

No part of the candidate's evidence in this exemplar material may be presented in an external assessment for the purpose of gaining an NZQA qualification or award.



Mana Tohu Mātauranga o Aotearoa
New Zealand Qualifications Authority

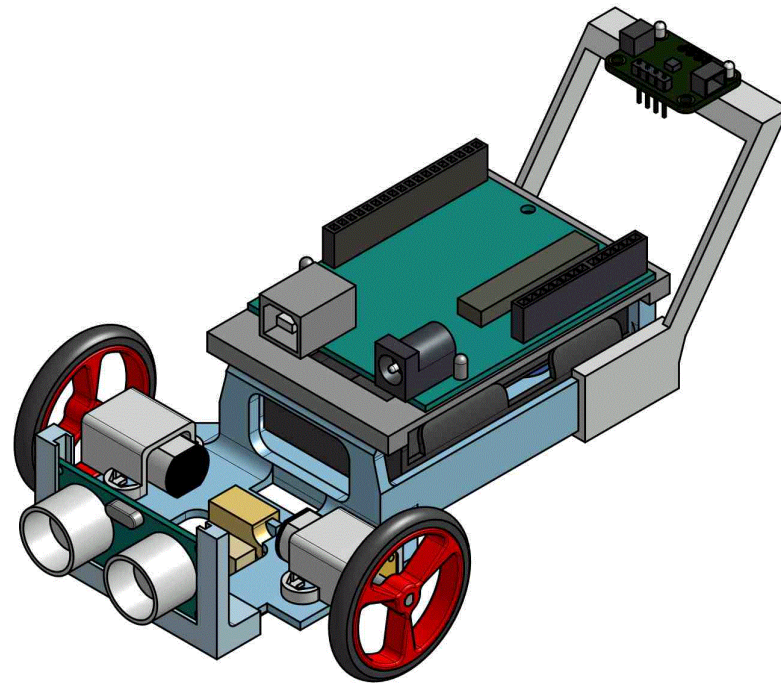
Level 3 Design and Visual Communication 2024

91631 Produce working drawings to communicate production details for a complex design

Excellence

TOTAL 07

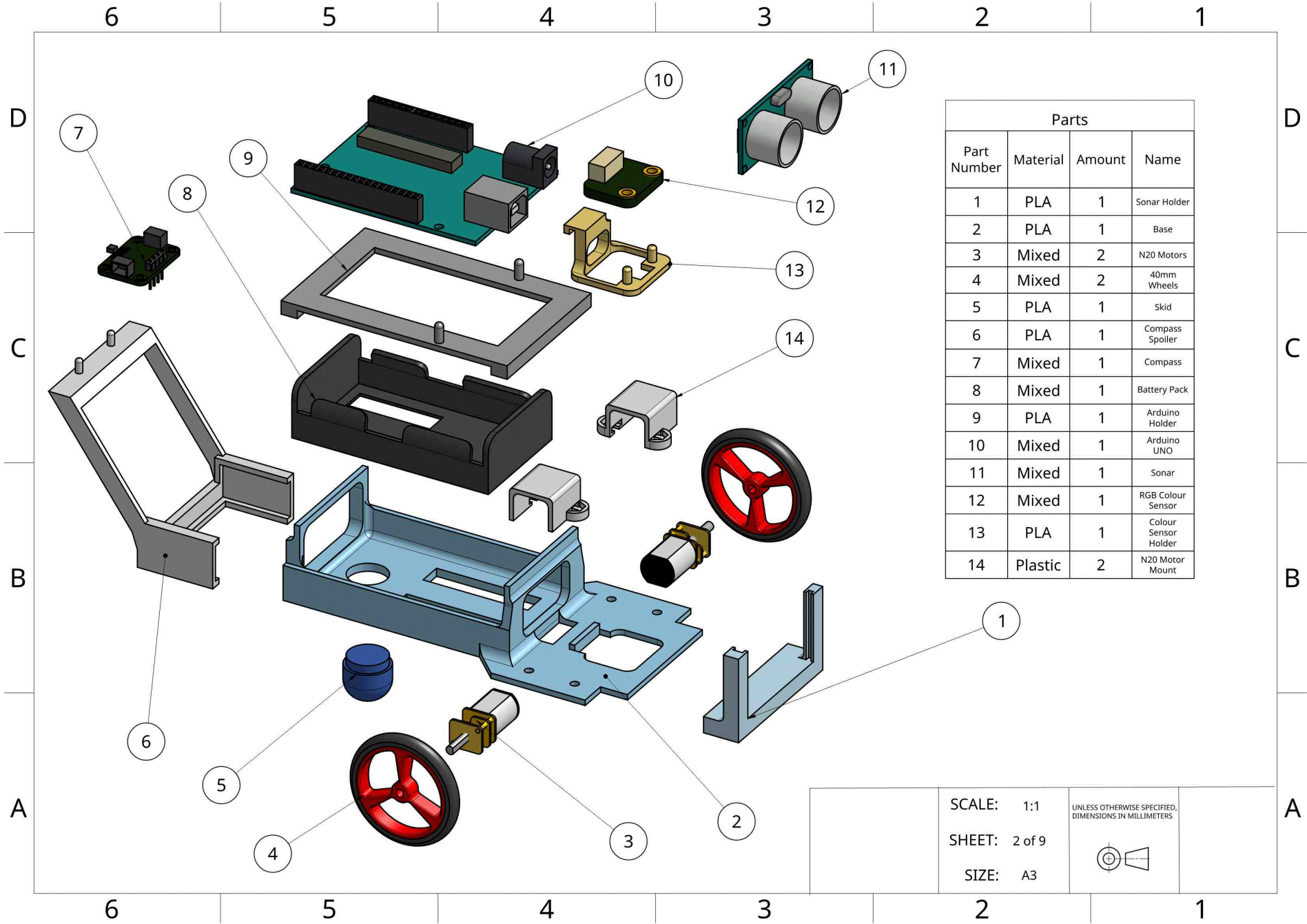
Labyrinth Robot



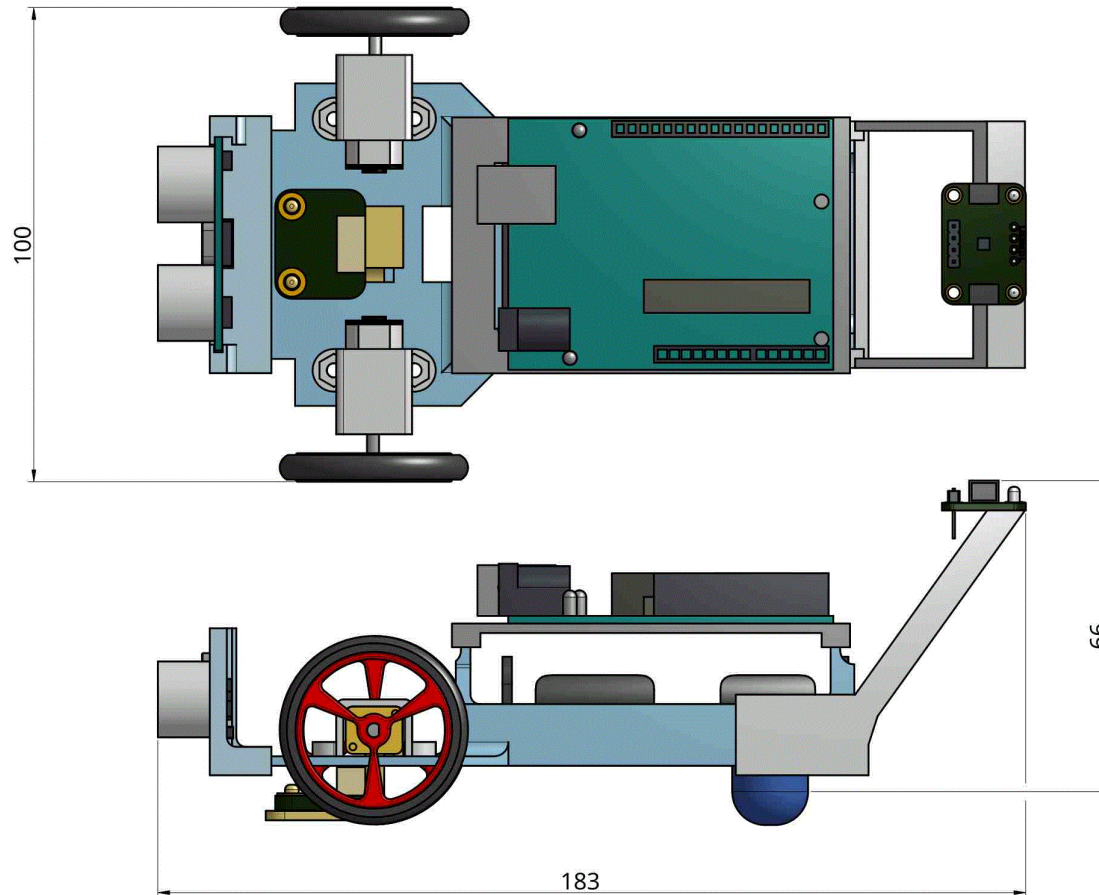
SCALE: 1:1

SHEET: 1 of 9

SIZE: A3



Whole Robot Measurement



SCALE: 1:1

SHEET: 3 of 9

SIZE: A3

UNLESS OTHERWISE SPECIFIED,
DIMENSIONS IN MILLIMETERS



6

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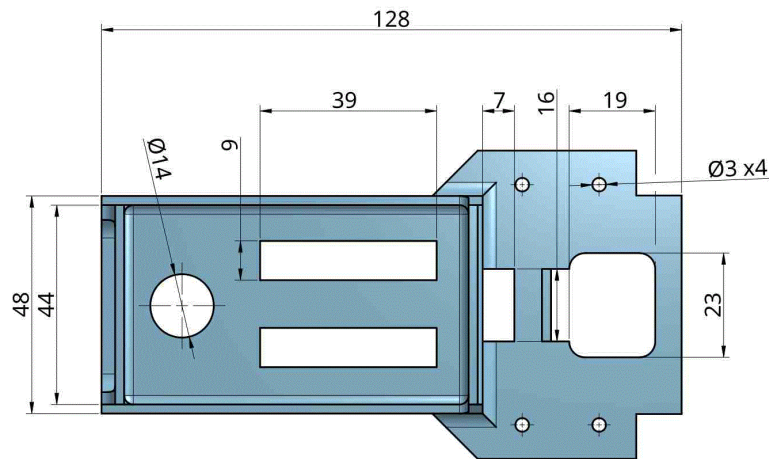
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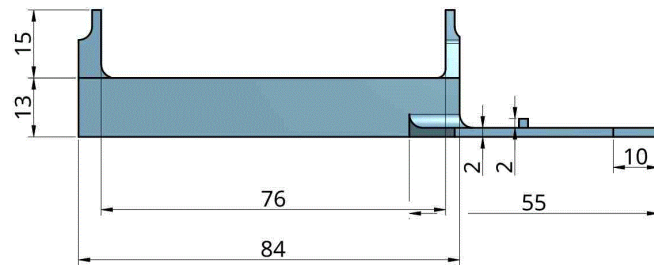
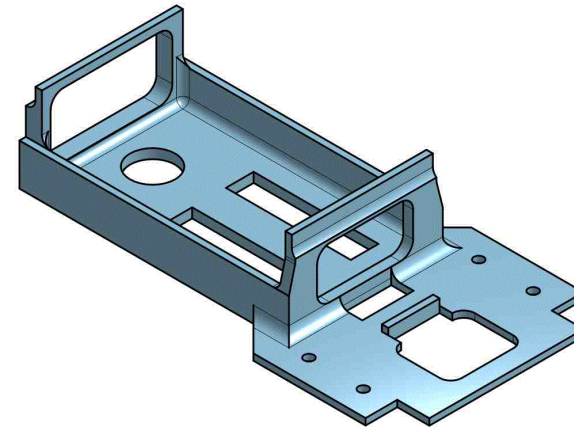
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1

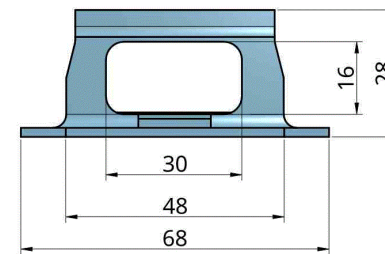
Top View



Base: Part 2



Front View



Side View

A

SCALE: 1:1

SHEET: 4 of 9

SIZE: A3

UNLESS OTHERWISE SPECIFIED,
DIMENSIONS IN MILLIMETERS

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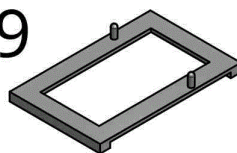
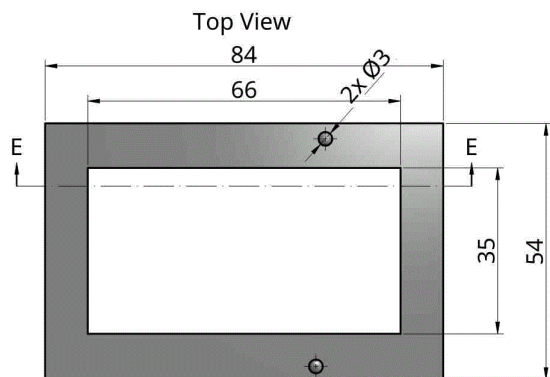
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3

2

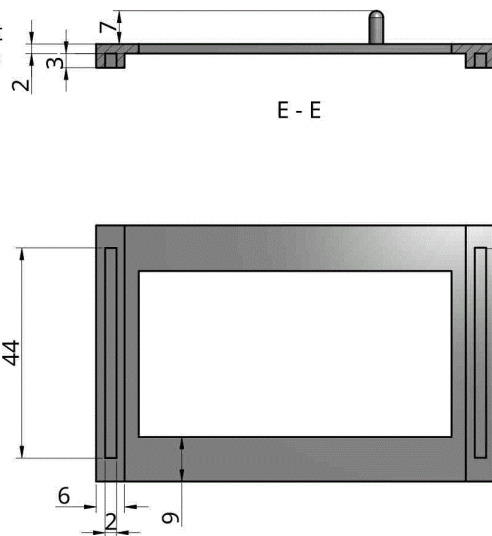
1

Arduino Holder: Part 9



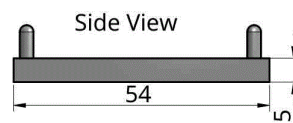
Scale 1:2

Front View



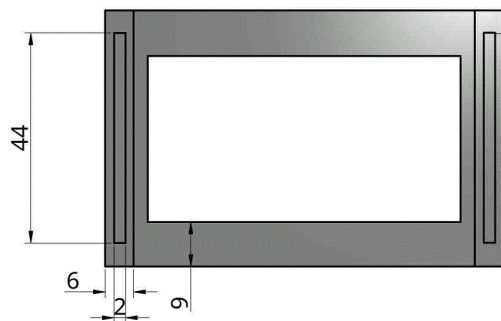
E - E

Side View



This slot allows it to clip onto base

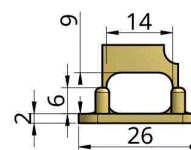
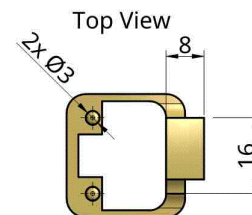
Bottom View



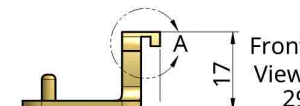
Color Sensor holder: Part 13



Scale 1:2

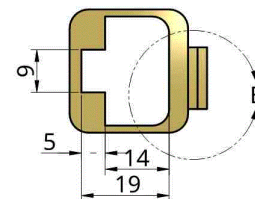
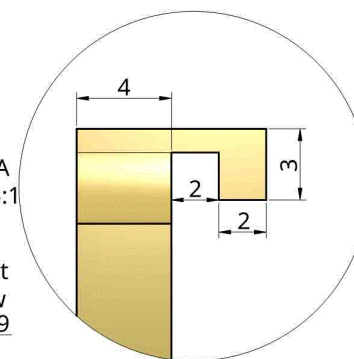


Side View



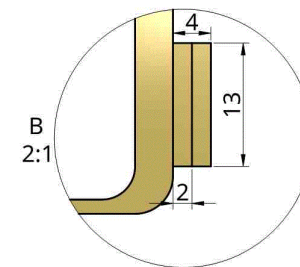
Front View 29

A 5:1



Bottom View

B 2:1



SCALE: 1:1

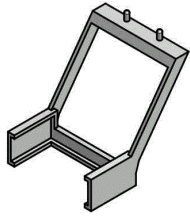
SHEET: 5 of 9

SIZE: A3

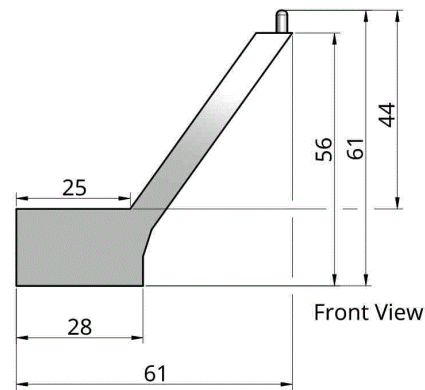
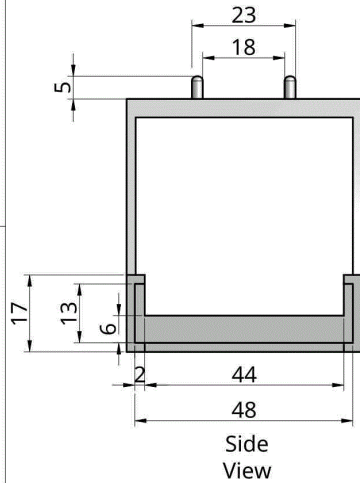
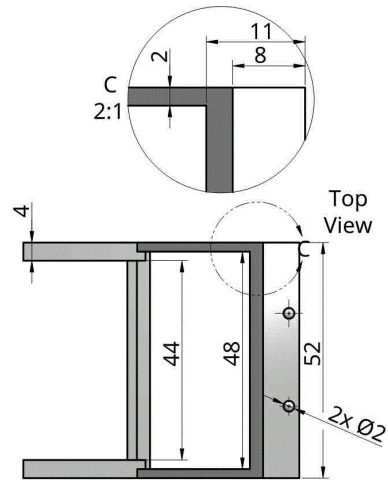
UNLESS OTHERWISE SPECIFIED,
DIMENSIONS IN MILLIMETERS



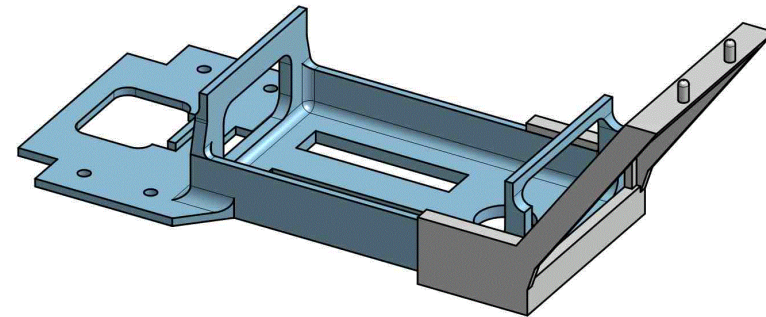
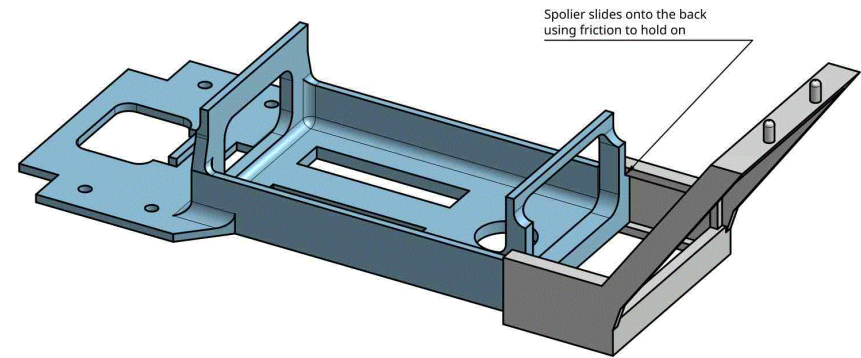
Compass Spoiler: Part 6



1:2



How Compass Spoiler Attaches to base



SCALE: 1:1

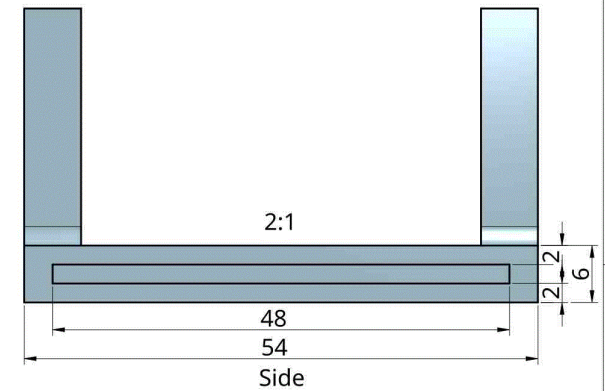
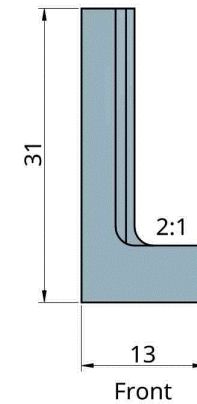
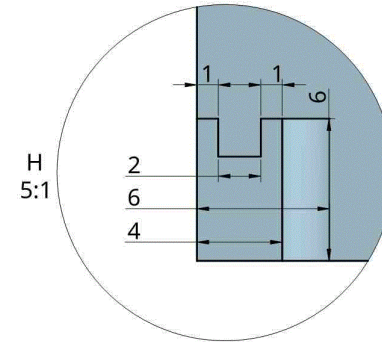
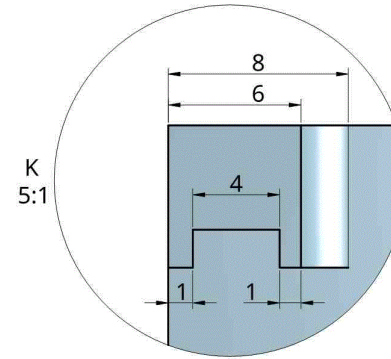
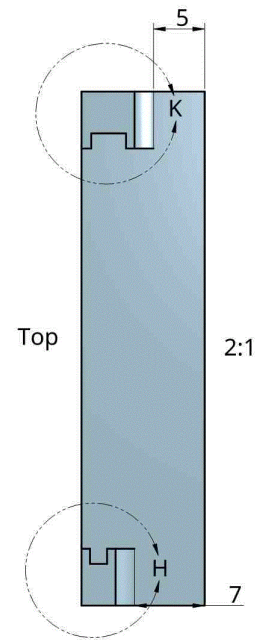
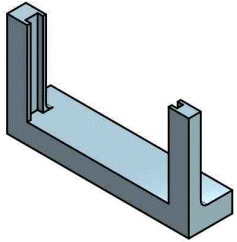
SHEET: 6 of 9

SIZE: A3

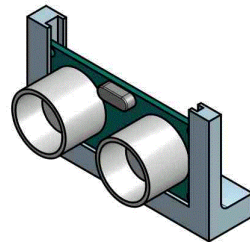
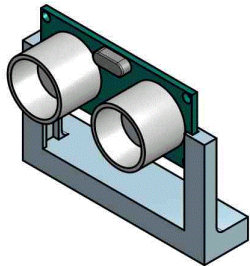
UNLESS OTHERWISE SPECIFIED,
DIMENSIONS IN MILLIMETERS



Sonar Holder: Part 1 - Scale 2:1



How Sonar and Sonar holder fit together

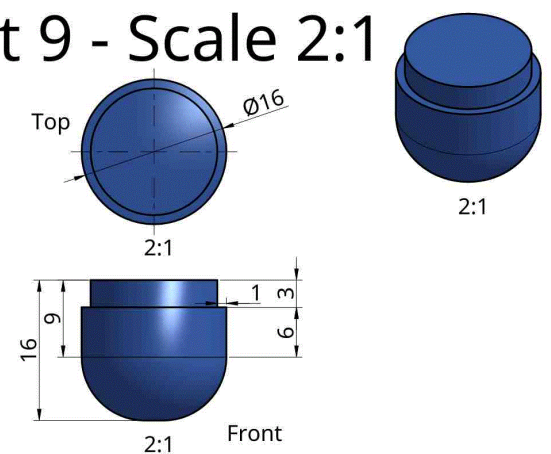


SCALE: 1:1
SHEET: 7 of 9
SIZE: A3

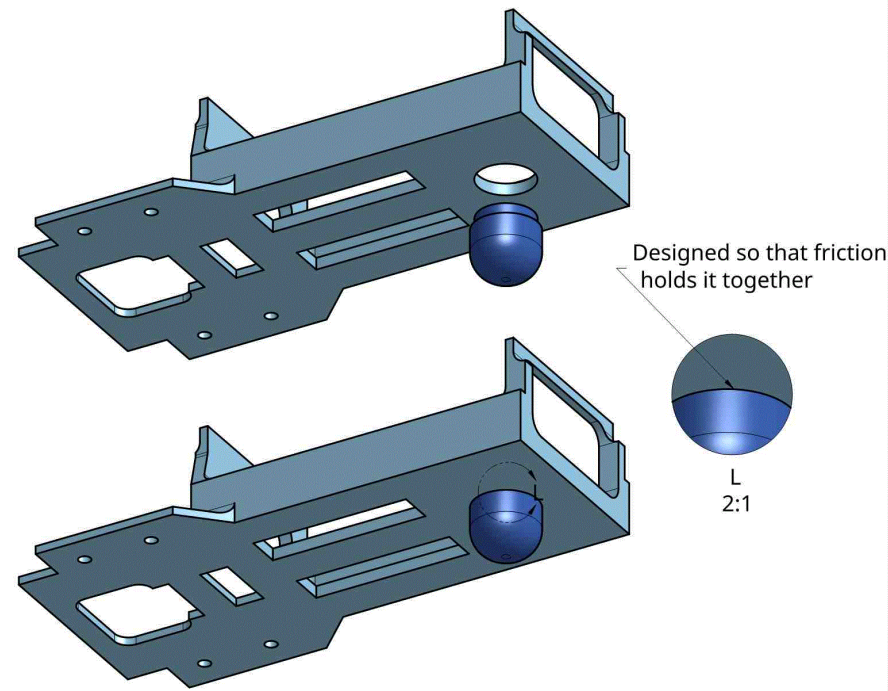
UNLESS OTHERWISE SPECIFIED,
DIMENSIONS IN MILLIMETERS



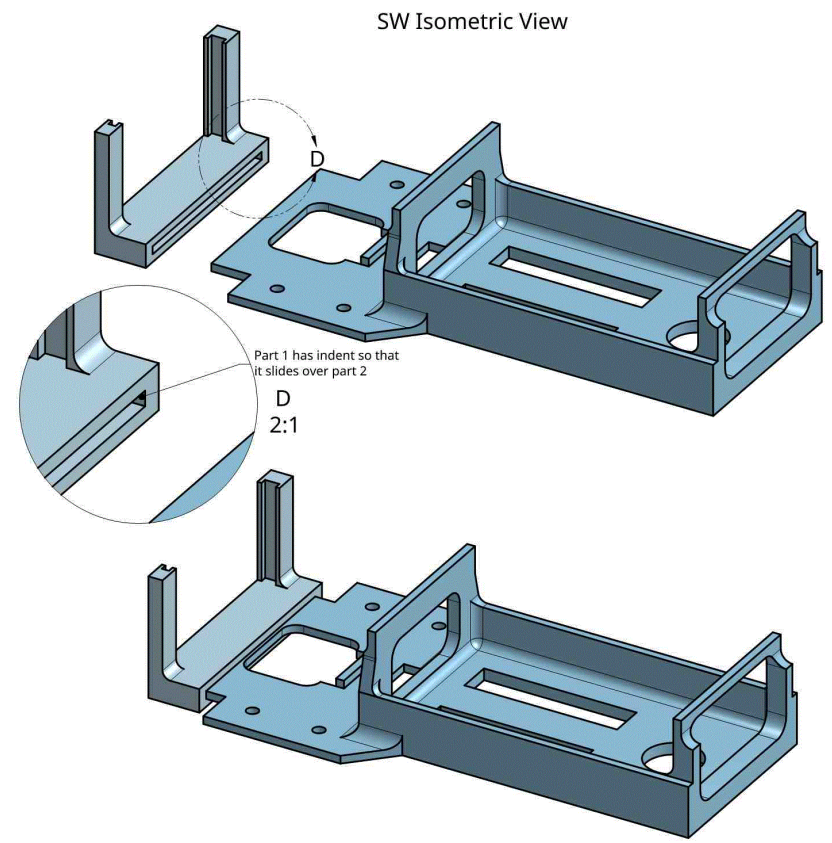
Skid: Part 9 - Scale 2:1



How skid (part 5) and base (part 2) connect



How Base (part 2) and Sonar holder (part 1) connect



SCALE: 1:1
SHEET: 8 of 9
SIZE: A3

6

5

4

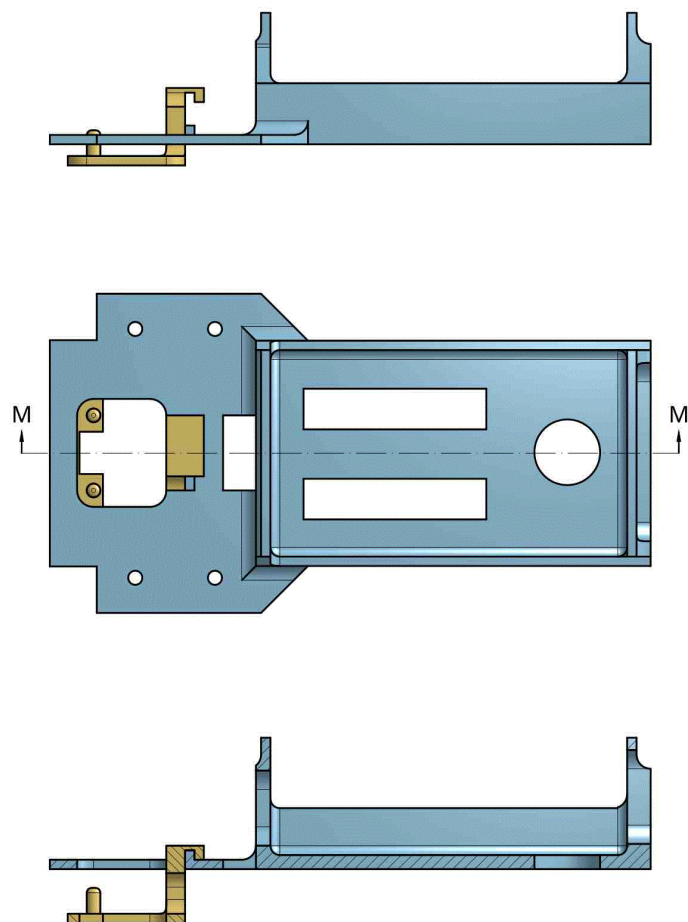
How Base (part 2) and Colour Sensor holder (part 13) fit together

D

C

B

A



M - M

6

5

4

3

2

1

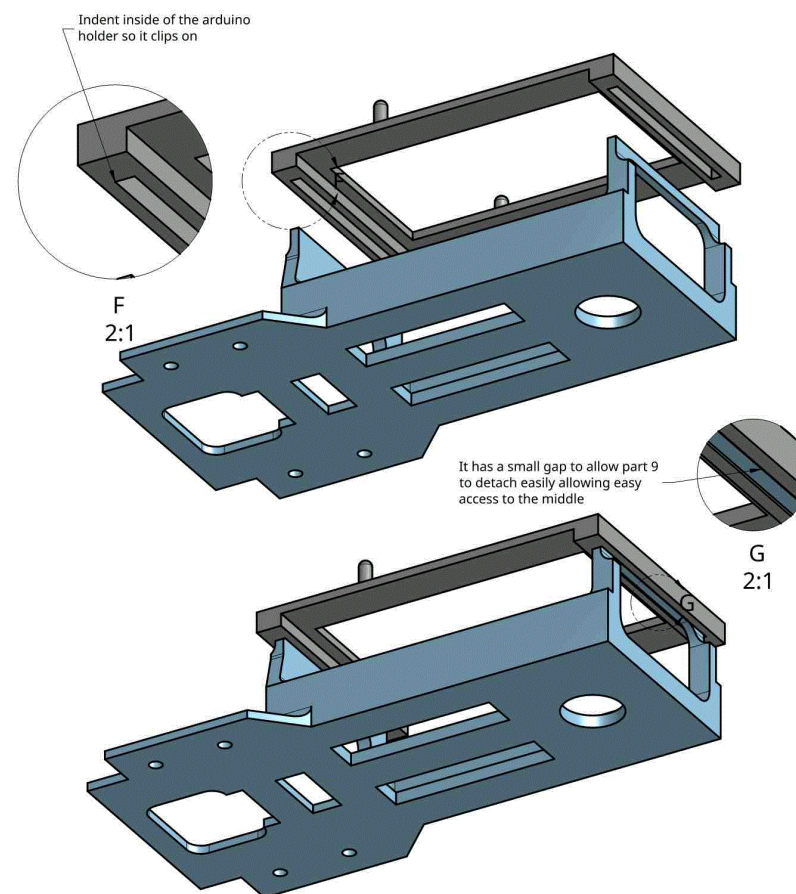
How Base (part 2) and Arduino Holder (part 9) fit together

D

C

B

A

F
2:1G
2:1

SCALE: 1:1
SHEET: 9 of 9
SIZE: A3

UNLESS OTHERWISE SPECIFIED,
DIMENSIONS IN MILLIMETERS

6

5

4

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2

1

Excellence

Subject: Design and Visual Communication

Standard: 91631

Total score: 07

Grade score	Marker commentary
E7	<p>Shows a set of related complex drawings of a Labyrinth Robot produced using CAD. This includes (meeting grade given):</p> <ul style="list-style-type: none">• illustrative assembled and exploded pictorial views to help visualise the design and explain constructional and function details• drawings showing precision and accuracy• extensive dimensioning of overall robot and components• a set of individual drawings cross referenced against the exploded views• well selected and informative sectional views and detailing, i.e. enlarged views were used to help explain features• good use of call-out details to show constructional detail and functions• the correct use of drawing conventions such as recognised scales, dimensioning, and symbols• correct use of all pages, labelling, and drawing referencing.