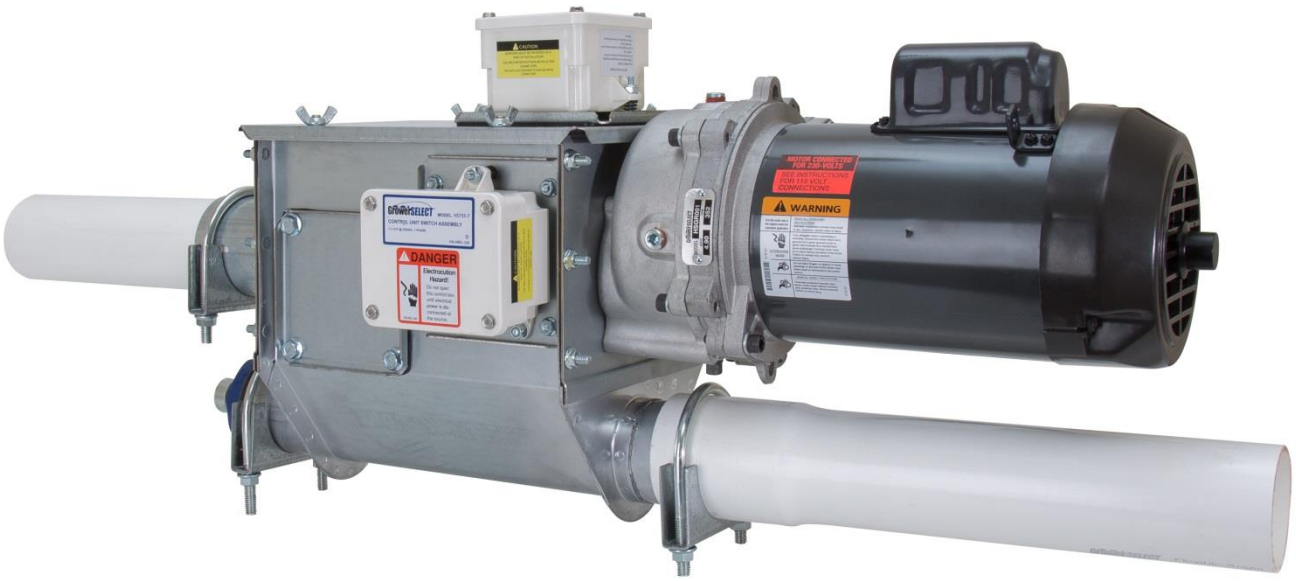
HS755 Model 75 Extension Hopper Installation Manual



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General Installation and Safety Notes:

- Always wear protective clothing and any applicable Personal Protective Equipment (Safety Glasses and/or Ear Plugs) when working with the equipment.
- Always keep safety decals in good condition and replace missing or damaged decals.
- Make sure that power is disconnected from the system prior to servicing.
- Ground all electrical equipment for safety.
- Ground all non-current carrying metal parts to guard against electrical shock.
- Discarded materials, equipment and boxes should be recycled in accordance with local and national codes.

Overview:

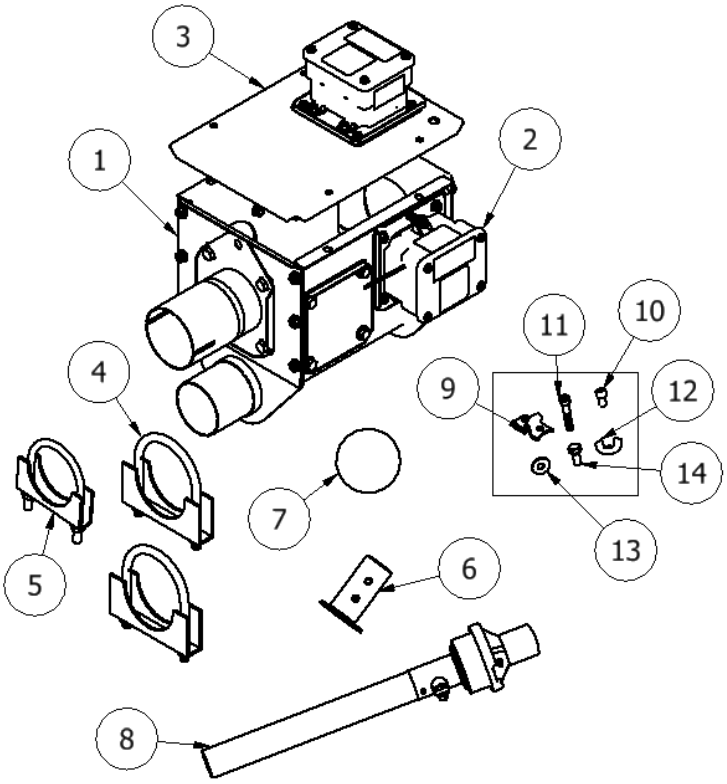
The Model 75 Extension Hopper is used to extend the length of auger feed line systems. It is also used for left hand and right hand turns. The components attached to the extension hopper (such as the window, steel cover plate, and feed level switch) are easily removable in order to modify the hopper as needed depending on its intended use. Extension hoppers should be used when the system has surpassed allowable length or when there is more than one 90 degree turn in the barn.

Auger Feed Line Length Specifications:

Motor Size	1/2 HP	3/4 HP	1 HP
Grower Select Part Number (Motor)*	HS9021D5	HS9022D5	HS9023D5
Max. Feed Line Length, no Ext. Hopper (ft)	80	150	200
Max. Feed Line Length, with Ext. Hopper (ft)	125	185	245

**Part number given for motor intended to carry feed from outside feed bin to extension hopper. Motor output is 216 RPM.*

Part List:



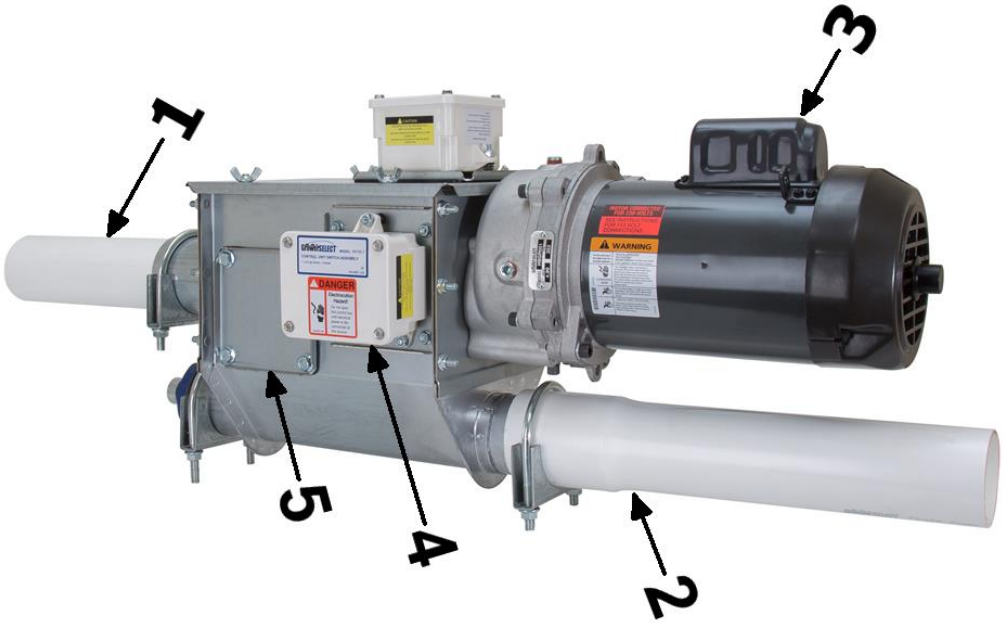
Item	Quantity	Part Number	Description
1	1	HS755	Boot, Weldment Assm
2	1	HS755-7	Feed Level Safety Switch
3	1	HS755-20	Cover, M75 Ext. Hopper – with switch
4	2	CLAMP325	Clamp, U-Bolt, 3.25”
5	1	CLAMP275	Clamp, U-Bolt, 2.75"
6	1	HS531-5	Weldment – Coupling, Direct Drive
7	1	HS527	Ball, Agitator, 3”
8	1	HSAB75C	Anchor Bearing M75C
9	1	HS531-8	Clamp, Auger, Direct Drive
10	1	91251A578	Socket Head Cap Screw 5/16-18 X 1/2”
11	1	91251A589	Socket Head Cap Screw 5/16-18 X 2-1/2”
12	4	60571	Wing Nut, Hex, 5/16-18
13	4	605800	Washer, 5/16”
14	8	60508	Bolt, Hex, 5/16-18 X 3/4”

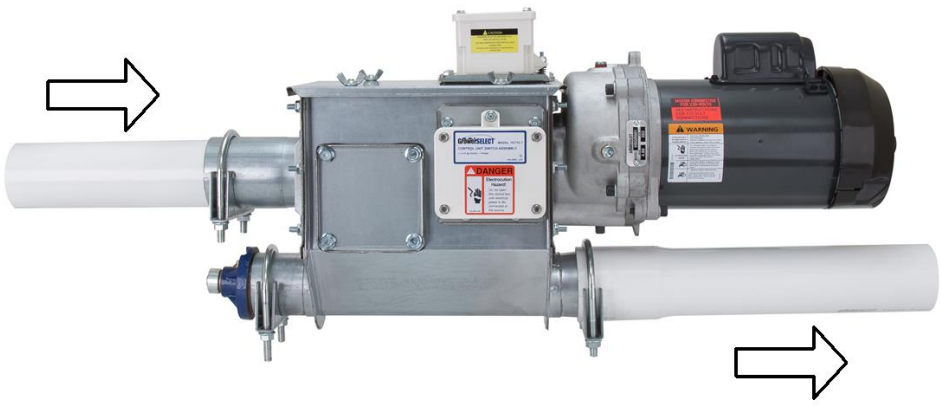
Hopper Orientation for Different Applications

The components of the extension hopper should be arranged to fit their intended application – straight line, right hand turn, or left hand turn.

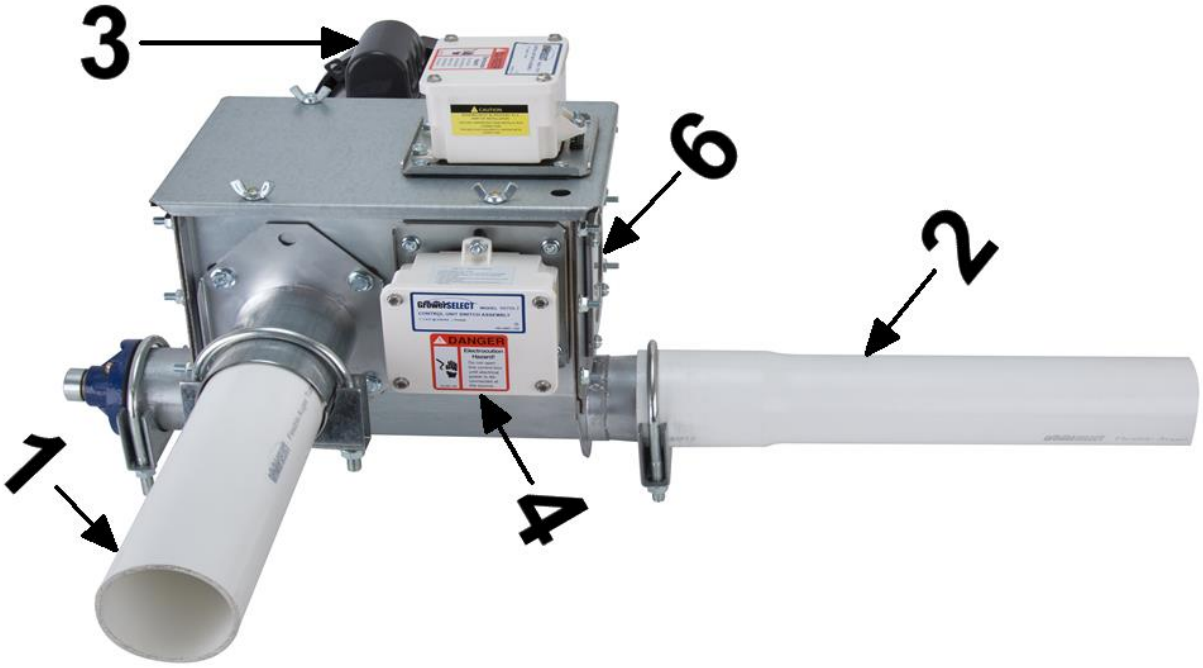
Reference Guide	
Number	**Description**
1	Incoming Feed
2	Outgoing Feed
3	Power Unit
4	Feed Level Switch
5	Cover Plate
6	Window

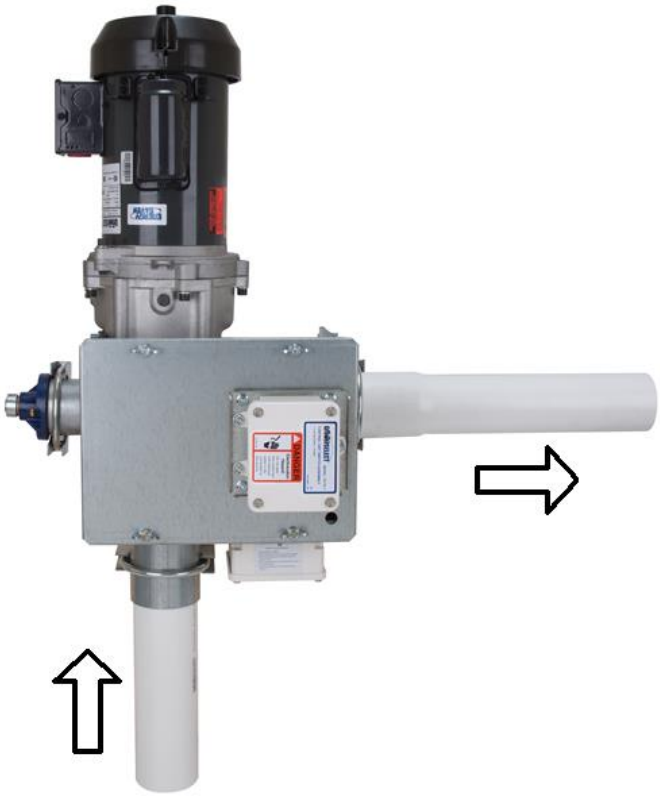
Straight Line:



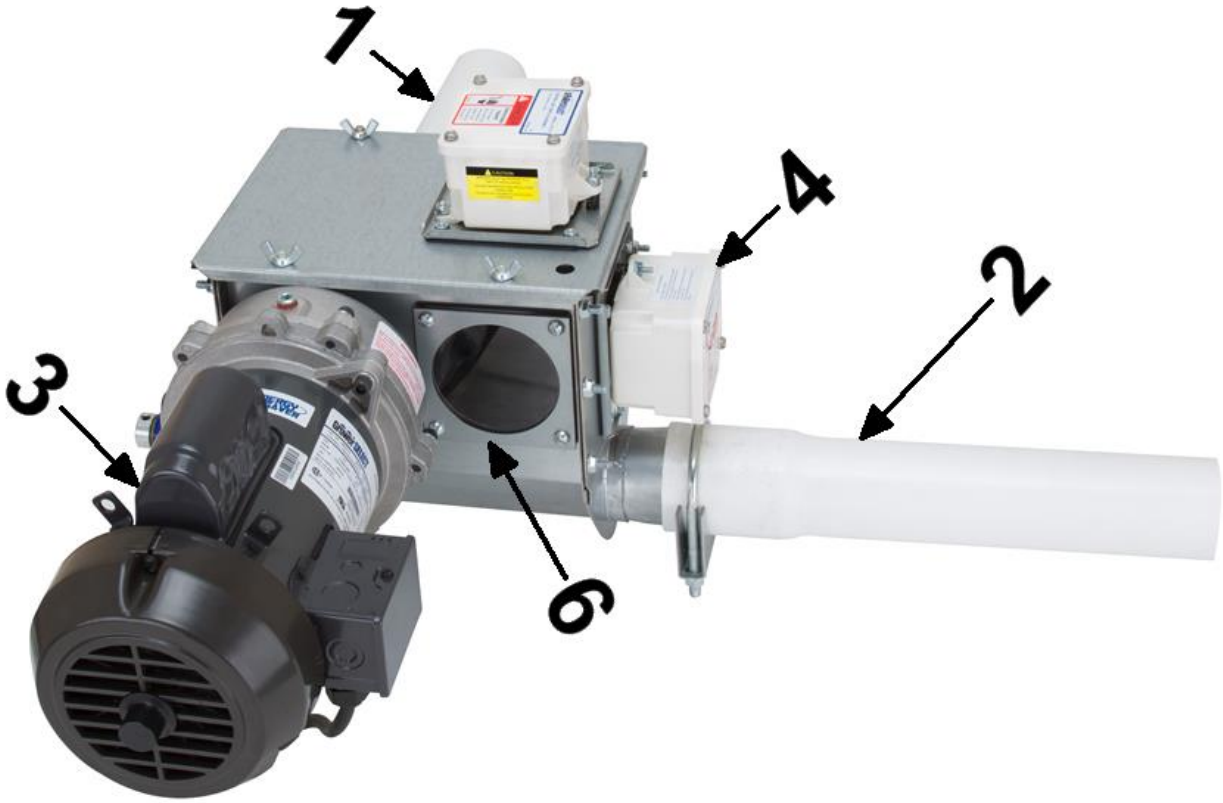


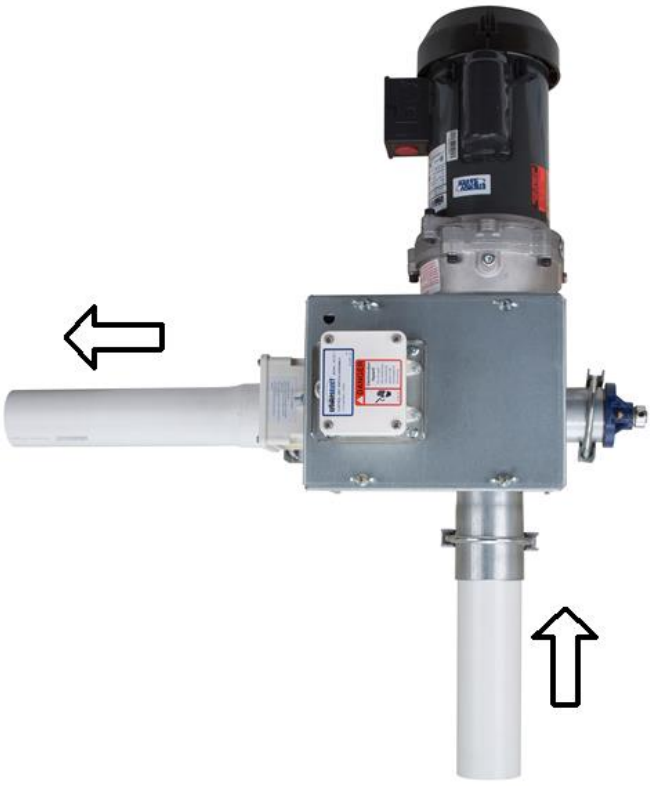
Right Hand Turn:





Left Hand Turn:





Determining the Location and Orientation of the Extension Hopper:

- Locate the hopper so there will not be any outlet drops on the short tube or elbow leading out of the hopper.

- The longer portion of the system with most of the outlet drops should follow the extension hopper. For example: in a 300’ (91.4 m) Model 75 System the distance from the bin to the extension hopper should be 100’ (30.5 m). The distance from the extension hopper to the control unit should be 200’ (61 m) with most outlets placed on the 200’ (61 m) section. Refer to chart on page 3 for power unit requirements.

- Auger Feed systems are typically designed to accommodate one 90 degree elbow. An extension hopper should be used if additional turns are required. Remember: one 90 degree elbow requires the same power as 30’ (9.1 m) of straight line.

- The lower part of the extension hopper can be turned 90 degrees to the left or right in relation to the top portion of the extension hopper. This allows the extension hopper to replace a horizontal elbow where both might be located in approximately the same position in the system.

Installation:

1. Rearrange the hopper components to match the images on Page 4 or 5 if the hopper will be used for left hand or right hand applications.

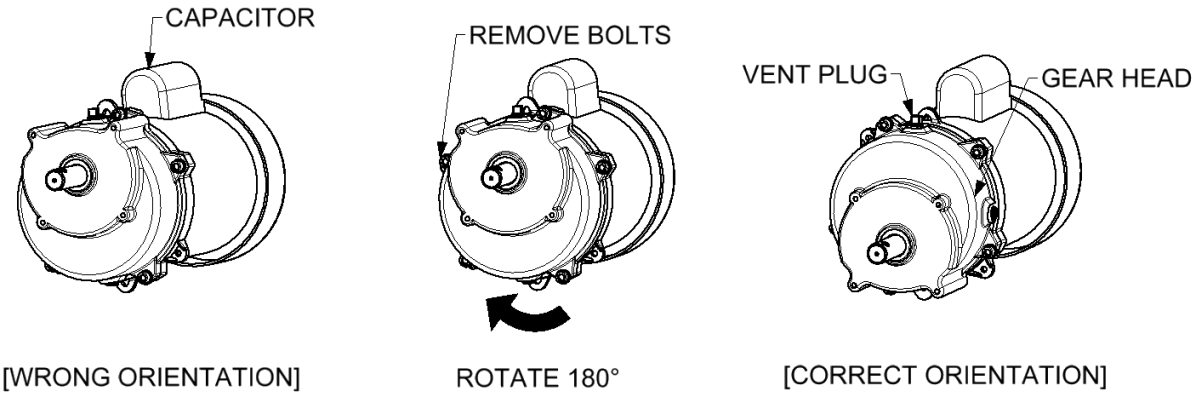
2. Attach the anchor bearing to the bottom outlet tube on the hopper. Secure it with the 2 ¾” U clamp.

3. Attach the power unit to the hopper using (4) 5/16” bolts and the (4) 5/16” washers out of the supplied hardware bag.

Some power units may be purchased in an orientation that is not suitable for the straight line application of the extension hopper. The gear head will need to be adjusted if there is interference between the feed tube and the gear head. The capacitor should be pointed toward the ceiling.

A. Remove the bolts connecting the gear head to the motor.
B. Rotate the gear head 180 degrees.
C. Fasten the gear head and the motor back together.

D. Remove the ¼" hex socket pipe plug from the top of the gear head and replace it with the vent plug. Make sure the vent plug is always on top of the gearhead and the ¼" hex socket plug is always on bottom of the gearhead. These plugs are interchangeable.



4. Suspend the hopper/motor assembly from the ceiling so that it will be level with the incoming auger tube. The suspension should be able to support at least 90 lbs. Suspension equipment is not included.

5. Slide the incoming PVC feed tube into the tube anchor attached to the hopper that is in line with the power unit. Slide the outgoing PVC feed tube over the bottom outlet tube. Fasten both tubes with the 3 ¼" U clamps.

6. Attach the *outgoing* auger to the anchor bearing by pulling the auger over the restrictor tube and fastening the auger using the set screw on the anchor bearing.

7. Attach the *incoming* auger to the power unit using the supplied coupling (HS531-5) and the two socket head cap screws.

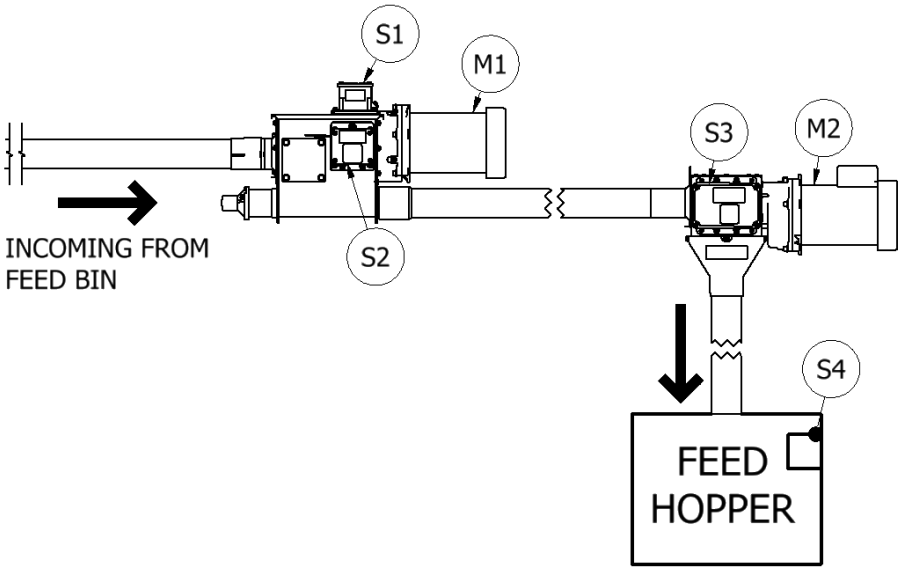
8. Fasten the HS755-20 cover to the top of the hopper using (4) 5/16" bolts and the (4) wing nuts.

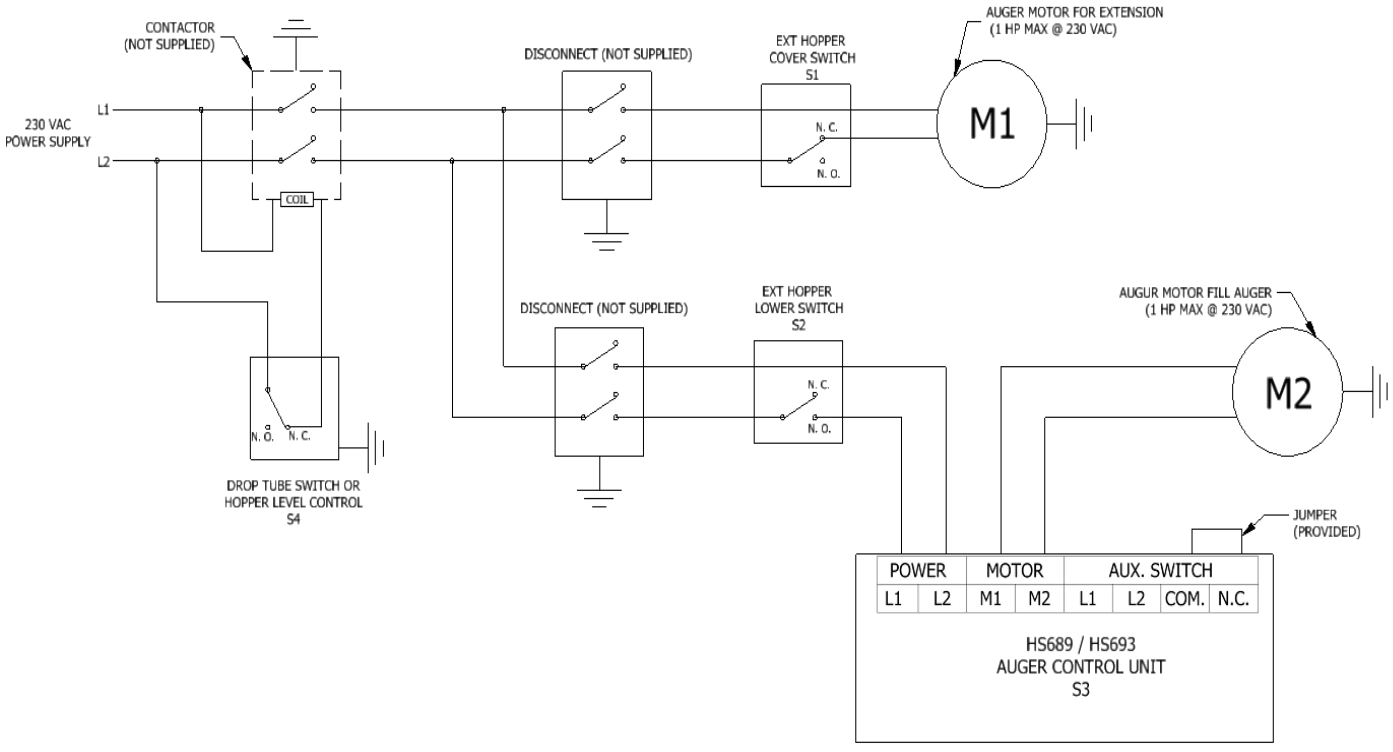
9. Refer to the following wiring diagrams to properly connect the power supply and feed level switches.

   NOTE: Further information regarding feed system installation can be found in the HSMANUAL-020 GrowerSELECT GROW-FLEX Auger Feed Manual.

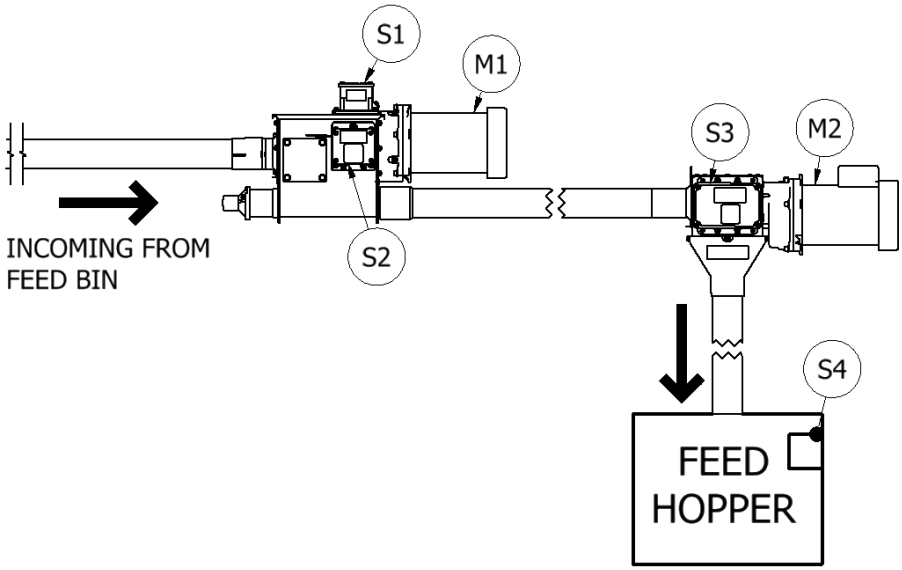
Wiring Instructions

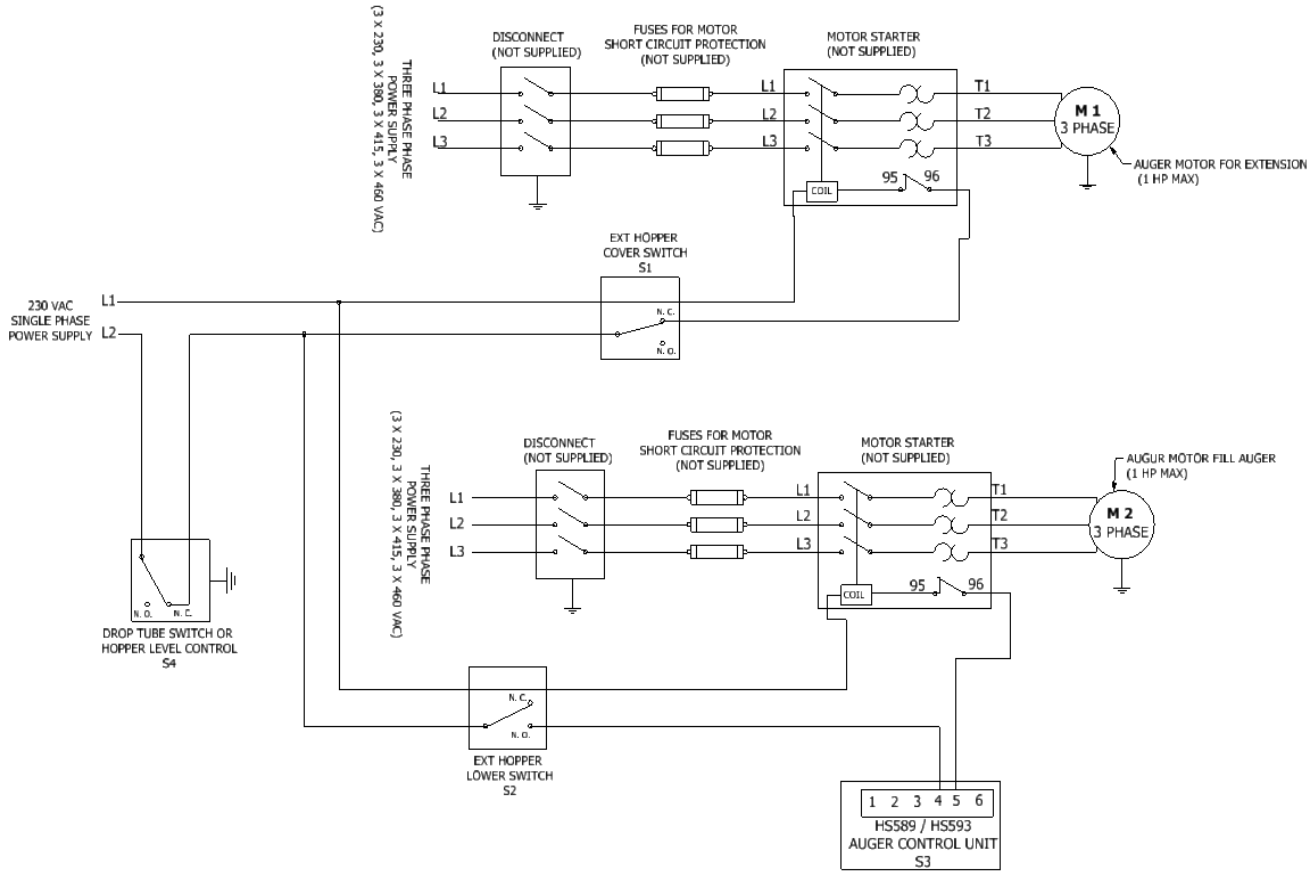
Single Phase 230 VAC 50/60Hz Motors:





Three Phase – 50/60Hz With Motor Starters:





This equipment must be installed in accordance with all State and Local Codes and applicable Regulations which should be followed in all cases. Authorities having jurisdiction should be consulted before installations are made.

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Part Number: HSMANUAL-166 Rev IR
Market: Poultry and Hog