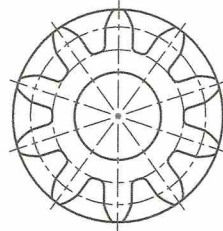
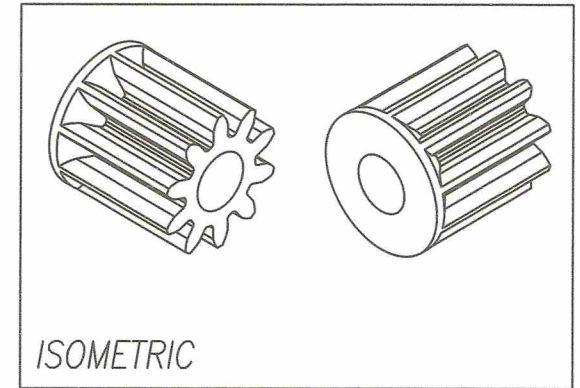
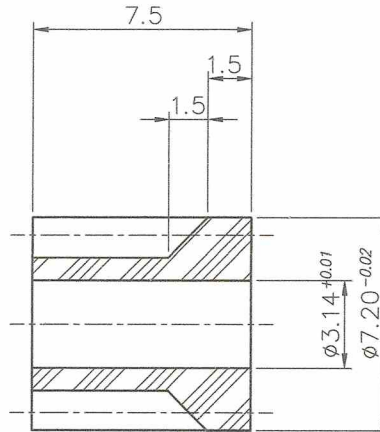


BATCH "B"



FRONT VIEW




ISOMETRIC

**20deg. PA INVOLUTE FULL-DEPTH TEETH  
SPUR GEAR**

Material: ACETAL Thermoplastic  
 Color: Blue  
 Metric Module = 0.60  
 Outside Diameter = 7.20<sup>-0.02</sup>mm  
 Pitch Diameter = 6.00mm  
 Circular Pitch = 1.88mm  
 Addendum = 0.60mm  
 Dedendum = 0.75mm  
 Whole Depth of Tooth = 1.35mm  
 Tooth Thickness at Pitch Line = 0.94mm  
 (Circular Thickness)  
 Number of Teeth = 10

- \* Dimensions are in millimeters except otherwise specified.
- \* Smoothen all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20 μm

GOVERNMENT PROPERTY

Date	SEPT 2021	Scale	NTS	
Conceptualized by				
Drawn by	B.C. Lisondra	Item Name	GEAR - B	
Designed by	J.C. Checked by	Material	Acetal Thermoplastic, Color: Natural Color	
	J.N. Arigja	File name	MC_gear B	
Recommended by	A.B. Ybañez	 <b>DepED-BLR</b>		
Approved by	R. C. La Rosa			

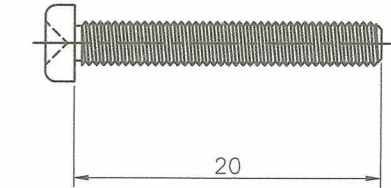
TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		± 0.10	± 0.10	± 0.20	± 0.30	± 0.50

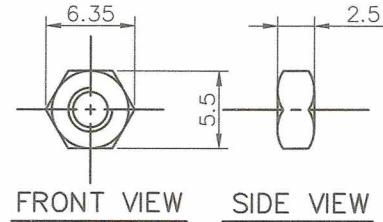
TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth Medium		± 0.20	± 0.50	± 1.00	± 2.00

SYM	REVISION	DATE	BY

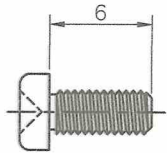
BATCH "B"



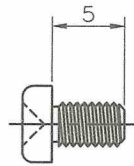
① RECESSED PAN HEAD  
SCREW – M3 x 0.5 RH  
Required: 1pc/assy  
Material: Stainless Steel, AISI 304/304L



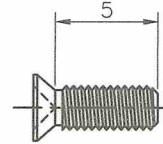
FRONT VIEW SIDE VIEW  
HEX NUT – M3 x 0.5  
Required: 1pc/assy  
Material: Stainless Steel



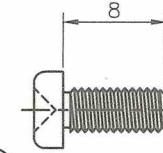
② RECESSED PAN HEAD  
SCREW – M3 x 0.5 RH  
Required: 6pcs/assy.  
Material: Stainless Steel, AISI 304/304L



③ RECESSED PAN HEAD  
SCREW – M3 x 0.5 RH  
Required: 4pcs/assy.  
Material: Stainless Steel, AISI 304/304L



④ COUNTERSUNK FLAT HEAD  
SCREW – M2 x 0.4  
Required: 4pcs/assy.  
Material: Stainless Steel, AISI 304/304L



⑤ RECESSED PAN HEAD  
SCREW – M3 x 0.5 RH  
Required: 6pcs/assy.  
Material: Stainless Steel, AISI 304/304L

\* Dimensions are in millimeters  
except otherwise specified.  
\* File all sharp edges.


GOVERNMENT PROPERTY

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		± 0.10	± 0.10	± 0.20	± 0.30	± 0.50

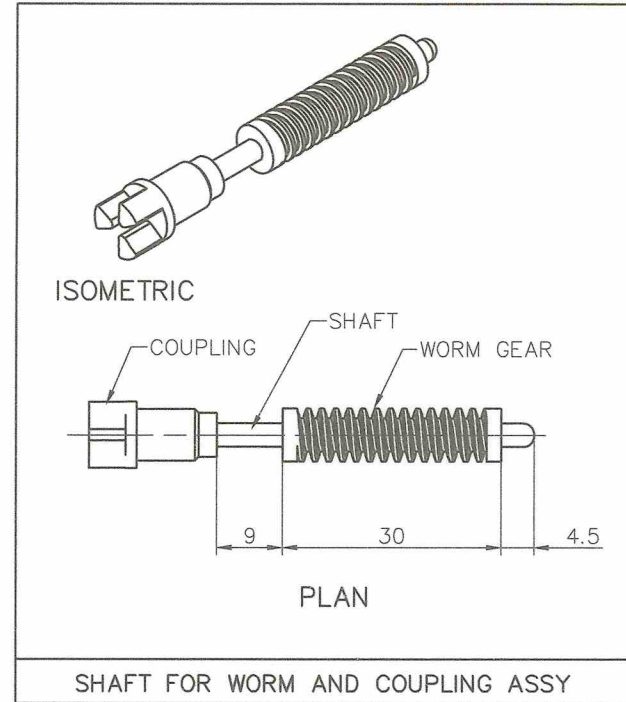
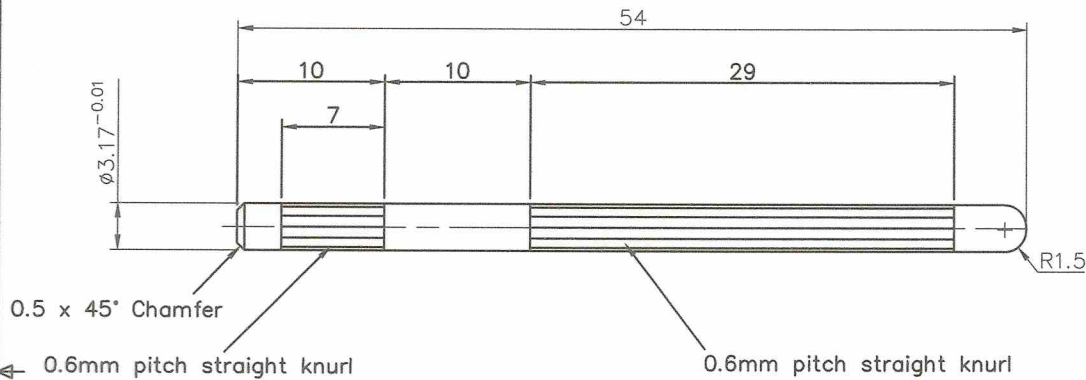
  

TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		± 0.20	± 0.50	± 1.00	± 2.00
Medium					

SYM	REVISION	DATE	BY

Date	SEPT 2021	Scale	NTS	<b>MOTORIZED CART</b>	
Conceptualized by					
Drawn by	B.C. Lisondra	Q.C. Checked by	J.N. Arioja	(SCREW - MARKET ITEMS)	
Designed by				Material	File name
Recommended by	A.B. Ybanez	(AS SHOWN ABOVE))			MC_screwsmarket
Approved by	R. C. La Rosa	 <b>DepED-BLR</b>			

BATCH "B"



Note: Molded-in to the Worm and Worm-Shaft Coupling

### SHAFT FOR WORM


- \* Dimensions are in millimeters except otherwise specified.
- \* File all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20  $\mu$ m

GOVERNMENT PROPERTY

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$	$\pm 0.50$

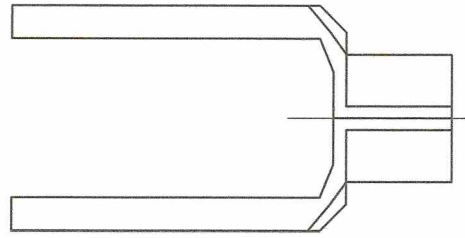
TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$
Medium					

Date	SEPT 2021	Scale	NTS	<b>MOTORIZED CART</b>	
Conceptualized by					
Drawn by	B.C. Lisondra	Item Name	SHAFT FOR WORM	Sheet	
Designed by		Q.C. Checked by	J.N. Arriola	Material	$\varnothing$ 3.175mm (1/8") Stainless Steel, AISI 304/304L
Recommended by	A.B. Ybanez	File name	MC_shaft4worm	 <b>DepED-BLR</b>	
Approved by	R. C. La Rosa				

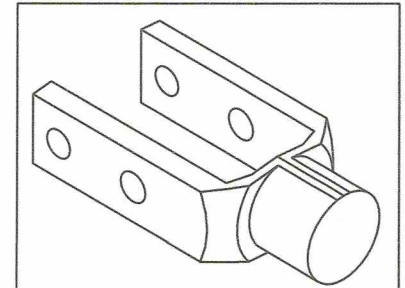
SYM REVISION DATE BY



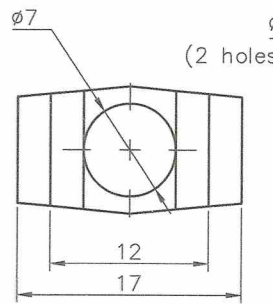
BATCH "B"



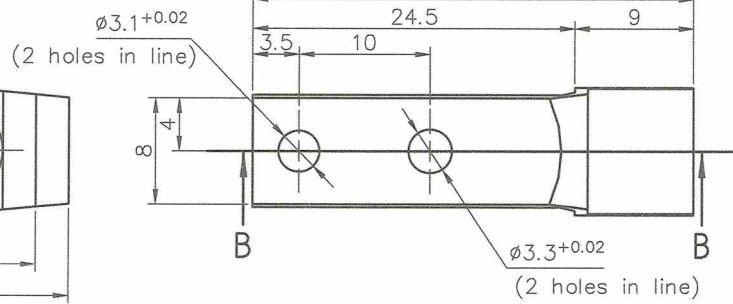
TOP VIEW



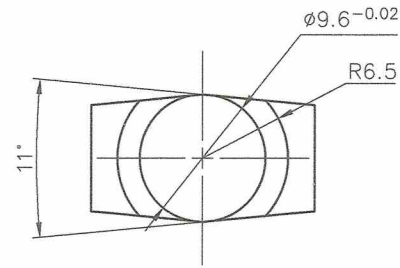
ISOMETRIC



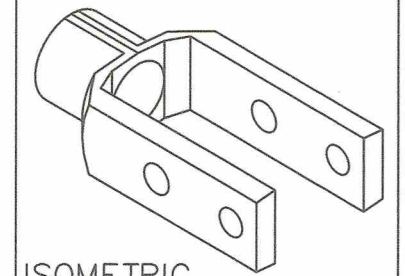
L-SIDE VIEW



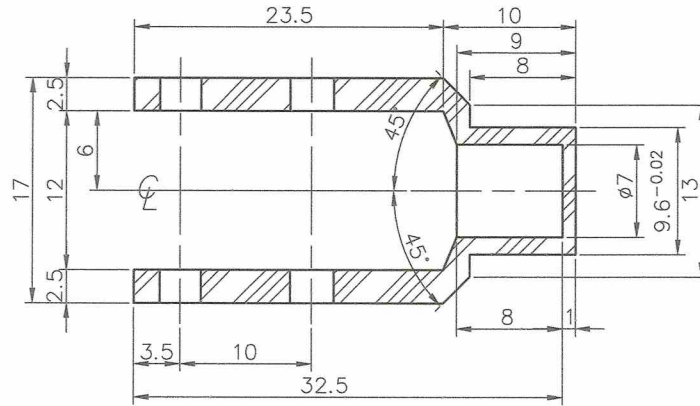
FRONT VIEW



R-SIDE VIEW



ISOMETRIC



SECTION "B-B"

- \* Dimensions are in millimeters except otherwise specified.
- \* Smoothen all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20 μm


GOVERNMENT PROPERTY

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		± 0.10	± 0.10	± 0.20	± 0.30	± 0.50

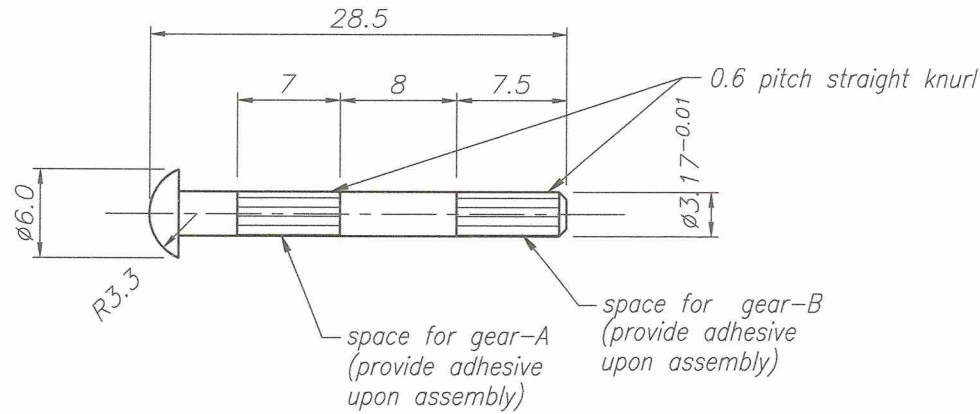
  

TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		± 0.20	± 0.50	± 1.00	± 2.00
Medium					

SYM	REVISION	DATE	BY

Date	SEPT 2021	Scale	NTS	<b>MOTORIZED CART</b>	
Conceptualized by					
Drawn by	B.C. Lisondra	Item Name	TRANSMISSION GEAR BRACKET		Sheet
Designed by	J.N. Arioja	Material	ABS Thermoplastic, Color: Blue		File name MC_transGbracket
Recommended by	A.B. Ybanez	 <b>DepED-BLR</b>			
Approved by	R. C. La Rosa				


BATCH "B"



\*Use "ARALDITE" rapid (high performance)  
Epoxy Adhesive (CIBA-GEIGY)

- \* Dimensions are in millimeters except otherwise specified.
- \* File all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20  $\mu\text{m}$

GOVERNMENT PROPERTY

Date	SEPT 2021	Scale	NTS	
Conceptualized by				
Drawn by	B.C. Lisondra	Item Name	TRANSMISSION GEAR PIN	
Designed by		Material	Stainless Steel, AISI 304/304L	File name MC_transGpin
QC Checked by	J.N. Arioja	 <b>DepED-BLR</b>		
Recommended by	A.B. Ybanez			
Approved by	R. C. La Rosa			

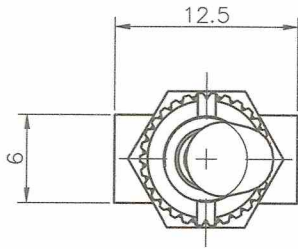
TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		± 0.10	± 0.10	± 0.20	± 0.30	± 0.50

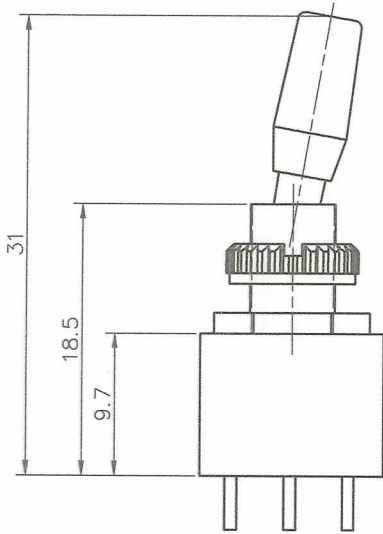
TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth Medium		± 0.20	± 0.50	± 1.00	± 2.00

SYM	REVISION	DATE	BY

BATCH "B"

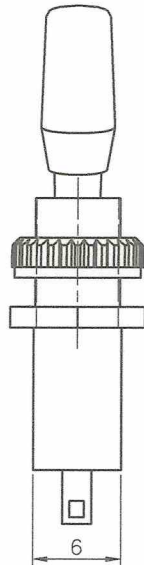


TOP VIEW



FRONT VIEW

MICRO TOGGLE SWITCH  
PARTICULARS : KNX-1  
3A, 250VAC



SIDE VIEW

ISOMETRIC

Item	Name	Description	Qty
6	LEVER SWITCH	Metal, chrome plated	1
5	RUBBER CAP	Black rubber cap/insulator	1
4	LOCK NUT	Metal, chrome plated	1
3	SPACER	Metal, chrome plated	1
2	HEX NUT	Metal, chrome plated	1
1	BODY	Plastic body with metal casing	1

Parts List

\*Dimensions are in millimeters except otherwise specified.  
\*Smoothen sharp edges.

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		± 0.10	± 0.10	± 0.20	± 0.30	± 0.50

TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		± 0.20	± 0.50	± 1.00	± 2.00
Medium					

SYM	REVISION	DATE	BY

Date	SEPT 2021	Scale	NTS
Conceptualized by			
Drawn by	B.C. Lisondra	Checked by	J.N. Arioja
Designed by			
Recommended by	A.B. Ybanez		
Approved by	R. C. La Rosa		

GOVERNMENT PROPERTY

## MOTORIZED CART

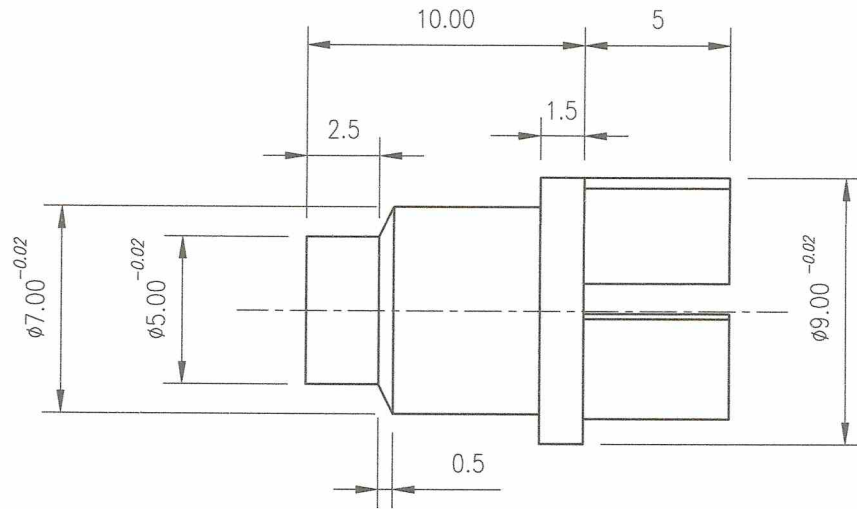
Item Name	MICRO TOGGLE SWITCH	Sheet	
Material	(MARKET ITEM)	File name	MC_toggleswitch

**DepED-BLR**

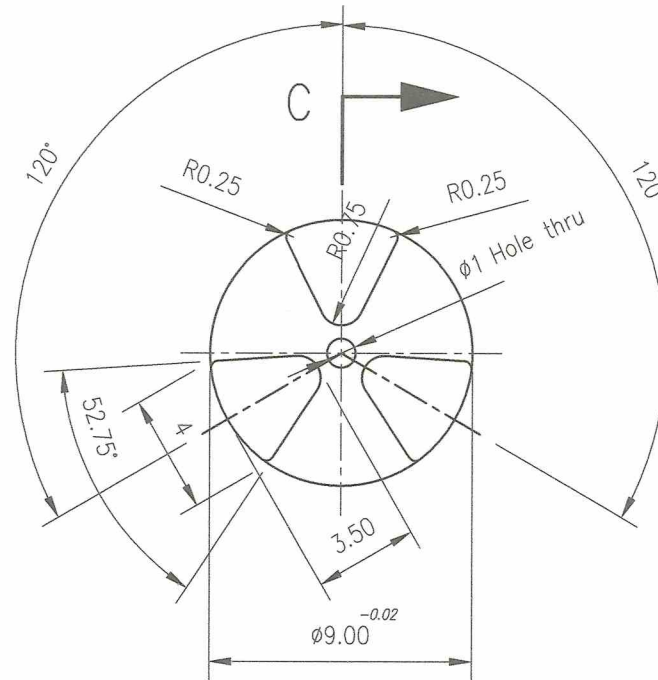




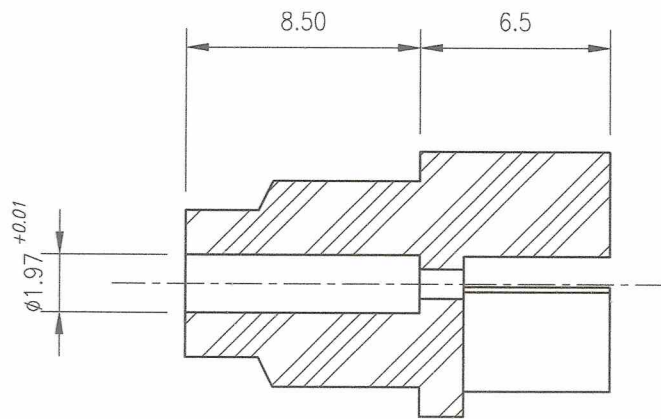
BATCH "B"



SIDE VIEW



FRONT VIEW



VIEW C-C

- \* Dimensions are in millimeters except otherwise specified.
- \* Smoothen all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20 μm


TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		± 0.10	± 0.10	± 0.20	± 0.30	± 0.50

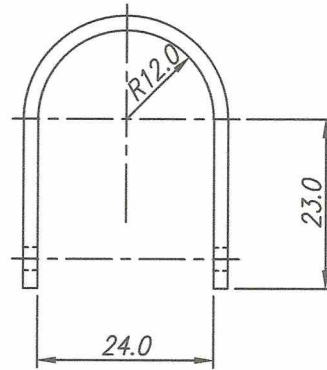
TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		± 0.20	± 0.50	± 1.00	± 2.00
Medium					

SYM	REVISION	DATE	BY

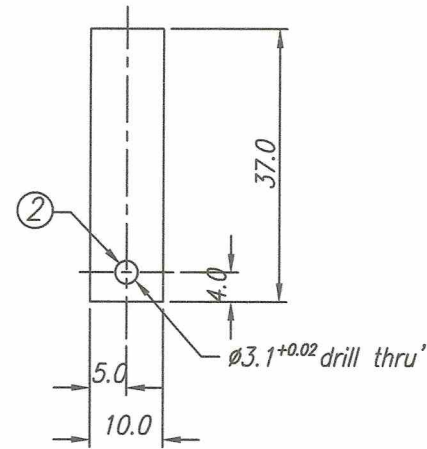
GOVERNMENT PROPERTY

Date	SEPT 2021	Scale	NTS	<b>MOTORIZED CART</b>	
Conceptualized by					
Drawn by	B.C. Lisondra	Checked by	J.N. Ariojas	Material	Acetal Thermoplastic, Color: White
Designed by				File name	MC_mcoupling
Recommended by	A.B. Ybanez			 <b>DepED-BLR</b>	
Approved by	R. C. La Rosa				

BATCH "B"



FRONT VIEW



SIDE VIEW

- \* Dimensions are in millimeters except otherwise specified.
- \* File all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20  $\mu$ m


GOVERNMENT PROPERTY

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$	$\pm 0.50$

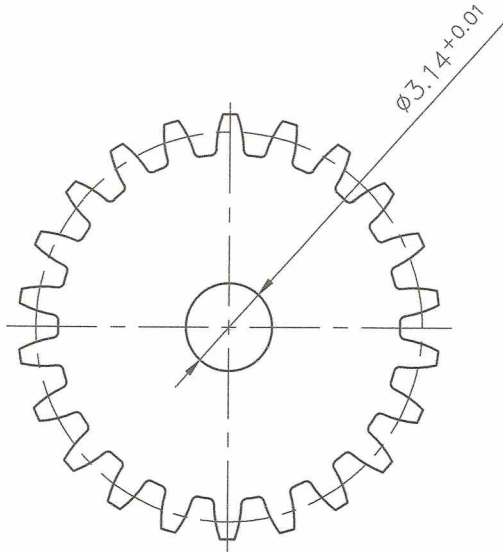
TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$
Medium					

SYM	REVISION	DATE	BY

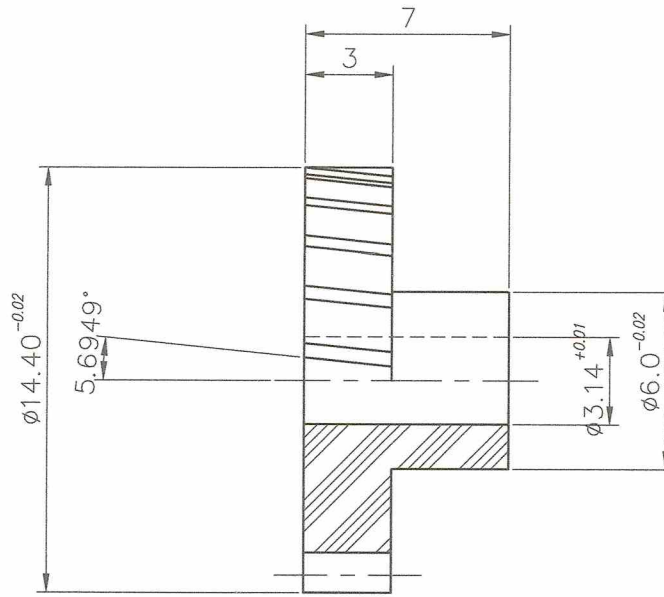
Date	SEPT 2021	Scale	NTS	<b>MOTORIZED CART</b>	
Conceptualized by					
Drawn by	B.C. Lisondra	Item Name	MOTOR BRACKET	Sheet	
Designed by		Material	2mm thk. Aluminum Plate, AA1095 or its equivalent	File name MC_mbracket	
Recommended by	J.N. Arioja	 <b>DepED-BLR</b>			
Approved by	R. C. La Rosa				



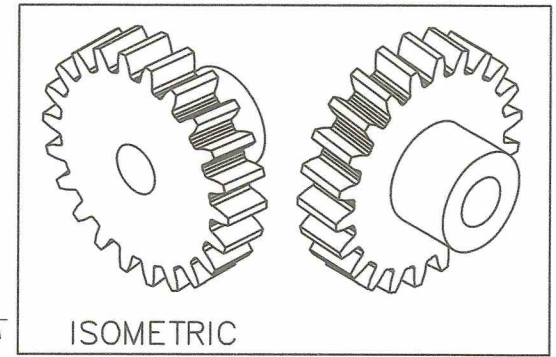
BATCH "B"



FRONT VIEW



HALF-SECTION VIEW



20deg. NORMAL P. A., 22 TEETH  
WORM GEAR

---

Material = ACETAL Thermoplastic  
 Circular Pitch = 1.88mm  
 Outside Diameter =  $14.40^{-0.02}$ mm  
 Pitch Diameter = 13.20mm  
 Addendum = 0.60mm  
 Whole Depth of Tooth = 1.36mm  
 Normal Tooth Thickness (@ pitch line) = 0.935mm  
 Normal Circular Pitch = 1.87mm  
 Helix Angle = 5.6949 deg.

- \* Dimensions are in millimeters except otherwise specified.
- \* Smoothen all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20  $\mu$ m


GOVERNMENT PROPERTY

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$	$\pm 0.50$

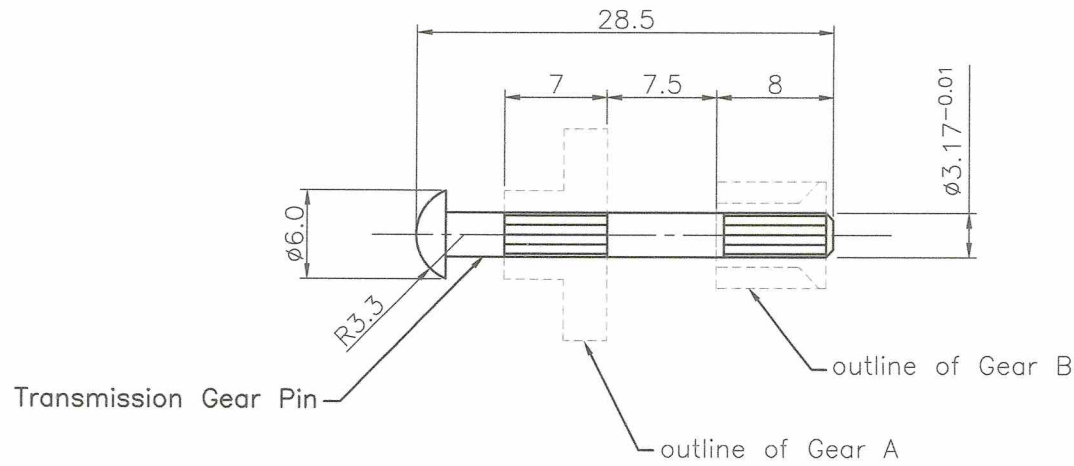
  

TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$
Medium					

SYM	REVISION	DATE	BY

Date	SEPT 2021	Scale	NTS	<b>MOTORIZED CART</b>	
Conceptualized by					
Drawn by	B.C. Lisondra	Item Name	GEAR - A	Sheet	
Designed by	J.C. Checked by	Material	Acetal Thermoplastic, Color: Natural Color	File name MC_gear A	
Recommended by	A.B. Ybañez	 <b>DepED-BLR</b>			
Approved by	R. C. La Rosa				

BATCH "B"



Note: The positioning of the gears as shown above is very important.

- \* Dimensions are in millimeters except otherwise specified.
- \* File all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20  $\mu$ m

GOVERNMENT PROPERTY


TOLERANCES FOR LENGTH GAUGING

Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$	$\pm 0.50$

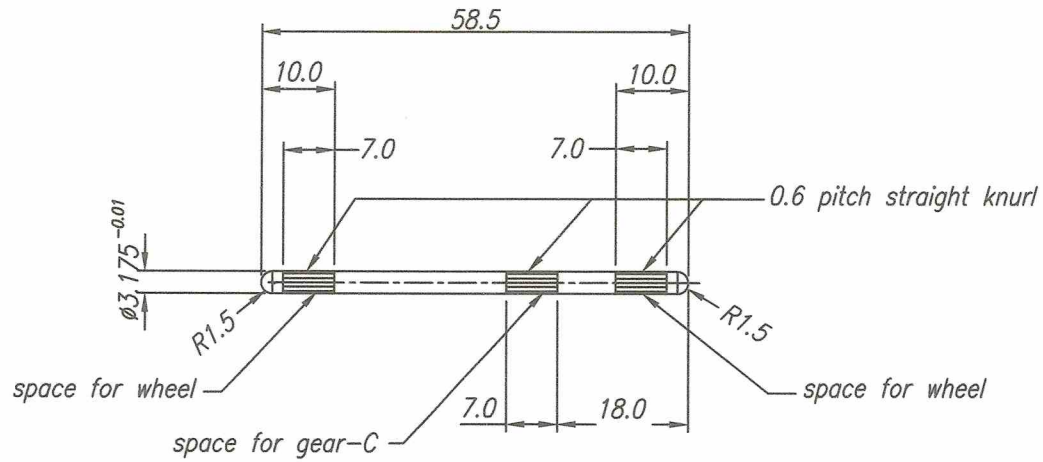
TOLERANCES FOR RADIUS & CHAMFERS

Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth Medium		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$

SYM	REVISION	DATE	BY

Date SEPT 2021	Scale NTS	<b>MOTORIZED CART</b>	
Conceptualized by			
Drawn by B.C. Lisondra		Item Name Trans Gear Pin, Gear A, and Gear B Assy	Sheet
Designed by		Material	File name MC_transGpinassy
QC Checked by J.N. Ariola		 <b>DepED-BLR</b>	
Recommended by A.B. Ybanez			
Approved by R. C. La Rosa			


BATCH "B"



Note: Molded-in to Gear C and Wheels

- \* Dimensions are in millimeters except otherwise specified.
- \* File all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20  $\mu\text{m}$

GOVERNMENT PROPERTY

Date	SEPT 2021	Scale	NTS	<b>MOTORIZED CART</b>	
Conceptualized by					
Drawn by	B.C. Lisondra	Item Name	REAR WHEEL AXLE	Sheet	
Designed by		Material	$\phi 3.175\text{mm}$ (1/8") Stainless Steel, AISI 304/304L	File name MC_rearwheelaxle	
Recommended by	A.B. Ybanez	Q.C. Checked by	J.N. Arioja	 <b>DepED-BLR</b>	
Approved by	R. C. La Rosa				

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$	$\pm 0.50$

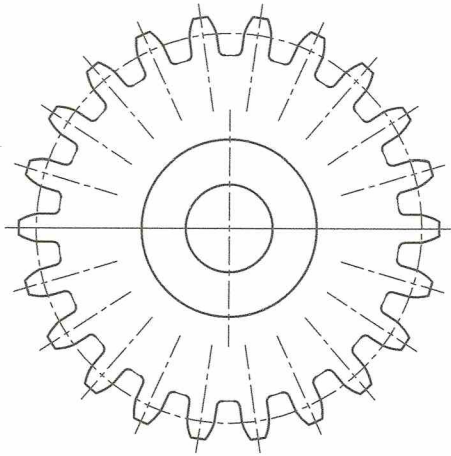
  

TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$
Medium		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$

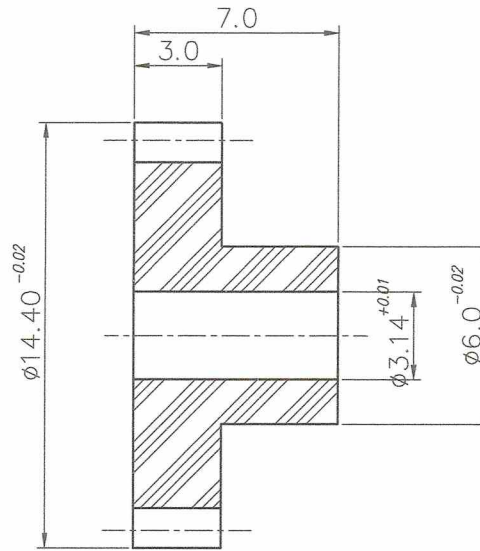
SYM	REVISION	DATE	BY



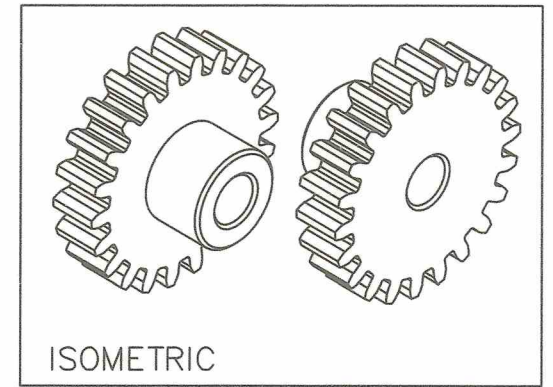
BATCH "B"



FRONT VIEW



SECTIONAL VIEW




ISOMETRIC

**20deg. PA INVOLUTE FULL-DEPTH TEETH  
SPUR GEAR**

Material = ACETAL Thermoplastic  
 Metric Module = 0.60  
 Outside Daimeter = 14.40<sup>-0.02</sup>mm  
 Pitch Diameter = 13.20mm  
 Circular Pitch = 1.88mm  
 Addendum = 0.60mm  
 Dedendum = 0.75mm  
 Whole Depth of Tooth = 1.35mm  
 Tooth Thickness at Pitch Line = 0.94mm  
 (Circular Thickness)  
 No. of Teeth = 22

- \* Dimensions are in millimeters except otherwise specified.
- \* Smoothen all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20 μm

GOVERNMENT PROPERTY

Date	SEPT 2021	Scale	NTS	
Conceptualized by				
Drawn by	B.C. Lisondra	Item Name	GEAR -C	
Designed by		Material	Acetal Thermoplastic, Color: Natural Color	
Checked by	J.N. Arioja	File name	MC_gear C	
Recommended by	A.B. Ybanez	 <b>DepED-BLR</b>		
Approved by	R. C. La Rosa			

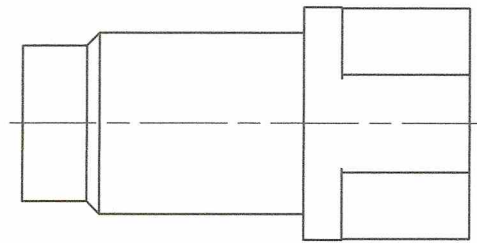
TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		± 0.10	± 0.10	± 0.20	± 0.30	± 0.50

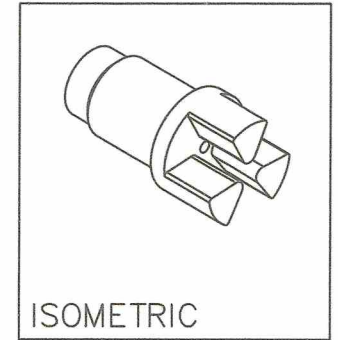
TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		± 0.20	± 0.50	± 1.00	± 2.00
Medium					

SYM	REVISION	DATE	BY

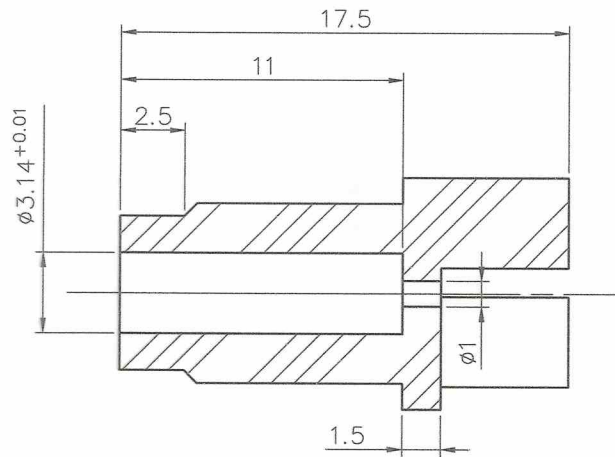
BATCH "B"



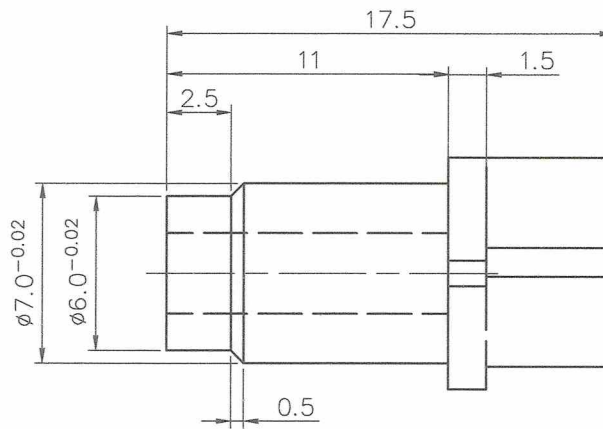
TOP VIEW



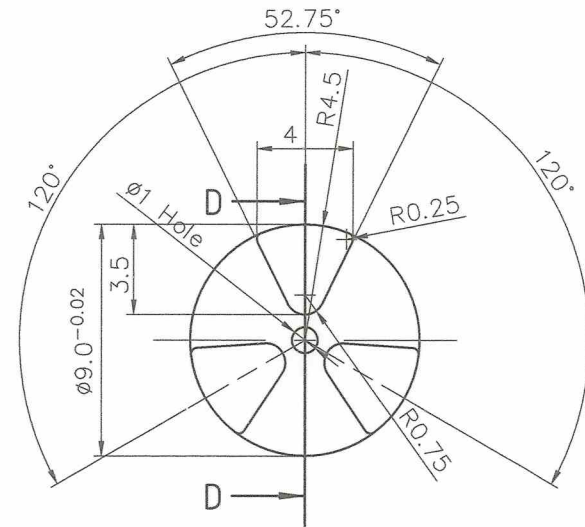
ISOMETRIC



VIEW "D-D"



FRONT VIEW



SIDE VIEW

- \* Dimensions are in millimeters except otherwise specified.
- \* Smoothen all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20  $\mu\text{m}$

GOVERNMENT PROPERTY


TOLERANCES FOR LENGTH GAUGING

Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$	$\pm 0.50$

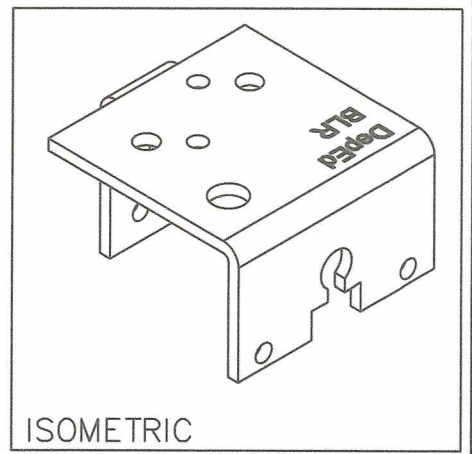
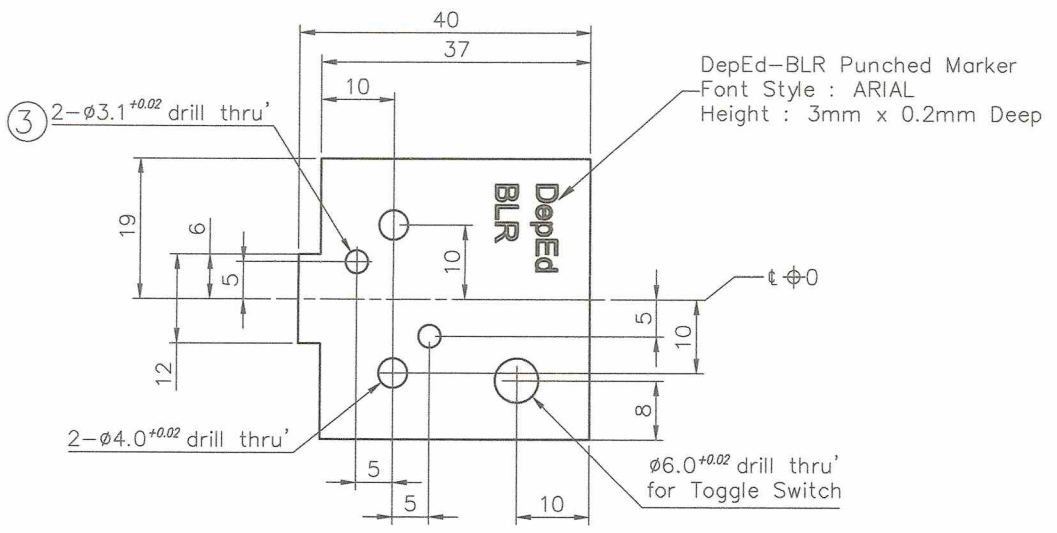
TOLERANCES FOR RADIUS & CHAMFERS

Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$
Medium					

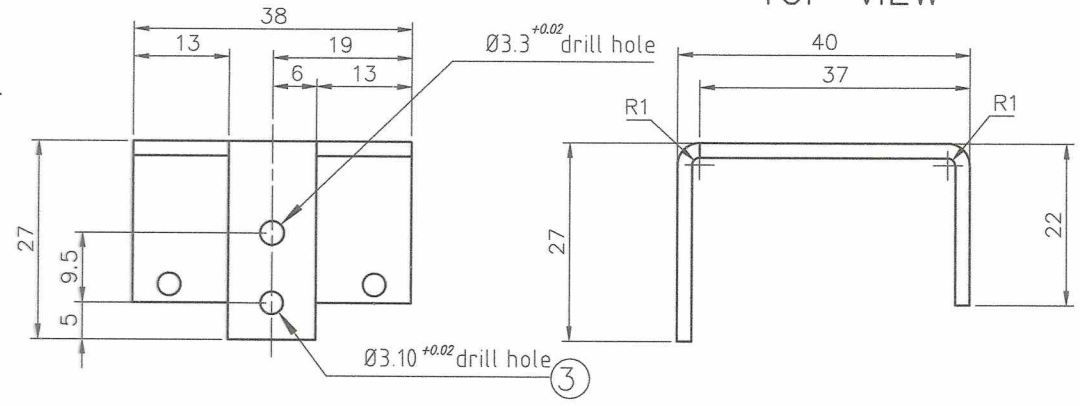
SYM	REVISION	DATE	BY

Date	SEPT 2021	Scale	NTS	<b>MOTORIZED CART</b>	
Conceptualized by					
Drawn by	B.C. Lisondra	Item Name	WORM/SHAFT ASSEMBLY COUPLING		Sheet
Designed by		Material	Acetal Thermoplastic, Color: White		File name
					MC_wormshaftcoup
Recommended by	A.B. Ybañez			 <b>DepED-BLR</b>	
Approved by	R. C. La Rosa				

BATCH "B"

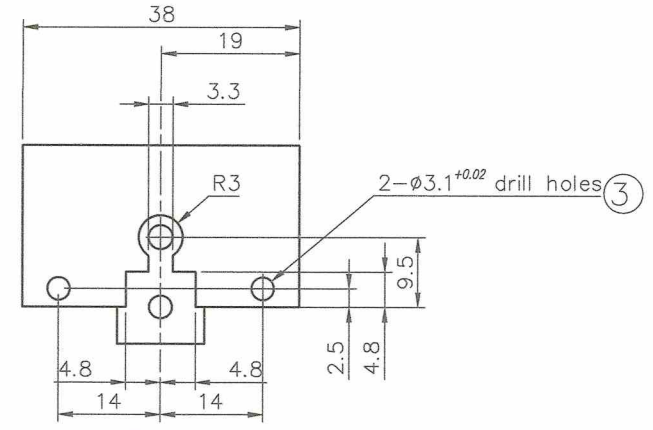


TOP VIEW



LEFT-SIDE VIEW

FRONT VIEW



RIGHT-SIDE VIEW

\* Dimensions are in millimeters except otherwise specified.  
 \* File all sharp edges.  
 \* Surface Roughness @ 1.00 to 1.20 μm

GOVERNMENT PROPERTY

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		± 0.10	± 0.10	± 0.20	± 0.30	± 0.50

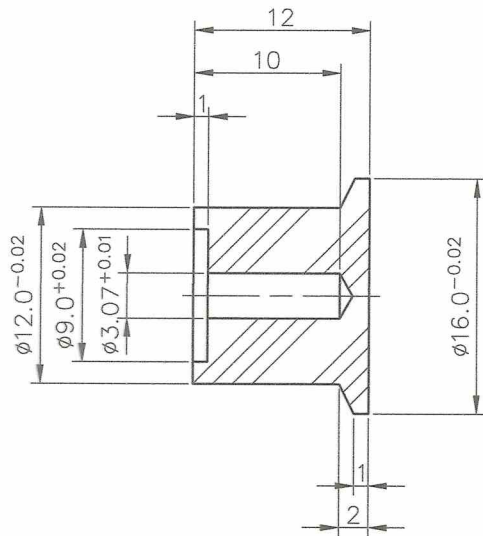
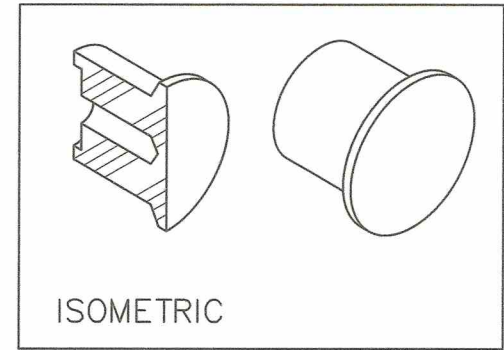
TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		± 0.20	± 0.50	± 1.00	± 2.00
Medium					

Date	SEPT 2021	Scale	NTS	<b>MOTORIZED CART</b>	
Conceptualized by					
Drawn by	B.C. Lisondra	Item Name	Transmission Mechanism Holder		Sheet
Designed by		Material	2mm thk. Aluminum Plate AA1095 or its equivalent		File name MC_transmechhold
Recommended by	A.B. Ybanez	<b>DepED-BLR</b>			
Approved by	R. C. La Rosa				

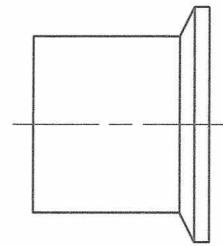




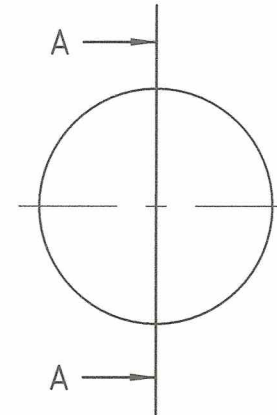
BATCH "B"



SECTION "A-A"



FRONT VIEW



SIDE VIEW

- \* Dimensions are in millimeters except otherwise specified.
- \* Smoothen all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20  $\mu\text{m}$


GOVERNMENT PROPERTY

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$	$\pm 0.50$

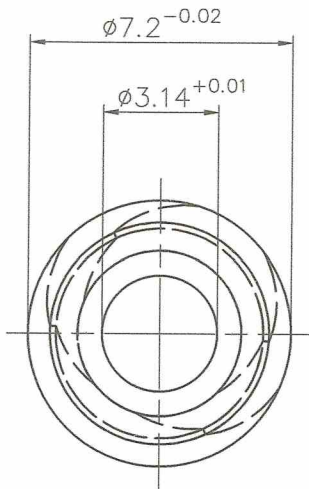
  

TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$
Medium					

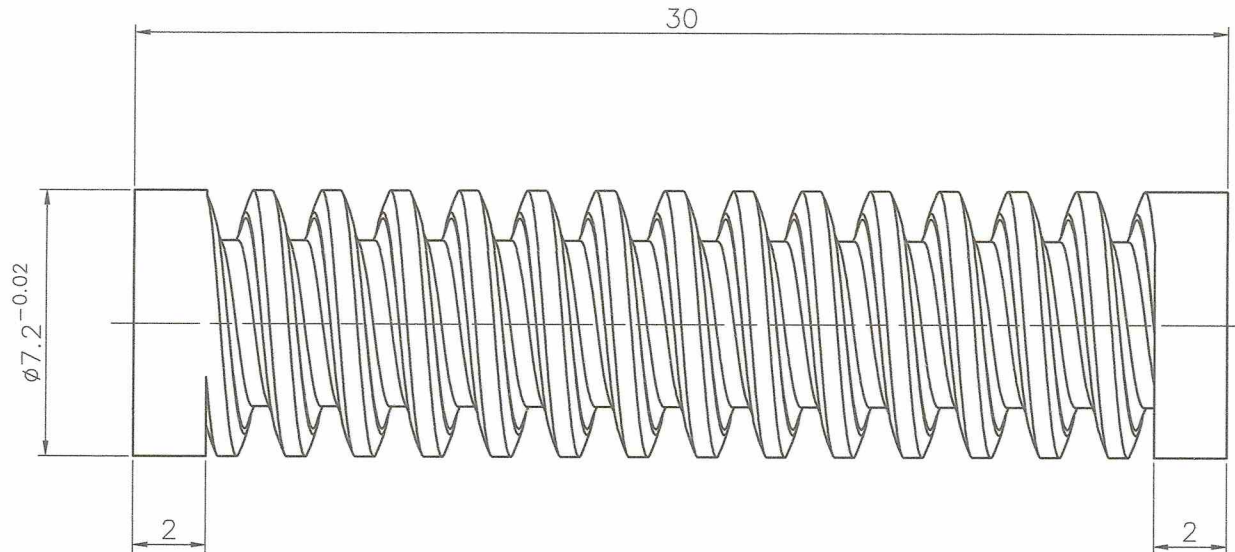
SYM	REVISION	DATE	BY

Date	SEPT 2021	Scale	NTS	<b>MOTORIZED CART</b>	
Conceptualized by					
Drawn by	B.C. Lisondra	Item Name	CART WHEEL	Sheet	
Designed by		Material	ABS Thermoplastic, color Black	File name MC_wheel	
QC Checked by	J.N. Ariola	 <b>DepED-BLR</b>			
Recommended by	A.B. Ybanez				
Approved by	R. C. La Rosa				

BATCH "B"



END VIEW




FRONT VIEW

WORM, 20deg. NORMAL P.A.,  
 SINGLE-THREAD (RIGHT HAND)  
 Material = ACETAL Thermoplastic  
 Color = Blue  
 Axial Pitch = 1.88mm  
 Lead = 1.88mm  
 Outside Diameter =  $7.20^{-0.02}$ mm  
 Pitch Diameter = 6.00 mm  
 Addendum = 0.60 mm  
 Whole Depth of Thread = 1.36mm  
 Normal Tooth Thickness (@ pitch line) = 0.935mm  
 Normal Circular Pitch = 1.87mm  
 Lead Angle = 5.6949 degrees

- \* Dimensions are in millimeters except otherwise specified.
- \* Smoothen all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20  $\mu$ m

GOVERNMENT PROPERTY

MOTORIZED CART

Date	SEPT 2021	Scale	NTS
Conceptualized by			
Drawn by	B.C. Lisondra	Item Name	WORM, 20deg. P.A. SINGLE THREAD
Designed by		Material	Acetal Thermoplastic, Color: Natural Color
Q.C. Checked by	J.N. Arjoja	File name	MC_worm
Recommended by	A.B. Ybañez	 DepED-BLR	
Approved by	R. C. La Rosa		

TOLERANCES FOR LENGTH GAUGING

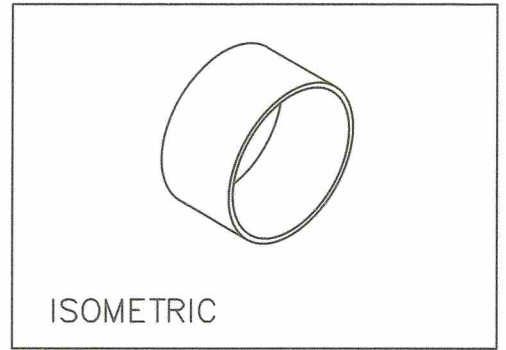
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$	$\pm 0.50$

TOLERANCES FOR RADIUS & CHAMFERS

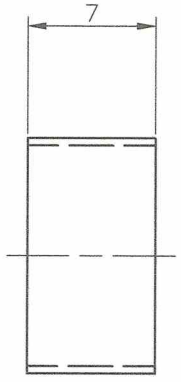
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth Medium		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$

SYM	REVISION	DATE	BY

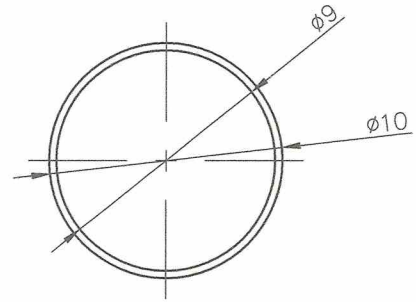
BATCH "B"



ISOMETRIC



FRONT VIEW



SIDE VIEW

GOVERNMENT PROPERTY


\* Dimensions are in millimeters except otherwise specified.

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$	$\pm 0.50$

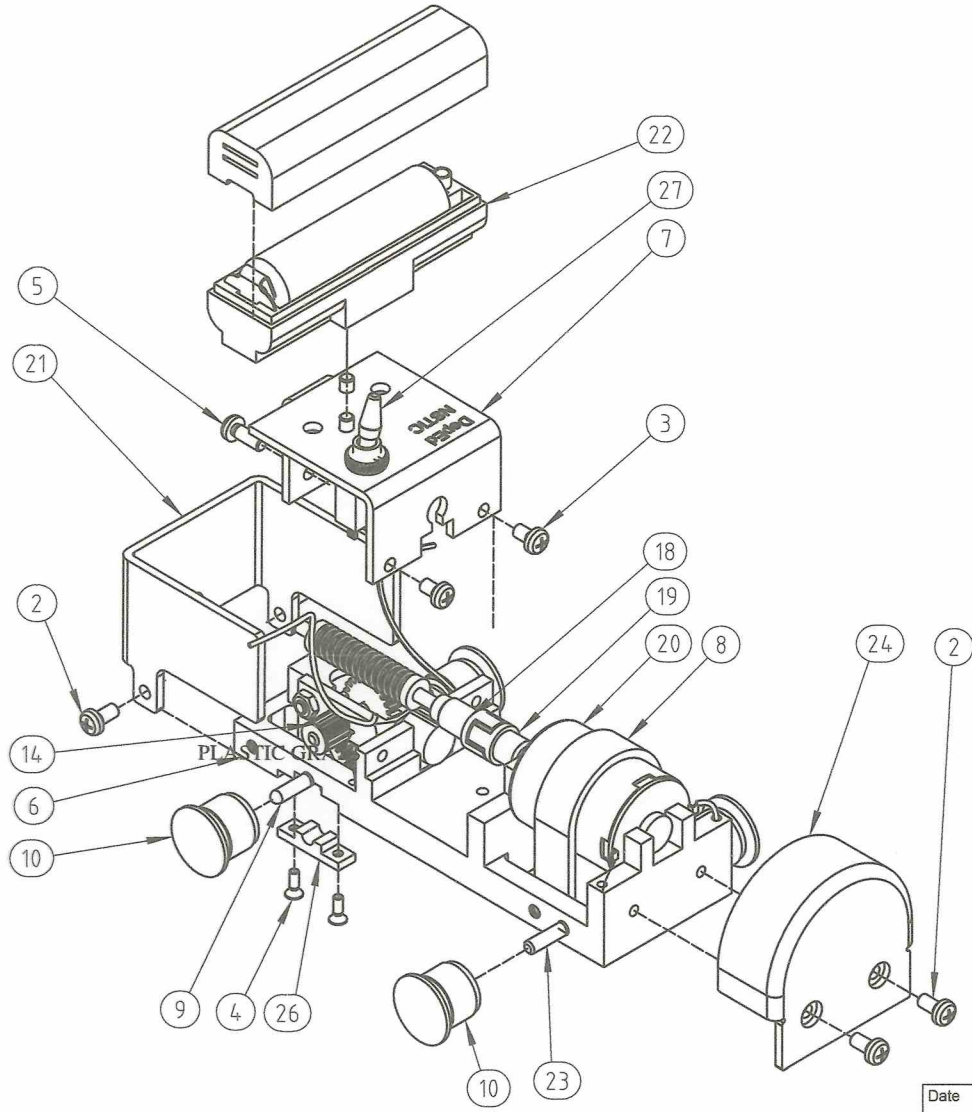
TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$
Medium					

SYM	REVISION	DATE	BY

Date	SEPT 2021	Scale	NTS	<b>MOTORIZED CART</b>	
Conceptualized by					
Drawn by	B.C. Lisonda	Checked by	J.N. Arjoja	Item Name	CART WHEEL RUBBER LINING
Designed by				Material	SOFT RUBBER , Color: BLACK
Recommended by	A.B. Ybanez			File name	MC_wheel
Approved by	R. C. La Rosa			 <b>DepED-BLR</b>	



BATCH "B"



Item	Name	Qty
28	CIRCUIT WIRE	1
27	MICRO_TOGGLE_SWITCH	1
26	REAR WHEEL AXLE BUSHING	2
25	HEX NUT - M3	1
24	FRONT HOOD	1
23	FRONT WHEEL AXLE	1
22	BATTERY CASING	1
21	TRANSMISSION MECHANISM COVER	1
20	DC MOTOR	1
19	MOTOR_COUPLING	1
18	WORM_SHAFT COUPLING	1
17	SHAFF FOR WORM	1
16	WORM	1
15	GEAR_A	1
14	GEAR_B	1
13	GEAR_C	1
12	TRANSMISSION GEAR PIN	1
11	TRANSMISSION GEAR BRACKET	1
10	CART WHEEL	4
9	REAR WHEEL AXLE	1
8	MOTOR BRACKET	1
7	TRANSMISSION MECHANISM HOLDER	1
6	CHASSIS	1
5	RECESSED PAN HEAD SCREW - M3 X 8	1
4	COUNTERSUNK FLAT HEAD SCREW - M2 X 6	4
3	RECESSED PAN HEAD SCREW - M3 X 5	4
2	RECESSED PAN HEAD SCREW - M3 X 6	6
1	RECESSED PAN HEAD SCREW - M3 X 20	1

GOVERNMENT PROPERTY


TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$	$\pm 0.50$

TOLERANCES FOR RADIUS & CHAMFERS						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	
Smooth		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$	
Medium						

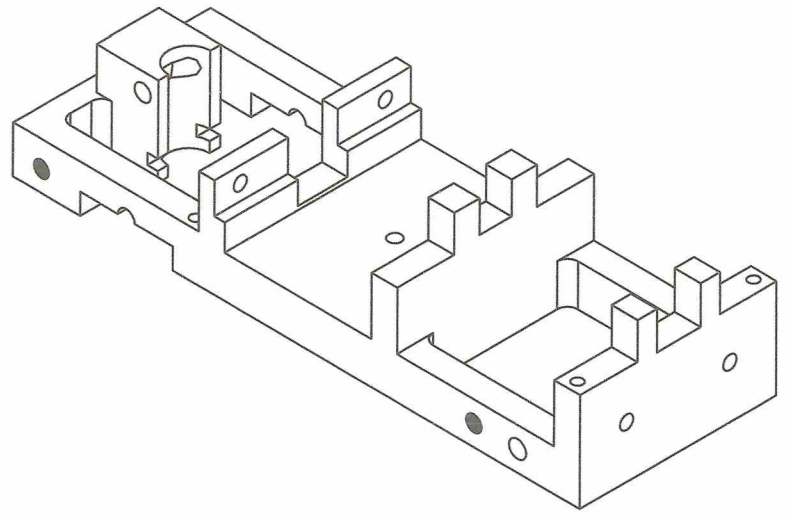
SYM	REVISION	DATE	BY

Date	SEPT 2021	Scale	NTS	<b>MOTORIZED CART</b>	
Conceptualized by					
Drawn by	B.C. Lisondra			Item Name	ASSEMBLY
Designed by				Material	Motorized Cart
				Q.C. Checked by	J.N. Arjoja
				Recommended by	A.B. Ybanez
				Approved by	R. C. La Rosa

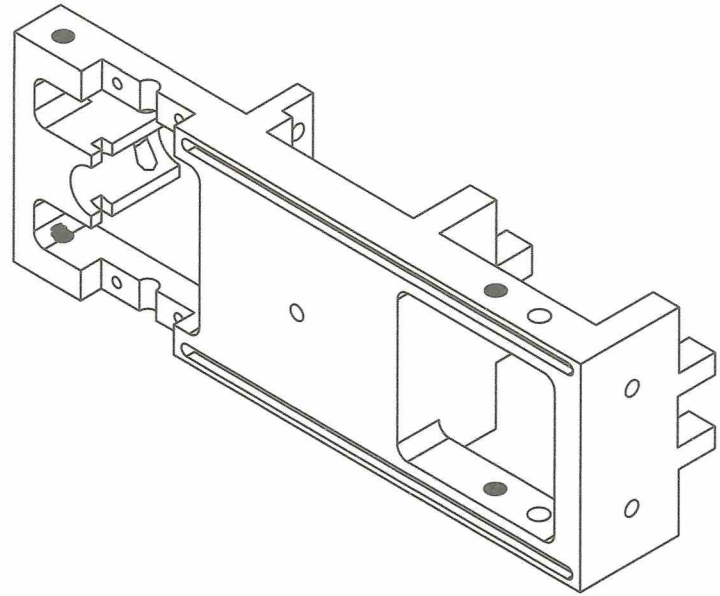


**DepED-BLR**

BATCH "B"




FRONT ISOMETRIC



BOTTOM ISOMETRIC

GOVERNMENT PROPERTY

**MOTORIZED CART**

Date	SEPT 2021	Scale	NTS
Conceptualized by			
Drawn by	B.C. Lisondra	Item Name	CART CHASSIS
Designed by	J.C. Arriaga	Material	Aluminum-Silicon-Copper Alloy, AA 384 or its equivalent (ADC 12)
Recommended by	A.B. Ybañez	File name	Mcart_chassis
Approved by	R. C. La Rosa	 <p><b>DepED-BLR</b></p>	

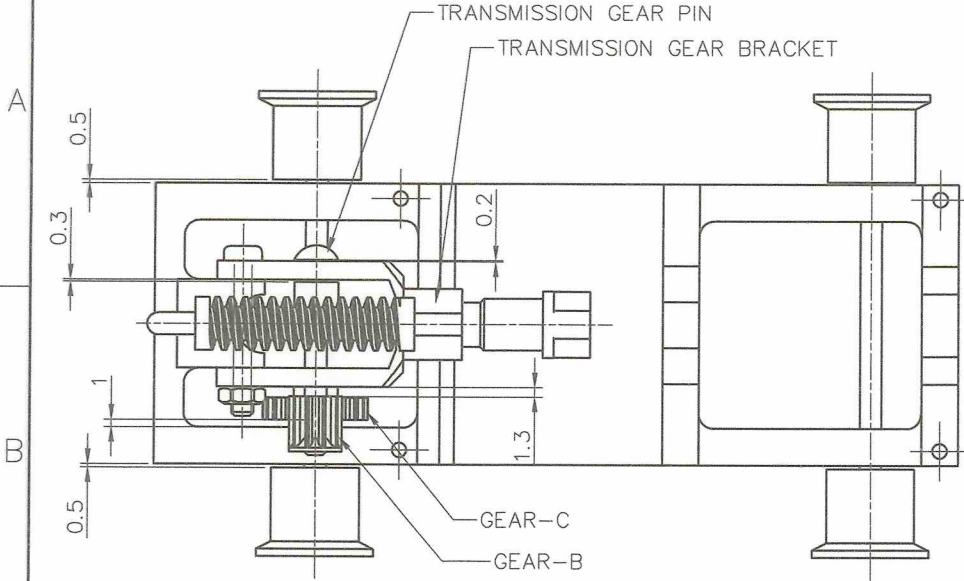
TOLERANCES FOR LENGTH GAUGING					
Grade of Accuracy	Nominal Size	Over 0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$
					$\pm 0.50$

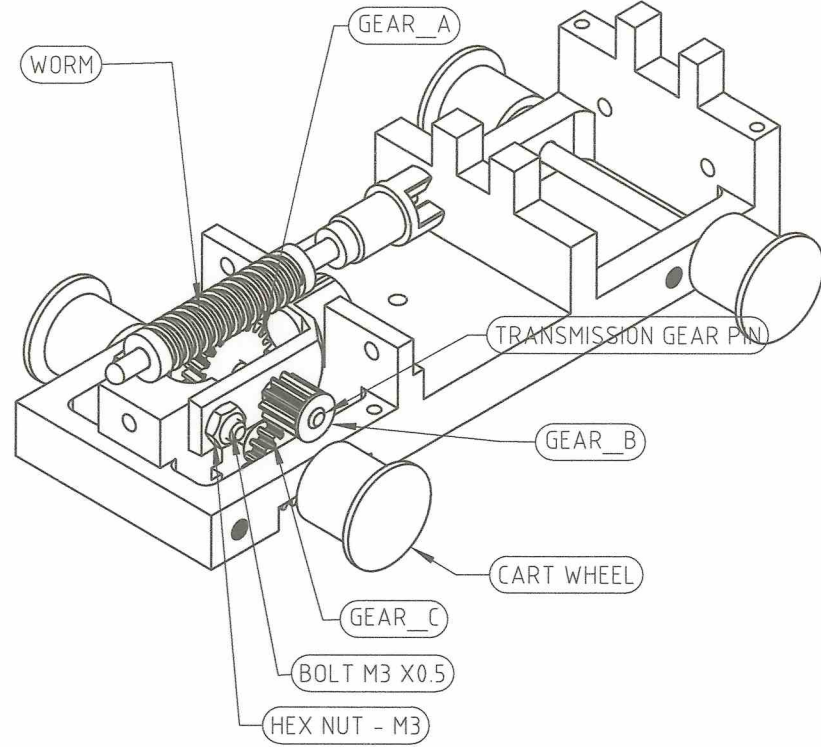
TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	Over 0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$
Medium					

SYM	REVISION	DATE	BY

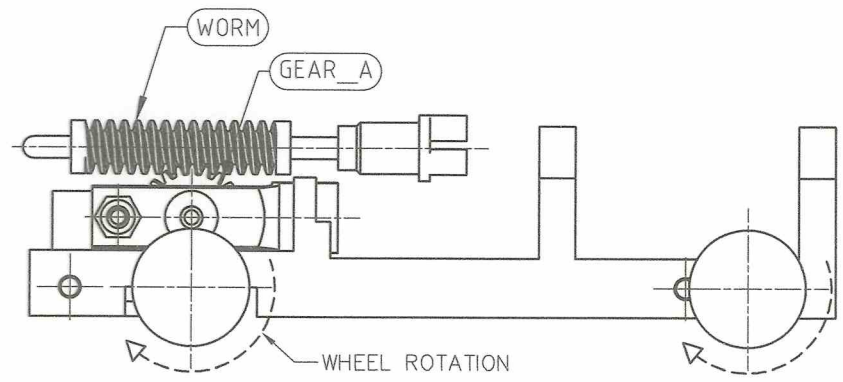
SCIKIT-MECHANICS



TOP VIEW




ISOMETRIC



FRONT VIEW

GOVERNMENT PROPERTY

MOTORIZED CART

Date	SEPT 2021	Scale	NTS
Conceptualized by			
Drawn by	B.C. Lisondra	Item Name	GEAR ASSEMBLY
Designed by		Material	
Checked by	J.N. Ariola	File name	Mcart_Gear_Assy
Recommended by	A.B. Ybanez	 <p>DepED-BLR</p>	
Approved by	R. C. La Rosa		

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$	$\pm 0.50$

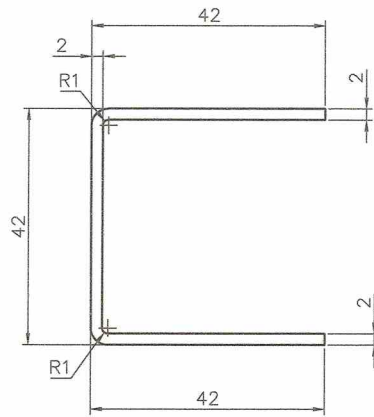
  

TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$
Medium					

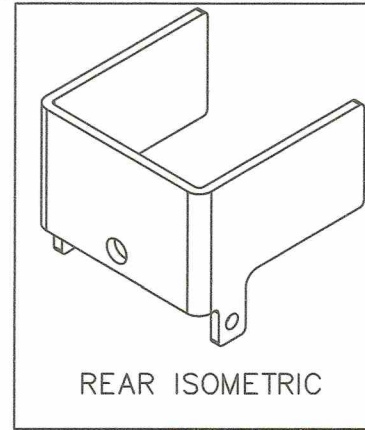
SYM	REVISION	DATE	BY



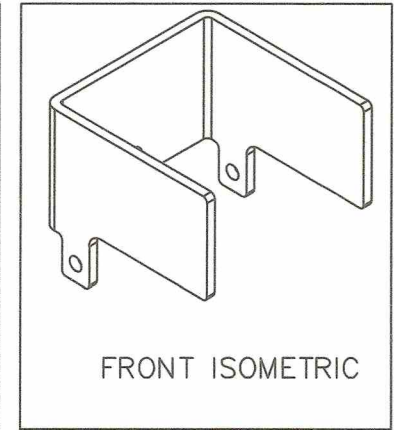
BATCH "B"



TOP VIEW

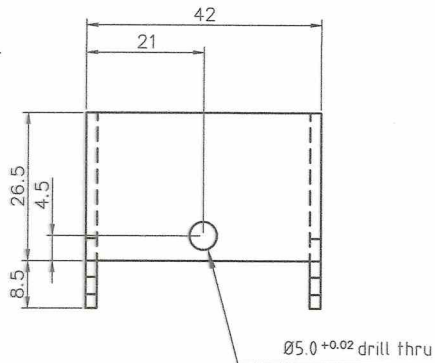


REAR ISOMETRIC

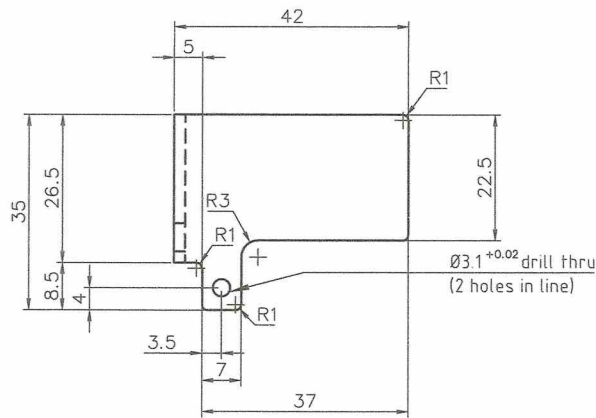


FRONT ISOMETRIC

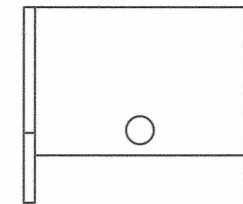
\*Dimensions are in millimeters except otherwise specified.  
 \*Smoothen sharp edges.  
 \*Surface Roughness: Smooth, clear, free from scratches.



REAR VIEW



FRONT VIEW



RIGHT SIDE VIEW


GOVERNMENT PROPERTY

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$	$\pm 0.50$

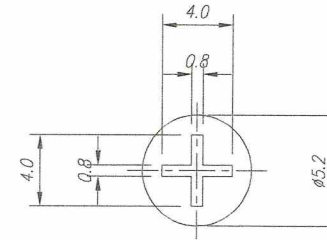
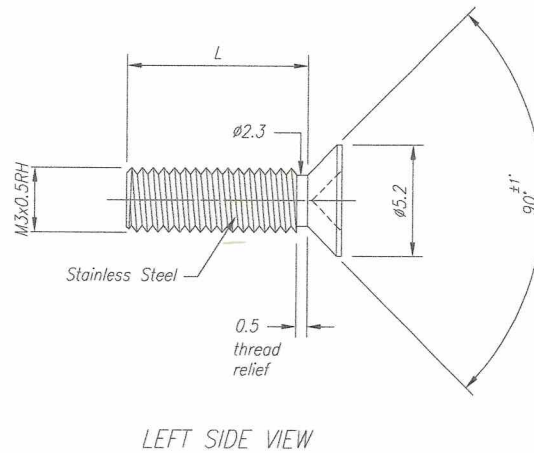
TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$
Medium		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$

SYM	REVISION	DATE	BY

Date	SEPT 2021	Scale	NTS	<b>MOTORIZED CART</b>	
Conceptualized by					
Drawn by	B.C. Lisondra	Item Name	Transmission Mechanism Cover	Sheet	
Designed by		Material	Polycarbonate Thermoplastic, transparent & clear	File name	MC_transmechcov
QC Checked by	J.M. Arioja	 <b>DepED-BLR</b>			
Recommended by	A.B. Ybañez				
Approved by	R. C. La Rosa				



BATCH "B"



Schedule for L:			
Item	Description	L	Qty.
1	Screw for Spring Housing (Dyn. Cart A)	5.0mm	4 pcs.
2	Screw for Push Rod Housing (Dyn. Cart A)	7.0mm	6 pcs.
3	Screw for 81.5-gram Counterweight (Dyn. Cart B)	8.0mm	4 pcs.

\* Dimensions are in millimeters except otherwise specified.  
 \* Smoothen all sharp edges.  
 \* Surface Roughness @ 1.00 to 1.20  $\mu$ m

GOVERNMENT PROPERTY

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		± 0.10	± 0.10	± 0.20	± 0.30	± 0.50

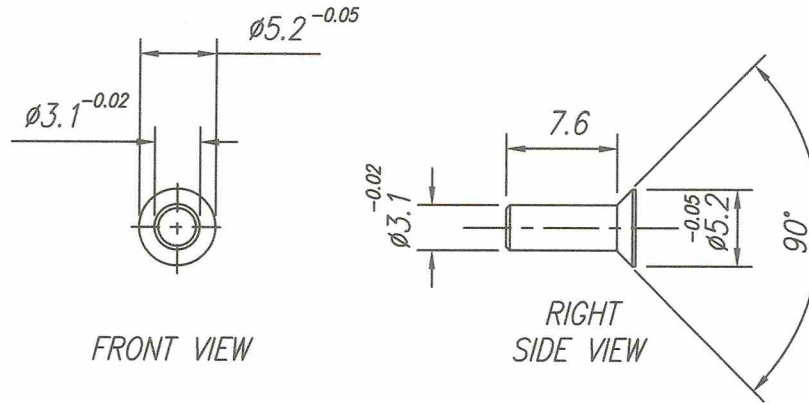
TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth Medium		± 0.20	± 0.50	± 1.00	± 2.00

SYM	REVISION	DATE	BY

Date	SEPT 2021	Scale	NTS
Conceptualized by			
Drawn by	B.C. Lisondra		
Designed by	G.C. Checked by		
	J.N. Anoja		
Recommended by	A.B. Ybañez		
Approved by	R. C. La Rosa		

<b>RAIL AND CART SYSTEM</b>	
Item Name	DYN. CARTS - SCREWS (Market Items)
Material	Stainless Steel
Sheet	
File name	screws
<b>DepED-BLR</b>	


BATCH "B"



SOLID ALUMINUM RIVET W/ COUNTERSUNK HEAD  
 Application: For fastening the Body & Chassis together

- \* Dimensions are in millimeters except otherwise specified.
- \* Smoothen all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20  $\mu$ m

GOVERNMENT PROPERTY

Date	SEPT 2021	Scale	NTS	RAIL AND CART SYSTEM	
Conceptualized by					
Drawn by	B.C. Lisondra	Q.C. Checked by	J.M. Arina	Material	File name
Designed by				RIVET	rivet
Recommended by	A.B. Ybañez			 DepED-BLR	
Approved by	R. C. La Rosa				

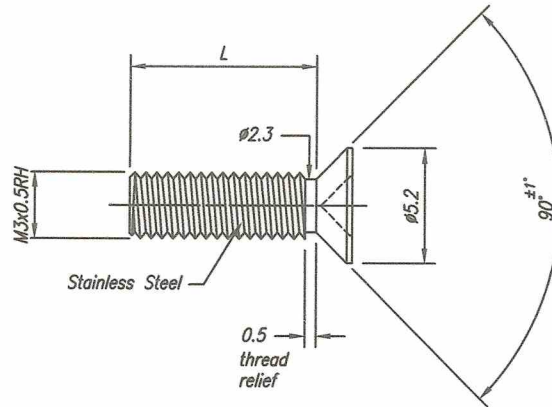
TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		± 0.10	± 0.10	± 0.20	± 0.30	± 0.50

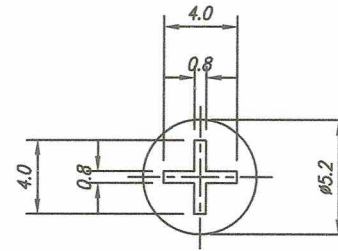
TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		± 0.20	± 0.50	± 1.00	± 2.00
Medium					

SYM	REVISION	DATE	BY

BATCH "B"



LEFT SIDE VIEW



FRONT VIEW

Schedule for L:			
Item	Description	L	Qty.
1	Screw for Spring Housing (Dyn. Cart A)	5.0mm	4 pcs.
2	Screw for Push Rod Housing (Dyn. Cart A)	7.0mm	6 pcs.
3	Screw for 81.5-gram Counterweight (Dyn. Cart B)	8.0mm	4 pcs.

- \* Dimensions are in millimeters except otherwise specified.
- \* Smoothen all sharp edges.
- \* Surface Roughness @ 1.00 to 1.20  $\mu\text{m}$


GOVERNMENT PROPERTY

TOLERANCES FOR LENGTH GAUGING						
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120	Over 120 to 400
Medium		$\pm 0.10$	$\pm 0.10$	$\pm 0.20$	$\pm 0.30$	$\pm 0.50$

TOLERANCES FOR RADIUS & CHAMFERS					
Grade of Accuracy	Nominal Size	0.5 to 3	Over 3 to 6	Over 6 to 30	Over 30 to 120
Smooth		$\pm 0.20$	$\pm 0.50$	$\pm 1.00$	$\pm 2.00$
Medium					

SYM	REVISION	DATE	BY

Date	SEPT 2021	Scale	NTS	RAIL AND CART SYSTEM	
Conceptualized by					
Drawn by	B.C. Lisondra	Q.C. Checked by	J.N. Arida	DYN. CARTS - SCREWS (Market Items)	
Designed by				Material	File name
				Stainless Steel	screws
Recommended by	A.B. Ybanez			 <b>DepED-NTSTIC</b>	
Approved by	R. C. La Rosa				