

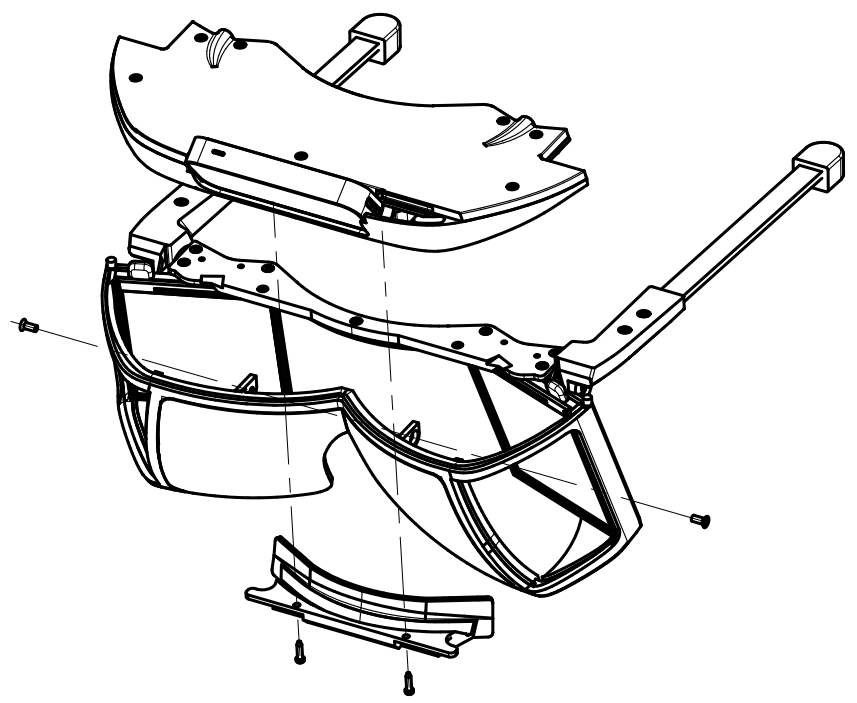
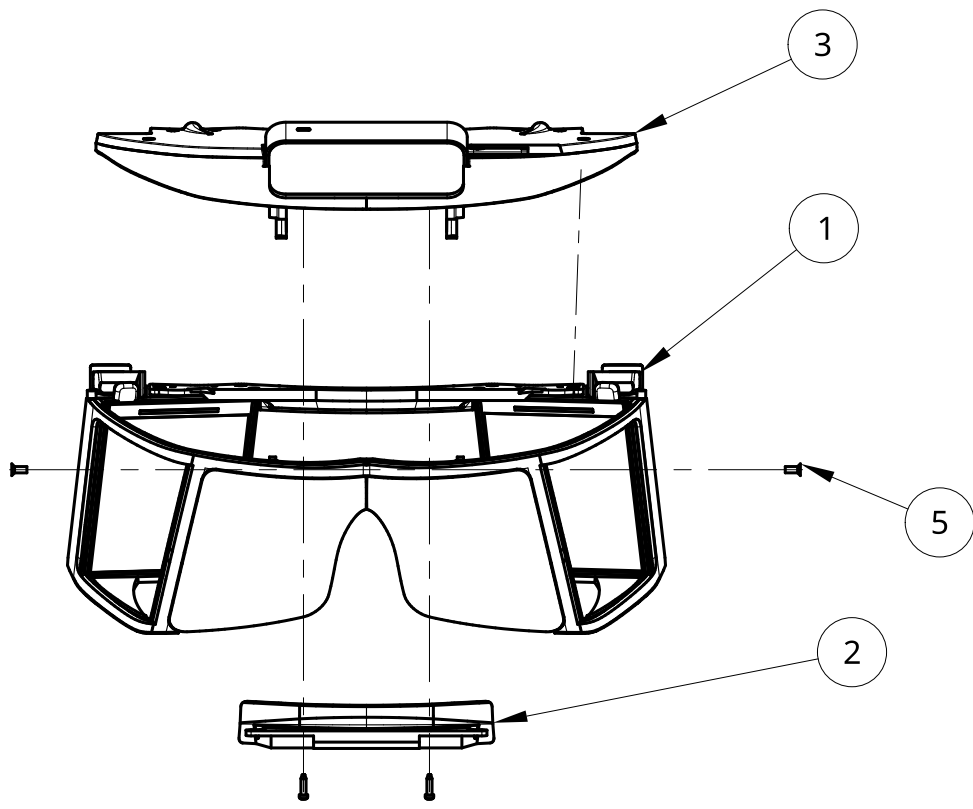
NOTES:
1) Install endcaps from optics assembly last

Item No.	Quantity	Part number	Description
1	1	#100-000	OPTICS ASSM.
2	1	#200-000	HEADGEAR ASSM

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS ANGULAR = ± ° SURFACE FINISH	DRAWN	FLORIAN MAURER	01/15/2019	Project: North Star NORTH STAR RELEASE 3
	CHECKED	JOHNATHON SELSTAD	01/15/2019	
	APPROVED	DAVID HOLZ	01/15/2019	
	DO NOT SCALE DRAWING BREAK ALL SHARP EDGES AND REMOVE BURRS			
THIRD ANGLE PROJECTION	MATERIAL	FINISH		SIZE A DWG NO. #000-000 REV. 1
				SCALE 1:3 WEIGHT SHEET 1 of 1

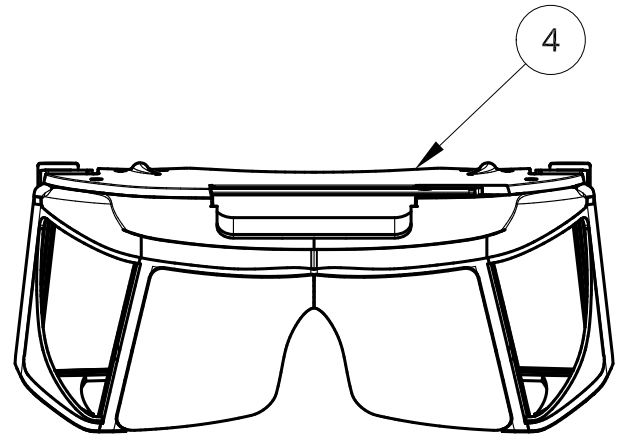
2

1



NOTES:

1) Use Item 1 and 3, or use item 4



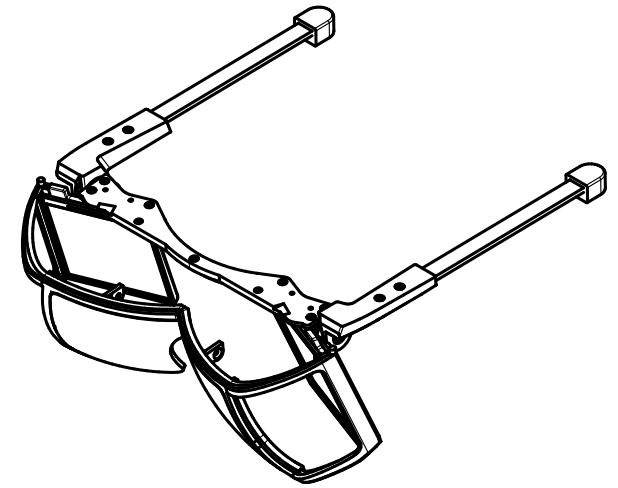
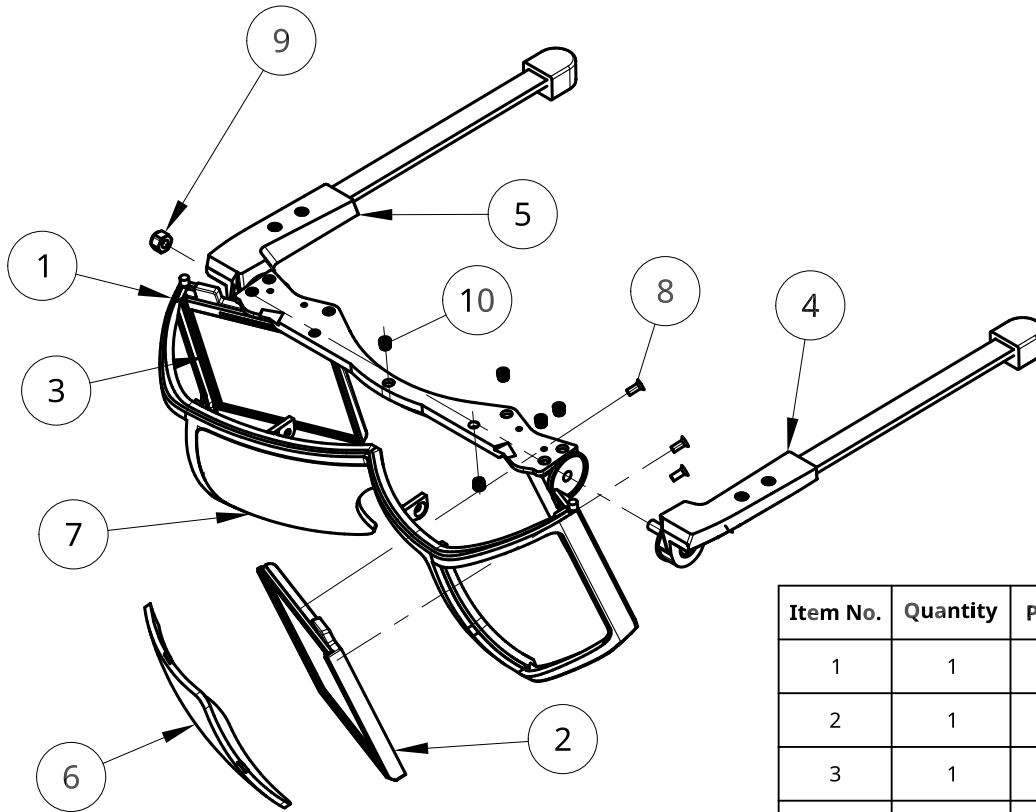
ALTERNATE CONFIGURATION

Item No.	Quantity	Part number	Description
1	1	#110-000	HINGED OPTICS BRACKET ASSM.
2	1	#115-000	FACIAL INTERFACE ASSM.
3	1	#120-000	HALO ELECTRONICS MODULE ASSM.
4	1	#130-000	SIMPLIFIED OPTICS MODULE ASSM.
5	2	#640-001	M2.5x0.45 6mm LONG STEEL FLAT HEAD SCREW 90 DEG CS

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS		NAME		DATE		Project: North Star	
ANGULAR = ± °		DRAWN	FLORIAN MAURER	01/15/2019		TITLE OPTICS ASSM.	
SURFACE FINISH		CHECKED	JOHNATHON SELSTAD	01/15/2019			
DO NOT SCALE DRAWING		APPROVED	DAVID HOLZ	01/15/2019			
BREAK ALL SHARP EDGES AND REMOVE BURRS		LAST REVISION	FLORIAN MAURER	03/08/2019			
THIRD ANGLE PROJECTION		MATERIAL		FINISH		SIZE A	DWG NO. #100-000
						SCALE 1:3	WEIGHT
						SHEET 1 of 1	
						REV. 2	

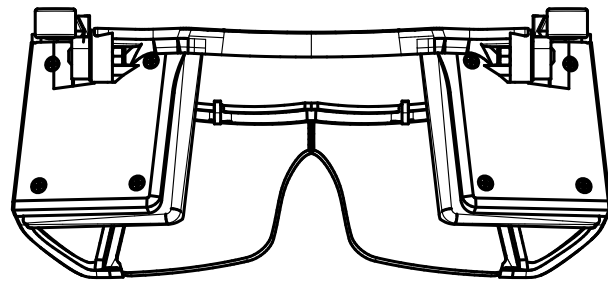
2

1



SCALE 1:4

Item No.	Quantity	Part number	Description
1	1	#110-001	OPTICS BRACKET MAIN BODY - 3DPRINT
2	1	#111-000	LEFT DISPLAY ASSM.
3	1	#112-000	RIGHT DISPLAY ASSM.
4	1	#113-000	LEFT ROT. SLIDE MOUNT ASSM.
5	1	#114-000	RIGHT ROT. SLIDE MOUNT ASSM.
6	1	#500-001	LEFT REFLECTOR
7	1	#500-002	RIGHT REFLECTOR
8	8	#640-001	M2.5x0.45 6mm LONG STEEL FLAT HEAD SCREW 90 DEG CS
9	2	#660-001	M4x0.7mm ZINC PLATED NYLON INSERT HEX LOCK NUT
10	9	#690-001	M2.5x0.45 3.4mm LONG HEAT-SET INSERT FOR PLASTICS



BACK
SCALE 1:4

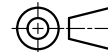
UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE IN MILLIMETERS
ANGULAR = ± °

SURFACE FINISH $\sqrt{\quad}$

DO NOT SCALE DRAWING

BREAK ALL SHARP EDGES AND
REMOVE BURRS

THIRD ANGLE PROJECTION

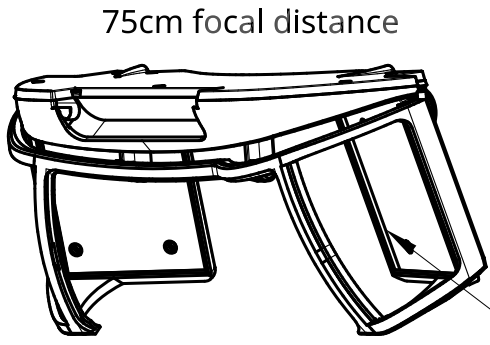


	NAME	DATE
DRAWN	FLORIAN MAURER	01/14/2019
CHECKED	JOHNATHON SELSTAD	01/15/2019
APPROVED	DAVID HOLZ	01/15/2019

Project: North Star

TITLE
HINGED OPTICS BRACKET ASSM.

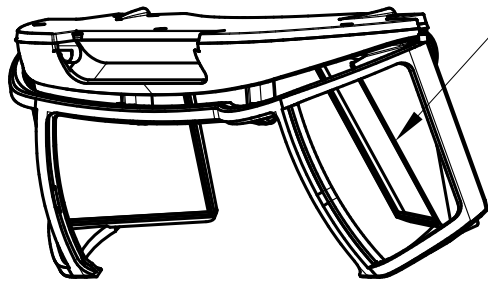
SIZE	DWG NO.	REV.
A	#110-000	1
SCALE 1:3	WEIGHT	SHEET 1 of 1



75cm focal distance

SCALE 1:3

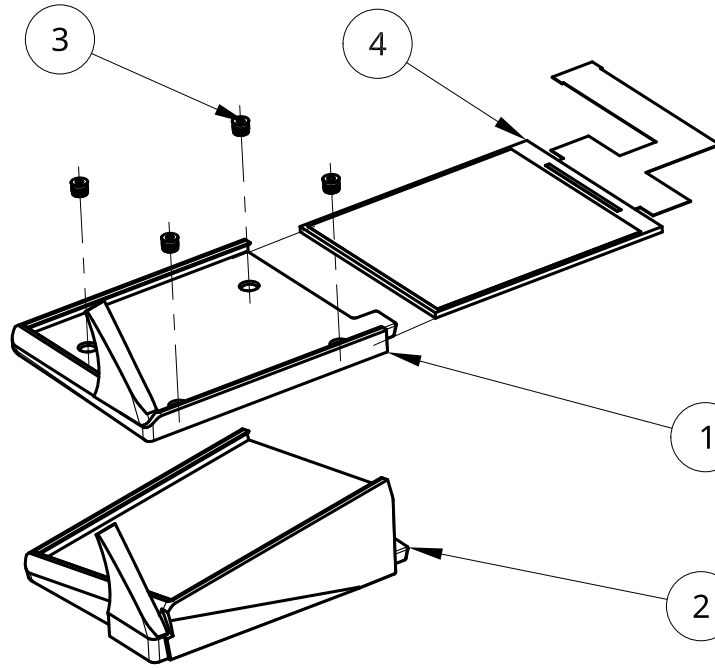
1



25cm focal distance

SCALE 1:3

2



SCALE 1:2

NOTES:

1) Select either Item 1 or 2

2) Repeat for mirror assembly on right side

Item No.	Quantity	Part number	Description
1	1	#111-001	LEFT DISPLAY TRAY - 75cm FOCAL - 3DPRINT
2	1	#111-002	LEFT DISPLAY TRAY - 25cm FOCAL - 3DPRINT
3	4	#690-001	M2.5x0.45 3.4mm LONG HEAT-SET INSERT FOR PLASTICS
4	1	#700-002	BOE 3.5-in VS035ZSM-NW0 120HZ LTPS 1440*1600 Module

UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE IN MILLIMETERS

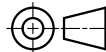
ANGULAR = ± °

SURFACE FINISH

DO NOT SCALE DRAWING

BREAK ALL SHARP EDGES AND
REMOVE BURRS

THIRD ANGLE PROJECTION



NAME

DATE

DRAWN

FLORIAN MAURER

01/09/2019

CHECKED

JOHNATHON SELSTAD

01/15/2019

APPROVED

DAVID HOLZ

01/15/2019

Project: North Star

TITLE

LEFT DISPLAY ASSM.

SIZE

A

DWG NO.

#111-000

REV.

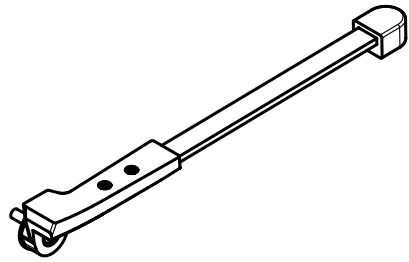
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SCALE 1:1

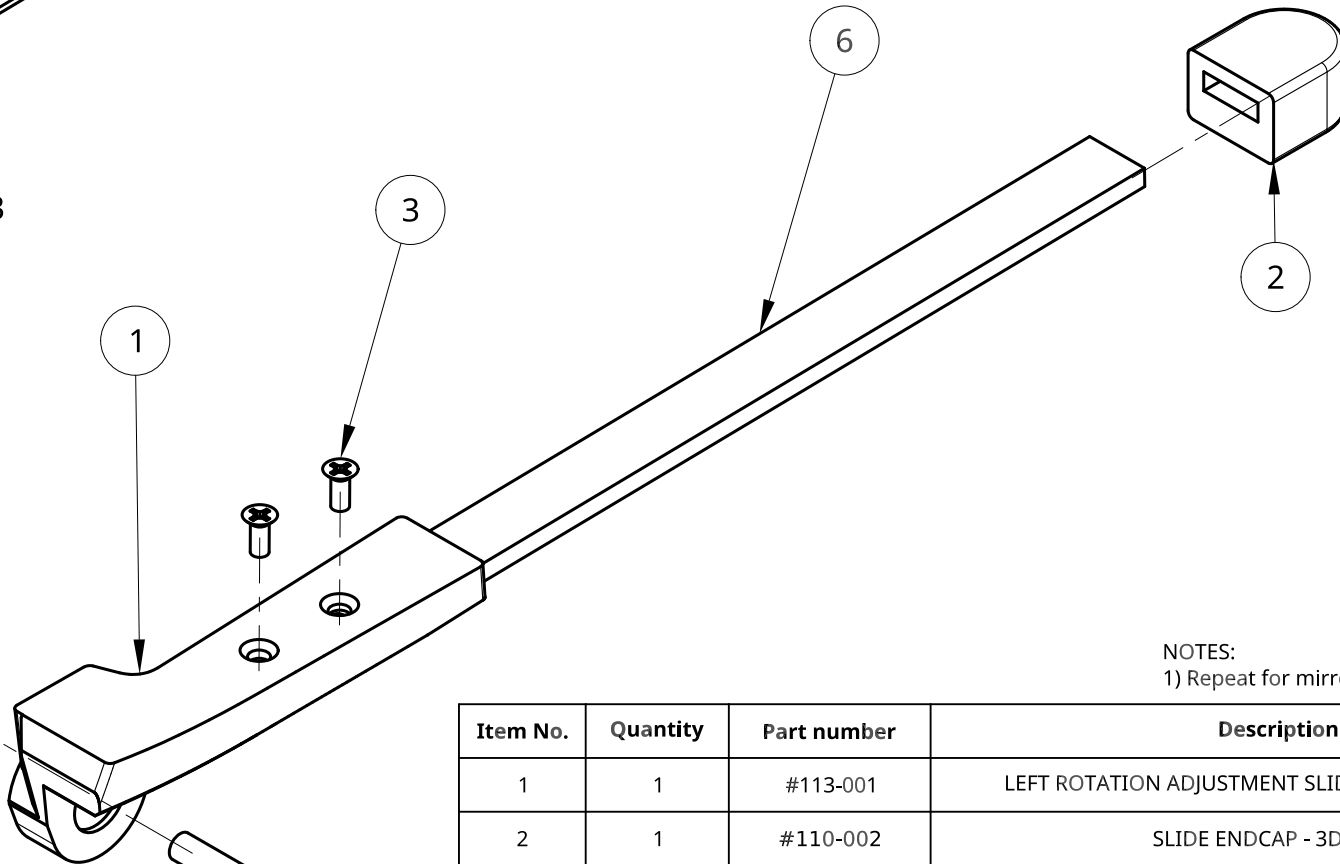
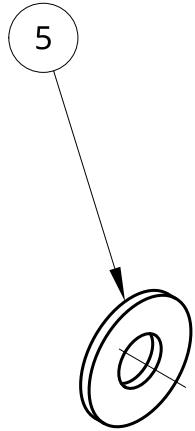
WEIGHT

SHEET

1 of 1





SCALE 1:3



NOTES:
1) Repeat for mirror assembly on right side

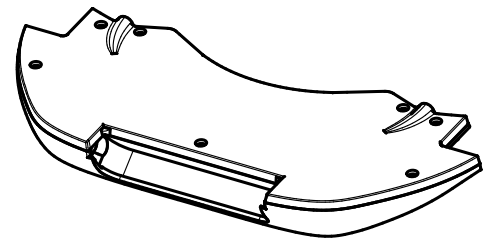
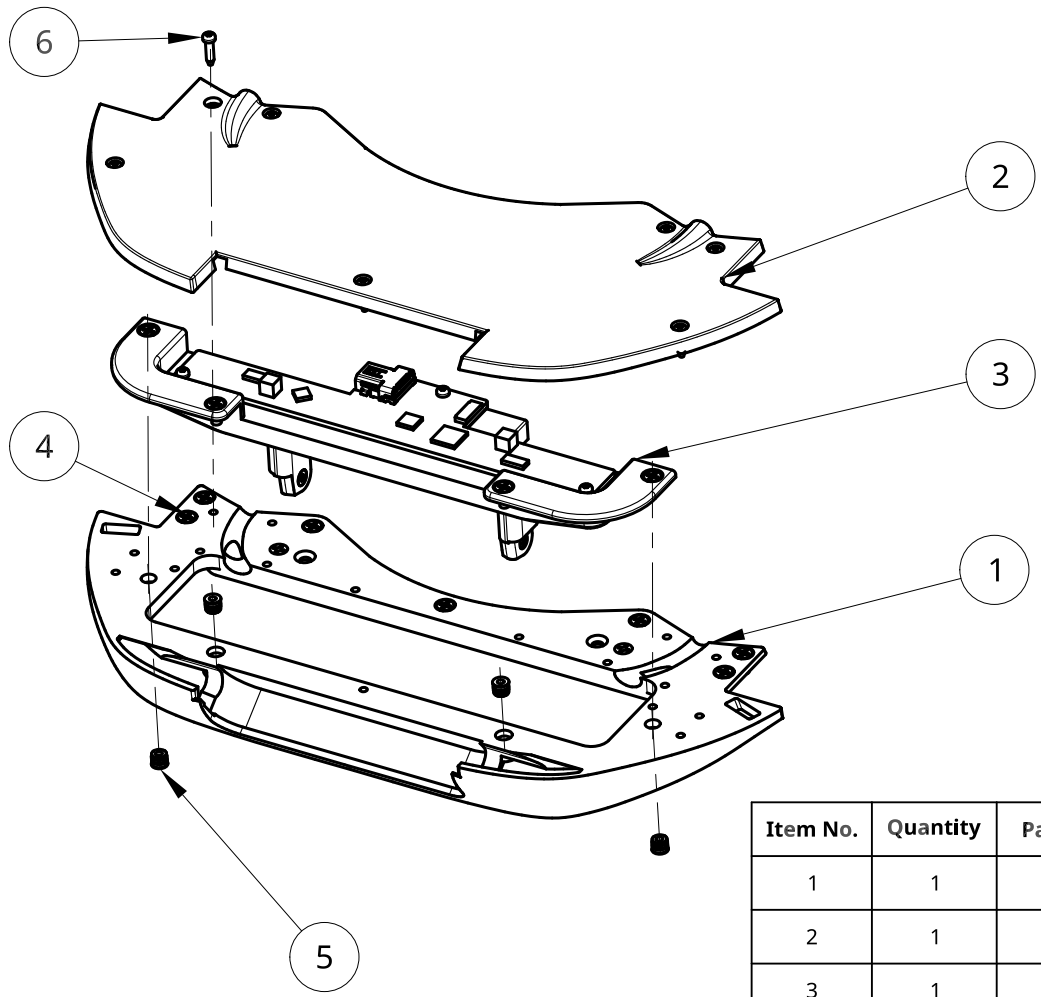
Item No.	Quantity	Part number	Description
1	1	#113-001	LEFT ROTATION ADJUSTMENT SLIDE MOUNT - 3DPRINT
2	1	#110-002	SLIDE ENDCAP - 3DPRINT
3	2	#640-001	M2.5x0.45 6mm LONG STEEL FLAT HEAD SCREW 90 DEG CS
4	1	#640-002	M4x0.7 20mm STEEL BUTTON HEAD SOCKET SCREW
5	1	#670-001	5/16 ID x 3/4 OD x 1/16in NEOPRENE WASHER
6	1	#900-005	3x10x165mm 6061 AL. BAR SLIDE

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS ANGULAR = ± ° SURFACE FINISH  DO NOT SCALE DRAWING BREAK ALL SHARP EDGES AND REMOVE BURRS THIRD ANGLE PROJECTION 	DRAWN	FLORIAN MAURER	01/08/2019
	CHECKED	JOHNATHON SELSTAD	01/15/2019
	APPROVED	DAVID HOLZ	01/15/2019
	MATERIAL		

Project: North Star			
TITLE LEFT ROT. SLIDE MOUNT ASSM.			
SIZE A	DWG NO. #113-000	REV. 1	
SCALE 1:1	WEIGHT	SHEET 1 of 1	

2

1



SCALE 1:3

- NOTES:
 1) Install item 2 after fastening items 4
 2) Use items 4 for fastening to parent assembly

Item No.	Quantity	Part number	Description
1	1	#120-001	HALO MAIN BODY - 3DPRINT
2	1	#120-002	HALO LID - 3DPRINT
3	1	#121-000	ELECTRONICS BAY ASSM.
4	9	#640-001	M2.5x0.45 6mm LONG STEEL FLAT HEAD SCREW 90 DEG CS
5	4	#690-001	M2.5x0.45 3.4mm LONG HEAT-SET INSERT FOR PLASTICS
6	7	#650-001	M2x8mm LONG THREAD-FORMING SCREWS FOR PLASTIC

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS		NAME	DATE	Project : North Star	
ANGULAR = ± °	DRAWN	FLORIAN MAURER	01/09/2019	TITLE HALO ELECTRONICS MODULE ASSM.	
SURFACE FINISH	CHECKED	JOHNATHON SELSTAD	01/15/2019		
DO NOT SCALE DRAWING	APPROVED	DAVID HOLZ	01/15/2019		
BREAK ALL SHARP EDGES AND REMOVE BURRS	MATERIAL		FINISH	SIZE	DWG NO.
THIRD ANGLE PROJECTION				A	#120-000
				SCALE	WEIGHT
				1:2	
				SHEET	REV.
				1 of 1	1

2

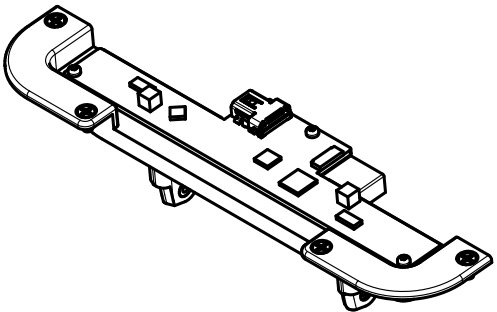
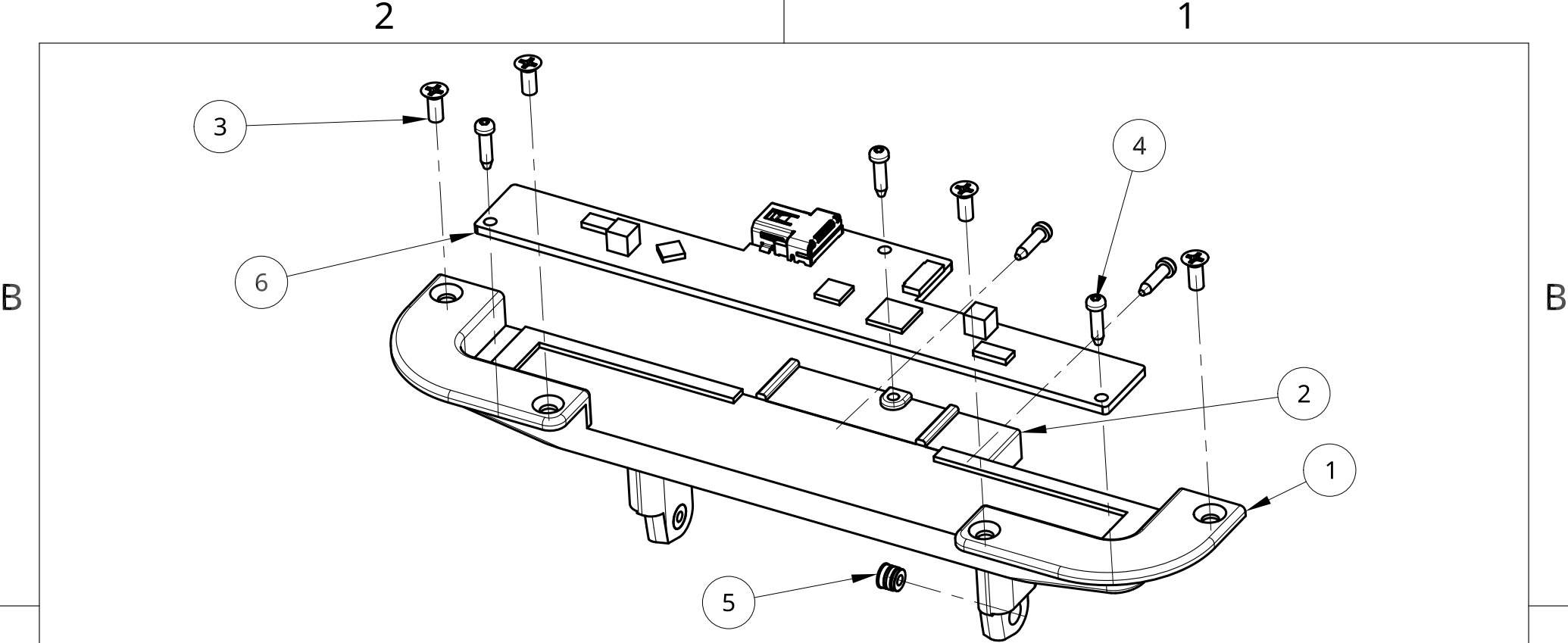
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B

B

A

A



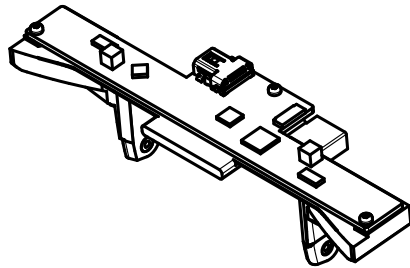
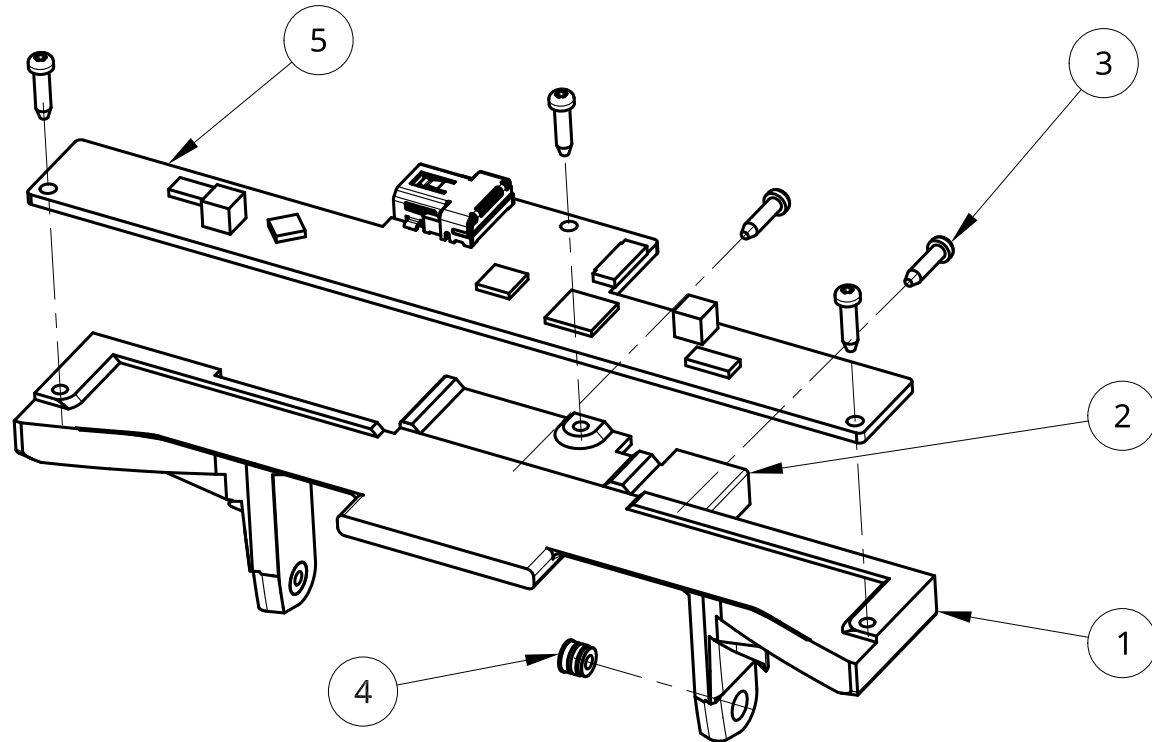
SCALE 1:2

Item No.	Quantity	Part number	Description
1	1	#121-001	HALO ELECTRONICS HOLDER - 3DPRINT
2	1	#121-002	HALO ELECTRONICS DP PORT HOLDER - 3DPRINT
3	4	#640-001	M2.5x0.45 6mm LONG STEEL FLAT HEAD SCREW 90 DEG CS
4	5	#650-001	M2x8mm LONG THREAD-FORMING SCREWS FOR PLASTIC
5	2	#690-001	M2.5x0.45 3.4mm LONG HEAT-SET INSERT FOR PLASTICS
6	1	#800-001	DISPLAY DRIVER BOARD

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS		NAME	DATE	Project: North Star	
ANGULAR = ± °	DRAWN	FLORIAN MAURER	01/09/2019	TITLE ELECTRONICS BAY ASSM	
SURFACE FINISH	CHECKED	JOHNATHON SELSTAD	1/15/2019		
DO NOT SCALE DRAWING	APPROVED	DAVID HOLZ	01/15/2019		
BREAK ALL SHARP EDGES AND REMOVE BURRS	MATERIAL		FINISH	SIZE	DWG NO.
THIRD ANGLE PROJECTION				A	#121-000
				SCALE	WEIGHT
				1:1	
				SHEET	1 of 1
				REV.	1

2

1



SCALE 1:2

Item No.	Quantity	Part number	Description
1	1	#131-001	SIMPLIFIED DRIVER BOARD MOUNT - 3DPRINT
2	1	#131-002	SIMPLIFIED DP PORT HOLDER - 3DPRINT
3	5	#650-001	M2x8mm LONG THREAD-FORMING SCREWS FOR PLASTIC
4	2	#690-001	M2.5x0.45 3.4mm LONG HEAT-SET INSERT FOR PLASTICS
5	1	#800-001	DISPLAY DRIVER BOARD

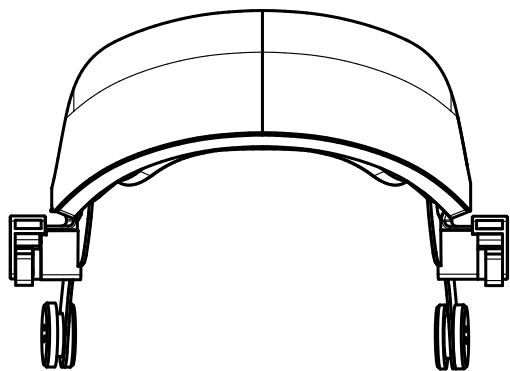
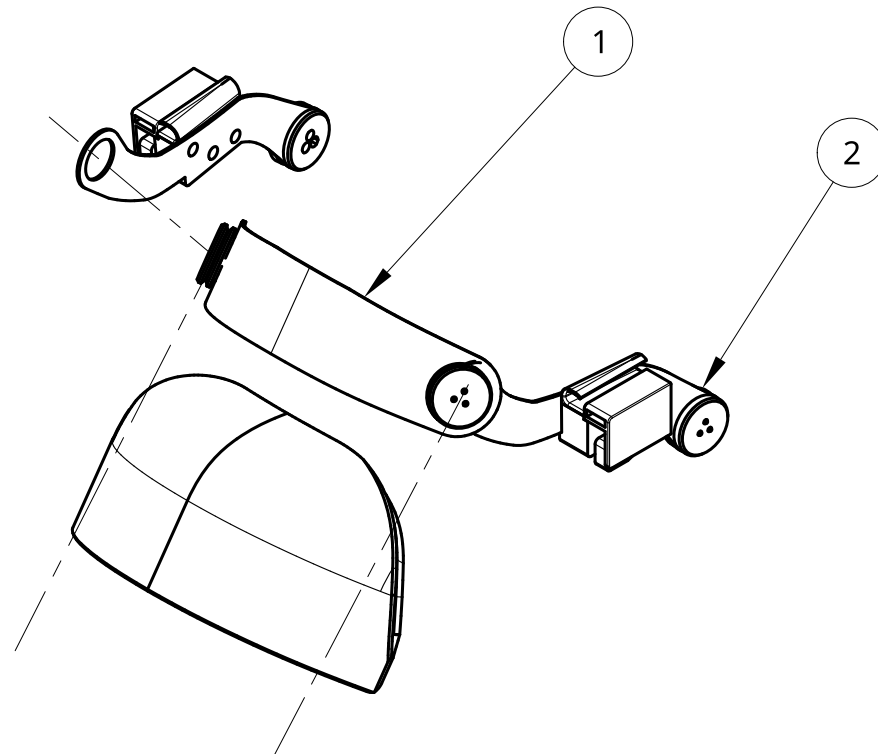
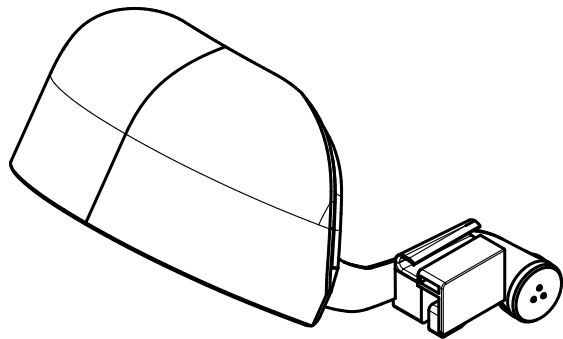
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS		NAME	DATE	Project: North Star	
ANGULAR = ± °	DRAWN	FLORIAN MAURER	01/09/2019	TITLE SIMPLIFIED ELECTRONICS BAY ASSM	
SURFACE FINISH	CHECKED	JOHNATHON SELSTAD	1/15/2019		
DO NOT SCALE DRAWING	APPROVED	DAVID HOLZ	01/15/2019		
BREAK ALL SHARP EDGES AND REMOVE BURRS	LAST REVISION	FLORIAN MAURER	03/08/2019		
THIRD ANGLE PROJECTION	MATERIAL	FINISH	SIZE	DWG NO.	REV.
			A	#131-000	1
			SCALE	WEIGHT	SHEET
			1:1		1 of 1

2

1

2

1



Item No.	Quantity	Part number	Description
1	1	#210-000	PADDED FOREHEAD ASSM.
2	1	#230-000	LEFT BRAKE ASSM.
3	1	#240-000	RIGHT BRAKE ASSM.

UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE IN MILLIMETERS
ANGULAR = ± °

SURFACE FINISH

DO NOT SCALE DRAWING

BREAK ALL SHARP EDGES AND
REMOVE BURRS

THIRD ANGLE PROJECTION



	NAME	DATE
DRAWN	FLORIAN MAURER	01/15/2019
CHECKED	JOHNATHON SELSTAD	01/15/2019
APPROVED	DAVID HOLZ	01/15/2019

MATERIAL	FINISH

Project: North Star

TITLE

HEADGEAR ASSM.

SIZE
A

DWG. NO.

#200-000

REV. **1**

SCALE **1:3**

WEIGHT

SHEET

1 of 1

2

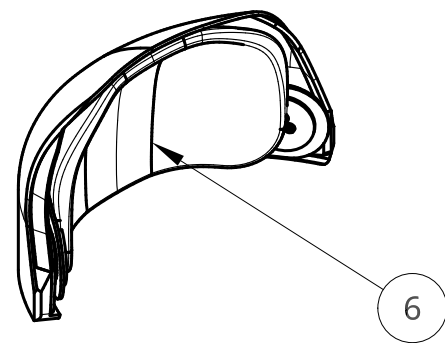
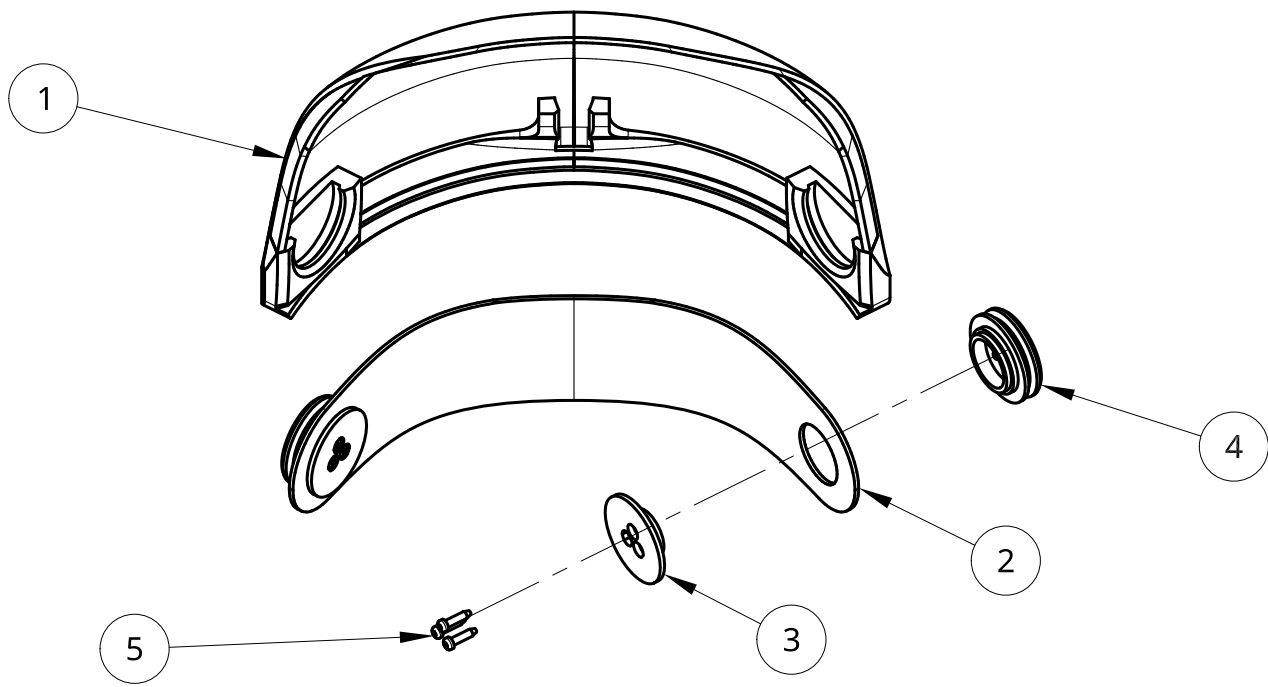
1

B

A

2

1



SCALE 1:3

Item No.	Quantity	Part number	Description
1	1	#210-001	FOREHEAD MAIN STRUCTURE - 3DPRINT
2	1	#210-002	FOREHEAD HEADGEAR SPAN - 3DPRINT
3	2	#210-003	FOREHEAD HINGE CAP - 3DPRINT
4	2	#210-004	FOREHEAD HINGE BASE - 3DPRINT
5	6	#650-001	M2x8mm LONG THREAD-FORMING SCREWS FOR PLASTIC
6	1	#900-003	FOAM FOREHEAD PADDING

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS ANGULAR = ± ° SURFACE FINISH	DRAWN	FLORIAN MAURER	01/09/2019	Project: North Star TITLE PADDED FOREHEAD ASSM.
	CHECKED	JOHNATHON SELSTAD	01/15/2019	
	APPROVED	DAVID HOLZ	01/15/2019	
	DO NOT SCALE DRAWING			
BREAK ALL SHARP EDGES AND REMOVE BURRS				
THIRD ANGLE PROJECTION	MATERIAL	FINISH		SIZE A DWG NO. #210-000 REV. 1
				SCALE 1:2 WEIGHT SHEET 1 of 1

2

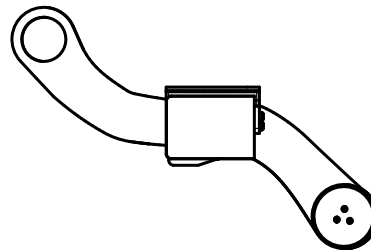
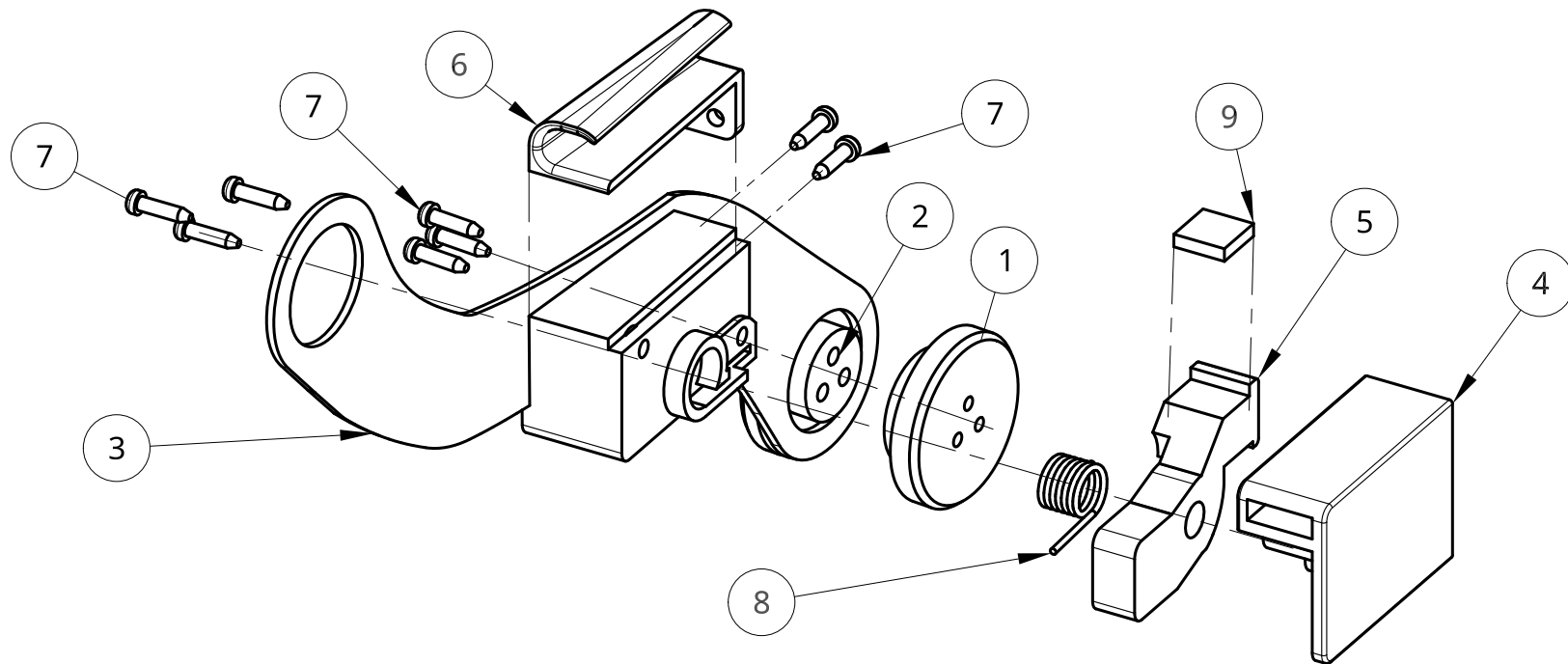
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B

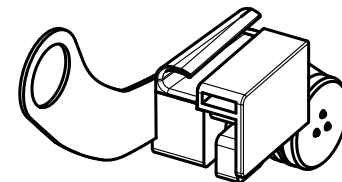
B

A

A



SCALE 1:3



SCALE 1:2

NOTES:
1) Repeat for mirror assembly on right side

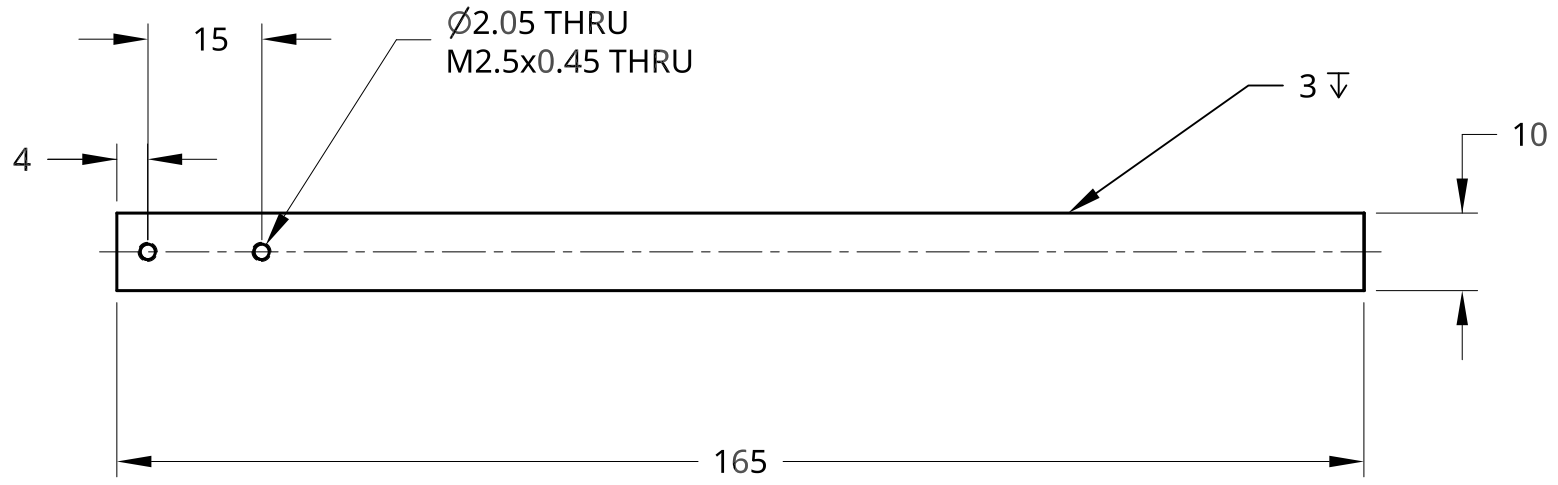
Item No.	Quantity	Part number	Description
1	1	#220-001	REAR HINGE BASE 3DPRINT
2	1	#220-002	REAR HINGE CAP 3DPRINT
3	1	#230-001	LEFT SIDE MAIN SPAN WITH SLIDE BRAKE - 3DPRINT
4	1	#230-002	LEFT BRAKE HOUSING - 3DPRINT
5	1	#230-003	LEFT BRAKE BUTTON - 3DPRINT
6	1	#230-004	LEFT CABLE GUIDE - 3DPRINT
7	8	#650-001	M2x8mm LONG THREAD-FORMING SCREWS FOR PLASTIC
8	1	#630-001	0.304-in OD TORSION SPRING 180 DEG. L-HAND WOUND
9	1	#900-002	2mm THICK SELF-STICK ANTI-SKID RUBBER

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS		NAME	DATE
ANGULAR = ± °		DRAWN	FLORIAN MAURER 01/09/2019
SURFACE FINISH		CHECKED	JOHNATHON SELSTAD 01/15/2019
DO NOT SCALE DRAWING		APPROVED	DAVID HOLZ 01/15/2019
BREAK ALL SHARP EDGES AND REMOVE BURRS			
THIRD ANGLE PROJECTION		MATERIAL	FINISH

Project: North Star			
TITLE			
LEFT BRAKE ASSM.			
SIZE	DWG NO.	REV.	
A	#230-000	1	
SCALE	WEIGHT	SHEET	
1:1		1 of 1	



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B



A

A

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS ANGULAR = ± ° SURFACE FINISH  DO NOT SCALE DRAWING BREAK ALL SHARP EDGES AND REMOVE BURRS THIRD ANGLE PROJECTION 		NAME	DATE	Project: North Star		
	DRAWN	FLORIAN MAURER	01/15/2019	TITLE 3x10x165mm 6061 AL. BAR SLIDE		
	CHECKED	JOHNATHON SELSTAD	01/15/2019			
	APPROVED	DAVID HOLZ	01/15/2019			
	MATERIAL	FINISH	SIZE	DWG NO.	REV.	
	AI 6061	NONE	A	#900-005	1	
			SCALE	WEIGHT	SHEET	
			1:1		1 of 1	

2

1

