

CLARKE-GRAVELY CORPORATION A Studebaker-Worthington Company INSTRUCTIONS

NAME:

8000 SERIES TRACTOR

PART NUMBER(S):

8000 SERIES

These set-up instructions give the procedure for assembling the 8000 Series tractor. All reference to right side, left side, front, and rear are given from the operator's position.



WARNING: Use caution when removing the straps that hold the tractor to the pallet.

Raise the rear of the tractor. Fasten the rear wheel to the wheel hub with the 7/16" x 3/4" hub bolts. See figure 2.0-1.

NOTE: Give service to the battery as shown in the **Battery Service instructions.** 

### 1.0 HOW TO TIGHTEN THE BOLTS

Tighten the bolts used to assemble the 8000 Series tractor to the torque given in the bolt torque specifications unless shown differently.

BOLT SIZE	FOOT POUNDS (ft. lbs.)	NEWTON METERS (N.m)
1/4"	7	9.5
5/16"	14	19
3/8"	25	34
7/16"	40	54
1/2"	60	82
9/16"	83	113
5/8"	120	163
3/4"	200	271



1 - Wheel Hub 2 - Hub Bolts

Figure 2.0-1

- 2. Repeat step 1 for the other rear wheel.
- Lower the rear of the tractor. 3.
- Adjust the air pressure of the tires to 12 to 18 4. psi (.84 to 1.27 kg/cm<sup>2</sup>).

#### HOW TO INSTALL THE FRONT WHEELS

- Raise the front of the tractor. 1.
- Put a spacer into the seal on the side of the 2. wheel that has the valve stem. See figure 3.0-1.

#### 2.0 HOW TO INSTALL THE REAR WHEELS

NOTE: The rear wheels must be installed with the valve stem towards the inside on the tractors that have a twin cylinder engine.

To continue its program of quality and design improvement, the manufacturer reserves the right to change specifications, designs and prices without notice and incurring obligation.

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- 1 Seal 2 - Spacer
- Figure 3.0-1
- 3. Put multi-purpose grease on the axle.
- 4. Put the wheel on the axle with the valve stem towards the inside.
- 5. Put multi-purpose grease on the bearing. Make sure the bearing cage is full of grease.
- 6. Put the bearing on the axle with the tapered end of the bearing toward the wheel. Push the bearing into the wheel.
- 7. Put a spacer on the axle. Put a .656" x 1.312" x .095" washer on the axle and install the 5/8" lock nut. See figure 3.0-2.



- 1 Washer 2 - Lock Nut
- Figure 3.0-2

- 8. Turn the wheel slowly by hand while turning the lock nut clockwise until there is a small amount of resistance in turning the wheel.
- 9. Turn the lock nut counterclockwise until there is no resistance.

NOTE: The wheel must turn freely with no clearance in the bearings.

10. Install the dust cap. See figure 3.0-3.



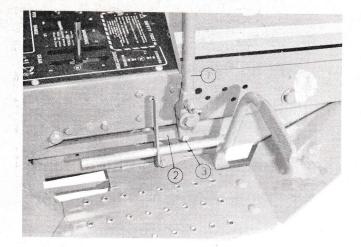
1 - Dust Cap

Figure 3.0-3

- 11. Repeat steps 2 through 10 for the other front wheel.
- 12. Lower the front of the tractor.
- 13. Adjust the air pressure of the tires to 12 to 18 psi (.84 to 1.27 kg/cm).

# 4.0 HOW TO CONNECT THE DIRECTION CONTROL LEVER

1. Align the hole in the direction control lever with the hole in the shifter link and install the clevis pin. See figure 4.0-1.



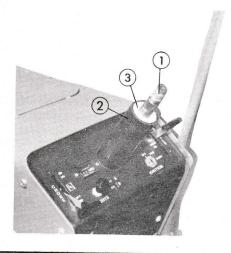
- 1 Direction Control Lever
- 2 Shifter Link
- 3 Clevis Pin

Figure 4.0-1

2. Put a .406"x .812" x .065" flat washer on the clevis pin and install the cotter pin.

#### 5.0 HOW TO INSTALL THE STEERING WHEEL

1. Put the steering wheel bushing on the steering wheel shaft. Make sure the steering wheel bushing fits over the nylon bushing in the instrument panel. See figure 5.0-1.



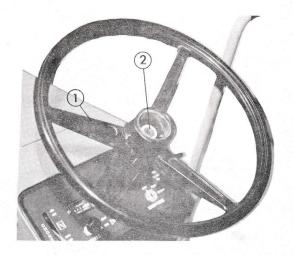
- 1 Steering Wheel Shaft
- 2 Steering Wheel Bushing
- 3 Nylon Bushing

Figure 5.0-1

2. Put the nylon bushing on the steering wheel shaft and into the steering wheel bushing.

# NOTE: Make sure the front wheels are in a straight, forward position.

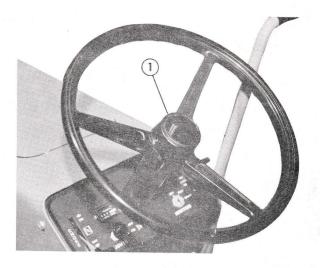
3. Put the steering wheel on the steering wheel shaft with one spoke of the steering wheel toward the rear. See figure 5.0-2.



- 1 Steering Wheel
- 2 Nut

Figure 5.0-2

- 4. Put a .656" x 1.312" x .095" flat washer on the steering wheel shaft. Install the 5/8" lock nut. Tighten the nut to a torque of 20 ft. lbs. (27 N.m).
- 5. Install the steering wheel insert. See figure 5.0-3.



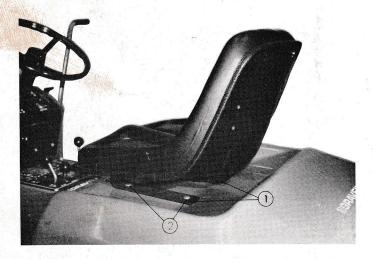
1 - Steering Wheel Insert

Figure 5.0-3

# 6.0 HOW TO INSTALL THE SEAT

NOTE: Use caution not to damage the paint on the seat pan when installing the seat.

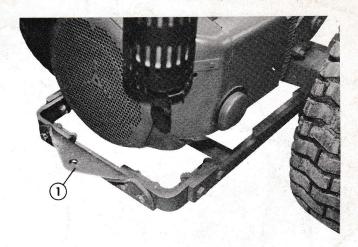
1. Put the seat in position on the seat pan. See figure 6.0-1.



- 1 Seat Spring
- 2 Round Head Bolts

Figure 6.0-1

- 2. Align the holes in the seat spring with the holes in the seat pan.
- 3. Fasten the seat in position with the 5/16" x 3/4" round head bolts, the flat washers, and the 5/16" lock nuts.



## 1 - Hitch Plate

Figure 7.0-1

#### 7.0 THE REAR HITCH

On the commercial tractors, install the hitch plate as shown in figure 7.0-1.