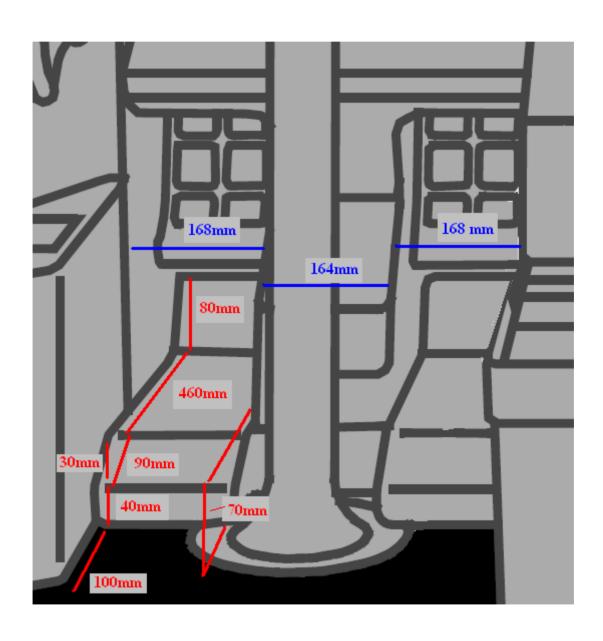
approx 10 degrees backwards for "up elevator"

### **RUDDER PEDALS**

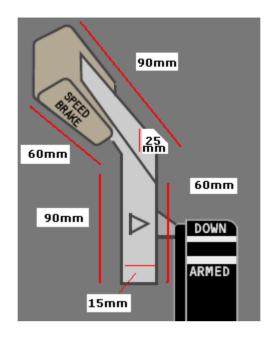




RUDDER PEDALS DATA	
Rudder Pedal Width	150 mm
Rudder Pedal Height	230 mm
Height above Rudder Pedal Floor	135 mm measured from rudder floor to bottom of rudder bar
Rudder Pedal Travel forward / aft	100 mm from neutral position

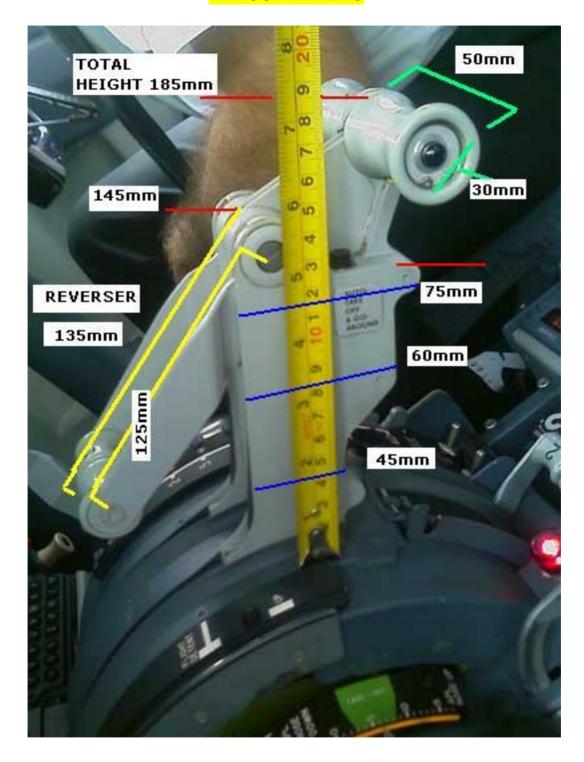


### SPEEDBRAKE LEVER



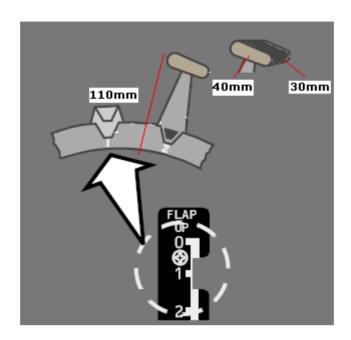
SPEEDBRAKE LEVER	
HEIGHT TOTAL	150mm
LOWER LEVER	
UPPER LEVER	
HANDLE	25 x 15 mm

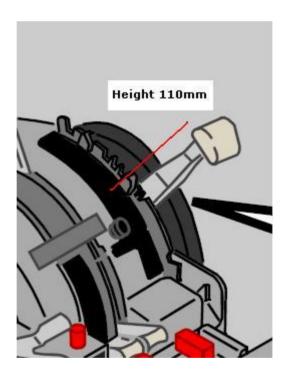
# **THRUST LEVERS**



THRUST LEVER	
HEIGHT TOTAL	185mm
THRUST LEVER	
HANDLE WIDTH	50mm
HANDLE DIAMETER	30mm
REVERSE LEVER	135 mm
HANDLE WIDTH	23mm
HANDLE DIAMETER	25mm

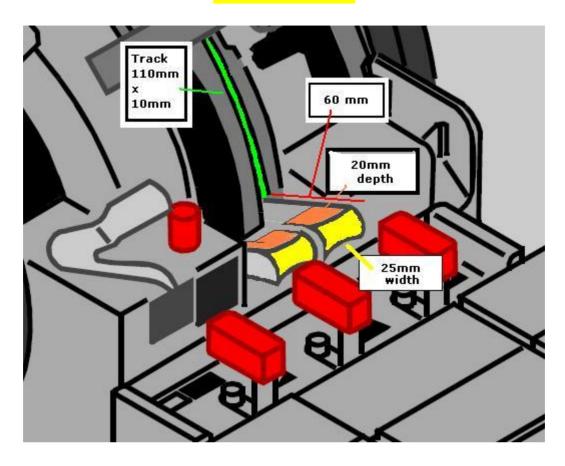
# FLAP LEVER





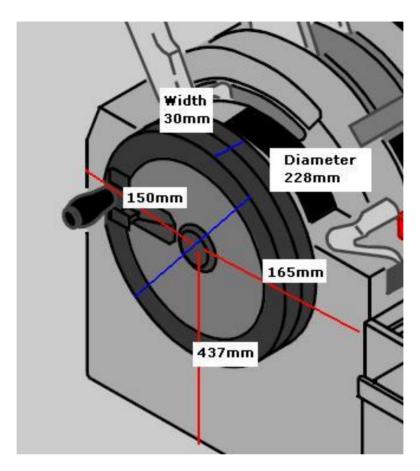
FLAP LEVER	
HEIGHT TOTAL	110 mm
HANDLE	40 mm
	30 mm

# **START LEVERS**



START LEVERS	
LENGTH TOTAL	60 mm
HANDLE	25 mm
	20 mm
TRACK	110 x 10 mm

### STABILISER TRIM WHEEL



STAB TRIM WHEEL	
POSITION	
HEIGHT	437 mm
AXEL	150mm / 165 mm
	from edges
DIAMETER	228mm
WIDTH	30mm