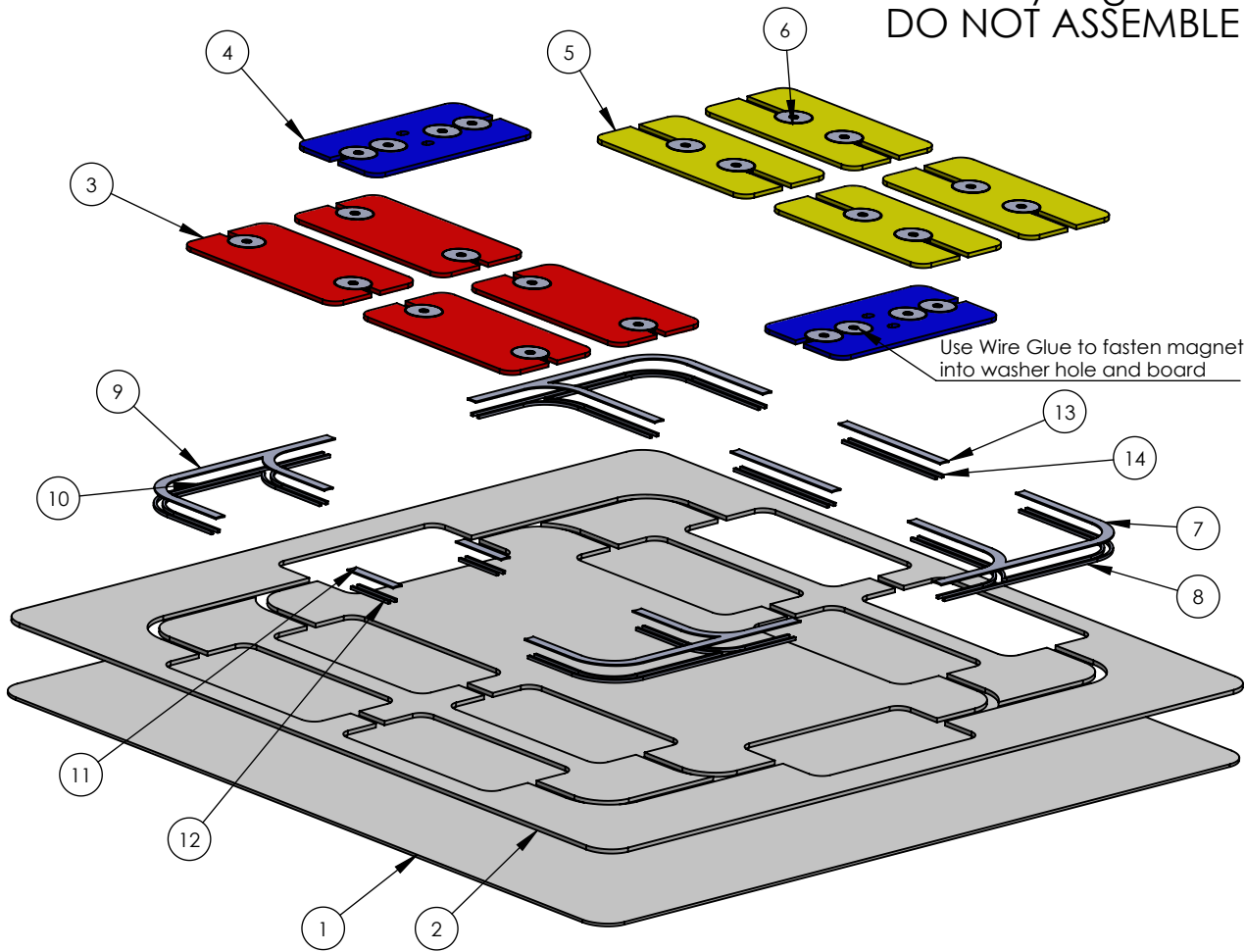


Use acrylic glue to assemble acrylic components  
DO NOT ASSEMBLE COVERS (7,9,11,13) UNTIL WIRING IS COMPLETE



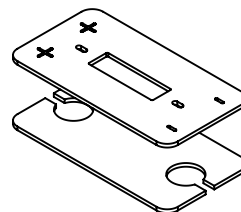
ITEM NO.	PART NUMBER	QTY.	Remarks
1	Base	1	2mm White
2	Main Board	1	3mm White
3	Battery Board	4	3mm Red
4	Switch Board	2	3mm Blue
5	Work Board	4	3mm Yellow
6	25mm OD x 6mm ID Steel Mudguard Washer (Stack of 2)	24	RS 666-7766
7	Cover Curve Long	2	1mm Black
8	Cover Curve Long Support	2	2mm White
9	Cover Curve Short	2	1mm Black
10	Cover Curve Short Support	2	2mm White
11	Cover Short	2	1mm Black
12	Cover Short Support	4	2mm White
13	Cover Long	2	1mm Black
14	Cover Long Support	4	2mm White
15	Super Strong Magnets Mini 6mm	24	Daiso

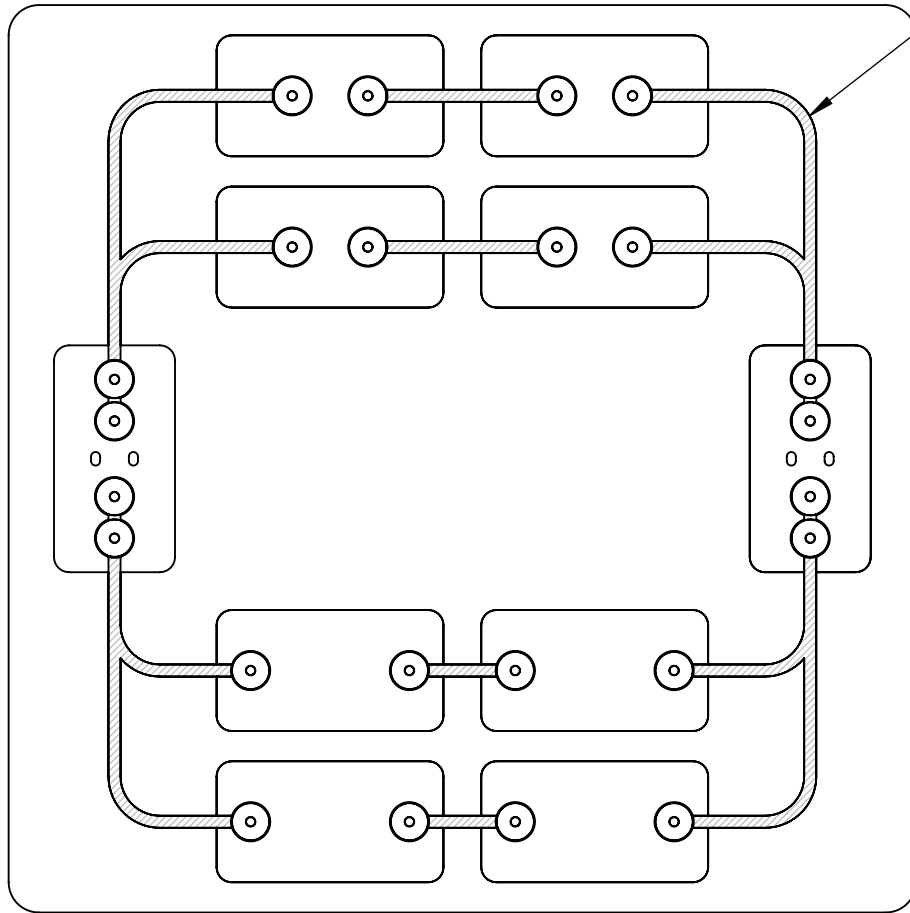
ITEM NO.	PART NUMBER	QTY.	Remarks
1	Battery Cover	4	3mm Red
2	Battery Board	4	3mm Red
3	Work Cover	6	3mm Yellow
4	Work Board	6	3mm Yellow
5	Switch Cover	2	3mm Blue
6	Wire Cover	6	3mm Blue
7	Switch Board	8	3mm Blue
8	E10 Filament Indicator Lamp, Clear, 6.5 V, 150 mA, 3000h	4	RS 655-9081
9	E10 MES metal PCB lampholder w/PC pin	4	RS 171-2580
10	25mm OD x 6mm ID Steel Mudguard Washer (Stack of 2)	104	RS 666-7766
11	Switch	2	KCD4-202N



Item 16: Super Strong Magnets Mini 6mm Diameter, from Daiso

For individual modules, go to Page 9

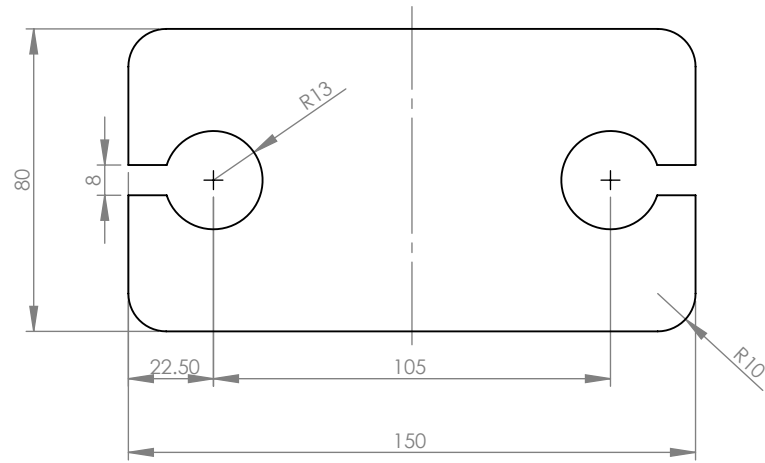




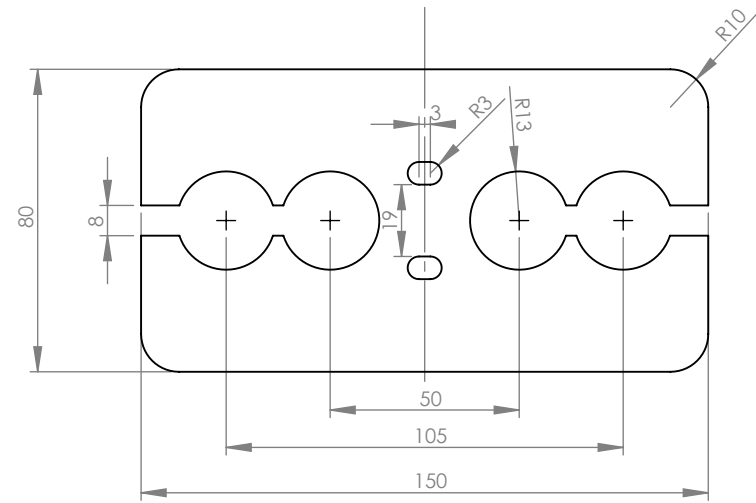
Connect washers with wire as shown  
Solder does NOT stick easily to washers  
Use of Wire Glue is recommended (can be bought online)



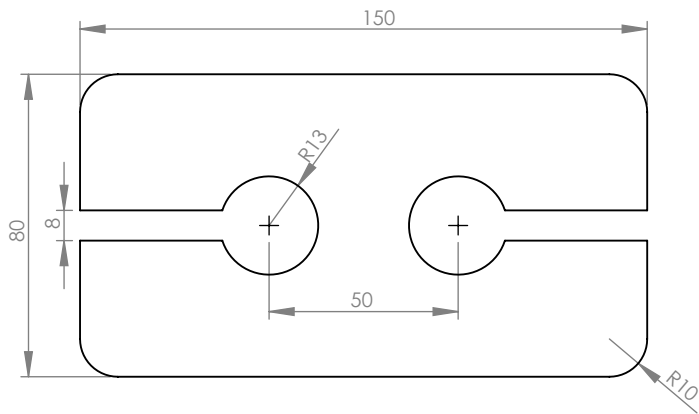
Item 3: Battery Board



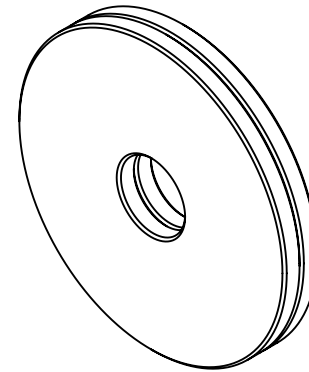
Item 4: Switch Board



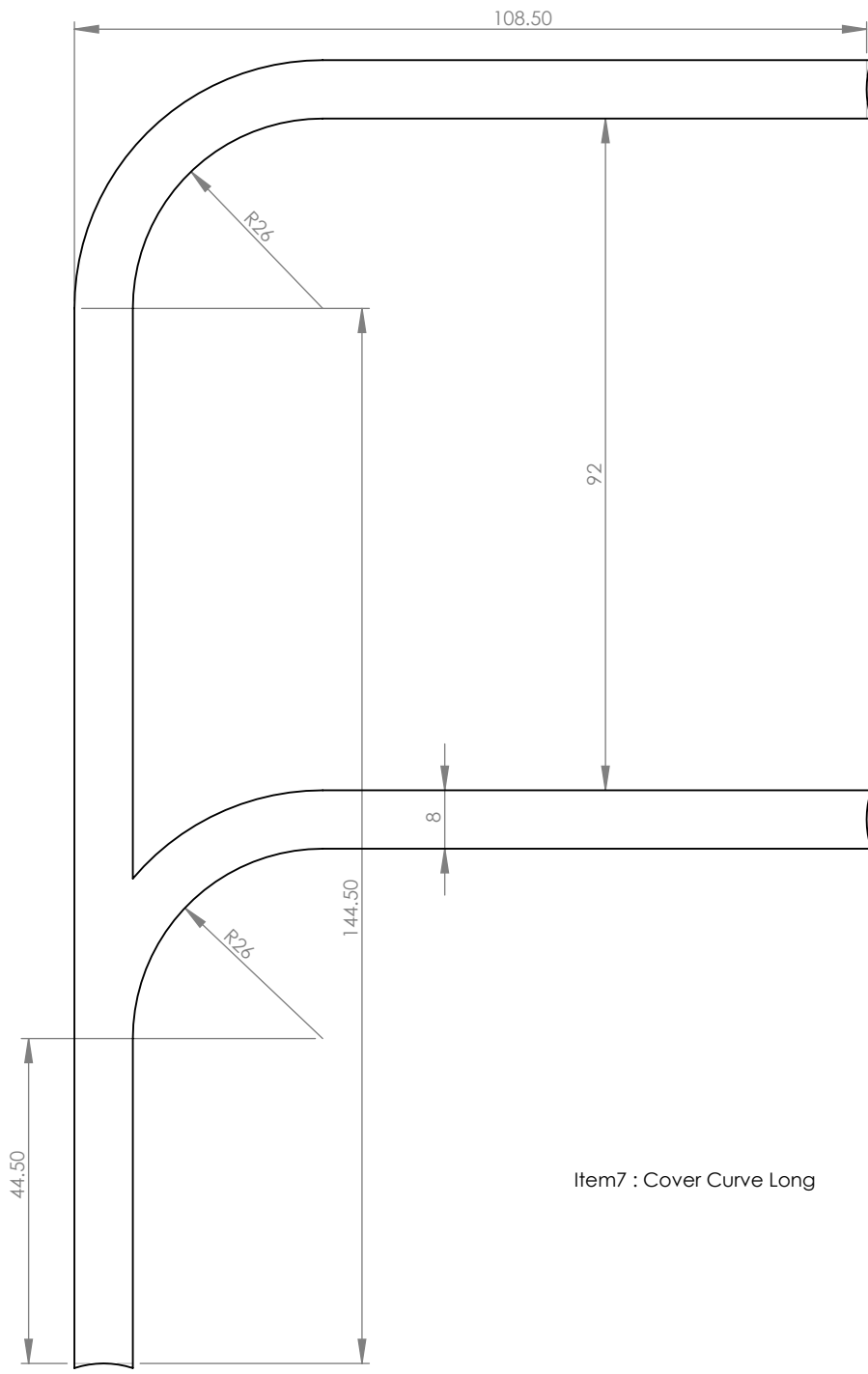
Item 5: Work Board



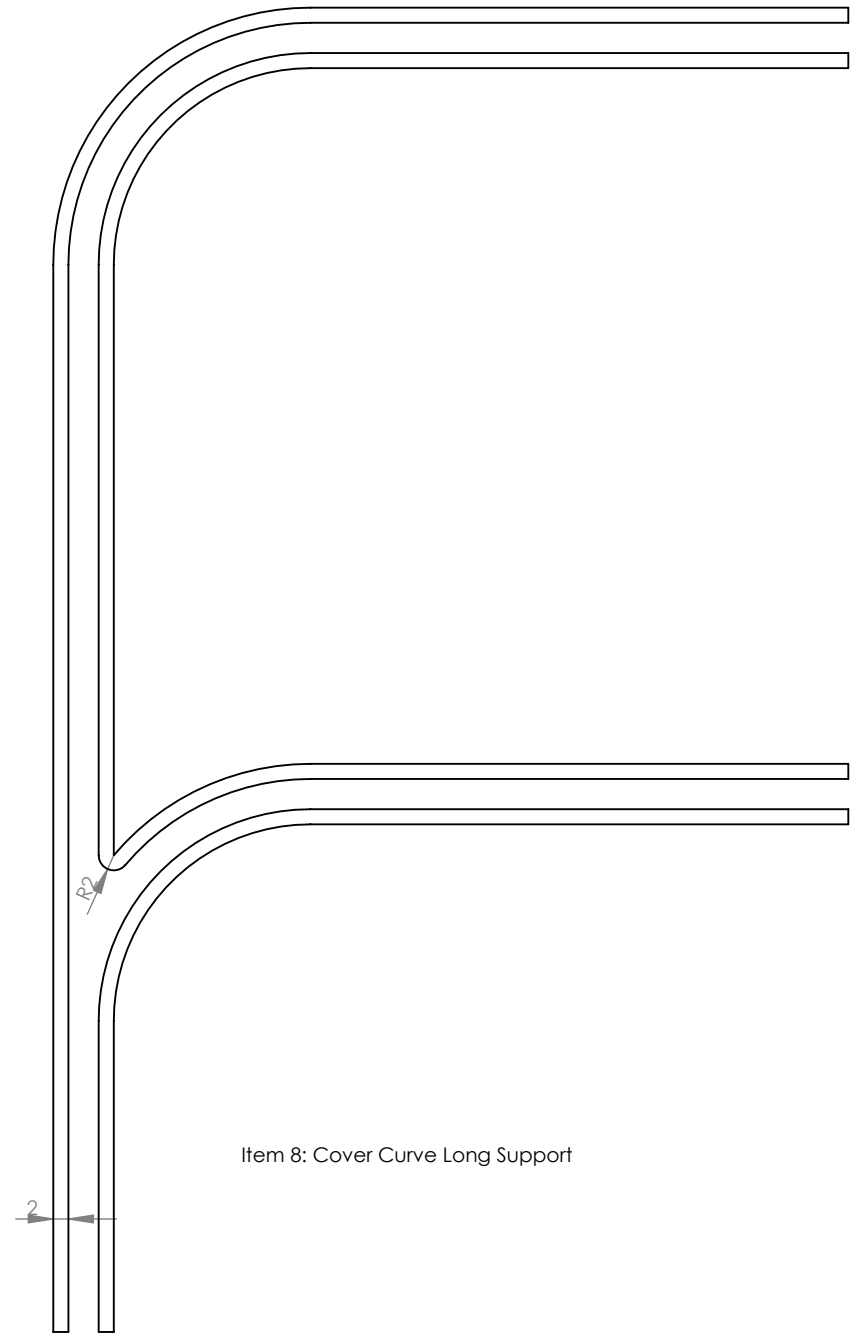
Item 6: 6x25 BZP Mudguard Washer  
RS 666-7766



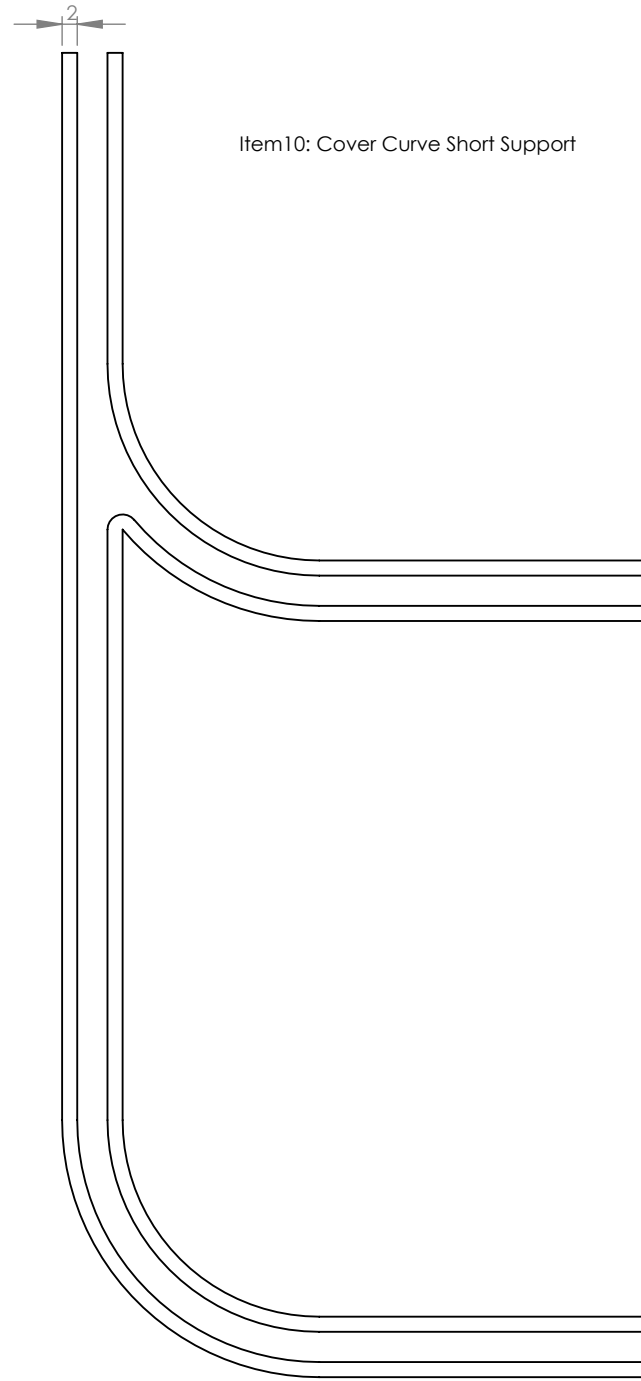
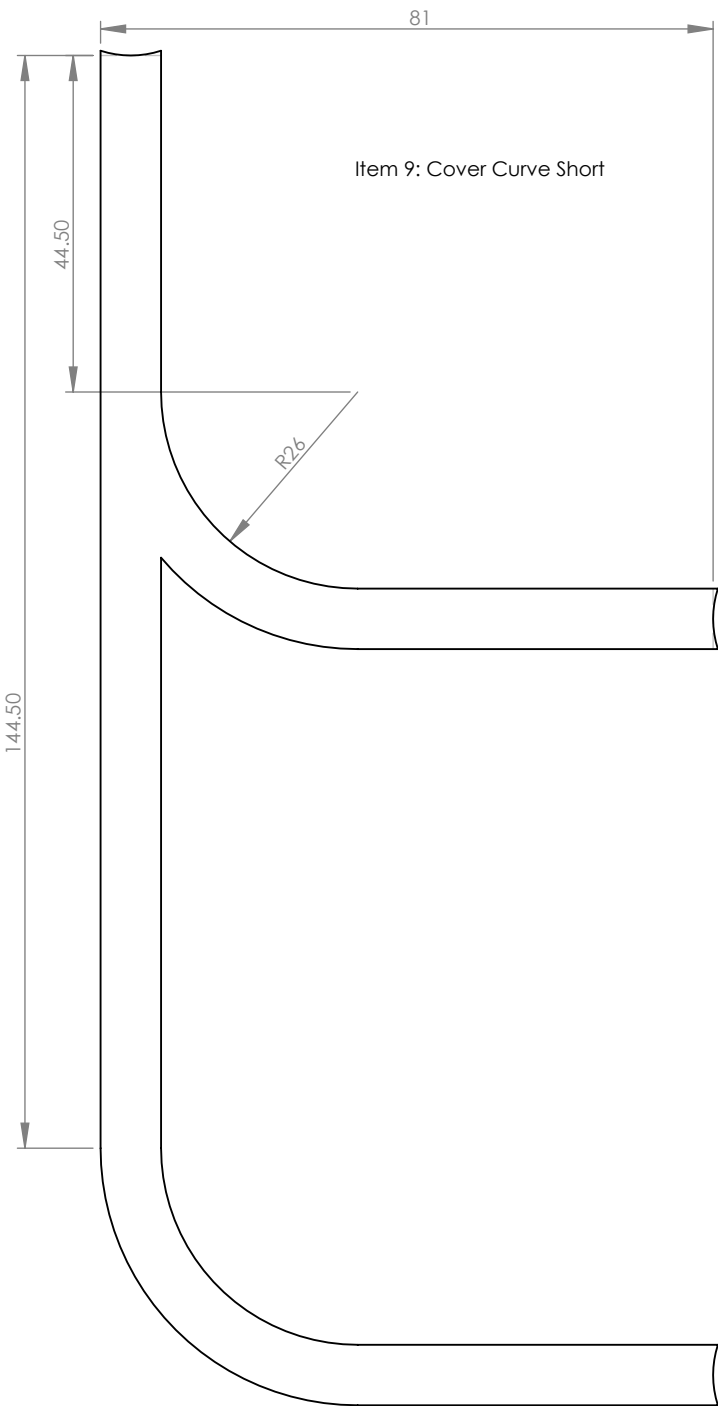
Each washer is 1.6mm thick.  
Use 2 for a total thickness of 3.2mm  
Join to each other using conductive glue  
Recommended: Wire Glue (can be purchased online)



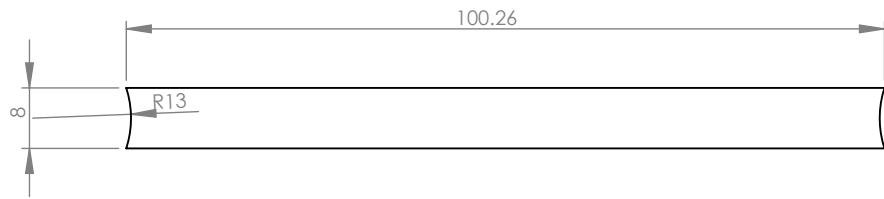
Item 7 : Cover Curve Long



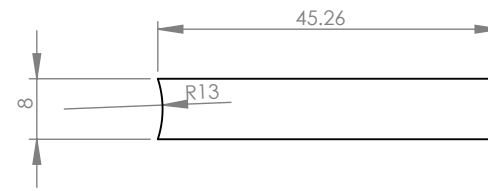
Item 8: Cover Curve Long Support



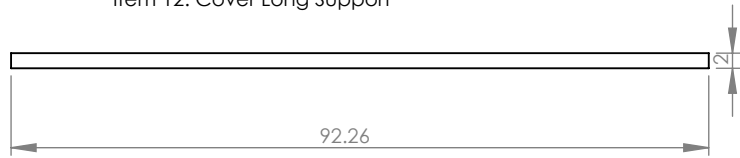
Item 11: Cover Long



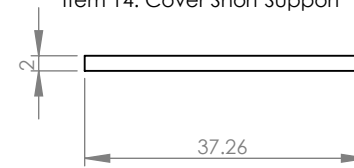
Item 13: Cover Short



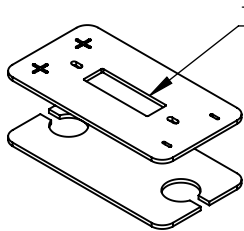
Item 12: Cover Long Support



Item 14: Cover Short Support



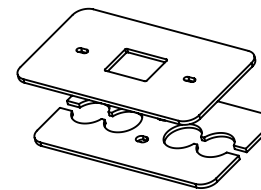
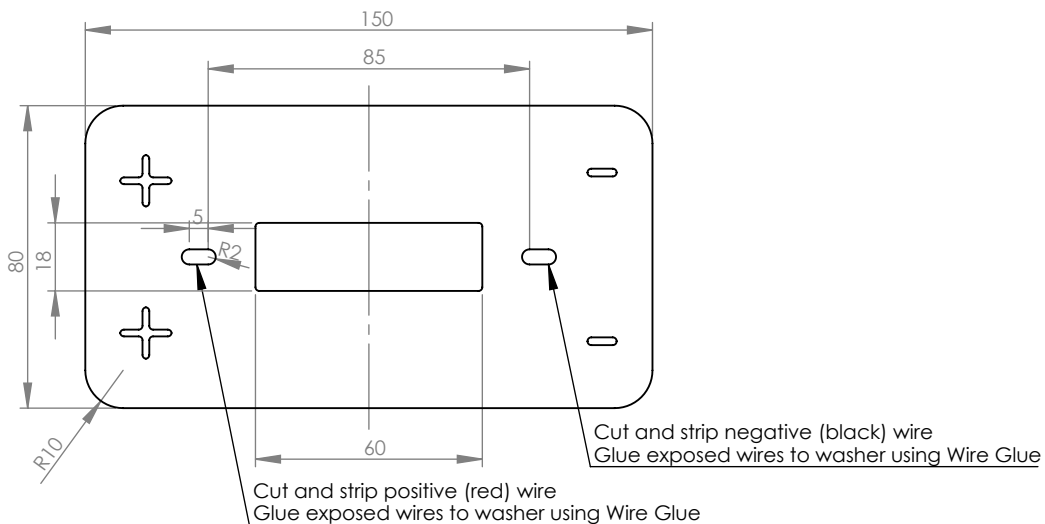




There should be enough space for a single AA battery holder.

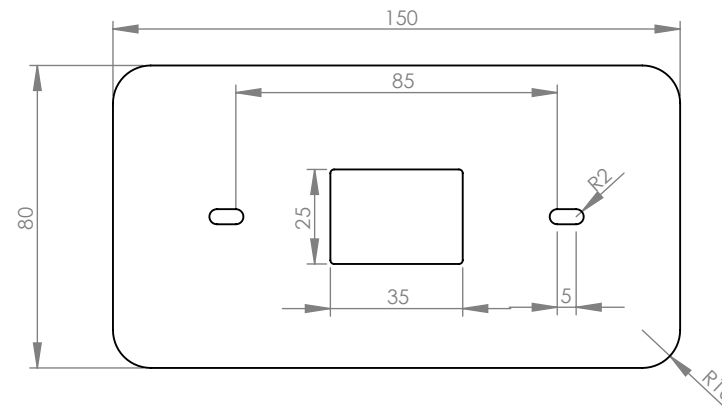
**BATTERY BOARD:**  
 Attach a single AA battery holder  
 Take care to wire + and - connections correctly.  
 Affix 2 x 2-washer stacks to bottom

Make 4 sets minimum



**SWITCH BOARD:**  
 Attach a switch.  
 Recommend KCD4-202N for flip switch.  
 Flat push-button switches can be used with  
 max diameter 80mm.  
 Switches can be purchased from Sim Lim Tower  
 Affix 4 x 2-washer stacks to bottom

Make 2 sets minimum

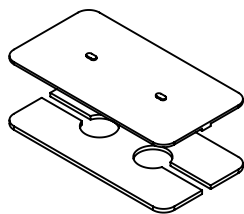
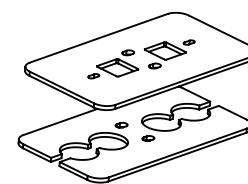


**WIRE BOARD:**  
 Used to test if materials are conductive.  
 Affix two 20x20x20mm copper-tape-wrapped  
 styrofoam cubes to the metal washers under the  
 square openings with Wire Glue.

Place a length of the item to be tested on top  
 of the cubes, and tie down with string through  
 the two slots.

Alternatively, glue a wire to both terminals to form  
 a pass-through wire.

Affix 4 x 2-washer stacks to bottom  
 Make 6 sets minimum



**WORK BOARD:**  
 Attach light bulbs, buzzers or other devices  
 Ensure that bulbs are protected.  
 Recommend using Glad brand Mini Round  
 containers for protection.

Light bulb: Recommend RS 655-9081  
 Bulb holder: Recommend RS 171-2580  
 Affix 2 x 2-washer stacks to bottom

Make 6 sets minimum  
 4 with light bulb  
 2 with buzzer

