

INSTALLATION INSTRUCTIONS



The Safety Symbol shown is used throughout these instructions to alert you to information about unsafe actions or situations and will be followed by the word **DANGER**, **WARNING** or **CAUTION**. **DANGER** - indicates immediate hazards that may result in severe injury or death. **WARNING** - indicates unsafe actions or situations that may cause severe injury, death and/or major equipment or property damage. **CAUTION** - indicates unsafe actions or situations that may cause injury and/or minor equipment or property damage.

ELECTRIC DRIVE CASTER WHEEL KIT, PART NO. A2036A for use with Portable Augers and Conveyors

This kit includes an electric powered drive tractor that works in conjunction with the caster wheel kit. The caster kit attaches to the existing wheel hubs provided with the auger/conveyor. The caster kit was designed to fit both 5-bolt and 6-bolt hubs.

The drive frame can be adjusted to push directly perpendicular with the auger/conveyor center line or at an angle up to 10° for swinging the auger/conveyor in an arc.



CAUTION

- Some of the items from the drive tractor kit are heavy, to prevent personal injury, use assistance during the installation and assembly process.
- When raising the auger or conveyor axle, do not rely solely on mechanical or hydraulic jacks, or overhead hoist's for support. Use appropriate jack stands or equivalent for supporting the unit.
- Electric motors and controls shall be installed by a qualified electrician and must meet the standards set by the National Electrical Code and all local and state codes.

Before beginning assembly it is suggested to read through these instructions and lay out all items from the kit to ensure all parts are accounted for. This not only helps you become familiar with the parts and the assembly procedures, but also makes you aware of what tools, equipment or materials you may need to complete the installation process.

- To avoid the possibility of tip-over when raising the axle for tire removal, make sure the auger/conveyor is in the fully lowered position.
- Only raise one side of the conveyor at a time.
- The conveyor axle only needs to be raised high enough to allow the conveyor tire to clear the ground.
- Use appropriate jack stands or equivalent to support the unit. Do not rely solely on mechanical jacks, overhead hoists or hydraulic jacks for support.

Whenever reference is made to the left, right, front or rear of a conveyor, it is always determined by standing at the intake end looking towards the discharge chute.

Caster and Mounting Plate Assembly

1. Raise the axle on the right side of the conveyor high enough to allow the tire to clear the ground. Properly support the axle, and remove the tire and rim from the wheel hub (retain the lug nuts, these will be used to attach the mount plate to the hub).
2. Locate one of the axle mount plates from the kit. Attach a caster wheel on each end of the mount plate using four (4) 1/2" x 1 1/2" bolts, flat washers and nylon locknuts for each wheel (See Fig. 2).
3. Position the mount plate onto the existing wheel hub, and secure using the lug nuts previously removed (turn the lug nuts around so that the flat side of the lug nut is against the mount plate).

Make sure all hardware is tight then lower the conveyor to the ground. Raise and support the left side conveyor axle and remove the tire from the conveyor.

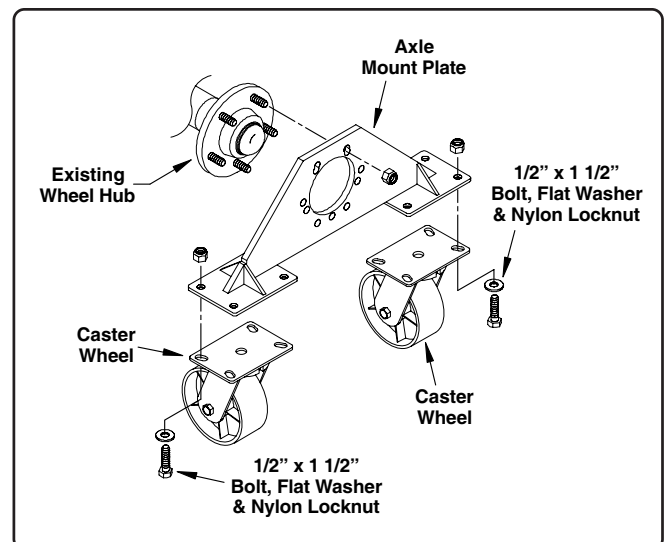


Fig. 1

Caster & Mounting Plate Assembly (con't.)

4. Locate the second axle mount plate from the kit and position the plate on top of the tractor mount connecting plate (See Fig. 2). Attach the caster wheels to the bottom side of the connecting plate using four (4) $1/2"$ x $1 3/4"$ bolts, flat washers and nylon locknuts for each wheel.

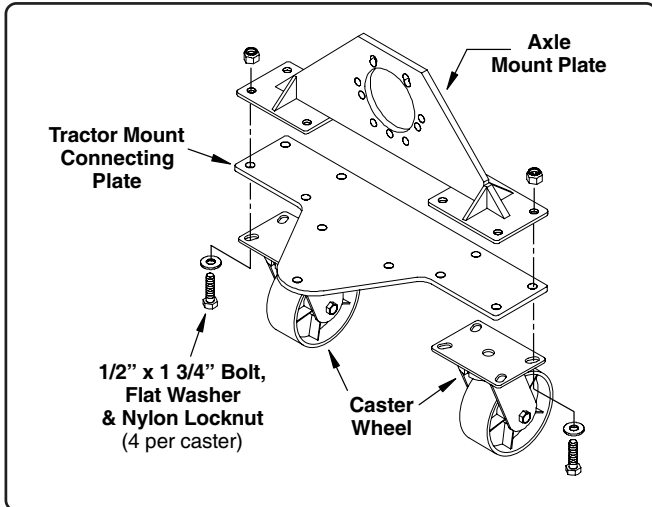


Fig. 2

5. Using two (2) $1/2"$ x $1 1/2"$ carriage bolts, flat washers and nylon locknuts, loosely attach the tractor drive frame to the top of the connecting plate as shown in Fig. 3 (do not tighten at this time).

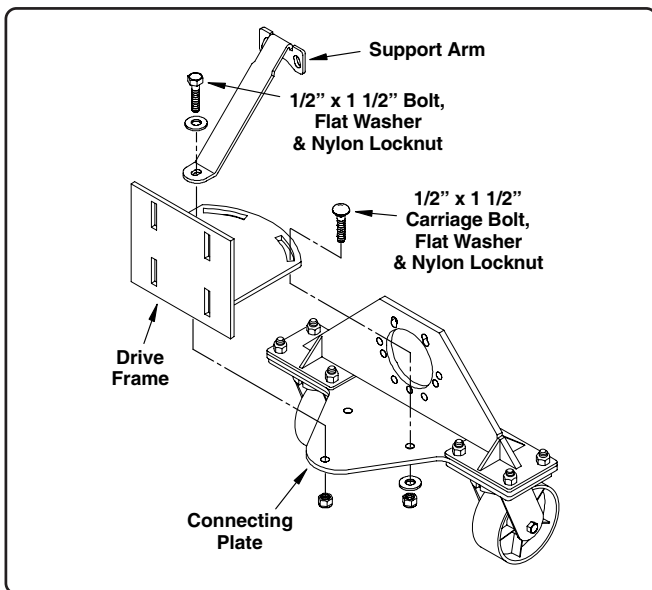


Fig. 3

6. Position the support arm on top of the drive frame and secure the bottom of the support arm using one $1/2"$ x $1 1/2"$ bolt, flat washer and nylon locknut (the bolt will pass through both the drive frame and connecting plate as shown in Fig. 3 (do not tighten completely at this time, you'll want a little movement at the top of the support arm when attaching it to the wheel hub).

Tractor Assembly and Mounting



CAUTION

- Use caution during the assembly process. When assembled, the unit may become top heavy which can cause the assembly to suddenly pivot or roll downward causing personal injury.

1. Attach the gearbox to the drive frame using four (4) $1/2"$ x $1 1/2"$ carriage bolts, flat washers, lock washers and non-lock nuts (position the gearbox at the top of the slots).
2. Install the wheel hubs to the shafts on each side of the gearbox. Secure each hub using one $3/8"$ x $2 1/2"$ bolt and nylon locknut.
Mount the tire and rim assembly's onto the hubs and secure using the ten (10) lug bolts provided.
3. Position the electric motor on top of the gearbox as shown in Fig. 4. Attach the motor to the top of the gearbox using four $3/8"$ x $1"$ bolts and lock washers (the bolts will pass up through the gearbox flange and tighten into the bottom of the motor).

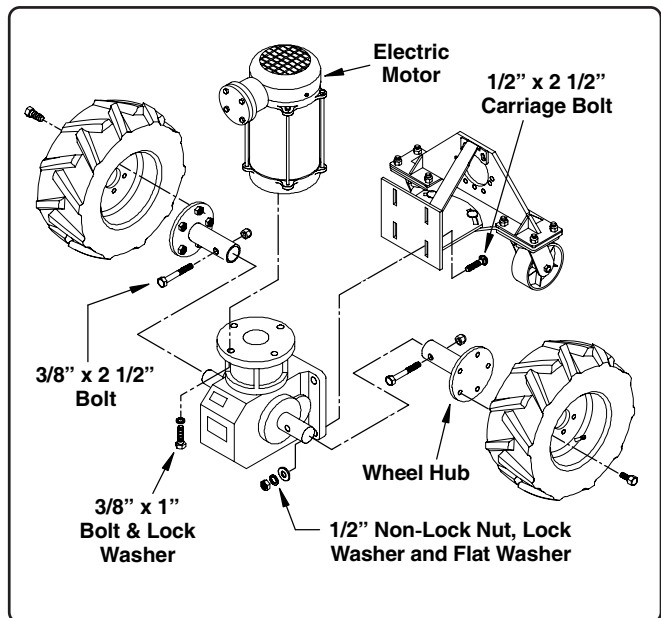


Fig. 4

4. Position the tractor and caster assembly near the conveyor axle hub. If necessary, lower the conveyor axle to align the hub bolts with the axle mounting plate (the two top bolts on the axle hub will also pass through the top of the support arm).
Secure the mounting plate to the axle hub using the lug nuts previously removed (turn the lug nuts around so that the flat side of the lug nut is against the mounting plate).

Tractor Assembly and Mounting (con't.)

5. It may be necessary to adjust the height of the tractor tires in relation to the height of the caster wheels. To make this adjustment, lower the conveyor axle until the tractor tires, or the caster wheels, are resting on the ground.

Loosen the four bolts securing the drive frame to the gearbox flange (See Fig. 5). Raise (or lower) the conveyor axle until the tractor tires and caster wheels are resting equally on the ground, retighten the four bolts.

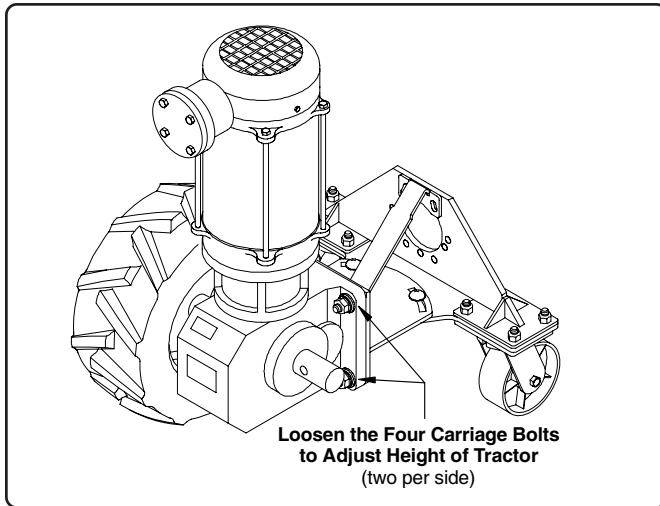


Fig. 5

6. To adjust the tractor angle, raise the conveyor axle just enough to allow the tractor tires to clear the ground. Loosen the bolt on the lower part of the support arm and the two carriage bolts that secure the drive frame to the connecting plate. Adjust the tractor to the desired position and retighten the hardware (See Fig. 6).

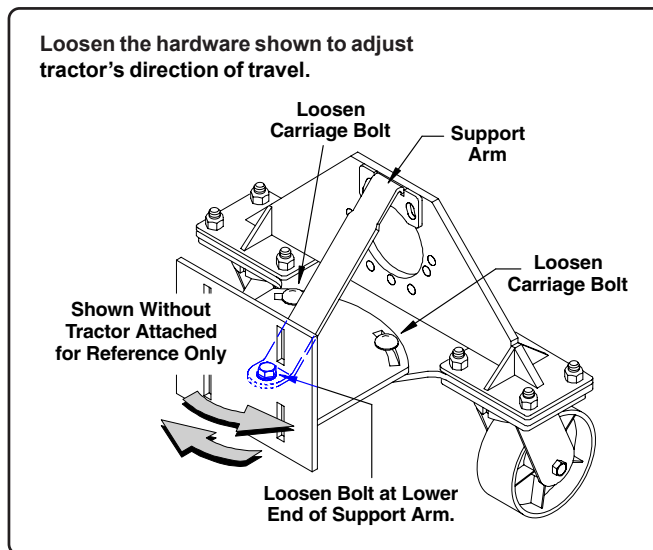


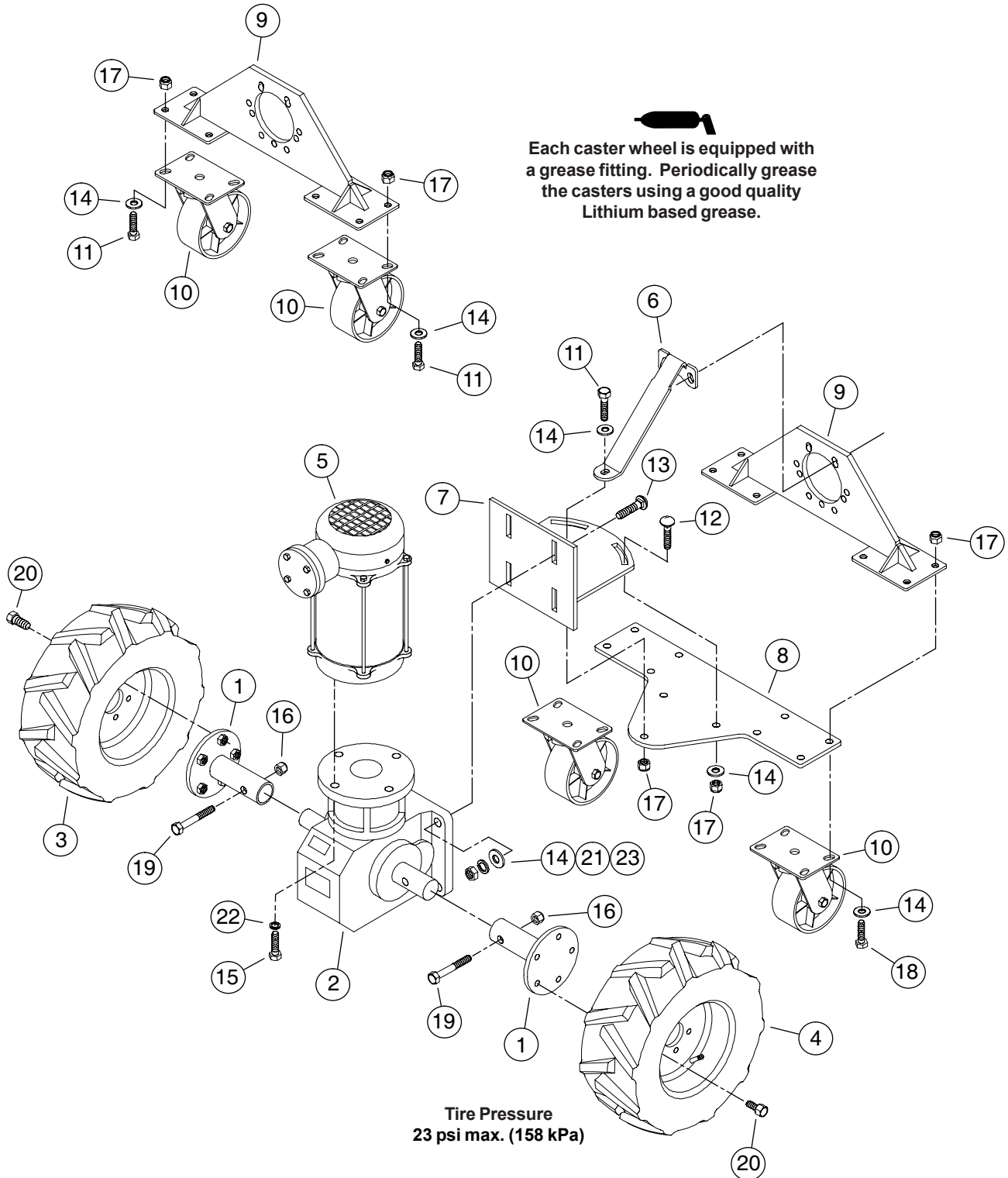
Fig. 6

7. Route the electrical wiring. Connect the motor to an appropriate power source and secure the cord in a manner in which it cannot become entangled or damaged during unit operation.

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

8. Start the motor and check to make sure the tractor is traveling as intended. Make any necessary adjustments to ensure proper tractor operation.

ELECTRIC TRACTOR DRIVE CASTER KIT
PART NO. A2036A
 for use with
Portable Augers and Conveyors



ELECTRIC TRACTOR DRIVE CASTER KIT
PART NO. A2036A
for use with
Portable Augers and Conveyors

Ref No.	Part No.	Description	No. Req'd.	Ref No.	Part No.	Description	No. Req'd.
1	1026633	Hub, wheel	2	13	1029034	Bolt, carriage 1/2-13 x 2 1/2" G5 PLT	4
2	1026652	Gearbox, 240:1 reduction	1	14	33025	Washer, flat 1/2" PLT	23
3	1026653	Wheel & tire, 20 x 8 4-ply (LH)	1	15	33060	Bolt, 3/8-16 x 1" G5 PLT	4
4	1026676	Wheel & tire, 20 x 8 4-ply (RH)	1	16	33136	Nut, nylon lock, 3/8-16 PLT	2
5	1027929	Motor, 1.5 HP single phase	1	17	33138	Nut, nylon lock, 1/2-13 PLT	19
6	1031611	Support arm	1	18	33247	Bolt, 1/2-13 x 1 3/4" G5 PLT	8
7	1031615	Drive frame	1	19	33375	Bolt, 3/8-16 x 2 1/2" G5 PLT	2
8	1031626	Plate, tractor connecting	1	20	106241	Lug bolt	10
9	1031645	Axle mount	2	21	D1143	Washer, lock 1/2" PLT	4
10	41625	Caster, swivel	4	22	D1150	Washer, lock 3/8" PLT	4
11	1002227	Bolt, 1/2-13 x 1 1/2" G5 PLT	9	23	D1169	Nut, non-lock, 1/2-13 PLT	4
12	1002243	Bolt, carriage 1/2-13 x 1 1/2" G5 PLT	2				

Where Used Hardware List

<u>Part No.</u>	<u>Description</u>	<u>Qty.</u>	<u>Where Used</u>
1029034	Bolt, carriage, 1/2-13 x 2 1/2" G5 PLT	4	Gearbox to Drive Frame
33025	Washer, flat, 1/2" PLT	4	
D1143	Washer, lock, 1/2" PLT	4	
D1169	Nut, non-lock, 1/2-13 PLT	4	
33375	Bolt, 3/8-16 x 2 1/2" G5 PLT	2	Wheel Hubs to Gearbox Shafts
33136	Nut, nylon lock, 3/8-16 PLT	2	
33060	Bolt, 3/8-16 x 1" G5 PLT	4	Electric Motor to Gearbox
D1150	Washer, lock, 3/8" PLT	4	
1002227	Bolt, 1/2-13 x 1 1/2" G5 PLT	8	Caster Wheels to Axle Mount Plate
33247	Bolt, 1/2-13 x 1 3/4" G5 PLT	8	
33025	Washer, flat, 1/2" PLT	16	
33138	Nut, nylon lock, 1/2-13 PLT	16	
1002243	Bolt, carriage, 1/2-13 x 1 1/2" G5 PLT	2	Drive Frame to
1002227	Bolt, 1/2-13 x 1 1/2" G5 PLT	1	Tractor Connecting Plate
33025	Washer, flat 1/2" PLT	3	
33138	Nut, nylon lock, 1/2-13 PLT	3	
106241	Lug bolts	10	Wheels to Hubs



Hutchinson/Mayrath

A Division of **GLOBAL** Industries, Inc.

Hutchinson/Mayrath • P.O. Box 629 • Clay Center, KS. 67432
Ph. 785-632-2161 • Fx. 785-632-5964 • Toll Free 800-523-6993