

# **GENMAC A Division of 5 Point Fabrication LLC**

# MODEL 3005-LD SERIAL NUMBER: 6435

### **GENMAC A Division of 5 Point Fabrication LLC**

1680 Cornell Road, Green Bay, WI– USA 54313 TELEPHONE: 920-458-2189 or 888-2-GENMAC

FAX: 920-458-8316

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E-Mail Address: <a href="mailto:sales@genmac.com">sales@genmac.com</a>

# 5 Point Fabrication, LLC d/b/a GENMAC

1680 Cornell Road Green Bay, WI 54313

### LIMITED WARRANTY

5 Point Fabrication, LLC d/b/a GENMAC ("GENMAC") warrants that the ordered machine will be constructed in accordance with normal GENMAC methods of manufacture and to the specifications set forth in the purchase order. GENMAC's machine is warranted to be free of defects in material and workmanship for a period of twelve (12) months from the date of invoice (the "Warranty Period"), provided that GENMAC's machine has been properly mounted and wired, properly lubricated and the machine has been properly maintained in accordance with the GENMAC maintenance manual, and further, provided, the machine has not been abused, misused, neglected, damaged accidentally or improperly operated, including the amount of pressure used. Wear due to highly abrasive or corrosive atmosphere shall not be considered a defect. Subject to the terms and conditions set forth herein, GENMAC agrees to replace, free of charge, any part or parts of the machine which fail through defect in material or workmanship within the Warranty Period. To invoke the warranty, customer shall, within the Warranty Period, provide GENMAC written notice of any alleged defect. Upon receipt of written notice of defect, GENMAC will, at its option, repair or replace the defective equipment or component. If GENMAC determines that the alleged defective equipment or component requires replacement, GENMAC will ship an identical or similar equipment or component to the customer and invoice customer for the same. After replacement equipment or components are installed on the machine, customer must return the alleged defective equipment or components to GENMAC for evaluation. Upon verification of defect, GENMAC will issue a full credit to customer covering the cost of the replacement equipment or components, but excluding labor, handling and shipping costs, which shall be the customer's responsibility. Any equipment or components of GENMAC's machine replaced under warranty shall have the same warranty as new equipment or components of GENMAC's machine, but any such replacement does not extend the warranty of the original machine. No warranty is made with respect to: (1) consumable items within GENMAC's machine, such as silicone grease, Teflon or other coatings, Teflon belts, sealing ribbons, cutting knives, etc.; (2) failures not reported to GENMAC within the Warranty Period; (3) failures or damage due to misapplication, lack of proper maintenance, abuse, improper installation, mounting, lubrication, wiring or abnormal conditions of temperature, moisture, dirt, or corrosive matter, etc.; (4) failures due to operation, either intentional or otherwise, above the rated capacities, or in an otherwise improper manner; (5) any component of the machine which has been altered by anyone other than an authorized representative of GENMAC; and (6) any component of the machine damaged without fault of GENMAC. GENMAC shall not be liable for any expenses incurred by the customer in an attempt to correct any allegedly defective machine or part thereof. Failure to make any payment of the sale price as it becomes due shall cancel this warranty and a re-commencement of payments shall not operate to reinstate the Warranty Period or expand the terms of this limited warranty or any other warranty imposed by operation of law. GENMAC assumes no responsibility for unauthorized repairs of its machine even though defective, or for the failure of the machine due to jamming or overload, improper refuse removal or improper tooling, even though unintentional. GENMAC is not liable for losses, damages or delays due to any defect, and customer's rights under this Warranty shall be the customer's only remedy.



SAFE T DECALS give instant warning that sharp blades are in operation alerting the operator as well as employees working near your slicer that a hazard exists. The SAFE T DECALS are made of a tough durable plastic designed to take the rigorous environment of food processing facilities. Adhesive mounted, SAFE T DECALS can be placed on any slicing machine in your processing line. Order SAFE T DECALS now to alert your employees of slicing machine hazards.

# IMPORTANT SAFETY FIRST READ THESE INSTRUCTIONS BEFORE INSTALLING, OPERATING, MAINTAINING OR CLEANING EQUIPMENT

- 1. MARK A MINIMUM "SAFE AREA" AROUND THE MACHINE.
- 2. TEST SAFETY GUARDS BEFORE OPERATING MACHINE
- 3. ONLY AUTHORIZED TRAINED PERSONNEL SHOULD WORK WITH OR NEAR MACHINE.
- 4. MACHINE SHOULD BE UNDER POWER ONLY WHEN THE PRODUCT IS BEING PROCESSED.
- 5. IMPORTANT!! IF FOR ANY REASON, INCLUDING, BUT NOT LIMITED TO, IMPROPER PRODUCT FEED, BLOCKAGE, UNFORESEEN MALFUNCTION, ETC., OCCUR, FIRST PRIORITES ARE TO:
  - A. TURN AIR OFF!
  - B. SEEK SUPERVISOR'S ASSISTANCE, AND
  - C. ASSURE SAFETY BEFORE RESTARTING.
- 7. WARNING DECALS ARE PLACED ON ALL GUARDS, REPLACE THEM WHEN WORN. DO NOT OPERATE THE MACHINE WITHOUT SAFETY DECALS IN PLACE.

### \*\*CLEAN UP AND MAINTENANCE CREWS\*\*

- 1. DISCONNECT ALL TO MACHINE BEFORE MAINTENANCE OR CLEANING.
- 2. WEAR PROTECTIVE GLOVES. USE LONG HANDLED BRUSHES FOR CLEANING ANY HAZARDOUS AREAS.

IF ASSISTANCE IS REQUIRED CONTACT

MANUFACTURER BEFORE OPERATING THE EQUIPMENT

REMEMBER THE SAFEST MACHINE IS ONLY AS SAFE AS YOU WANT

IT TO BE!!

PHONE: 920-458-2189 FAX: 920-458-8316

E-MAIL: sales@genmac.com

### **IMPORTANT NOTICE**

Employ machine only for the purpose advertised by manufacturer.

Due to federal laws dealing with safety, GENMAC requires that operating and safety instructions related to this machine, be brought to the attention of any and all personnel who operates, maintains, cleans or supervises or manages its use.

If this machine is disposed of or used by any other concern, these instructions must accompany the machine and be brought to the attention of such concern.

GENMAC is to be promptly notified if the machine is sold or disposed of in any manner:

Phone: 920-458-2189

Fax: 920-458-8316

E-mail: sales@genmac.com

Only parts or equipment manufactured by GENMAC, or authorized by GENMAC in writing, are to be employed on or with this machine.

### READ THIS IMPORTANT NOTICE WITH REGARD TO SAFETY

Our engineering department is continually evaluating both new safety equipment and that employed in the field. Consequently, we require immediate notification in regard to any perceived hazards, and prior to any modifications, or if the machine is sold, loaned, transferred, or otherwise disposed of. That information will allow us to maintain accurate files and assure continued safe operation.

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> www.genmac.com Phone: 920-458-2189 Fax: 920-458-8316

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### **YOUR ATTENTION PLEASE:**

This notice or copy thereof must be brought to the attention of all personnel connected with the operation, maintenance, sales, and/or disposition of GENMAC Equipment. Attach to your permanent records for regular reference.

### **WARNING**

DO NOT CONNECT AIR OR OPERATE MACHINE WITHOUT VISUALLY CHECKING TO SEE THAT ALL MOVING PARTS ARE SECURED, AND ANY OBSTACLES ARE REMOVED FROM THE CUTTING AREAS.

DO NOT REMOVE AND/OR MODIFY ANY MACHINE COMPONENTS. ALL COMPONENTS SUCH AS GUARDS, PANELS, GAUGES, ETC. MUST BE IN PLACE AND FUNTION PROPERLY BEFORE MACHINE IS PUT INTO OPERATION. ANY MALFUNCTION, OR MISSING COMPONENTS MUST BE BROUGHT TO THE ATTENTION OF THE MANUFACTURER IMMEDIATELY.

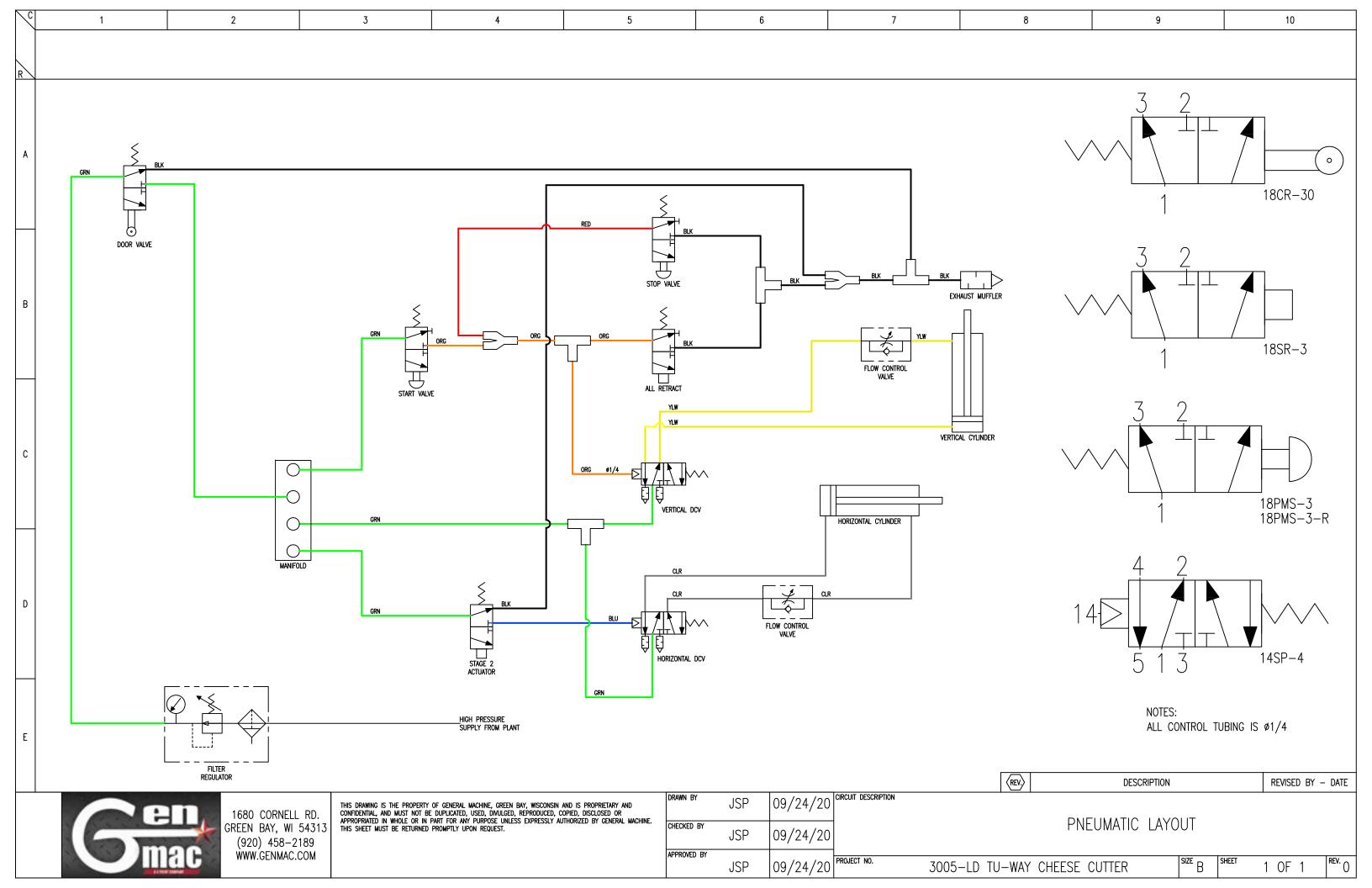
This safety notice should be prominently displayed it the work area, given to the supervisor and operation personnel in an effort for all employees to be concerned about safety precautions.

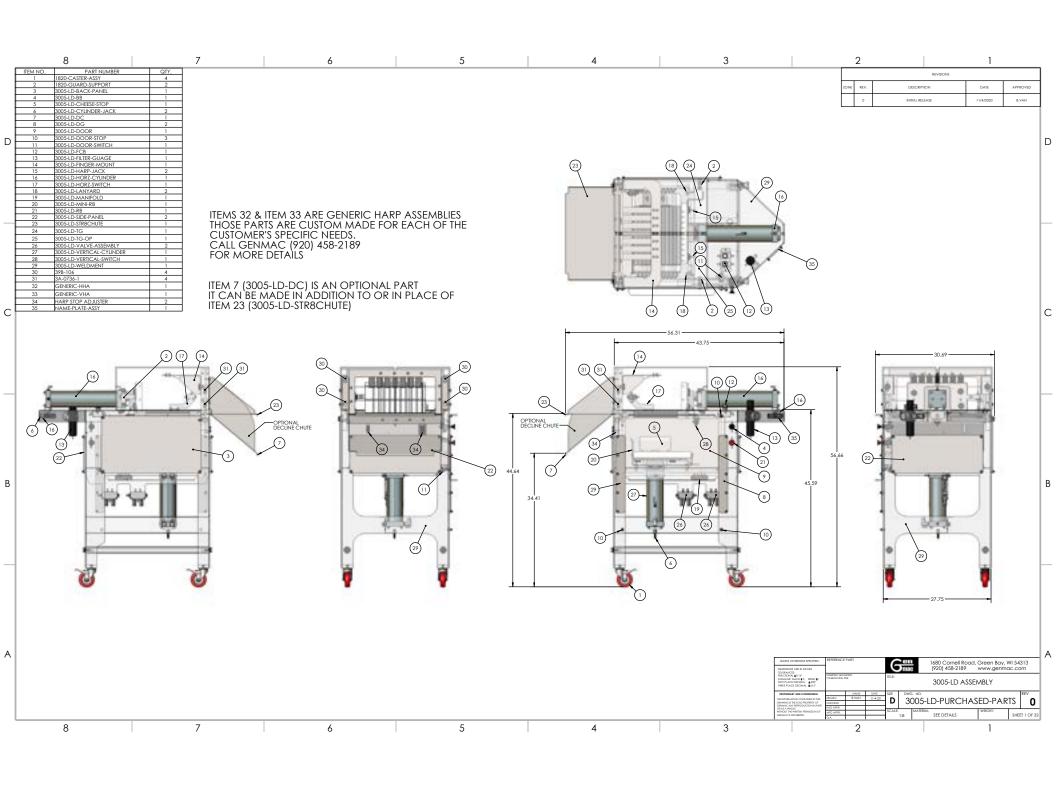
### **GENMAC**

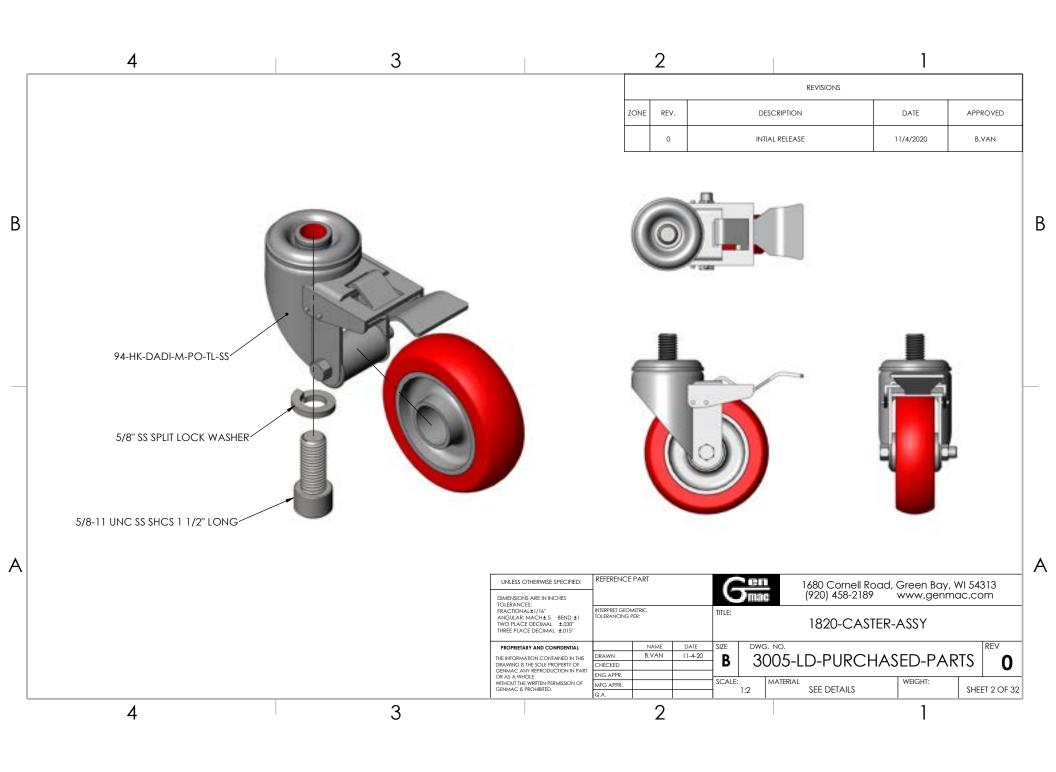
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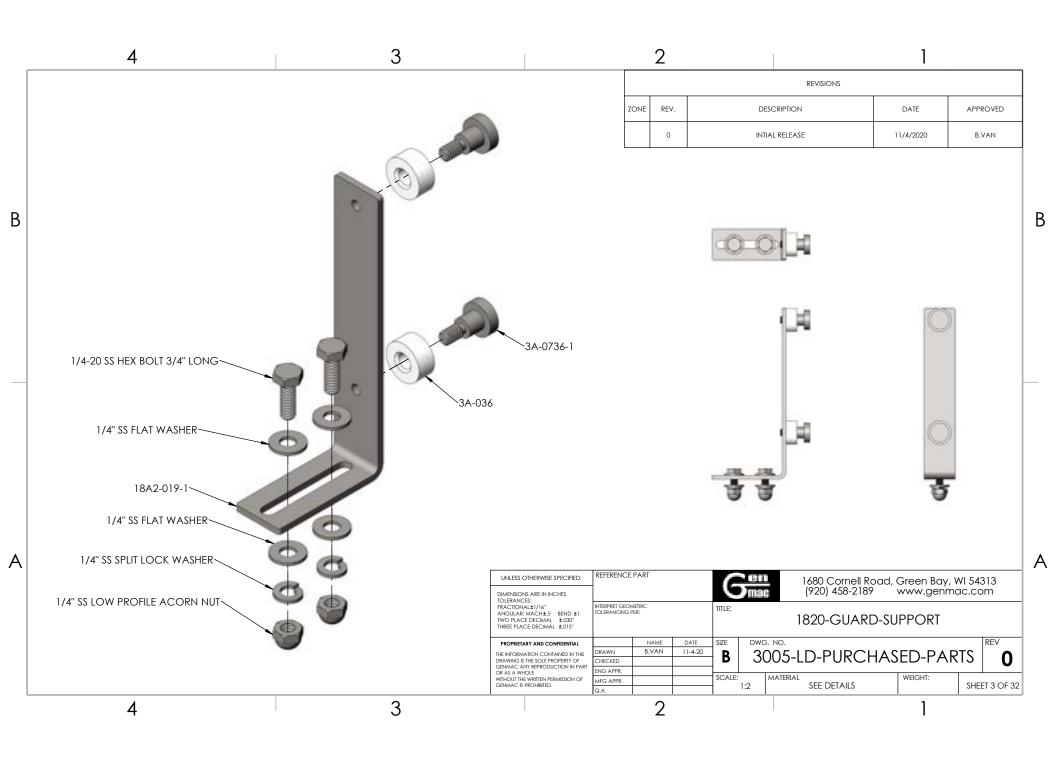
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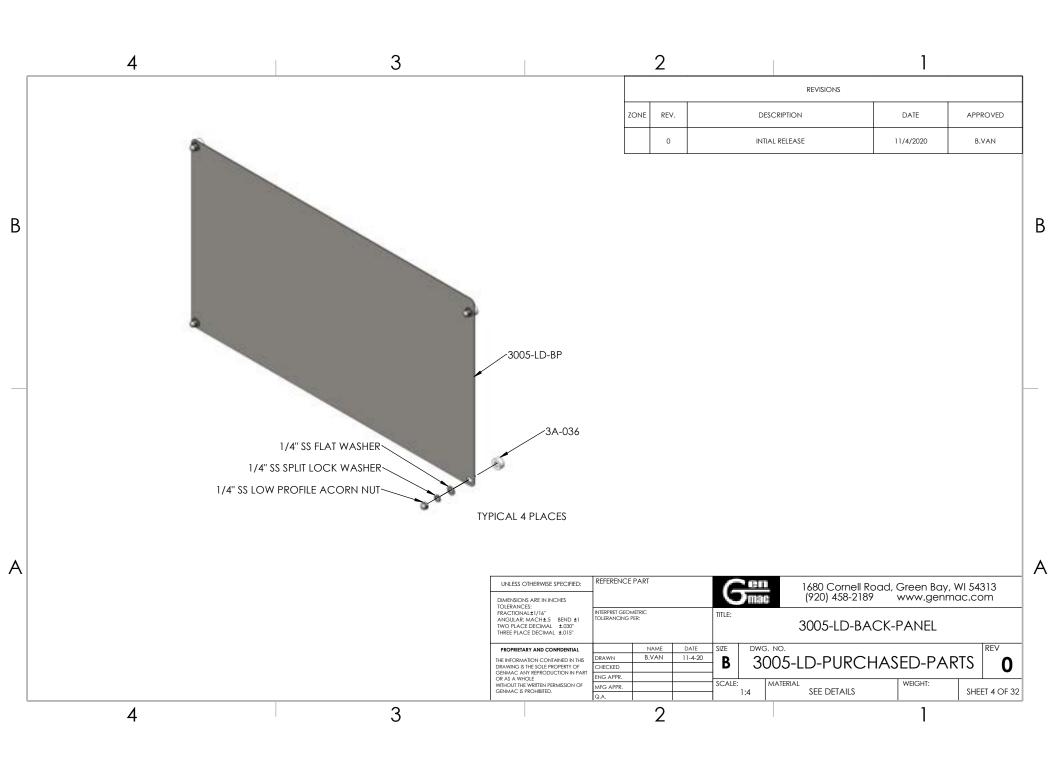
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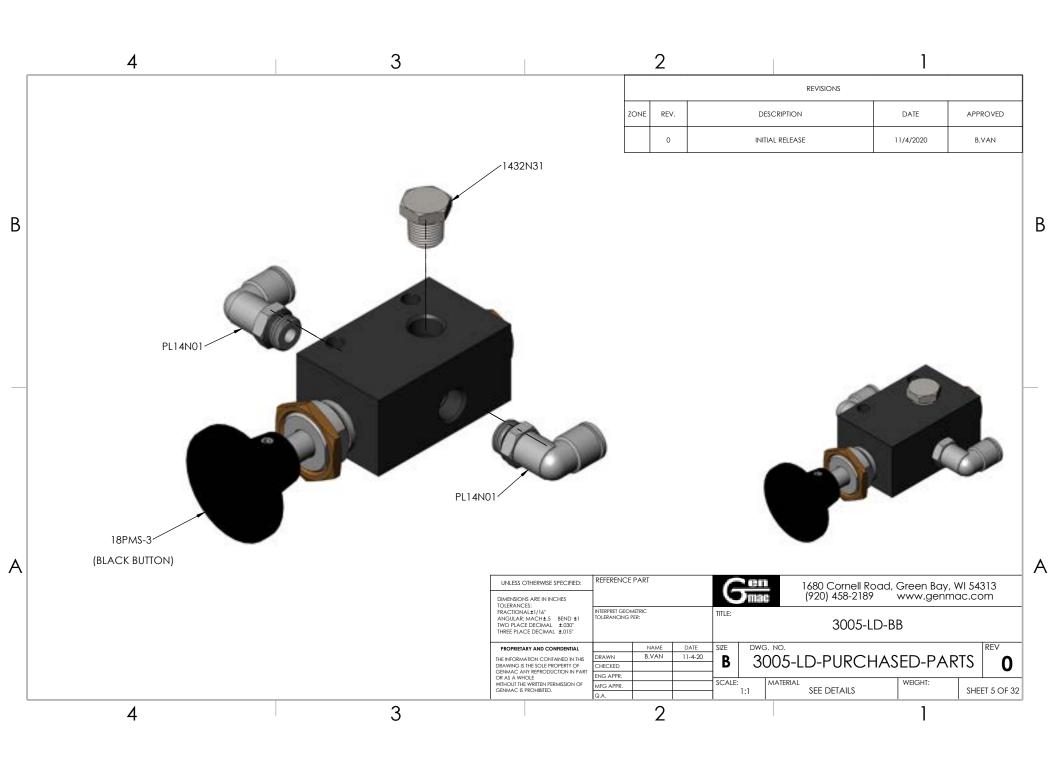


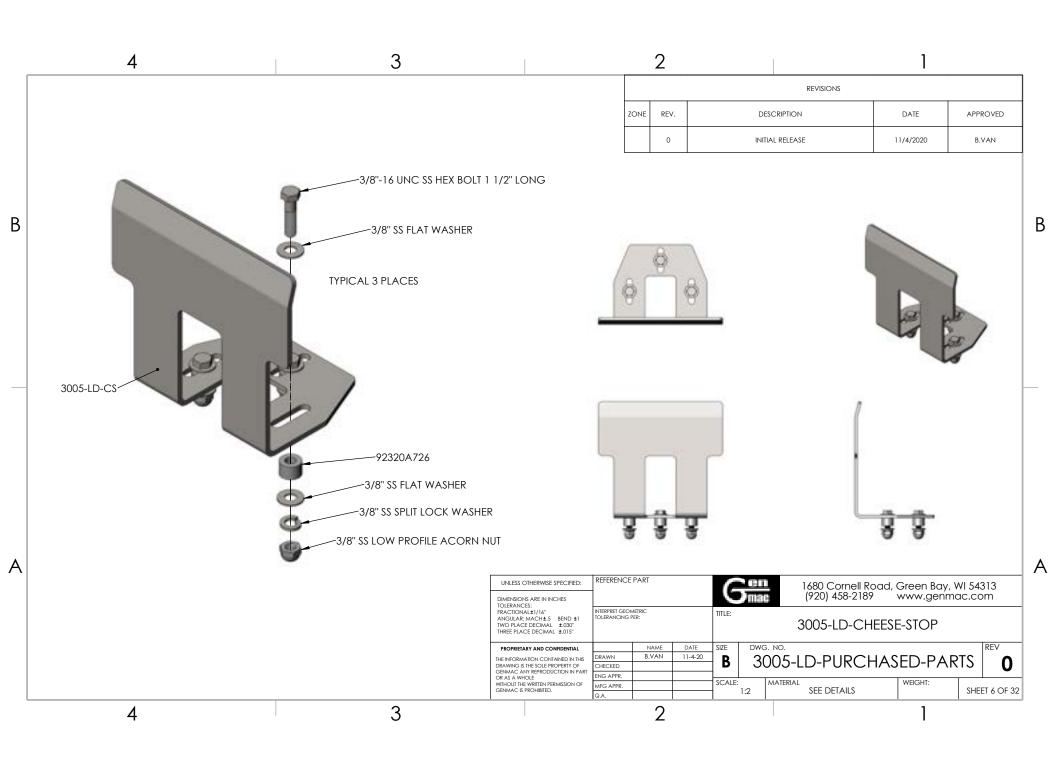


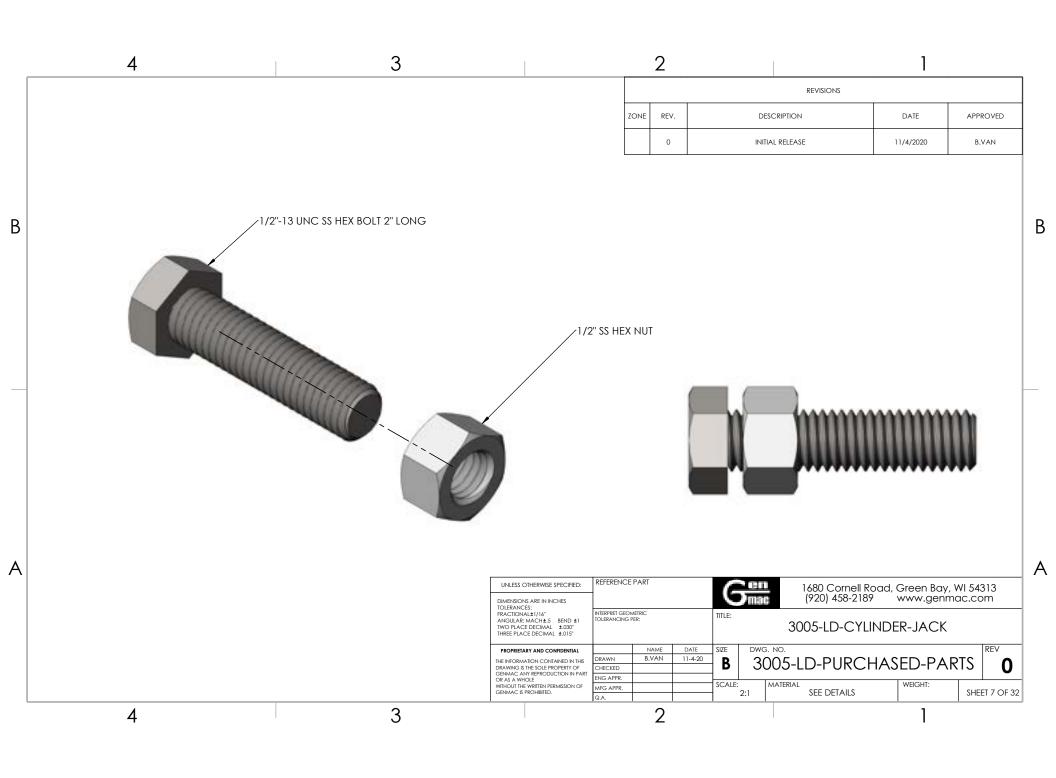


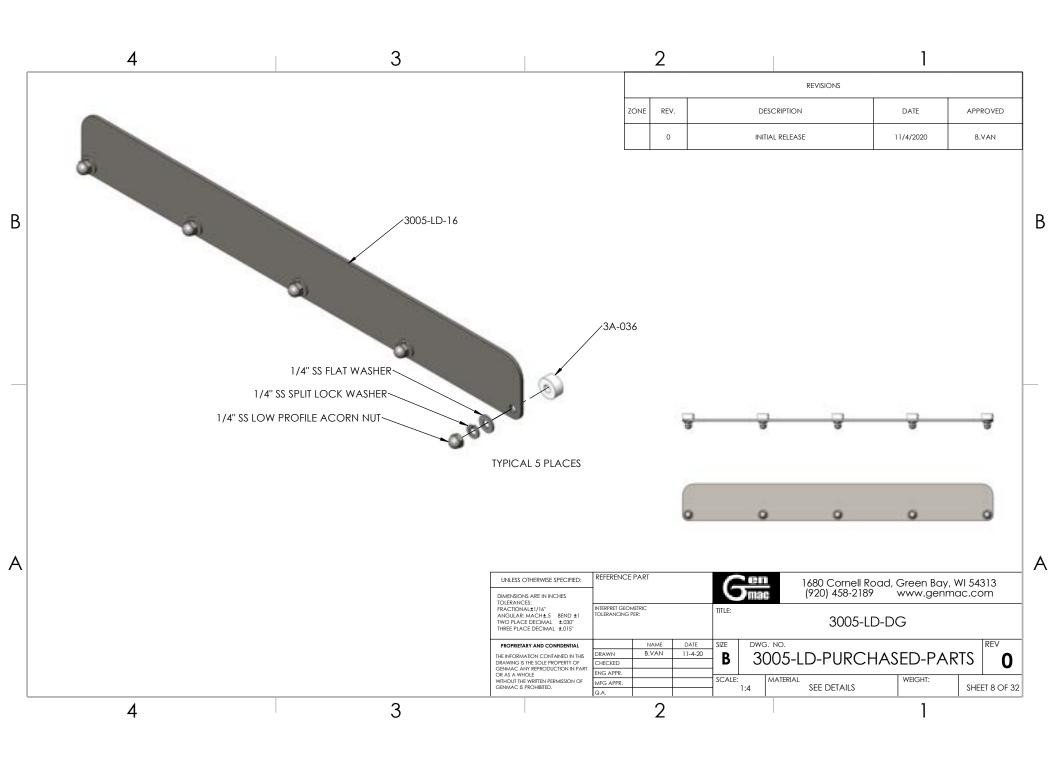


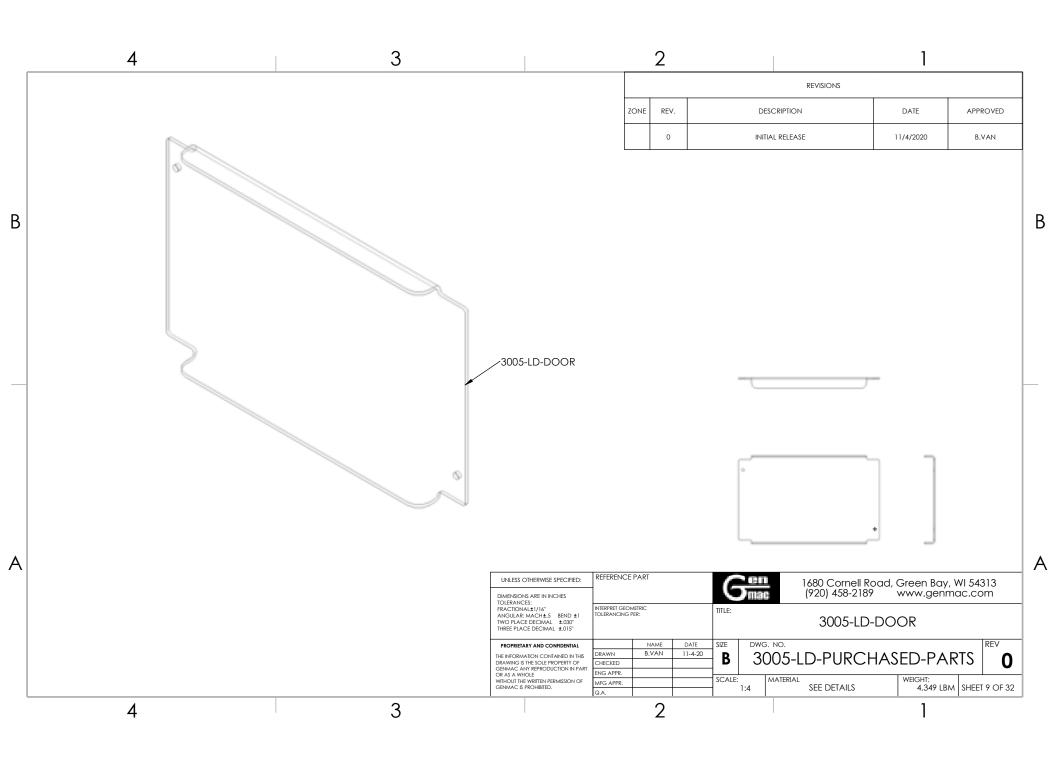


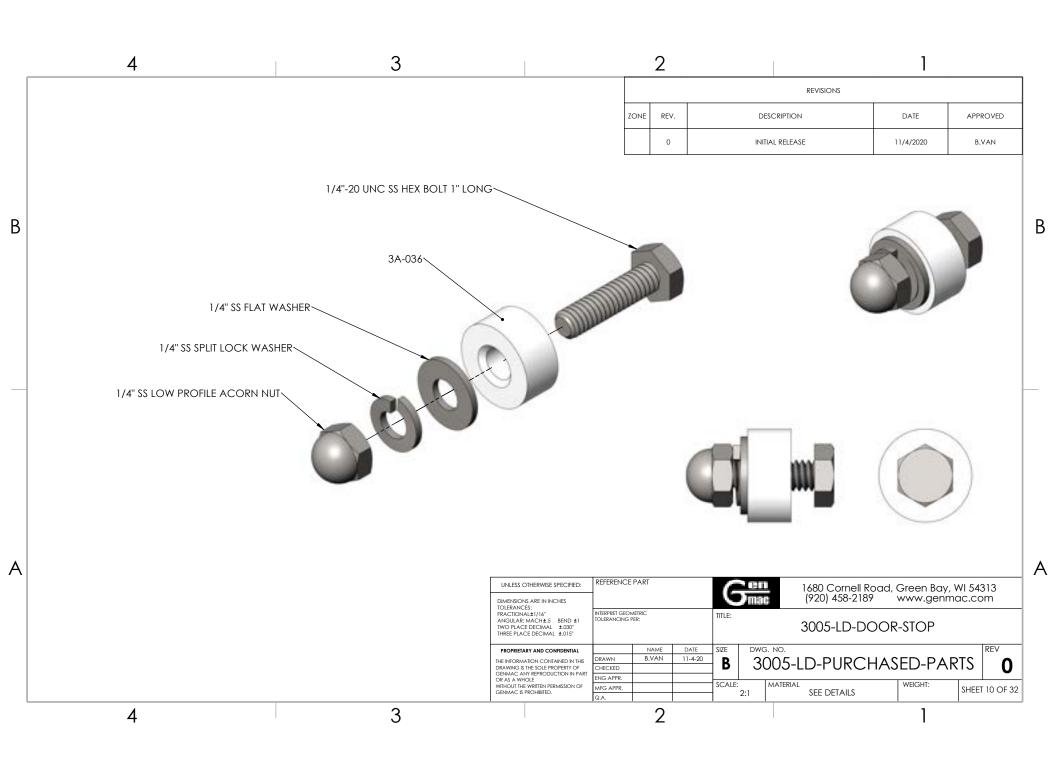


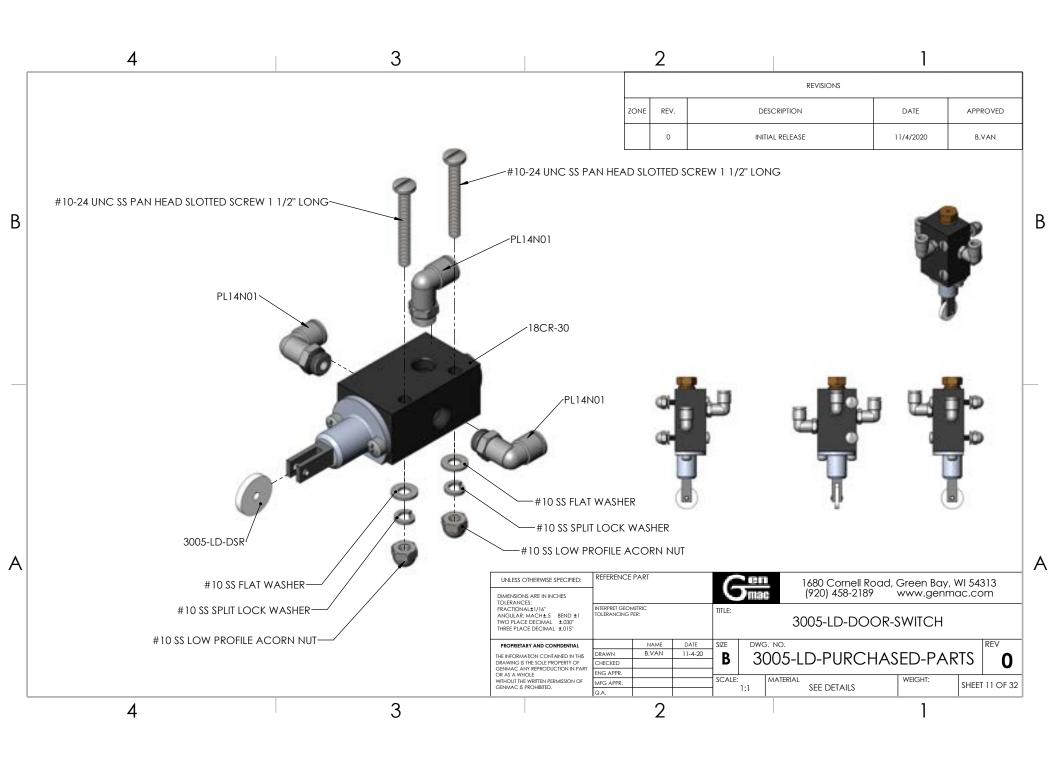


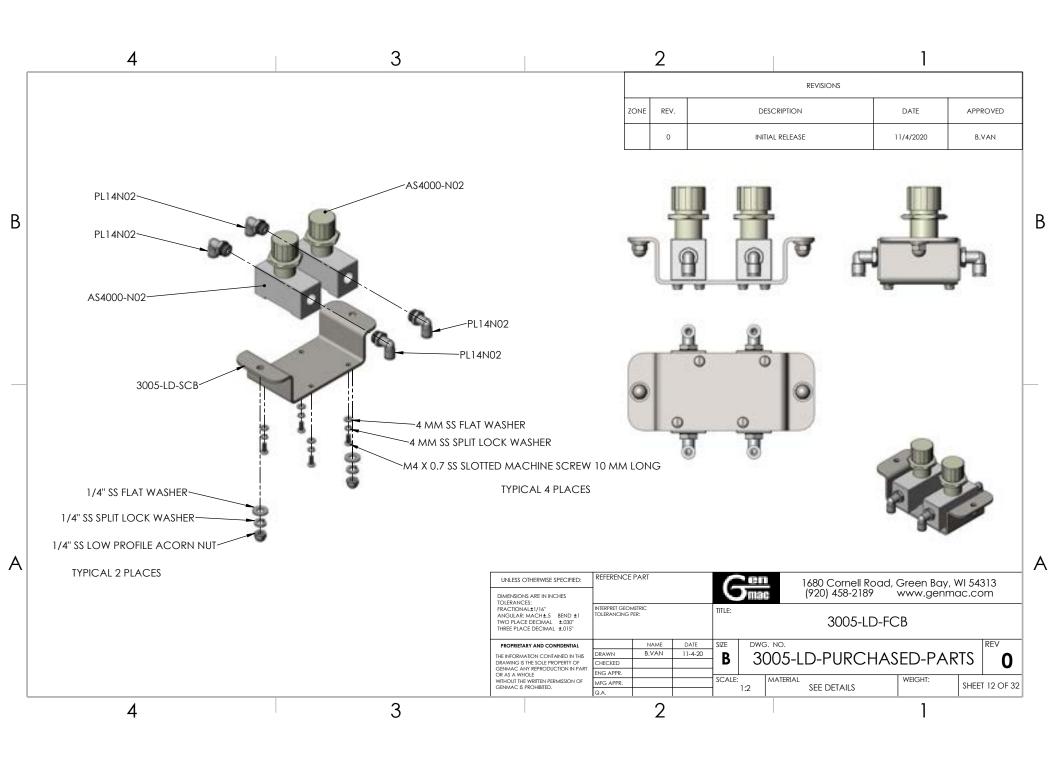


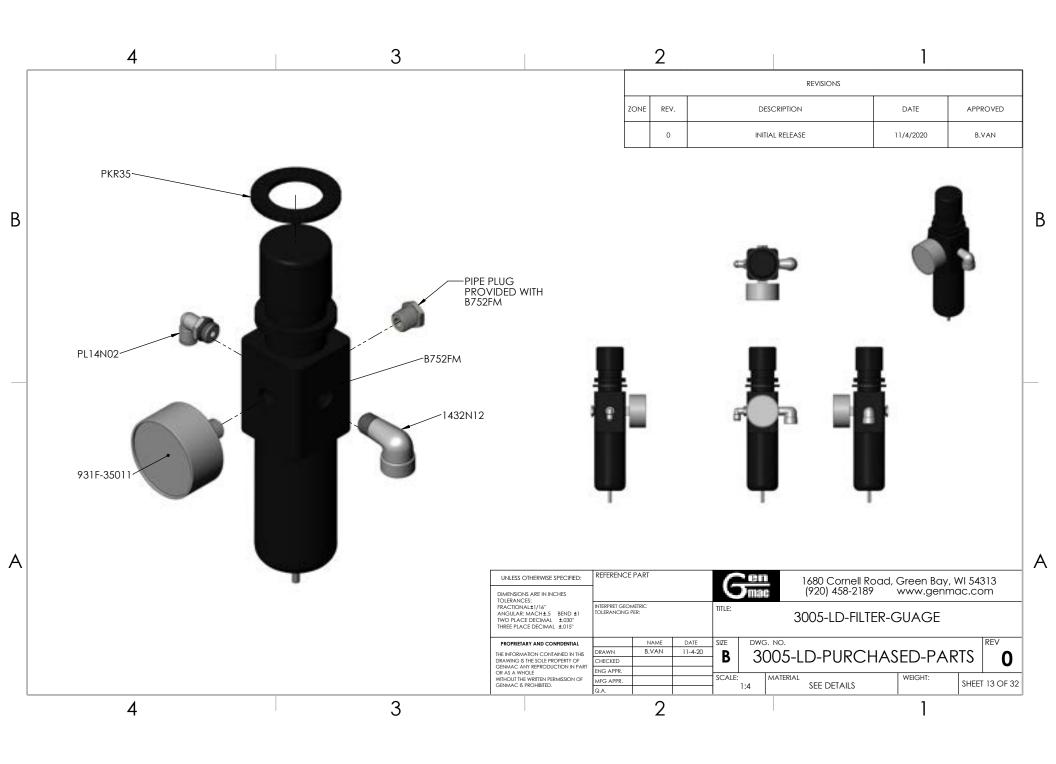


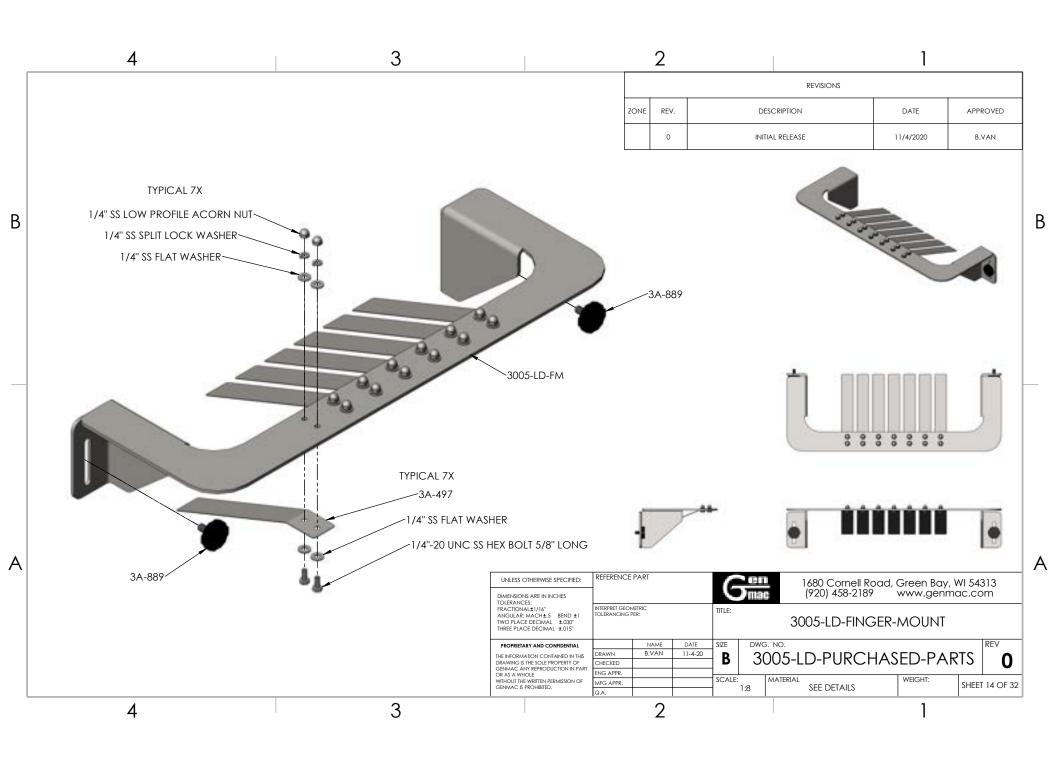


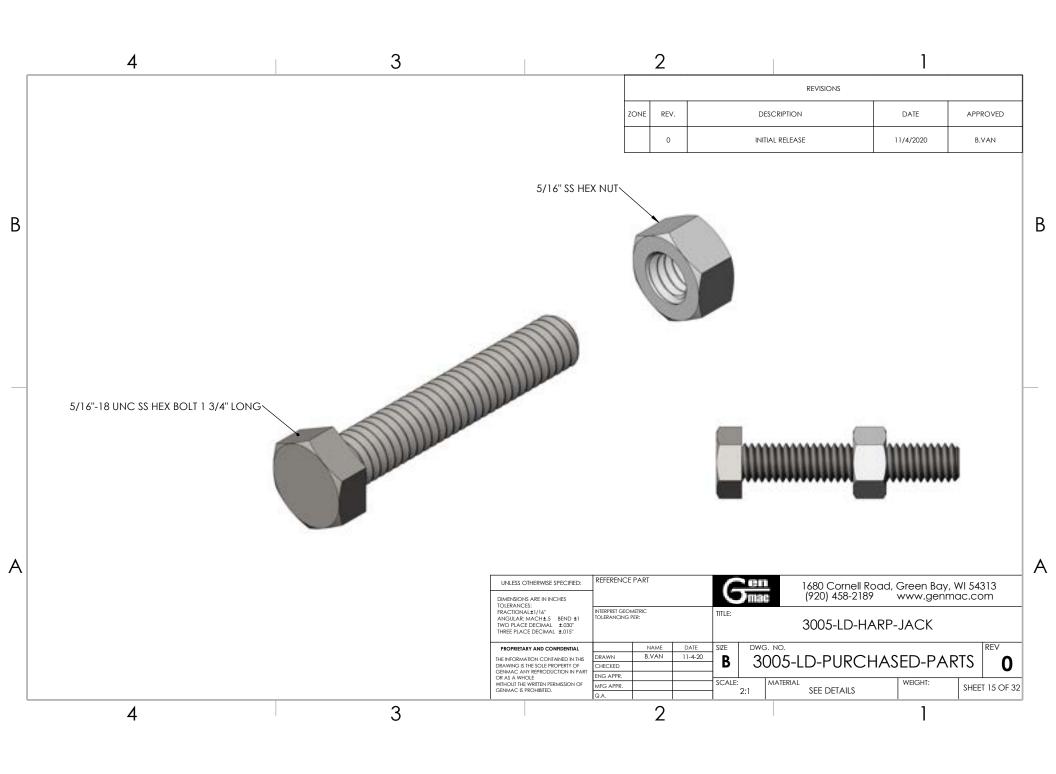


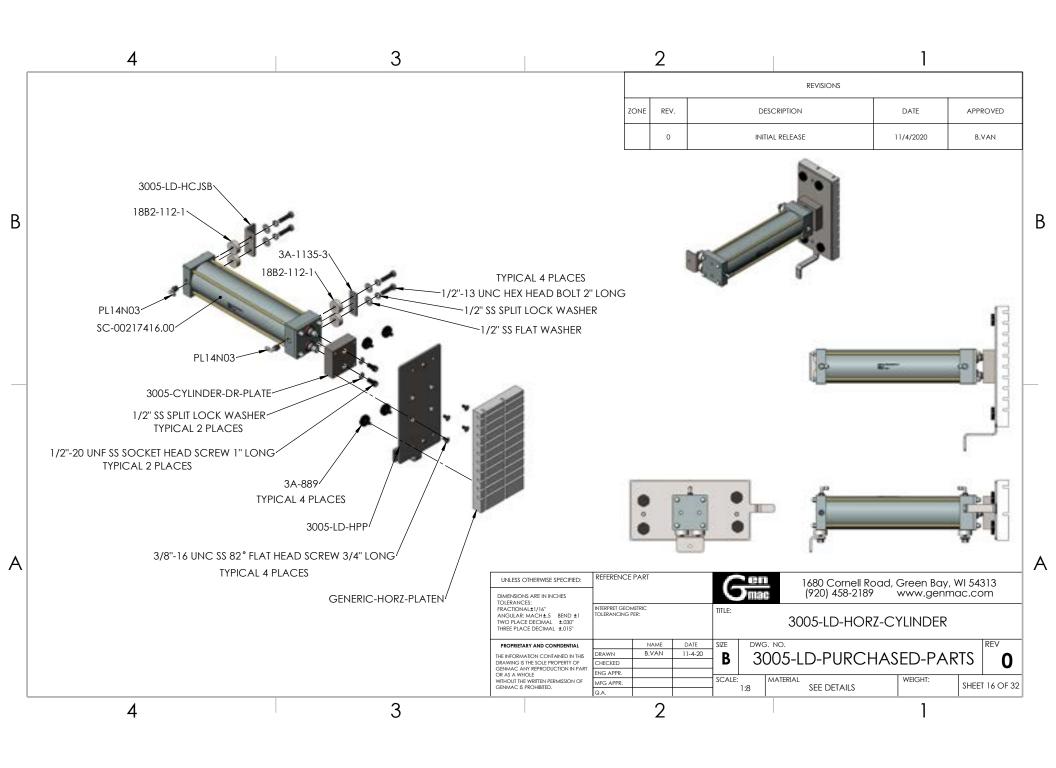


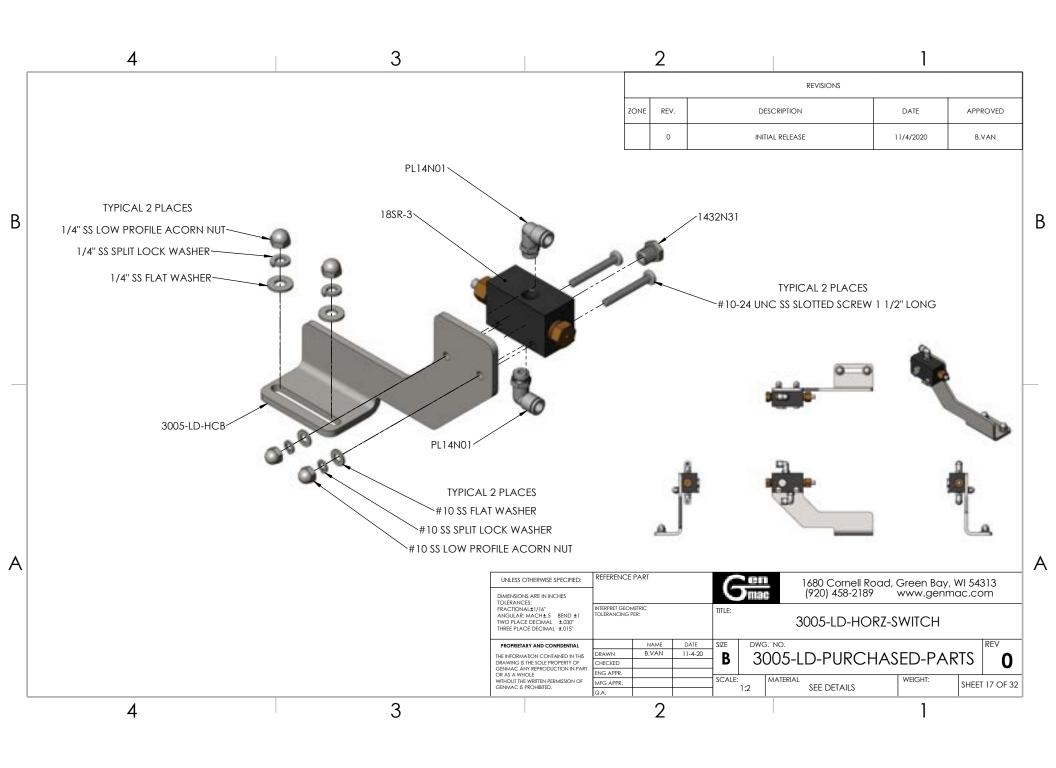


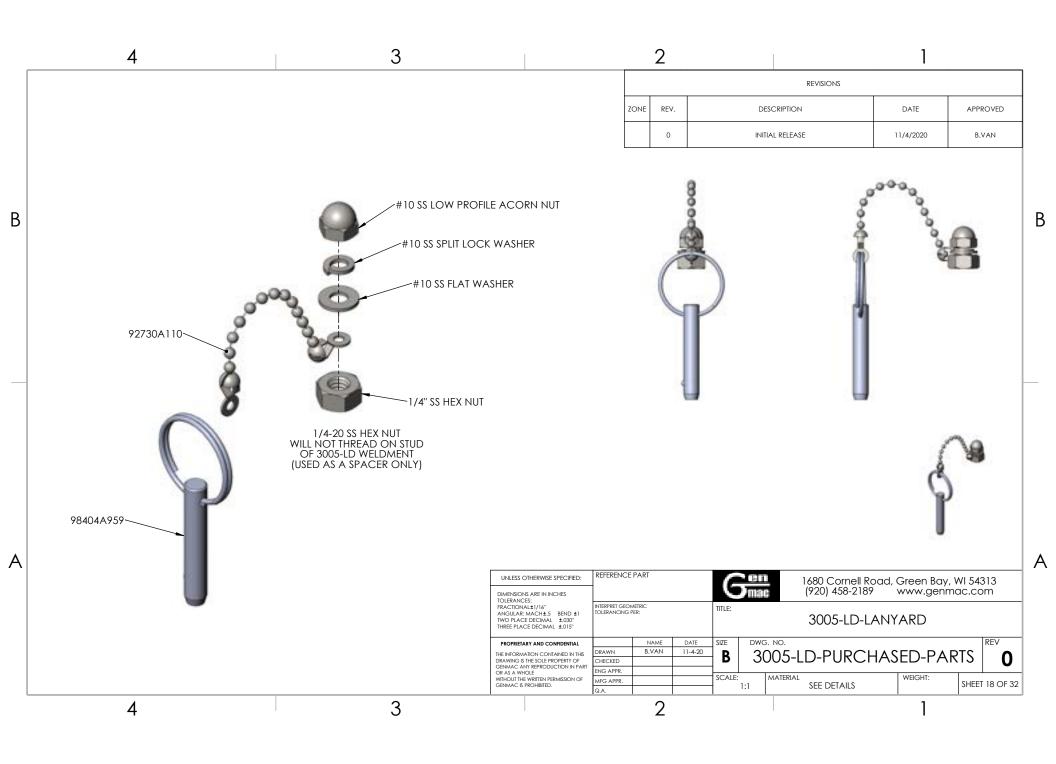


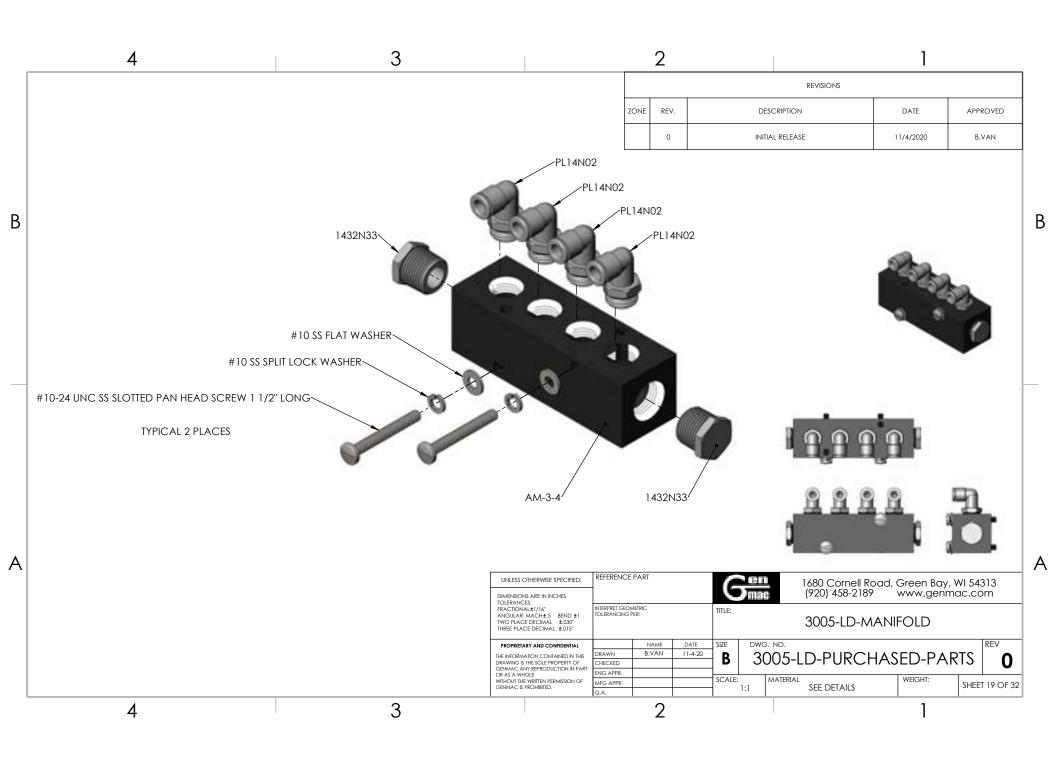


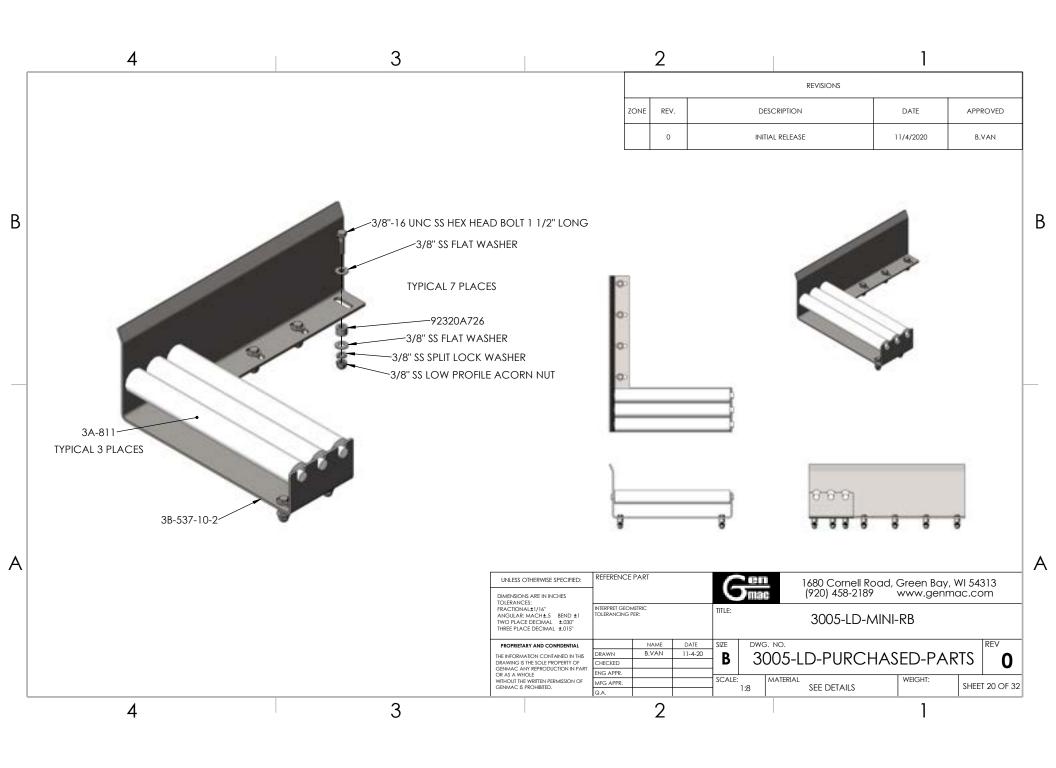


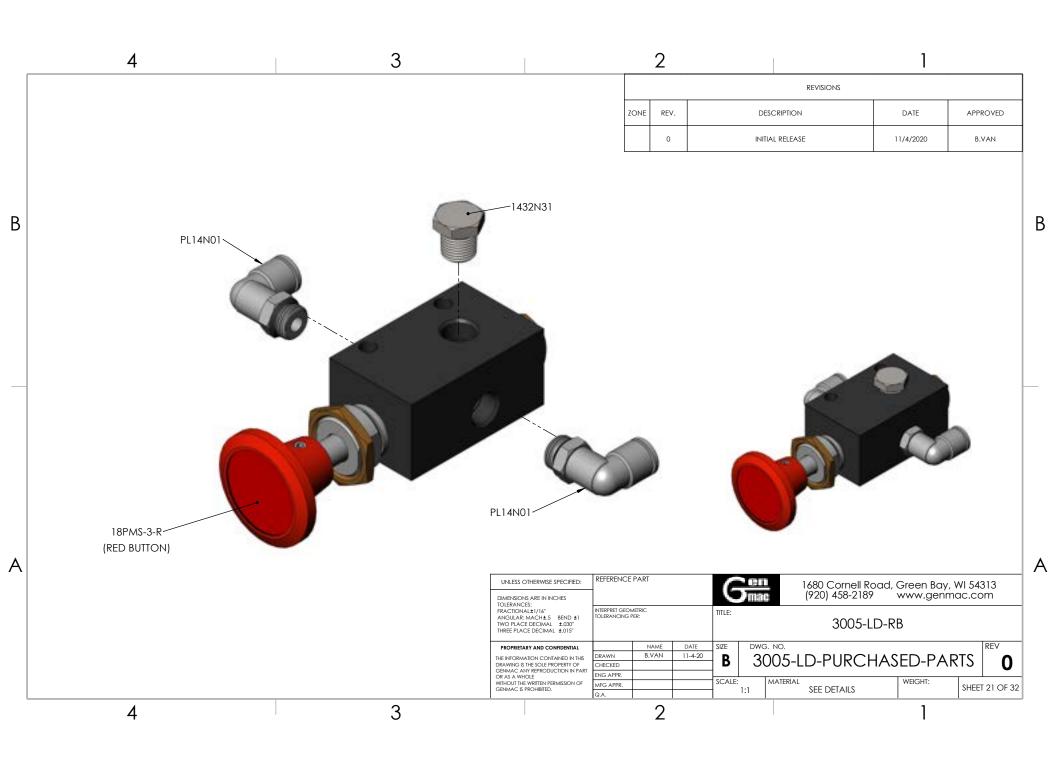


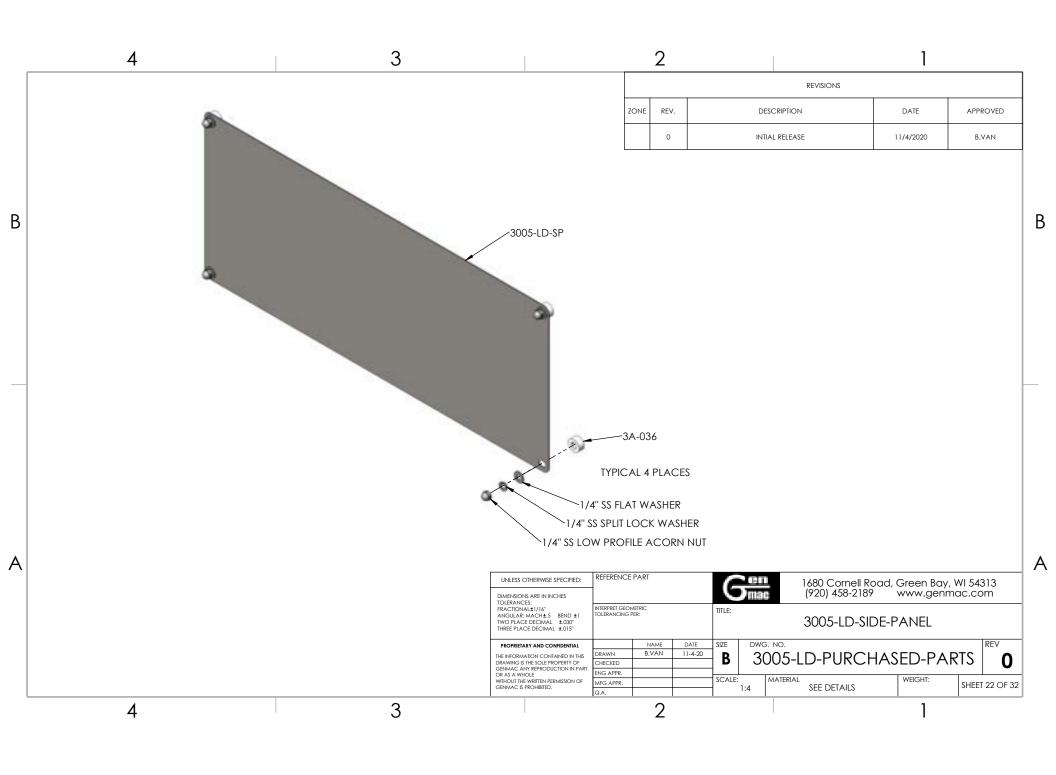


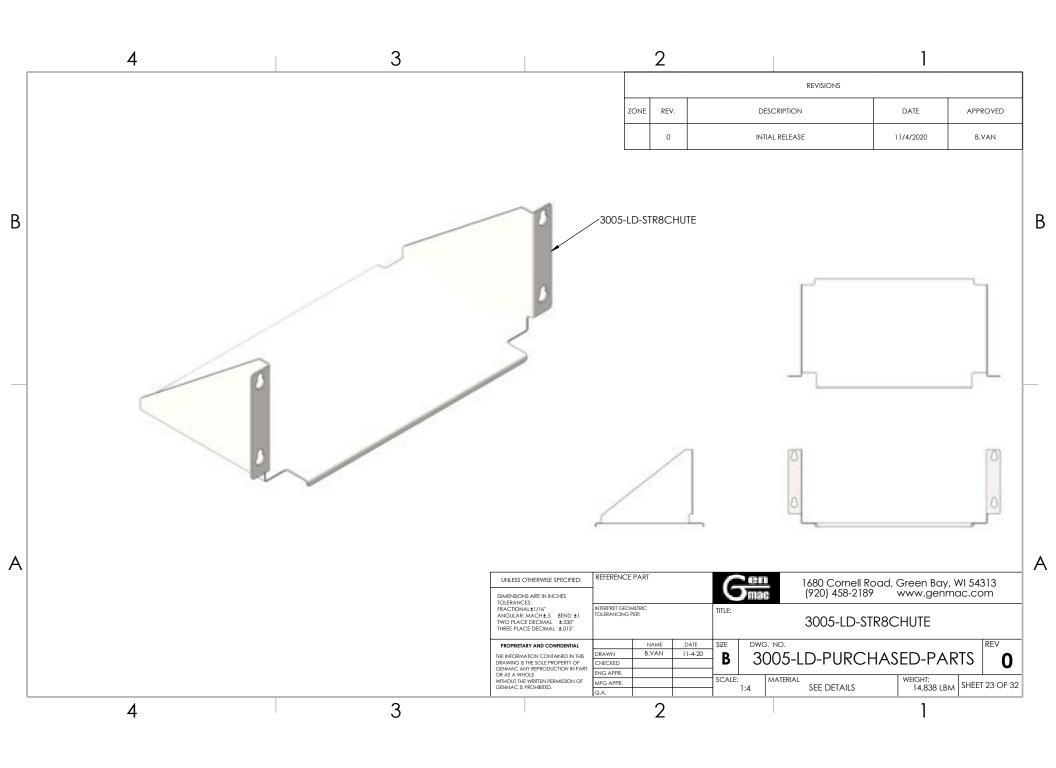


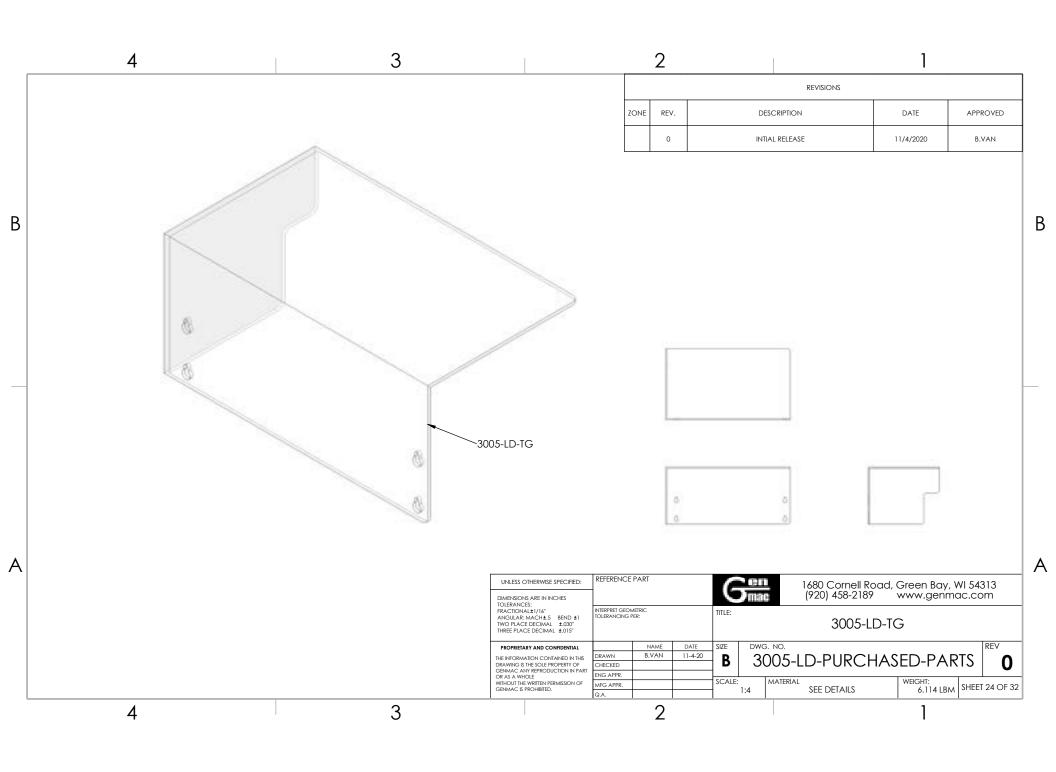


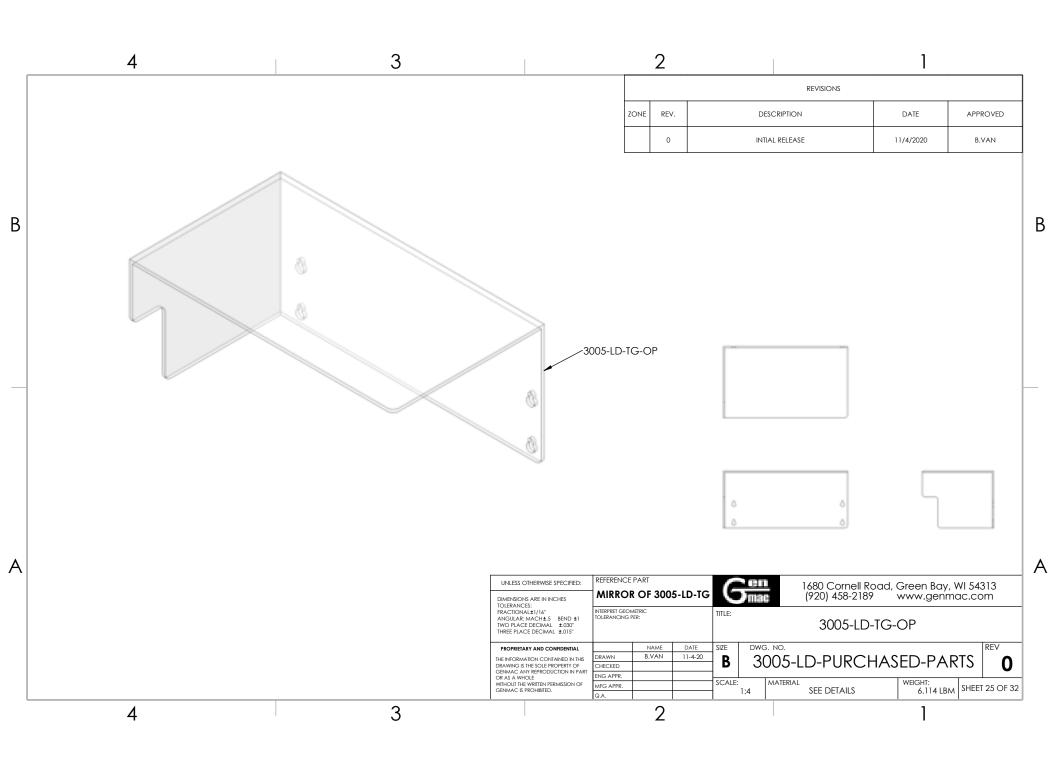


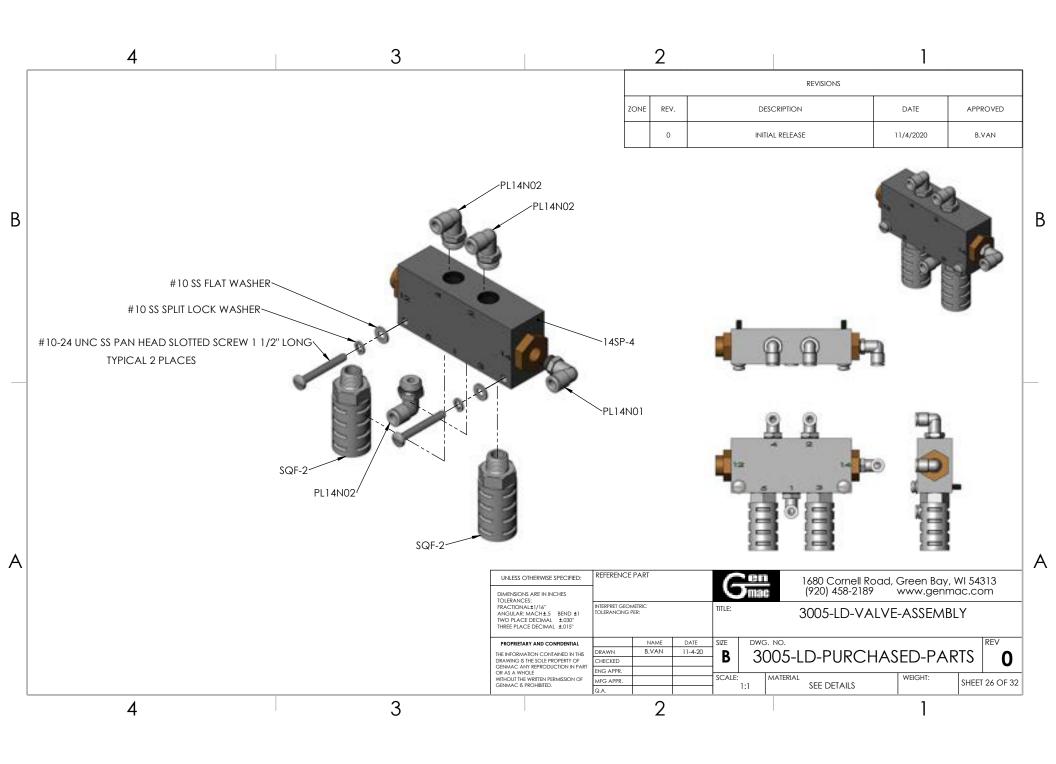


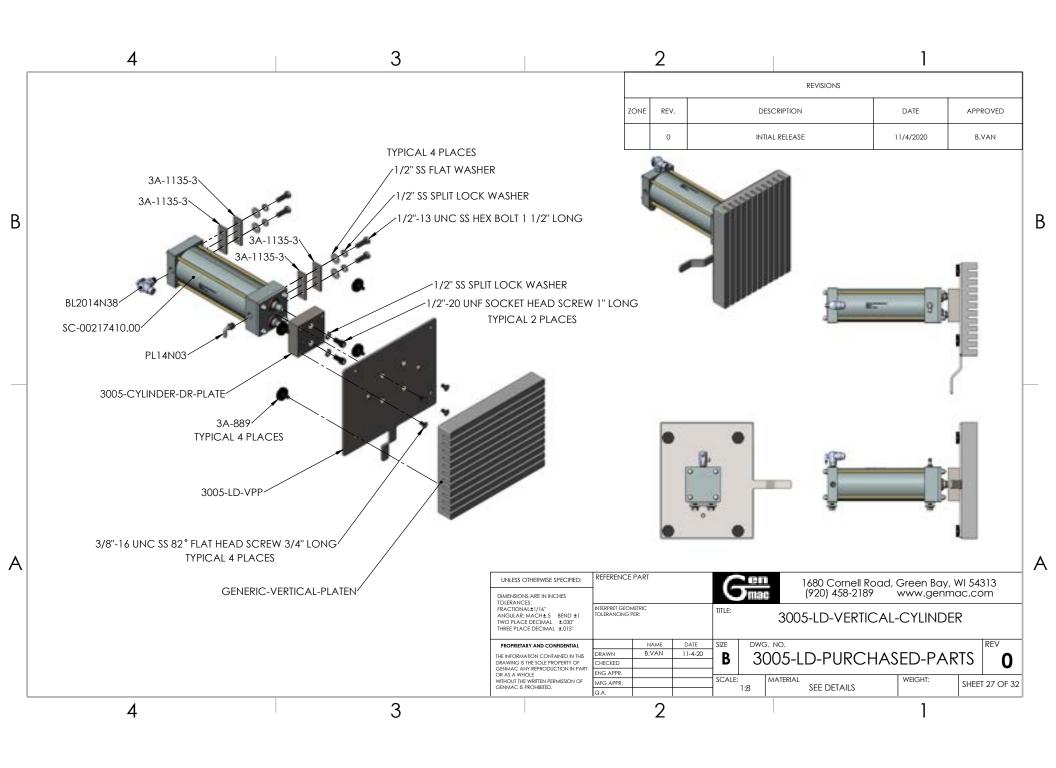


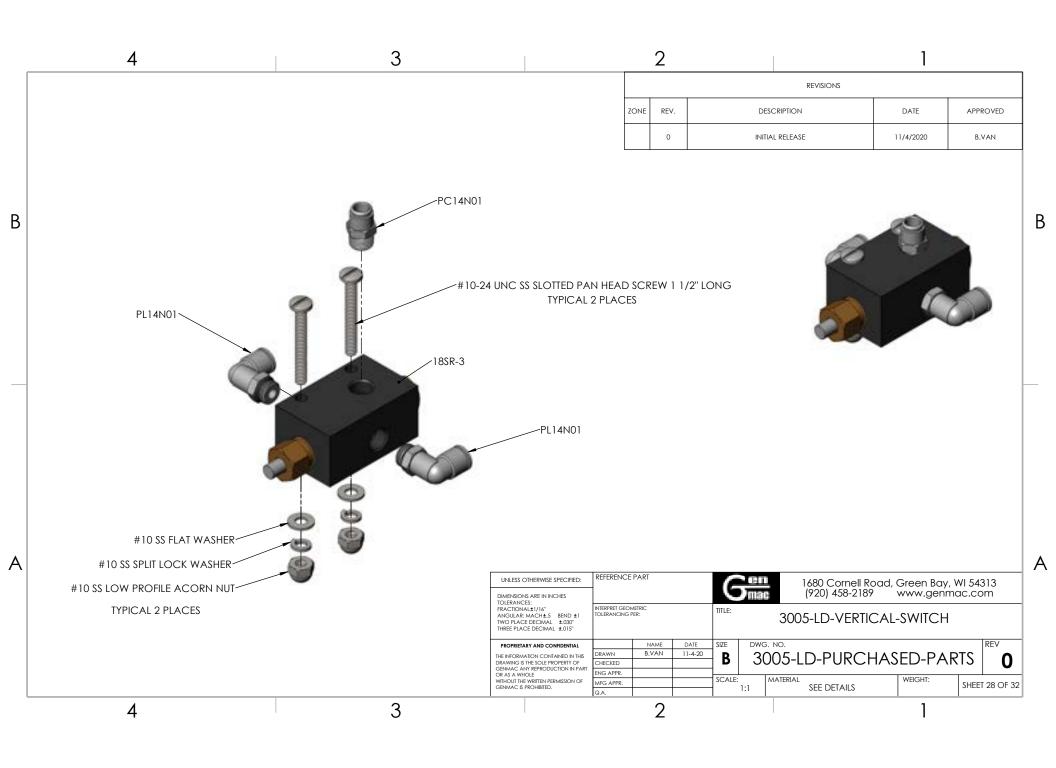


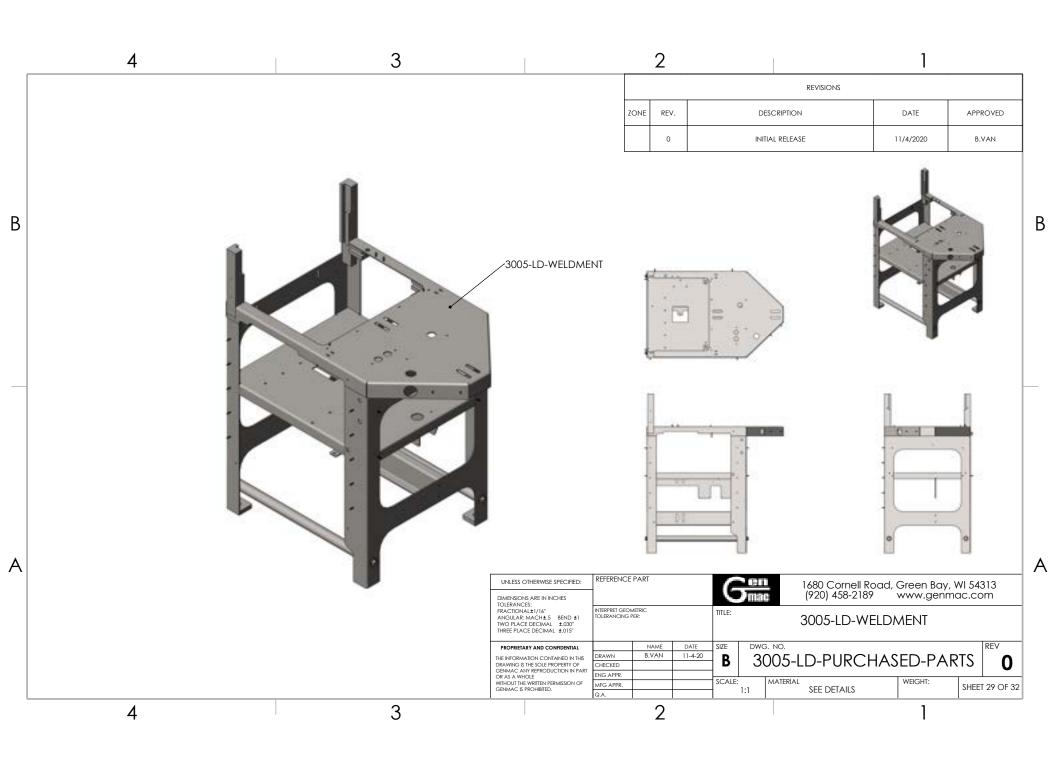


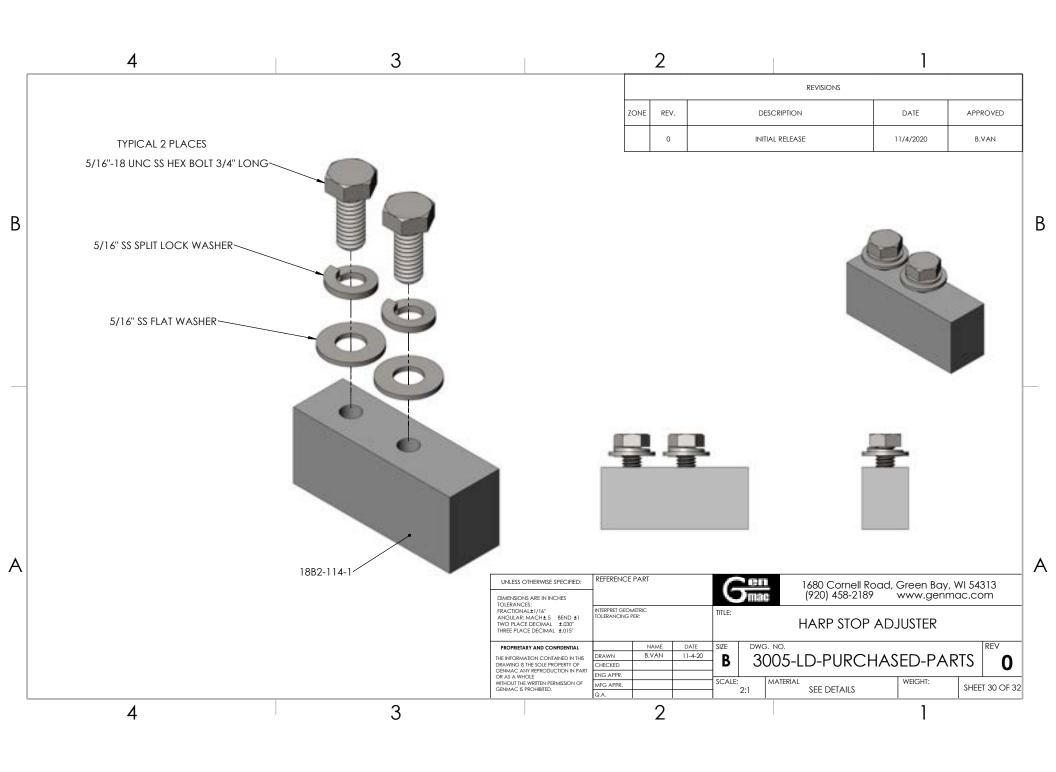


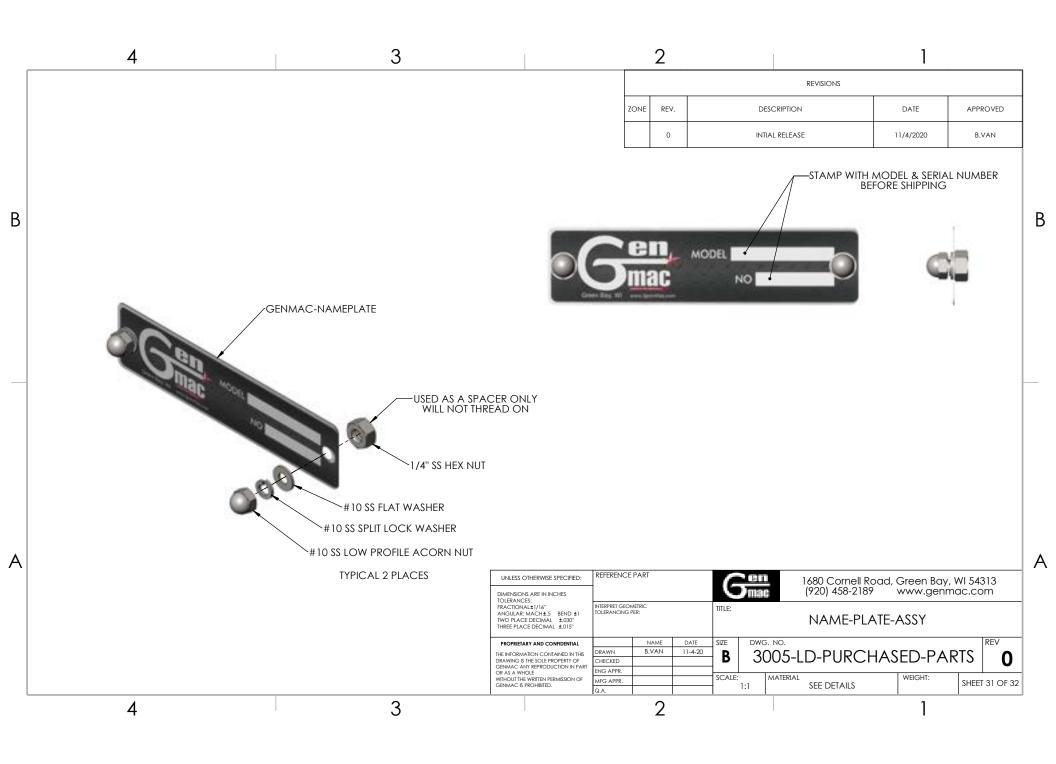


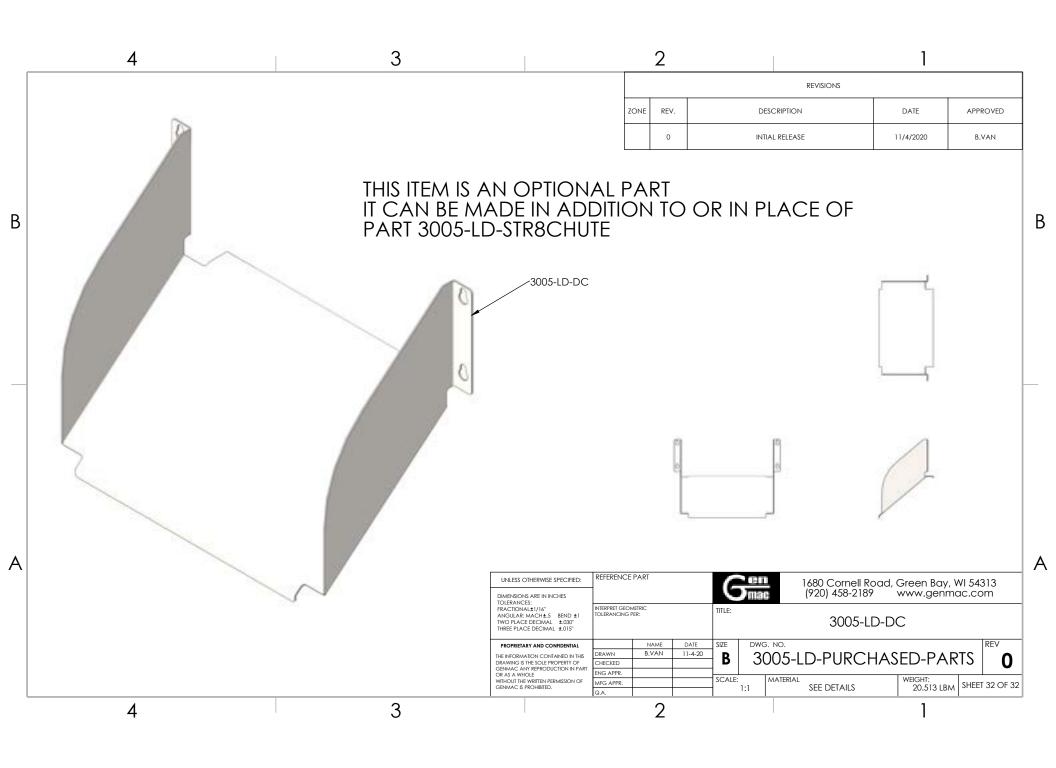












# OPERATING INSTRUCTIONS MODEL 3005-LD CHEESE PORTIONER (MANUAL #3005-LD-1)

### **INSTALLATION**

The TU-WAY Automatic Cheese Portioner has been fully inspected and factory tested prior to shipment.

Check the machine crate for any shipping damage and note any damage on the bill of lading. Have the driver sign the bill. If there is damage, check the machine immediately for any damage and note it on the bill of lading so proper action can be taken with the freight carrier.

- 1. Remove all crating material from the machine and inspect for possible damage.
- 2. Move machine to proper location with machine placed in a level position. All four legs should firmly contact the floor or machine support structure.
- 3. Remove protective coating from table and cutting assembly, etc.
- 4. The pneumatic system of the TU-WAY Portioner is a complete self contained and regulated system. It is designed for years of trouble-free service. The TU-WAY should be operated at approximately 80 PSI air pressure. The Tu-Way uses 5 CFM air consumption. Connection of the air for the TU-WAY is made at the filter/regulator.

## OPERATING INSTRUCTIONS MODEL 3005-LD TU-WAY CHEESE PORTIONER

After the TU-WAY has been properly situated in the processing line, and airlines inserted into receptacle, the mechanism should be tested **WITHOUT PRODUCT** to make sure cutting wires line up with grooves in platens. The procedure should be as follows:

Set operating pressure at 80 PSI, by adjusting regulator. Gauge is calibrated in pound per square inch (PSI).

Flow control valves are used to control the speed of the vertical & horizontal cylinders. The "Meter out Method", is used to control the speed of the cylinders. Both cylinders return to the home position at full speed. The speeds are set at the factory to run slowly. Should the settings need to be changed, make small adjustments. Clockwise will make the cylinders push slower, and counterclockwise will make them push faster.

NOTE: The safety door must be closed to operate the machine. Press black fingertip valve sending air to Stage 1 control valve. This will sequence the platens starting with vertical platen. Adjust flow control for desired speed. Vertical platen should come up with wires centered in the grooves and protrude through vertical cutting frame just enough to transfer product from platen to removable chute. The actuator arm that is part of the stage 1 pusher base plate, should contact the actuator valve when the cylinder is fully extended. Rod actuated valve (air switch) directs pilot pressure to control stage 2 valve sending the horizontal cylinder forward. Adjust flow control for desired speed. Horizontal platen will travel forward and the wires on cutting frame should be in the center of the grooves on the platen. When the horizontal cylinder is fully extended the actuator, arm mounted on the base plate pusher should contact another actuator valve which simultaneously sends both vertical and horizontal platens back to load position.

At any time during the cycle the platens can be returned to the load position by depressing red stop valve which exhausts system pressure.

Air is a compressible substance and therefore is somewhat erratic. However, if the movement of the platens is noticeably irregular it may be caused by insufficient air supply pressure, improperly adjusted flow controls, dirty exhaust silencers, water in the line, malfunction of the valves, or leakage in the seals of the cylinders. The machine has a filter with auto drain to prevent water from getting into the system. This is a non-lube air system. Do not introduce a lubricator into the air system.

### SAFETY

### THE SAFEST MACHINE IS ONLY AS SAFE AS YOU WANT IT TO BE

### **WARNING SAFETY GLASSES MUST BE WORN**

The GMC TU-WAY Cheese Cutter is pneumatically operated. The characteristics of air operation can result in movement of mechanisms because of air leaking in the control valve. An airline could fracture or become dislodged from a fitting which would cause it to whip around out of control.

Warn operating personnel, that airlines must be properly connected. Air pressure should not exceed 80 PSI. In the event of any blockage or malfunction, the first priority is to disconnect or shut off the primary air source, before any attempt is made to remedy the problem.

The enclosed safety notice must be brought to the attention of the operating and maintenance personnel.

Call the manufacturer If at any time questions arise concerning the operation or safety of the GENMAC Model 3005-LD TU-WAY. Call the manufacture toll free at 1-888-243-6622.

### REMOVAL & INSTALLATION OF WIRE CUTTING FRAME & POLY PLATENS

The wire harps and platens are designed to be easily removed for maintenance, cleaning or size changes. The cutting frames are easily removed by doing the following:

Remove the clear, plastic guards, and discharge chute. Pull horizontal harp (stage 2) straight up. To remove vertical (stage 1) harp, pull the quick release pins which are located in the rear of the cutting frame. Stage 2 harp can now be pulled straight out the discharge end of the machine. The poly platens (white pusher blocks) are removed by removing four platen knobs on the backside of the pusher plate. After removing the knobs pull platens perpendicular to base to clear locating pin.

Installation of frames is accomplished by reversing the sequence starting with the vertical frame, with wire bolts facing down, and locating holes to the rear, slides in grooves, and stops against stop screws. Quick release pins are inserted into holes, for positive location. Install horizontal frame with stamped part number facing up towards the ceiling and wire bolts facing inside of machine. Slide harp downward so it rests firmly in position against the 2 adjuster blocks. Slide discharge chute back into position, replace 4 ea platen knobs and put the clear guards back on the machine.

When either the wire frames or Poly cut-off blocks are removed from the machine and reinstalled, they should be lined up before the machine is operated. It is important that they align correctly otherwise wire breakage will result due to the wires running into the Poly cut-off block.

# MUSIC WIRE INSTALLATION (Diagram "B")

To replace music wire on the frame cut wire 9" longer than the distance between the wire tensioner into which the wire fits. Before putting wires into tighteners, back them off, so there is 5/16" of space between the harp and the flange on the wire bolt. This is done so there is enough threads to tighten the wires. Put the wire through the holes in the wire tighteners "A" to "A", "B" to "B", etc. Bend the wire ½" from each end, so the wire will not slip through the holes. Turn one of the wire tighteners three turns clockwise then put the nut on the reverse side. Do the same for the other tighteners, making sure the wire is tight but not excessively taught. This will minimize the probability of premature breakage.

#### **CUTTING THE PRODUCT**

The product should be wire-cutable. Not excessively firm due to low temperature, surface crust or wax cover, etc.

Load cheese so it squares up against positioners. Close the safety door and press the start (black) button. At no time until platens are again in the load position should the safety door be opened. If the door is opened, the cutting platens will return to the start position leaving the cheese hanging in the wire. The flow control valves may need to be adjusted to compensate for product consistency, temperature, or the positions of the finished product. Excessive speed of the product can also cause breakage of the wires.

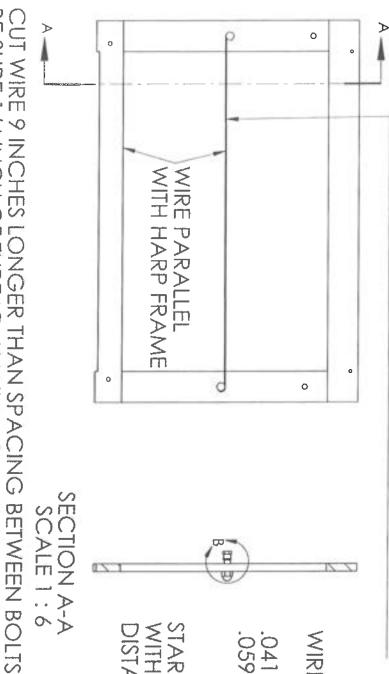
#### TROUBLE SHOOTING

- 1. No air to machine.
  - a. Check if air supply is turned on.
  - b. Check to see if the filter/regulator is turned off.
- 2. Cylinders do not move.
  - a. Check air supply
  - b. Check for air leaks at fittings.
  - c. Check mufflers. Excessive water in airlines will clog mufflers preventing the air valves from releasing air to allow valve shifting.
  - d. Check air valves When worn they will leak air internally and the valves will not shift.
  - e. Seals in cylinders are worn. Seals will leak air causing less power.
  - f. Check door roller-tip valve. The door must be closed and the roller on the valve must fall into a dimple cut into the back of the door.
  - g. Check flow controls to ensure valves are open and not clogged.

### IF YOU HAVE ANY PROBLEMS CONTACT THE FACTORY AT 1-888-243-6622

BE SURE WIRE IS WINDING AROUND THE BOTTOM OF LEFT SIDE WIRE BOLT, AND AROUND THE TOP OF THE RIGHT SIDE WIRE BOLT. THE WIRE SHOULD APPEAR STRAIGHT IF DONE

PROPERLY.



WIRE TIGHTENING TORQUE:

.041" WIRE 110 IN-LBS

WITH .250 INCH OR 6 MM START TIGHTENING WIRE BOLT DISTANCE AS SHOWN

PULL WIRE UP (IF LOOKING AT DRAWING ABOVE THIS) WHILE MAKING 3 COMPLETE TURNS ON FIRST WIRE BOLT. TIGHTEN NUT ON BACK REPEAT ON OTHER SIDE TILL APPROPRIATE TORQUE REACHED, BE SURE 1/4 INCH OF THREAD AVAILABLE IN EACH WIRE BOLT , MAKE VERY SMALL OME BACK THROUGH SECTION A-A SCALE 1:6 (6 MM) 250 N

PERIODICALLY AS THEY STRETCH RETIGHTEN NEW WIRES AFTER CUTTING A FEW BLOCKS, AND

BEND IN ENDS (

OF WIRE SO THEY CAN'T O THROUGH WIRE BOLT

INSERT EACH END



SCALE 1: DETAIL B

### REDUCING BROKEN WIRE OCCURENCES:

Several things contribute to increased frequency of breaking wires. Use this checklist to improve your process wherever possible.

<u>Product issues:</u> Different cheeses have different features that can make it difficult, or even impossible to cut. If the cheese has a wax, plastic, or cured "skin", this can cause problems for the wire to start its cut. Cutting cheese with wires has limitations, but here are some things to consider, to improve the results.

<u>Temperature:</u> The temperature of the product has a huge effect on cutting. A firm cheese that is kept in a cooler till just before cutting (below 40 F for example) will be remarkably harder to cut than if the same product was at 45 F. If a firm cheese is breaking wires often, temper the block to a warmer temperature if possible. Every 2 degrees warmer will yield noticeable improvements.

<u>Wire Diameter:</u> A wide range of wire sizes are available through our parts department. We supply a tested brand in many sizes that have given the best results. Generally, for a cheese similar to cheddar, cutting at 40-45 degrees we recommend a .041" diameter wire. For softer cheeses, we often recommend a smaller wire. For harder or colder product, we offer up to .059" diameter wire. If you are breaking wires regularly, are not able to warm the product, and are following the torque guidelines (following section), and are using a quality wire, then it may be time to go to a heavier wire.

<u>Wire tightening technique</u>: Wires need to be tight enough to not "bow" too much while cutting but tightening the wires TOO much can easily stretch the wire past it's yield point, drastically shortening the life of the wire. Use this chart for specific wire diameters to apply the recommended torque:

Wire	Torque (IN-	Torque (FT-
Diameter	LB)	LB)
0.016	16.17	1.35
0.029	49.49	4.12
0.035	70.49	5.87
0.041	95.47	7.96
0.05	137.79	11.48
0.059	185.35	15.45

Note: Wires will stretch and require regular retightening, especially after the first few cuts.