



**BILL OF MATERIALS**

ITEM	QTY	SUPPLIER	SUPPLIER PN	DESCRIPTION	RACELOGIC PN
1	1	OHMITE	FSR03CE	Force Sensor	FSR03CE
2	1	VITAL PARTS	NYS034	M6.2 x 20mm F/F Nylon Spacer	NYS034
3	50mm	TE CONNECTIVITY	HTAT-12/3-0-STK	Heatshrink 12mm 4:1 Black 12/3 Adhesive Lined	HTAT-12/3-0
4	4	PRO POWER	CBBR1239	WHITE 4 CORE CABLE UNSCREENED	CBBR1239
5	4	PRO POWER	13636	Heatshrink 4.8mm 2:1 Black	100-8431
6	2m	Multicomp	PP000861	2 Core Grey Multipair Unscreened Cable	PP000861
7	1	SAMTEC	TSW-102-23-G-S	2 Way Connector Through Hole 2.54mm	EC02-0016
8	1	MULTICOMP	MF25 510R	MF25 510R TH Resistor 250mW	MF25 510R
9	4	ARR	CB09682	Heatshrink 3.2mm 2:1	100-8430
10	1	AVERY	J8658-25	25.4 x 10mm LABEL + CABLE IDENT	J8658-25
11	30mm	FARNELL	3046539	CLEAR HEATSHRINK 6mm 3:1	304-6539
12	35mm	TE CONNECTIVITY	CGAT-6/2-0	Heatshrink 6mm 3:1 Adhesive Lined Black	157-3795

DRAWING NUMBER	RLACS344	DRAWN	H.HUSSAIN	SHEET	1/1
DESCRIPTION	DOOR HANDLE FORCE SENSOR				
REVISION					
ISS	DESCRIPTION	DATE	APPROVED	REDMINE	
1	FIRST RELEASE	09-08-23	SH	21408	

**Notes:**

- Item 1 needs to remain removable.
- Insulate with Heatshrink (Item 9).
- Use Kapton tape around cable to hold together + protect from heat under spacer.
- Cut back the cable (Item 4) to expose wires
- Cover the cable transition with ~20mm of Item 5
- Strip & tin wires 3mm
- Solder Item 4 cable to 2 Core cable wires inside spacer.
- Solder resistor to GND wire inside spacer as shown in the diagram to the left.
- Cover solder joints with heatshrink (Item 9).
- Strip back 2 core cable (Item 6) to expose wires and solder onto pins on connector (Item 7). Then Heatshrink over with Item 5.

**CONNECTION TABLE**

2 CORE CABLE	FUNCTION	TERMINATED WIRE
COLOUR	GND	COLOUR
BLACK	CH+	YELLOW
	CH-	BLUE
RED	PWR	RED