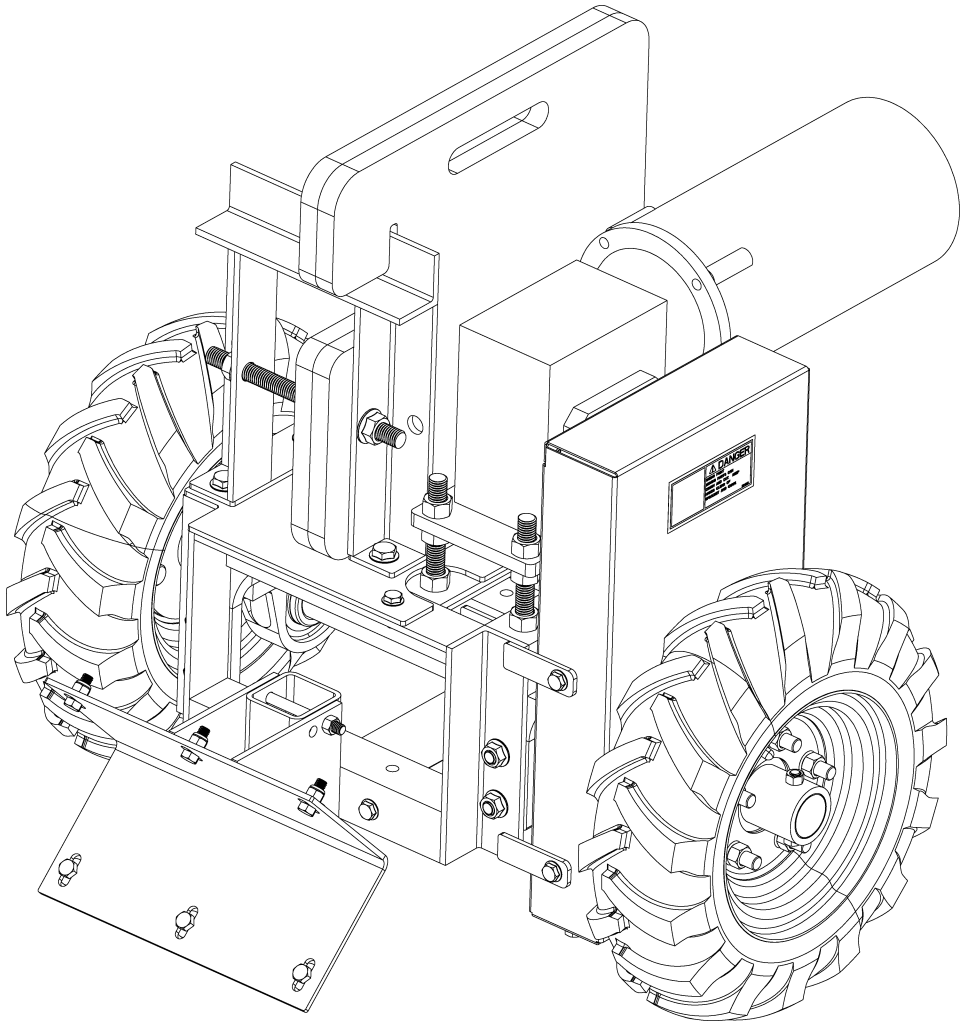

Sweep Tractor and Control Panel Assembly Instructions

Instruction Manual

PNEG-1597

Version: 3.**1**

Date: **12-21-20**

PNEG-1597

Personnel operating or working around this equipment should read this manual. This manual must be delivered with equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment. Any misuse of the equipment may void the warranty.

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General Information

1. We reserve the right to improve our product whenever possible and practical to do so. We reserve the right to change, improve and modify products at any time without obligation to make changes, improvements and modifications on equipment sold previously.
2. The Sweep Tractor has been designed and manufactured to give years of dependable service. The care and maintenance of this machine will affect the satisfaction and service obtained. By observing the instructions and suggestions we have recommended, the owner should receive competent service for many years. If additional information or assistance should be required, please contact the factory or your local dealer.
3. **Receiving Merchandise and Filing Claims**
    a. When receiving merchandise, it is important to check both the quantity of parts and their descriptions with the packing list enclosed within each package. All claims for freight damage or shortage must be made by the consignee within ten (10) days from the date of the occurrence of freight damage. The consignee should accept the shipment after noting the damage or loss.

For Claims Contact:

GSI Group
1004 E. Illinois St.
Assumption, IL. 62510
Phone: 1-217-226-4421

Safety Guidelines

Safety guidelines are general-to-specific safety rules that must be followed at all times. This manual is written to help you understand safe operating procedures and problems that can be encountered by the operator and other personnel when using this equipment. Read and save these instructions.

As owner or operator, you are responsible for understanding the requirements, hazards, and precautions that exist and to inform others as required. Unqualified persons must stay out of the work area at all times.

Alterations must not be made to the equipment. Alterations can produce dangerous situations resulting in SERIOUS INJURY or DEATH.

This equipment must be installed in accordance with the current installation codes and applicable regulations, which must be carefully followed in all cases. Authorities having jurisdiction must be consulted before installations are made.

When necessary, you must consider the installation location relative to electrical, fuel and water utilities.

Personnel operating or working around equipment must read this manual. This manual must be delivered with equipment to its owner. Failure to read this manual and its safety instructions is a misuse of the equipment.

ST-0001-4

Cautionary Symbols Definitions

Cautionary symbols appear in this manual and on product decals. The symbols alert the user of potential safety hazards, prohibited activities and mandatory actions. To help you recognize this information, we use the symbols that are defined below.

DANGER This symbol indicates an imminently hazardous situation which, if not avoided, **will result in serious injury or death.**

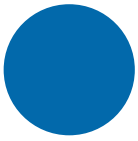
WARNING This symbol indicates a potentially hazardous situation which, if not avoided, **can result in serious injury or death.**

CAUTION This symbol indicates a potentially hazardous situation which, if not avoided, **can result in minor or moderate injury.**

NOTICE This symbol is used to address practices not related to personal injury.

This symbol indicates a general hazard.

This symbol indicates a prohibited activity.



This symbol indicates a mandatory action.

ST-0005-2

Safety Cautions

Use Personal Protective Equipment

- Use appropriate personal protective equipment:

Eye Protection

Respiratory Protection

Foot Protection

Hearing Protection

Head Protection

Fall Protection

Hand Protection

- Wear clothing appropriate to the job.
- Remove all jewelry.
- Tie long hair up and back.

ST-0004-1

Follow Safety Instructions

- Carefully read all safety messages in this manual and safety signs on your machine. Keep signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from the manufacturer.
- Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.
- If you do not understand any part of this manual or need assistance, contact your dealer.

ST-0002-1

Maintain Equipment and Work Area

- Understand service procedures before doing work. Keep area clean and dry.
- Never service equipment while it is operating. Keep hands, feet, and clothing away from moving parts.
- Keep your equipment in proper working condition. Replace worn or broken parts immediately.

ST-0003-1

Operate Motor Properly

- All electrical connections must be made in accordance with applicable local codes (National Electrical Code for the US, Canadian Electric Code, or EN60204 along with applicable European Directives for Europe). Make sure equipment and bins are properly grounded.
- Lock-out power before resetting motor overloads.
- Do not repetitively stop and start the drive in order to free a plugged condition. Jogging the drive in this manner can damage the equipment and drive components.

ST-0009-3

Rotating Auger Hazard

- Keep clear of rotating augers and moving parts.
- Do not remove or modify guards or covers.
- Lock-out power source before making adjustments, cleaning, or maintaining equipment.
- Failure to follow these precautions will result in serious injury or death.

ST-0037-1

Stay Clear of Hoisted Equipment

- Always use proper lifting or hoisting equipment when assembling or disassembling equipment.
- Do not walk or stand under hoisted equipment.
- Always use sturdy and stable supports when needed for installation. Not following these safety precautions creates the risk of falling equipment, which can crush personnel and cause serious injury or death.

ST-0047-1

Stay Clear of Rotating Parts

- Do not enter the bin while the equipment is in operation.
- Entanglement in rotating augers will cause serious injury or death.
- Keep all guards and covers in place at all times.
- Lock-out power source before making adjustments, cleaning, or maintaining equipment.

ST-0008-2

Use Unload Equipment Properly

- Do not operate this equipment alone. Make sure someone nearby is aware of the proper shut down sequence in the event of an emergency.
- Do not allow any person intoxicated or under the influence of drugs to operate this equipment. All operators must be adequately rested and prepared to perform all functions of operating the equipment.
- Do not start equipment until all persons are clear of the work area and safety guards are in place.
- Do not allow anyone inside a bin, truck, or wagon which is being unloaded by an auger. Flowing grain can trap and suffocate in seconds.
- Use ample overhead lighting after sunset to light the work area.
- Always use caution to not hit the auger when positioning the load.
- Do not leave equipment operating while unattended.
- Be aware of pinch points, which can trap or catch objects and cause injury.
- Be sure all equipment is locked in position before operating.
- Always lock out all power sources to the equipment when unloading is finished.

ST-0051-1

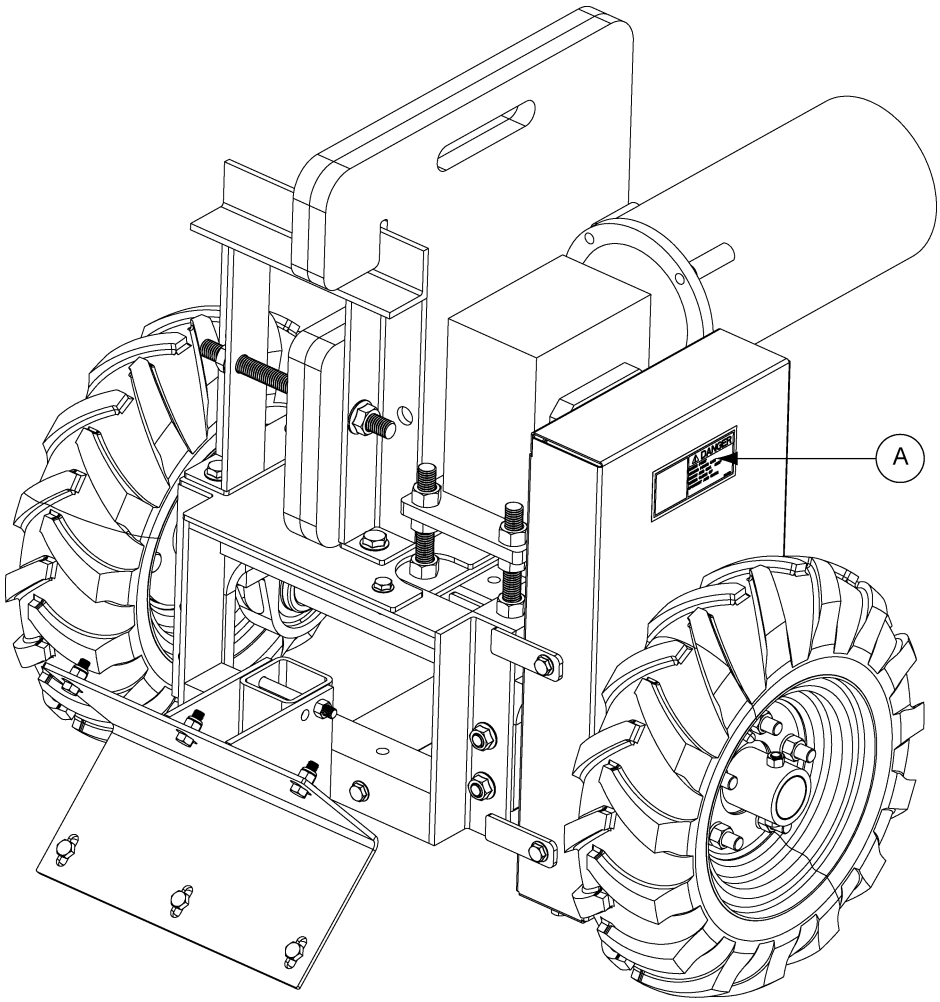
Safety Sign-Off Sheet

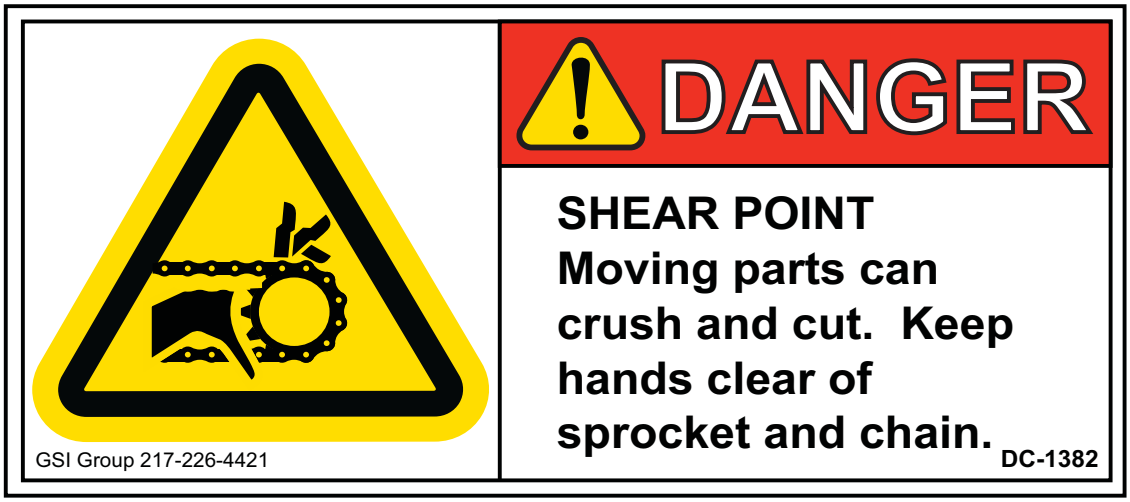
Below is a sign-off sheet that can be used to verify that all personnel have read and understood the safety instructions. This sign-off sheet is provided for your convenience and personal record keeping.

Date	*Employee Name*	*Supervisor Name*

ST-0007

Check components shown below to ensure that the safety decals are in place and in good condition. If a decal cannot be easily read for any reason or has been painted over, replace it immediately. Contact your dealer or the manufacturer to order a replacement decal free of charge.





DC-1382

A

Decals located on outside of chain guards.

Sweep Tractor Assembly

1. Place the tractor frame (A) on plain flat ground.
2. Bolt each pillow block bearing (E) to a bearing mount bracket (D) using two (2) 1/2"-13 x 2" hex head cap screws (G), two (2) flat washers (F) and serrated flanged nuts (C).
3. Bolt each bearing mount bracket (D) to the tractor frame (A) using two (2) 1/2"-13 x 1-1/4" flange bolts (B) and serrated flanged nuts (C). *(See Figure 4A.)*

   NOTE: *Lock collar flanges for each pillow block bearing (E) must be to the inside of frame.*

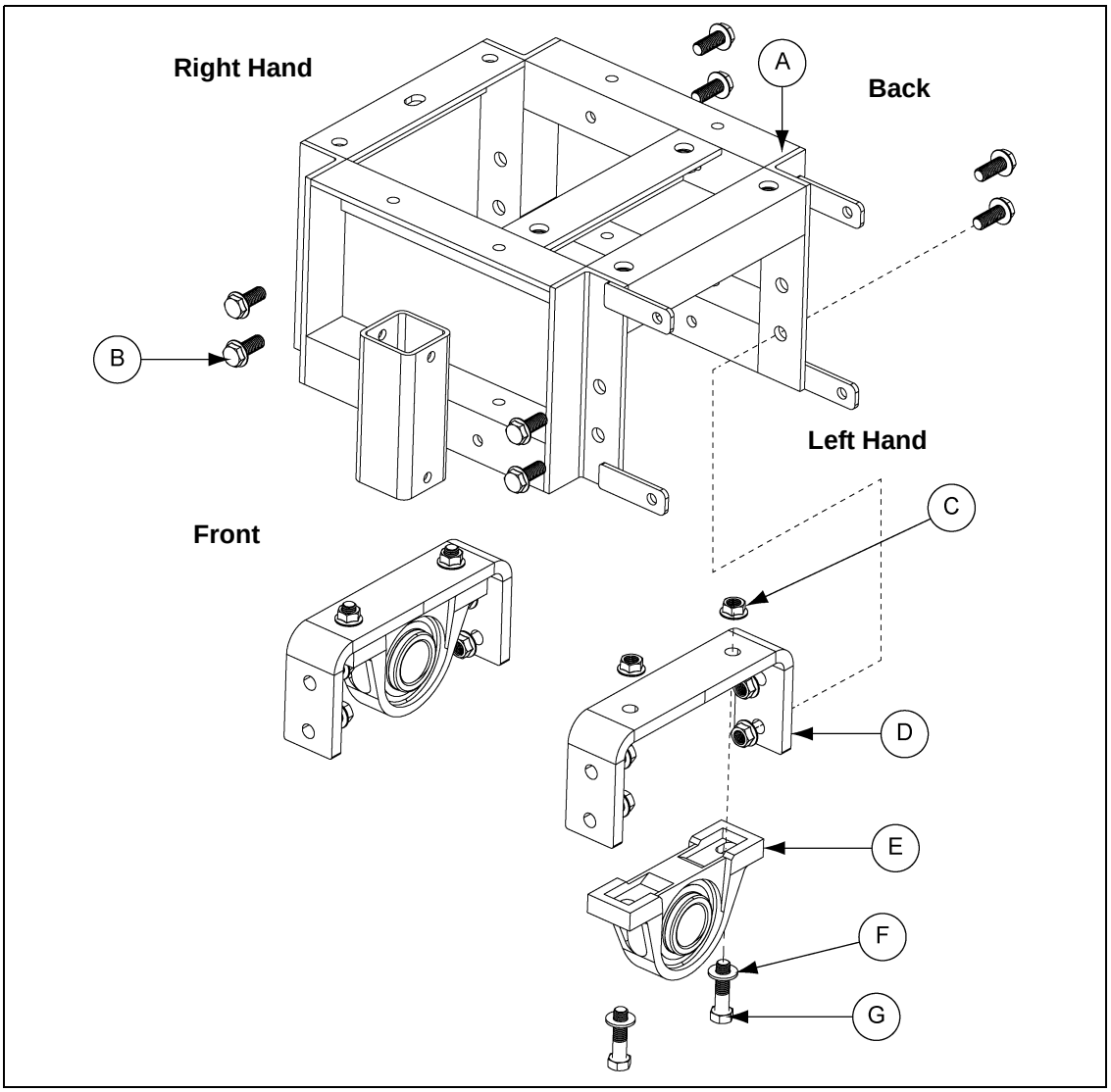


Figure 4A

Ref #	Description
A	Tractor Frame
B	1/2" x 1-1/4" Flange Bolt
C	1/2" Serrated Flange Nut
D	Bearing Mount Bracket

Ref #	Description
E	Pillow Block Bearing
F	1/2" Flat Washer
G	1/2" x 2" HHCS Bolt

4. Slide the tractor axle through the left side of the pillow block bearing and the lock collars so as to pass through the right side of the pillow block bearing. Make sure the keyway of the shaft is on the left hand side of the tractor.

   NOTE: *Do not tighten the pillow block bearing lock collars yet.*

5. Assemble the 40 tooth sprocket (I) to the tractor axle using a 3/8" square x 1-3/4" key (H). Temporarily tighten the sprocket to the key and the shaft. Final adjustment of the sprocket placement will occur after the chain is installed.

6. Mount the wheel hubs to the tractor axle using 3/8"-16 x 2-1/2" hex head cap screws (J) and stover lock nuts (K). *(See Figure 4B.)*

   NOTE: *Lock collars on inside of frame.*

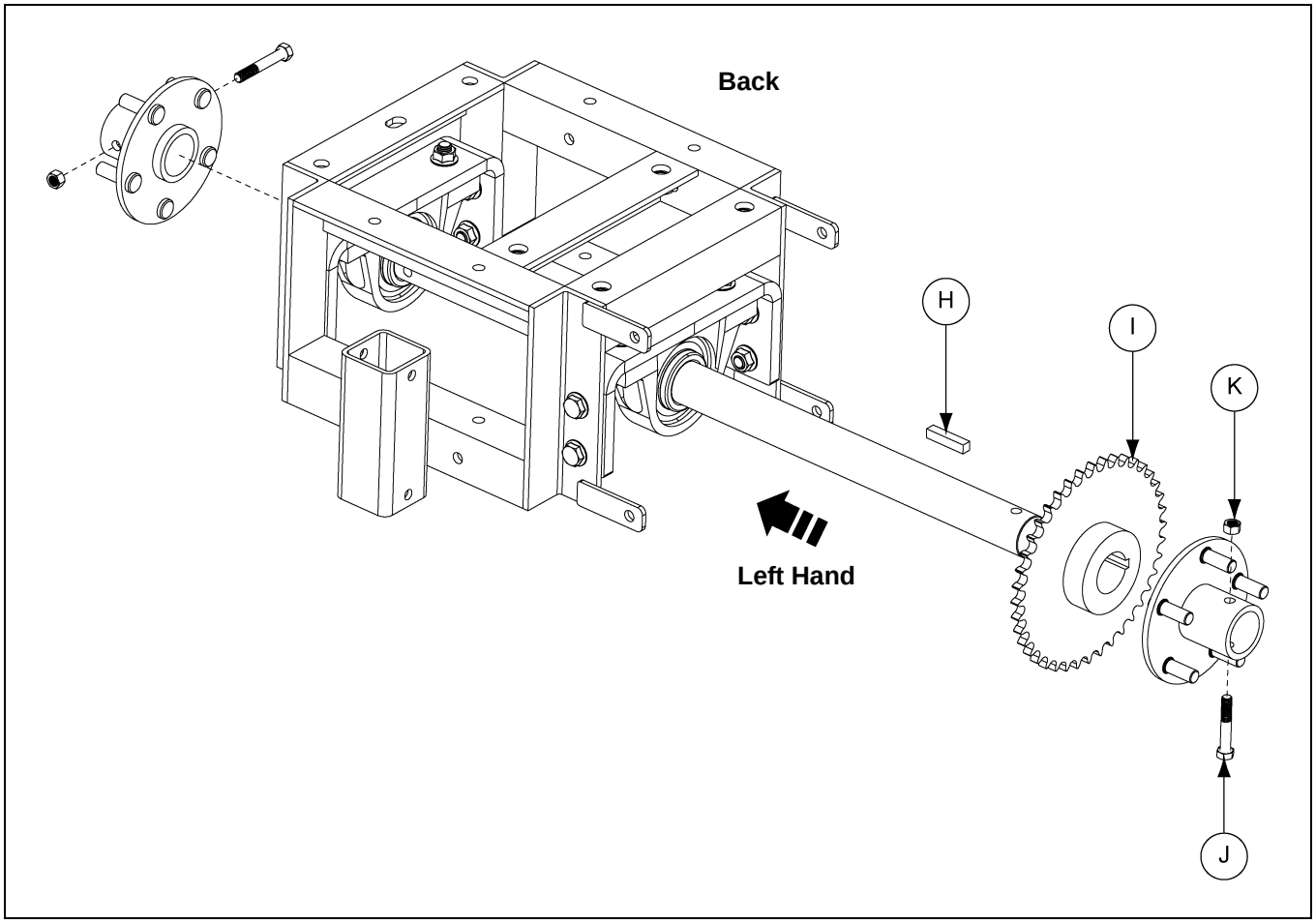


Figure 4B

Ref #	Description
H	3/8" x 1-3/4" Square Key
I	40 Tooth Sprocket
J	3/8" x 2-1/2" HHCS Bolt
K	3/8" Stover Nut

7. Assemble the tire and wheel assemblies securely to the wheel hubs using five (5) 1/2" flat washers (F) and fine thread hex nut (O).

   NOTE: *Remove the screws or nails that are present in the tires to contain the foam in the tires when they are made. The treads of the tires should be in the forward direction. Figure 4C shows the proper orientation of the tire and wheel assemblies.*

8. Assemble the strut bracket (M) to the tractor frame using four (4) 3/8"-16 x 1" flange bolts (L) and serrated flange nuts (N). *(See Figure 4C.)*

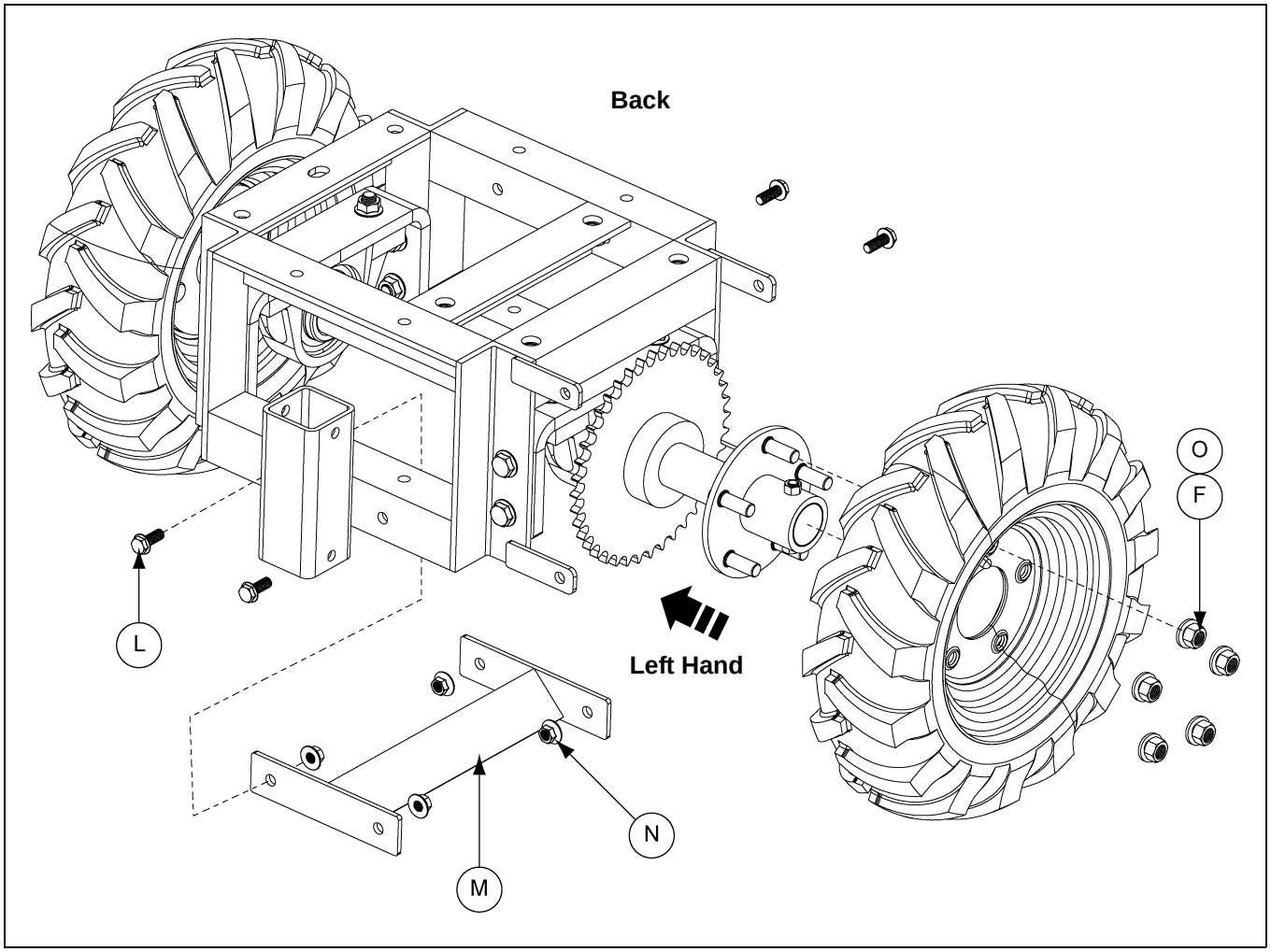


Figure 4C

Ref #	Description
F	1/2" Flat Washer
L	3/8" x 1" Flange Bolt
M	Strut Bracket
N	3/8" Serrated Flange Nut
O	1/2" Fine Thread Hex Nut

9. Bolt the shield bracket to the front of the tractor frame using two (2) 3/8"-16 x 3-1/2" hex head cap screws (K), two (2) flat washers (R) (only on the bottom slot of the bracket) and hex nuts (Q).
10. Attach the weight plate (P) to the tractor frame using two (2) 3/8"-16 x 1" flange bolts (L) and serrated flange nuts (N). *(See Figure 4D.)*

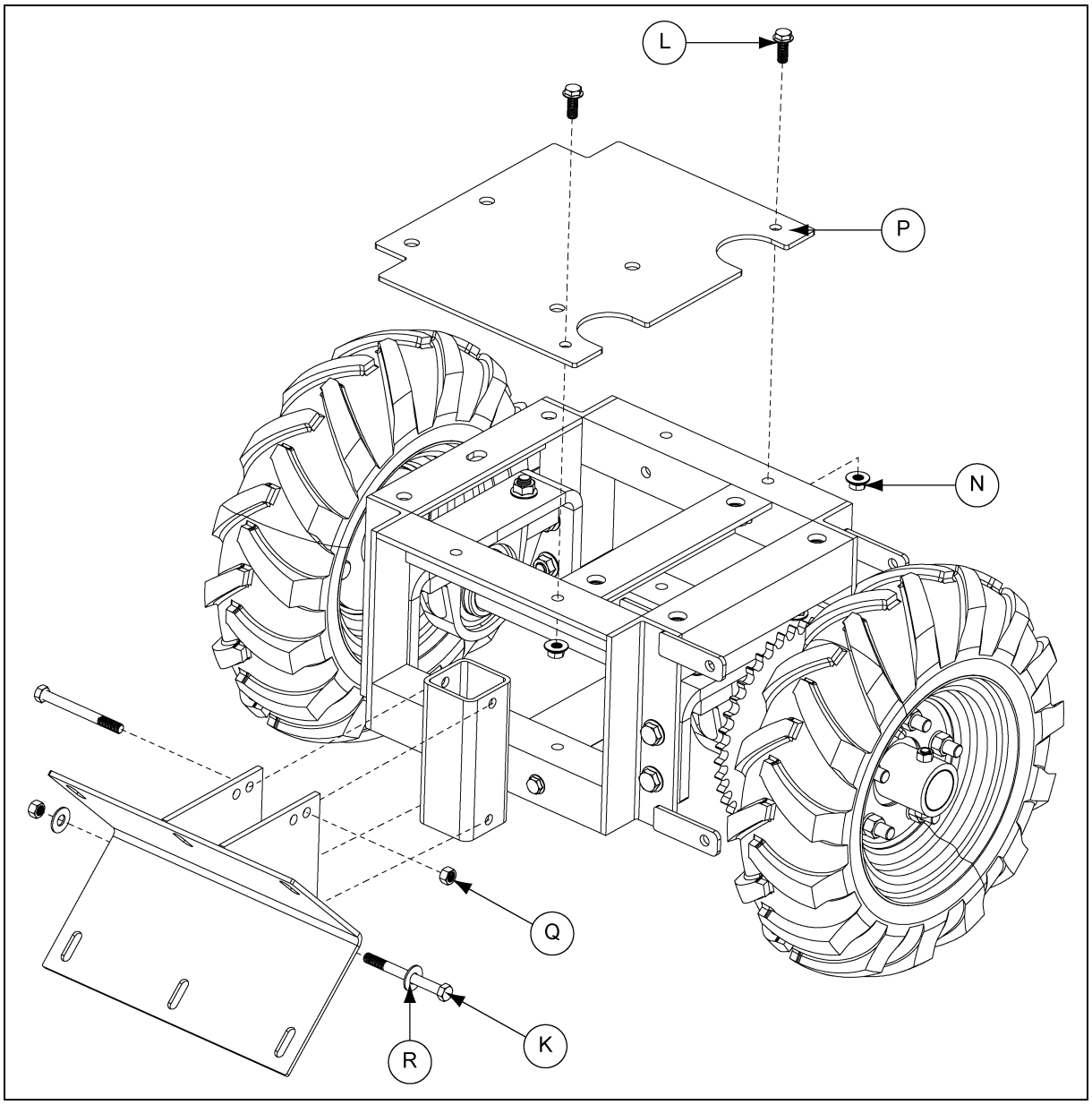


Figure 4D

Ref #	Description
K	3/8" x 3-1/2" HHCS Bolt
L	3/8" x 1" Flange Bolt
N	3/8" Serrated Flange Nut
P	Weight Plate
Q	3/8" Hex Nut
R	3/8" Flat Washer

11. Bolt the four (4) 5/8"-11 x 6" threaded rods (S) to the tractor frame using one 5/8"-11 hex nut (T) for each rod. *(See Figure 4E.)*

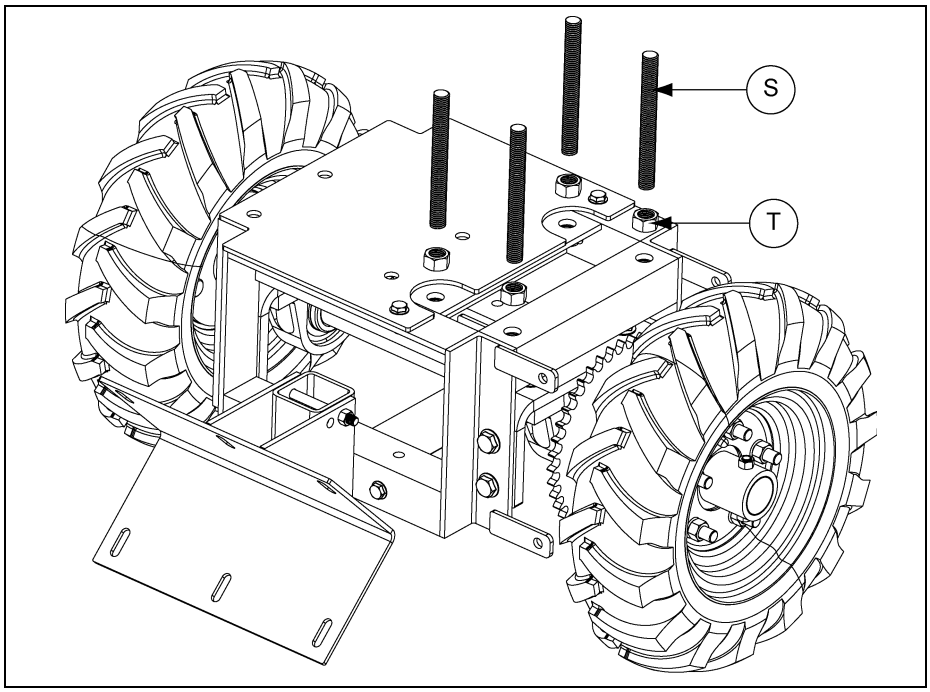


Figure 4E

12. Place one 5/8"-11 hex nut (T) onto each rod in a temporary position. These will hold the motor plate in place. *(See Figure 4F.)*

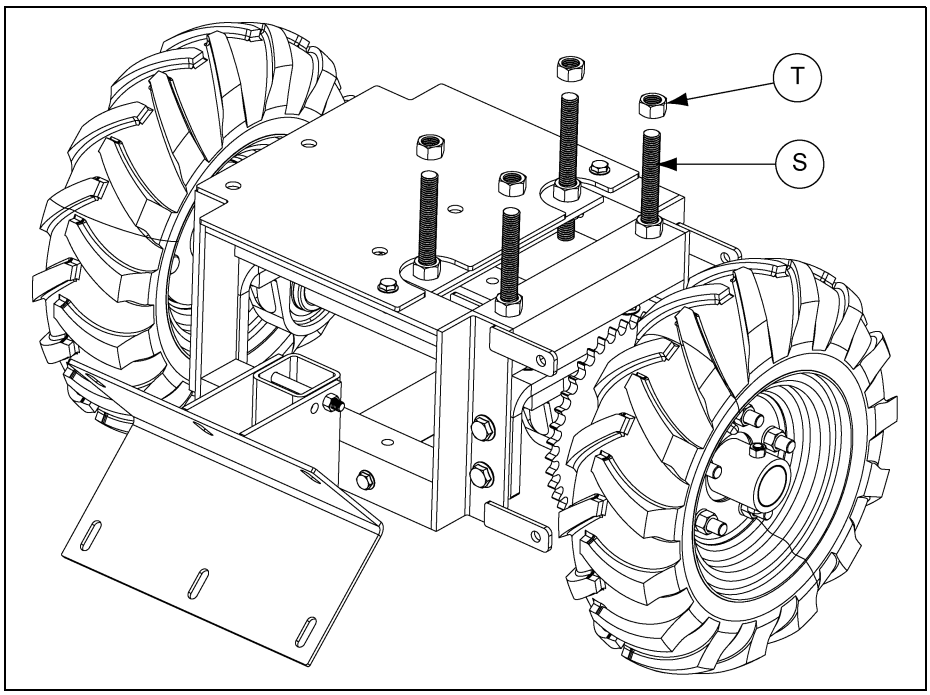


Figure 4F

Ref #	Description
S	5/8" x 6" Threaded Rod
T	5/8" Hex Nut

13. Mount the drive assembly to the gearbox plate using four (4) 3/8"-16 x 1" flange bolts (L). Place the gearbox plate and motor assembly (U) over the threaded rods (S), resting on the hex nuts. *(See Figure 4G.)*

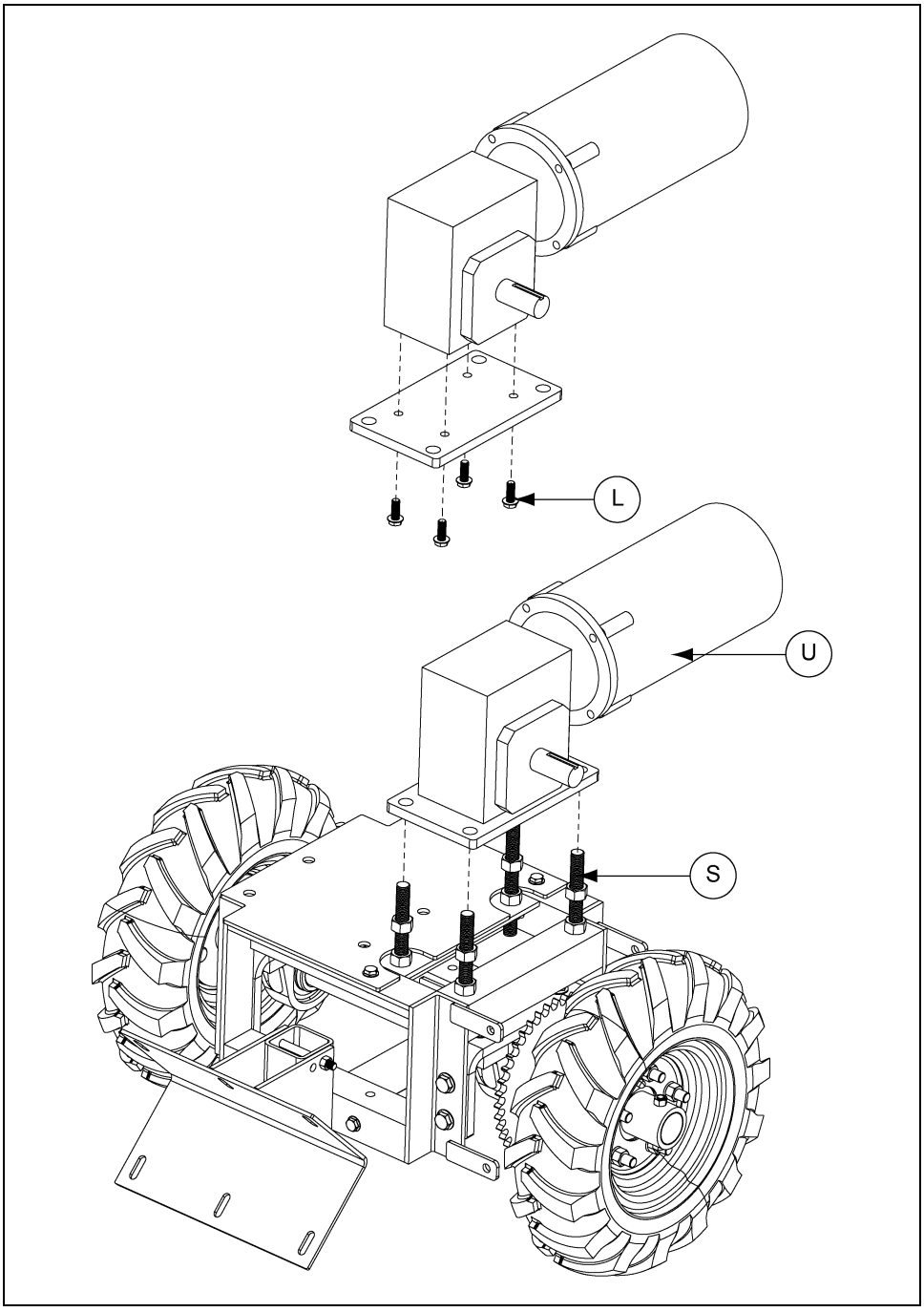


Figure 4G

Ref #	Description
L	3/8" x 1" Flange Bolt
S	5/8" x 6" Threaded Rod
U	Gear Motor Assembly

14. Mount the gearbox plate and motor assembly to the 5/8"-11 x 6" threaded rod installed to the tractor frame using four (4) 5/8"-11 hex nuts (T).

15. Attach the weight stand (V) to the weight plate and tractor frame with four (4) 1/2"-13 x 1-1/4" flange bolts (B) and serrated flange nuts (C). *(See Figure 4H.)*

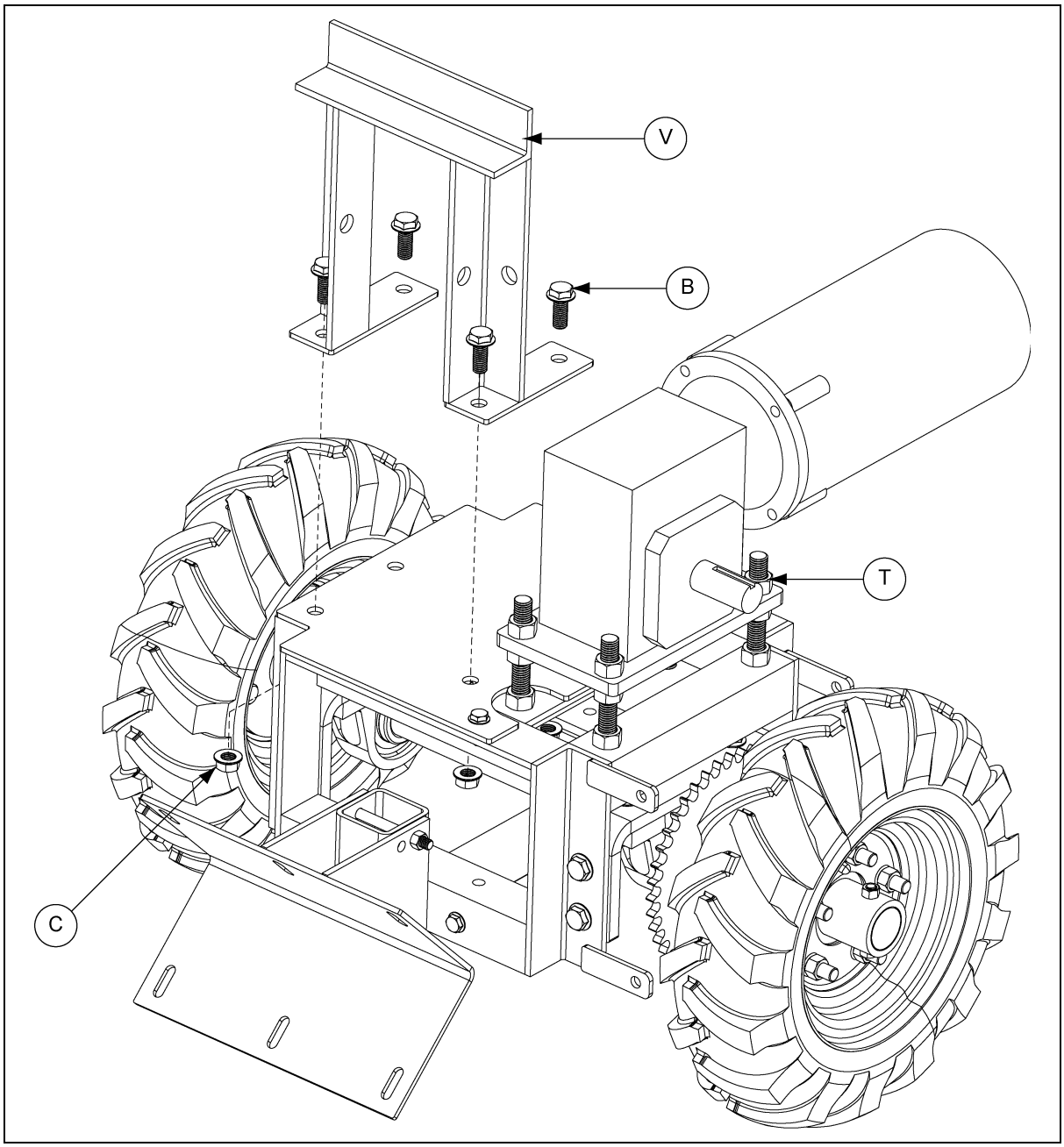


Figure 4H

Ref #	Description
B	1/2" x 1-1/4" Flange Bolt
C	1/2" Serrated Flange Nut
T	5/8" Hex Nut
V	Weight Stand

16. Assemble the 13 tooth sprocket (X) to the motor shaft using a 1/4" square x 1" key (W).
17. Install the roller chain around both sprockets. Adjust the position each sprocket or the tractor axle (if necessary) to correctly align the chain.
18. Tighten all the sprocket set screws.
19. Tension the roller chain (Y) as required by adjusting the nuts on the 5/8"-11 x 6" threaded rods. *(See Figure 4I.)*

NOTE: *Tighten both pillow block bearing lock collars at this time.*

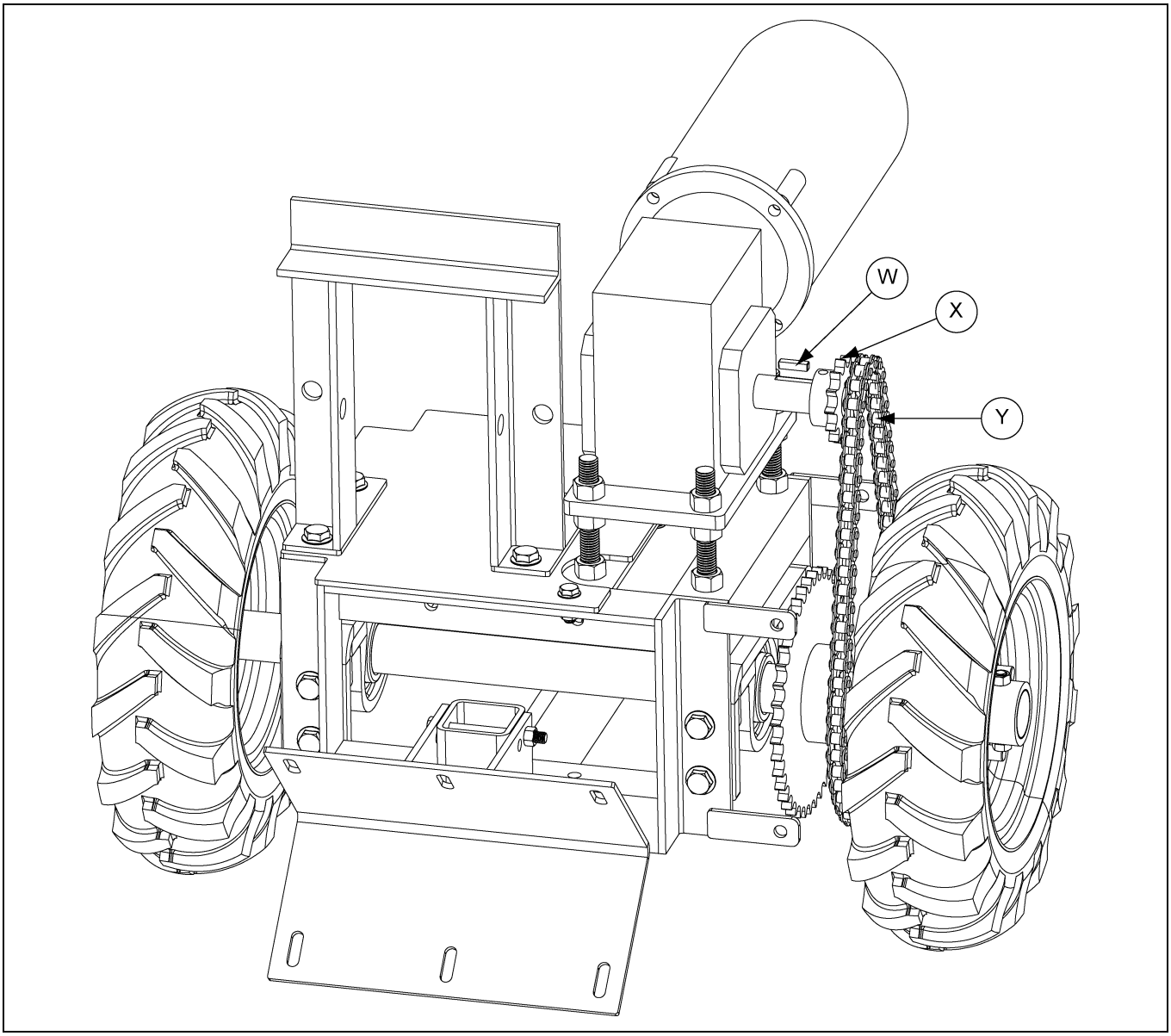


Figure 4I

Ref #	Description
W	1/4" x 1" Square Key
X	13 Tooth Sprocket
Y	Roller Chain

20. Install the top chain guard assembly (Z) to the tractor frame using four (4) 3/8"-16 x 1" flange bolts (L). Slide the bottom chain guard assembly (AA) through the slot on the top chain guard and secure it with a 3/8"-16 x 3/4" flange bolt (AB). *(See Figure 4J.)*

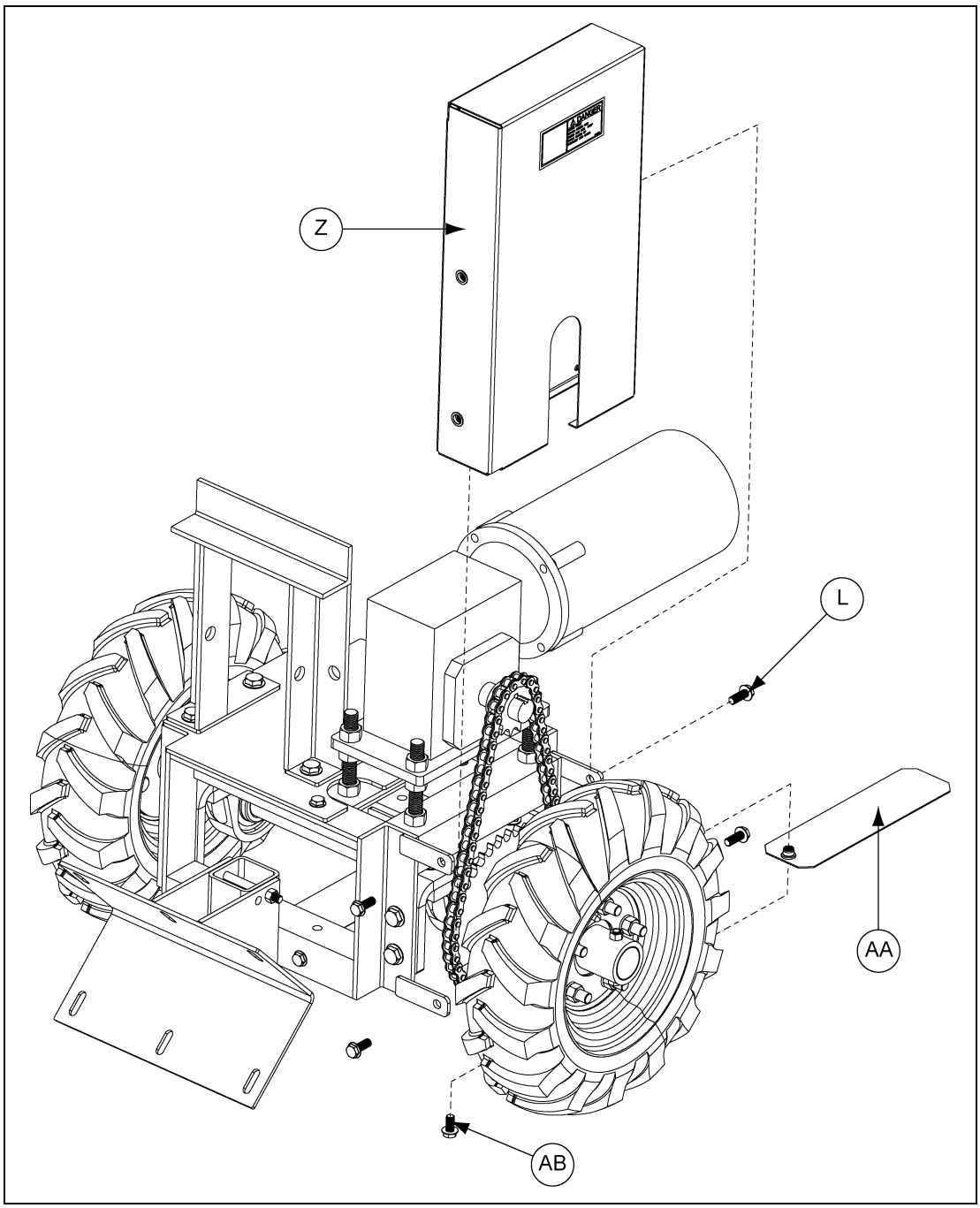


Figure 4J

Ref #	Description
L	3/8" x 1" Flange Bolt
Z	Chain Guard Top Assembly
AA	Chain Guard Bottom Assembly
AB	3/8" x 3/4" Flange Bolt

21. Mount the weights (AC) to the weight stand using one 5/8"-11 x 8-1/2" threaded rod (AD) and three (3) flange nuts (AF) and one flat washer (AE). *(See Figure 4K.)*

NOTE: *Install the weights against the left hand of the weight stand so the weight is in the middle of the tractor assembly. The weight stand can be reversed so that the weights hang over the front of the frame, if necessary. Adjust the weights to the inside of the frame to center the weight on the frame when the weight stand is reversed as described above.*

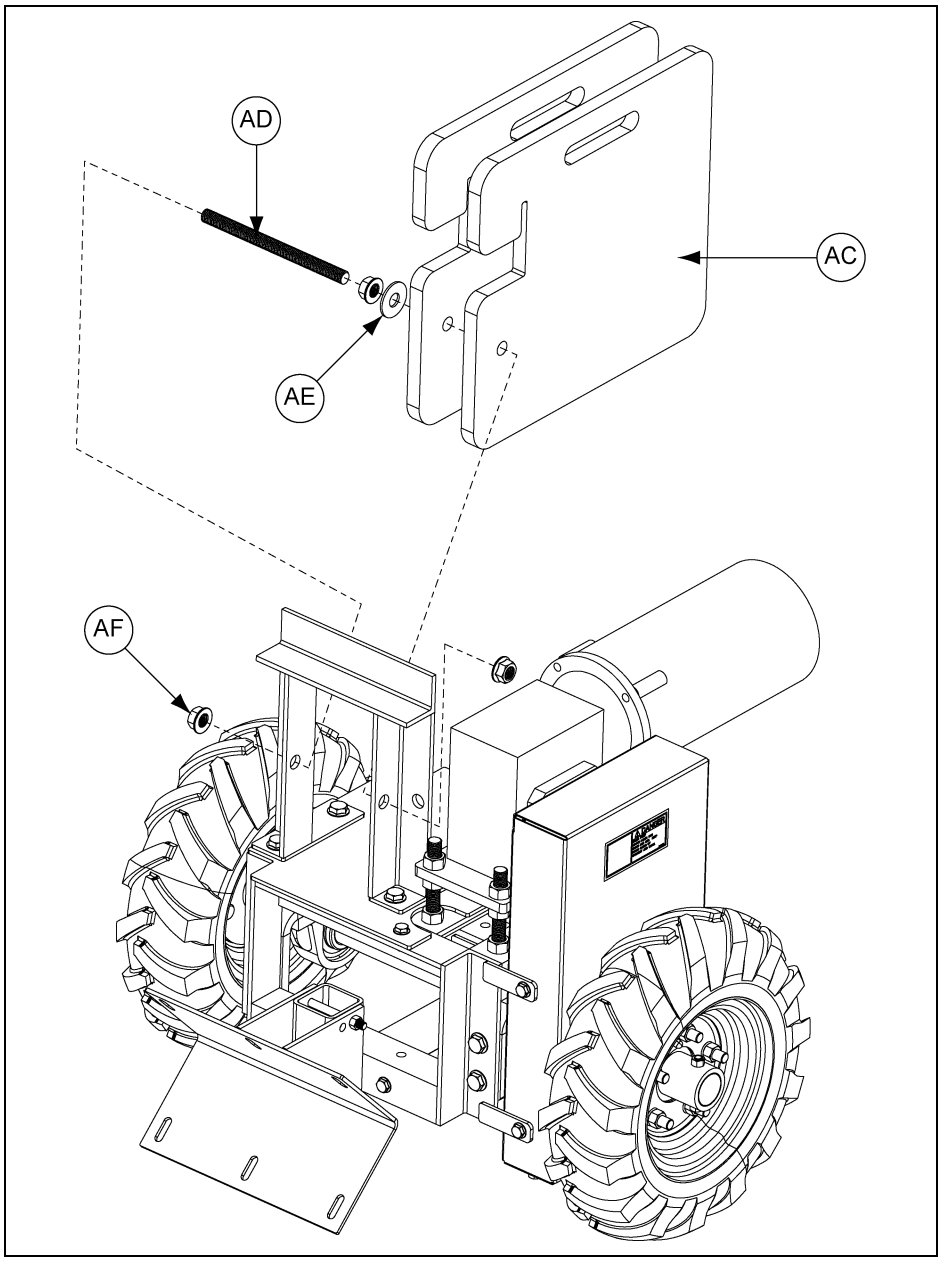


Figure 4K

Ref #	Description
AC	50 Lbs. Tractor Weight
AD	5/8" x 8-1/2" Threaded Rod
AE	5/8" Flat Washer
AF	5/8" Serrated Flange Nut

End Wheel Assembly

NOTE: *If installing sweep tractor to an existing sweep, the current end wheel components must be removed.*

1. Connect the stub shaft (E) into the sweep flight (F) using a 5/8"-11 x 4" hex head cap screw and 5/8" stover nut.
2. Install the bearing stand assembly (D) onto the stub shaft (E) and bolt it to the sweep shield using two (2) 3/8" x 3" carriage bolts, flat washers and nylock nuts.
3. Install the end wheel (B) and collar (C) onto the end of the stub shaft (E). Pin the collar in place with a 1/2" x 3-1/2" hex head cap screw and prevailing torque lock nut. *(See Figure 4L.)*

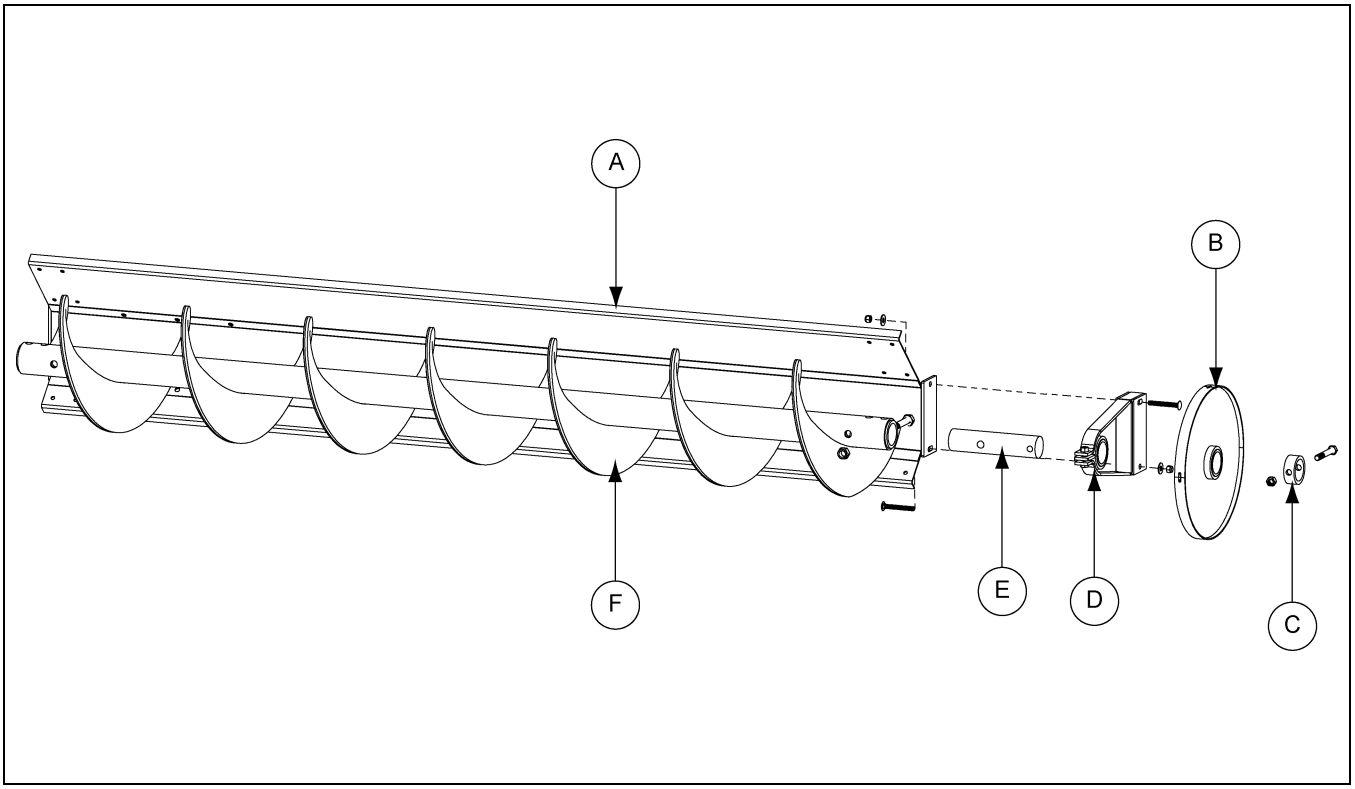


Figure 4L *End Wheel Assembly*

Ref #	Description
A	Sweep Back Shield
B	End Wheel
C	Collar
D	Bearing Stand Assembly
E	Stub Shaft
F	Sweep Flight

Sweep Tractor to Shield Assembly

1. Position sweep tractor against the sweep shield approximately 3' from the end wheel.
2. Use the bracket on the sweep tractor to mark the location where the holes need to be drilled into the sweep shield.
3. The bolts that attach the sweep bracket to the tractor frame may need to be adjusted so that height and angle of the sweep back shield and the shield bracket are matched.
4. After marking the hole locations, drill six (6) 7/16" holes and attach the sweep tractor to the back shield (B) using six (6) 3/8" x 1" hex head cap screws, flat washers and nylock nuts.
5. Install electric wiring for motor and controls. *(See Figure 4M.)*

CAUTION

All electrical wiring shall be installed by a qualified electrician and must meet the standards set by the National Electric Code and all local and state codes.

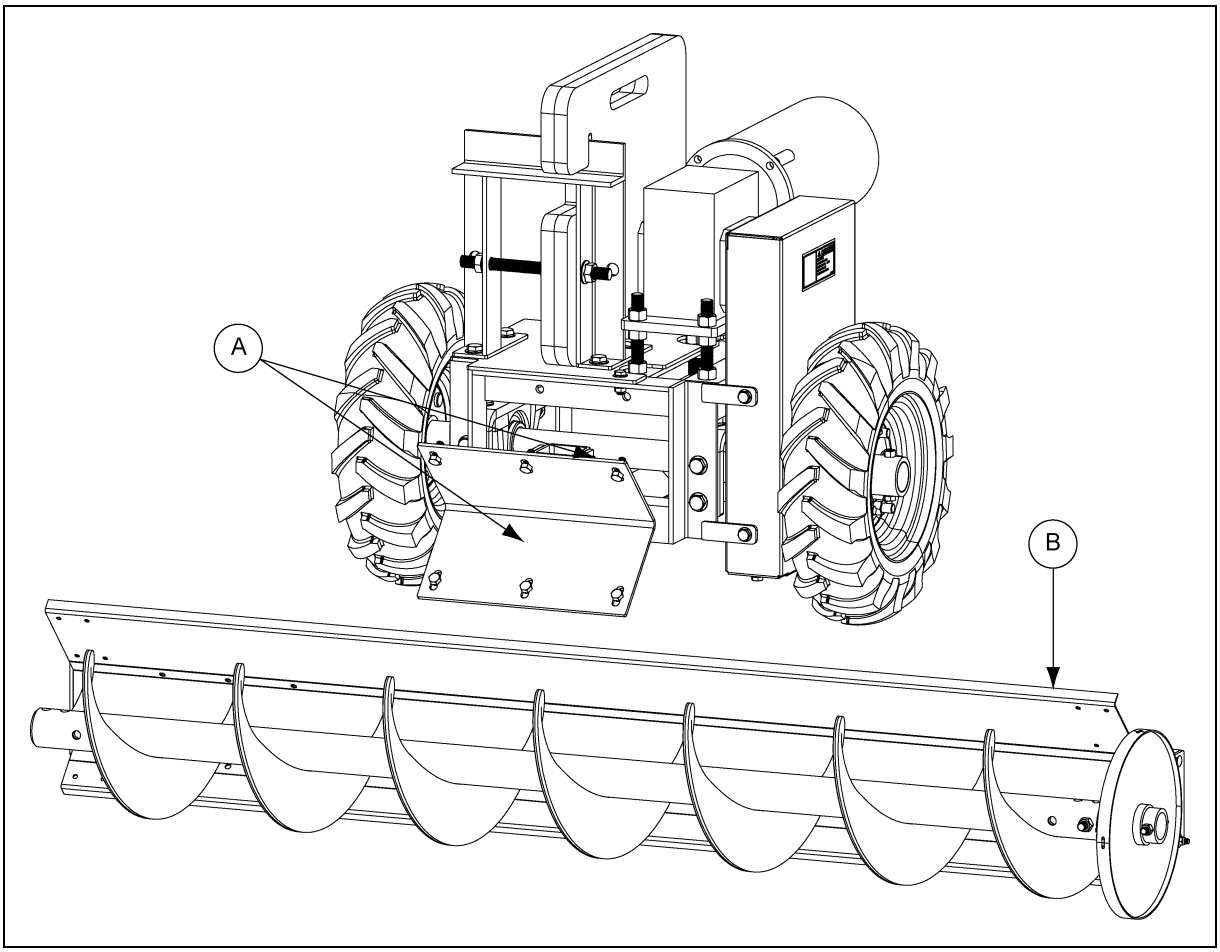


Figure 4M *Sweep Tractor to Shield Assembly*

Ref #	Description
A	Adjustment bolts for adjusting the angle and height of the bracket (3/8" x 1" HHCS bolt with flat washer and nylock nut).
B	Sweep Back Shield

Programming

Control Panel Calibration

Observe the tractor drive motor nameplate and the auger drive motor nameplate.

Record the full load amp (FLA) value for the specific voltage on each motor.

Auger drive motor full load amps: ____
Tractor drive motor full load amps: ____

Unlock and open the control panel.

Adjust the FLA dial screw on the tractor drive motor contactor (M2) and the auger drive motor contactor (M1) so that the indicator arrowhead is set slightly higher than the full load amp value listed on the nameplates.

Tractor drive motor contactor (M1) FLA adjustment dial: ____
Auger drive motor (M2) FLA adjustment dial value: ____

Close and lock the control panel.

Initial Display Setup

NOTE: *If no keys are activated for 2 minutes, the display returns to the default state without saving any configuration changes. At each value, after 5 seconds of inactivity, a description of the current state will scroll across the display.*

NOTE: *Pressing and hold OK will return to the previous menu or return to the default state without saving the changed values or parameters.*

Press OK on the display unit.

(IN) should be displayed on the unit.

Press ▲ or ▼ on the display unit until (CURR) is shown (not VOLT, POTM or TEMP).

Press OK.

(RANG) should be displayed on the unit.

Press ▲ or ▼ on the display unit until 4-20 is shown (not 0-20).

Press OK.

(DEC.P) should be displayed on the unit.

Press ▲ or ▼ on the display unit until 11.11 is shown (not 1111, 111.1, 1.111 or .1111).

Press OK.

(DI.LO) should be displayed on the unit.

Press ↑ or ↓ on the display unit until 0 is shown.

Press OK.

(DI.HI) should be displayed on the unit.

The DI.HI value will match the amperage range selection switch value on the current transducer (30, 60 or 90). Refer part # AS-0736 *on Page 39*.

Press ↑ or ↓ on the display unit until the correct value is shown.

Press OK repeatedly until “-----” is displayed. This indicates the programming described above has been saved.

Make sure no individual is inside the bin.

Make sure the sweep will not contact any obstruction and cause damage.

Have an employee observe the sweep from outside the bin, through the open door.

Have another employee operate the control panel.

Switch the Run Mode switch so that Manual is selected (not Auto).

Switch the Manual Mode switch to idle (not reverse or forward).

Press the Start button on the control panel.

NOTE: *If any damage is observed or there is abnormal operation of the sweep, shut it down immediately. There are three (3) ways to accomplish this. 1) Remove the pressure on the safety foot switch. 2) Press the Stop button on the control panel. 3) Press in on the Enable/Disable button so that it collapses appropriately. Switch the disconnect switch on the panel to OFF (not ON). Lock out the panel before entering the bin to service the sweep.*

Observe the no load amps (NLA) displayed on the meter on the front of the panel.

Auger drive motor no load amps: ____

The tractor motor operation (forward and stop) in automatic is dictated by the amp reading on the auger drive motor.

The tractor drive motor is meant to shut off (idle) when the Auger Drive Motor reaches 90% of the nameplate FLA.

90% of full load amps: ____

The tractor motor is meant to reactivate (forward) when the auger drive motor reaches 110% of the no load amps (amperage observed when the auger flight turns freely in absence of grain).

110% of no load amps: ____

Final Display Setup

NOTE: *If no keys are activated for 2 minutes, the display returns to the default state without saving any configuration changes. At each value, after 5 seconds of inactivity, a description of the current state will scroll across the display.*

Press OK repeatedly until RELU is displayed on the unit.

Press ▲ or ▼ on the display unit until DISP is shown (not PERC).

Press OK.

REL1 should be displayed on the unit.

Press ▲ or ▼ on the display unit until SET is shown (not SKIP or OFF).

Press OK.

SETP should be displayed on the unit.

Press ▲ or ▼ on the display unit the 90% of FLA value is shown.

Press OK.

ACT1 should be displayed on the unit.

Press ▲ or ▼ on the display unit until INCR is shown (not DECR).

Press OK.

HYS1 should be displayed on the unit.

For this control panel hysteresis (HYS1) is measured as the different between 90% of full load amps and 110% of no load amps.

90% of full load amps: ____ minus 110% of no load amps: ____

Press ▲ or ▼ on the display unit until the correct value is shown.

Press OK.

ERR1 should be displayed on the unit.

Press ▲ or ▼ on the display unit until DEAC is shown (not HOLD, ACTI or NONE).

Press OK.

ON.DE should be displayed on the unit.

Press ▲ or ▼ on the display unit until 0 is shown.

Press OK.

OF.DE should be displayed on the unit.

Press ↑ or ↓ o the display unit until 20 is shown.

Press OK.

REL2 should be displayed on the unit.

Press ↑ or ↓ on the display unit until OFF is shown (not SET or SKIP).

Press OK.

E.PAS should be displayed on the unit.

Press ↑ or ↓ on the display unit until NO is shown.

Press OK.

This function will allow the values that were entered to be locked.

NOTE: *Using a password will stop access to the menu and parameters. There are two (2) levels of password protection. Passwords between 0000 and 4999 allow access to the fast set point adjustment and relay test. (Using this password stops access to all other parts of the menu.) Passwords between 5000 and 9999 stop access to all parts of the menu, fast set point adjustment and relay test. (Current set point is still shown.) By using the master password 2008, all configuration menus are available.*

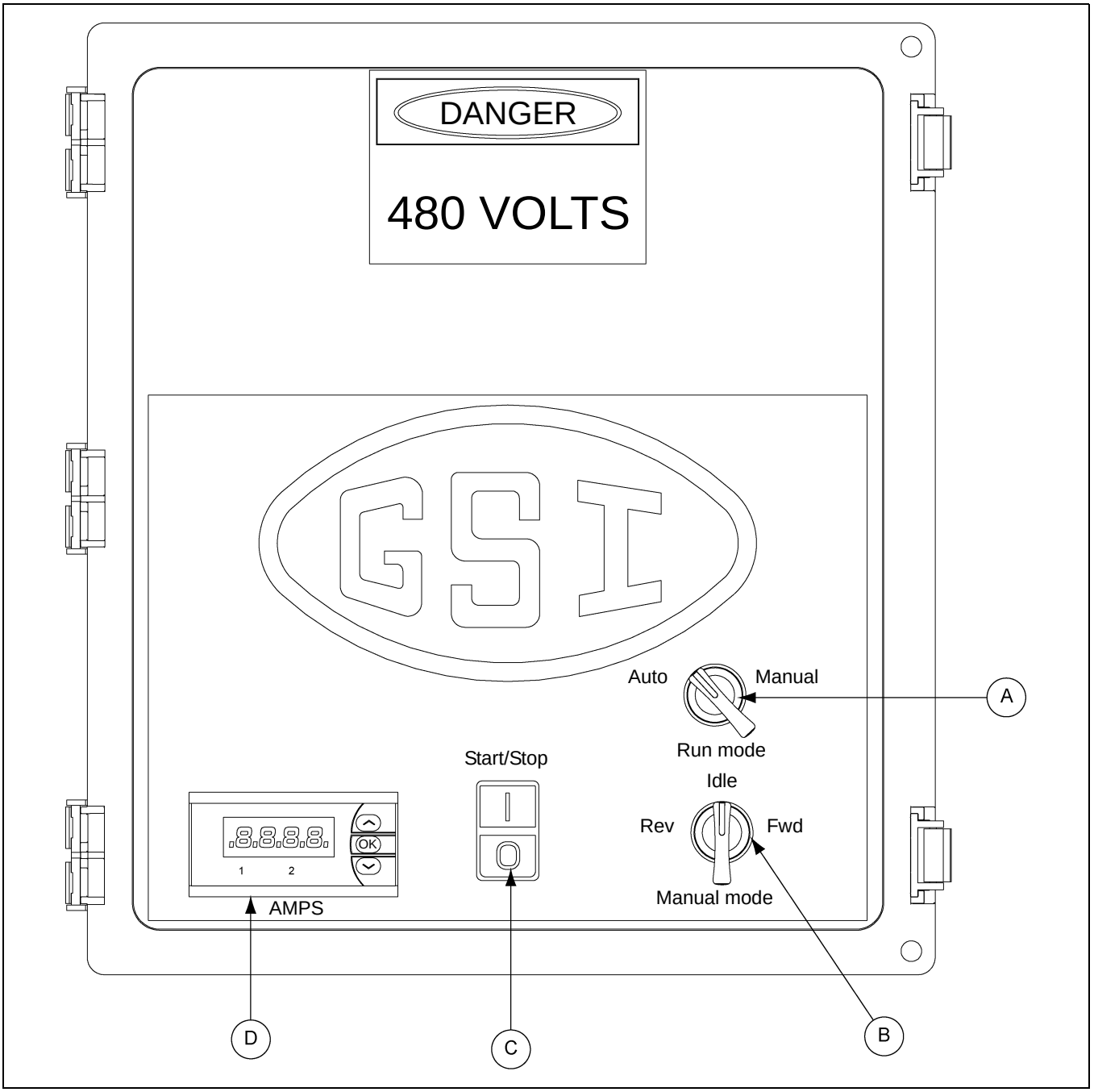
If you select NO, press OK.

If you select YES, N.PAS will be displayed. Press ↑ or ↓ on the display unit until your password is shown. Press OK. Document this password.

The password will be necessary if there needs to be changes to many of the configuration values.

Sweep Tractor Control Box Definitions

Commercial Sweep Control Panel

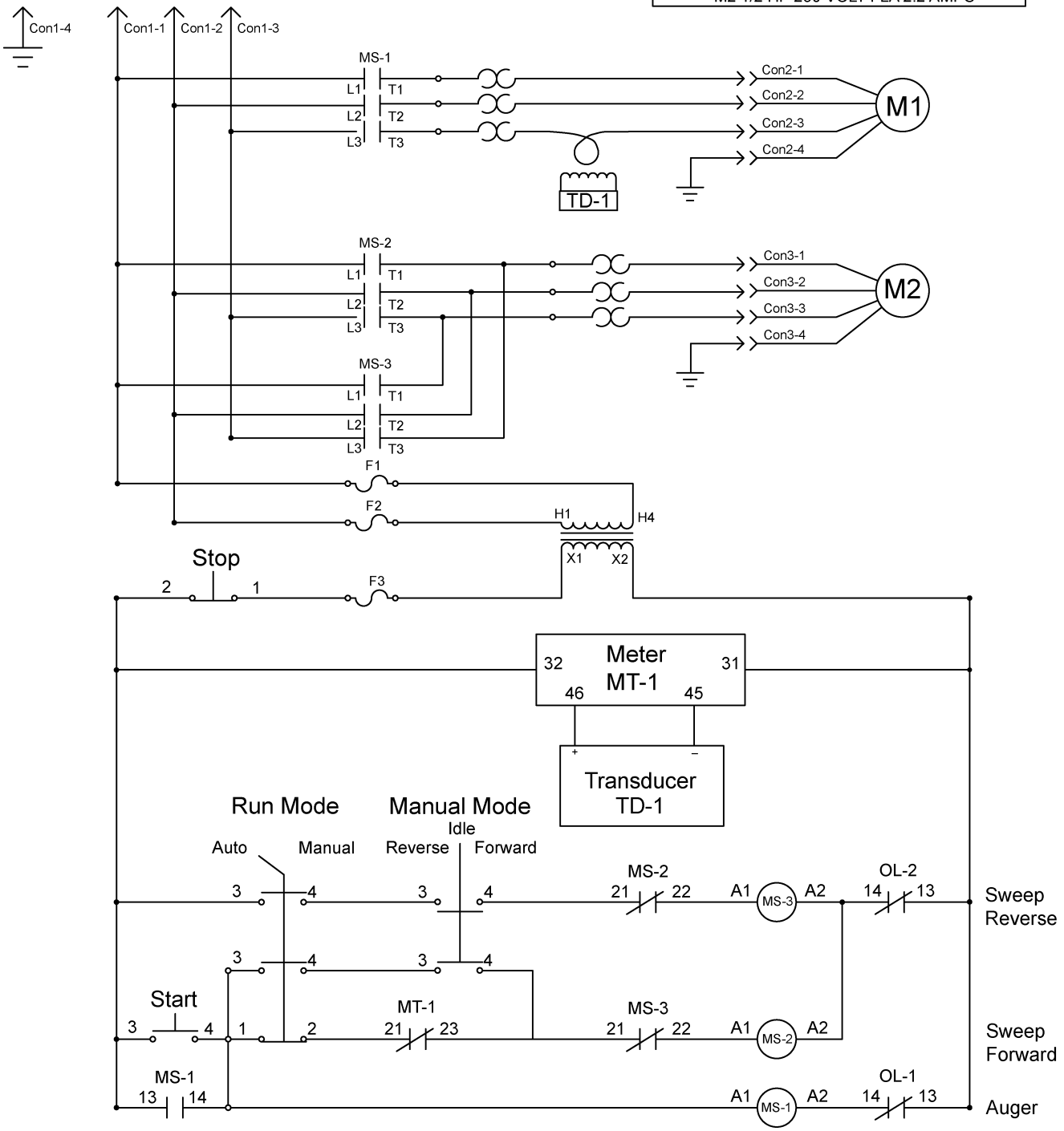


Ref #	Part #	Description
A	GC20181	2 Position Control Switch
B	GC20182	3 Position Control Switch
C	C-8716	Start/Stop Switch
D	GC20171	Digital Amp Meter

Schematic - Control Panel GCS Sweeps 230V 3 HP (GCSTP2-03)

Type	Volts	FLA	Phase	Frequency
1, Nema 3R	230	14.7	3	60
Rev	Fuse F1 and F2		Fuse F3	
1	ATMR-1		ATMR-2	
M1 3 HP 230 VOLT FLA 9.6 AMPS				
M2 1/2 HP 230 VOLT FLA 2.2 AMPS				

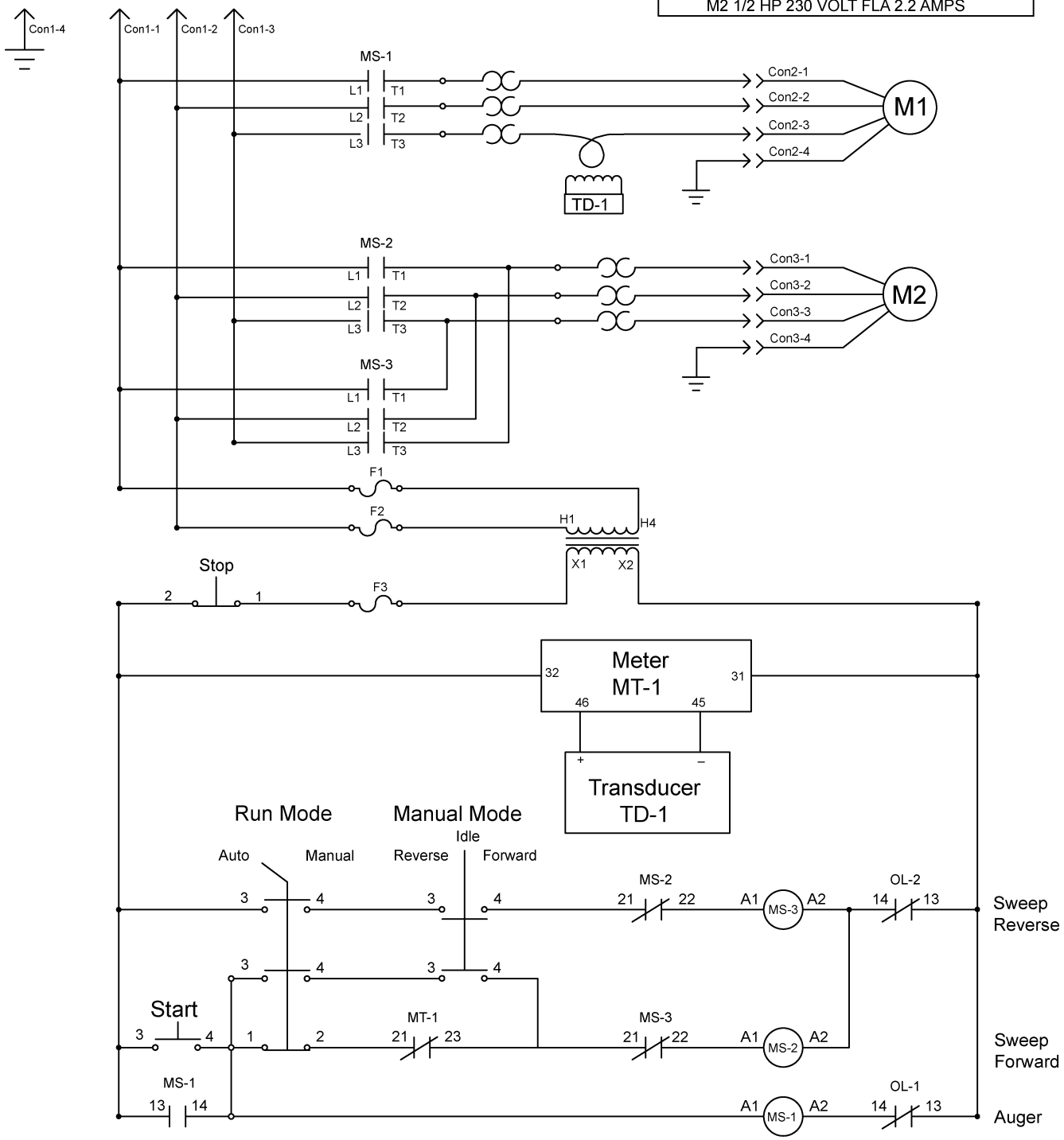
Service disconnect supplied by others.



Schematic - Control Panel GCS Sweeps 230V 5 HP (GCSTP2-05)

Type	Volts	FLA	Phase	Frequency
1, Nema 3R	230	21.7	3	60
Rev	Fuse F1 and F2		Fuse F3	
1	ATMR-1		ATMR-2	
M1 5 HP 230 VOLT FLA 15.2 AMPS				
M2 1/2 HP 230 VOLT FLA 2.2 AMPS				

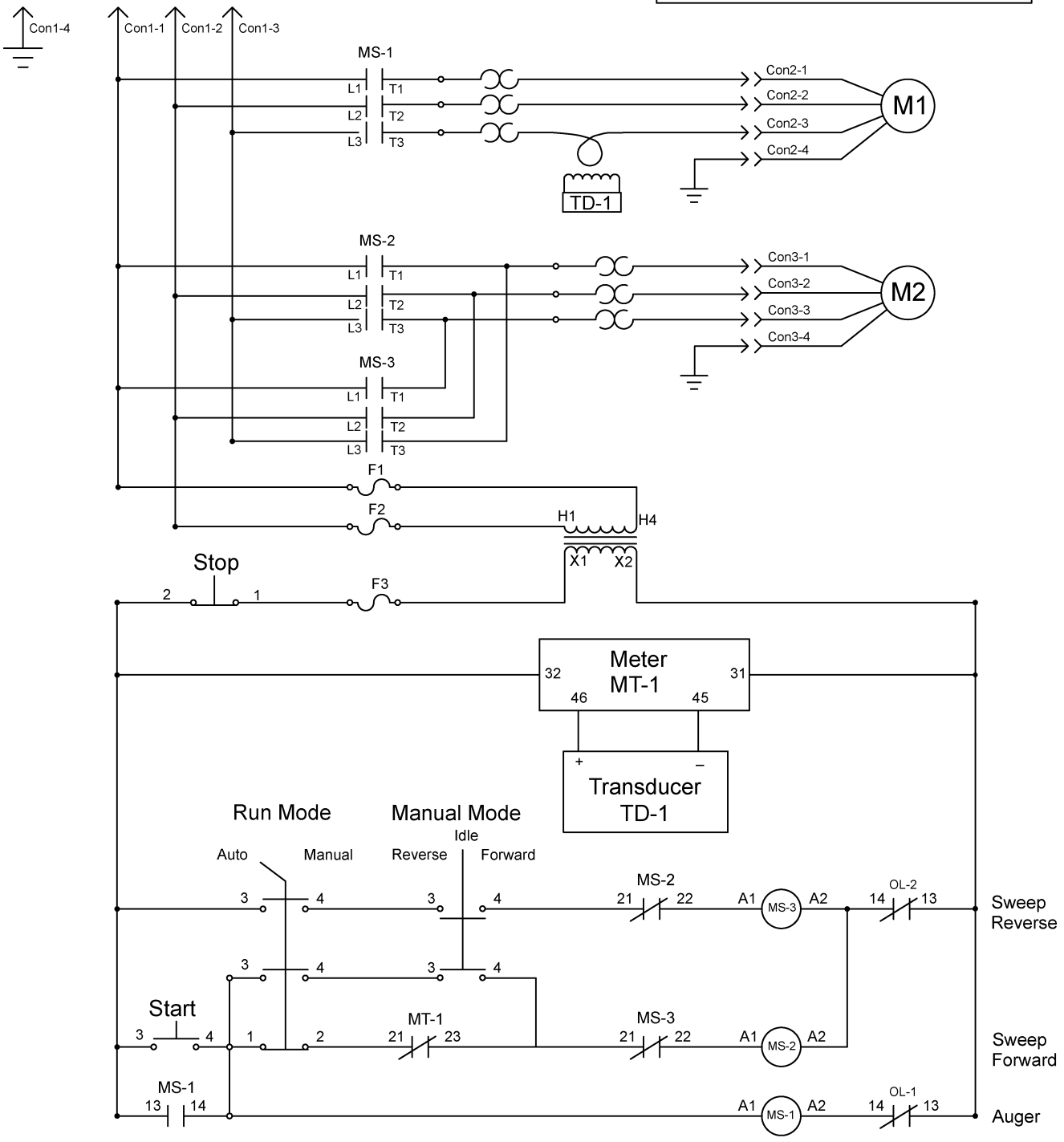
Service disconnect supplied by others.



Schematic - Control Panel GCS Sweeps 230V 7.5 HP (GCSTP2-75)

Type	Volts	FLA	Phase	Frequency
1, Nema 3R	230	30	3	60
Rev	Fuse F1 and F2		Fuse F3	
1	ATMR-1		ATMR-2	
M1 7.5 HP 230 VOLT FLA 22 AMPS				
M2 1/2 HP 230 VOLT FLA 2.2 AMPS				

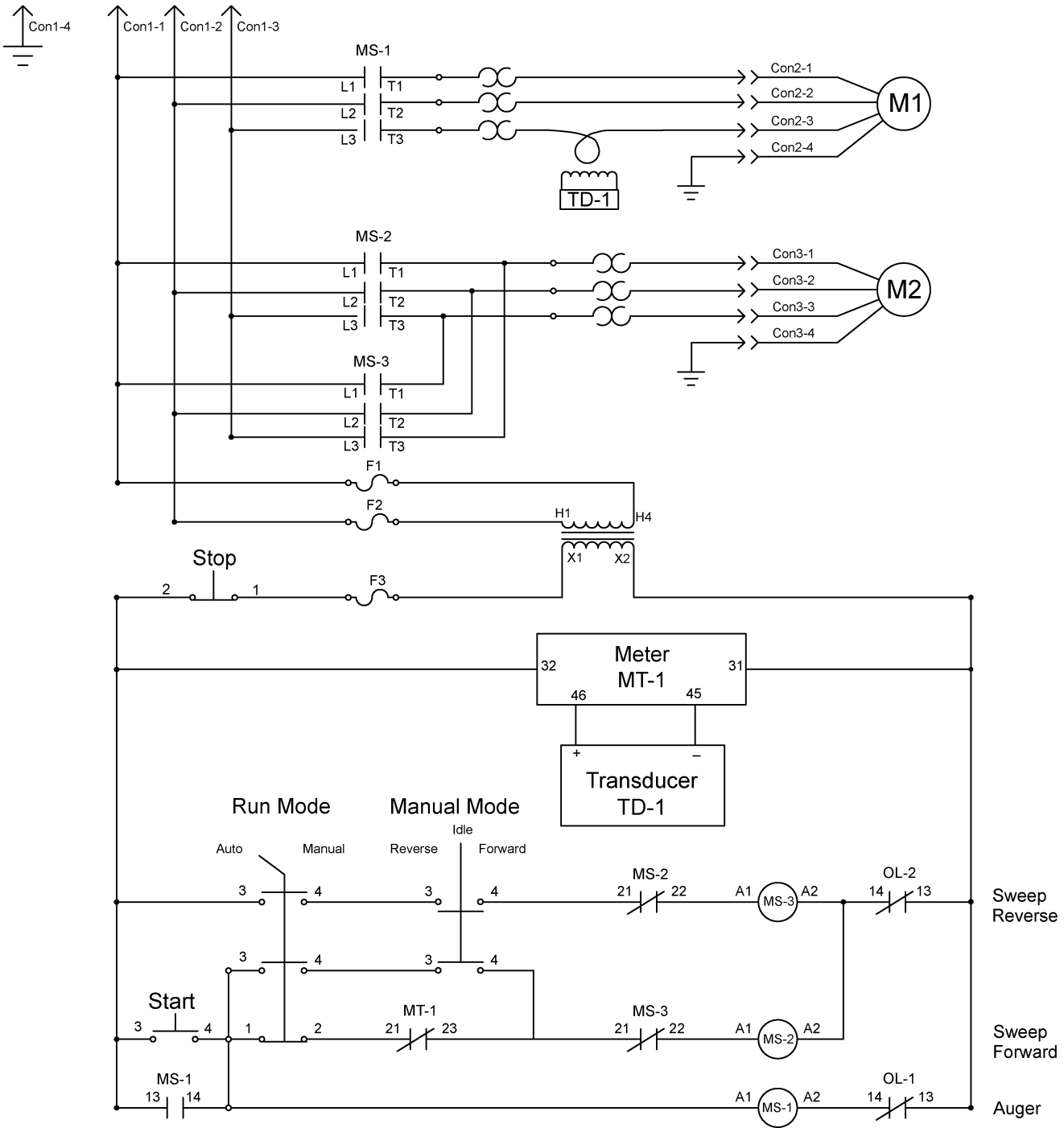
Service disconnect supplied by others.



Schematic - Control Panel GCS Sweeps 230V 10 HP (GCSTP2-10)

Type	Volts	FLA	Phase	Frequency
1, Nema 3R	230	37.7	3	60
Rev	Fuse F1 and F2		Fuse F3	
1	ATMR-1		ATMR-2	
M1 10 HP 230 VOLT FLA 28 AMPS				
M2 1/2 HP 230 VOLT FLA 2.2 AMPS				

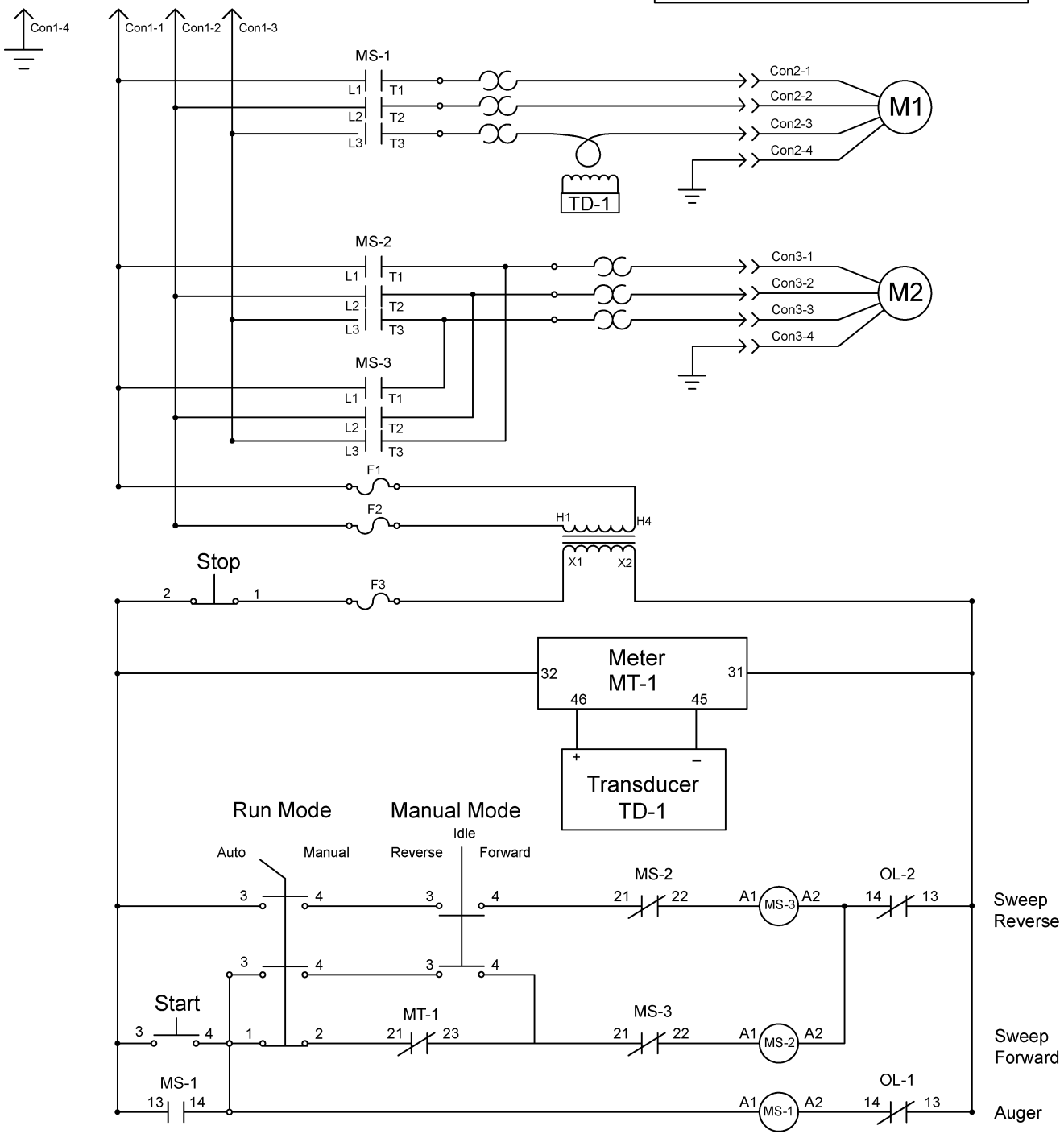
Service disconnect supplied by others.



Schematic - Control Panel GCS Sweeps 460V 3 HP (GCSTP4-03)

Type	Volts	FLA	Phase	Frequency
1, Nema 3R	480	7.6	3	60
Rev	Fuse F1 and F2		Fuse F3	
1	ATMR-1		ATMR-2	
M1 3 HP 480 VOLT FLA 4.8 AMPS				
M2 1/2 HP 480 VOLT FLA 1.1 AMPS				

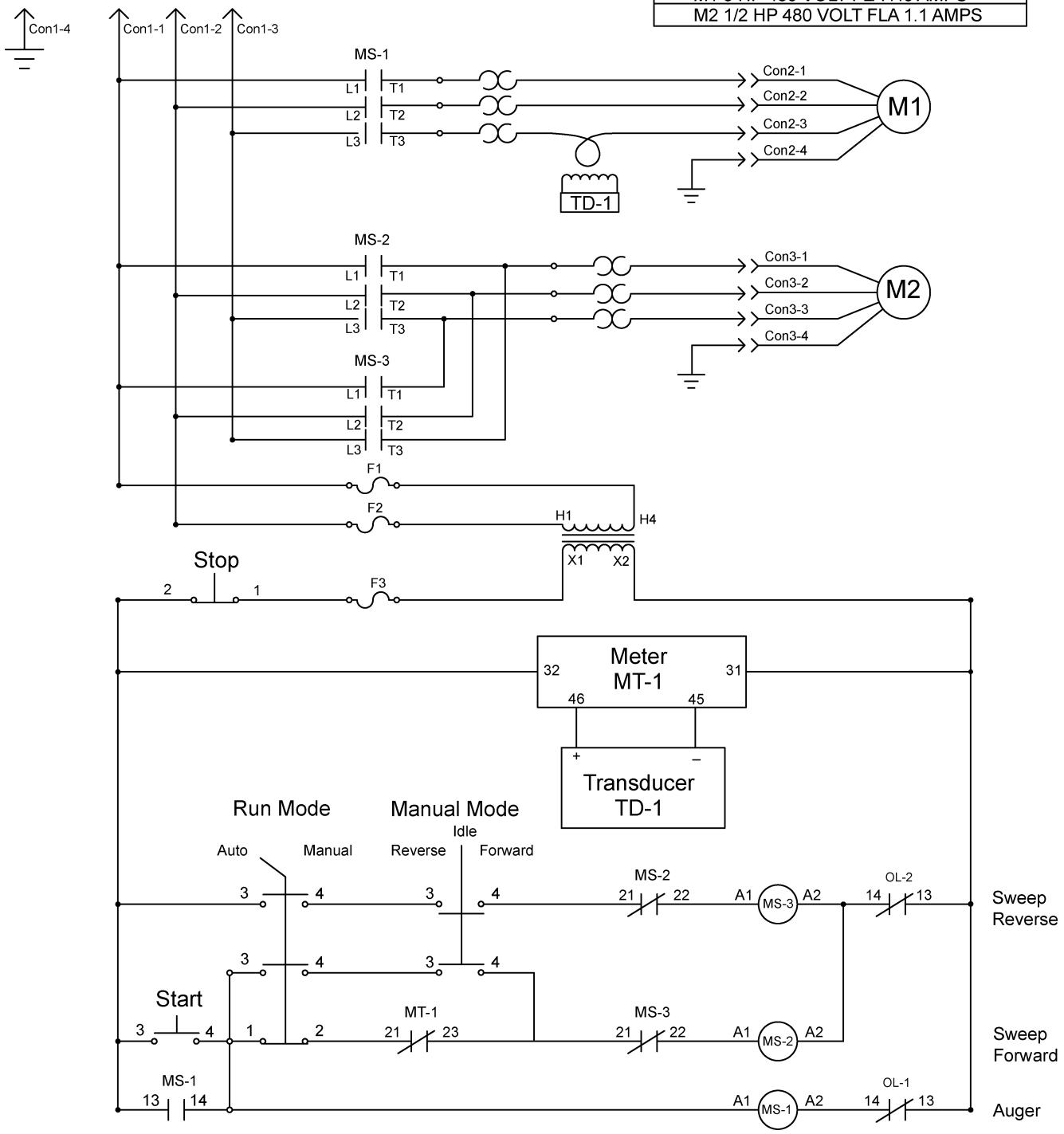
Service disconnect supplied by others.



Schematic - Control Panel GCS Sweeps 460V 5 HP (GCSTP4-05)

Type	Volts	FLA	Phase	Frequency
1, Nema 3R	480	11.1	3	60
Rev	Fuse F1 and F2		Fuse F3	
1	ATMR-1		ATMR-2	
M1 5 HP 480 VOLT FLA 7.6 AMPS				
M2 1/2 HP 480 VOLT FLA 1.1 AMPS				

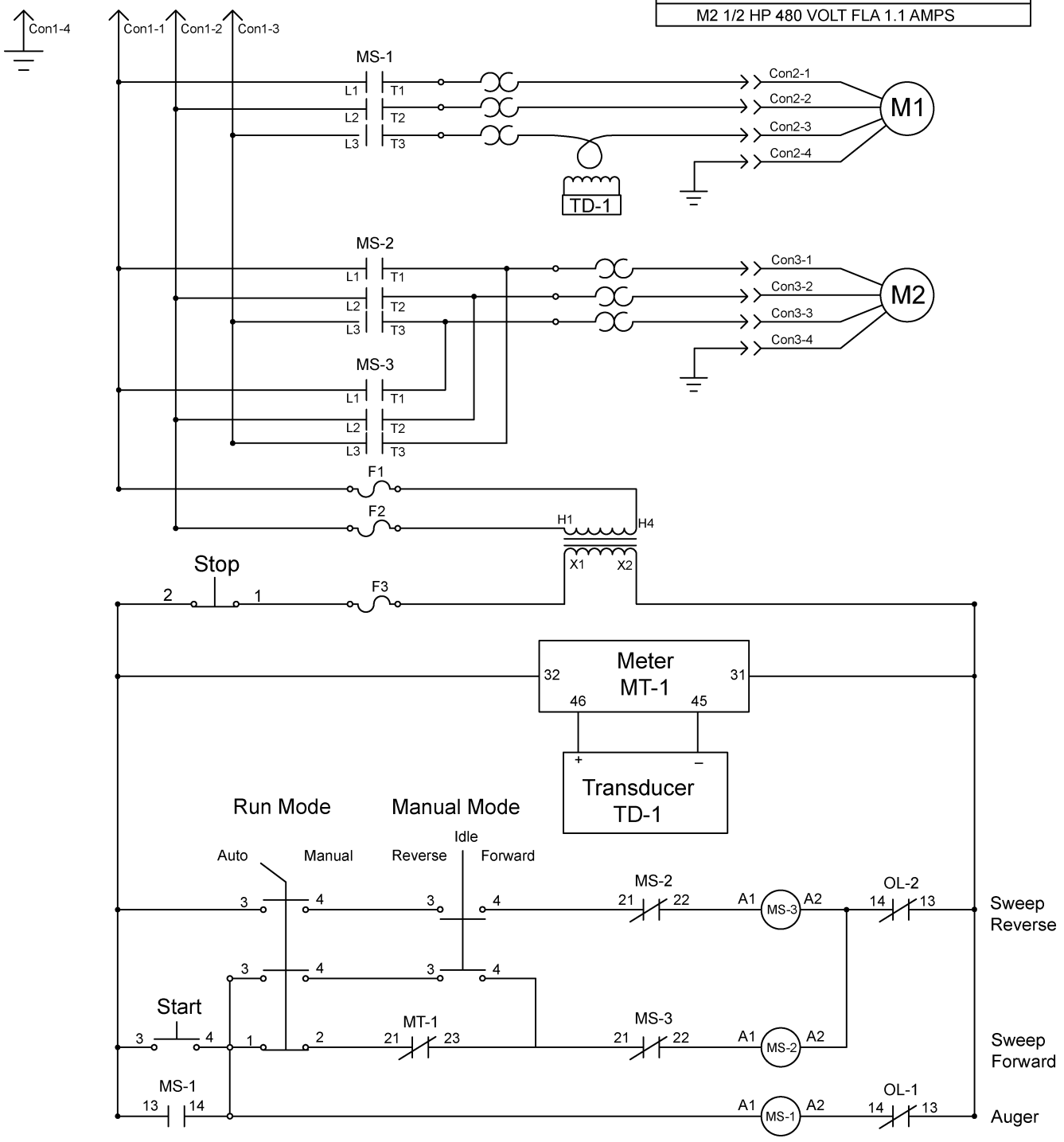
Service disconnect supplied by others.



Schematic - Control Panel GCS Sweeps 460V 7.5 HP (GCSTP4-75)

Type	Volts	FLA	Phase	Frequency
1, Nema 3R	480	15.35	3	60
Rev	Fuse F1 and F2		Fuse F3	
1	ATMR-1		ATMR-2	
M1 7.5 HP 480 VOLT FLA 11 AMPS				
M2 1/2 HP 480 VOLT FLA 1.1 AMPS				

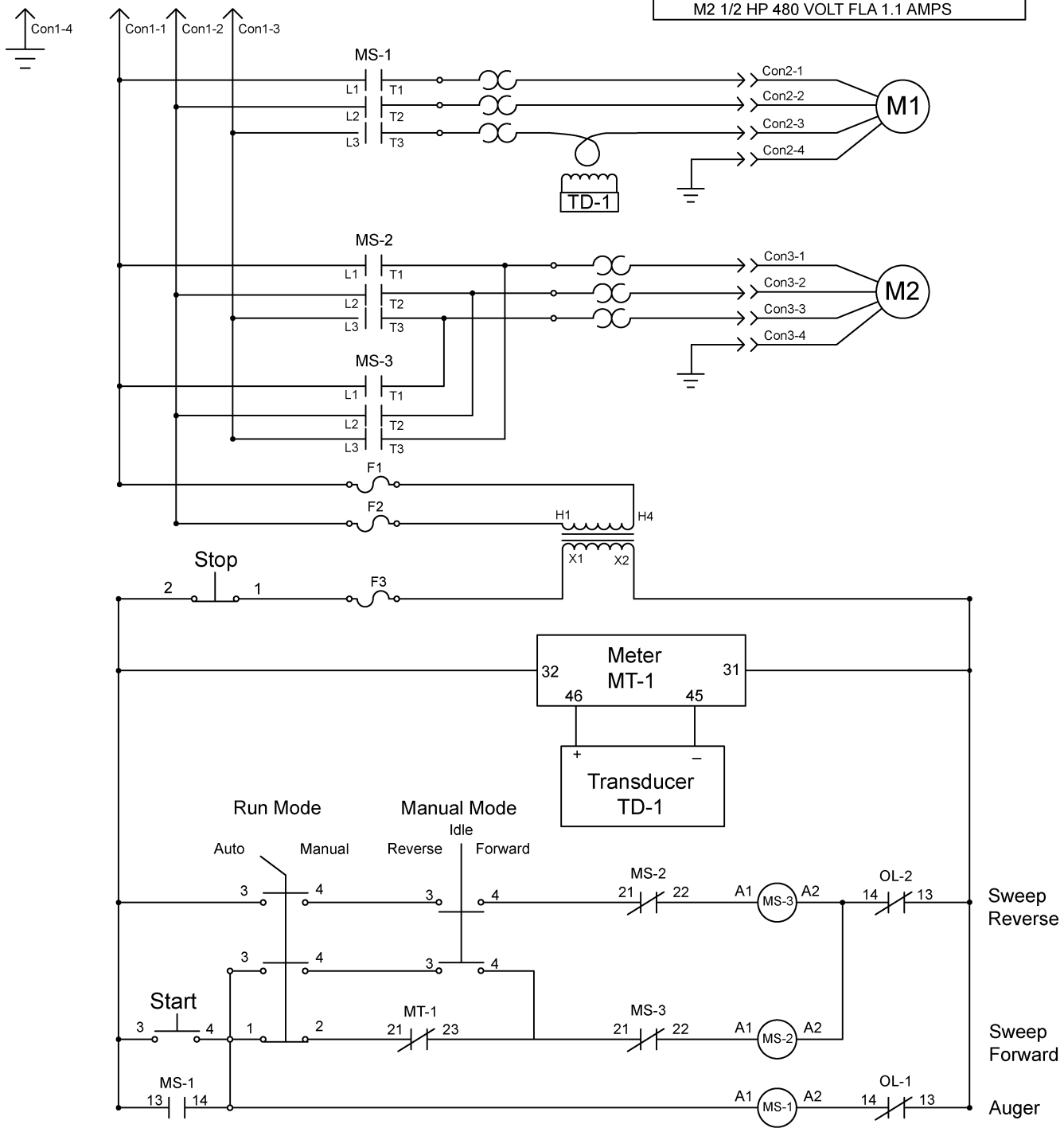
Service disconnect supplied by others.



Schematic - Control Panel GCS Sweeps 460V 10 HP (GCSTP4-10)

Type	Volts	FLA	Phase	Frequency
1, Nema 3R	480	19.1	3	60
Rev	Fuse F1 and F2		Fuse F3	
1	ATMR-1/2		ATMR-2	
M1 10 HP 480 VOLT FLA 14 AMPS				
M2 1/2 HP 480 VOLT FLA 1.1 AMPS				

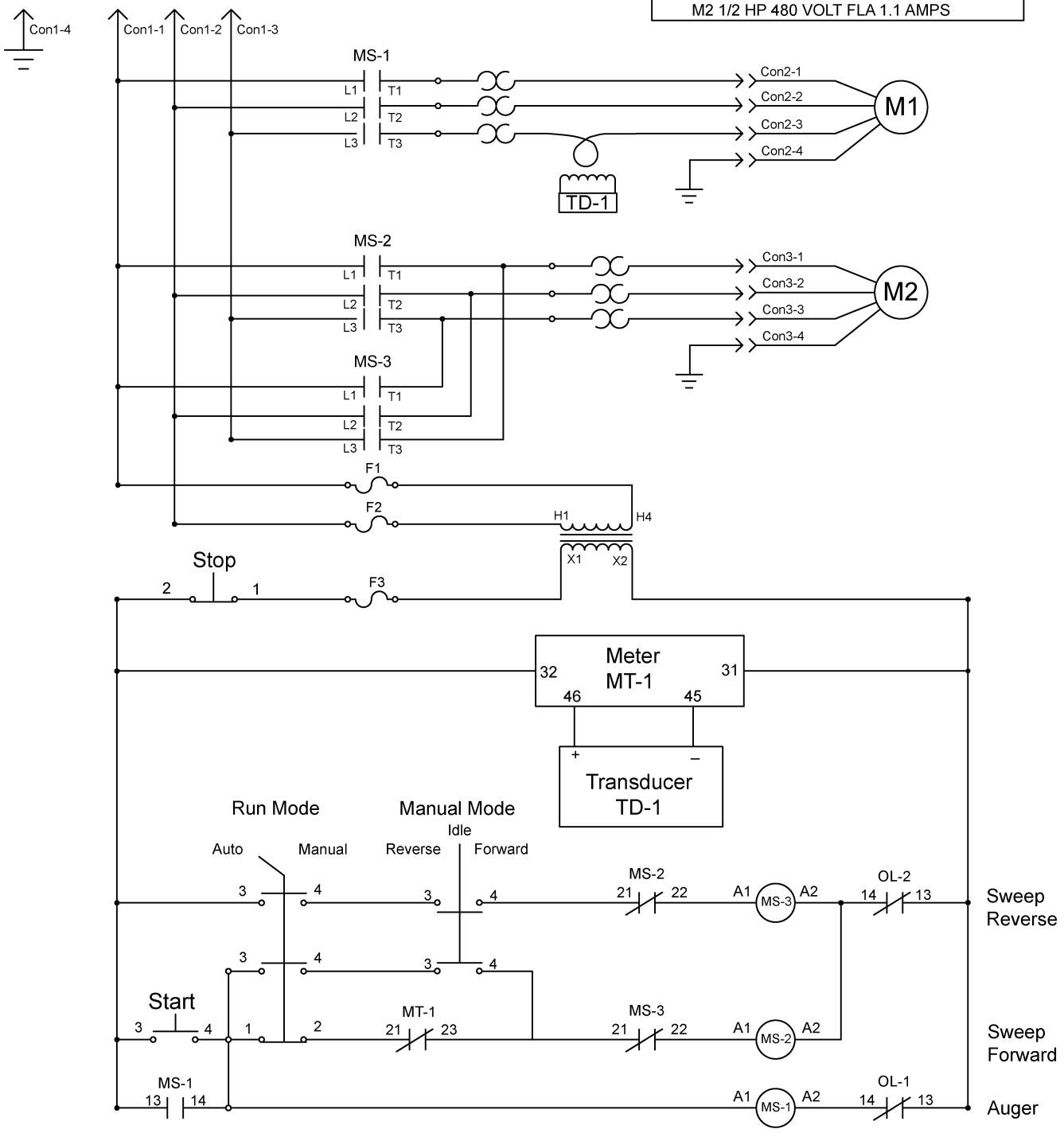
Service disconnect supplied by others.



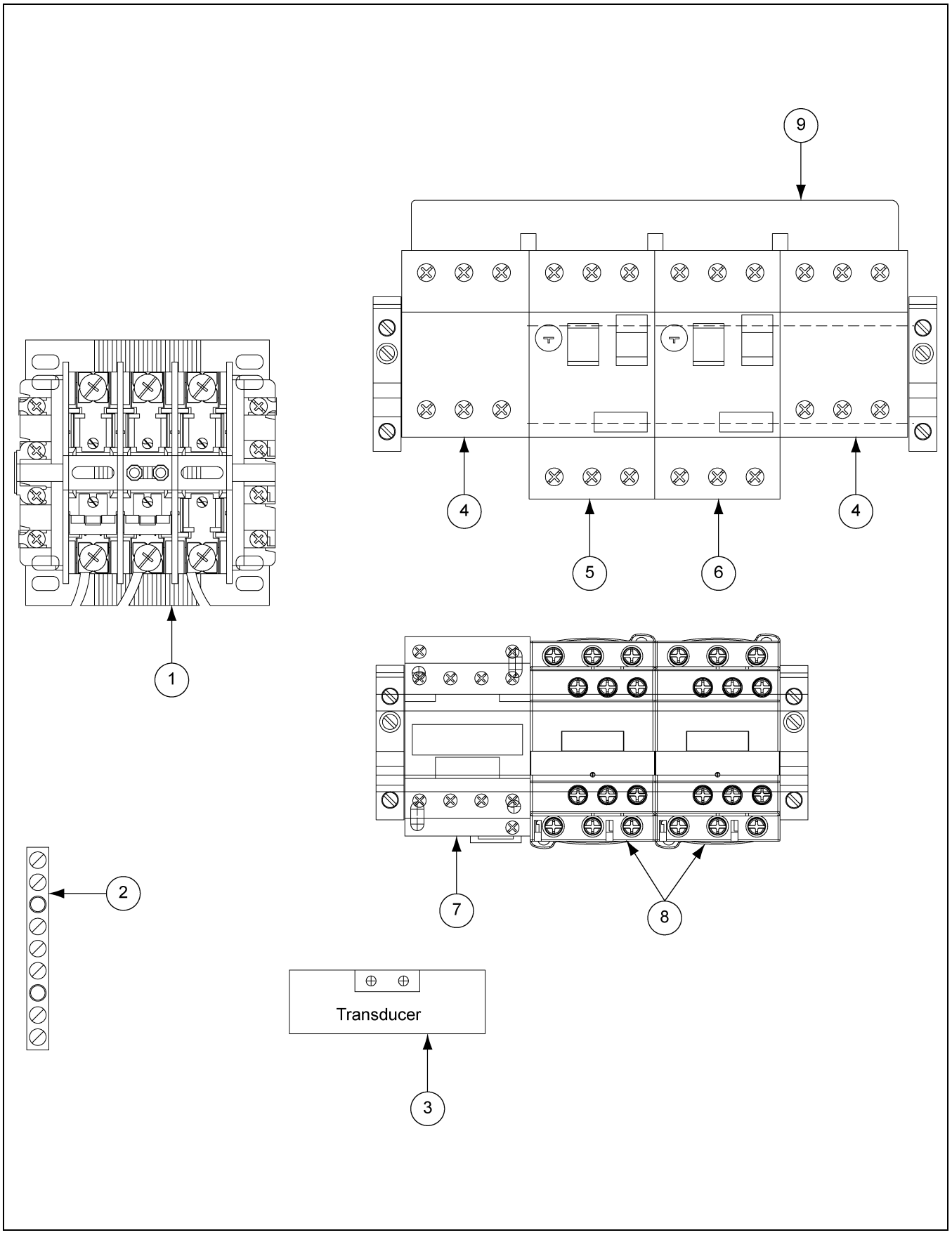
Schematic - Control Panel GCS Sweeps 460V 15 HP (GCSTP4-15)

Type	Volts	FLA	Phase	Frequency
1, Nema 3R	480	27.85	3	60
Rev	Fuse F1 and F2		Fuse F3	
1	ATMR-1		ATMR-2	
M1 15 HP 480 VOLT FLA 21 AMPS				
M2 1/2 HP 480 VOLT FLA 1.1 AMPS				

Service disconnect supplied by others.



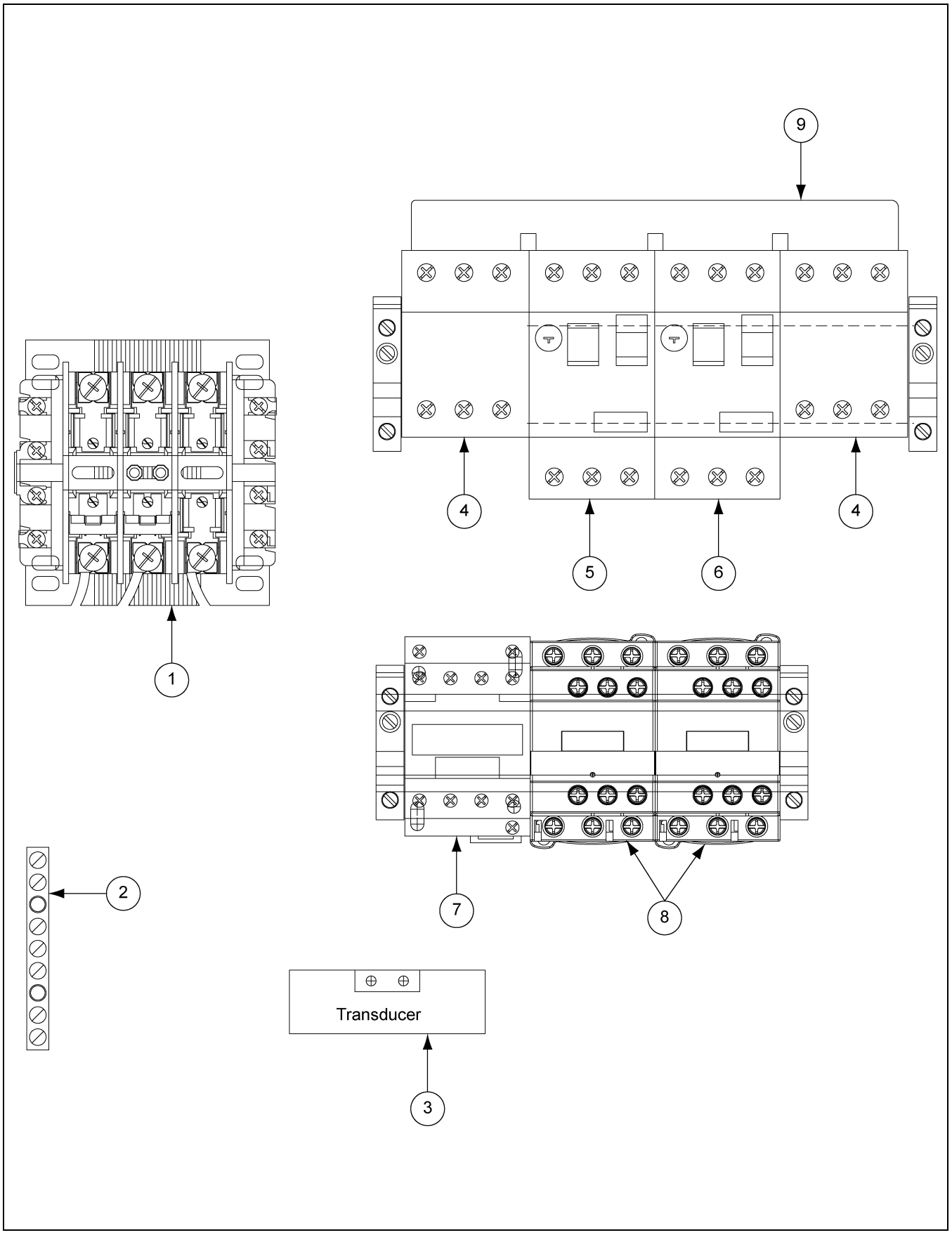
Standard Control Panel Assembly 230V 3 Phase



Standard Control Panel Assembly 230V 3 Phase Parts List

Ref #	Part #	Description	Qty			
			GCSTP2-03	GCSTP2-05	GCSTP2-75	GCSTP2-10
			3 HP	5 HP	7.5 HP	10 HP
1	C-8711	Transformer	1	1	1	1
2	GC20176	Ground Bar Kit	1	1	1	1
3	AS-0736	Current Transducer	1	1	1	1
4	GC20170	Manual Starter Terminal Block	2	2	2	2
5	GC20184	Auger Motor Starter and Protector	1	1	1	1
6	GC20186	Auger Motor Starter and Protector	1	-	-	-
6	GC20187	Auger Motor Starter and Protector	-	1	-	-
6	GC20188	Auger Motor Starter and Protector	-	-	1	-
6	GC20189	Auger Motor Starter and Protector	-	-	-	1
7	056-1942-4	Auger Relay	1	-	-	-
7	056-1949-9	Auger Relay	-	1	-	-
7	056-1969-7	Auger Relay	-	-	1	-
7	056-1941-6	Auger Relay	-	-	-	1
8	GC20168	Reverse Contactor	1	1	1	1
9	GC20169	Starter Cable Busbar	1	1	1	1

Standard Control Panel Assembly 460V 3 Phase



Standard Control Panel Assembly 460V 3 Phase Parts List

Ref #	Part #	Description	Qty				
			GCSTP4-03	GCSTP4-05	GCSTP4-75	GCSTP4-10	GCSTP4-15
			3 HP	5 HP	7.5 HP	10 HP	15 HP
1	C-8711	Transformer	1	1	1	1	1
2	GC20176	Ground Bar Kit	1	1	1	1	1
3	AS-0736	Current Transducer	1	1	1	1	1
4	GC20170	Manual Starter Terminal Block	2	2	2	2	2
5	GC20185	Motor Starter and Protector	1	1	1	1	1
6	GC20190	Auger Motor Starter and Protector	1	-	-	-	-
6	D03-0964	Auger Motor Starter and Protector	-	1	-	-	-
6	GC20186	Auger Motor Starter and Protector	-	-	1	-	-
6	GC20187	Auger Motor Starter and Protector	-	-	-	1	-
6	GC20188	Auger Motor Starter and Protector	-	-	-	-	1
7	056-1948-1	Auger Relay	1	1	-	-	-
7	056-1942-4	Auger Relay	-	-	1	-	-
7	056-1969-7	Auger Relay	-	-	-	1	1
8	GC20168	Reverse Contactor	1	1	1	1	1
9	GC20169	Starter Cable Busbar	1	1	1	1	1

NOTES

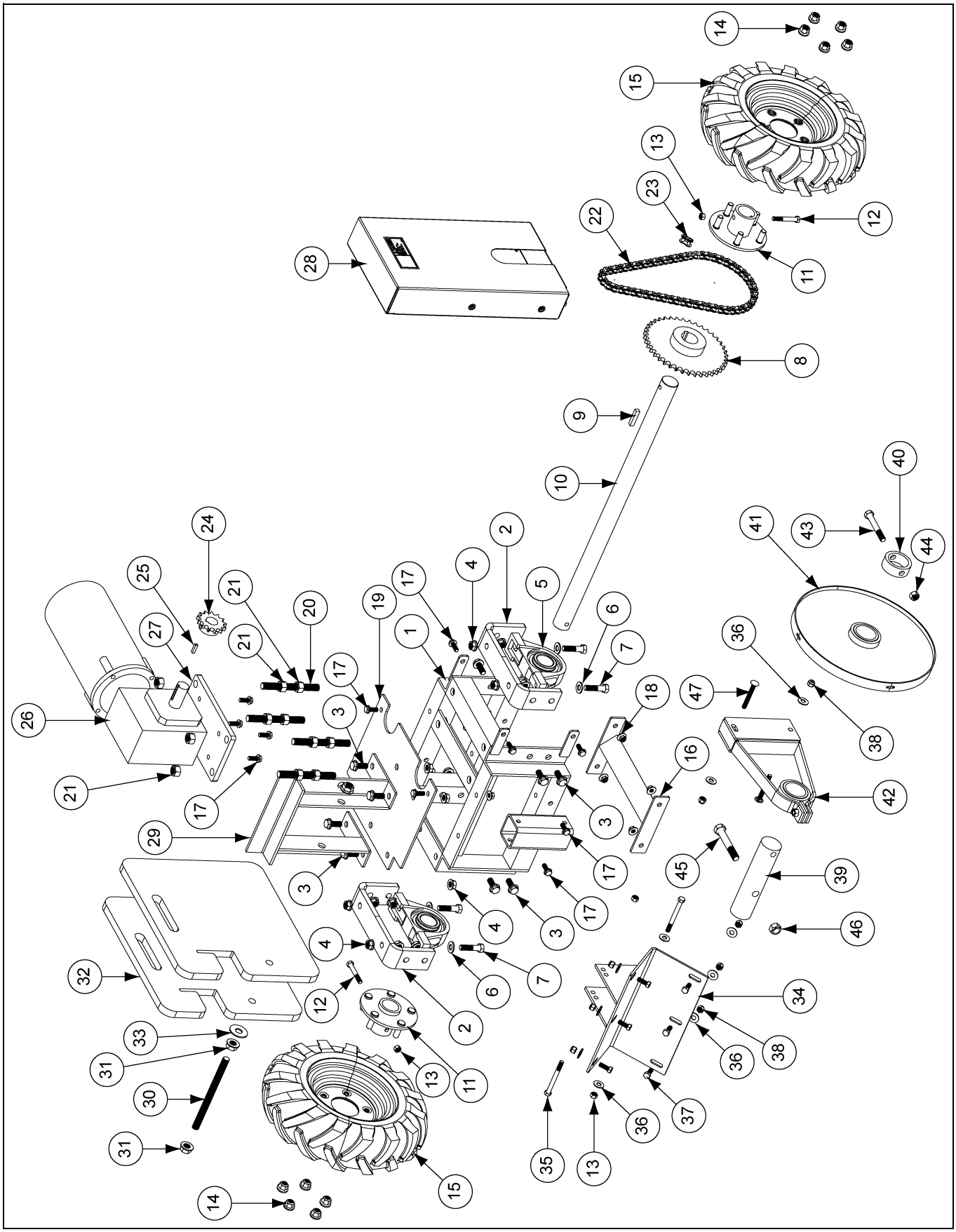
1. Sweep Tractor Parts - *(See Pages 44-45.)*

2. Chain Guard Assembly - *(See Pages 46.)*

3. Drive Motor Assembly - *(See Pages 47.)*

4. Bearing Stand Assembly - *(See Pages 48.)*

Sweep Tractor Parts

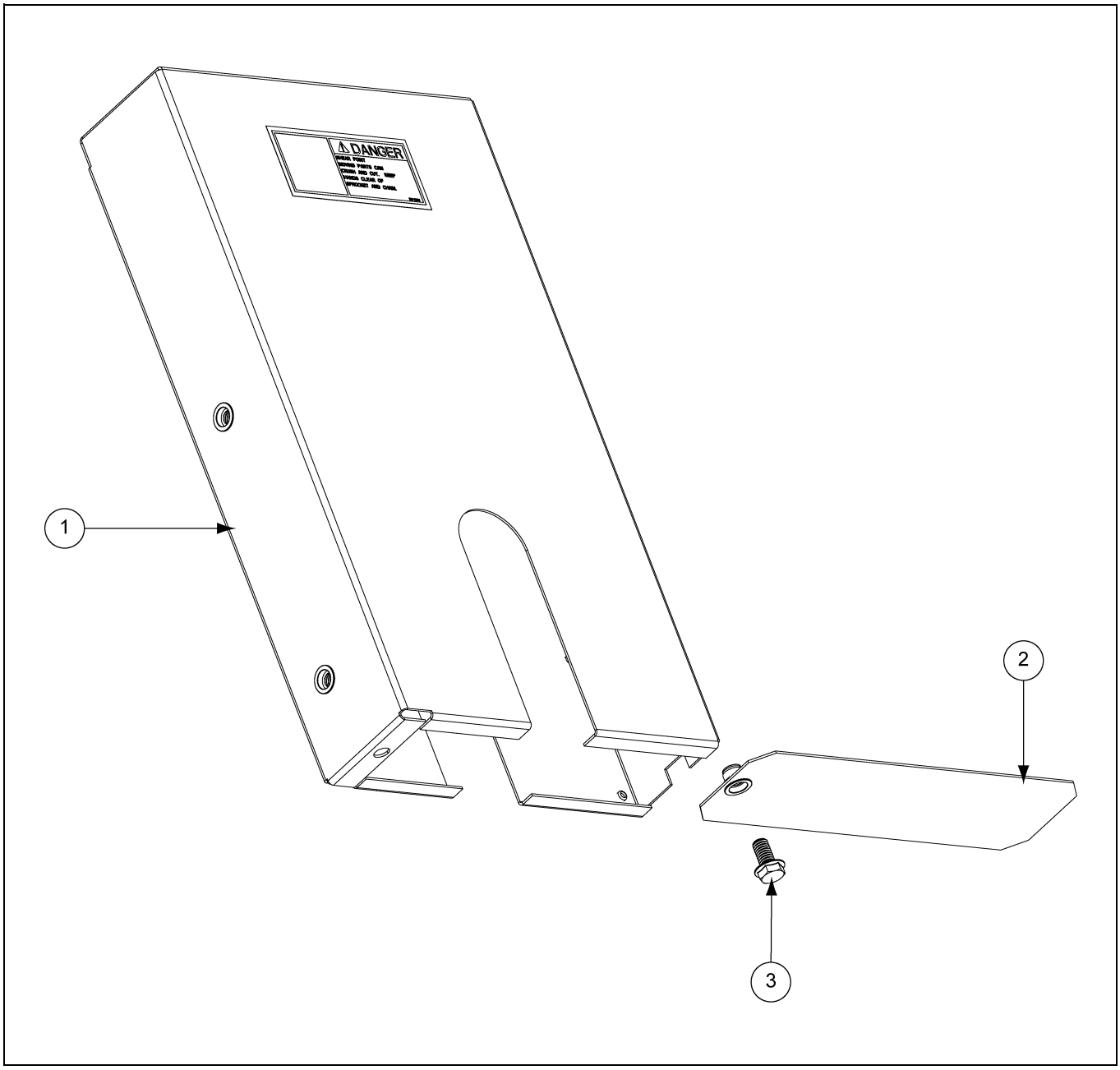


Sweep Tractor Parts List

Ref #	Part #	Description
1	GK7714-BS	Tractor Frame - Bin Silver
2	GK7716-BS	Bearing Mounting Bracket - Bin Silver
3	S-9062	1/2"-13 x 1-1/4" Flange Bolt Zinc Grade 5
4	S-8506	1/2"-13 Serrated Flange Nut Zinc
5	017-1486-4	Bearing: 1-5/8" Bore Pillow Block
6	S-2120	1/2" Flat Washer SAE Zinc
7	S-7811	1/2"-13 x 2" HHCS Bolt Zinc Grade 5
8	GK7724	Sprocket, #50, 40 Tooth, 1-5/8" Bore, Type B
9	S-9179	3/8" Square x 1-3/4" Key
10	GK7715	Tractor Axle
11	GK7718-BS	Wheel Hub - Bin Silver
12	S-6762	3/8"-16 x 2-1/2" Hex Bolt Zinc Grade 5
13	S-8251	3/8"-16 Stover Nut Zinc Grade C
14	S-8133	Hex Nut 1/2"-20 ZN
15	GK7748	Tire and Wheel: 4.80-8 5-Lug, Foam Filled
16	GK80116-BS	Strut Bracket - Bin Silver
17	S-9065	3/8"-16 x 1" Flange Bolt Zinc Grade 5
18	S-968	3/8"-16 Wide Serrated Flange Nut Zinc Grade 5
19	GK80115	Weight Support Plate
20	GC03552	5/8"-11 x 6" Threaded Rod
21	S-4110	5/8"-11 Hex Nut Zinc Grade 5
22	GK7883	Roller Chain, #50, 61 Pitch
23	D32-0015	Roller Chain Connecting Link, #50
24	GK4978	Sprocket, #50, 13 Tooth, 1-1/8" Bore, Type B
25	S-9168	1/4" Square x 1" Key
26	GK4985	Drive Motor Assembly - 1 PH, 60 Hz, 115/230V, TEFC
	GK7828	Drive Motor Assembly - 1 PH, 60 Hz, 115V/208V-230V, XPFC
	GK5481	Drive Motor Assembly - 3 PH, 60 Hz, 230V/460V, TEFC
	GK6387	Drive Motor Assembly - 3 PH, 60 Hz, 208V-230V/460V, XPFC
	GK7720	Drive Motor Assembly - 3 PH, 60 Hz, 575V, XPFC
	GK6827	Drive Motor Assembly - 3 PH, 50 Hz, 220V/380V/460V, TEFC
27	GK7719-Y	Drive Assembly Plate - Ochre
28	GK80029	Chain Guard Assembly
29	GK80117-BS	Weight Bracket - Bin Silver

Ref #	Part #	Description
30	GK7725	5/8"-11 x 8-1/2" Threaded Rod
31	S-9259	5/8"-11 Serrated Flange Nut Zinc
32	GK7717-BS	Tractor Weight - 50 Lbs. - Bin Silver
33	S-858	5/8" Flat Washer USS Zinc
34	GK80172-BS	Shield Bracket - GCS6-8 - Bin Silver
	GK80173-BS	Shield Bracket - GCS8-10 - Bin Silver
	GK4975-BS	Shield Bracket - GCS10-12 and GCS12-14 - Bin Silver
35	S-8989	3/8"-16 x 3-3/4" HHCS Bolt Zinc Grade 5
36	S-248	3/8" Flat Washer YDP
37	S-7469	3/8"-16 x 1" HHCS Bolt Zinc Grade 5
38	S-7383	3/8"-16 Nylock Nut Zinc Grade 5
39	GK80165	Stub Shaft - GCS6-8
	GK80166	Stub Shaft - GCS8-10
	GK4952	Stub Shaft - GCS10-12 and GCS12-14
40	GK80163	Stub Collar - GCS6-8
	GK80164	Stub Collar - GCS8-10
	GK4951	Stub Collar - GCS10-12 and GCS12-14
41	GK80161	End Wheel with Bearing - GCS6-8
	GK80162	End Wheel with Bearing - GCS8-10
	GK6457	End Wheel with Bearing - GCS10-12
	GK4954	End Wheel with Bearing - GCS12-14
42	GK2107	Bearing Stand Assembly - GCS6-8
	GK1954	Bearing Stand Assembly - GCS8-10
	GK2047	Bearing Stand Assembly - GCS10-12
	GK80084	Bearing Stand Assembly - GCS12-14
43	S-8314	1/2"-13 x 3-1/2" HHCS Bolt YDP Grade 8
	S-7372	Bolt, HHCS 7/16"-14 x 2-1/2" ZN Grade 8 - GCS6
44	S-8315	1/2"-13 Prevailing Torque Lock Nut Zinc Grade C
	S-8317	Stover Nut 7/16"-14 ZN Grade C - GCS6
45	S-7893	5/8"-11 x 4" HHCS Bolt YDP Grade 8
	S-8316	Bolt, HHCS 7/16"-14 x 3 ZN YDP Grade 8 - GCS6
46	S-8606	5/8"-11 Stover Nut Zinc Grade C
	S-8317	Stover Nut 7/16"-14 ZN Grade C - GCS6
47	S-8055	3/8"-16 x 3" Carriage Bolt Zinc Grade 5

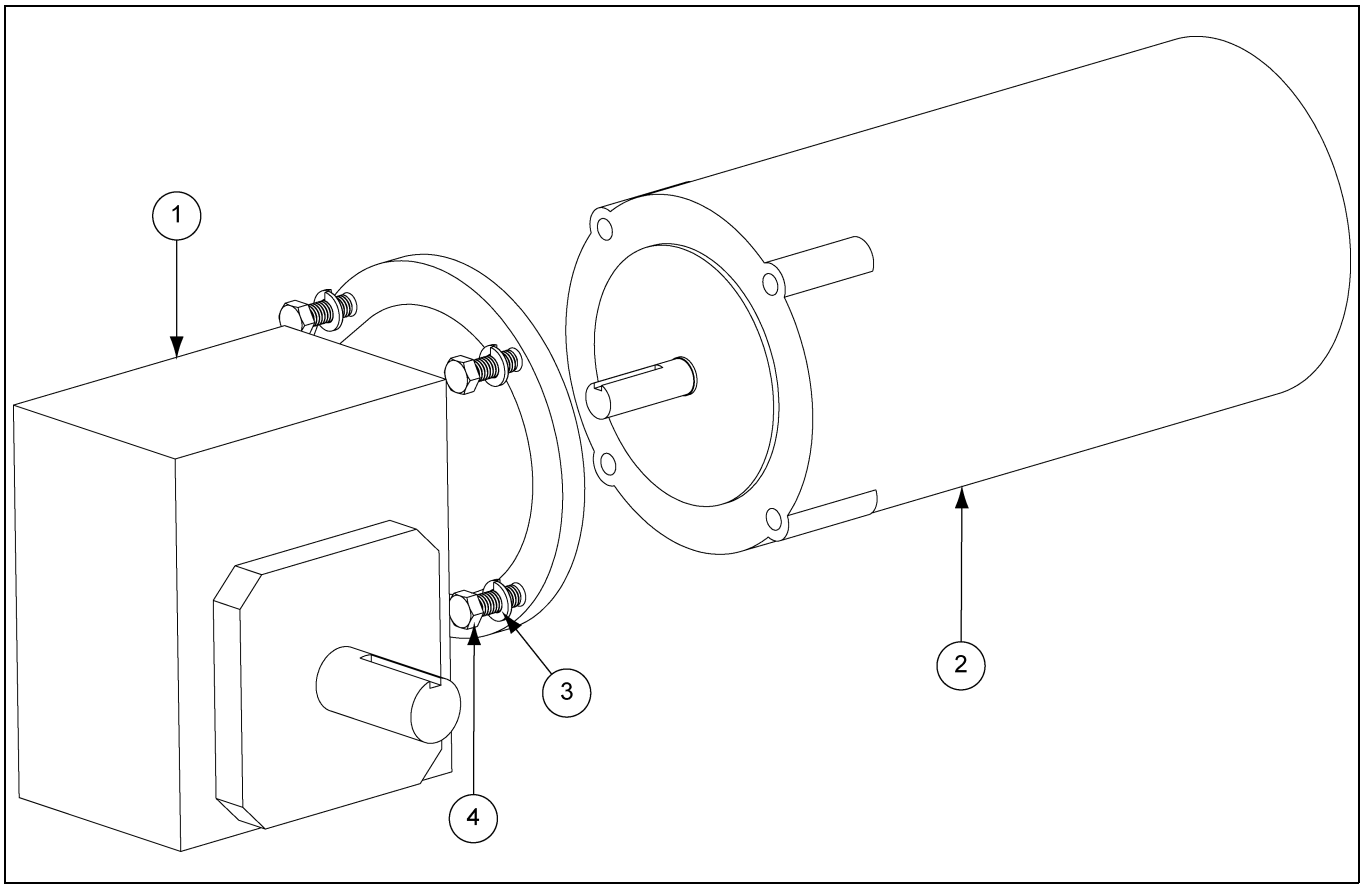
Chain Guard Assembly



Chain Guard Assembly Parts List

Ref #	Part #	Description
1	GK7712	Chain Guard Top Assembly
2	GK7713	Chain Guard Bottom Assembly
3	S-9067	3/8"-16 x 3/4" Flange Bolt Zinc Grade 5

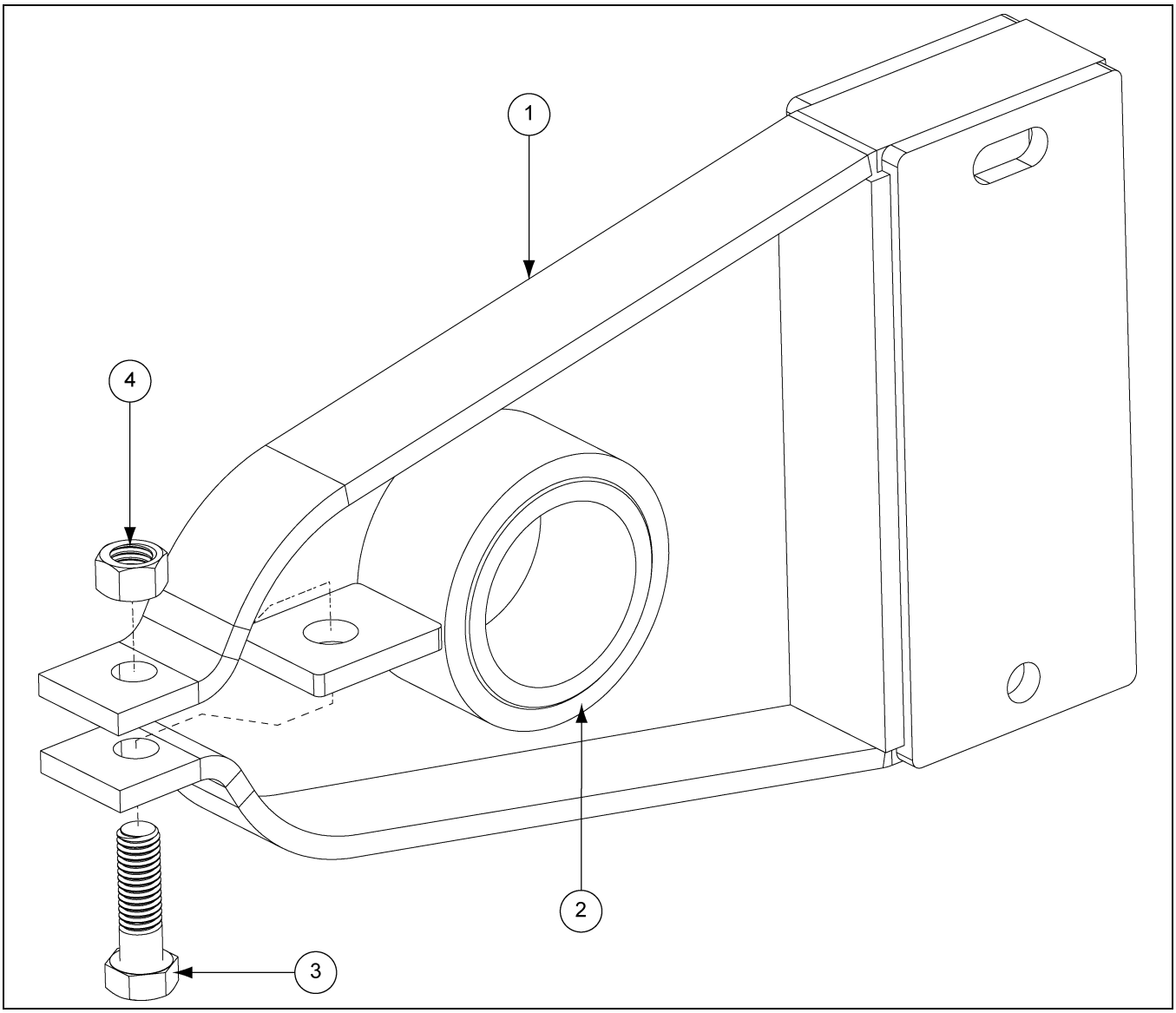
Drive Motor Assembly



Drive Motor Assembly Parts List

Ref #	Part #	Description
1	GK4987	Worm Gear Reducer, 60:1, 56C, LO, S23
2	CFDL3504M	Motor - 1/2 HP, 1 PH, 60 Hz, 1725 RPM, 115/230V, TEFC, 56C
2	FLX-4021-1PH	Motor - 1/2 HP, 1 PH, 60 Hz, 1725 RPM, 115/208-230V, XPFC, 56C
2	FLX-3547F	Motor - 1/2 HP, 3 PH, 60 Hz, 1725 RPM, 230/460V, TEFC, 56C
2	FLX-4021	Motor - 1/2 HP, 3 PH, 60 Hz, 1725 RPM, 208-230/460V, XPFC, 56C
2	012-3E-575XP	Motor - 1/2 HP, 3 PH, 60 Hz, 1725 RPM, 575V, XPFC, 56C
2	002-1408-0F	Motor - 1/2 HP, 3 PH, 50 Hz, 1725 RPM, 220/380/460V, TEFC, 56C
3	S-1054	3/8" Split Lock Washer Zinc
4	S-7469	3/8"-16 x 1" HHCS Bolt Zinc Grade 5

Bearing Stand Assembly



Bearing Stand Assembly Parts List

Ref #	Part #	Description
1	GK1626-BS	Bearing Stand - GCS8 - Bin Silver
1	GK1679-BS	Bearing Stand - GCS10 - Bin Silver
1	GK2049-BS	Bearing Stand - GCS12 - Bin Silver
1	GK2172-BS	Bearing Stand - GCS14 - Bin Silver
2	GK1680	Bearing Stand Bearing Assembly - GCS8
2	GK1955	Bearing Stand Bearing Assembly - GCS10
2	GK2050	Bearing Stand Bearing Assembly - GCS12
2	GK2163	Bearing Stand Bearing Assembly - GCS14
3	S-7837	7/16"-14 x 1-1/2" HHCS Bolt Zinc Grade 5
4	S-8317	Stover Nut 7/16"-14 ZN Grade C

Limited Warranty — N.A. Grain Products

The GSI Group, LLC. (“GSI”) warrants products which it manufactures, to be free of defects in materials and workmanship under normal usage and conditions for a period of 12 months from the date of shipment (or, if shipped by vessel, 14 months from the date of arrival at the port of discharge). If, in GSI’s sole judgment, a product is found to have a defect in materials and/or workmanship, GSI will, at its own option and expense, repair or replace the product or refund the purchase price. This Limited Warranty is subject to extension and other terms as set forth below.

Warranty Enhancements: The warranty period for the following products is enhanced as shown below and is in lieu of (and not in addition to) the above stated warranty period. (Warranty Period is from date of shipment.)

	Product	Warranty Period
Storage	Grain Bin Structural Design ▪ Sidewall, roof, doors, platforms and walkarounds ▪ Flooring (when installed using GSI specified floor support system for that floor) ▪ Hopper tanks (BFT, GHT, NCHT, and FCHT)	5 Years
Conditioning	Dryer Structural Design – (Tower, Portable and TopDry) ▪ Includes (frame, portable dryer screens, ladders, access doors and platforms)	5 Years
	All other Dryer parts including: ▪ Electrical (controls, sensors, switches and internal wiring)	2 Years
	All Non-PTO Driven Centrifugal and Axial Fans	3 Years
	Bullseye Controllers	2 Years
Material Handling	Bucket Elevators Structural Design	5 Years
	Towers Structural Design	5 Years
	Catwalks Structural Design	5 Years
	Accessories (stairs, ladders and platforms) Structural Design	5 Years

Conditions and Limitations:

THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE LIMITED WARRANTY DESCRIPTION SET FORTH HEREIN; SPECIFICALLY, GSI DISCLAIMS ANY AND ALL OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE IN CONNECTION WITH: (I) ANY PRODUCT MANUFACTURED OR SOLD BY GSI, OR (II) ANY ADVICE, INSTRUCTION, RECOMMENDATION OR SUGGESTION PROVIDED BY AN AGENT, REPRESENTATIVE OR EMPLOYEE OF GSI REGARDING OR RELATED TO THE CONFIGURATION, INSTALLATION, LAYOUT, SUITABILITY FOR A PARTICULAR PURPOSE, OR DESIGN OF SUCH PRODUCTS.

The sole and exclusive remedy for any claimant is set forth in this Limited Warranty and shall not exceed the amount paid for the product purchased. This Warranty only covers the value of the warranted parts and equipment, and does not cover labor charges for removing or installing defective parts, shipping charges with respect to such parts, any applicable sales or other taxes, or any other charges or expenses not specified in this Warranty. GSI shall not be liable for any other direct, indirect, incidental or consequential damages, including, without limitation, loss of anticipated profits or benefits. Expenses incurred by or on behalf of a claimant without prior written authorization from the GSI warranty department shall not be reimbursed. This warranty is not transferable and applies only to the original end-user. GSI shall have no obligation or responsibility for any representations or warranties made by or on behalf of any dealer, agent or distributor. Prior to installation, the end-user bears all responsibility to comply with federal, state and local codes which apply to the location and installation of the products.

This Limited Warranty extends solely to products sold by GSI and does not cover any parts, components or materials used in conjunction with the product, that are not sold by GSI. GSI assumes no responsibility for claims resulting from construction defects, unauthorized modifications, corrosion or other cosmetic issues caused by storage, application or environmental conditions. Modifications to products not specifically delineated in the manual accompanying the product at initial sale will void all warranties. This Limited Warranty shall not extend to products or parts which have been damaged by negligent use, misuse, alteration, accident or which have been improperly/inadequately maintained.

Notice Procedure:
In order to make a valid warranty claim a written notice of the claim must be submitted, using the RMA form, within 60 days of discovery of a warrantable nonconformance. The RMA form is found on the OneGSI portal.

Service Parts:
GSI warrants, subject to all other conditions described in this Warranty, Service Parts which it manufactures for a period of 12 months from the date of purchase unless specified in Enhancements above.

(Limited Warranty - N.A. Grain Products_ revised 01 October 2020)

This equipment shall be installed in accordance with the current installation codes and applicable regulations, which should be carefully followed in all cases. Authorities having jurisdiction should be consulted before installations are made.

1004 E. Illinois St.
Assumption, IL 62510-0020
Phone: 1-217-226-4421
Fax: 1-217-226-4420
www.gsiag.com

CN-324184