

Request for Quotation

Customer Loading Unit

Construction and Component Assembly

Wiserg Corporation

03-06-2013



Dear contractor:

This is a solicitation for a quote for construction and component assembly of the Customer Loading Unit, part of the Harvester H30 series developed by WISErg Corporation, Redmond, WA.

We appreciate the time and effort required to review, understand and respond to this request and WISErg will review your response carefully.

The Customer Loading Unit must be constructed to the specifications provided, fully assembled, and delivered under the accelerated schedule provided in the attached statement of work.

WISErg engineers or leadership are available to talk with contractor at any time in the proposal development or construction periods.

Your quote should clearly state that the response is:

- Provided for the statement of work and according to the timeline specifications attached for construction and assembly of components.
- Provided for the statement of work and timeline attached, BUT with itemized exceptions or additions (i.e., no assembly of components).
- Provided as a substitute for the statement of work or timeline attached specification where the method of construction or components, or proposed timeline differ significantly from the attached specifications.

Ultimately WISErg Corporation is looking for a vendor capable of delivering hundreds of these units in the 2013-2015 timeframe so we are looking for a long term partner who strives for excellence in the manufacturing industry.

I look forward to your response.

Sincerely

Jose Lugo
COO
WISErg Corporation





Panels Removed



Panels Removed



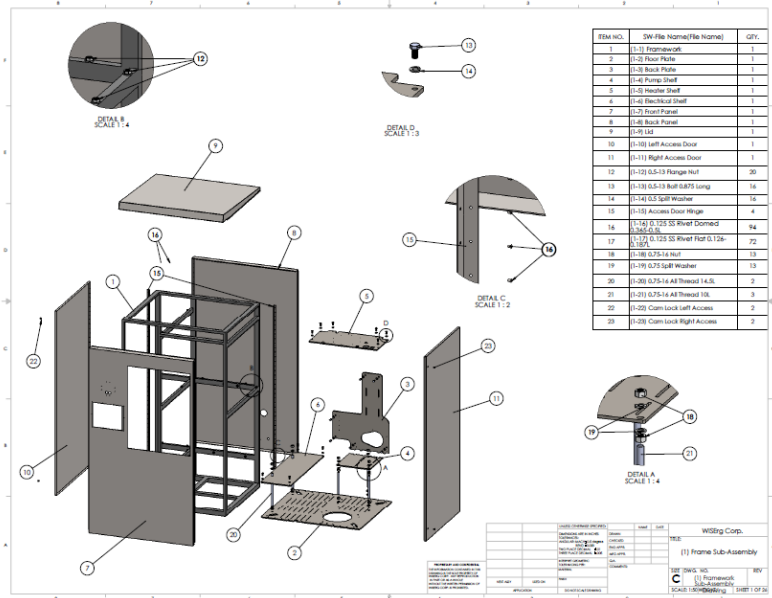
Framework and Hopper Removed

Component Breakdown

*Reference Appendix for Detailed Drawings

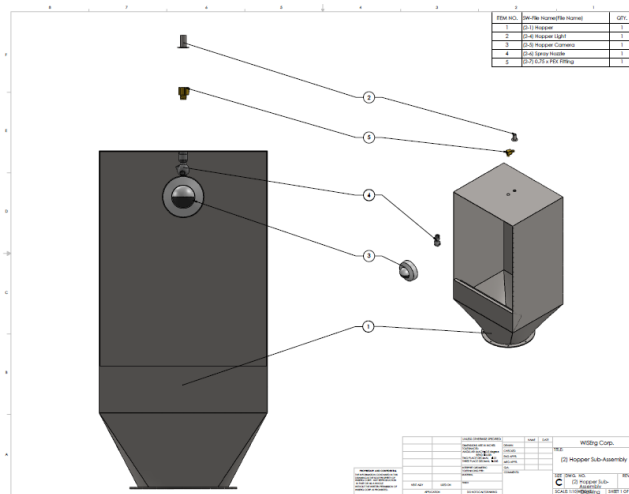
(1) Framework and Panel Sub-Assembly

- (1-1) Framework
- (1-2) Floor Plate
- (1-3) Back Plate
- (1-4) Pump Shelf
- (1-5) Heater Shelf
- (1-6) Electrical Shelf
- (1-7) Front Panel
- (1-8) Back Panel
- (1-9) Lid
- (1-10) Left Access Door
- (1-11) Right Access Door
- (1-12) ½"-13 Flange Nut
- (1-13) ½"-13 Bolt 7/8" Long
- (1-14) ½" Split Washer
- (1-15) Access Door Hinge
- (1-16) 1/8" SS Rivet Domed 0.376-0.5L
- (1-17) 1/8" SS Rivet Flat 0.126-0.187L
- (1-18) ¾"-16 Nut
- (1-19) ¾" Split Washer
- (1-20) ¾"-16 All Thread 14 ½" Long
- (1-21) ¾"-16 All Thread 10" Long
- (1-22) Cam Lock Left Access
- (1-23) Cam Lock Right Access



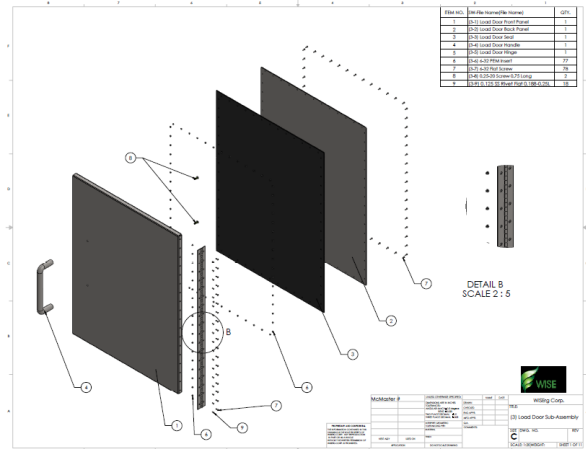
(2) Hopper Sub-Assembly

- (2-1) Hopper
- (2-2) Hopper Light
- (2-3) Hopper Camera
- (2-4) Spray Nozzle
- (2-5) ¾" MNPT X PEX Elbow
- (2-6) Deadbolt
- (2-7) Deadbolt Faceplate
- (2-8) Deadbolt Mounting Brackets
- (2-9) M5 15 mm Long Flat Screw



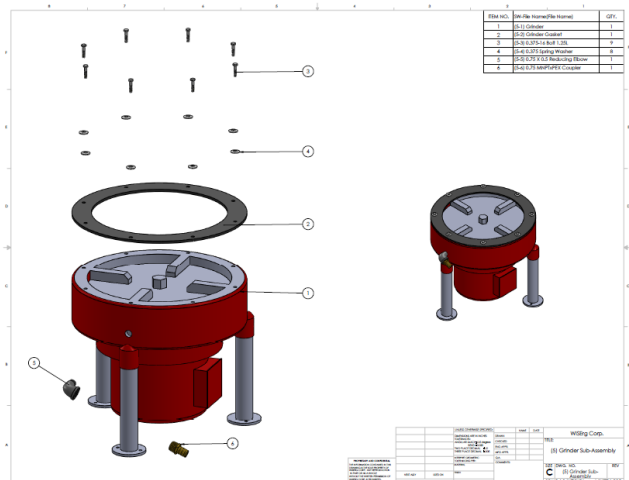
(3) Load Door Sub-Assembly

- (3-1) Load Door Front Panel
- (3-2) Load Door Back Panel
- (3-3) Load Door Seal
- (3-4) Load Door Handle
- (3-5) Load Door Hinge
- (3-6) 6-32 PEM Insert
- (3-7) 6-32 Flat Screw
- (3-8) 1/4"-20 Screw 3/4" Long
- (3-9) 1/8" SS Rivet Flat 0.188-0.25 Long
- (3-10) Door Lock Magnet
- (3-11) Door Lock Magnet Mount
- (3-12) M4 11 MM Long Flat Screw
- (3-13) Insulation



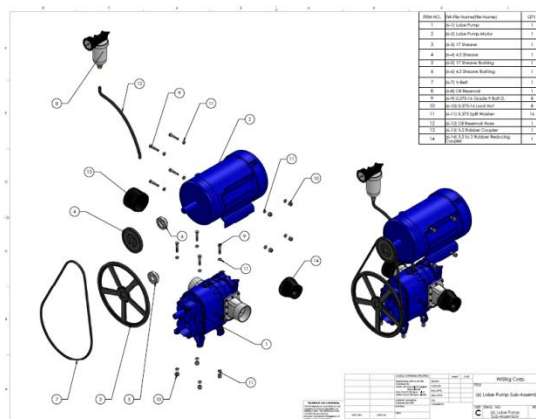
(4) Insulation Pieces

- (4-1) Insulation 1
- (4-2) Insulation 2



(6) Lobe Pump Sub-Assembly

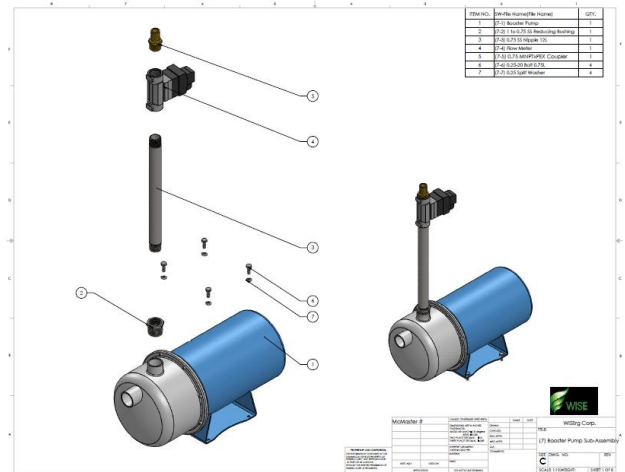
- (6-1) Lobe Pump
- (6-2) Lobe Pump Motor
- (6-3) 17" Sheave
- (6-4) 4 1/2" Sheave
- (6-5) 17" Sheave Bushing
- (6-6) 4 1/2" Sheave Bushing
- (6-7) V-Belt
- (6-8) Oil Reservoir



- (6-9) 3/8"-16 Grade 9 Bolt 2" Long
- (6-10) 3/8"-16 Lock Nut
- (6-11) 3/8" Split Washer
- (6-12) Oil Reservoir Hose
- (6-13) 3" Rubber Coupler
- (6-14) 3" to 2" Rubber Reducing Coupler

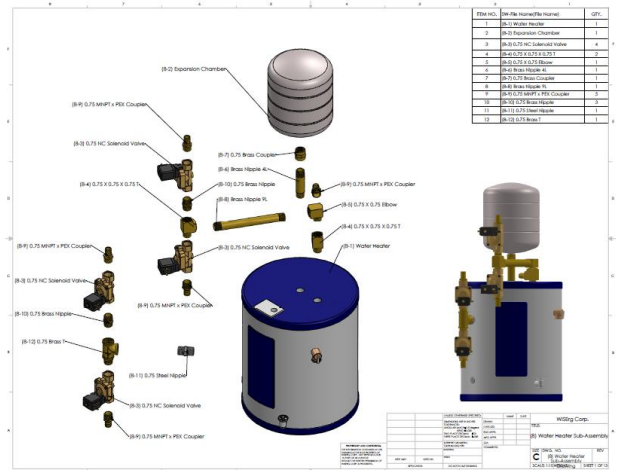
(7) Booster Pump Sub-Assembly

- (7-1) Booster Pump
- (7-2) 1" to 3/4" SS Reducer Bushing
- (7-3) 3/4" SS Nipple 12" Long
- (7-4) Flow Meter
- () 3/4" MNPT x PEX Coupler
- () 1/4"-20 Bolt



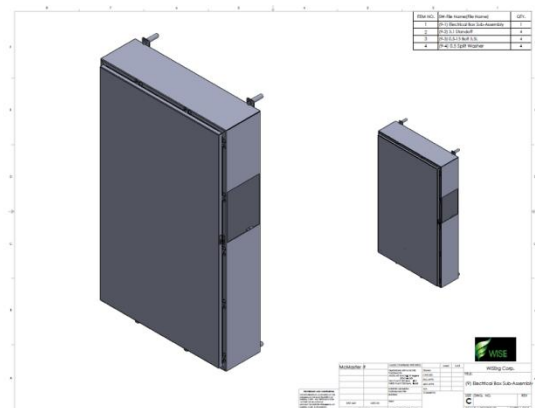
(8) Water Heater Sub-Assembly

- (8-1) Water Heater
- (8-2) Expansion Tank
- (8-3) 3/4" N/C Solenoid Valve
- (8-4) 3/4" X 3/4" X 3/4" T
- (8-5) 3/4" X 3/4" Elbow
- (8-6) Brass Nipple 4" Long
- (8-7) 3/4" Brass Coupler
- (8-8) 3/4" Brass Nipple 9" Long
- (8-9) 3/4" MNPT X PEX Coupler
- (8-10) 3/4" Brass Nipple
- (8-11) 3/4" Steel Nipple
- (8-12) 3/4" Brass T



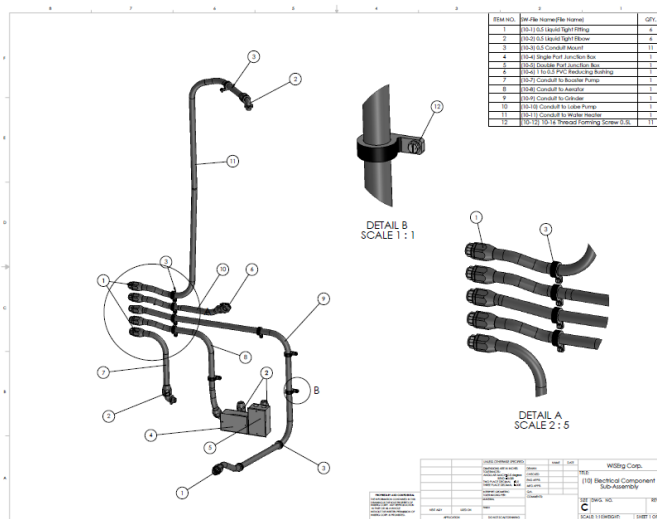
(9) Electrical Box Sub-Assembly

- (9-1) Electrical Box
- (9-2) 3.1" Standoff
- (9-3) 1/2"-13 Bolt 3 3/4" Long
- (1-14) 1/2" Split Washer



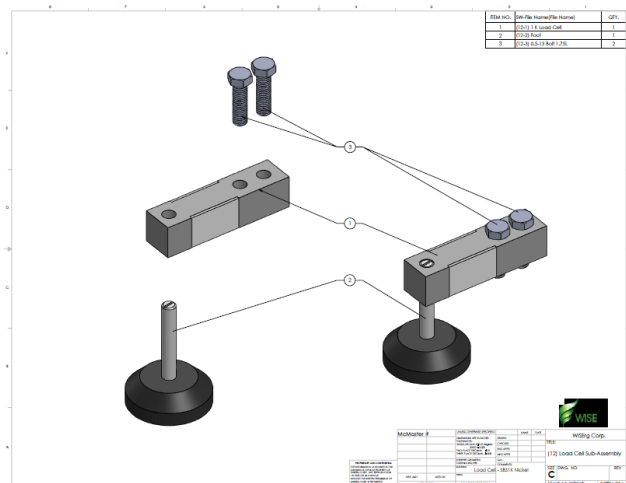
(10) Electrical Component Sub-Assembly

- (10-1) ½" Liquid Tight Fitting
- (10-2) ½" Liquid Tight Elbow
- (10-3) ½" Conduit Mount
- (10-4) Single Port Junction Box
- (10-5) Double Port Junction Box
- (10-6) 1" to ½" PVC Reducing Bushing
- (10-7) Conduit to Booster Pump
- (10-8) Conduit to Aerator
- (10-9) Conduit to Grinder
- (10-10) Conduit to Lobe Pump
- (10-11) Conduit to Water Heater
- (10-12) 10-16 Thread Forming Screw ½" Long



(11) Low Voltage Sub-Assembly

- (11-1) Cable Gland
- (11-2) 4 Wire Shielded Cable
- (11-3) Low Voltage Conduit



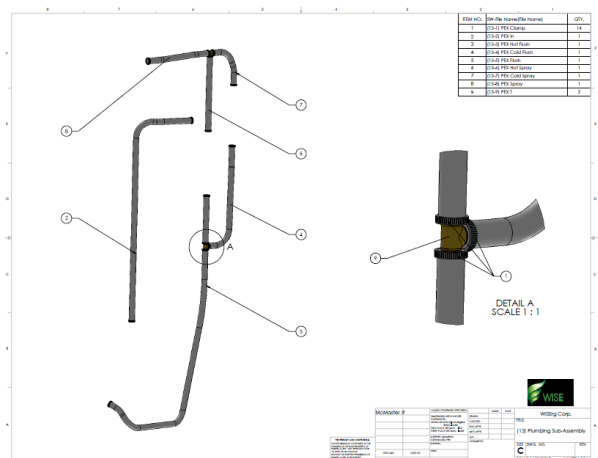
(12) Load Cell Sub-Assembly

- (12-1) 1K Load Cell
- (12-2) Foot
- (12-3) ½"-13 Bolt 1 ¾" Long



(13) Plumbing Sub-Assembly

- (13-1) PEX Clamp
- (13-2) PEX In
- (13-3) PEX Hot Flush
- (13-4) PEX Cold Flush
- (13-5) PEX Flush
- (13-6) PEX Hot Spray
- (13-7) PEX Cold Spray
- (13-8) PEX Spray
- (13-9) PEX T



Suggested Assembly

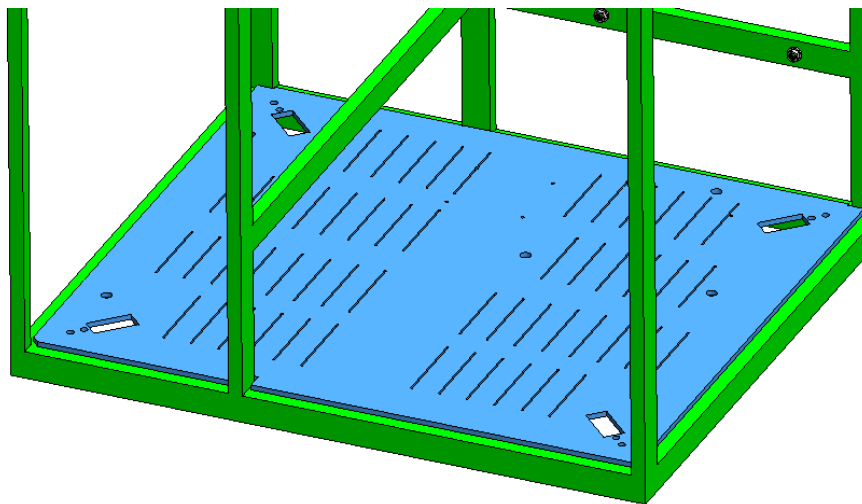
1) Floor Plate

Required Components

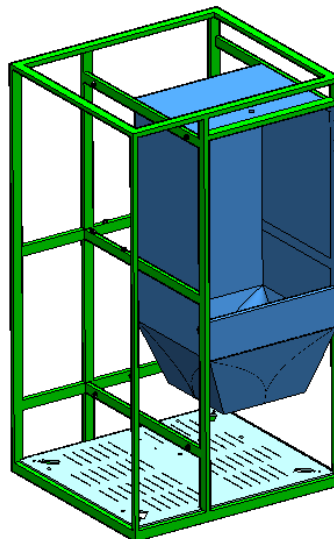
- Framework
- (1-2) Floor Plate
- (1-9) $\frac{1}{2}$ - 13 Flange Nut

Spot weld the floor plate to the framework.

Weld flange nuts in their allocated locations according to drawing (1-1.1)



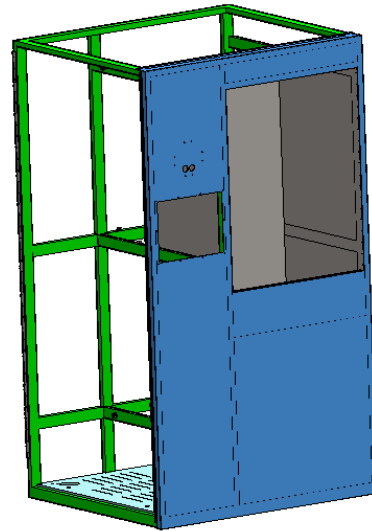
2) Weld Hopper in Place



3) Front Panel

Required Components

- Front Panel
 - (1-16) 1/8" Rivets
 - MasterBond EP30DP Polyurethane Bond <http://www.masterbond.com/tds/ep30dp>
-
- Clean all surfaces that the front panel will be applied to
 - Apply bond fully covering all faces of the framework that will be in contact with the front panel. This will double as its coating for that face so it must all be covered.
 - Add front panel and rivet in place.
 - Weld around perimeter of hopper where it meets the front panel cut out for it.
 - Grind smooth

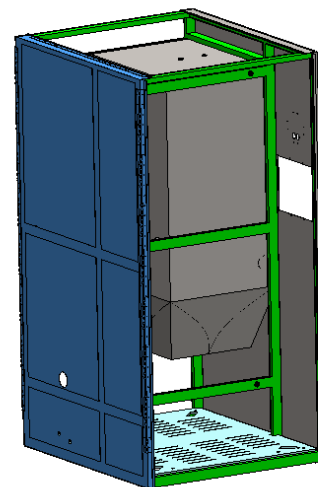


4) Back Panel

Required Components

- Back Panel
- (1-16) 1/8" Rivets
- MasterBond EP30DP Polyurethane Bond
- (1-15) Access Door Hinges

Apply rear panel the same as the front with the exception of adding hinges when riveting

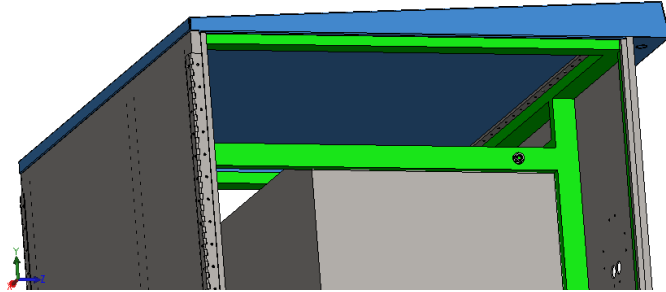


5) Lid

Required Components

- (1-9) Lid
- (1-16) 1/8" Rivet Domed

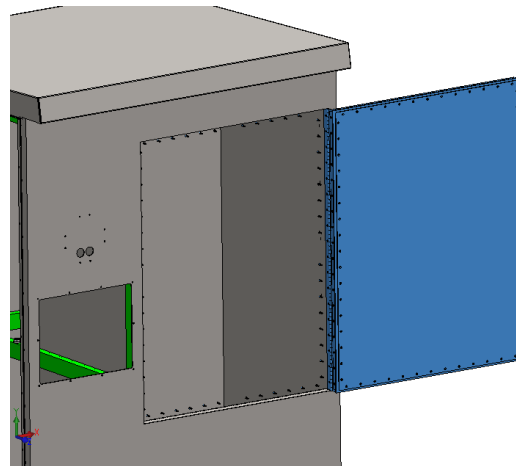
Place lid in place and rivet.



6) Install Loading Door

Required Components:

- (3) Loading Door-Sub-Assembly

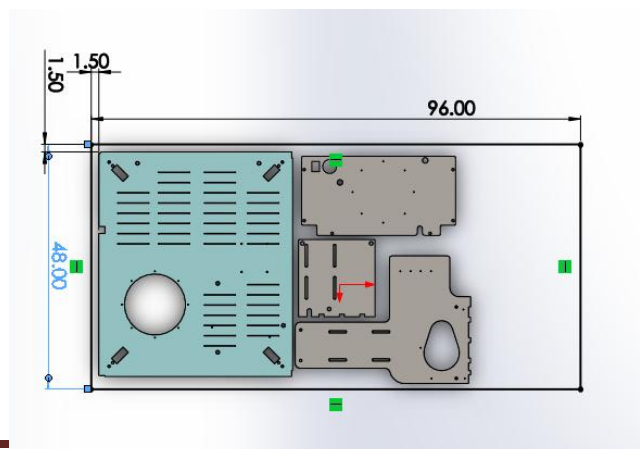


7) Paint Exposed Carbon Steel

The framework can be sprayed inside. The inside stainless panels don't need to be taped since there will be foam covering them.

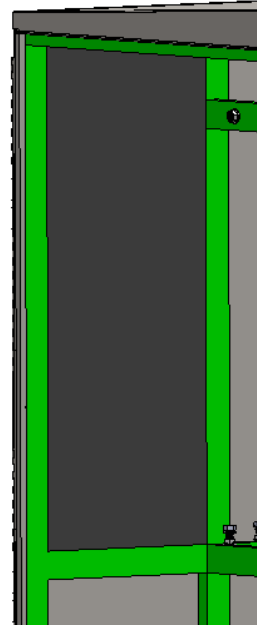
Also paint the following carbon steel parts.

- (1-2) Floor Plate
- (1-3) Back Plate
- (1-4) Pump Shelf
- (1-5) Heater Shelf
- (1-6) Electrical Shelf



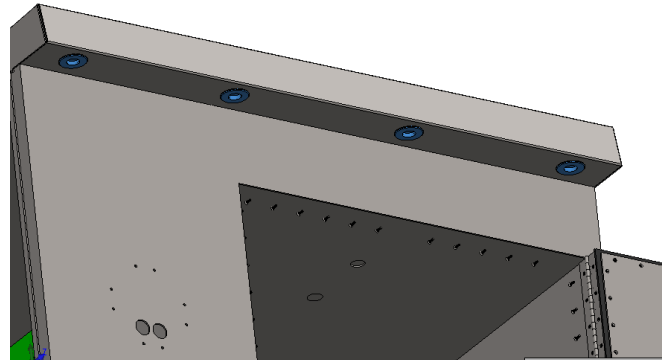
8) Install Sound Dampening Foam Insulation

All panel surfaces on the interior of the C.L.U. will be covered with 1" thick adhesive foam sound dampening pad. The outer hopper walls will be covered as well along with the access doors interior walls.

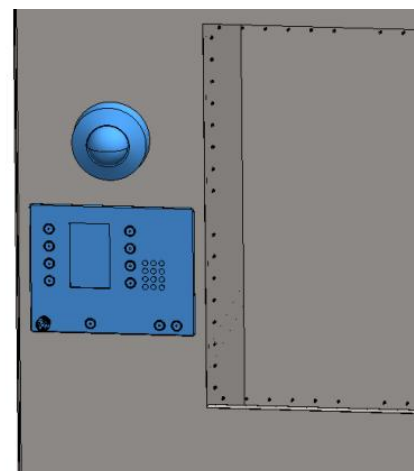


9) Install Exterior Lights

Newcon 24V IP67 Insert In Place Flush Mount Lights



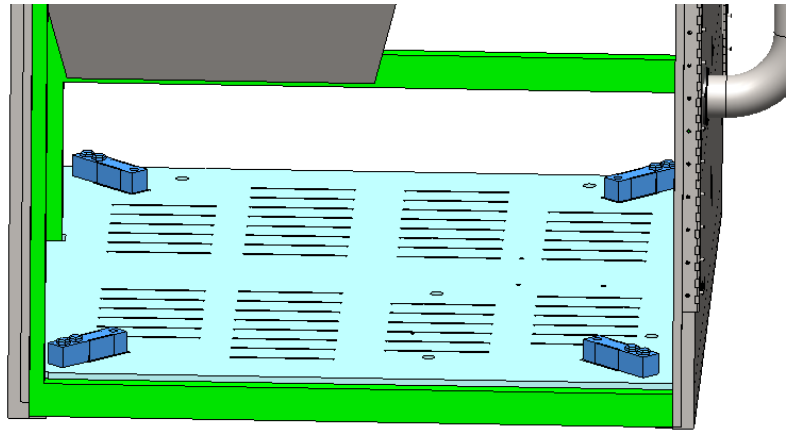
10) Install User HMI and Exterior IP Camera EAO HMI and Axis Camera



11) Install Load Cells

Required Components:

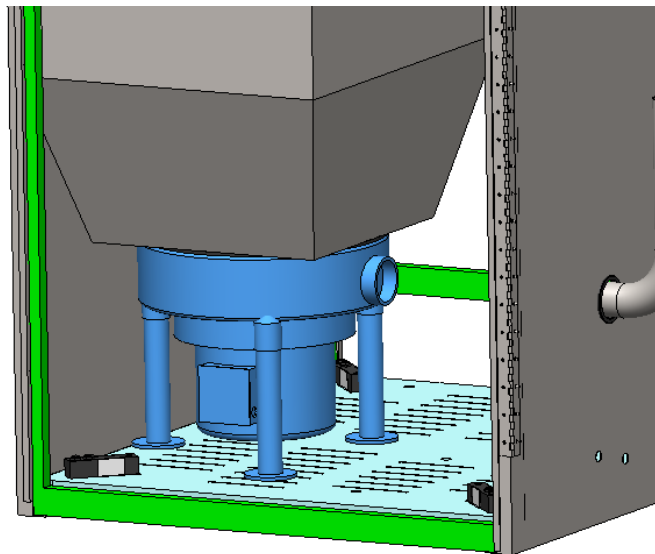
- (12) Load Cell Sub-Assembly



12) Install Grinder

Required Components:

- (5) Grinder Sub-Assembly



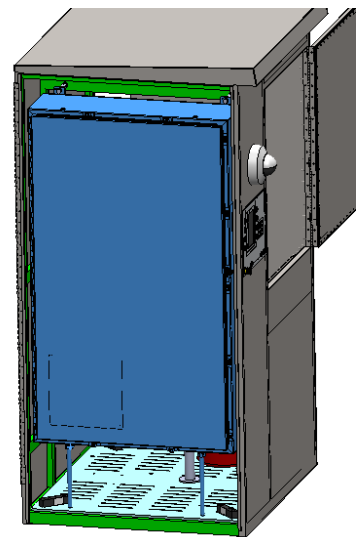
13) Install Electrical Box

Required Components:

- (9) Electrical Panel Sub-Assembly
- (1-6) Electrical Box Shelf
- (1-13) 1/2"-13 Bolt 3/4" Long
- (1-14) 1/2" Split Washer
- (1-18) 3/4"-16 Nut
- (1-19) 3/4" Split Washer
- (1-20) 3/4"-16 All Thread

*The electrical box will come completely wired.

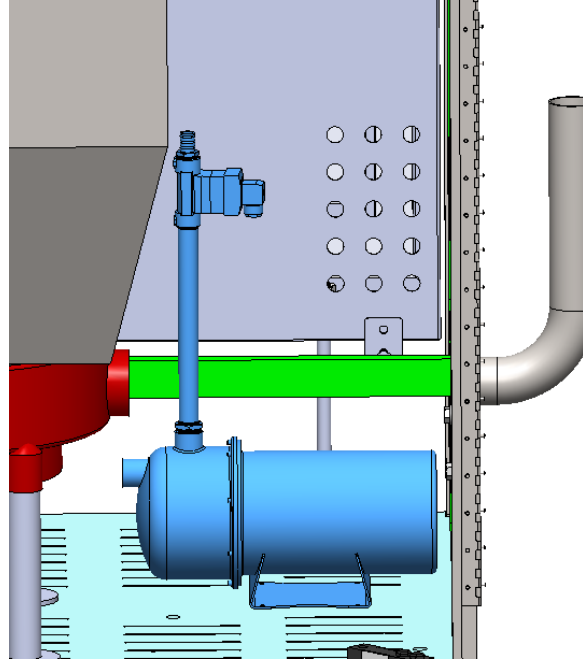
Terminal blocks will be designated for wire connections. The HMI cutouts will also be there.



14) Install Booster Pump Sub-Assembly

Required Components:

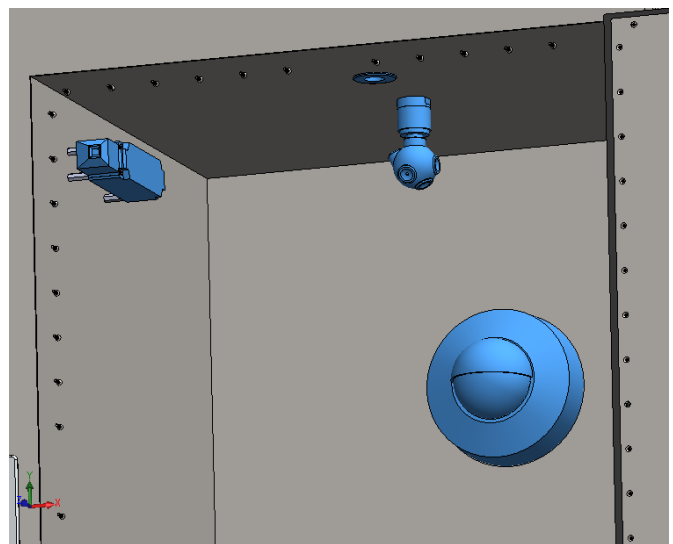
- (7) Booster Pump-Sub Assembly



15) Install Hopper Sub-Assembly Components

Required Components:

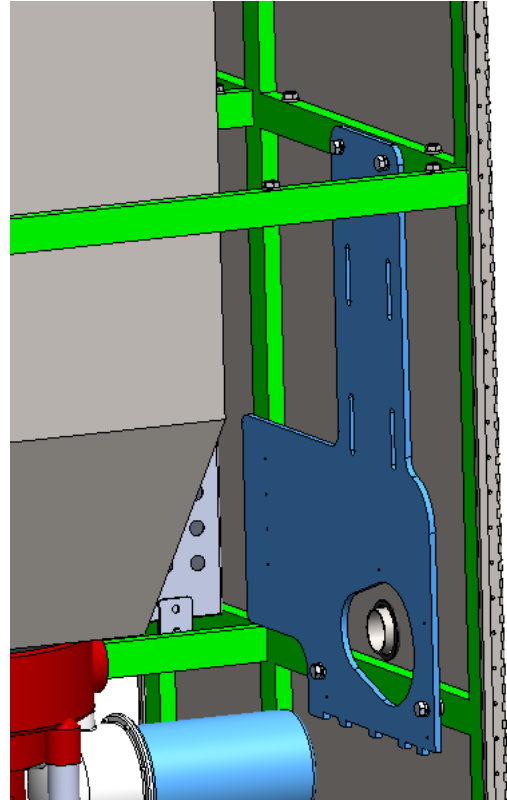
- (2-2) Electronic Deadbolts (Yet to be integrated and missing in appendix)
- (2-3) Coded Magnetic Safety Switch (Yet to be integrated and missing in appendix)
- (2-4) Hopper Light
- (2-5) Hopper Camera
- (2-6) Spray Nozzle
- (2-7) ½" X PEX Fitting



16) Mount Back Plate

Required Components:

- (1-3) Back Plate
- (1-13) ½"-13 Bolt ¾" Long
- (1-14) 1/2" Split Washer



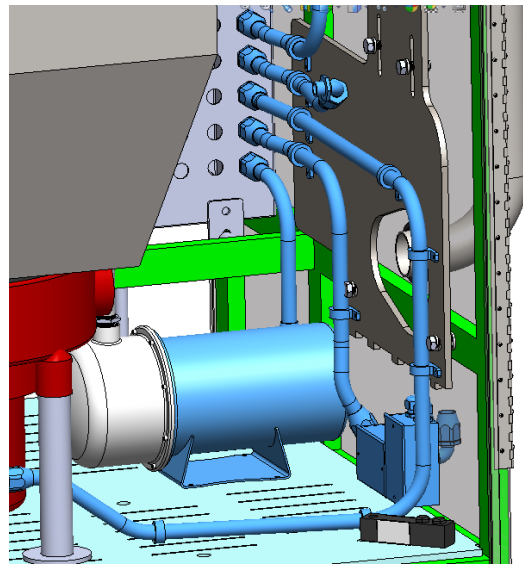
17) Install Electrical Components Sub-Assembly

Required Components:

- (10) Electrical Components Sub-Assembly
- (11) Low Voltage Wires (Still Finishing...)

* Include running high voltage wires in the conduit

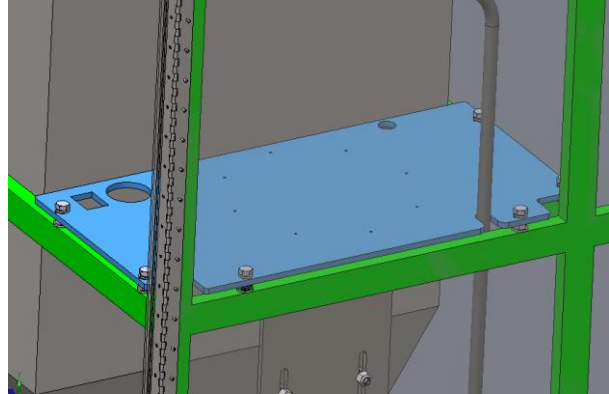
* Low voltage wires can be run in plastic cable guard with adhesive backed mounts. 10 low voltage lines.



18) Mount Water Heater Shelf

Required Components:

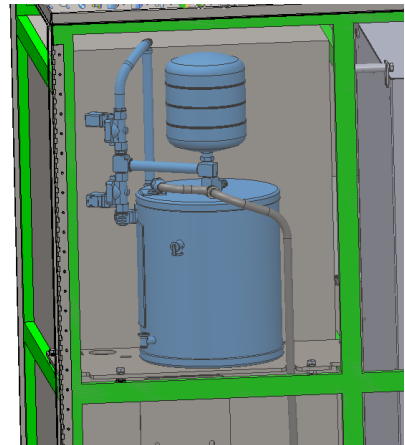
- (1-6) Electrical Shelf
- (1-13) ½"-13 Bolt ¾" Long
- (1-14) 1/2" Split Washer



19) Install Water Heater Sub-Assembly

Required Components:

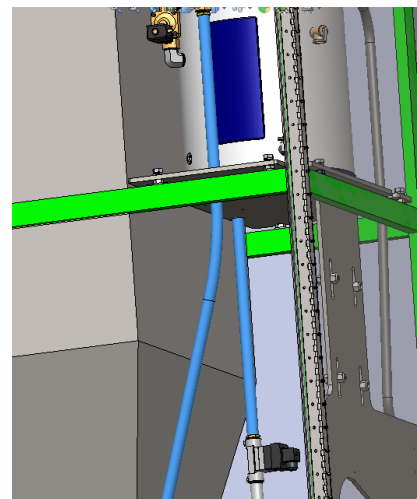
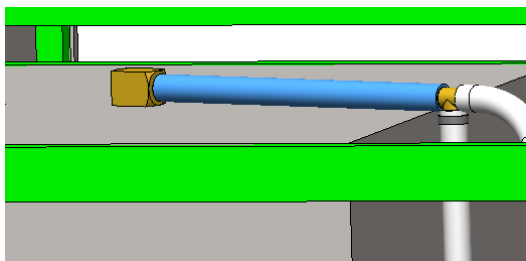
- (8) Water Heater Sub-Assembly



20) Run Plumbing Lines

Required Components:

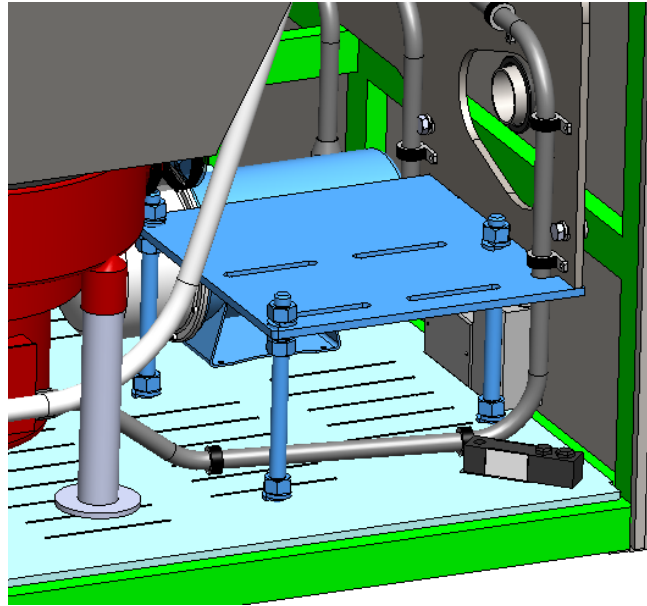
- Plumbing Sub-Assembly



21) Install Pump Shelf

Required Components:

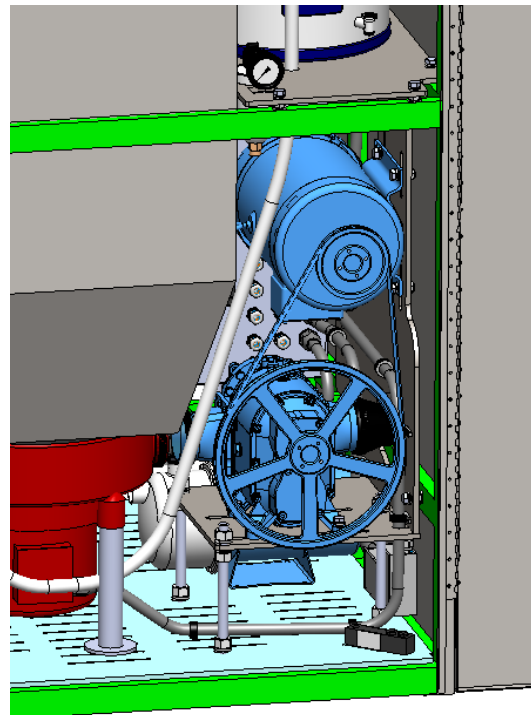
- (1-4) Pump Shelf
- (1-13) $\frac{1}{2}$ "-13 Bolt $\frac{3}{4}$ " Long
- (1-14) $\frac{1}{2}$ " Split Washer
- (1-18) $\frac{3}{4}$ "-16 Nut
- (1-19) $\frac{3}{4}$ " Split Washer
- (1-20) $\frac{3}{4}$ " - 16 All Thread



22) Install Lobe Pump Assembly

Required Components:

- (6) Lobe Pump Sub-Assembly



23) Access Doors

Required Components:

- (1-10) Left Access Door
- (1-11) Right Access Door
- (1-17) 1/8" SS Rivet Flat

