Notes:
1. Parts are attached via and secured to the field carpet via. These parts have volunteer requirements for assembly.
2. is attached to via and aligned using. Lifting and securing has volunteer requirements.
3. Attach flush to on both assemblies.
4. Attach by looping around Truss. Ensure loops on are facing towards. To move out of the way, attach to or using the attached magnet.
5. Attach and using appropriate hardware.
7. Secure to Truss using 50-lb cable ties.
8. Secure to Truss using 50-lb cable ties.
Notes:
1. Align 18 and 17 with boundaries on 10. Apply colored Gaffers Tape to boundaries on 10.
2. Align 2X 15 between 2X 17.
3. Align center of 16 between 2X 18 and 2X 15.
4. Place 19 and 20 between Boundaries.
5. Attach 13 and 14 with 120-lb cable ties. Be sure 14 align with Trenches.
6. Place 23 on Boundaries 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.
**DESCRIPTION:** 6061-T6 ALUMINUM - LIGHT DUTY TRUSS, 3-SIDED CORNER BLOCK

**VENDOR:** TOTAL STRUCTURES

**PART NUMBER:** TS 1212LD-C3P

**NOTE:** SUBSTITUTIONS NOT ALLOWED

---

<table>
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<tr>
<th>ZONE</th>
<th>REV.</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>APPROVED</th>
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<td>Added Note</td>
<td>10/28/2019</td>
<td>KAMC</td>
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UNLESS OTHERWISE SPECIFIED:

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

INTERPRET GEOMETRIC TOLERANCING PER:

| MATERIAL |
| FINISH |

APPROVALS:

<table>
<thead>
<tr>
<th>NAME</th>
<th>DATE</th>
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DRAWN: KAMC 9/23/19
CHECKED
ENG APPR
MFG APPR
Q.A.

COMMENTS:

NEXT ASY USED ON: N/A
APPLICATION: DO NOT SCALE DRAWING

---

**TITLE:** TS 1212LD-C3P, 3 Way Corner Block Light Duty Truss, Total Structures

**SCALE:** 1:8

**WEIGHT:**

**SHEET:** 1 OF 1
DESCRIPTION: 6061-T6 ALUMINUM - LIGHT DUTY TRUSS, 4-SIDED CORNER BLOCK

VENDOR: TOTAL STRUCTURES

PART NUMBER: TS 1212LD-C4P

NOTE: SUBSTITUTIONS NOT ALLOWED

NOTE:
SUBSTITUTIONS NOT ALLOWED

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

INTERPRET GEOMETRIC TOLERANCING PER:

UNLESS OTHERWISE SPECIFIED:

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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° 1\" BEND
TWO PLACE DECIMAL: ±0.01
THREE PLACE DECIMAL: ±0.001

INTERPRET GEOMETRIC TOLERANCING PER:

FINISH
MATERIAL

APPLICATION
USED ON

DO NOT SCALE DRAWING
DESCRIPTION: 6061-T6 ALUMINUM - LIGHT DUTY TRUSS, 60" X 12" X 12"

VENDOR: TOTAL STRUCTURES

PART NUMBER: TS 1212LD-060P

NOTE: SUBSTITUTIONS NOT ALLOWED
DESCRIPTION: 6061-T6 ALUMINUM - LIGHT DUTY TRUSS, 144" X 12" X 12"

VENDOR: TOTAL STRUCTURES

PART NUMBER: TS 1212LD-144P

NOTE: SUBSTITUTIONS NOT ALLOWED

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES

TOLERANCES:

FRACTIONAL 1/16

ANGULAR : 1° BEND

TWO PLACE DECIMAL .01

THREE PLACE DECIMAL .001

INTERPRET GEOMETRIC TOLERANCING PER:

QUALIFIED

APPLICATION USED ON

PREPARED

Q.A.

CHECKED

ENG. APPR.

MFG. APPR.

COMMENTS:

DO NOT SCALE DRAWING

DRAWN

KAMC 9/23/19

REV.

TITLE:

TS 1212LD-144P, 144" x 12" x 12" Light Duty Truss, Total Structures

SIZE: B

Dwg. No.: GE-20005

Rev.: A

Scale: 1:24

Weight:
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: 18 FEET
NOTE: CUT TO LENGTH

DESCRIPTION: Foam Cushion for Generator Switch
VENDOR: ROVING COVE
PART NUMBER: 1305
PACKAGE QUANTITY: 18 FEET
NOTE: CUT TO LENGTH

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

INTERPRET GEOMETRIC TOLERANCING PER:
- MATERIAL
- INTERPRET GEOMETRIC TOLERANCING PER:

UNLESS OTHERWISE SPECIFIED:
- DRAWN: KAMC 12/15/19
- CHECKED
- ENG APPL
- MFG APPL
- Q.A.

APPLICATION: Foam Cushion for Generator Switch
DO NOT SCALE DRAWING
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.

Table:

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<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
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<tr>
<td>1</td>
<td>GE-20010 - 01</td>
<td>Hanger - Top</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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<td>GE-20010 - 03</td>
<td>Hanger - Center Leg, Face</td>
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<td>7</td>
<td>GE-20010 - 07</td>
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<td>8</td>
<td>GE-20010 - 08</td>
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<td>9</td>
<td>GE-20010 - 09</td>
<td>Hanger - Hanging Pole</td>
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<td>10</td>
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<tr>
<td>13</td>
<td>GE-20010 - 13</td>
<td>Hanger - Sensor Feature</td>
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<td>14</td>
<td>GE-20010 - 14</td>
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<td>15</td>
<td>GE-20010 - 15</td>
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<td>GE-20010 - 16</td>
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<tr>
<td>17</td>
<td>pin_clevis_.25_3.5</td>
<td>Clevis Pin, 1/4&quot; diameter, 3.5&quot; length</td>
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<td>18</td>
<td>pin_hairpincotter_0.078_1.5</td>
<td>Cotter Pin, 0.078in x 1.5in</td>
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<td>Rivnut, 1/4&quot;-20 bolt, material thickness: .027&quot;-.165&quot;</td>
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<td>92</td>
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</table>
Note: Assembly is symmetric - Left/Right

Dimensions Shown for Ref.

Include Rivets

53.75

53.68

12.03

Does Not Include Rivets or End Caps

55.63

Does Not Include Rivets

12.03

3.01

3.51

Includes Rivet & Pin

Includes Rivets

1.66

3.69

Includes Rivets

FRACTIONAL: 1/16

ANGULAR: 1° BEND 1°

TWO PLACE DECIMAL .01

THREE PLACE DECIMAL .001

Interpret Geometric Tolerancing Per:

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS SHOWN FOR REF.

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COPYRIGHTED.
ADD RIVETS x36
GE-20010 - 30

GE-20010 - 27

GE-20010 - 27

GE-20010 - 26
ADD RIVETS X16
ADD RIVETS X8
ADD RIVETS X8

GE-20010 - 28
NOTE:
GE-20010 - 09 WILL BE LOOSE
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
### Notes:

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

### Item List

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
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<td>pin_clevis__25_3.5</td>
<td>Clevis Pin, 1/4&quot; diameter, 3.5&quot; length</td>
<td>4</td>
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<td>2</td>
<td>pin_hairpincotter_0.078_1.5</td>
<td>Cotter Pin, 0.078in x 1.5in</td>
<td>4</td>
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<td>80</td>
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</table>
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. Aluminum Sheet
2. Remove all burrs and sharp edges.

**Details:**
- **Detail A**
  - Scale: 1:4
  - Material: Aluminum Sheet

- **Detail C**
  - Scale: 1:4
  - Material: Aluminum Sheet

**Material:** Aluminum Sheet

**Dimensions (inches):**
- 2X \( \varnothing .39 \) THRU ALL (25/64" DRILL BIT)
- 12X \( \varnothing .194 \pm .002 \) THRU ALL
- 2X \( \varnothing .194 \pm .002 \) THRU ALL

**Tolerances:**
- Fractional: \( \pm \frac{1}{16} \)
- Angular: \( \pm 1° \)
- Two Place Decimal: \( \pm .01 \)
- Three Place Decimal: \( \pm .001 \)

**Revision Information:**
- A: MAJOR GEOMETRY CHANGES
- Date: 9/16/19
- Approver: KAMC
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: 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.
Notes:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.
Notes:
2. Remove all burrs and sharp edges.

Material: 8 Ga. 5052 Aluminum Sheet.

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES

TOLERANCES:

FRACTIONAL 1/16
ANGULAR: MACH 1° BEND
THREE PLACE DECIMAL 0.001

APPLICATION USED ON NEXT ASSY

NAME DATE

CHECKED ENG APPR.

Q.A. COMMENTS

PROPRIETARY AND CONFIDENTIAL
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TITLE: Hanger - Hanging Pole Holder, Face

SHEET 1 OF 1
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.
Exploded View:

RIVETS INTENTIONALLY LEFT OUT AT THIS STEP
x16

Notes:
1. Rivets and Rivnuts should be plated or aluminum.
Hanger - Center Bar
Sub Assembly

DIMENSIONS SHOWN FOR REFERENCE

RIVETS INTENTIONALLY LEFT OUT X14

RIVET INTENTIONALLY LEFT OUT X8

DIMENSIONS SHOWN FOR REFERENCE

SCALE: 1:8
WEIGHT:

UNLESS OTHERWISE SPECIFIED:

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

INTERPRET GEOMETRIC
TOLERANCING PER:

BARE
FINISH
MATERIAL
INTERPRET GEOMETRIC
TOLERANCING PER:

A A
B B

4
3
2
1

GE-20010
USED ON
BARE

DO NOT SCALE DRAWING

TITLE:

REVISIONS

ZONE REV. DESCRIPTION DATE APPROVED
- - See Sheet1 - -
Exploded View:

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.

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>QTY.</th>
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</thead>
<tbody>
<tr>
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<td>3/16&quot; Aluminum Rivet, .251-.375 Grip Range</td>
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<td>2</td>
<td>GE-20010-06</td>
<td>Hanger - Cross Bar</td>
<td>2</td>
</tr>
<tr>
<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>
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</tbody>
</table>

TITLE: Hanger - Center Bar Sub Assembly

WEIGHT: 15.74 LBS
3.07
98.00
4.49
3.32

DIMENSIONS SHOWN FOR REFERENCE
Notes:
1. Rivets should be plated or aluminum.
**Dimensions Shown for Reference**

<table>
<thead>
<tr>
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<td>-</td>
<td>-</td>
<td>See Sheet 1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Geometric Tolerancing**
- Dimensions are in inches.
- Tolerances: 1/16 fractional.
- Angular: Mach 1° bend.
- Two place decimal: .01.
- Three place decimal: .001.

**Materials and Finishes**
- Bare finish.

**Title:**
Hanger - Hanging Pole Holder Sub Assembly

**Drawing Information**
- Size: B
- DWG No.: GE-20010 - 29
- Rev: A
- Scale: 1:4
- Weight: Sheet 2 of 2

**Notes:**
- Do not scale drawing.
- Use on next assembly.
- Weight shown on sheet 1.

**Remarks:**
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**Technical Details:**
- Includes rivet head.
- Dimensions shown for reference.

**Dimensions:**
- 3.64
- 5.30
- 129.00°
- 10.32
- 5.24

**Interpret Geometric Tolerancing Per:**
- ASME.
Notes:
1. Rivets should be plated or aluminum.

<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&quot; 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: 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>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>

---

**Title:** Hanger Brace

**Comments:**

- **Application:** bare
- **Do not scale drawing**
- **Rev.:** A
- **Scale:** 1:6
- **Weight:** 7.63 lbs

---

**Drawing Information:**

- **Drawn:** KAMC 9/16/19
- **Approved:** KAMC 9/16/19
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.
2X R.05

1.825 THRU 1.820

NOTE: EDGE MUST BE CLEAN - NO SHARP EDGE

0.18

0.69

1.50

2.32

2.83

3.01

0.25

0

1.86

2X Ø .194 ±.002 THRU ALL

5.38

5.13

0.13

Material: 8 Ga. 5052 Aluminum Sheet

Remove all burrs and sharp edges.
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.

<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&quot; Aluminum Rivet, .251-.375 Grip Range</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>rivet_.1875_.376-.5</td>
<td>3/16&quot; Aluminum Rivet, .376-.5 Grip Range</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>GE-20011 - 03</td>
<td>Hanger Brace - Pivot Pole Top Cap</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>GE-20011 - 04</td>
<td>Hanger Brace - Pivot Pole Holder</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>GE-20011 - 05</td>
<td>Hanger Brace - Pivot Pole Holder, Face</td>
<td>2</td>
</tr>
</tbody>
</table>
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.

OUTER DIAMETER (INCLUDING POWDER COAT) NOT TO EXCEED 1.525"
Notes:
1. Material: 8 Ga. 5052 Aluminum Sheet
2. Remove all burrs and sharp edges.
3. 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>GE-20008</td>
<td>Foam Cushion for Generator Switch</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20008</td>
<td>Foam Cushion for Generator Switch</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>GE-20010</td>
<td>Hanger</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Hook_2_9</td>
<td>Hook 2&quot; x 9&quot;, Adhesive Backed</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Hook_2_30</td>
<td>Hook 2&quot; x 30&quot;, Adhesive Backed</td>
<td>4</td>
</tr>
</tbody>
</table>
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>Part Number</th>
<th>Vinyl Image</th>
<th>Qty per Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE-20017 - Blue</td>
<td>GE-20017</td>
<td>Blue - Vinyl</td>
<td>2</td>
</tr>
<tr>
<td>GE-20017 - Red</td>
<td>GE-20017</td>
<td>Red - Vinyl</td>
<td>2</td>
</tr>
</tbody>
</table>
Notes:
1. 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-20018 - Blue</td>
<td>GE-20018 - Blue - Vinyl</td>
<td>2</td>
</tr>
<tr>
<td>GE-20018 - Red</td>
<td>GE-20018 - Red - Vinyl</td>
<td>2</td>
</tr>
</tbody>
</table>
Note:
1. 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-20007</td>
<td>Cheeseborough for Truss _ Single</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20011</td>
<td>Hanger Brace</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>GE-20012</td>
<td>Hanger Brace - Mounting Plate</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>GE-20013</td>
<td>Hanger - Pivot Pole</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>GE-20014</td>
<td>Hanger - Sensor Mount</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>GE-20015</td>
<td>Generator Switch with Hook and Corners</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>GE-20021</td>
<td>Pivot Pole to Generator Switch Bearing</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>GE-20022</td>
<td>Pivot Pole to Generator Switch Shaft Collar</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>GE-20023</td>
<td>Generator Switch Vinyl Left _ With Loop</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>GE-20024</td>
<td>Generator Switch Vinyl Right _ With Loop</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>hex_.25_20_1.25</td>
<td>Hex Head Bolt, 1/4-20 x 1.25&quot;, Steel</td>
<td>24</td>
</tr>
<tr>
<td>12</td>
<td>nylock_.5_13</td>
<td>steel nylon-insert locknut, 1/2&quot; - 13</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>washer_flat_.25</td>
<td>Flat Washer for 1/4&quot; Screw</td>
<td>24</td>
</tr>
<tr>
<td>14</td>
<td>washer_flat_.5</td>
<td>Flat Washer for 1/2&quot; Screw</td>
<td>1</td>
</tr>
</tbody>
</table>
NOTE:
1. Only pieces that pivot are shown here. Approximate mass of pivoting system is 93 lbs.
DESCRIPTION: IGLIDE M250 FLANGE BEARING - INCH

VENDOR: IGUS

PART NUMBER: MFI-2428-12

NOTE: SUBSTITUTIONS NOT ALLOWED

TOLERANCE: 1.50 - 1.53

TOLERANCE: 1.79 - 1.82

TOLERANCE: 2.04 - 2.08

TOLERANCE: 0.74 - 0.75

NOTE: SUBSTITUTIONS NOT ALLOWED
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>
<th>ITEM NO.</th>
<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&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>

**TITLE:**
Generator Switch Vinyl Left _ With Loop

**DRAWN:**
GE-20023

**SCALE:**
1:4

**REVDWG. NO.:**
B

**SIZE:**
Sheet 1 of 2

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

**TRADEMARKS:**
- Star Wars

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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.
DESCRIPTION: SAFETY DAISY CHAINS, BEARING CAPACITY 23 KN, GREY

VENDOR: KIKIGOAL VIA AMAZON

PART NUMBER: B072Z87DD5

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

MAGNET MUST BE INSTALLED INTO HOUSING
DIMENSIONS SHOWN ARE FOR MAGNET + HOUSING ASSEMBLY

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ±1/64
ANGULAR AND .01° BEND ± .01°
TWO PLACE DECIMAL ± .01
THREE PLACE DECIMAL ± .001

INTERPRET GEOMETRIC TOLERANCING PER:
BARE

APPLICATION
DO NOT SCALE DRAWING

TITLE: Generator Switch Lock Out - Magnet

BARE

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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).
Wraps around truss

Magnet sticks to Hard Stop

May wrap over truss or hang down, as shown

INSTALLED CONFIGURATION

Note:
See GE-20000 for installation information & lengths relative to the Truss

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

INTERPRET GEOMETRIC TOLERANCING PER:
UNLESS OTHERWISE SPECIFIED:

SCALE: 1:3
WEIGHT:

APPLICATION

PROPRIETARY AND CONFIDENTIAL
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Notes:
1. Rivets should be plated or stainless steel
2. Tag or label with part number.
3. Powder Coated Black (Full Assembly).
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. Item 6 should be loose to allow Item 5 to float.
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
Vinyl Applied to this face

Cut out holes (x9)

Cut away vinyl

Follow edge of plastic

Cut away vinyl

Notes:
1. Tag or label with part number

Left/Right Variations

<table>
<thead>
<tr>
<th>Part Number</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>

Truss Vinyl Plastic
Notes:
1. Material: 1/16" 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
<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-20051</td>
<td>Boundary, Black 75.38&quot;</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Hook_2_75.-375</td>
<td>2&quot; x 75.375&quot; Hook, Adhesive Backed</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Hook should be placed centered on the width of the part.
Hook should be placed centered on the width of the part.

<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-20052</td>
<td>Boundary, Black 63.5&quot;</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Hook_2_63-50</td>
<td>2&quot; x 63.5&quot; Hook, Adhesive Backed</td>
<td>1</td>
</tr>
</tbody>
</table>
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.
Note:
Hook should be placed centered on the width of the part.
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>
</tr>
</thead>
<tbody>
<tr>
<td>GE-20051</td>
<td>Bengal Black 49/88888</td>
</tr>
</tbody>
</table>
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>
</tr>
</thead>
<tbody>
<tr>
<td>GE-20052</td>
<td>Bengal Black 49/88888</td>
</tr>
</tbody>
</table>
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>
</tr>
</thead>
<tbody>
<tr>
<td>GE-20053-RED</td>
<td>Bengal Red 49/33333</td>
</tr>
<tr>
<td>GE-20053-BLU</td>
<td>Mercury Blue 59740653</td>
</tr>
</tbody>
</table>

Boundary, Red/Blue 57.5"

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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>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE-20054-RED</td>
<td>Bengal Red 49/33333</td>
<td></td>
</tr>
<tr>
<td>GE-20054-BLU</td>
<td>Mercury Blue 59740653</td>
<td></td>
</tr>
</tbody>
</table>
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
<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-20055</td>
<td>Notched Flooring Protection</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20056</td>
<td>Floor protection full</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>GE-20057-01</td>
<td>Carpet</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Carpet Tape _ 57.375</td>
<td>Carpet Tape - Adhesive</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Carpet Tape _ 63.625</td>
<td>Carpet Tape - Adhesive</td>
<td>3</td>
</tr>
</tbody>
</table>

**Title:** Floor Protector Assembly, Left

**Scale:** 1:16

**Drawing Number:** GE-20057

**Sheet:** 1 of 2
Carpet Dims

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

INTERPRET GEOMETRIC TOLERANCING PER:

UNLESS OTHERWISE SPECIFIED:
SCALE: 1:16
WEIGHT:

DO NOT SCALE DRAWING

Floor Protector
Assembly, Left

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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>Carpet Tape _ 57.375</td>
<td>Carpet Tape - Adhesive</td>
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<td>2</td>
<td>Carpet Tape _ 63.625</td>
<td>Carpet Tape - Adhesive</td>
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<td>3</td>
<td>GE-20055</td>
<td>Notched Flooring Protection</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>GE-20056</td>
<td>Floor protection full</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>GE-20058 - 01</td>
<td>Floor Protector Notched - Carpet, Right</td>
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<td>ITEM NO.</td>
<td>PART NUMBER</td>
<td>DESCRIPTION</td>
<td>QTY.</td>
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<tr>
<td>1</td>
<td>GE-20087</td>
<td>Hard Stop, Truss Protection</td>
<td>1</td>
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<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>
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<tr>
<td>ITEM NO.</td>
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<td>DESCRIPTION</td>
<td>QTY.</td>
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<td>------</td>
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<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>
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<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>
DISTANCE WILL VARY ON INSTALL

DISTANCE WILL VARY ON INSTALL

DISTANCE WILL VARY ON INSTALL

10.48

12.00

25.49

2.50

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<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-20089</td>
<td>Hard Stop, Weldment, Small</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>washer_flat_.5</td>
<td>Flat Washer for 1/2&quot; Screw</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>nylock_.5_13</td>
<td>steel nylon-insert locknut, 1/2&quot; - 13</td>
<td>4</td>
</tr>
</tbody>
</table>

**UNLESS OTHERWISE SPECIFIED:**

- **SCALE:** 1:4
- **WEIGHT:**
- **REV:** DWG NO. GE-20068

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**DESCRIPTION:** STEEL U-BOLT, 3/8"-16, 2-7/16" ID

**VENDOR:** McMaster Carr

**VENDOR PART NUMBER:** 8880T959

**DESCRIPTION:**
STEEL U-BOLT, 3/8"-16, 2-7/16" ID

**VENDOR:** McMaster Carr

**VENDOR PART NUMBER:** 8880T959

**3/8" - 16 THREAD**

**NUTS INCLUDED**

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

**APPLICATION**

**USED ON**

**SHAPE**

**FINISH**

**MATERIAL**

**INTERPRET GEOMETRIC TOLERANCING PER:**

**UNLESS OTHERWISE SPECIFIED:**

**NAME DATE**

**DRAWN KAMC 12/16/19**

**CHECKED**

**ENG APPR.**

**MFG APPR.**

**G.A.**

**COMMENTS**

**DO NOT SCALE DRAWING**

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

**APPLICATION**

**USED ON**

**SHAPE**

**FINISH**

**MATERIAL**

**INTERPRET GEOMETRIC TOLERANCING PER:**

**UNLESS OTHERWISE SPECIFIED:**

**NAME DATE**

**DRAWN KAMC 12/16/19**

**CHECKED**

**ENG APPR.**

**MFG APPR.**

**G.A.**

**COMMENTS**

**DO NOT SCALE DRAWING**
<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_2</td>
<td>.25&quot;-20 x 2&quot; Flat Head Phillips</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>GE-20084</td>
<td>Hard Stop, Hitting Tube</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>GE-20085</td>
<td>Hard Stop, Hitting Plate</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>hex_.5_13_7</td>
<td>Steel Hex Head Screw, 1/2&quot;-13 x 7&quot; long, fully threaded</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>hexnut_.5_13</td>
<td>Steel Hex Nut, 1/2&quot;-13</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>nylock_.25_20</td>
<td>Steel Nylon-Insert Locknut, 1/4&quot;-20</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>washer_flat_.25</td>
<td>Flat Washer for 1/4&quot; Screw</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>washer_flat_.5</td>
<td>Flat Washer for 1/2&quot; Screw</td>
<td>4</td>
</tr>
</tbody>
</table>
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.
Notes:
1. Material: 0.125" Mild Steel A366/1008 Cold Roll
2. Remove all burrs and sharp edges.

Material: 0.125” Mild Steel A366/1008 Cold Roll

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.
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.
<table>
<thead>
<tr>
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<th>DESCRIPTION</th>
<th>QTY.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>46CLR</td>
<td>46CLR</td>
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<tr>
<td>2</td>
<td>Button_hex_375_16_2.5</td>
<td>Button hex drive 3/8-16 x 2.5&quot;</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Flat_phil_25_20_2.25</td>
<td>Flat Head Phil .25-20 x 2.25&quot;</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>GE-20104</td>
<td>Control Panel</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>GE-20121</td>
<td>Flange for control panel</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>GE-20122</td>
<td>0.375&quot;id bearing shielded</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>GE-20141</td>
<td>Mounting Bracket (46CLR ColorSight)</td>
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<tr>
<td>8</td>
<td>GE-20142</td>
<td>Sensor Tray Lid</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>GE-20143</td>
<td>Trench to Truss Gusset</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>GE-20160</td>
<td>Sensor Housing Assembly with cable tie mounts</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>GE-20161</td>
<td>GE-20101 with hook</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>GE-20162</td>
<td>GE-20102 with GE-20114</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>GE-20163</td>
<td>GE-20115 with loop</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>GE-20164</td>
<td>GE-20123 with 4&quot; hook</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>Pan_phil_10-32_1</td>
<td>Pan Head 10-32 1&quot;</td>
<td>4</td>
</tr>
<tr>
<td>16</td>
<td>Pan_phil_10-32_625</td>
<td>Pan head Phil 10-32 x 5/8</td>
<td>24</td>
</tr>
<tr>
<td>17</td>
<td>Pan_phil_M3_35</td>
<td>Pan Head M3 x 35mm</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>Pin_quick_ring_25_0.6_875</td>
<td>Quick Release Pin with ring 11/16&quot; usable</td>
<td>4</td>
</tr>
<tr>
<td>19</td>
<td>Spacer_375_75_2</td>
<td>3/4&quot; OD 2&quot; spacer for 3/8&quot; screw</td>
<td>4</td>
</tr>
<tr>
<td>20</td>
<td>StackLight_Assembly</td>
<td>Stack Light Assembly</td>
<td>1</td>
</tr>
<tr>
<td>21</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>2</td>
</tr>
<tr>
<td>22</td>
<td>nylock_25_20</td>
<td>Steel Nylon-insert Locknut, 1/4&quot;-20</td>
<td>7</td>
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<tr>
<td>23</td>
<td>nylock_375_16</td>
<td>Steel Nylon-insert Locknut, 3/8&quot;-16</td>
<td>5</td>
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<tr>
<td>24</td>
<td>nylock_10_32</td>
<td>Low-Strength Steel Nylon-insert Locknut, Zinc-Plated, 10-32 Thread Size</td>
<td>16</td>
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<tr>
<td>25</td>
<td>nylock_M3</td>
<td>nylock M3</td>
<td>2</td>
</tr>
</tbody>
</table>
Notes:
1. Attach (20) to (8) using cable 50lb cable ties.
2. Attach (7) to (1) with (17).
3. Attach step 2 to (10) with (16).
4. Attach (8) to (10) with (18) in 4 spots.
Notes:
1. Slide 11 into 12
2. Attach 12 to 11 using 3, 21 and 22 in three spots per side
Notes:
1. Attach 14 to 11 on the outside
2. Use 16 to assemble. Rivet nut is in 11
Notes:
1. Attach 4 to 12 on the Susan with 16.
2. Assemble from top to bottom the following: 2 5 19 6.
3. Insert Step 2 into 12 and secure with 23.
Notes:
1. Attach 13 to 11 with hook and loop
2. Attach 10 to 12 using 16 just on one side
3. After placement on the field attach 9 to 10 and 12 with 15.
4. After wiring and pass through of cable attach 8 to 10 using 18.
Notes:

1. Label or Tag with Part Number

ITEM NO. | PART NUMBER | DESCRIPTION | QTY.
--- | --- | --- | ---
1 | GE-20101-01 | 14 Gauge Pre-plated steel | 1
2 | GE-20101-02 | 12 Gauge Pre-plated Steel | 1
3 | GE-20101-03 | 12 Gauge Pre-plated steel | 1
5 | GE-20101-04 | 12 Gauge Pre-plated steel | 4
6 | rivet_.1875_.126-.25 | 3/16" Rivet, .126-.25 Grip Range | 20
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: 

---

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES TO TOLERANCES:
FRACTIONAL ±1/16
ANGULAR ±0.1° BEND
TWO PLACE DECIMAL ±0.01
THREE PLACE DECIMAL ±0.001

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Step 4: Attach 1 to Step 3: with QTY(4). Flanges away from 5.
Notes:
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.
Note:
1. Tag or Label with Part Number
2. Zinc Plated Steel Rivets

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20102-01</td>
<td>12 Gauge Pre-plated Steel</td>
<td>2</td>
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<tr>
<td>2</td>
<td>GE-20102-02</td>
<td>12 Gauge Pre-plated Steel</td>
<td>2</td>
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<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
Notes:
1. Material: 12 Ga. Pre-plated steel
2. Remove all burrs and sharp edges.
### Revisions

<table>
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<th>ZONE</th>
<th>REV.</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>APPROVED</th>
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<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>
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**Control Panel**

- **Title:** Control Panel
- **Size:** A
- **Drawing No.:** GE-20104
- **Revision:** A
- **Scale:** 1:12
- **Weight:**
- **Sheet:** 1 of 5

---

**General Notes:**

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

- Interpret geometric tolerancing per:

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<tr>
<th>Material</th>
<th>Finish</th>
<th>Next Assy</th>
<th>Used On</th>
<th>Application</th>
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<td>Do not scale drawing</td>
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<tr>
<td>1</td>
<td>GE-20105</td>
<td>Bottom Control Panel</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20106</td>
<td>Top Control Panel</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Threaded_s</td>
<td>Threaded_standoff_.25_1.5</td>
<td>10</td>
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<tr>
<td></td>
<td>standoff_</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.25_1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Threaded_s</td>
<td>Threaded_standoff_10-32_1.5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>standoff_</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10-32_1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Flat Hex</td>
<td>Flat Hex .25_20_.75</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>.25_20_.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>round_hex</td>
<td>Round Hex Head, #10-32 x 5/8&quot; long, fully threaded</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>10_32_.625_</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>full</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Dimensions and Tolerances:**
- Dimensions are in inches.
- Tolerances:
  - Fractional: ±1/16
  - Angular: Mach ±1° bend ±1°
  - Two Place Decimal: ±0.01
  - Three Place Decimal: ±0.001

**Interpret Geometric Tolerancing Per:**
- Machining

**Notes:**
- Unless otherwise specified, dimensions are in inches.
- Tolerances:
  - Fractional: ±1/16
  - Angular: Mach ±1° bend ±1°
  - Two Place Decimal: ±0.01
  - Three Place Decimal: ±0.001
- Interpreting geometric tolerancing per:
  - Machining

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**Title:** Control Panel

**Size:** A
**Dwg. No.:** GE-20104
**Rev:** A

**Scale:** 1:12
**Weight:**

**Sheet 2 of 5**
Notes:
1. Remove Protective backing
2. Attach \(4\) to \(2\) using \(6\) 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
Notes:
1. Material: 0.25" Clear Polycarbonate
2. Remove all burrs and sharp edges.
3. 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

Material: 12 Ga. Pre Plated Steel

Remove all burrs and sharp edges.

Label or Tag with part number.
Note:
Tag or Label with part number

<table>
<thead>
<tr>
<th>ITEM NO.</th>
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<th>QTY.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GE-20140-01</td>
<td>12 Gauge Aluminum</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20140-03</td>
<td>12 Gauge Aluminum</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>rivet_.1875_.126-.25</td>
<td>3/16&quot; Rivet, .126-.25 Grip Range</td>
<td>16</td>
</tr>
</tbody>
</table>
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.
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

---

**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, B4</td>
<td>A</td>
<td>Moved holes for pins</td>
<td>9/20/2019</td>
<td>NTW</td>
</tr>
</tbody>
</table>

---

**Material:** 12 Ga. Aluminum 5052

**Application:** Used on Sensor Tray Lid

---

**UNLESS OTHERWISE SPECIFIED:**

- **SCALE:** 1:8
- **WEIGHT:**
- **FINISH:**
- **MATERIAL:**
- **INTERPRET GEOMETRIC TOLERANCING PER:**

**TOLERANCES:**

- **FRACTIONAL:** 1/16
- **THREE PLACE DECIMAL:** .001
- **TWO PLACE DECIMAL:** .01
- **ANGULAR:** 1° BEND

---

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

REV. DESCRIPTION DATE APPROVED
A A Updated manufacturer part number. 1/9/2020 CPO

SECTION A-A
SCALE 1:2

Lazy Susan

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

UNLESS OTHERWISE SPECIFIED:
NAME DATE
DRAWN CHECKED ENG APPR. MPG APPR.
Q.A.

UNLESS OTHERWISE SPECIFIED:
FINISH MATERIAL

INTERPRET GEOMETRIC TOLERANCING PER:

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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-20101</td>
<td>Trench Leg</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Hook_1_15</td>
<td>1&quot; x 15&quot; Hook, Adhesive Backed</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>rivnut_10-32_.130</td>
<td>rivnut 10-32 grip range .020 to .130</td>
<td>4</td>
</tr>
</tbody>
</table>
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.
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>

DO NOT SCALE DRAWING

UNLESS OTHERWISE SPECIFIED:

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

REVDWG. NO.  B

TITLE: GE-20115 with loop

SIZE: 1/8

WEIGHT: SHEET 1 OF 1
Notes:
1. Clean and prep bottom surface
2. Attach 2 to 1 as shown above.
3. No Hook permisssable 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>
<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-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-20205</td>
<td>Chute Assembly, Lower</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>GE-20210</td>
<td>Chute Assembly, Upper</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>GE-20216</td>
<td>Top Rail, Standard</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>GE-20221</td>
<td>Front Face, with Target</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>GE-20313</td>
<td>Anchor with hook</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Hook_1_60</td>
<td>1” x 60” Hook, Adhesive Backed</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Loop_1_60</td>
<td>1” x 60” Loop, Adhesive Backed</td>
<td>1</td>
</tr>
</tbody>
</table>
Secure polycarbonate to frame with eight cable ties.

Secure all item 3 with a cable tie.

Secure each chute with six cable ties.
Notes:
1. Tag or label with part number
2. Remove all burrs and sharp edges
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.
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
<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>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>
Notes:
1. Material: 1/4" Polycarbonate, Clear
2. Remove all burrs and sharp edges.
3. 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.
<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_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>
</tbody>
</table>
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>
</tr>
</thead>
<tbody>
<tr>
<td>GE-20220-Blue</td>
<td>1</td>
</tr>
<tr>
<td>GE-20220-Red</td>
<td>1</td>
</tr>
</tbody>
</table>

Title: Front Face with Vinyl

Material: Vinyl

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

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

Application: Used on next Assy

Proprietary and Confidential: The information contained in this drawing is the sole property of First Robotics. Any reproduction in part or as a whole without the written permission of First Robotics is prohibited.
1. GE-20220 Front Face with Vinyl
2. Vision_LOADINGBay 2" Wide, 3M 8830 Scotchlite Reflective Material

**ITEM NO.** | **PART NUMBER** | **DESCRIPTION** | **QTY.**
---|---|---|---
1 | GE-20220 | Front Face with Vinyl | 1
2 | Vision_LOADINGBay | 2" Wide, 3M 8830 Scotchlite Reflective Material | 4
**Notes:**
1. This assembly exists in red and blue configurations. Only blue is shown here.

### Parts 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>
</tr>
<tr>
<td>12</td>
<td>GE-20339</td>
<td>Side Polycarbonate Assembly, Left</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>GE-20340</td>
<td>Outer Port Serializer</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>GE-20350</td>
<td>Plastic Serializer Assembly</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>GE-20370</td>
<td>Counter Assembly</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>GE-20387</td>
<td>support bar</td>
<td>1</td>
</tr>
<tr>
<td>17</td>
<td>GE-20387</td>
<td>Corral Assembly</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>GE-20390</td>
<td>Power Port Base Back Bottom</td>
<td>1</td>
</tr>
<tr>
<td>19</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>20</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>2</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>Ring-Grip Quick-Release Pin, 1/4&quot; diameter, 1-13/16&quot; long</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 19, 20, and 21.
3. Place item 5 in place and attach 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 16 into the assembly, secure in place using 22.
2. Attach 14 to 8 using 1 and 21.
3. Slide this subassembly into place and secure using 120 lb. cable ties.
4. Attach 13 to the assembly using the hook and loop fastener.
5. Attach 6 and 18 using 50 lb. cable ties.
Notes:
1. Attach 15 to 10 using 50 lb. cable ties.
2. Attach this subassembly to the rest of the assembly using 50 lb. cable ties.
3. Slide 17 into place.
Blue version shown, also exists in red.

<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.
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-0420-12Z-</td>
<td>PennEngineering 1/4-20 self-clinching nut, .054 shank</td>
<td>4</td>
</tr>
</tbody>
</table>

4x PEM nuts installed on interior face
Notes:
1. Material: 1/8" thick, clear polycarbonate
2. Remove all burns 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
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

Material: 1/8" thick polycarbonate - black

Finish changed from vinyl to screen print. 10/9/2019 CPO
Updated material to black polycarbonate, eliminated note about screen print. 10/28/2019 CPO

Dimensions are in inches

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

Interpret Geometric Tolerancing Per:
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  

Notes:  
1. Tag or label with part number.  
2. Remove burrs and sharp edges.
No weld permissible on inside of tube. 2x

4 places

Round tube flush here. 2x

2 Places. Grind flush to Datum A if protruding

Notes:
1. Tag or label with part number
2. Remove all burrs and sharp edges
Notes:
1. Material: 16 GA. Preplated Steel
2. Remove all burrs and sharp edge
3. Tag or label with part number

Material: 16 GA. Preplated Steel

Remove all burrs and sharp edge

Tag or label with part number

Power Port Light Bracket

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

INTERPRET GEOMETRIC TOLERANCING PER:

DRAWN
CHECKED
ENG APPR
MFG APPR

Q.A.
COMMENTS:

APPLICATION
DO NOT SCALE DRAWING

DO NOT SCALE DRAWING
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.
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_2.75_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>
Vinyl applied to one face. Front and back of part are identical.

Notes:
1. Tag or label with part number

Color Variations

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Vinyl Image</th>
<th>QTY per field</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE-20320-Blue</td>
<td>GE-20320-Blue-Vinyl</td>
<td>1</td>
</tr>
<tr>
<td>GE-20320-Red</td>
<td>GE-20320-Red-Vinyl</td>
<td>1</td>
</tr>
</tbody>
</table>

This row of holes oriented towards top.

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

## Details

- **Detail A**
  - Scale: 1:6
  - Countersinks face up

- Vinyl applied to this face

---

**Title:** Low Power Port with Vinyl

**Scale:** 1:12

**Weight:**

**Sheet:** 1 of 1
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' 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.
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
<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_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:
1. Plastic with vinyl same for both RED and BLUE
Note: Item 2 can be red or blue. See drawing for more details.

<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-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_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>
</tbody>
</table>
Vinyl applied to this face.

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.

Notes: Tag or label with part number

<table>
<thead>
<tr>
<th>Color Variations</th>
<th>QTY per field</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE-20332-Red</td>
<td>GE-20332-Red-Vinyl</td>
</tr>
<tr>
<td>GE-20332-Blue</td>
<td>GE-20332-Blue-Vinyl</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

Material: 1/16" thick, clear polycarbonate

Remove all burrs and sharp edges

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.

1. Remove burrs and sharp edges.
2. Tag or label with part number.
<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 2</td>
</tr>
<tr>
<td>2</td>
<td>GE-20334</td>
<td>Inner Port Chute Slide 1</td>
</tr>
<tr>
<td>3</td>
<td>GE-20335</td>
<td>Inner Port Chute Churro 7</td>
</tr>
<tr>
<td>4</td>
<td>GE-20336</td>
<td>Inner Port Chute Ramp 1</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 14</td>
</tr>
</tbody>
</table>

**Unless Otherwise Specified:**
- Scale: 1:6
- Weight:

**Interpret Geometric Tolerancing Per:**
- Dimensions are in inches
- Tolerances:
  - Fractional
  - Angular: Mach 1° Bend
  - Two Place Decimal
  - Three Place Decimal

**Application:**
- Used On: NEAT
- Do Not Scale Drawing

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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. 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;x24&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>
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_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.
<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>
</tr>
<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>Clamp_4hole</td>
<td>4 Hole Clamp, TCH: 504-1700800</td>
<td>15</td>
</tr>
<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_1.25</td>
<td>Hex Head Bolt, 1/4-20 x 1.25&quot;, Steel</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>nylock_.25_20</td>
<td>Steel Nylon-Insert Locknut, 1/4&quot;-20</td>
<td>4</td>
</tr>
<tr>
<td>21</td>
<td>rivet_.1875_.251-.375</td>
<td>3/16” Aluminum Rivet, .251-.375 Grip Range</td>
<td>80</td>
</tr>
<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>
</tr>
<tr>
<td>24</td>
<td>threaded_rod_.25_20_4</td>
<td>Threaded Rod, 1/4-20 x 4&quot;</td>
<td>1</td>
</tr>
</tbody>
</table>
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 burrs and sharp edges.
3. Tag or label with part number.

DIMENSIONS ARE IN INCHES

TOLERANCES:
FRACTIONAL ±1/16
ANGULAR (MIN): 1° BEND ±1°
THREE PLACE DECIMAL ±.001
TWO PLACE DECIMAL ±.01

MATERIAL

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SCALE: 1:3
WEIGHT:

UNLESS OTHERWISE SPECIFIED:

DRAWN
CHECKED
ENG. APPR.
MFG. APPR.

Q.A.
COMMENTS:

FINISH
MATERIAL

INTERPRET GEOMETRIC TOLERANCING PER:

APPLICATION
DO NOT SCALE DRAWING

NOTES:
Material: 1/4" Clear Polycarbonate.
Remove all burrs and sharp edges.
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.
1. Material: 1/4" Clear Polycarbonate
2. Remove all burrs and sharp edges.
3. Label or tag with part number.

NOTES:
Notes:
1. Material: 3/8\" Clear Polycarbonate
2. Remove all burrs and sharp edges.
3. Tag or label with part number.
Note: Place Item 2 (QTY:4) in four places
Place Item 5 (QTY:4) in four places

Notes:
Attach Item 2 6 places
Notes:
Attach Item 5 and 21 with Item 15

Notes:
Attach Item 6 and 22 with Item 15
Note: Attach item 27 and 23 using item 15

Note: Attach item 9 and 8 using cable ties
Notes:
1. Material 1/4" Thick Polycarbonate Sheet, Clear
2. Remove Sharp Edges and Burrs
3. Tag or Label with Part Number
Note:
1. Material: 12 GA Plated Sheet
2. Remove Sharp edges and burrs
3. Label and Tag with part number

View A-A

Material:
12 GA Plated Sheet

1.00
4.00
5.00
65.00°
1.00
1.21
2.08
4.00
5.00
0.64
1.87
0
0

4X .25 Thru All

REVISIONS

<table>
<thead>
<tr>
<th>ZONE</th>
<th>REV.</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>APPROVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>B4</td>
<td>A</td>
<td>12 Gage Steel Thickness updated</td>
<td>11/1/2019</td>
<td>MXS</td>
</tr>
</tbody>
</table>
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

### Dimensions
- **2X R.13**
- **2X R.23**
- **90.00°**
- **4X Ø .194 ± .002 Thru**
- **(.11)**
- **6X Ø .13 Thru All**
- **.50 Thru All**
- **12X Ø .25 Thru All**
- **2X 1.00**
- **2X 2.00**
- **2X 3.00**
- **2X 4.38**
- **2X 4.91**
- **2X 5.44**
- **2X 6.82**
- **2X 7.82**
- **2X 8.82**

### 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</td>
<td>A</td>
<td>Changed to 12 Gage Preplated Steel</td>
<td>10/24/2019</td>
<td>MXS</td>
</tr>
<tr>
<td>A1</td>
<td>B</td>
<td>Changed Part description</td>
<td>10/30/2019</td>
<td>MXS</td>
</tr>
</tbody>
</table>
Notes:
1. Material 1/4" Thick Polycarbonate Sheet
2. Remove Sharp Edges and Burrs
3. Label and Tag with Part Number
<table>
<thead>
<tr>
<th>Notes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Material: 1/4&quot; Thick Polycarbonate Sheet, Clear</td>
</tr>
<tr>
<td>2. Remove Sharp Edges and Burrs</td>
</tr>
<tr>
<td>3. Label and Tag with Part Number</td>
</tr>
</tbody>
</table>
4X .194 ± .002 Thru
2X .600
4.00
6X .26
10X Ø .25 Thru

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
<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-20361</td>
<td>Polycarbonate Face</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>GE-20362</td>
<td>Angle Bracket</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>GE-20363</td>
<td>Angle Pusher</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>GE-20374</td>
<td>Serializer Top Angle</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>GE-20367</td>
<td>Serializer Lower Angle Bracket</td>
<td>1</td>
</tr>
<tr>
<td>6</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>6</td>
</tr>
<tr>
<td>7</td>
<td>nylock_25_20</td>
<td>Steel Nylon-Insert Locknut, 1/4&quot;-20</td>
<td>6</td>
</tr>
</tbody>
</table>

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

APPLICATION
USED ON
HIGH

PROPRIETARY AND CONFIDENTIAL
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Note Cable Tie 4 places
**Note:**
1. Material: 1/4" Thick Polycarbonate Sheet
2. Remove Sharp Edges and Burrs
3. Tag and Label with Part Number
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

---

<table>
<thead>
<tr>
<th>ZONE</th>
<th>REV.</th>
<th>DESCRIPTION</th>
<th>DATE</th>
<th>APPROVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>A3</td>
<td>A</td>
<td>Added four holes</td>
<td>11/27/2019</td>
<td>MXS</td>
</tr>
</tbody>
</table>

Angle Pusher

Material: 1/4" Thick Polycarbonate Sheet, Clear

Remove Sharp Edges and Burrs

Tag and Label with Part Number

---

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES

TOLERANCES:

FRACTIONAL: 1/32

ANGULAR: 1° BEND

THREE PLACE DECIMAL: .001

TWO PLACE DECIMAL: .01

APPLICATION

USED ON

PROPRIETARY AND CONFIDENTIAL

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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

Material 1/4" Thick Polycarbonate Sheet

Remove Sharp Edges and Burrs

Tag and Label with Part Number
Notes:
1. Material: 1 X 1x .125 aluminumn Angle 6063
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

1.60 Thru 2X .27 Thru
0  2X .75
1.00  2X 1.61
2.00

2X R.13

Φ 1.60 Thru
4.68
6.00

Φ 0.30 Thru
2X

0 50
2X
2.00
2.50

0 1.25
0 2.25
2.50

0 4.68
2X

0
1.79
(.10)

(1.00)
Detail A
Scale 1:2

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

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ±1/16
ANGULAR: MACH 1° BEND ±1°
TWO PLACE DECIMAL ±.01
THREE PLACE DECIMAL ±.001
INTERPRET GEOMETRIC TOLERANCING PER:
MATERIAL:
FINISH:
MFG APPR.:
ENG APPR.:
CHECKED:
DRAWN:
COMMENTS:
Q.A.
REVDWG. NO.
TITLE:
APPLICATION:
USED ON:
NEXT ASSY:
DO NOT SCALE DRAWING
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Counter Box Side Bracket

Note: Material: 12 Gage Preplated Steel Sheet
2. Remove Sharp Edges and Burrs
3. Tag and Label With Part Number
Notes:
1. Material: 1/4" Thick Polycarbonate Sheet, Clear
2. Remove Sharp Edges and Burrs
3. Tag and Label with Part Numbers
<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>hex_.25_20_1.25</td>
<td>Hex Head Bolt, 1/4-20 x 1.25&quot;, Steel</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>M3 SOCKET HEAD CAP SCREW</td>
<td>M3 Socket Head Cap Screw 5mm</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>nylock_.25_20</td>
<td>Steel Nylon-Insert Locknut, 1/4&quot;-20</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>CUP POINT SET SCREW 10-24-.50</td>
<td>Cup Point Set Screw 10-24</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>GE-20368</td>
<td>Serializer 1/4 x 20 Rod Spacer</td>
<td>2</td>
</tr>
<tr>
<td>14</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>15</td>
<td>Nylock_Shallow_.25_20</td>
<td>Nylock Shallow 1/4 x 20</td>
<td>2</td>
</tr>
</tbody>
</table>
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: McMasterCarr
Partnumber: 94639A569

Spacer

SCALE: 8:1
WEIGHT: SHEET 1 OF 1

UNLESS OTHERWISE SPECIFIED:

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

INTERPRET GEOMETRIC TOLERANCING PER:

MATERIAL

APPLICATION USED ON

FINISH

DO NOT SCALE DRAWING

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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.

<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-20393</td>
<td>Corral Leg Side</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>GE-20396</td>
<td>Corral Elbow</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>GE-20395</td>
<td>Corral Leg Middle</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>GE-20394</td>
<td>Corral Leg Vertical</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>GE-20391</td>
<td>Corral Backboard</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>GE-20392</td>
<td>Corral Side Plastic</td>
<td>2</td>
</tr>
</tbody>
</table>
Notes:
1. Material: 1/8" Polycarbonate Sheet clear
2. Remove Sharp Edges and Burrs
3. Tag and Label with Part Numbers

4X \( \Phi \) 0.27 Thru 0.25
29.75
30.00

20.25
20.50

2.50
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.
Notes:
1. Description: Medium Bounce Dino-Skin Foam Ball, 7 inches
2. Source: Flaghouse
3. Item #: 1892 YEL
4. Available to teams as am-4200 from AndyMark

FIRST logo applied to face in black.

φ7.00