



# Parts List & Instructions

815 Rice Lake Street, Owatonna, MN 55060

Phone: 800-443-2476 / 507-451-5430

www.gandy.net / Email: sales@gandy.net

**66FS12C**  
**Orbit-Air<sup>®</sup> Applicator**  
**Implement Mounted Hopper**  
**Hydraulic Raven Monitor Controlled**  
**10 Cu. Ft. (.28m<sup>3</sup>) Hopper, 450-Lb Chemical Capacity**  
**w/ 12 (1-1/4") Outlets, Black Metering Wheels**  
**For Use w/ 1" I.D. Tubing**  
**Single Metering Shaft, No Clutch**  
**(All Parts & Hardware in Place Unless Otherwise Specified)**

**The Following Parts Are Shipped Inside the Hopper:**

- 1 ..... 0197102-1 ..... Manual Holder Bracket
- 2 ..... L04-0005-000 ..... Cable Tie (5/16 x 15-1/4)
- 1 ..... M10-0005-004 ..... Manual Holder
  
- 1 ..... L07-0063-829 ..... Console
- 1 ..... L07-0115-651 ..... Grain Flow, 10 Ft, 22 Pin
- 1 ..... L07-0115-652 ..... Grain Flow Cable, 12 Ft, 22 Pin
- 1 ..... L07-0063-484 ..... Wheel Speed Sensor
  
- 1 ..... 641-A ..... Parts Carton (See Page for Contents)
- 1 ..... 6212-D ..... Air Pressure Gauge Carton (See Page for Contents)
- 1 ..... 662-C ..... Run Hold Switch Carton (See Page for Contents)

## Maintenance

**Check all bolts for tightness after first two hours of use; check periodically thereafter.**

**Grease all fittings regularly.**

There are **Two** grease fittings on hopper. These **must** be greased before use and periodically during use.

Locations: See page 11 for locations.

One grease fitting on each 1-inch bearing (D05-1000-010) (two), located on the 1-inch drive shaft (628720-13).

Lubricate chain as needed.

Periodically clean intake screen on hydraulic driven blower.

See Raven Operator's Manual for operating and wiring instructions.

- 1..... S02-0001-035 .....Shipping Crate (10 CF Hopper)  
 Use: 2 Hex Bolt (3/8 x 2-3/4) (C03-0375-111)  
 2 Hex Bolt (3/8 x 5-1/2) (C03-0375-191)  
 8 Wrought Washer (3/8) (C02-0375-030)  
 4 Whiz Flange Nut (3/8) (C01-0375-030)
- 1..... 628720-1.....Hopper 10 Cu. Ft.  
 Use: 2 Sight Window (610851/26)  
 4 Mounting Rail (610851/27)  
 12 Pop Rivet (3/16 x 3/8) (C19-0187-030)  
 2 Decal, Gandy Orbit-Air Small (N02-0001-123) (on sides)  
 2 Decal, Gandy Diamond (4 x 7-1/2) (N02-0001-093) (on ends)  
 2 Decal, Caution (N02-0014-010)  
 1 Decal, Important, Metering Wheel (N02-0062-040)  
 1 Decal, Caution Black on Yellow (N02-0062-050)  
 1 Decal, Caution Plug (N02-0062-051)
- 1..... 628720-10.....Mounting Base, Hopper, Left  
 Use: 8 Hex Bolt (3/8 x 1-1/4) (C03-0375-051)  
 8 Lock Washer (3/8) (C02-0375-010)  
 8 Wrought Washer (3/8) (C02-0375-030)  
 8 Whiz Flange Nut (3/8) (C01-0375-030)
- 1..... 628720-11.....Mounting Base, Hopper, Right  
 Use: 8 Hex Bolt (3/8 x 1-1/4) (C03-0375-051)  
 8 Lock Washer (3/8) (C02-0375-010)  
 8 Wrought Washer (3/8) (C02-0375-030)  
 8 Whiz Flange Nut (3/8) (C01-0375-030)
- 2..... 63861-3.....Screen 10 Cu Ft Hopper
- 1..... 63861-2.....Cover, 10 Cu Ft Hopper  
 Use: 2 Clevis Pin (1/4 x 2-5/8) (C22-0250-200)  
 2 Cotter Pin (3/32 x 3/4) (C20-0093-020)
- 2..... 1406318.....Cover Lock  
 Use: 2 Cotter Pin (3/32 x 3/4) (C20-0093-020)
- 1..... 62852-24.....Clear Windshield 10 Cu Ft Hopper  
 Use: 5 Hex Bolt (1/4 x 3/4) (C03-0250-030)  
 5 Lock Washer (1/4) (C02-0250-010)  
 5 Wrought Washer (5/16) (C02-0312-030)  
 5 Whiz Flange Nut (1/4) (C01-0250-030)
- 1..... 62852-21.....Shaft Gear & Driven (32-3/4 x 5/8 Round)
- 2..... 63861-7.....Plastic Bearing (5/8 Bore)
- 4..... 09074690-4.....Flangette (For 63861-7 Bearing)  
 Use: 3 Carriage Bolt (1/4 x 5/8) (C04-0250-020)  
 1 Carriage Bolt (1/4 x 1) (C04-0250-040)  
 1 Wrought Washer (1/4) (C02-0250-030)  
 4 Lock Nut Nylon (1/4) (C01-0250-040)
- 1..... 62851-42.....Chain Sprocket, 21-Tooth (5/8 Bore)  
 Use: 1 Cotter Pin (3/16 x 1-1/4) (C20-0187-030)
- 1..... 62853-9.....Sprocket, 24-Tooth, (5/8 Bore x 1-1/4 Hub)  
 Use: 1 Cotter Pin (3/16 x 1-1/4) (C20-0187-030)
- 1..... 628720-12.....Chain Sprocket, 32-35 Tooth, (1-inch Bore x 3-5/8 Hub)  
 Use: 1 Hex Bolt (1/4 x 1-3/4) (C03-0250-070)  
 1 Lock Nut Nylon (1/4) (C01-0250-040)

- 1..... 628720-13..... Shaft, (1-inch x 38 Long)  
Use: 1 Cotter Pin (3/16 x 1-1/4) (C20-0187-030)  
2 SAE Washer (1-inch) (C02-1000-020)
- 2..... D05-1000-010 ..... Bearing (1-inch)  
Use: 4 Hex Bolt (5/16 x 3/4) (C03-0312-030)  
4 Lock Nut Nylon (5/16) (C01-0250-040)
- 1..... 628721-1..... Air Chamber, 12-Outlet  
Use: 2 Hex Bolt (3/8 x 1) (C03-0375-041)  
5 Hex Bolt (3/8 x 1-1/4) (C03-0375-051)  
7 Lock Washer (3/8) (C02-0375-010)  
5 Wrought Washer (3/8) 9C02-0375-030  
7 Whiz Flange Nut (3/8) (C01-0375-030)
- 2..... M05-2000-000..... Rubber Plug, 2-inch (For Air Chamber)
- 1..... 628721-3..... Angle Support, Air Chamber
- 12..... M05-0829-300..... Gasket, Mixing Chamber
- 12..... M10-0055-000..... Mixing Chamber (for 1" I.D. Tubing)  
Use: 24 Hex Bolt Self-Tapping (5/16 x 3/4) (C03-0312-032)
- 1..... 5508242-33..... Gasket, Potting Box
- 1..... 641-3..... Air Pressure Switch**  
Use: 2 Phillips Pan Head TC Screw (#8 x 1/2) (C07-0164-070)
- 1..... L10-0016-010..... Potting Box  
Use: 2 Phillips Pan Head TC Screw (#8 x 1/2) (C07-0164-070)
- 1..... M05-3000-000..... Rubber Plug, 3-inch (For Hopper)
- 1..... 628720-18..... Clean-Out Chute, 4-inch  
Use: 1 Hex Nut (5/16) (C01-0312-010)  
1 Lock Washer (5/16) (C02-0312-010)  
1 Wrought Washer (5/16) (C02-0312-030)
- 1..... 62852-9..... Angle Clamp, Tubing  
Use: 3 Foam Clamp Strip 9-1/2 Long (62851-16)
- 1..... 5408326..... Bar Clamp, Plastic Tubing  
Use: 3 Foam Clamp Strip 9-1/2 Long (62851-16)  
4 Hex Bolt (5/16 x 2-1/4) (C03-0312-091)  
4 Lock Nut, Nylon (5/16) (C01-0312-040)

## Sensors & Wire Extensions

1	L07-0115-456	Console Valve Adapter Cable
1	L07-0115-557	Cable, Single Shaft, No Clutch
1	62851-28	Mounting Bracket, Sensor (Mounts to Flangette 09074690-4, Side Opposite Hyd Drive)
1	661-16	Sensor Shaft
1	5508442-35	Magnetic Hub, 5/8 Bore ( <b>Installed on Metering Door Shaft</b> ) Use: 1 Cotter Pin (3/16 x 1) (C20-0187-030)

## Mount Bracket & Parts for Hydraulic Drive Motor

1	661-12	Motor Mount (For Hydraulic Motor Drive) Use: 2 Hex Bolt (5/8 x 3-1/2) (C03-0625-141) 2 SAE Washer (5/8) (C02-0625-020) 2 Lock Washer (5/8) (C02-0625-010) 2 Hex Nut (5/8) (C01-0625-010) 2 Hex Bolt (3/8 x 1-1/4) (C03-0375-051) 2 Wrought Washer (3/8) (C02-0375-030) 2 Lock Washer (3/8) (C02-0375-010) 2 Whiz Flange Nut (3/8) (C01-0375-030)
1	F02-0041-045	Roller Chain #41 (45-Rollers) (Hyd Motor to Drive Shaft) Use: 1 Connector Link #41 (F02-0041-001)

## Hydraulic Drive Motor Assembly (6623-A)

1	K01-1022-000	Hydraulic Motor
1	09073678-4	Plate, Motor Mount
		Use: 2 Hex Bolts (3/8 x 1) (C03-0375-041)
		2 Lock Washer (3/8) (C02-0375-010)
1	661-2	Sensor Bracket
		Use: 2 Hex Bolts (3/8 x 1) (C03-0375-041)
		2 Wrought Washer (3/8) (C02-0375-030)
		2 Lock Washer (3/8) (C02-0375-010)
1	661-13	Regulator Block
		Use: 2 Socket Pipe Plug 1/4-18 NPT (C06-0250-300)
		4 Socket Head Cap Screw (5/16 x 2) (C06-0312-130)
1	L08-SV10-230	Solenoid Valve
		Use: 2 Terminal, 14-16ga, Male #634005 (L03-0009-090)
1	661-11	Sensor, Sprocket
		Use: 1 Hex Bolt (1/4 x 3/4) (C03-0250-030)
		1 Lock Washer (1/4) (C02-0250-010)
		1 Whiz Flange Nut (1/4) (C01-0250-030)
1	661-7	Sprocket, 13-Tooth (1-inch Bore w/ 1/4 Keyway)
		Use: 1 Key (1/4 x 1) (5408320-25)
1	661-6	Bushing (1-1/8 O.D. x 1/2 Long)
1	661-4	Sprocket, 20-Tooth (7/8 Bore)
		Use: 2 Spring Pin (1/8 x 1-3/4) (C23-0125-200)
1	661-5	Collar, Hydraulic Speed Comp Drive
		Use: 1 Hex Bolt (1/4 x 1-1/4) (C03-0250-051)
		1 Lock Washer (1/4) (C02-0250-010)

## Hydraulic Valve Assembly (6623-B)

1	L07-0063-195	Hydraulic Control Valve, 16 GPM	
		Use: 3 Apt SAE 10, Male 1/2 NPT, Female Swivel (K04-0500-010)	
1	661-15	Bracket, Motor Control (For 10 & 23/31 Cu Ft Hopper)	
		Use: 2 Hex Bolt (5/16 x 3/4) (C03-0312-030)	
		2 Lock Washer (5/16) (C02-0312-010)	
		2 Whiz Flange Nut (5/16) (C01-0312-030)	
2	K02-0500-120	Hydraulic Hose, 1/2 x 120"	
3	K02-0500-014	Hydraulic Hose, 1/2 x 14" w/ O-Ring Fitting on One End	
1	K02-0500-012	Hydraulic Hose, 1/2 x 12" w/ Fitting	
1	K02-0500-021	Hydraulic Hose, 1/2 x 21"	
1	K04-0500-030	Adaptor, 1/2-NPT Swivel Female to Male	
1	K07-0500-010	Steel Pipe Tee (1/2)	
1	K09-0500-000	90° High Pressure Sp Elbow (1/2)	
1	K11-0500-028	Steel Pipe Nipple (1/2 x 1-13/16)	
1	<b>62113</b>	<b>Hydraulic By-Pass Block Assembly w/Check Valve</b>	
	1	K05-CV10-200	Check Valve
	1	6296-1	Hydraulic By-Pass Block

**1..... 62852-C..... Metering Door Assembly, 12-Outlet (Black Metering Wheels)**

- 1 ..... 62852-11..... Mounting Plate (12-Outlet)
  - Use: 2 J-Bolt (C16-0312-020)
  - 2 Wrought Washer (5/16) (C02-0312-030)
  - 2 Hex Nut (5/16) (C01-0312-010)
- 3.17 FT..... M05-0125-050..... Rubber Strip w/ Adhesive (1/8 x 1/2)
- 12 ..... M10-0055-000..... Metering Cup (1-1/4)
  - Use: 26 Whiz Flange Nut (3/16) (C01-0187-030)
- 12 ..... 62851-76..... Hole Closures, Slotted
  - Use: 12 Extruded Washer (628720-20)
  - 12 SAE Washer (5/16) (C02-0312-020)
  - 12 Hex Bolt (5/16 x 1-3/4) (C03-0312-071) (**Stainless**)
  - 12 Comp. Spring (E00-0420-012)
- 1 ..... 62852-14..... Hex Shaft (31-7/16 x 5/8 Hex)
- 2 ..... 63861-7..... Plastic Bearing
- 4 ..... 09074690-4..... Flangette, Bearing
  - Use: 4 Hex Bolt (1/4 x 3/4) (C03-0250-015) (**Stainless**)
  - 4 Lock Washer (1/4) (C01-0250-012) (**Stainless**)
  - 4 Whiz Flange Nut (1/4) (C01-0250-032) (**Stainless**)
- 12 ..... 62851-75..... Metering Wheel Black
- 1 ..... 62851-41..... Sprocket, 21-Tooth (5/8 Bore)
  - Use: 1 Cotter Pin (3/16 x 1-1/4) (C20-0187-030)

1..... K02-0375-024 .....Hydraulic Hose, 3/8 x 24” (Case Drain)

## Hydraulic Blower Assembly

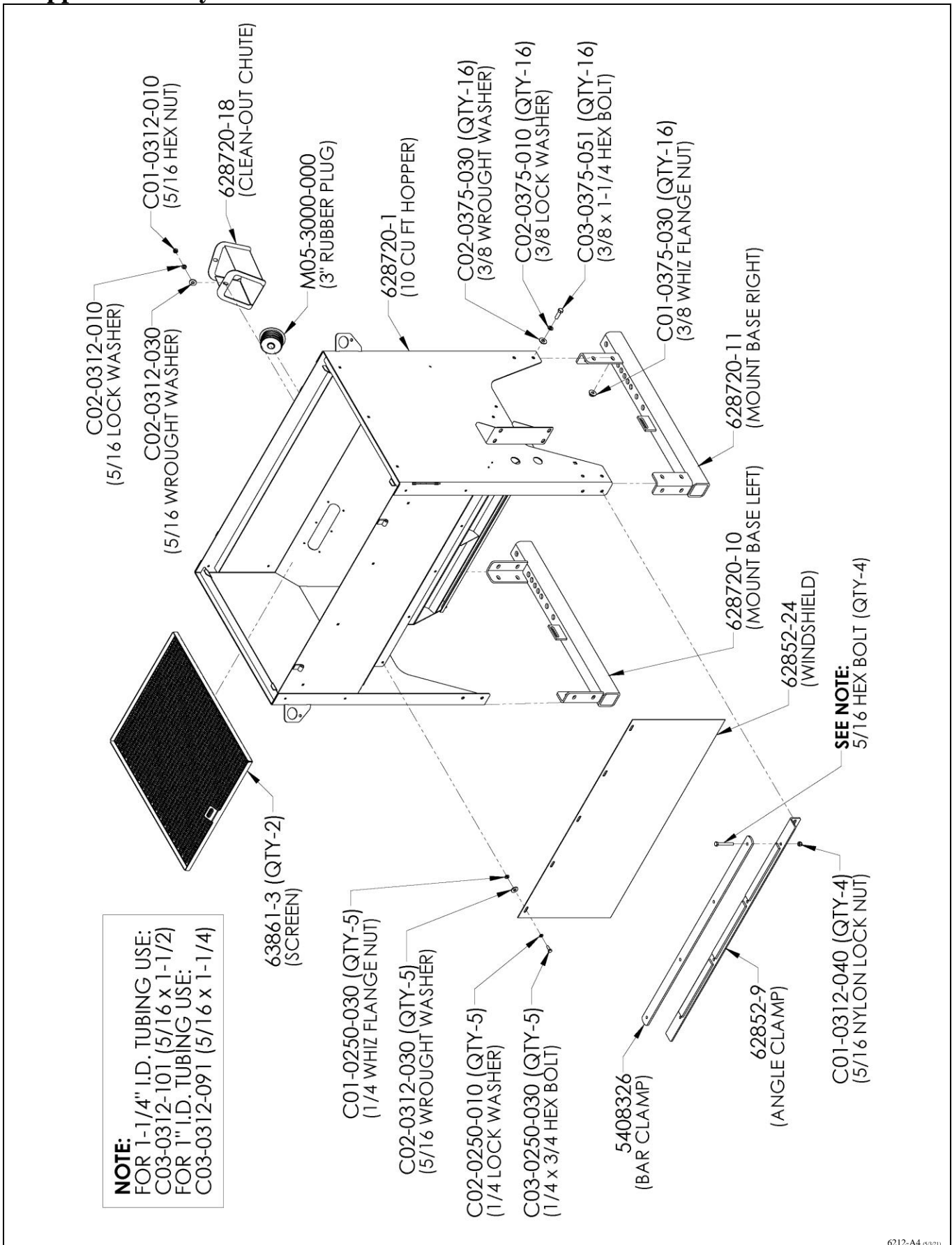
### 1..... 62167-P8LH .....Blower Assembly, 8 GPM Hydraulic Motor, w/out Hoses

- 1 ..... B56-08636.....Blower Housing, Front & Back Set (Black Plastic)  
Use: 14 Hex Bolt (1/4 x 3/4) (C03-0250-030)  
28 SAE Washer (1/4) (C02-0250-020)  
14 Lock Nut, Nylon (1/4) (C01-0250-040)
- 1 ..... 5608636-4.....Back-Up Plate  
Use: 4 Carriage Bolt (3/8 x 1-1/4) (C04-0375-051)  
4 Lock Nut, Nylon (3/8) (C01-0375-041)
- 1 ..... 62167-2.....Mount, Blower (Plastic w/Coupler)  
Use: 1 Decal, Warning Rotating Parts (N02-0055-010)  
1 Decal, Important Hydraulic Motor (N02-0062-043)  
1 Decal, Black on Yellow (N02-0062-050)
- 1 ..... L01-0034-004.....Fan, Impeller  
Use: 1 Bushing (1-inch JA Bore) (L01-0033-002)
- 1 ..... 5408320-25.....Key, Fan Shaft (1/4 x 1)
- 1 ..... 62167-3.....Shaft (6 Inch Long)
- 1 ..... 24078179-11.....Key, for Coupler (3/16 sq. x 1)
- 1 ..... K18-M024-000.....Coupler (9/16 x 7/8)  
Replacement Parts .....(K18-M024-003 Black Plastic Coupler Sleeve) (5508230-5 1/8 x1 Key)  
(K18-M024-004 Coupler for 9/16 Shaft on Hyd Motor)  
(K18-M024-005 Coupler for 7/8 Shaft on End of Fan Shaft)
- 1 ..... K01-0045-003 .....Hydraulic Motor, 8-GPM Casappa  
Use: 2 Carriage Bolt (3/8 x 1-1/4) (C04-0375-051)  
2 Washer, Motor Side, Stainless (62164-2)  
2 Lock Nut, Nylon (3/8) (C01-0375-041)
- 2 ..... D05-1000-030 .....Bearing & Locking Collar (For 1-inch Shaft)
- 4 ..... D10-1000-011 .....Flangette, Round  
Use: 6 Carriage Bolt (5/16 x 1) (C04-0312-040)  
6 Lock Washer (5/16) (C02-0312-010)  
6 Hex Nut (5/16) (C01-0312-010)
- 1 ..... 5608231-3.....Screen, Blower  
Use: 3 Pan Head Sheet Screw (#10 x 3/4) (C07-0187-090)
- 1 ..... 5508336-7.....Guard, Blower Shaft  
Use: 2 Hex Head Self-Tap Bolt (5/16 x 3/4) (C03-0312-032)



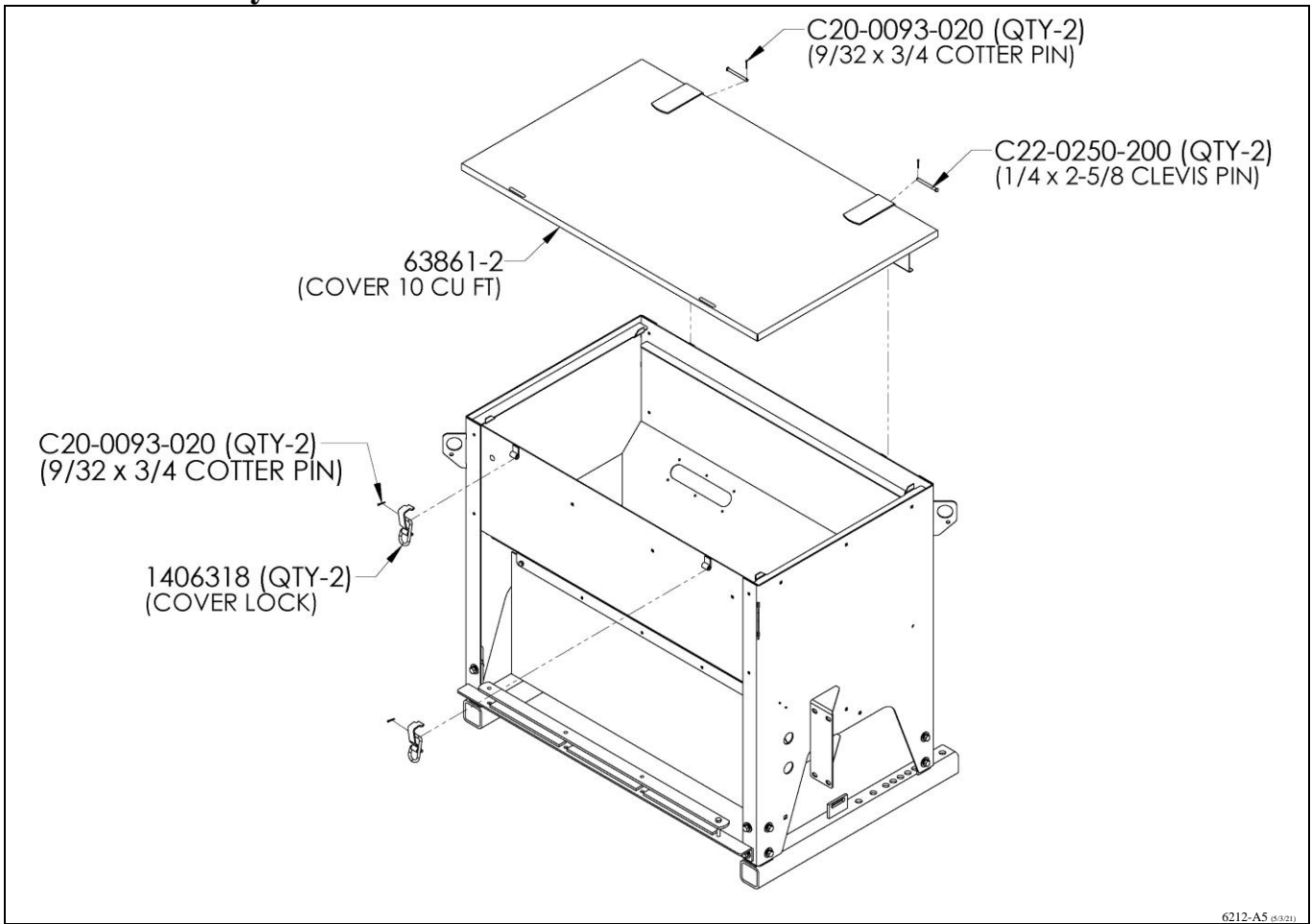


# Hopper Assembly



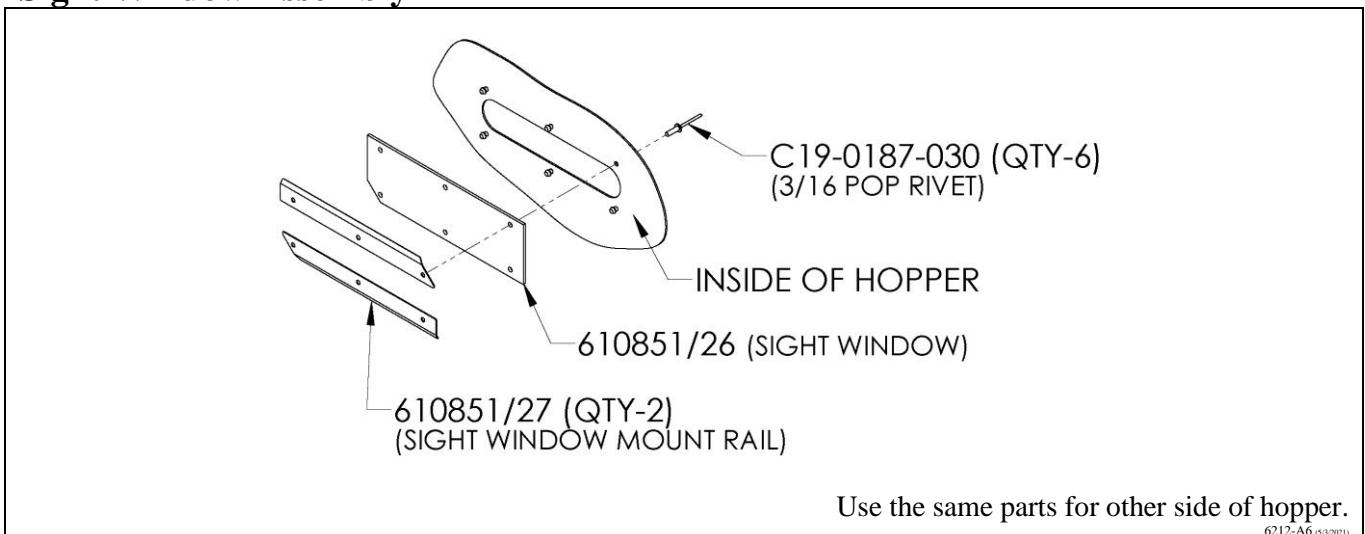
6212-A4 d3211

## Cover Assembly



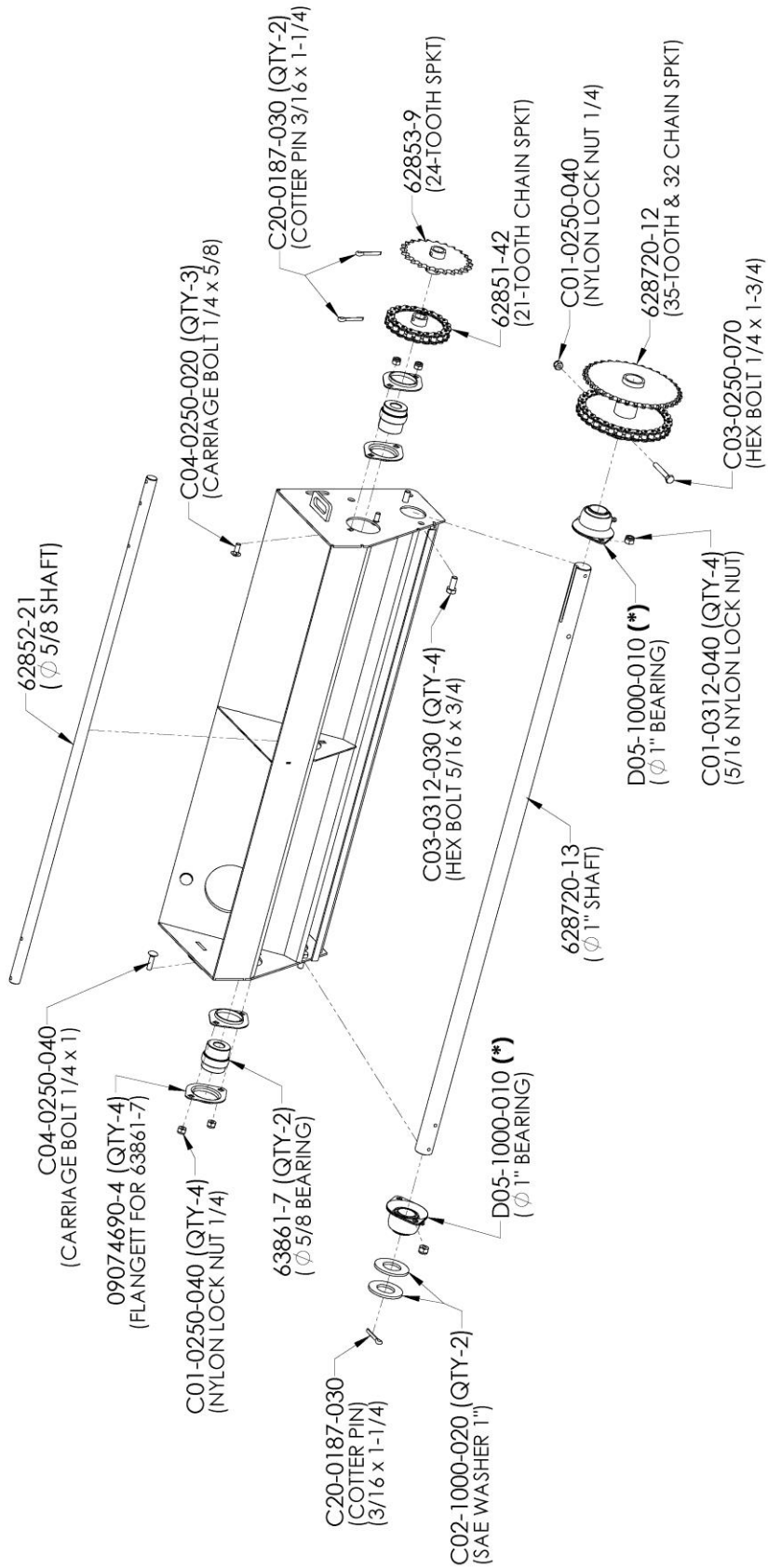
6212-A5 (8/2/21)

## Sight Window Assembly



6212-A6 (8/3/2021)

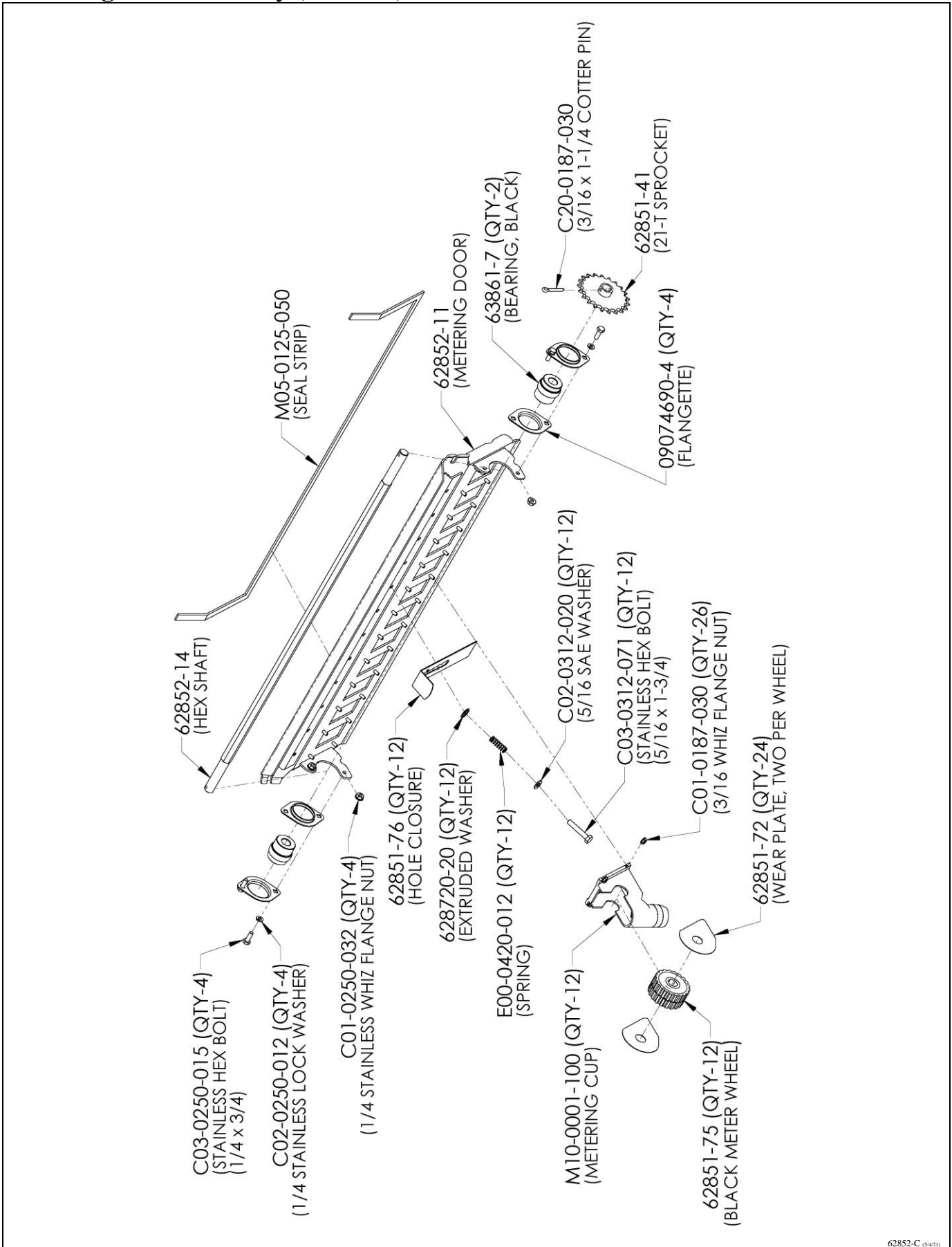
# Drive Shaft Assembly



62DS12-A1 (4/22)

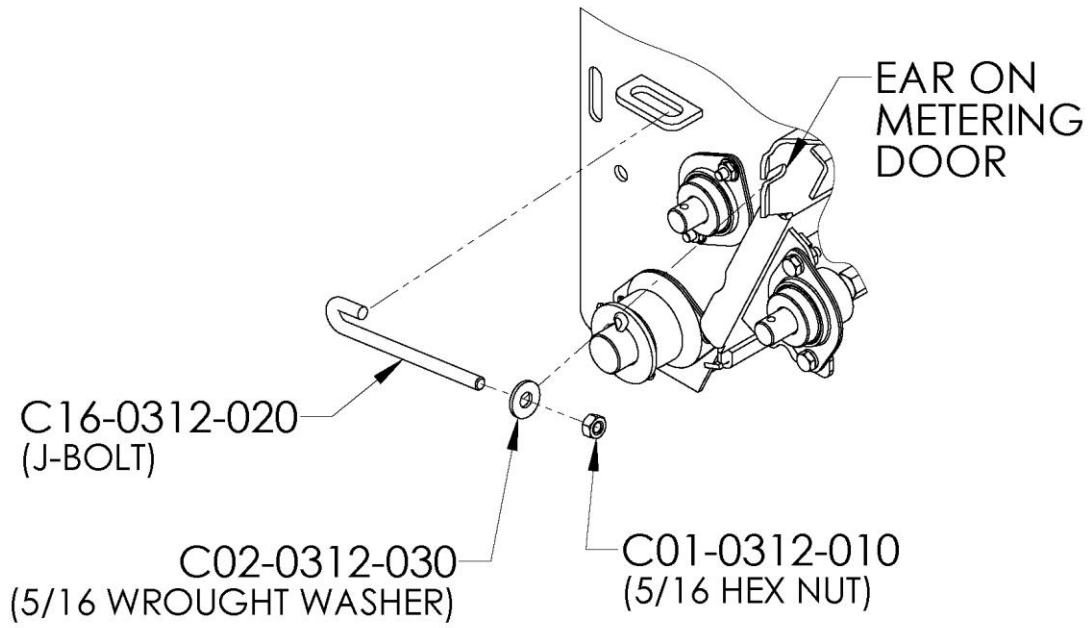
Part numbers with a (\*) behind them have grease fittings. See first page.

# Metering Door Assembly (62852-C)

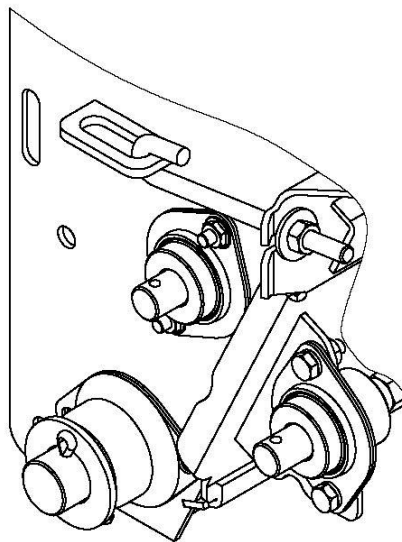


62852-C (5/421)

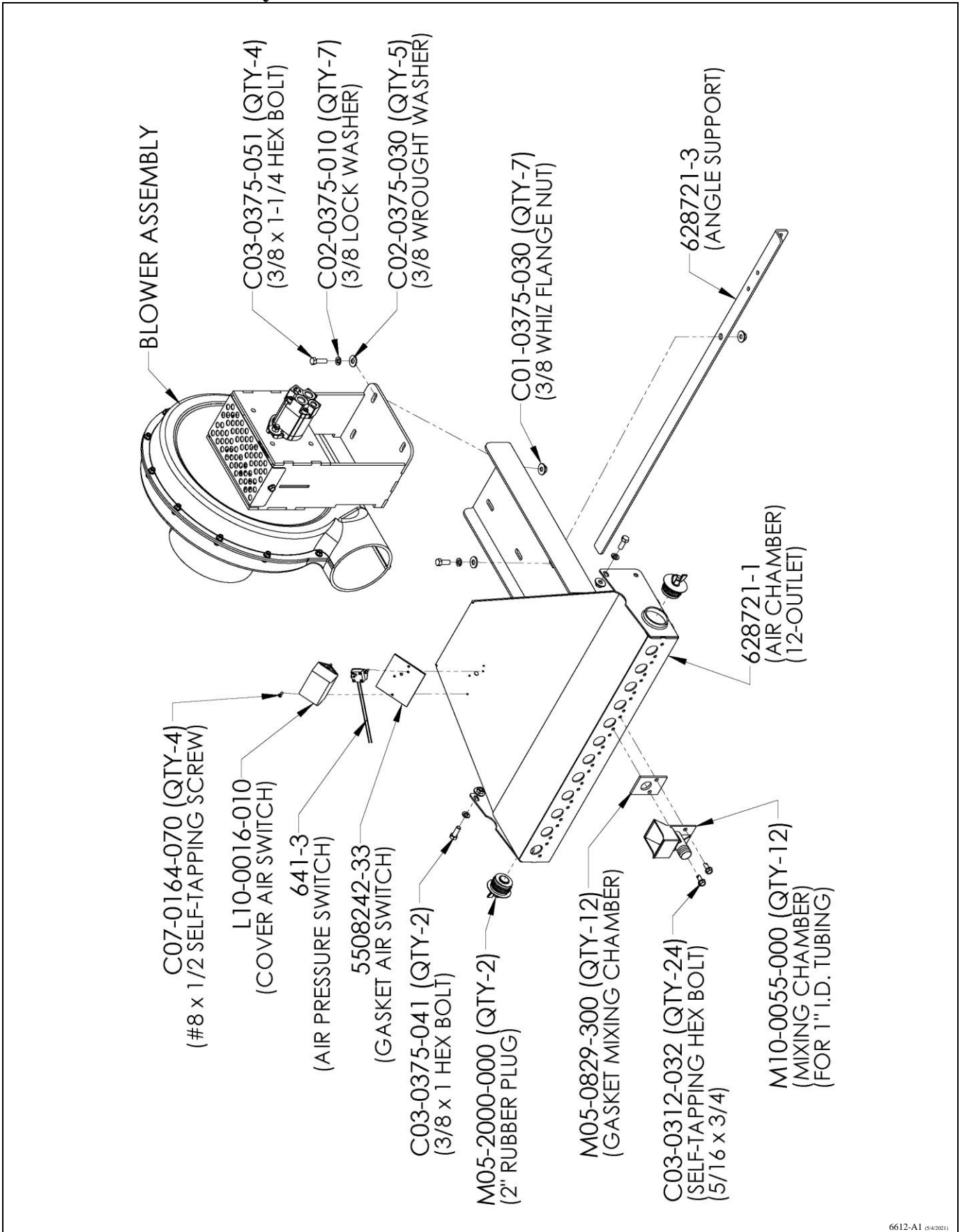
**Fastening Metering Door in Place (use one J-Bolt on each end of metering door)**



**J-bolt shown in place.**

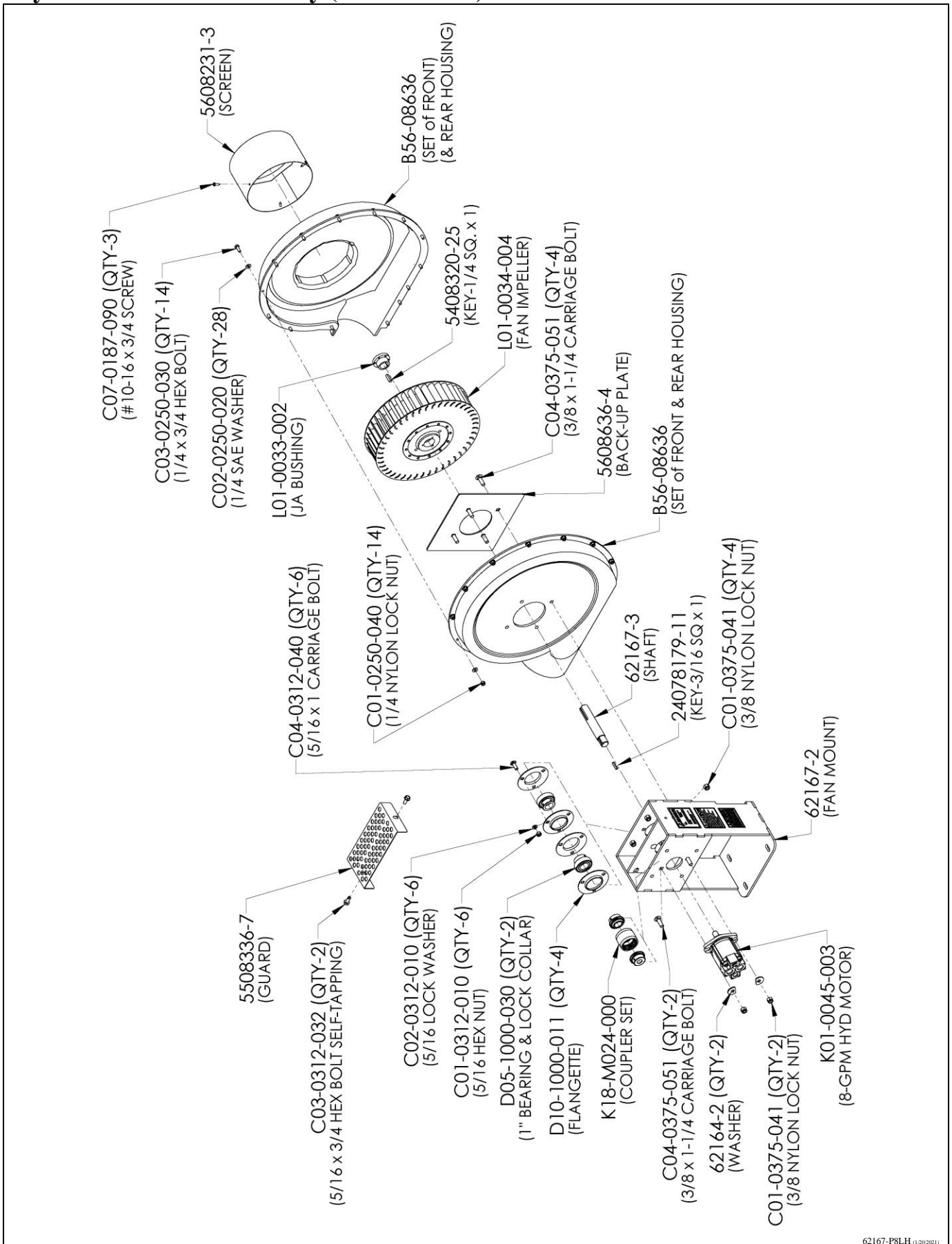


# Air Chamber Assembly



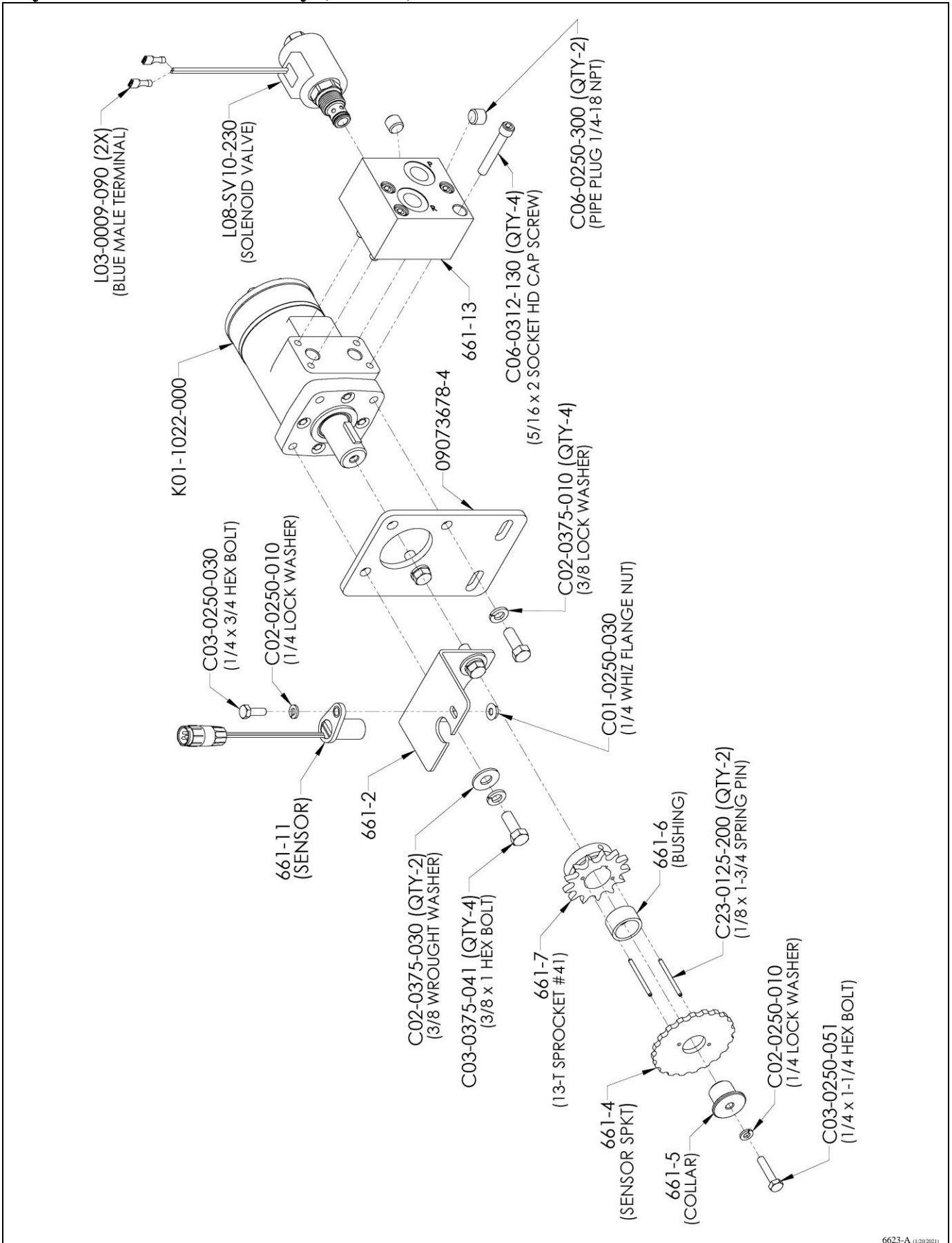
6612-A1 (5/4/2011)

# Hydraulic Blower Assembly (62167-P8LH)



62167-P8LH (1/26/2021)

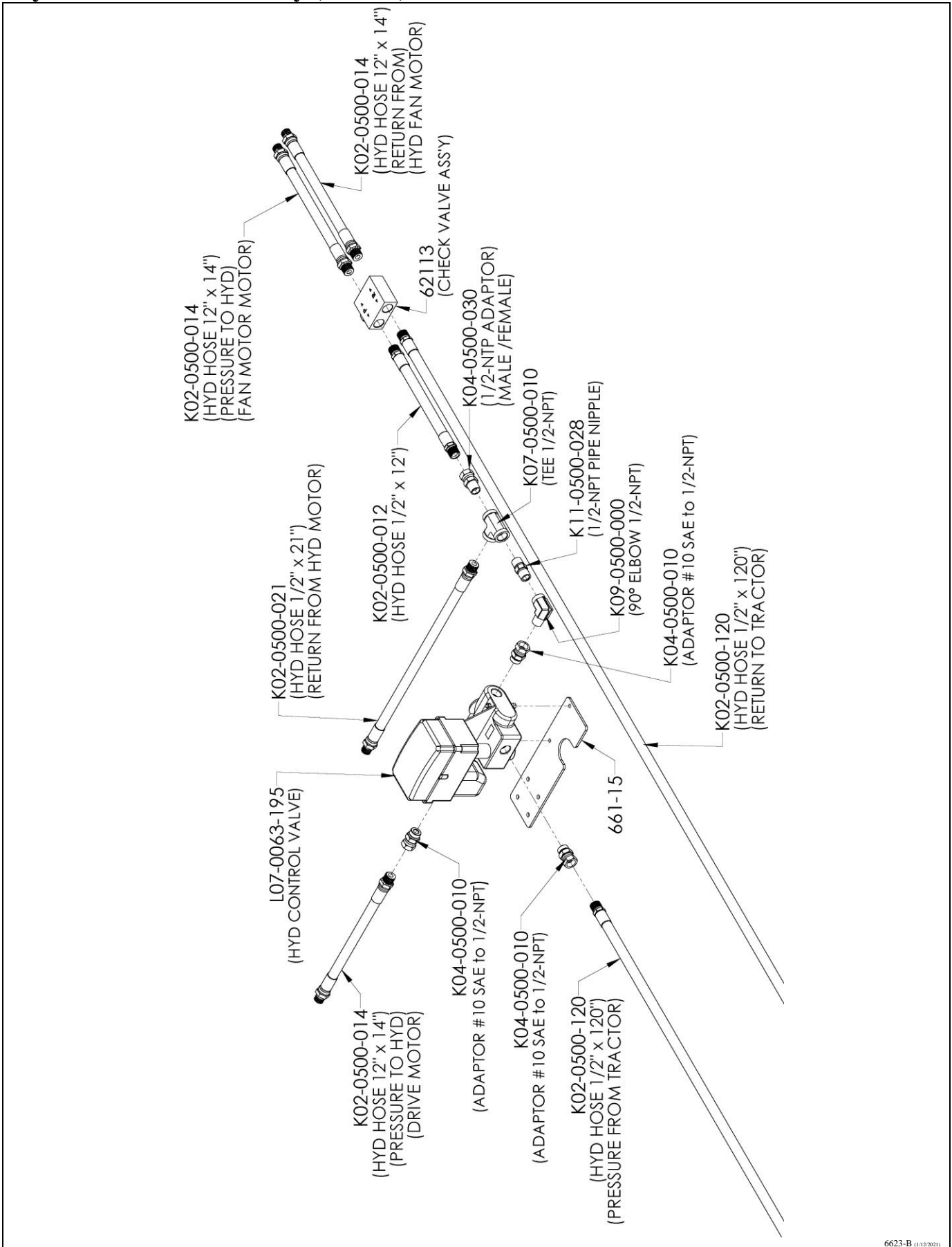
# Hydraulic Motor Assembly (6623-A)



6623-A (1/20/2021)



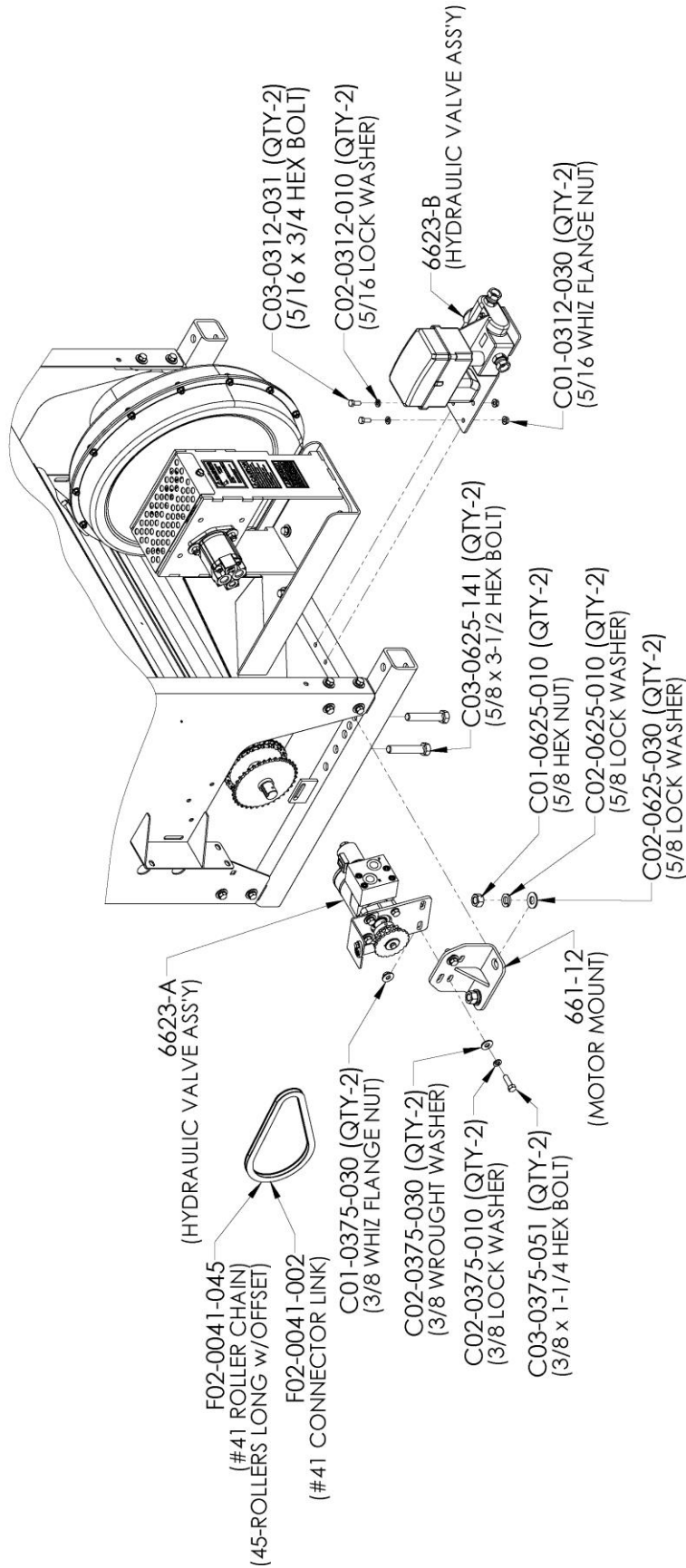
# Hydraulic Valve Assembly (6623-B)



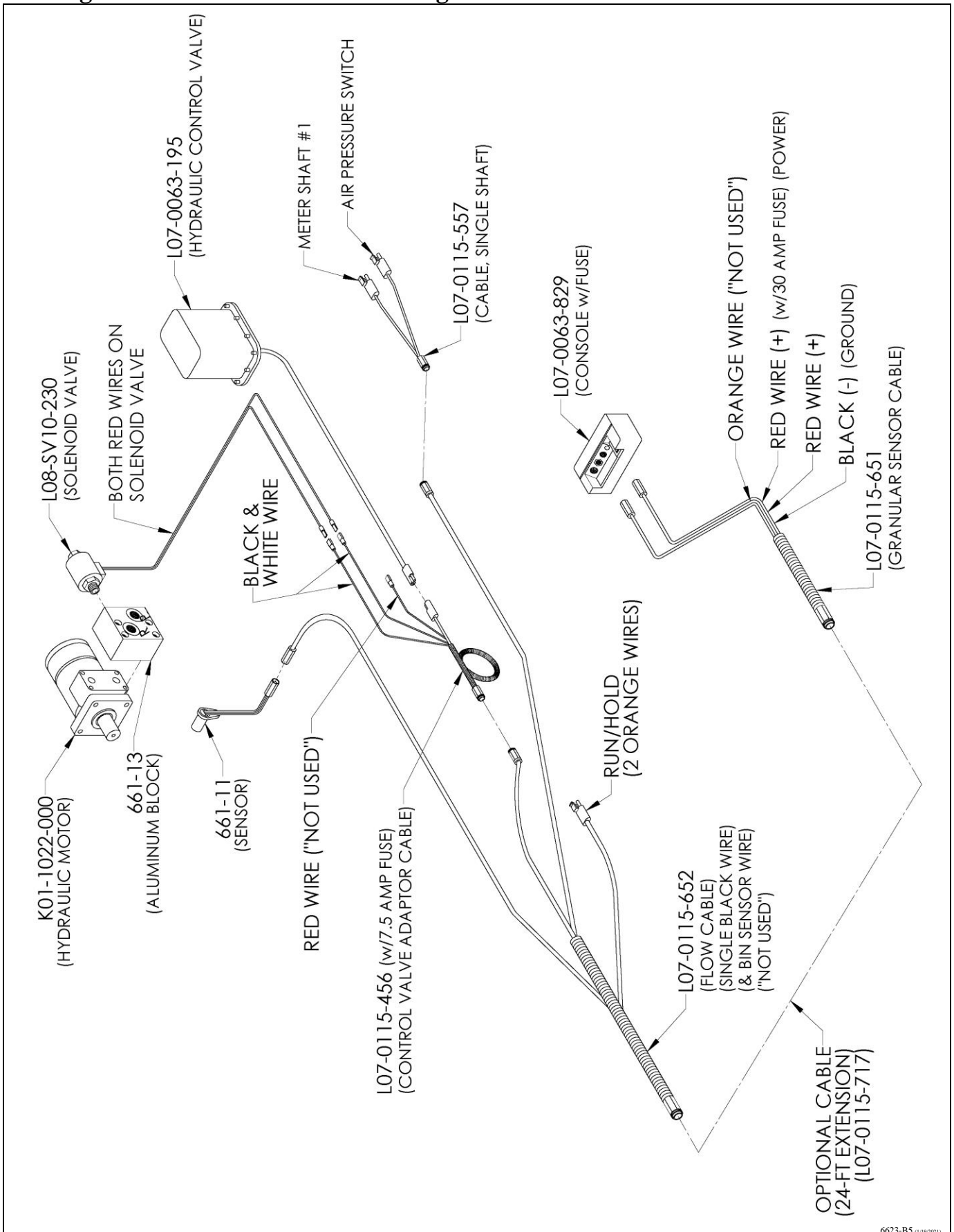
6623-B (1/12/2021)



# Hydraulic Drive Assembly

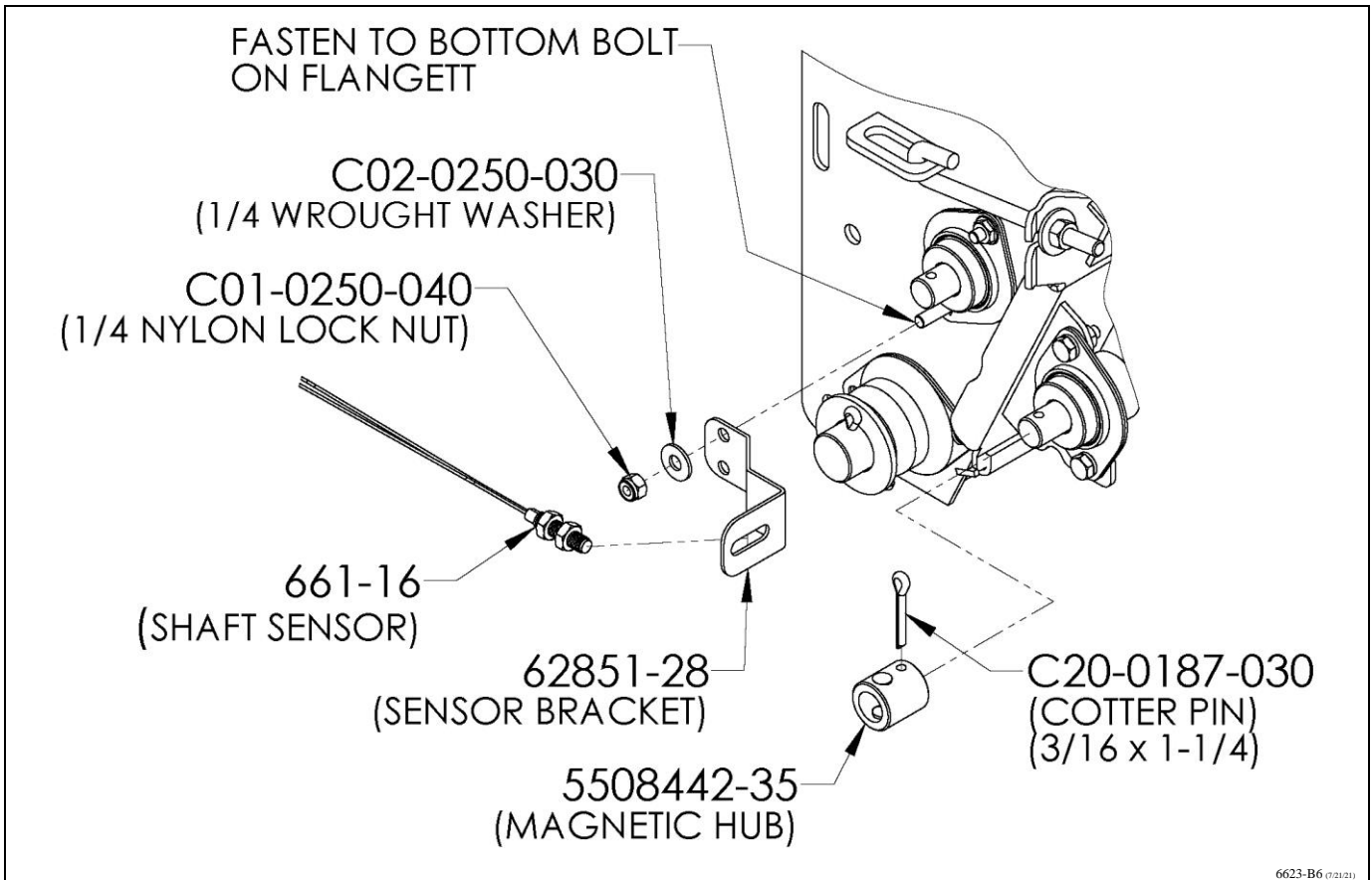


# Wiring Connections for Models w/ Single Shaft No Clutch

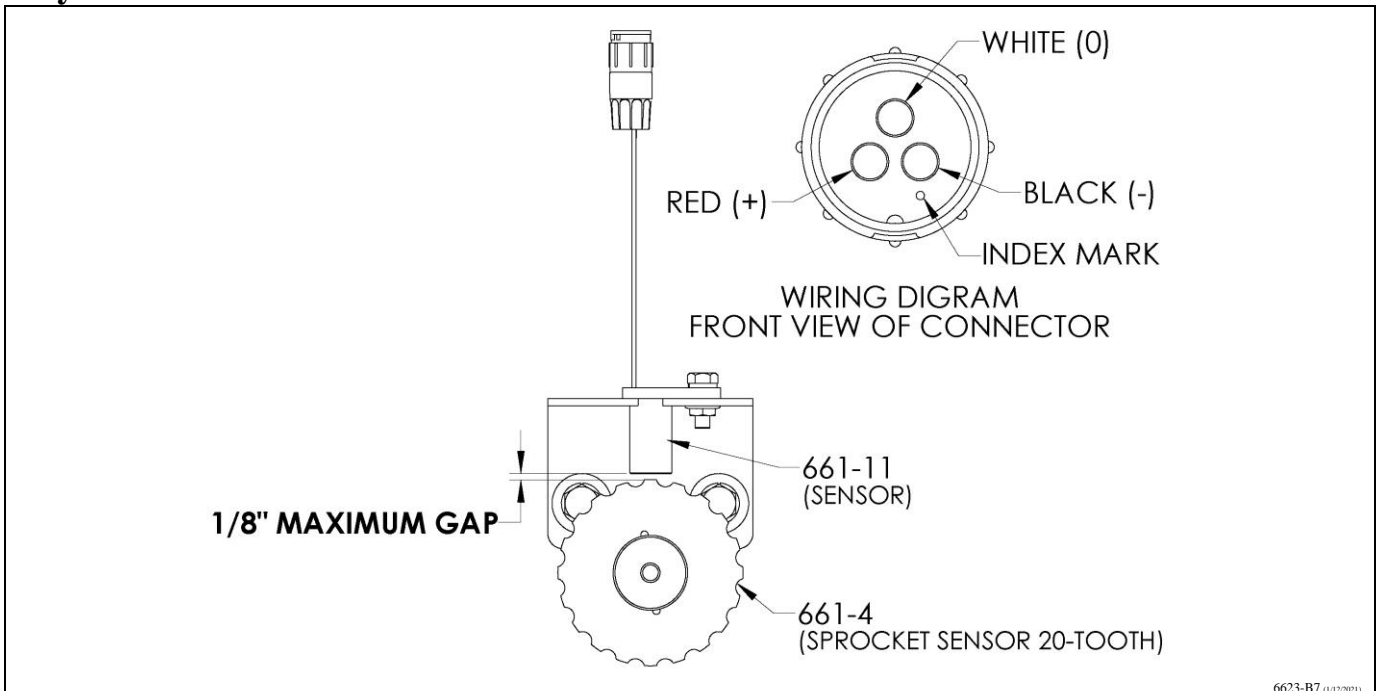


6623-B5 (1/19/2021)

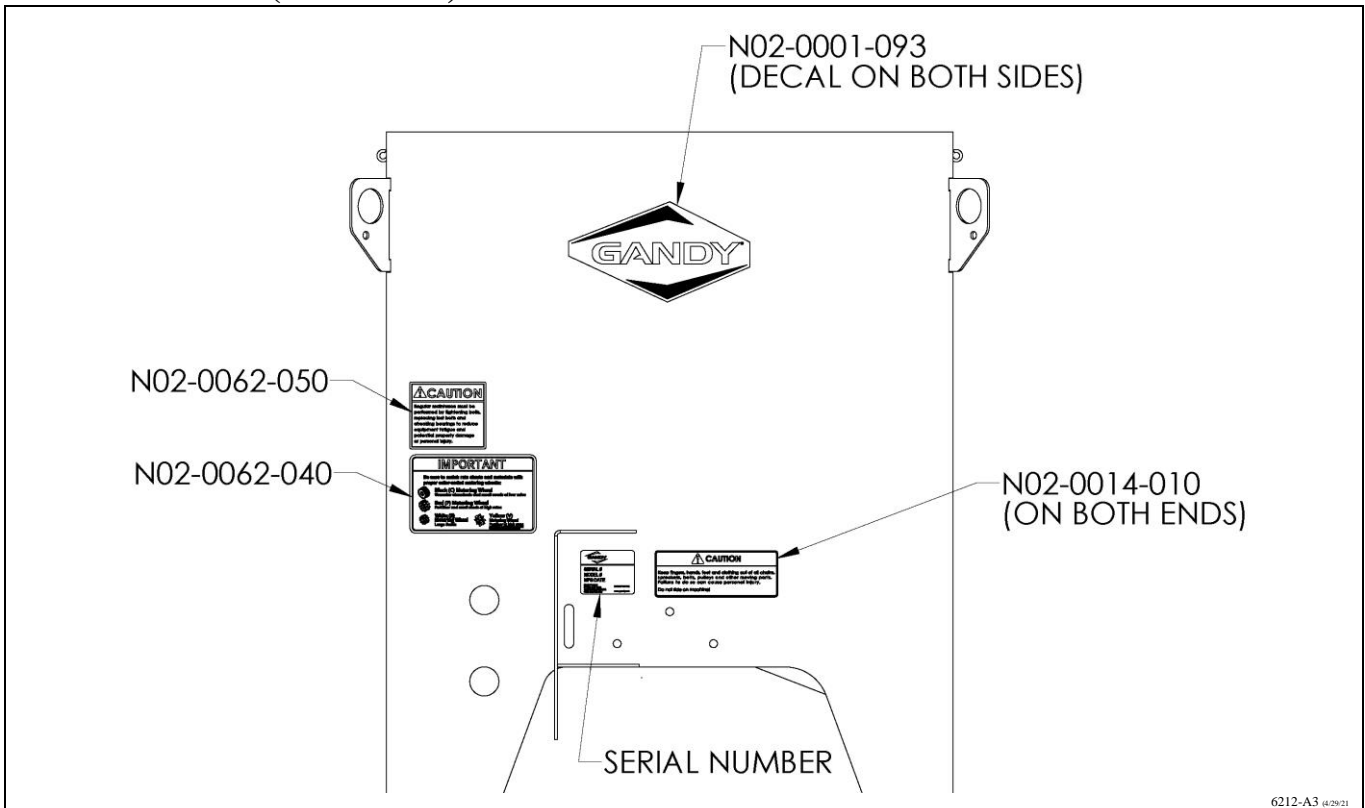
## Shaft Sensor



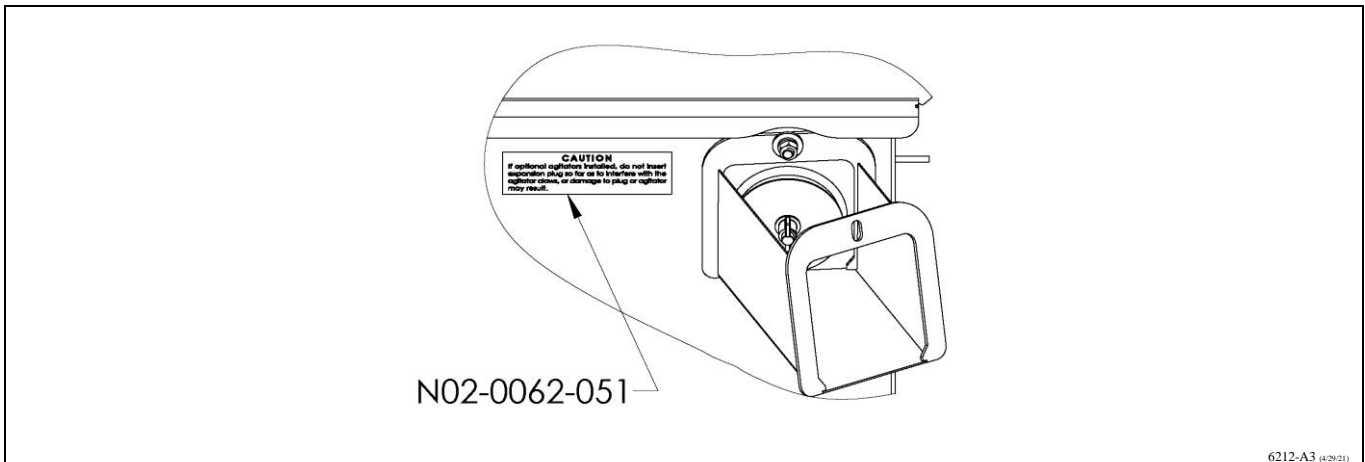
## Hydraulic Drive Sensor



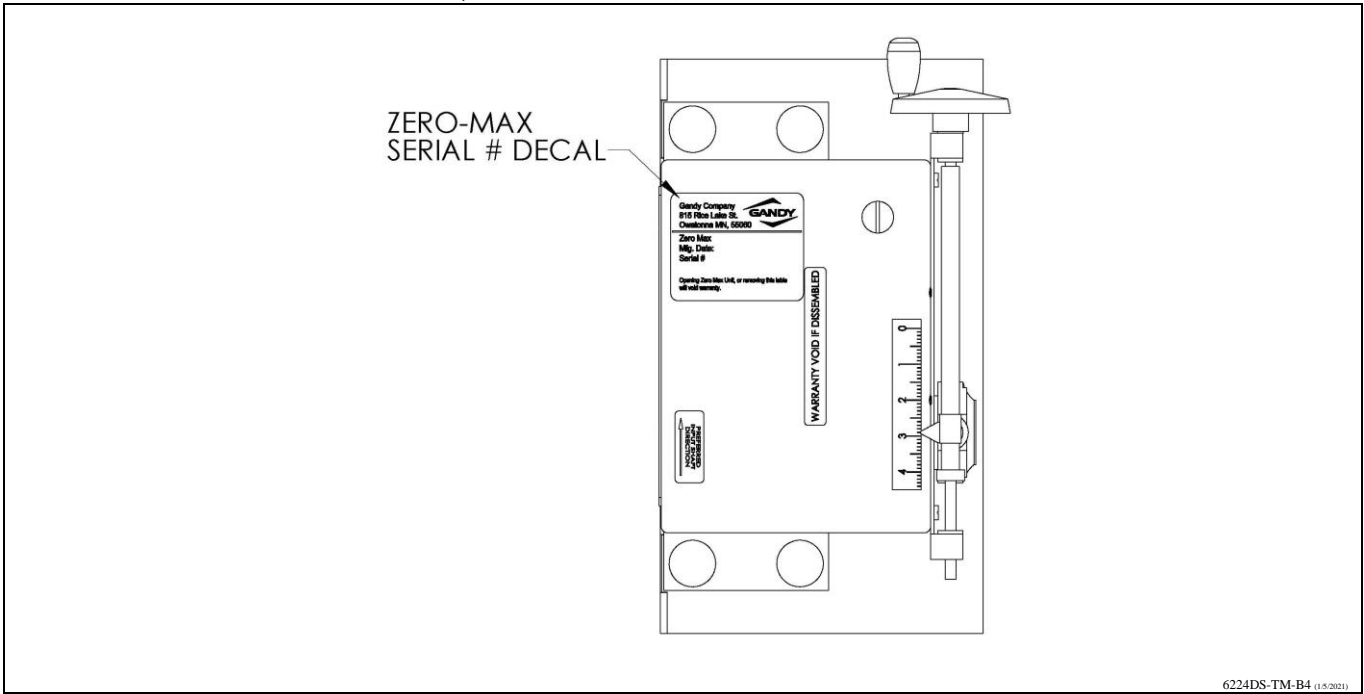
## Decal Location (Drive Side)



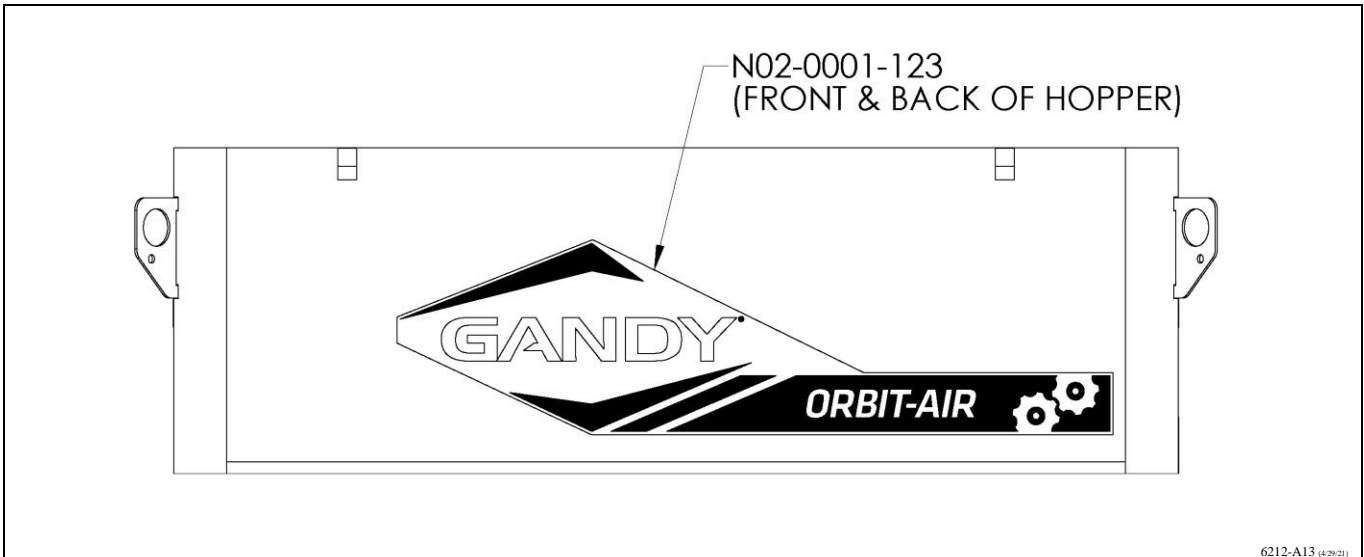
## Clean-Out Decal Location



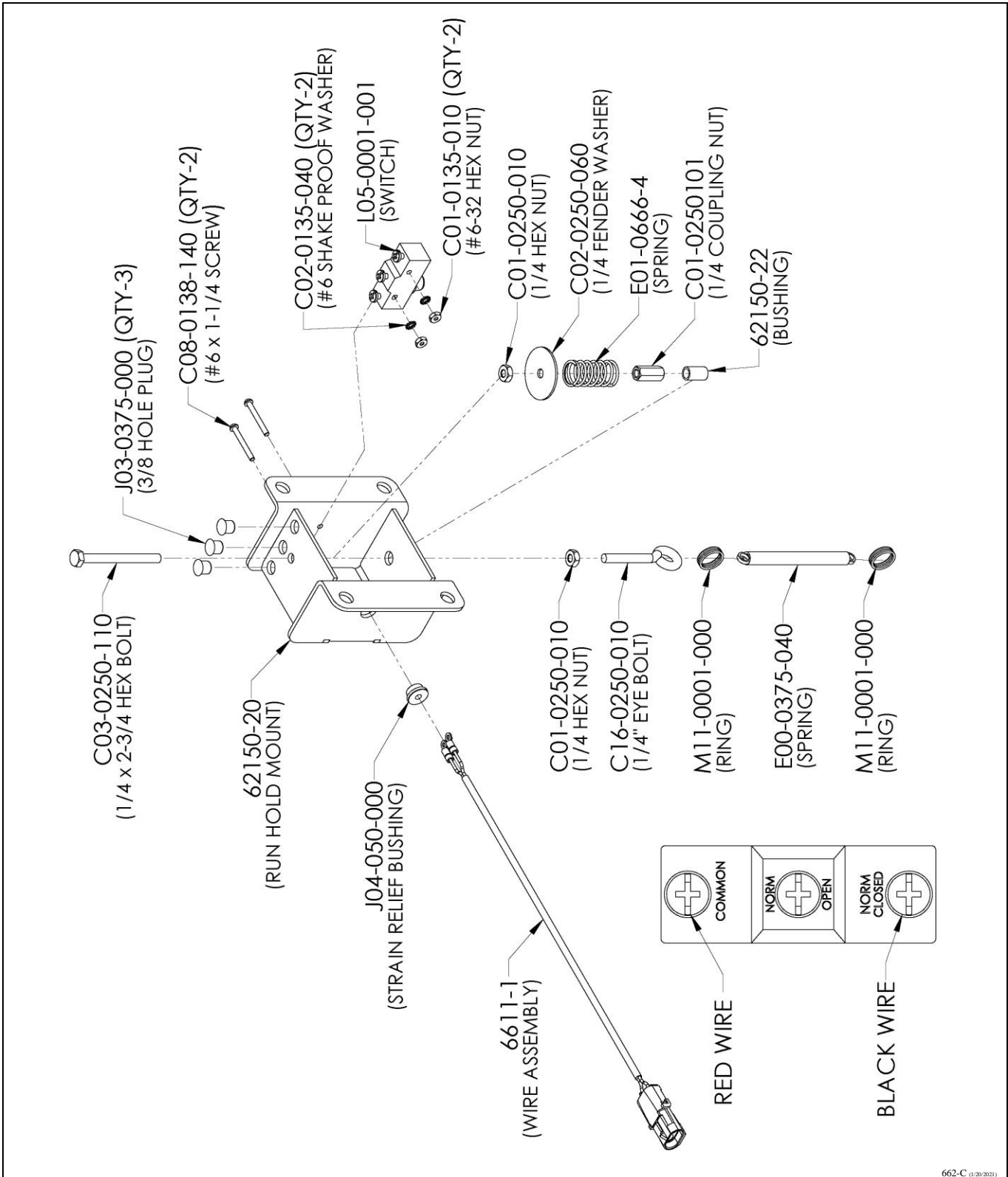
## Zero-Max Decal Locations (on Zero-Max)



## Front & Rear & End Decals



# Run Hold Switch

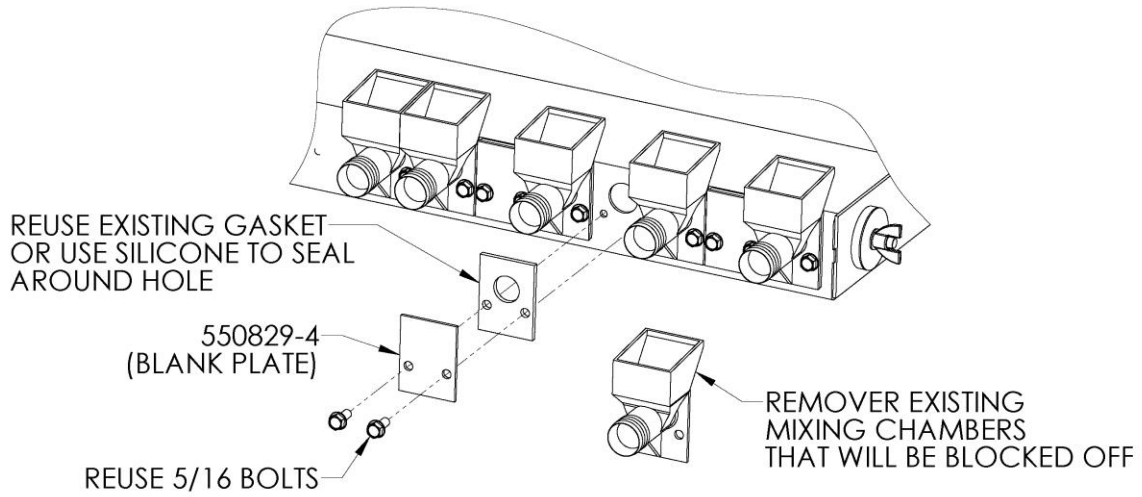


662-C (1/20/2021)



### Air Chamber Blank Plates:

Blank Plate (550829-4) is used to block off unused air chamber openings when not needed.

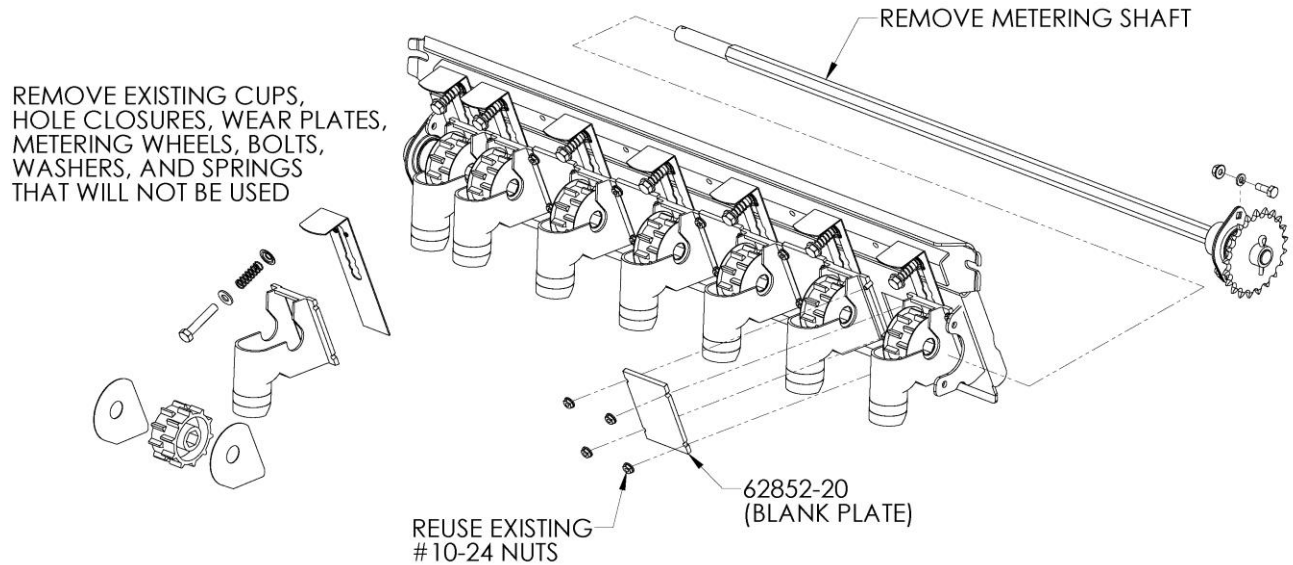


6223-A23 (1/20/2021)

### Metering Door Blank Plate:

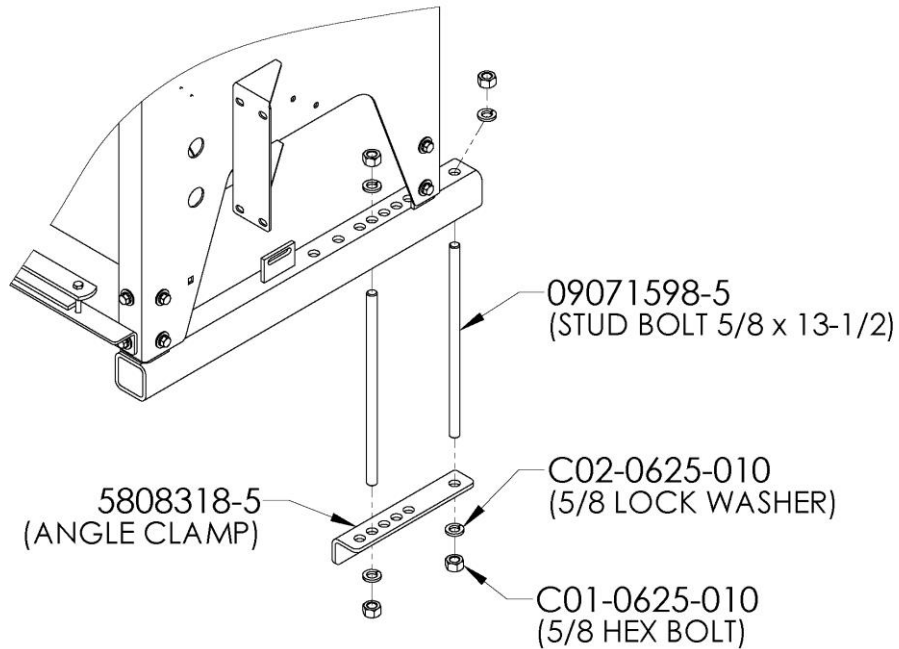
Blank Plate (62852-20) is used to block off unused metering door openings when not needed.

To remove shaft; First remove sensor hub from shaft, then unbolt bearing flange by sprocket on metering shaft and pull shaft out. Reassembly by reversing instructions.



6223-A24 (1/20/2021)

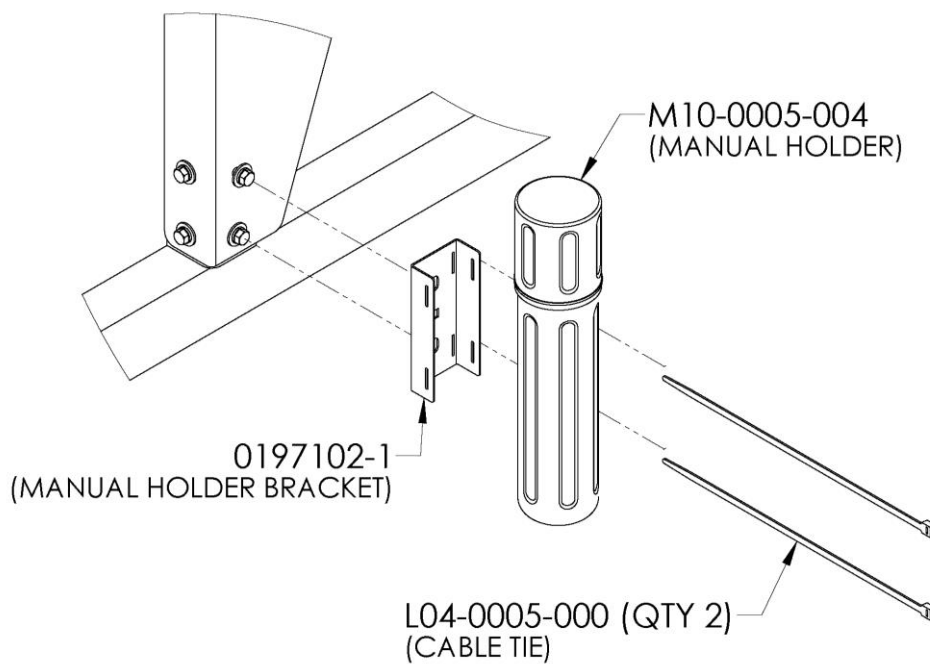
## Angle Clamp (optional mounting hardware & parts supplied with applicator)



6212-A8 6/3/21

## Manual Holder Bracket

Mount manual holder to corner of hopper or convergent location on implement.  
Store Operator's manual, Packing List & Rate Chart of convergent access.



HOLDER-1 (2/20/2021)