DESCRIPTION: 6061-T6 ALUMINUM - LIGHT DUTY TRUSS, 3-SIDED CORNER BLOCK

VENDOR: TOTAL STRUCTURES

PART NUMBER: TS 1212LD-C3P

NOTE: SUBSTITUTIONS NOT ALLOWED
DESCRIPTION: 6061-T6 ALUMINUM - LIGHT DUTY TRUSS, 4-SIDED CORNER BLOCK

VENDOR: TOTAL STRUCTURES

PART NUMBER: TS 1212LD-C4P

NOTE: SUBSTITUTIONS NOT ALLOWED
DESCRIPTION: 6061-T6 ALUMINUM - LIGHT DUTY TRUSS, 48" X 12" X 12"

VENDOR: TOTAL STRUCTURES

PART NUMBER: TS 1212LD-048P

NOTE: SUBSTITUTIONS NOT ALLOWED

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES

TOLERANCES:

FRACTIONAL: ±1/16

ANGULAR (1°) BEND: ±1°

TWO PLACE DECIMAL: ±.01

THREE PLACE DECIMAL: ±.001

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DESCRIPTION: 6061-T6 ALUMINUM - LIGHT DUTY TRUSS, 60" X 12" X 12"

VENDOR: TOTAL STRUCTURES

PART NUMBER: TS 1212LD-060P

NOTE: SUBSTITUTIONS NOT ALLOWED

REV: 1

DATE: 10/28/2019

APPROVED: KAMC
DESCRIPTION: 6061-T6 ALUMINUM - LIGHT DUTY TRUSS, 144" X 12" X 12"

VENDOR: TOTAL STRUCTURES

PART NUMBER: TS 1212LD-144P

NOTE: SUBSTITUTIONS NOT ALLOWED
**DESCRIPTION:** STACKED, 90 DEG OFF SET, CHEESE BOROUGH FOR TRUSS - MEGA-SWIVEL COUPLER, SILVER

**VENDOR:** TOTAL STRUCTURES VIA THE LIGHT SOURCE

**PART NUMBER:** MLSM MEGA COUPLER

**NOTE:** SUBSTITUTIONS NOT ALLOWED
DESCRIPTION: CHEESE BOROUGH FOR TRUSS - MLM MEGA COUPLER, SILVER

VENDOR: TOTAL STRUCTURES VIA THE LIGHT SOURCE

PART NUMBER: MLM MEGA COUPLER

NOTE: SUBSTITUTIONS NOT ALLOWED
DESCRIPTION: SAFETY EDGE & CORNER GAURD, NBR FOAM, ONYX

VENDOR: ROVING COVE

PART NUMBER: 1305

PACKAGE QUANTITY: 18FEET

NOTE: CUT TO LENGTH
DESCRIPTION: SAFETY EDGE & CORNER GAURD, NBR FOAM, ONYX

VENDOR: ROVING COVE

PART NUMBER: 1305

PACKAGE QUANTITY: 18 FEET

NOTE: CUT TO LENGTH

DESCRIPTION:
SAFETY EDGE & CORNER GAURD, NBR FOAM, ONYX

VENDOR:
ROVING COVE

PART NUMBER:
1305

PACKAGE QUANTITY:
18 FEET

NOTE:
CUT TO LENGTH

DESCRIPTION:
SAFETY EDGE & CORNER GAURD, NBR FOAM, ONYX

VENDOR:
ROVING COVE

PART NUMBER:
1305

PACKAGE QUANTITY:
18 FEET

NOTE:
CUT TO LENGTH
### Notes:
1. Rivets and Rivnuts should be plated or aluminum.
2. Tag or label with part number.

### Revised Drawing
- **Zone:** A
  - **Rev:** MULTIPLE PARTS UPDATED, WEIGHT UPDATED, OVERALL ASSEMBLY OTHERWISE UNCHANGED
  - **Date:** 9/10/2019
  - **Approved:** KAHC

- **Zone:** A3.8-82
  - **Rev:** POST PRODUCTION - CHANGED PIN TO COTTER PIN STYLE
  - **Date:** 11/18/2019
  - **Approved:** KAHC

### Part List
<table>
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<th>Part Number</th>
<th>Description</th>
<th>Qty.</th>
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<td>Hanger - Top</td>
<td>2</td>
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<tr>
<td>2</td>
<td>GE-20010 - 02</td>
<td>Hanger - Center Leg</td>
<td>1</td>
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<tr>
<td>3</td>
<td>GE-20010 - 03</td>
<td>Hanger - Center Leg, Face</td>
<td>1</td>
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<tr>
<td>4</td>
<td>GE-20010 - 04</td>
<td>Hanger - Side Leg</td>
<td>2</td>
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<td>5</td>
<td>GE-20010 - 05</td>
<td>Hanger - Side Leg, Face</td>
<td>2</td>
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<tr>
<td>6</td>
<td>GE-20010 - 06</td>
<td>Hanger - Cross Bar</td>
<td>2</td>
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<td>7</td>
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<td>Hanger - Cross Bar, Top</td>
<td>2</td>
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<td>8</td>
<td>GE-20010 - 08</td>
<td>Hanger - Cross Bar, Bottom</td>
<td>2</td>
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<td>GE-20010 - 09</td>
<td>Hanger - Hanging Pole</td>
<td>1</td>
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<td>10</td>
<td>GE-20010 - 10</td>
<td>Hanger - Hanging Pole Holder</td>
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<td>GE-20010 - 11</td>
<td>Hanger - Hanging Pole Holder, Face</td>
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<td>12</td>
<td>GE-20010 - 12</td>
<td>Hanger - Center Leg, End Cap</td>
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<td>13</td>
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<td>Hanger - Sensor Feature</td>
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<td>Clevis Pin, 1/4&quot; diameter, 3.5&quot; length</td>
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<td>19</td>
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<tr>
<td>21</td>
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<td>22</td>
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</table>

**Application**
- **Used On:** Next Assy
- **Weight:** 67.14 LBS
- **Scale:** 1:16
- **Title:** Hanger
- **REV:** B
- **Dwg. No.:** GE-20010
- **Size:** B

**Comments:**
- Weight: 67.14 LBS
- Do not scale drawing

**Remarks:**
- Pin visible from back

**Drawing Information:**
- Bare finish
- Geometric tolerancing per FIRST Robotics Competition
- Any reproduction in part or as a whole without written permission of FIRST® is prohibited.
Note: Assembly is symmetric - Left/Right

DIMENSIONS SHOWN FOR REF.

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ± 1/16
ANGULAR AND 45° BEND ± 1°
THREE PLACE DECIMAL ± .001

INTERPRET GEOMETRIC
TOLERANCING PER:

MATERIAL

FINISH

APPLICATION

OTHER

BARE

USED ON

Q.A.

ENG APPR.

MFG APPR.

CHECKED

DRAWN

Title: Hanger

Dimensions Shown For Ref.
### REVISIONS

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<tr>
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<th>DATE</th>
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**ADD RIVETS**

- **GE-20010 - 26**
- **GE-20010 - 27**
- **GE-20010 - 30**

---

**UNLESS OTHERWISE SPECIFIED:**

- **SCALE:** 1:16
- **WEIGHT:**
- **REVDWG. NO.**
- **SIZE**
- **TITLE:** Hanger
- **NAME**
- **DATE**
- **COMMENTS:**
- **Q.A.**
- **MFG APPR.**
- **ENG APPR.**
- **CHECKED**
- **DRAWN**

---

**DIMENSIONS ARE IN INCHES**

- **TOLERANCES:**
  - Fractional: ±1/16
  - Angular: ±1°
  - Two place decimal: ±.01
  - Three place decimal: ±.001

---

**INTERPRET GEOMETRIC TOLERANCING PER:**

- **BARE**

---

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ADD RIVETS X8

ADD RIVETS X16

ADD RIVETS X8

Hanger

GE-20010 - 28

SCALE: 1:16
WEIGHT:

REVISIONS
ZONE REV. DESCRIPTION DATE APPROVED
- - See Sheet 1 - -
NOTE:
GE-20010 - 09 WILL BE LOOSE
ADD RIVETS X8

NOTE:
ALIGN HOLES IN GE-20010 - 09 WITH THE SLOTS ON GE-20010 - 30, SPECIFICALLY GE-20010 - 11
USE PINS TO LOCK POLE IN PLACE.
### DETAILED BOM SHOWN FOR REF.

**Notes:**
1. Rivets and Rivnuts should be plated or aluminum.
2. Tag or label with part number.

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
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<tr>
<td>1</td>
<td>pin_clevis_25_3.5</td>
<td>Clevis Pin, 1/4&quot; diameter, 3.5&quot; length</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>pin_hairpincotter_0.078_1.5</td>
<td>Cotter Pin, 0.078in x 1.5in</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>rivet_1875_251-375</td>
<td>3/16&quot; Aluminum Rivet, 251-375 Grip Range</td>
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<td>GE-20010-14</td>
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<td>GE-20010-07</td>
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<td>Hanger - Hanging Pole Holder, Face</td>
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<td>GE-20010-12</td>
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<td>GE-20010-13</td>
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</table>
Notes:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.

DETAIAL A
SCALE 1:3

DETAIAL B
SCALE 1:3

NOTE: EDGE MUST BE CLEAN
- NO SHARP EDGE
Notes:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges
Notes:
1. Material: 8 Ga. Aluminum Sheet
2. Remove all burrs and sharp edges.

Material: 8 Ga. Aluminum Sheet

Title: Hanger - Center Leg, Face

UNLESS OTHERWISE SPECIFIED:
- DIMENSIONS ARE IN INCHES
- TOLERANCES:
  - FRACTIONAL: ±1/16
  - ANGULAR: ±1° BEND
  - TWO PLACE DECIMAL: ±.01
  - THREE PLACE DECIMAL: ±.001
- GEOMETRIC TOLERANCING PER:
  - UNLESS OTHERWISE SPECIFIED:
- INTERPRET GEOMETRIC TOLERANCING PER

APPLICATION: NEXT ASSY
- PROCESSED: BARE
- MATERIAL: ALUMINUM SHEET

HANGER - CENTER LEG, FACE

DRAWN: KAMC
DATE: 9/10/19

REVISIONS:
ZONE REV DESCRIPTION DATE APPROVED
A MAJOR GEOMETRY CHANGES 9/16/19 KAMC

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PERMISSION OF FIRST ® IS PROHIBITED.
Notes:
1. Material: 8 Ga. 5052 Aluminum
2. Remove all burrs and sharp edges.

Material: 8 Ga. 5052 Aluminum

Dimensions are in inches
Tolerances:
- Fractional: 1/16
- Angular: MACH 1° BEND
- Two place decimal: .01
- Three place decimal: .001
Notes:
1. Material: 8 Ga. 5052 Aluminum
2. Remove all burns and sharp edges.
Notes:
1. Material: 8 Ga. 5052 Aluminum
2. Remove all burrs and sharp edges.
Notes:
1. Material: 8 Ga. 5052 Aluminum
2. Remove all burrs and sharp edges.
Notes:
1. Material: 8 Ga. 5052 Aluminum
2. Remove all burrs and sharp edges.
Notes:
1. Material: 1.66" OD x 0.14" WALL x 1.38" ID Aluminum Pipe 6061-T6-Extruded Schedule 40
2. Remove all burrs and sharp edges.

ISO SCALE: 1:12
### Notes:

1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.

### Tolerances:

- **Fractional:** 1/16
- **Angular:** $\pm 1^\circ$
- **Two-Place Decimal:** .01
- **Three-Place Decimal:** .001

### Comments:

- DO NOT SCALE DRAWING

### Revised Drawing:

- **Rev.** GE-20010 - 10
- **Sheet:** 1 of 1

---

#### Revisions

<table>
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<tr>
<th>Zone</th>
<th>Rev.</th>
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<td>MAJOR GEOMETRY CHANGE</td>
<td>9/16/19</td>
<td>KAMC</td>
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#### Specifications

- **Material:** Aluminum Sheet
- **Finish:** Bare
Notes:
2. Remove all burrs and sharp edges.

Material: 8 Ga. 5052 Aluminum Sheet.

1. HOLE PATTERN AND GENERAL GEOMETRY MODIFIED
2. 9/16/2019

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL 1/16
ANGULAR (90° + 1°) BEND 1°
TWO PLACE DECIMAL .01
THREE PLACE DECIMAL .001

INTERPRET GEOMETRIC TOLERANCING PER:

BARE

APPLICATION

DO NOT SCALE DRAWING

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is prohibited.

Scale 1:2
Weight:
Sheet 1 of 1

Title:

Hanger - Hanging Pole Holder, Face

GE-20010 - 29
GE-20010

Material:

ALUMINUM SHEET

BARE

APPLICATION

DO NOT SCALE DRAWING

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permission of

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Scale 1:2
Weight:
Sheet 1 of 1

Title:

Hanger - Hanging Pole Holder, Face

GE-20010 - 29
GE-20010

Material:

ALUMINUM SHEET

BARE

APPLICATION

DO NOT SCALE DRAWING
Notes:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.

Notes:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.
Notes:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.
Notes:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.
Note:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.
Notes:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.
RIVETS INTENTIONALLY LEFT OUT AT THIS STEP

Notes:
1. Rivets and Rivnuts should be plated or aluminum.
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<td>See Sheet 1</td>
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**Dimensions Shown for Reference**

- **RIVETS INTENTIONALLY LEFT OUT X14**
- **RIVET INTENTIONALLY LEFT OUT X8**
- **DIMENSIONS SHOWN FOR REFERENCE**

**Scale:** 1:8  
**Geometric Tolerancing:**  
- **FRACTIONAL:** 1/16  
- **ANGULAR:** 1°  
- **TWO PLACE DECIMAL:** .01  
- **THREE PLACE DECIMAL:** .001

**Material:** BARE  
**Application:** DO NOT SCALE DRAWING

**Title:** Hanger - Center Bar Sub Assembly  
**Drawing Number:** GE-20010 - 26  
**Revision:** A  
**Date:** 9/10/19  
**Scale:** 1:8

**Comment:** The information contained in this drawing is the sole property of FIRST®. Any reproduction in part or as a whole without the written permission of FIRST® is prohibited.
Notes:
1. Rivets should be plated or aluminum.

ONLY 6 RIVETS APPLIED IN THIS SUB-ASSEMBLY
Exploded View:

Notes:
1. Rivets should be plated or aluminum.

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<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
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<th>QTY.</th>
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<tr>
<td>2</td>
<td>GE-20010 - 06</td>
<td>Hanger - Cross Bar</td>
<td>2</td>
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<td>3</td>
<td>GE-20010 - 07</td>
<td>Hanger - Cross Bar, Top</td>
<td>2</td>
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<tr>
<td>4</td>
<td>GE-20010 - 08</td>
<td>Hanger - Cross Bar, Bottom</td>
<td>2</td>
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</tbody>
</table>

Revisions:
Zone: A
Description: Part Lengths Updated
Date: 9/16/2019
Approved: KAMC

REVDWG. NO. B
WEIGHT: 15.74 LBS

TITLE: Hanger - Center Bar Sub Assembly

GE-20010

SCALE: 1/8
WEIGHT: SHEET 1 OF 2

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Notes:
1. Rivets should be plated or aluminum.
### Notes:

1. Rivets should be plated or aluminum.

### Table: Material List

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>rivet_1875_.251-.375</td>
<td>3/16” Aluminum Rivet, .251-.375 Grip Range</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>GE-20010 - 01</td>
<td>Hanger - Top</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>GE-20010 - 14</td>
<td>Hanger - Top, Face</td>
<td>1</td>
</tr>
</tbody>
</table>
Notes:
1. Rivets and Rivnuts should be plated or aluminum.
2. Tag or label with part number.

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>rivnut_.25_20_.165-.260</td>
<td>Rivnut, 1/4&quot;-20 bolt, material thickness:.165&quot;-.260&quot;</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>rivet_.1875_.251-.375</td>
<td>3/16&quot; Aluminum Rivet, .251-.375 Grip Range</td>
<td>16</td>
</tr>
<tr>
<td>3</td>
<td>rivet_.1875_.376-.5</td>
<td>3/16&quot; Aluminum Rivet, .376-.5 Grip Range</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>GE-20011 - 01</td>
<td>Hanger Brace - Channel</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>GE-20011 - 02</td>
<td>Hanger Brace - Face</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>GE-20011 - 06</td>
<td>Hanger Brace - Connection to Hanger</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>GE-20011 - 16</td>
<td>Hanger Brace - Pivot Pole Holder Sub Assembly</td>
<td>1</td>
</tr>
</tbody>
</table>

**REVISIONS**

<table>
<thead>
<tr>
<th>ZONE</th>
<th>REV.</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>APPROVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td>MAJOR GEOMETRY CHANGE TO PARTS, PARTS AND SUB ASSEMBLY ADDED</td>
<td>9/16/2019</td>
<td>KAMC</td>
</tr>
</tbody>
</table>

**SCALE: 1:6**

**WEIGHT: 7.63 LBS**
Notes:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.
Notes:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.
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2. Remove all burrs and sharp edges.
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Notes:
2. Remove all burrs and sharp edges.
Notes:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.
Notes:
1. Rivets should be plated or aluminum.
**Title:** Hanger Brace - Pivot Pole Holder Sub Assembly

**Dimensions Shown for Ref.:**

- **6.02 (Includes Rivet)**
- **5.96**
- **3.65 (Including Rivets)**
- **3.52**
- **2.07**
- **10.45**
- **1.83 (φ)**

**Notes:**
- **DIMENSIONS ARE IN INCHES**
- **TOLERANCES:**
  - FRACTIONAL: 1/16
  - ANGULAR: 1° 1" BEND
  - TWO PLACE DECIMAL: .01
  - THREE PLACE DECIMAL: .001
- **INTERPRET GEOMETRIC TOLERANCING PER:**
- **BARE**

**Application:**
- **Used On:**
- **DO NOT SCALE DRAWING**

**Scale:** 1:4

**Weight Shown on Sheet 1:**

**Revised Drawing Number:**
- **GE-20011**
- **Sheet 2 of 2**

**Drawn:** 9/16/19

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**Comments:**

**Title Block:**
- **Title:** Hanger Brace - Pivot Pole Holder Sub Assembly
- **Drawing Number:** GE-20011
- **Scale:** 1:4
- **Weight:**
- **Sheet 2 of 2**
Notes:
1. Material: 8 Ga. Aluminum Sheet
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
Notes:
1. Material: 1.50" diameter x 0.125" wall, 1020 DOM A513 Round Tube
2. Remove all burrs and sharp edges.
3. Powder Coated Black.
Notes:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
ITEM NO. | PART NUMBER | DESCRIPTION | QTY.  
--- | --- | --- | ---  
1 | GE-20008 | Foam Cushion for Generator Switch | 1  
2 | GE-20008 | Foam Cushion for Generator Switch | 2  
3 | GE-20010 | Hanger | 1  
4 | Hook_2_9 | Hook 2" x 9", Adhesive Backed | 2  
5 | Hook_2_30 | Hook 2" x 30", Adhesive Backed | 4
Notes:
1. Make sure surface of GE-20010 is clean prior to hook and foam application.
2. Press firmly on hook and foam to ensure adhesion.
Notes:
1. Material: 1/16" Polycarbonate, Clear
2. Remove all burrs and sharp edges
3. Tag or label with part number
4. Finish: Bare - Vinyl will be applied to face, either side
**Notes:**

1. Tag or label with part number

<table>
<thead>
<tr>
<th>Color Variations</th>
<th>Qty per Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>Vinyl Image</td>
</tr>
<tr>
<td>GE-20017 - Blue</td>
<td>GE-20017 - Blue - Vinyl</td>
</tr>
<tr>
<td>GE-20017 - Red</td>
<td>GE-20017 - Red - Vinyl</td>
</tr>
</tbody>
</table>
Notes:

1. Tag or label with part number

<table>
<thead>
<tr>
<th>Color Variations</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>Vinyl Image</td>
</tr>
<tr>
<td>GE-20018 - Blue</td>
<td>GE-20018 - Blue - Vinyl</td>
</tr>
<tr>
<td>GE-20018 - Red</td>
<td>GE-20018 - Red - Vinyl</td>
</tr>
</tbody>
</table>
DESCRIPTION: IGLIDE M250 FLANGE BEARING - INCH

VENDOR: IGUS

PART NUMBER: MFI-2428-12

NOTE: SUBSTITUTIONS NOT ALLOWED

TOLERANCE: 1.50 - 1.53

TOLERANCE: 1.75 - 1.79

TOLERANCE: 2.00 - 2.04

TOLERANCE: 0.74 - 0.75
DESCRIPTION: TWO-PIECE SHAFT COLLAR, BLACK OXIDE STEEL, CLAMP STYLE

VENDOR: RULAND

PART NUMBER: SP-24-F

NOTE: EQUIVALENT SUBSTITUTIONS ALLOWED

2X FORGED CLAMP SCREWS
1/4-28
HEX WRENCH SIZE: 3/16"
<table>
<thead>
<tr>
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<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20017-Blue</td>
<td>Generator Switch Vinyl Plastic_ Left - with vinyl</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Loop_1_8</td>
<td>1” x 8” Loop, Adhesive Backed</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Loop_2_30</td>
<td>2” x 30” Loop, Adhesive Backed</td>
<td>1</td>
</tr>
</tbody>
</table>
Notes:
1. Make sure non-vinyl surface of GE-20017 is clean prior to loop application.
2. Press firmly on loop to ensure adhesion.
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20018-Blue</td>
<td>Generator Switch Vinyl Plastic, Right - with vinyl</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Loop_1_8</td>
<td>1&quot; x 8&quot; Loop, Adhesive Backed</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Loop_2_30</td>
<td>2&quot; x 30&quot; Loop, Adhesive Backed</td>
<td>1</td>
</tr>
</tbody>
</table>
Notes:
1. Make sure non-vinyl surface of GE-20018 is clean prior to loop application.
2. Press firmly on loop to ensure adhesion.

FROM VIRTUAL SHARP
DESCRIPTION: SAFETY DAISY CHAINS, BEARING CAPACITY 23 KN, GREY

VENDOR: KIKIGOAL VIA AMAZON

PART NUMBER: B07Z87DD5

NOTE: SUBSTITUTIONS NOT ALLOWED
DESCRIPTION: NEODYMIUM LATCH MAGNET

VENDOR: MASTER MAGNETICS, INC. - MAGNET SOURCE

PART NUMBER: NMLKIT4

NOTE:
1. SUBSTITUTIONS NOT ALLOWED
2. MAGNET MUST BE INSTALLED INTO HOUSING
3. DIMENSIONS SHOWN ARE FOR MAGNET + HOUSING ASSEMBLY

SCALE: 2:1

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Notes:
1. Attach 2 to 1 where shown, using 2x 18 lb. cable ties. Cable tie heads should be inside Daisy Chain (i.e. not showing).
INSTALLED CONFIGURATION

May wrap over truss or hang down, as shown

Magnet sticks to Hard Stop

Wraps around truss

Note:
See GE-21000 for installation information & lengths relative to the Truss
Notes:
1. Rivets should be plated or stainless steel
2. Tag or label with part number.
3. Powder Coated Black (Full Assembly).

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>rivet_.1875_.126-.25</td>
<td>3/16&quot; Rivet, .126-.25 Grip Range</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>GE-20030 - 01</td>
<td>Truss Base - Sheet Metal Assembly, Base Plate</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>GE-20030 - 02</td>
<td>Truss Base - Sheet Metal Assembly, Truss Feet</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>GE-20030 - 03</td>
<td>Truss Base - Sheet Metal Assembly, Berm - Red</td>
<td>2</td>
</tr>
</tbody>
</table>
Notes:
1. Material: 12 Ga. (0.105") Mild Steel Sheet A366/1008 Cold Roll
2. Remove all burrs and sharp edges.
Notes:
1. Material: 0.125" Mild Steel Sheet A366/1008 Cold Roll
2. Remove all burrs and sharp edges.
Notes:
1. Material: 0.125" Mild Steel Sheet A366/1008 Cold Roll
2. Remove all burrs and sharp edges.
Note:
1. Make sure surface of GE-20030 is clean prior to hook application.
2. Press firmly on hook to ensure adhesion.
3. 6 should be loose to allow 5 to float.

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>flat_phillips_10_24_.75</td>
<td>Flat Head, Phillips, .75in Length, 10_24</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>GE-20030</td>
<td>Truss Base - Sheet Metal Assembly</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Hook_4_16</td>
<td>4&quot; x 16&quot; Hook Fastener, Adhesive Backed</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Hook_4_24</td>
<td>4&quot; x 24&quot; Hook Fastener, Adhesive Backed</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>nut_chassis_625_11</td>
<td>Nut, Chassis, 5/8-11</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>nylock_10_24</td>
<td>Nylock #10-24</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>washer_flat_10</td>
<td>Flat Washer for #10 Screw</td>
<td>8</td>
</tr>
</tbody>
</table>
Notes:
1. Material: 1/4" Polycarbonate, Clear
2. Remove all burrs and sharp edges
3. Tag or label with part number
Notes:
1. Material: 1/16" Polycarbonate, Clear
2. Remove all burrs and sharp edges
3. Tag or label with part number
4. Finish: Bare - Vinyl will be applied to face, either side

Dimensions:
- 9X Ø .31 THRU ALL
- 6X R.25
- 0
- 2.13
- 9.63
- 11.75
- 20.00
- 21.00
- 29.25
- 32.00
- 46.50
- 48.00
- 48.50
- 2.13
- 9.75
- 12.25
- 16.00
- 32.00
- 46.50

Material: 1/16" Polycarbonate, Clear

Remove all burrs and sharp edges

Tag or label with part number

Finish: Bare - Vinyl will be applied to face, either side
**Notes:**

1. Tag or label with part number.

<table>
<thead>
<tr>
<th>Left/Right Variations</th>
<th>Vinyl Image</th>
<th>Qty per Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE-20041 - Left</td>
<td>GE-20041 - Left - Vinyl</td>
<td>4</td>
</tr>
<tr>
<td>GE-20041 - Right</td>
<td>GE-20041 - Right - Vinyl</td>
<td>4</td>
</tr>
</tbody>
</table>
Notes:
1. Material: 1/16" Polycarbonate, Clear
2. Remove all burrs and sharp edges
3. Tag or label with part number

Material: 1/16" Polycarbonate, Clear

POLYCARB
Truss Leg Plastic

UNLESS OTHERWISE SPECIFIED:

DRAWN: KAMC 10/23/19
CHECKED:
ENG APPR.:
MFG APPR.:

DIMENSIONS ARE IN INCHES
FRACTIONAL: 1/16
ANGULAR: 1° 1°
TWO PLACE DECIMAL: .01
THREE PLACE DECIMAL: .001

INTERPRET GEOMETRIC
TOLERANCING PER:

QUALIFIED:

POLYCARB
BARE

APPROVAL:

DO NOT SCALE DRAWING

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Notes:
1. Material: 1/16" Polycarbonate, Clear
2. Remove all burrs and sharp edges
3. Tag or label with part number
Note: Hook should be placed centered on the width of the part.
Hook should be placed centered on the width of the part.

Note: Item 1 can be red or blue. See part drawing for more details.
Notes:
1. Material: 1" x 3" x .125" A513 Rectangular Tube
2. Finish: Tiger Drylac Powder Coating, Or Equivalent
3. Remove All Sharp Edges and Burrs
4. Lable or Tag with part number

Part Number | Color
-------------|-------------
GE-20051 | Bengal Black 49/88888

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL: ±1/16
ANGULAR: ±1° 1/4" BEND ±1°
TWO PLACE DECIMAL: ±.01
THREE PLACE DECIMAL: ±.001

INTERPRET GEOMETRIC TOLERANCING PER:
MATERIAL

QUALITY

COMMENTS:
NEXT ASSY USED ON:
APPLICATION
DO NOT SCALE DRAWING

TITLE: Boundary, Black

SCALE: 1:12
WEIGHT:
SHEET 1 OF 1

DRAWN
CHECKED
ENG APPR.
MFG APPR.
Q.A.

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Notes:
1. Material: 1" x 3" x .125" A513 Rectangular Tube
2. Finish: Tiger Drylac Powder Coating, Or Equivalent
3. Remove All Sharp Edges and Burrs
4. Label or Tag with part number

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Color</th>
<th>Material</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE-20053-RED</td>
<td>Bengal Red 49/33333</td>
<td>1&quot; x 3&quot; x .125&quot; A513 Rectangular Tube</td>
<td>Tiger Drylac Powder Coating, Or Equivalent</td>
</tr>
<tr>
<td>GE-20053-BLU</td>
<td>Mercury Blue 597406553</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend:
- 1:8 Scale
- Weight:
- Sheet 1 of 1

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<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20087</td>
<td>Hard Stop, Truss Protection</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Hook_1_6</td>
<td>1&quot; x 6&quot; Hook, Adhesive Backed</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Loop_1_6</td>
<td>1&quot; x 6&quot; Loop, Adhesive Backed</td>
<td>4</td>
</tr>
</tbody>
</table>

Unless otherwise specified:
- Dimensions are in inches
- Tolerances: ±1/16
- Angular: Mach 1° bend
- Two place decimal
- Three place decimal

Finite element analysis

Interpret geometric tolerancing per:
- FRACTIONAL 1/16
- TWO PLACE DECIMAL .01
- THREE PLACE DECIMAL .001

Application used on next assy

Hard Stop, Truss Protection, with Hook and Loop

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<table>
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<th>DESCRIPTION</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20066</td>
<td>Hard Stop, Truss Protection, with Hook and Loop</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20072</td>
<td>Hard Stop, Hitting Assembly</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>GE-20088</td>
<td>Hard Stop, Weldment, Large</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>nylock_.5_13</td>
<td>steel nylon-insert locknut, 1/2&quot; - 13</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>washer_flat_.5</td>
<td>Flat Washer for 1/2&quot; Screw</td>
<td>4</td>
</tr>
</tbody>
</table>
**ITEM NO.** | **PART NUMBER** | **DESCRIPTION** |
--- | --- | --- |
1 | GE-20066 | Hard Stop, Truss Protection, with Hook and Loop |
2 | GE-20072 | Hard Stop, Hitting Assembly |
3 | GE-20089 | Hard Stop, Weldment, Small |
4 | washer_flat_.5 | Flat Washer for 1/2" Screw |
5 | nylock_.5_13 | steel nylon-insert locknut, 1/2" - 13 |

**TITLE:** Hard Stop, Small

**FACTOR:** FIRST®

**DRAWN:** 12/16/19

**SCALE:** 1:4

**UNLESS OTHERWISE SPECIFIED:**

- **DIMENSIONS ARE IN INCHES**
- **TOLERANCES:**
  - FRACTIONAL: 1/16
  - ANGULAR: ±1°
  - TWO PLACE DECIMAL: .01
  - THREE PLACE DECIMAL: .001

**INTERPRET GEOMETRIC TOLERANCING PER:**

**MATERIAL:**

**APPLICATION:**

**DO NOT SCALE DRAWING**
DESCRIPTION: STEEL U-BOLT, 3/8"-16, 2-7/16" ID

VENDOR: MCMASTER CARR

VENDOR PART NUMBER: 8880T959
ITEM NO. | PART NUMBER | DESCRIPTION                                      | QTY. |
----------|-------------|--------------------------------------------------|------|
1         | flat_phil_.25_20_2 | .25"-20 x 2" Flat Head Phillips                  | 4    |
2         | GE-20084     | Hard Stop, Hitting Tube                          | 1    |
3         | GE-20085     | Hard Stop, Hitting Plate                         | 1    |
4         | hex_.5_13_7  | Steel Hex Head Screw, 1/2"-13 x 7" long, fully threaded | 2    |
5         | hexnut_.5_13 | Steel Hex Nut, 1/2"-13                            | 2    |
6         | nylock_.25_20| Steel Nylon-Insert Locknut, 1/4"-20              | 4    |
7         | washer_flat_.25 | Flat Washer for 1/4" Screw                       | 4    |
8         | washer_flat_.5 | Flat Washer for 1/2" Screw                       | 4    |
Notes:
1. Material: 1" x 3" x 0.12" Mild Steel Rectangle Tube A500/A513  Hot Rolled
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
4. Finish: Gray/Silver - Painted
Notes:
1. Material: 0.25" HDPE, Texture: Natural/Smooth, Color: White
2. Remove all burrs and sharp edges.
3. Tag or label with part number.

Hidden Lines Shown - For Hole Ref.

4X Ø .27 THRU
Ø .51 X 82°

4X R.06
Notes:
1. Material: 0.125" HDPE, Texture: Natural/Smooth, Color: White
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
Notes:
1. Finish: Silver/Gray - Paint
2. Remove all burrs and sharp edges.
3. Tag or label with part number.

ITEM NO. | PART NUMBER | DESCRIPTION | QTY.
--- | --- | --- | ---
1 | GE-20081 | Hard Stop, Weldment, Truss Mount Plate | 1
2 | GE-20082 | Hard Stop, Weldment, Tube, Long | 1
3 | GE-20086 | Hard Stop, Weldment, Tube, Hitting Assembly Mount | 1
Notes:
1. Material: 0.125” Mild Steel A366/1008 Cold Roll
2. Remove all burrs and sharp edges.
Notes:
1. Material: 1" x 3" x 0.12" Mild Steel Rectangle Tube A500/A513 Hot Rolled
2. Remove all burrs and sharp edges.
Notes:
1. Material: 1" x 3" x 0.12" Mild Steel Rectangle Tube A500/A513 Hot Rolled
2. Remove all burrs and sharp edges.
Notes:
1. Finish: Silver/Gray - Paint
2. Remove all burrs and sharp edges.
3. Tag or label with part number.

<table>
<thead>
<tr>
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<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
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<tbody>
<tr>
<td>1</td>
<td>GE-20081</td>
<td>Hard Stop, Weldment, Truss Mount Plate</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20086</td>
<td>Hard Stop, Weldment, Tube, Hitting Assembly Mount</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>GE-20083</td>
<td>Hard Stop, Weldment, Tube, Short</td>
<td>1</td>
</tr>
</tbody>
</table>
Notes:
1. Material: 0.125" Mild Steel A366/1008 Cold Roll
2. Remove all burrs and sharp edges.
Notes:
1. Material: 1" x 3" x 0.12" Mild Steel Rectangle Tube A500/A513 Hot Rolled
2. Remove all burrs and sharp edges.
Notes:
1. Material: 1" x 3" x 0.12" Mild Steel Rectangle Tube A500/A513 Hot Rolled
2. Remove all burrs and sharp edges.
Notes:
1. Label or Tag with Part Number
Step 1: 

Assembly 5 to 4 with 6 QTY (6) 

Note: Zinc Plated Steel Rivets

Step 2: 

Attach 2 to Step 2: with channel facing up with 6 QTY (4) 

Note: Zinc Plated Steel Rivets

Step 3: 

Attach 2 to Step 2: with channel facing up with 6 QTY (4) 

Note: Zinc Plated Steel Rivets
Step 4:

Attach 1 to Step 3: with 6 QTY(4). Flanges away from 5.
1. Material: 14 Ga. Pre-plated steel
2. Remove all burrs and sharp edges.

Notes:

1. Material: 12 Ga. Pre-plated steel
2. Remove all burrs and sharp edges.

Notes:
Notes:
1. Material: 12 Ga. Pre-plated steel
2. Remove all burrs and sharp edges.
Note:
1. Tag or Label with Part Number
2. Zinc Plated Steel Rivets

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20102-01</td>
<td>12 Gauge Pre-plated Steel</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>GE-20102-02</td>
<td>12 Gauge Pre-plated Steel</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>rivet_.1875_.126-.25</td>
<td>3/16&quot; Rivet, .126-.25 Grip Range</td>
<td>24</td>
</tr>
</tbody>
</table>
Notes:
1. Material: 12 Ga. Pre-plated steel
2. Remove all burrs and sharp edges.
### REVISIONS

<table>
<thead>
<tr>
<th>ZONE</th>
<th>REV.</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>APPROVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1, B2, 2-A1, 2-B1, 2-B2, 3-B2, 4-A1, 5-B1, 5-B2</td>
<td>A</td>
<td>Fixed broken Item No. callouts, fixed color pattern application to match GE-20105 and GE-20106 drawings, Updated Part Numbers of standoffs in BOM.</td>
<td>1/6/2020</td>
<td>CPO</td>
</tr>
<tr>
<td>ITEM NO.</td>
<td>PART NUMBER</td>
<td>DESCRIPTION</td>
<td>QTY.</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>GE-20105</td>
<td>Bottom Control Panel</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>GE-20106</td>
<td>Top Control Panel</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Threaded standoff_.25_1.5</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Threaded standoff_10-32_1.5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Flat Hex .25_20_.75</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Round hex_10_32_.625_full</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
Notes:
1. Remove Protective backing
2. Attach 4 to 2 using 6 4 spots.
Notes:
1. Attach 3 to 2 using 5.
Notes:
1. Remove the protective backing from 1.
2. Align colors to match
3. Attach 1 to 2 using 5
Notes:
1. Material: 0.25" Clear Polycarbonate
2. Remove all burrs and sharp edges.
3. Label or Tag with Part Number

REVISIONS

<table>
<thead>
<tr>
<th>ZONE</th>
<th>REV.</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>APPROVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2, B3, B4</td>
<td>A</td>
<td>0.125&quot; Alignment holes for vinyl</td>
<td>10/21/2019</td>
<td>NTW</td>
</tr>
</tbody>
</table>
Notes:
1. Material: 0.25" Clear Polycarbonate
2. Remove all burrs and sharp edges.
3. Label or Tag with Part Number

Material: 0.25" Clear Polycarbonate
Remove all burrs and sharp edges.
Label or Tag with Part Number.
Note:
1. Material: 1/8" clear Polycarbonate
2. Remove all Burrs and Sharp edges
3. Label or Tag with Part Number
Notes:
1. Material: 0.125" Black HDPE Smooth Finish
2. Remove all burrs and sharp edges.
3. Bag and Label with part number
Notes:
1. 0.375" id shielded bearing (R6ZZ)
Notes:
1. Material: 12 Ga. Pre Plated Steel
2. Remove all burrs and sharp edges.
3. Label or Tag with part number
Notes:
1. Material: 12 Ga. Aluminum 5052
2. Remove all burrs and sharp edges.
Notes:
1. Material: 12 Ga. Aluminum 5052
2. Remove all burrs and sharp edges.


Ensure all burrs and sharp edges are removed.
Notes:
1. Material: 14 Ga. Pre-plated steel
2. Remove all burrs and sharp edges.
3. Bag or Tag with Part Number
Notes:
1. Material: 12 Ga. Aluminum 5052
2. Remove all burrs and sharp edges.
3. Tag or Label with part number
Note:
1. Material 0.375" Polycarbonate, Clear
2. Remove all burrs and sharp edges
3. Tag or Label with part number

Material: 0.375" Polycarbonate, Clear
Remove all burrs and sharp edges
Tag or Label with part number
Note:
Triangle Manufacturing
Steel Round Lazy Susan Turntable Bearing 22gau-12" with 4 detents
Manufacturer part number: 12D10346

Section A-A
Scale 1:2

Drawn: [Signature]
Checked: [Signature]
Rev.: [Revision]

Lazy Susan

Revisions

<table>
<thead>
<tr>
<th>ZONE</th>
<th>REV.</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>APPROVED</th>
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</thead>
<tbody>
<tr>
<td>A4</td>
<td>A</td>
<td>Updated manufacturer part number.</td>
<td>1/9/2020</td>
<td>CFO</td>
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</table>

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<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20140</td>
<td>Sensor Housing Assembly</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>CABLE TIE MOUNT</td>
<td>CABLE TIE MOUNT</td>
<td>7</td>
</tr>
</tbody>
</table>

**Cable Tie Pad**

**Cable Tie placement**

**Sensor Housing Assembly with cable tie mounts**

---

**UNLESS OTHERWISE SPECIFIED:**

- DIMENSIONS ARE IN INCHES
- TOLERANCES: 1/16
- ANGULAR AND LINEAR: 1° BEND
- FRACTIONAL: 1/16
- THREE-PLACE DECIMAL: 0.001
- TWO-PLACE DECIMAL: 0.01

**INTERPRET GEOMETRIC TOLERANCING PER:**

- **FRACTIONAL**: 1/16
- **ANGULAR**: 1° BEND
- **TWO-PLACE DECIMAL**: 0.01
- **THREE-PLACE DECIMAL**: 0.001

**DO NOT SCALE DRAWING**

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Notes:
1. Install #10-32 rivet nuts to GE-20101 as shown

Notes:
1. Clean and prep surface
2. Apply 1” wide be 15” Hook
Notes:
1. Attach 2 to 1 with 4 and 5 in 6 spots.
2. Attach 3 to 2 with 7 and 6 in 4 spots. Making sure to align access holes in 3 to matching cut out in 2.

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20102</td>
<td>Trench Top Frame</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20114</td>
<td>Trench Top Plastic</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>GE-20150</td>
<td>12d6234 Triangle Manufacturing</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>flat_hex_25_20_1</td>
<td>Steel Hex Flat Head Screw, 1/4&quot;-20 x 1&quot; long, fully threaded</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>nylock_25_20</td>
<td>Steel Nylon-Insert Locknut, 1/4&quot;-20</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>nylock_10_32</td>
<td>Low-Strength Steel Nylon-Insert Locknut, Zinc-Plated, 10-32 Thread Size</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>round_hex_10_32_625_full</td>
<td>Round Hex Head, #10-32 x 5/8&quot; long, fully threaded</td>
<td>4</td>
</tr>
</tbody>
</table>
Notes:
1. Remove protective Plastic.
2. Attach 2 to 1 as shown on back side only.

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20115</td>
<td>Trench Side Plastic</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Loop_1_15</td>
<td>1&quot; x 15&quot; Loop, Adhesive Backed</td>
<td>2</td>
</tr>
</tbody>
</table>

The drawing is not to scale.
Notes:
1. Clean and prep bottom surface
2. Attach 2 to 1 as shown above.
3. No Hook permissable in the circular cut outs.

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20123</td>
<td>Trench Base</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Hook_4_55</td>
<td>4&quot; x 55&quot; Hook, Adhesive Backed</td>
<td>2</td>
</tr>
</tbody>
</table>

**Dimensions:**
- Trench Base: 1
- Hook_4_55: 2

**Notes:**
- Clean and prep bottom surface.
- Attach 2 to 1 as shown above.
- No Hook permissable in the circular cut outs.
Frame, Bay

Notes:
1. Tag or label with part number
2. Remove all burrs and sharp edges

ITEM | PART NUMBER | DESCRIPTION | QTY.
--- | --- | --- | ---
1 | GE-20201-01 | 1.75" x .125" thk. Square Tubing, 6063 Aluminum | 2
2 | GE-20201-02 | 1-1/4" Schedule 40 Pipe, 6061 Aluminum | 2
3 | GE-20201-03 | 1.75" x .125" thk. Square Tubing, 6063 Aluminum | 2
Notes:
1. Material: 1/4" thick, clear polycarbonate.
2. Remove all burrs and sharp edges.
3. Part will have vinyl applied.
4. Tag or label with part number.

**REV**...
Notes:
1. Material: 1/4" thick, clear, polycarbonate.
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
DESCRIPTION: ZINC-PLATED STEEL PEGBOARD HOOK FOR 3/16" AND 9/32" DIAMETER PEG HOLE, 6-3/4" PROJECTION

VENDOR: MC MASTER-CARR

PART NUMBER: 18535A63

PACKAGE QUANTITY: 10
Notes:
1. Material: 1/4" Polycarbonate, Clear
2. Remove all burrs and sharp edges.
3. Tag or label with part number.

Material: 1/4" Polycarbonate, Clear

Remove all burrs and sharp edges.
Tag or label with part number.
Notes:
1. Material: 0.093" thick polycarbonate, clear
2. Remove all burrs and sharp edges
3. Tag or label with part number
Notes:
1. Material: 1/8" thick, polycarbonate, clear.
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
Notes:
1. Material: Aluminum
2. Description: AndyMark Churro
3. Make from AndyMark PN: am-3101-6, or equivalent.
4. Bag or tag with part number.
Notes:
1. Material: 1/4" Polycarbonate, Clear
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
Notes:
1. Material: .093" polycarbonate, clear
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
Notes:
1. Material: 1/8" polycarbonate, clear
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
Notes:
1. Material: 1/8" thick polycarbonate, clear
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
Notes:
1. Material: Aluminum
2. Description: AndyMark Churro
3. Make from AndyMark PN: am-3101-6 or equivalent.
4. Bag or tag with part number.

Material: Aluminum
Description: AndyMark Churro
Make from AndyMark PN: am-3101-6 or equivalent.
Bag or tag with part number.
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20217</td>
<td>Top Rail, Angle</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20218</td>
<td>Top Rail, Post</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Round hex, .25 x .625 full Steel Button Head Hex Drive Screw, 1/4&quot;-20 x 5/8&quot; long, fully threaded</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Dimensions are in inches. Tolerances:**
- Angular ±1/16°
- Three place decimal ±.001

**Application:**
- Used on:
- Do not scale drawing

**Material:**

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Notes:
1. Material: 5052 Aluminum Sheet, 10 GA.
2. Remove all burrs and sharp edges.
3. Tag or Label with part number.
Notes:
2. Remove all burrs and sharp edges.
3. Bag or tag with part number.
Vinyl applied to one face. Front and back of part are identical.

Notes:
1. Tag or label with part number

<table>
<thead>
<tr>
<th>Color Variations</th>
<th>QTY per field</th>
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</thead>
<tbody>
<tr>
<td>GE-20220-Blue</td>
<td>1</td>
</tr>
<tr>
<td>GE-20220-Red</td>
<td>1</td>
</tr>
<tr>
<td>ITEM NO.</td>
<td>PART NUMBER</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>1</td>
<td>GE-20220</td>
</tr>
<tr>
<td>2</td>
<td>Vision_LoadingBay</td>
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</table>

DIMENSIONS ARE IN INCHES
FRACTIONAL: 1/16
ANGULAR: 1°  BEND
TWO PLACE DECIMAL: .01
THREE PLACE DECIMAL: .001

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<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20302</td>
<td>Power Port Top Frame</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>GE-20303</td>
<td>Power Port Top Brace</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>GE-20304</td>
<td>Power Port Top Side Polycarbonate</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>GE-20305</td>
<td>Power Port Top Back Polycarbonate</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>GE-20307</td>
<td>Power Port Top Roof Polycarbonate</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>GE-20308</td>
<td>Power Port Top Deflector Polycarbonate</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>GE-20322</td>
<td>Power Port Top Front</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>hex_.25_20_.625</td>
<td>Steel Hex Head Screw, 1/4&quot;-20 x 5/8&quot; long, fully threaded</td>
<td>16</td>
</tr>
</tbody>
</table>
Notes:
1. Cable tie plastic at available locations.
**Notes:**

1. Rivets to be aluminum.
2. Tag or label with part number.
3. Remove all burrs and sharp edges.

### Table: Items

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20302-01</td>
<td>12 GA, 5052 Aluminum</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20302-02</td>
<td>12 GA, 5052 Aluminum</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>GE-20302-03</td>
<td>12 GA, 5052 Aluminum</td>
<td>1</td>
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<tr>
<td>4</td>
<td>GE-20302-04</td>
<td>12 GA, 5052 Aluminum</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>GE-20302-05</td>
<td>12 GA, 5052 Aluminum</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>rivet_.1875_.126-.25</td>
<td>3/16&quot; Rivet, .126-.25 Grip Range</td>
<td>40</td>
</tr>
</tbody>
</table>
Power Port Top Frame

Dimensions are in inches.

Interpret geometric tolerancing per:

- Fractional: 1/16
- Angular: 1° bend
- Two place decimal: .01
- Three place decimal: .001

Material: [specify material]

Finish: [specify finish]

Scale: 1:4

Weight: [specify weight]

UNLESS OTHERWISE SPECIFIED:

- Dimensions are in inches.
- Tolerances:
  - Fractional: 1/16
  - Angular: 1° bend
  - Two place decimal: .01
  - Three place decimal: .001

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Notes:
1. Tag or label with Part Number
2. Remove all burrs and sharp edges

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20303-01</td>
<td>12 GA, 5052 Aluminum</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>S-0420-1ZI-PennEngineering</td>
<td>1/4-20 self-clinching nut, .054 Shank</td>
<td>4</td>
</tr>
</tbody>
</table>
Notes:
1. Material: 1/8" thick, clear polycarbonate
2. Remove all burrs and sharp edges
3. Tag or label with part number

Material: 1/8" thick, clear polycarbonate
Remove all burrs and sharp edges
Tag or label with part number
Notes:
1. Material: 1/8" thick polycarbonate - black
2. Remove all burrs and sharp edges
3. Tag or label with part number
Notes:
1. Material: 1/8" Thick Polycarbonate, Clear
2. Vinyl to be applied to face.
3. Tag or label with part number.
4. Remove burrs and sharp edges.
Notes:
1. Material: 1/8" thick, clear polycarbonate
2. Remove all burrs and sharp edges
3. Tag or label with part number
Notes:
1. Material: 1/8" thick polycarbonate - black
2. Remove all burrs and sharp edges
3. Tag or label with part number

**REVISIONS**

<table>
<thead>
<tr>
<th>ZONE</th>
<th>REV.</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>APPROVED</th>
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</thead>
<tbody>
<tr>
<td>A3</td>
<td>A</td>
<td>Finish changed from vinyl to screen print.</td>
<td>10/9/2019</td>
<td>CPO</td>
</tr>
<tr>
<td>A4</td>
<td>B</td>
<td>Updated material to black polycarbonate, eliminated note about screen print.</td>
<td>10/28/2019</td>
<td>CPO</td>
</tr>
</tbody>
</table>

**Legend:**
- 6x R.63
- 7x Ø .25 THRU ALL
- 8x R.13

**Material:**
1/8" thick polycarbonate - black

**Tag or Label:**
Part number A

**Notes:**
- **Material:** 1/8" thick polycarbonate - black
- **Remove all burrs and sharp edges**
- **Tag or label with part number**

**Title:**
Power Port Top Deflector Polycarbonate
Notes:
1. Tag or label with part number.
2. Remove burrs and sharp edges.

ITEM NO. PART NUMBER DESCRIPTION QTY.
1 GE-20309-01 1.75" x .125" thk. Square Tube, 6061 Aluminum 1
2 GE-20309-02 1.75" x .125" thk. Square Tube, 6061 Aluminum 2
3 GE-20309-03 1.75" x .125" thk. Square Tube, 6061 Aluminum 1
4.63  4.63  35.43

5.46  5.46

1/4 places

48.60
48.00

B

No weld permissible on inside of tube. 2x

1/4
1/4

2 places

2 Places. Grind flush to Datum A if protruding

1/4

2 Places. Grind flush to Datum A if protruding

1/4

2 places

Round tube flush here. 2x

5.46

3.40

4 places

1/4

1/4 2 places

1/4

1/4

1.55

Notes:

1. Tag or label with part number
2. Remove all burrs and sharp edges

DETAIL B
SCALE 1:4

Tube corner flush to A

ITEM
NO.
PART NUMBER
DESCRIPTION
QTY.

1
GE-20310-01
1.75" x .125" thk. Square Tubing, 6063 Aluminum
2

2
GE-20310-02
1-1/4" Schedule 40 Pipe, 6061 Aluminum
2

3
GE-20310-03
1.75" x .125" thk. Square Tubing, 6063 Aluminum
2
Low Power Port Frame

Dimensions are in inches. Tolerances:
- Fractional: ±1/16
- Angular, minimum bend: ±1°
- Two place decimal: ±.01
- Three place decimal: ±.001

Interpret geometric tolerancing per:

Material:

Application:

Do not scale drawing.
Notes:
1. Material: 16 GA. Preplated Steel
2. Remove all burrs and sharp edge
3. Tag or label with part number
Notes:
1. Material: 12 Gauge Preplated Steel
2. Remove all burrs and sharp edges
3. Tag or label with part number
Notes:

1. Make sure surface of GE-20312 is clean prior to hook application.
2. Press firmly on hook to ensure adhesion.
Notes:
2. Tag or label with part number.
3. Remove all burrs and sharp edges.
4. Finish: Vinyl to be applied to face.
Notes:
2. Remove burrs and sharp edges.
3. Tag or label with part number.
Notes:
2. Remove all burrs and sharp edges.
3. Tag or label with part number.

Material: 1/4" Clear Polycarbonate.  
Remove all burrs and sharp edges.  
Tag or label with part number.
Notes:
1. Material: 1.75" x .125" thk. Square Tube, 6063 Aluminum
2. Remove all burrs and sharp edges
3. Tag or label with part numbers
Notes:
1. Material: 1/4" thk. Polycarbonate, Clear
2. Tag or label with part number
3. Remove all burrs and sharp edges
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20317</td>
<td>Power Port Base Brace Bar</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20318</td>
<td>Power Port Base Brace Hook</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>nylon_.25_20</td>
<td>Steel Nylon-Insert Locknut, 1/4&quot;-20</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>round_hex_.25_20_2.7_partial</td>
<td>Steel Button Head Hex Drive Screw, 1/4&quot;-20 x 2.75&quot; long, partially threaded</td>
<td>4</td>
</tr>
</tbody>
</table>
GE-20320-Blue GE-20320-Red-Vinyl applied to one face. Front and back of part are identical.

This row of holes oriented towards top.

Black region to be cut out, backed with translucent, light diffusing vinyl.

Vinyl applied to one face. Front and back of part are identical.

Notes:
1. Tag or label with part number

<table>
<thead>
<tr>
<th>Color Variations</th>
<th>QTY per field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>Vinyl Image</td>
</tr>
<tr>
<td>GE-20320-Blue</td>
<td>GE-20320-Blue-Vinyl</td>
</tr>
<tr>
<td>GE-20320-Red</td>
<td>GE-20320-Red-Vinyl</td>
</tr>
</tbody>
</table>
Vinyl applied to this face

Countersinks face up

DETAIL A
SCALE 1 : 6

Color Variations

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Vinyl Image</th>
<th>QTY per field</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE-20321-Blue</td>
<td>GE-20321-Blue-Vinyl</td>
<td>1</td>
</tr>
<tr>
<td>GE-20321-Red</td>
<td>GE-20321-Red-Vinyl</td>
<td>1</td>
</tr>
</tbody>
</table>

Dimension: 1:12

Graphical Symbol:

Low Power Port
with Vinyl

Application:
USED ON NEXT ASSY

Dimension: 1:6

Graphical Symbol:

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Notes:
1. Attach 2 3X to 1.
2. Align to lower portion of the opening on the face of the vinyl.

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20320-Blue</td>
<td>Power Port Top Front with Vinyl</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Vision_PowerPort</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ITEM NO.</td>
<td>PART NUMBER</td>
<td>DESCRIPTION</td>
<td>QTY.</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>1</td>
<td>GE-20218</td>
<td>Top Rail, Post</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>GE-20324</td>
<td>Top Rail, Power Port Angle</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Hook_1_45</td>
<td>1&quot; X 45&quot; Hook, Adhesive Backed</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Loop_1_45</td>
<td>1&quot; x 45&quot; Loop, Adhesive Backed</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>round_hex_.25_20_.62_5_full</td>
<td>Steel Button Head Hex Drive Screw, 1/4&quot;-20 x 5/8&quot; long, fully threaded</td>
<td>2</td>
</tr>
</tbody>
</table>
Notes:
1. Attach 1 to the underside of 2.
2. Fasten in place with 5.

Note:
2. Attach 3 to the front of 2.
3. Attach 4 to 3 and leave the protective backing on.
Notes:
1. Material: 5052 Aluminum Sheet, 10 GA.
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
Notes:
1. Material: 1/8" thick, 5052 Aluminum, or similar.
2. Remove all burrs and sharp edges.
3. Bag or tag with part number.

Material: 1/8" thick, 5052 Aluminum, or similar.

Dimensions are in inches.

Tolerances:
- Fractional: ±1/16
- Angles: ±1° bend
- Two place decimal: ±.01
- Three place decimal: ±.001

Finish: Mill finish

Interpret Geometric Tolerancing Per: ASME Y14.5-1994

Application: Not used on next assembly.

Do not scale drawing.
Notes:
1. Material: 1/8" Thick Polycarbonate, Clear
2. Vinyl to be applied to face.
3. Tag or label with part number
4. Remove burrs and sharp edges

Title: Power Port
Backboard

Material: 1/8" Thick Polycarbonate, Clear
Vinyl to be applied to face.
Tag or label with part number
Remove burrs and sharp edges

Notes:
1. Material: 1/8" Thick Polycarbonate, Clear
2. Vinyl to be applied to face.
3. Tag or label with part number
4. Remove burrs and sharp edges
Notes:
1. Remove all burrs and sharp edges
2. Bag or label with part number
Note:
1. Plastic with vinyl same for both RED and BLUE

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20331-Red</td>
<td>Power Port Backboard Left with Vinyl</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20328</td>
<td>Backboard Bracket</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>nylock_.25_20</td>
<td>Steel Nylon-Insert Locknut, 1/4&quot;-20</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>round_hex_.25_20_.62_5_full</td>
<td>Steel Button Head Hex Drive Screw, 1/4&quot;-20 x 5/8&quot; long, fully threaded</td>
<td>8</td>
</tr>
<tr>
<td>ITEM NO.</td>
<td>PART NUMBER</td>
<td>DESCRIPTION</td>
<td>QTY.</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>-------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>1</td>
<td>GE-20328</td>
<td>Backboard Bracket</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>GE-20332</td>
<td>Power Port Backboard Right with Vinyl</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>nylock_.25_20</td>
<td>Steel Nylon-Insert Locknut, 1/4&quot;-20</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>round_hex_.25_20_.625_full</td>
<td>Steel Button Head Hex Drive Screw, 1/4&quot;-20 x 5/8&quot; long, fully threaded</td>
<td>8</td>
</tr>
</tbody>
</table>

Note: Item 2 can be red or blue. See drawing for more details.
**Color Variations**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Vinyl Image</th>
<th>QTY per field</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE-20331-Blue</td>
<td>GE-20331-Blue-Vinyl</td>
<td>1</td>
</tr>
<tr>
<td>GE-20331-Red</td>
<td>GE-20331-Red-Vinyl</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes: Tag or label with part number

VINYL APPLIED TO THIS FACE.

Power Port
Backboard Left with Vinyl

UNLESS OTHERWISE SPECIFIED:
SCALE: 1:12
WEIGHT:

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL: ±1/64
ANGULAR: ±0.1° BEND ±0.0625°
THREE PLACE DECIMAL: ±0.001

INTERPRET GEOMETRIC TOLERANCING PER:

APPLICATION

DO NOT SCALE DRAWING

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Vinyl applied to this face.

Notes: Tag or label with part number

<table>
<thead>
<tr>
<th>Color Variations</th>
<th>Vinyl Image</th>
<th>QTY per field</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE-20332-Red</td>
<td>GE-20332-Red-Vinyl</td>
<td>1</td>
</tr>
<tr>
<td>GE-20332-Blue</td>
<td>GE-20332-Blue-Vinyl</td>
<td>1</td>
</tr>
</tbody>
</table>
Notes:
1. Material: 1/4" thick, clear polycarbonate.
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
Notes:
1. Material: 1/16" thick, clear polycarbonate
2. Remove all burrs and sharp edges
3. Tag or label with part number
Notes:
1. Material: Aluminum
2. Description: AndyMark Churro
3. Make from AndyMark PN: am-3101-6, or equivalent.
4. Bag or tag with part number.
Notes:
2. Remove burrs and sharp edges.
3. Tag or label with part number.


Added slot to part.

A3, B4

2/27/2020

CPO
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20333</td>
<td>Inner Port Chute Wall</td>
</tr>
<tr>
<td>2</td>
<td>GE-20334</td>
<td>Inner Port Chute Slide</td>
</tr>
<tr>
<td>3</td>
<td>GE-20335</td>
<td>Inner Port Chute Churro</td>
</tr>
<tr>
<td>4</td>
<td>GE-20336</td>
<td>Inner Port Chute Ramp</td>
</tr>
<tr>
<td>5</td>
<td>round_hex_.25_20_.62_full</td>
<td>Steel Button Head Hex Drive Screw, 1/4&quot;-20 x 5/8&quot; long, fully threaded</td>
</tr>
</tbody>
</table>

**Application**

- **Component Name**: Inner Port Chute Assembly
- **Drawing Number**: GE-20337
- **Scale**: 1:6
- **Weight**:
- **Sheet**: 1 of 2
- **Note**: Do not scale drawing.
Notes:
1. Attach 3 (qty. 7) to 1 using 5 (qty. 7)

Notes:
1. Attach 2 to the assembly by bending and aligning the plastic tabs
2. Attach 1 to the assembly, aligning with the tabs of 2
3. Bolt using 5 (qty. 7)

Notes:
1. Attach 4 to the assembly using 50 lb. cable ties.
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20315</td>
<td>Power Port Base Side Polycarbonate</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20325</td>
<td>Angle, Side Polycarbonate</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>nylock_.25_20</td>
<td>Steel Nylon-Insert Locknut, 1/4&quot;-20</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>round_hex_.25_20_.62_full</td>
<td>Steel Button Head Hex Drive Screw, 1/4&quot;-20 x 5/8&quot; long, fully threaded</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Hook_1_24</td>
<td>1&quot; x 24&quot; Hook, Adhesive backed</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Loop_1_24</td>
<td>1&quot; x 24&quot; Loop, Adhesive backed</td>
<td>1</td>
</tr>
</tbody>
</table>

**Title:** Side Polycarbonate Assembly, Right

**Scale:** 1:24

**Dimensions:**
- Fractions: 1/16
- Angular: 1° Bend
- Two Place Decimal: .01
- Three Place Decimal: .001

**Material:**

**Notes:**
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Notes:
1. Clean and prep 2.
2. Attach 5 to 2 to the back without drilled holes.
3. Attach 6 to 5 leaving protective backing on.

Notes:
1. Remove protective plastic from 1.
2. Attach 2 to one in the orientation shown above.
3. Fasten with 3 and 4 in three locations.
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20315</td>
<td>Power Port Base Side Polycarbonate</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20325</td>
<td>Angle, Side Polycarbonate</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Hook_1_24</td>
<td>1&quot; x 24&quot; Hook, Adhesive backed</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Loop_1_24</td>
<td>1&quot; x 24&quot; Loop, Adhesive backed</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>nylock_25_20</td>
<td>Steel Nylon-Insert Locknut, 1/4&quot;-20</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>round_hex_25_20_62_5_full</td>
<td>Steel Button Head Hex Drive Screw, 1/4&quot;-20 x 5/8&quot; long, fully threaded</td>
<td>3</td>
</tr>
</tbody>
</table>
Notes:
1. Clean and prep 2.
2. Attach 3 to 2 to the face without holes.
3. Attach 4 to 3, but leave the protective backing on.

Notes:
1. Remove protective plastic from 1.
2. Attach 2 to the plastic in the orientation shown.
3. Fasten with 6 and 5 in three locations.
Notes:
1. Material: 1/4" clear polycarbonate.
2. Remove all burrs and sharp edges.
3. Label or tag with part number.
Notes:
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
NOTES:
2. Remove all burns and sharp edges.
3. Tag or label with part number.
Notes:
1. Make from commercial part:
   Vendor: TCH
   Website: TCHWEB.com
   SKU #: 505-1965801
   Description: STEEL CONTINUOUS HINGE - 0.04" X 2.0" X 72"
   WITH NICKEL PLATE & MOUNTING HOLES
2. Bar or tag with part number.
3. Remove burrs and sharp edges.
Notes:
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
Notes:
1. Material: 1/8" 5052 Aluminum sheet or similar.
2. Remove all burrs and sharp edges.
3. Bag or tag with part number.
Notes:
1. Material: 1/4" Clear Polycarbonate
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
NOTES:
1. Material: 1/4" Clear Polycarbonate
2. Remove all burrs and sharp edges.
3. Label or tag with part number.

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL: ±1/16
ANGULAR: ±1°
TWO PLACE DECIMAL: ±.01
THREE PLACE DECIMAL: ±.001

INTERPRET GEOMETRIC TOLERANCING PER:
MACHINIST

Q.A.
ENGINEER
MFG. APPR.

NEXT Assy USED ON
APPLICATION

DO NOT SCALE DRAWING
Notes:
1. Material: 3/8" Clear Polycarbonate
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
Notes:
1. Material 1/4" Thick Polycarbonate Sheet, Clear
2. Remove Sharp Edges and Burrs
3. Tag or Label with Part Number

**Dimensions are in inches**

**Angles:**
- Mach 1°
- Bend 1°

**Tolerances:**
- Fractional: 1/16
- Two place decimal: .01
- Three place decimal: .001

---

**Application**

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**Note:**
1. Material: 12 GA Plated Sheet
2. Remove Sharp edges and burrs
3. Label and Tag with part number

---

**Title:** Sheet Metal Angle

**Note:**
- 1. Material: 12 GA Plated Sheet
- 2. Remove Sharp edges and burrs
- 3. Label and Tag with part number
Notes:
1. Material: 2" x 2" x .125" Aluminum Angle 6063
2. Remove Sharp Edges and Burrs
3. Tag and Label with Part Number
Notes:
1. Material: 12 Ga. Pre Plated Steel
2. Remove all burrs and sharp edges
3. Tag and Label With Part Number
Notes:
1. Material 1/4" Thick Polycarbonate Sheet
2. Remove Sharp Edges and Burrs
3. Label and Tag with Part Number
Notes:
1. Material: 1/4" Thick Polycarbonate Sheet, Clear
2. Remove Sharp Edges and Burrs
3. Label and Tag with Part Number

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4X</td>
<td>.88</td>
</tr>
<tr>
<td>6X</td>
<td>3.25</td>
</tr>
<tr>
<td>7X</td>
<td>4.00</td>
</tr>
<tr>
<td>9X</td>
<td>6.00</td>
</tr>
<tr>
<td>11X</td>
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<td>13X</td>
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<tr>
<td>27X</td>
<td>16.25</td>
</tr>
<tr>
<td>29X</td>
<td>17.50</td>
</tr>
</tbody>
</table>

Material: 1/4" Thick Polycarbonate Sheet, Clear
Remove Sharp Edges and Burrs
Label and Tag with Part Number
Notes:
1. Material: 1/4" Thick Polycarbonate Sheet
2. Remove Sharp Edges And Burrs
3. Tag and Label with Part Numbers
Description: STEEL CONTINUOUS HINGE - 0.04" X 2.0" X 72" WITH NICKEL PLATE & MOUNTING HOLES
Vendor TCH
Part Number: 505-1965801
Note:
1. Material: 1/4" Thick Polycarbonate Sheet
2. Remove Sharp Edges and Burrs
3. Tag and Label with Part Number

4X Ø.25 Thru
2X .50
2X 1.88
4X Ø.25 Thru

4X Ø.27 Thru
2X 8.48
2X 8.75
4X Ø.19 ± .002 Thru

4X 8.48
6.50
6.88
7.75

1.25
6.10
7.00
7.72
9.00
11.00
12.88
14.75
16.00

Molette.

Polycarbonate
Face

11/22/2019
MXS

12/19/2019
MXS

Material: 1/4" Thick Polycarbonate Sheet
Remove Sharp Edges and Burrs
Tag and Label with Part Number.

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ± 1/16
ANGULAR AND 90° BEND ± 1°
THREE PLACE DECIMAL ± .001

DO NOT SCALE DRAWING

REV.
A3
A
Added Four holes
11/22/2019
MXS

A1
B
Description/Title Change
12/19/2019
MXS

A
B

SIZE
DWG. NO.
REV

TITLE
GE-20361
B

SCALE 1:2
WEIGHT:
SHEET 1 OF 1

NAME DATE
DRAWN
CHECKED
ENG. Appr.
MFG. Appr.
Q.A.

APPLICATION
DO NOT SCALE DRAWING

COMMENTS:
Q.A.
MFG. APPr.
ENG. APPr.
CHECKED
DRAWN

INTERPRET GEOMETRIC TOLERANCING PER:

NOTE:
1. Material: 1/4" Thick Polycarbonate Sheet
2. Remove Sharp Edges and Burrs
3. Tag and Label with Part Number

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Notes:
1. Material: 1.5" X 1.5" X .125" Aluminum Angle 6063
2. Remove Sharp Edges and Burrs
3. Tag and Label with Part Number 2x .75
Notes:
1. Material: 1/4" Thick Polycarbonate Sheet, Clear
2. Remove Sharp Edges and Burrs
3. Tag and Label with Part Number

Material: 1/4" Thick Polycarbonate Sheet, Clear
Remove Sharp Edges and Burrs
Tag and Label with Part Number

DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL: ±1/16
ANGULAR: ±1° BEND
TWO PLACE DECIMAL: ±0.01
THREE PLACE DECIMAL: ±0.001

INTERPRET GEOMETRIC TOLERANCING PER:

UNLESS OTHERWISE SPECIFIED:

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Description: Rod end with female thread, EBRI igubal®, spherical ball iglide® L280, inch

Vendor: Igus
Part Number: EBRI-04
Notes:
1. Material 1/4" Thick Polycarbonate Sheet
2. Remove Sharp Edges and Burrs
3. Tag and Label with Part Number
Description: Aluminum Spacer 3/8 OD x .257 ID x 1-1/8 Long

Vendor: Aluminum Spacers
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20372</td>
<td>Counter Box</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>VisiSight_with_bracket</td>
<td>VisiSight Break Beam with Bracket</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>6-32_Pan_Phil_1</td>
<td>6-32 Steel Pan Head Phillips Screw</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>No.5 Washer</td>
<td>No 5 Screw washer</td>
<td>16</td>
</tr>
<tr>
<td>6</td>
<td>Nylock_6_32</td>
<td>6-32 Nylock Nut</td>
<td>8</td>
</tr>
</tbody>
</table>
Note:
Using item 1 attach item 3 using hardware from items 4,5,6 in four places
Notes:
1. Material: 12 GA Pre Plated Steel
2. Remove Sharp Edges and Burrs
3. Tag and Label with Part Number

Material: 12 GA Pre Plated Steel

Thru: 1.60
Through: .27

2X .30 Thru

2X 1.61
2X .75
2X .27 Thru

1.00
2.25
2.50

4.68

6.00

2X R.13

2X .30

0.50
0.25

1.79

1.00
Note:
1. Material: 1/4" Thick HDPE Sheet, Black
2. Finish: Orange Peel
3. Remove Sharp Edges and Burrs
4. Tag and Label With Part Number

Weld Permissible
4 Places

DETAIL A
SCALE 1 : 2

A

B

Counter Box

Material: 1/4" Thick HDPE Sheet, Black
Finish: Orange Peel
Remove Sharp Edges and Burrs
Tag and Label With Part Number

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ±1/16
ANGULAR AND 1/16" BEND ±1/8
TWO PLACE DECIMAL ±.01
THREE PLACE DECIMAL ±.001

INTERPRET GEOMETRIC TOLERANCING PER:

UNIVERSAL
MEDIAL
CONVENTIONAL

APPLICATION
USED ON
DO NOT SCALE DRAWING

ADDRESS
CHECKED
ENG APPr.
MFG APPr.

QM
G.A.

LEGAL

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Note:
1. Material: 12 Gage Preplated Steel Sheet
2. Remove Sharp Edges and Burrs
3. Tag and Label With Part Number

Material: 12 Gage Preplated Steel Sheet

R.23
Notes:
1. Material: 1/4" Thick Polycarbonate Sheet, Clear
2. Remove Sharp Edges and Burrs
3. Tag and Label with Part Numbers
**Description:** NeverRest 60 Motor

**Vendor:** Andymark

**Part Number:** am-3103
Note:
1. Material: 1/2" Square Bar, 6061 Aluminum
2. Remove Sharp Edges and Burrs
3. Tag and Label With Part Number
Notes:
1. Material: 1x1x.125 Aluminum Angle 6063
2. Remove Sharp Edges and Burrs
3. Tag and Label with Part Numbers
Notes

Vendor: McMaster-Carr

Partnumber: 94639A569

Spacer

DIMENSIONS ARE IN INCHES
PERTINENT GEOMETRIC TOLERANCING PER:

1/16 FRACTIONAL

1°  BEND

.001 THREE PLACE DECIMAL

.01 TWO PLACE DECIMAL

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED:

SCALE: 8:1

WEIGHT:
Notes:
1. Material: Low-Strength Steel Threaded Rod
   1/4"-20 Thread Size, 3" Long
   Mcmaster-Carr: 91565A554
Notes:
1. Material: 1" Schedule 40 Pipe, 6061 Aluminum
2. Remove Sharp Edges and Burrs
3. Tag and Label With Part Number
Note: Use cable ties to attach plastic pieces.
Notes:
1. Material: 1/8" Polycarbonate Sheet clear
2. Remove Sharp Edges and Burrs
3. Tag and Label with Part Numbers
Notes:
1. Material: 1/8" Thick Polycarbonate Clear
2. Remove Sharp Edges and Burrs
3. Tag and label with part number
Notes:
1. Materials: 1 1/2” Schedule 40 PVC Pipe, White
2. Remove Sharp edges and burrs
3. Remove markings and lettering
4. Tag and Label with Part Numbers
Notes:
1. Material: 1-1/2" Schedule 40 PVC Pipe, White
2. Remove Lettering and Markings
3. Remove Sharp Edges and Burrs
4. Tag and Label with Part Number
Notes:
1. Material: 1-1/2" Schedule 40 PVC, White
2. Remove Labeling and Lettering
3. Remove Sharp Edges and Burrs
4. Tag and Label with Part Number
Description: Standard-Wall PVC Pipe Fitting for Water Side-Outlet Elbow Connector, 1-1/2 Socket-Connect Female
Vendor: McMaster-Carr
Part Number: 4880K634
Notes:
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
Notes:
1. Material: 1/4" Clear Polycarbonate
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
### Item NO. | Part Number | Description | QTY.
--- | --- | --- | ---
1 | GE-20001 | TS 1212LD-C5P, 3 Way Corner Block Light Duty Truss, Total Structures | 4
2 | GE-20002 | TS 1212LD-C4P, 4 Way Corner Block Light Duty Truss, Total Structures | 2
3 | GE-20003 | TS 1212LD-48P, 48" x 12" x 12" Light Duty Truss, Total Structures | 8
4 | GE-20004 | TS 1212LD-60P, 60" x 12" x 12" Light Duty Truss, Total Structures | 4
5 | GE-20005 | TS 1212LD-144P, 144" x 12" x 12" Light Duty Truss, Total Structures | 3
6 | GE-20006 | Cheeseborough for Truss _ Stacked | 8
7 | GE-20007 | Cheeseborough for Truss _ Single | 2
8 | GE-20014 | Hanger - Sensor Mount | 2
9 | GE-20022 | Pivot Pole to Generator Switch Shaft Collar | 4
10 | GE-20028 | Generator Switch Lock Out - Field Attachment | 4
11 | GE-20031 | Truss Base with Nut Chassis | 4
12 | GE-20035 | Jig for Cheeseboroughs | 6
13 | GE-20041 | Truss Vinyl Plastic | 8
14 | GE-20043 | Shield Generator Truss Leg Plastic | 12
15 | GE-20044 | Shield Generator Truss Plastic, Trench | 4
16 | GE-20046 | Boundary 75.38" w/ hook | 4
17 | GE-20048 | Boundary 57.5" w/ hook | 4
18 | GE-20067 | Hard Stop, Large | 2
19 | GE-20068 | Hard Stop, Small | 2
20 | GE-21500 | Power Cell | 10
21 | GE-21020 | Generator Switch Assembly | 2
22 | GE-21033 | Sensor Attachment Front w/ Hook, Loop | 2
23 | GE-21034 | Sensor Attachment Back w/ Hook, Loop | 2
24 | GE-21061 | Floor Protection full | 2
25 | hex...625...11...2.00 | Hex Head Bolt, 5/8"-11 Thread, 2" length | 104
26 | hexnut...625...11 | 5/8"-11 hex nut | 88
27 | Light Assembly for Shield Generator_Blue | Light Assembly for Shield Generator_Red | 3
28 | Light Assembly for Shield Generator_Red | Light Assembly for Shield Generator_Red | 3
29 | nylock...5...13 | steel nylon-insert locknut, 1/2" - 13 | 2
30 | StackLight_Assembly | Stack Light Assembly | 2
31 | washer_flat...5 | Flat Washer for 1/2" Screw | 2
32 | washer_flat...625 | Flat washer for 5/8" screw | 192

### Revisions

**Zone** | **Rev.** | **Description** | **Date** | **Approved**
--- | --- | --- | --- | ---
A2, B2, B3, 2-A2, 2-B1, 3-A2, 4-A1, 4-B1, 4-B2, 5-A2 | A | Added Generator Switch Lock Out - Field Attachment. Added Sheet 5 to Detail Assembly. Updated Tolerance in Title Blocks. Updated Tolerances. | 2/6/2020 | KAMC
A2, A3, B1, 2-A4, 2-B4, 3-B4, 4-A1, 4-B1, 4-B2, 5-A2 | B | Updated Assembly Number to GE-21000, modified sensor location, added new sensor plates, added 2 additional shaft collars (GE-20027), removed GE-20047, removed GE-20048 (red & blue), modified floor protection, changed POWER CELLS, starting locations (not detailed in this drawing), a number of part/assembly numbers in the BOM were updated for 2021, added additional assembly steps on Sheet 2, added dimension detail on Sheet 4, balloon numbers updated, added GENERATOR SWITCH ranges on Sheet 6. | 8/25/2020 | KAMC
Notes:
1. 1, 2, 3, 4, 5 are attached via 25, 26, 32, and secured to the field carpet via 11. These parts have volunteer requirements for assembly.
2. Secure 13 to Truss using 50-lb cable ties.
3. Attach 23 & 22 to 21 before installing 21.
4. 21 is attached to 5 via 6 and aligned using 13. Lifting and securing 21 has volunteer requirements.
5. Attach 2x 9 flush to 6 on each 21 assembly.
6. Attach 18 and 19 using appropriate hardware.
7. Attach 10 to 4 by looping around Truss. Ensure loops on 10 are facing towards 21. To move out of the way, attach 10 to 18 or 19 using the attached magnet.
8. Assemble 7 and 8 with appropriate hardware. Once assembled, attach 7 to 5 such that 7 is aligned with 6.
10. Secure 30 to Truss using 50-lb cable ties.
Notes:

1. Align 2x red and 2x blue (17) with boundaries on (11). Apply colored Gaffers Tape to boundaries on (11).

2. Align 2X (16) between 2X (17). Repeat until there are 4x (16) placed.

3. Place (24) between (17) and aligned with (16).

4. Attach (14) and (15) with 120-lb cable ties. Be sure (15) aligns with Trenches.

5. Place (20) on (24) as needed.
Notes:
All dimensions in parentheses ( ) are REFERENCE dimensions.
Generator Switch Lock Out - Field Attachment is attached to lower rung of Truss, positioned behind hard stops.

Daisy Chain may extend below truss, or wrap over truss. Daisy Chain will not extend lower than Hard Stop Hitting Plate.

Note: Vinyl hidden in Detail Views

Notes:
All dimensions in parentheses () are REFERENCE dimensions.
Note: Blue GENERATOR SWITCH and Black Boundaries hidden for clarity

GENERATOR SWITCH Dimensions - Top of Rung to Top of Floor Protection Carpet:

LEVEL (Horizontal):
- M2 = 63" +/- 0.5"
- M1 & M3 should be within +/- 0.25" of each other

Lower LEVEL Range:
- M1 = M2 - 7.25", +/- 0.25"
- M3 = M2 - 7.25", +/- 0.25"

Maximum Range (hitting hard stops):
- M5 = 46.13", +0.5", -0"

UNLESS OTHERWISE SPECIFIED:
SCALE: 1:24
WEIGHT:

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL 1/16
ANGULAR (MAX 1°) BEND ± 1°
TWO PLACES DECIMAL ± .01
THREE PLACES DECIMAL ± .001

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APPLICATION
DO NOT SCALE DRAWING

Shield Generator
Note: Vinyl may be red or blue.

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20011</td>
<td>Hanger Brace</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>GE-20012</td>
<td>Hanger Brace - Mounting Plate</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>GE-20013</td>
<td>Hanger - Pivot Pole</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>GE-20015</td>
<td>Generator Switch with Hook and Corners</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>GE-20021</td>
<td>Pivot Pole to Generator Switch Bearing</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>GE-20022</td>
<td>Pivot Pole to Generator Switch Shaft Collar</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>GE-20023</td>
<td>Generator Switch Vinyl Left _ With Loop</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>GE-20024</td>
<td>Generator Switch Vinyl Right _ With Loop</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>hex_.25_20_1.25</td>
<td>Steel Hex Head Screw, 1/4&quot;-20 x 1.25&quot; long, fully threaded</td>
<td>24</td>
</tr>
<tr>
<td>10</td>
<td>washer_flat_.25</td>
<td>Flat Washer for 1/4&quot; Screw</td>
<td>24</td>
</tr>
</tbody>
</table>
NOTE:
1. Only pieces that pivot are shown here. Approximate mass of pivoting system is 93 lbs.
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-21033-01</td>
<td>Sensor Attachment Front</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Hook_1_3</td>
<td>1&quot; x 3&quot; Hook, Adhesive Backed</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Loop_1_3</td>
<td>1&quot; x 3&quot; Loop, Adhesive Backed</td>
<td>1</td>
</tr>
</tbody>
</table>
Notes:
1. Ensure surface of 1 is clean prior to loop application.
2. Press 3 firmly to 1 to ensure application.
3. Without removing the adhesive backing protection, attach 2 to 3.
4. The adhesive backing protection will be removed from 2 when installed in-field.
Notes:
1. Material: 0.25" HDPE, White
2. Remove all burrs and sharp edges
Notes:
1. Ensure surface of 1 is clean prior to loop application
2. Press 3 firmly to 1 to ensure application
3. Without removing the adhesive backing protection, attach 2 to 3.
4. The adhesive backing protection will be removed from 2 when installed in-field.
Notes:
1. Material: 0.25" HDPE, White
2. Remove all burrs and sharp edges

Material: 0.25" HDPE, White

Sensor Attachment

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES

TOLERANCES:

FRACTIONAL 1/16

ANGULAR: MACH 1° BEND

TWO PLACE DECIMAL .01

THREE PLACE DECIMAL .001

APPLICATION

USED ON

NEXT ASSY

PROPRIETARY AND CONFIDENTIAL

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GE-21034

.25" HDPE, White

DO NOT SCALE DRAWING
Notes:
1. Material: 1/8" Hardboard
2. Remove all burrs and sharp edges.
3. Tag or Label with part number
Notes:
1. Material: 1/8" Hardboard
2. Remove all burrs and sharp edges.
3. Tag or Label with part number

Material: 1/8" Hardboard

Dimensions are in inches.

Tolerances:
- Fractional: ±1/16
- Angular: ±1° bend
- Two place decimal: ±.01
- Three place decimal: ±.001

Applications:
- Used on NEXT ASSY
- Q.A.

Scale: 1:12

Weight:

Revision History:
- 8/18/2020 NTW

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<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-21055</td>
<td>Notched Flooring Protection</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>GE-21056</td>
<td>Floor protection full</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>GE-21063</td>
<td>floor protection carpet</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Tape 63_625</td>
<td>2&quot; black gaff tape</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Tape 30</td>
<td>2&quot; black gaff tape</td>
<td>1</td>
</tr>
</tbody>
</table>

**DRAWING SCALE:** 1:24

**DIMENSIONS:** ARE IN INCHES

**MACHINERY:**

**TOLERANCES:**

- FRACTIONAL: 1/16
- ANGULAR (AND 45° AND 90°): 1°
- THREE PLACE DECIMAL: .001

**APPROVALS:**

- DRAWN
- CHECKED
- Q.A.
- MFG APPR.
- ENG APPR.

**NOTES:**

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Step 1:

Notes:
1. Lay down 1 and 2 as shown on the floor.
2. Attach together at the seams with 4 and 5.

Step 2:

Notes:
1. Lay 3 on top of step 1 and align the holes.
2. Tape the edge of the carpet to the hardboard by wrapping around from carpet to the back of the hardboard with Black 3M cloth tape (Gaffer Tape). (Tape is not shown)
3. Tape assembly to floor using 3" Black 3M cloth Tape (Gaffer Tape).
Notes:
1. Material: Neyland II 20 carpet
ITEM NO. | PART NUMBER | DESCRIPTION | QTY.
--- | --- | --- | ---
1 | 46CLR | 46CLR | 1
2 | Button_hex_.375_16_3.5 | Button hex drive 3/8-16 x 3.5" | 4
3 | Default | Pin, Ring-Grip Quick-Release with SS Ring, 1/4" Diameter, 0.6875" Usable Length | 4
4 | Flat_phil_25_20_2.25 | Flat Head Phil .25-20 x 2.25" | 4
5 | GE-20104 | Control Panel | 1
6 | GE-20121 | Flange for control panel | 4
7 | GE-20122 | 0.375"id bearing shielded | 8
8 | GE-20141 | Mounting Bracket (46CLR ColorSight) | 2
9 | GE-20142 | Sensor Tray Lid | 1
10 | GE-20143 | Trench to Truss Gusset | 1
11 | GE-20160 | Sensor Housing Assembly with cable tie mounts | 1
12 | GE-20161 | GE-20101 with hook | 2
13 | GE-20162 | GE-20102 with GE-20114 | 1
14 | GE-20163 | GE-20115 with loop | 2
15 | GE-20164 | GE-20123 with 4" hook | 2
16 | GE-21144 | Flange for control panel | 4
17 | Pan_phil_10-32_1 | Pan Head 10-32 1" | 4
18 | Pan_phil_10-32_625 | Pan head Phil 10-32 x 5/8 | 24
19 | Pan_phil_M3_35 | Pan Head M3 x 35mm | 2
20 | Spacer_.375_75_2 | 3/4" OD 2" spacer for 3/8" screw | 4
21 | flat_phil_25_20_75 | Steel Phillips Flat Head Screw, 1-4"-20 x 3/4" long, fully threaded | 2
22 | nylon_25_20 | Steel Nylon-Insert Locknut, 1/4"-20 | 7
23 | nylon_375_16_thin | 3/8"-16 nylon thin profile | 5
24 | StackLight_Assembly | Stack Light Assembly | 1
25 | nylon_10_32 | Low-Strength Steel Nylon-Insert Locknut, Zinc-Plated, 10-32 Thread Size | 16
26 | nylon_M3 | nylon M3 | 2
27 | washer_flat_.375_nylo | nylon flat washer .375 | 4

REVISIONS

ZONE | REV. | DESCRIPTION | DATE | APPROVED
--- | --- | --- | --- | ---
B1 | A | Fixed color pattern appearance to match GE-20105 and GE-20106 drawings | 1/6/2020 | CPO
A3, B2 | B | Added GE-21144 and washer to assembly. Fixed exploded views to show where parts are added. | 8/27/2020 | NTW
Notes:
1. Attach 24 to 9 using cable 50lb cable ties.
2. Attach 8 to 1 with 19.
3. Attach step 2 to 11 with 18.
4. Attach 9 to 11 with 3 in 4 spots.
Notes:
1. Slide 12 into 13
2. Attach 13 to 12 using 4, 21, and 22 in three spots per side
Notes:
1. Attach 15 to 12 on the outside.
2. Use 18 to assemble. Rivet nut is in 12.
1. Attach 5 to 13 on the Susan with 18.
2. Assemble from top to bottom the following: 2 16 6 20 27 7.
3. Insert Step 2 into 13 and secure with 23.
Notes:
1. Attach 14 to 12 with hook and loop.
2. Attach 11 to 13 using 18 just on one side.
3. After placement on the field attach 10 to 11 and 13 with 17.
4. After wiring and pass through of cable attach 9 to 11 using 3.
Notes:
1. Material: 0.125" Steel pre-plated.
2. Remove all burrs and sharp edges.
3. Bag and Label with part number.
<table>
<thead>
<tr>
<th>ITEM NO.</th>
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<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20201</td>
<td>Frame, Bay</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20203</td>
<td>Ball Rack, Bay</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>GE-20204</td>
<td>Hook, Pegboard, 6.75'</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>GE-20216</td>
<td>Top Rail, Standard</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>GE-20221</td>
<td>Front Face, with Target</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>GE-20313</td>
<td>Anchor with hook</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>GE-21205</td>
<td>Chute Assembly, Lower</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>GE-21210</td>
<td>Chute Assembly, Upper</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Hook_1_60</td>
<td>1&quot; x 60' Hook, Adhesive Backed</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Loop_1_60</td>
<td>1&quot; x 60' Loop, Adhesive Backed</td>
<td>1</td>
</tr>
</tbody>
</table>
Secure polycarbonate to frame with eight cable ties.

Secure each chute with six cable ties.

Secure all item with a cable tie.
### Item Breakdown

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20206</td>
<td>Side Plate, Lower Chute</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>GE-20207</td>
<td>Slide, Lower Chute</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>GE-20208</td>
<td>Top, Lower Chute</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>GE-20209</td>
<td>Churro, Lower Chute</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>GE-21223</td>
<td>Ramp, Lower Chute</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>round_hex_25_20_625_full</td>
<td>Steel Button Head Hex Drive Screw, 1/4&quot;-20 x 5/8&quot; long, fully threaded</td>
<td>8</td>
</tr>
</tbody>
</table>

### Revisions

<table>
<thead>
<tr>
<th>ZONE</th>
<th>REV.</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>APPROVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2, A4</td>
<td>A</td>
<td>Assembly renumbered for 2021 season, GE-21223 Ramp, Lower Chute added to assembly.</td>
<td>11/30/2020</td>
<td>CPO</td>
</tr>
</tbody>
</table>

---

**Notice:**

- **Scale:** 1:6
- **Weight:**
- **Sheet:** 1 of 1

---

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ITEM NO. | PART NUMBER  | DESCRIPTION                  | QTY.  |
--- | --- | --- | --- |
1 | GE-20211 | Side Plate, Upper Chute | 2 |
2 | GE-20212 | Slide, Upper Chute | 1 |
3 | GE-20213 | Top, Upper Chute | 1 |
4 | GE-20214 | Divider, Upper Chute | 2 |
5 | GE-20215 | Churro, Upper Chute | 4 |
6 | GE-21224 | Ramp, Upper Chute | 1 |
7 | round_hex_..25_20_.625_full | Steel Button Head Hex Drive Screw, 1/4"-20 x 5/8" long, fully threaded | 8 |

**REVISIONS**

<table>
<thead>
<tr>
<th>ZONE</th>
<th>REV.</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>APPROVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2, A3</td>
<td>A</td>
<td>Assembly renumbered for 2021 season. GE-21224 Ramp, Upper Chute added to assembly.</td>
<td>11/30/2020</td>
<td>CPO</td>
</tr>
</tbody>
</table>
Notes:
1. Material: 1/8" thk. Polycarbonate, Clear
2. Tag or label with part number
3. Remove all burrs and sharp edges
Notes:
1. Material: 1/8" thk. Polycarbonate, Clear
2. Tag or label with part number
3. Remove all burrs and sharp edges
### Notes:
1. This assembly exists in red and blue configurations. Only blue is shown here.

### Table: Item List

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>flat_phil_..25_20_.75</td>
<td>Steel Phillips Flat Head Screw, 1-4&quot;-20 x 3/4&quot; long, fully threaded</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>GE-20301</td>
<td>Power Port Top Assembly</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>GE-20309</td>
<td>Goal Base Upright</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>GE-20310</td>
<td>Low Power Port Frame</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>GE-20313</td>
<td>Anchor with hook</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>GE-20316</td>
<td>Power Port Base Back Top</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>GE-20319</td>
<td>Power Port Base Brace Assembly</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>GE-20321</td>
<td>Low Power Port with Vinyl</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>GE-20323</td>
<td>Top Rail, Standard</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>GE-20337</td>
<td>Inner Port Chute Assembly</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>GE-20338</td>
<td>Side Polycarbonate Assembly, Right</td>
<td>1</td>
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<tr>
<td>12</td>
<td>GE-20339</td>
<td>Side Polycarbonate Assembly, Left</td>
<td>1</td>
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<tr>
<td>13</td>
<td>GE-20370</td>
<td>Counter Assembly</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>GE-20387</td>
<td>support bar</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>GE-20390</td>
<td>Corral Assembly</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>GE-20398</td>
<td>Power Port Base Back Bottom</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>GE-21340</td>
<td>Outer Port Serializer</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>GE-21350</td>
<td>Plastic Serializer Assembly</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>hex_..25_20_0.625</td>
<td>Steel Hex Head Screw, 1/4&quot;-20 x 0.625&quot; long, fully threaded</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>hex_..25_20_2.25_partial</td>
<td>Steel Hex Head Screw, 1/4&quot;-20 x 2-1/4&quot; long, partially threaded</td>
<td>4</td>
</tr>
<tr>
<td>21</td>
<td>nylock_..25_20</td>
<td>Steel Nylon-Insert Locknut, 1/4&quot;-20</td>
<td>12</td>
</tr>
<tr>
<td>22</td>
<td>pin_quick_ring_..25_1.8125</td>
<td>Pin, Ring-Grip Quick-Release with SS Ring, 1/4&quot; Diameter, 1.8125&quot; Usable Length</td>
<td>2</td>
</tr>
</tbody>
</table>
Notes:
1. Items 9 and 4 should be installed during creation of Alliance Wall.
2. Attach 2 to 3 and 9 using 20, 20, and 21.
3. Place item 5 in place and affix to carpet.
4. Attach the item 7 pieces to 3 using the plastic hooks.
5. Slide 11 and 12 into place and secure using 50 lb. cable ties.

Notes:
1. Insert 14 into the assembly, secure in place using 22.
2. Attach 18 to 8 using 1 and 21.
3. Slide this subassembly into place and secure using 120 lb. cable ties.
4. Attach 17 to the assembly using the hook and loop fastener.
5. Attach 6 and 16 using 50 lb. cable ties.
Notes:
1. Attach 10 to 13 using 50 lb. cable ties.
2. Attach this subassembly to the rest of the assembly using 50 lb. cable ties.
3. Slide 15 into place.
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20341</td>
<td>Floor, Outer Port Serializer</td>
<td>1</td>
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<tr>
<td>2</td>
<td>GE-20342</td>
<td>Side Plate, Outer Port Serializer</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>GE-20343</td>
<td>Top Plate, Outer Port Serializer</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>GE-20344</td>
<td>Hinge, Outer Port Serializer</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>GE-20345</td>
<td>Paddle, Outer Port Serializer</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>GE-20346</td>
<td>Angle, Outer Port Serializer</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>GE-20347</td>
<td>Foot, Outer Port Serializer</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>GE-20348</td>
<td>Ramp, Outer Port Serializer</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>GE-20349</td>
<td>Motor Mount, Outer Port Serializer</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>GE-20364</td>
<td>Igus Bearing</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>GE-20370</td>
<td>Counter Assembly</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>GE-20381</td>
<td>NeverRest 60</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>GE-20382</td>
<td>Hub</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>GE-20384</td>
<td>L Bracket</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>GE-20385</td>
<td>Spacer</td>
<td>3</td>
</tr>
<tr>
<td>16</td>
<td>GE-20399</td>
<td>Cover, Outer Port Serializer</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>Angle Bracket, 4 Hole</td>
<td>1/8&quot; Bracket</td>
<td>15</td>
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<tr>
<td>18</td>
<td>CUP POINT SET SCREW 10-24 .50</td>
<td>Cup Point Set Screw 10-24</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>hex .25 20 1.5</td>
<td>Steel Hex Head Screw, 1/4&quot;-20 x 1.5&quot; long, fully threaded</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>nylock .25 20</td>
<td>Steel Nylon-Inset Locknut, 1/4&quot;-20</td>
<td>4</td>
</tr>
<tr>
<td>21</td>
<td>rivet .1875 .251 .375</td>
<td>3/16&quot; Aluminum Rivet, .251-.375 Grip Range</td>
<td>80</td>
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<tr>
<td>22</td>
<td>round hex .25 20 .625 full</td>
<td>Steel Button Head Hex Drive Screw, 1/4&quot;-20 x 5/8&quot; long, fully threaded</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>socket hex 3mm 14mm</td>
<td>Socket Head Screw, 3mm x .5mm x 14mm</td>
<td>6</td>
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<tr>
<td>24</td>
<td>threaded rod .25 20 4</td>
<td>Threaded Rod, 1/4-20 x 4&quot;</td>
<td>1</td>
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<tr>
<td>ITEM NO.</td>
<td>PART NUMBER</td>
<td>DESCRIPTION</td>
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<tr>
<td>---------</td>
<td>-------------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>GE-20351</td>
<td>1/4&quot; Thick Polycarbonate Sheet 1</td>
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</tr>
<tr>
<td>2</td>
<td>GE-20356</td>
<td>Serializer Side Wall 1</td>
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<tr>
<td>3</td>
<td>GE-20357</td>
<td>Serializer Side Wall Angled 1</td>
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<tr>
<td>4</td>
<td>GE-20354</td>
<td>Serializer Bracket Support 2</td>
<td></td>
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<tr>
<td>5</td>
<td>GE-20355</td>
<td>Top Bracket 1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>GE-20353</td>
<td>2 x 2 Aluminum Angle 6063 4</td>
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</tr>
<tr>
<td>7</td>
<td>GE-20370</td>
<td>Counter Assembly 1</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>GE-20365</td>
<td>1/4&quot; Thick Polycarbonate Sheet 1</td>
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<tr>
<td>9</td>
<td>GE-21380</td>
<td>NeverRest Assembly 1</td>
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<tr>
<td>10</td>
<td>GE-20358</td>
<td>Steel Continuous Hinge, Nickel (6' lengths) TCH 505-196801 1</td>
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<td>11</td>
<td>GE-21360</td>
<td>Pusher Assembly 1</td>
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<tr>
<td>12</td>
<td>round_hex_.25_20_.75_full</td>
<td>Steel Button Head Hex Drive Screw, 1/4&quot;-20 x 3/4&quot; long, fully threaded 2</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>nylock_.25_20</td>
<td>Steel Nylon-Insert Locknut, 1/4&quot;-20 10</td>
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</tr>
<tr>
<td>14</td>
<td>rivet_.1875_.251_.375</td>
<td>3/16&quot; Aluminum Rivet, .251-.375 Grip Range 38</td>
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</tr>
<tr>
<td>15</td>
<td>round_hex_.25_20_.625_full</td>
<td>Steel Button Head Hex Drive Screw, 1/4&quot;-20 x 5/8&quot; long, fully threaded 2</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Flat Hex .25_20_.75</td>
<td>Flat Hex .25_20_.75 6</td>
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<td>17</td>
<td>GE-20373</td>
<td>Counter Box Side Bracket 1</td>
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<tr>
<td>18</td>
<td>GE-21376</td>
<td>Polycarbonate Bracket Small Left 1</td>
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<tr>
<td>19</td>
<td>GE-21377</td>
<td>Polycarbonate Bracket Small Right 1</td>
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<tr>
<td>20</td>
<td>GE-20352</td>
<td>Sheet Metal Angle 3</td>
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**REVISEN**

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<thead>
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<th>REV.</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>APPROVED</th>
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<tbody>
<tr>
<td>A1, A3</td>
<td>A</td>
<td>Added GE-21377 and GE-21376. GE-20360 changed to GE-21360, GE-20380 changed to GE-21380.</td>
<td>12/18/2020</td>
<td>MXS</td>
</tr>
</tbody>
</table>

**NOTES**

- UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL: .1/16 ANGULAR: .1° BEND TWO PLACE DECIMAL: .01 THREE PLACE DECIMAL: .001

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Note: Place Item 6 (QTY:4) in four places.
Place Item 2 and 3 (QTY:2) in four places.

Notes:
Attach Item 20, 3 places.
Notes:
Attach Item 4 and 9 Using Hardware Item 15
Repeat with Item 17

Notes:
Attach Item 10 using Item 14 To Item 5
Note:
Attach item 5 and 11 using item 14

Note:
Attach item 7 and 8 using cable ties
ITEM NO. | PART NUMBER | DESCRIPTION | QTY.
--- | --- | --- | ---
1 | GE-20361 | Polycarbonate Face | 1
2 | GE-20362 | Angle Bracket | 1
3 | GE-20363 | Angle Pusher | 1
4 | GE-20374 | Serializer Top Angle | 1
5 | round_hex_.25_20_.75_f ull | Steel Button Head Hex Drive Screw, 1/4"-20 x 3/4" long, fully threaded | 6
6 | nylock_.25_20 | Steel Nylon-Insert Locknut, 1/4"-20 | 6
7 | GE-21369 | Serializer Sweeper | 1

REVISIONS

ZONE | REV. | DESCRIPTION | DATE | APPROVED
--- | --- | --- | --- | ---
A1, A4 | A | Added 21369 | 12/17/2020 | MXS

TITLE: Pusher Assembly

SCALE: 1:4

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES

TOLERANCES:

FRACTIONAL

1/16

ANGULAR: MACH 1° BEND

TWO PLACE DECIMAL

.01

THREE PLACE DECIMAL

.001

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Note Cable Tie 4 places
Note:
Material: 12 Gage Sheet Metal Steel
Remove Sharp Edges and Burrs
Notes:
1. Material: 1/8" thick Polycarbonate, Clear
2. Remove all burrs and sharp edges.

Materials:
- Material: 1/8" thick Polycarbonate, Clear

Tolerances:
- Dimensions are in inches
- Tolerances: fractional ±1/16
- Angular: machined ±1° bend ±1°
- Two place decimal ±.01
- Three place decimal ±.001

Interpret geometric tolerancing per:

Finish:
- Next Assy
- Used On
- Application

Do not scale drawing

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Notes:
1. Material: 1/8" thick polycarbonate, clear.
2. Remove all burrs and sharp edges.
<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20354</td>
<td>Serializer Bracket Support</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20381</td>
<td>NeverRest 60</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>GE-20384</td>
<td>L Bracket</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>GE-20371</td>
<td>Motor Bracket</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>GE-20386</td>
<td>1/4x20 Threaded Shaft</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>GE-20385</td>
<td>Spacer</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>GE-20382</td>
<td>Hub</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>GE-20364</td>
<td>igus bearing</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>M3 SOCKET HEAD CAP SCREW</td>
<td>M3 Socket Head Cap Screw 5mm</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>nylock_.25_20</td>
<td>Steel Nylon-Insert Locknut, 1/4&quot;-20</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>CUP POINT SET SCREW 10-24_.50</td>
<td>Cup Point Set Screw 10-24</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>GE-20368</td>
<td>Serializer 1/4 x 20 Rod Spacer</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>round_hex_.25_20_.75_full</td>
<td>Steel Button Head Hex Drive Screw, 1/4&quot;-20 x 3/4&quot; long, fully threaded</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>Nylock_Shallow_.25_20</td>
<td>Nylock Shallow 1/4 x 20</td>
<td>2</td>
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<tr>
<td>15</td>
<td>hex_.25_20_1.50</td>
<td>Steel Hex Head Screw, 1/4&quot;-20 x 1.5&quot; long, fully threaded</td>
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</tr>
</tbody>
</table>

**REVISIONS**

<table>
<thead>
<tr>
<th>ZONE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>A3</td>
<td>A</td>
<td>Increased bolt length to 1.5 inches.</td>
<td>12/18/2020</td>
<td>DAF</td>
</tr>
</tbody>
</table>
Notes:
1. Description: Medium Bounce Dino-Skin Foam Ball, 7 inches
2. Source: Flaghouse
3. Item #: 1892 YEL
4. Available to teams as am-4200a from AndyMark

FIRST logo may be applied to face in black.