



MODEL NO. 44232

# **INSTALLATION INSTRUCTIONS**

## **CUSHMAN® GA™ 60 ADAPTER KIT**

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#### **CUSHMAN® GA-60 ADAPTER KIT**

The Cushman GA-60 Adapter kit contains the mounting bracket and wiring necessary to mount the GA-60 controller to the Workman. It will be necessary to have previously installed Hydraulic Control Kit (Model 07415) and the 5th Wheel Hitch Kit (Model 44230) on the Workman in order to use the GA-60 Aerator. In addition, it is recommended that the hand throttle and tachometer options be installed on the Workman to precisely monitor and control ground speed to assure desired hole spacing.

Read and understand the Workman, 5th wheel hitch kit, and Cushman GA-60 Aerator operator's manuals before using this equipment. Allow only properly trained and qualified operators to operate the equipment. All operator's manuals must remain on the equipment within easy access of the operator.

#### **INSTALL POWER CABLE**

1. Disconnect negative (-) battery cable.
2. Connect red lead (+) of power cable to (+) terminal on battery. Replace boot.
3. Connect black lead (-) of power cable to main frame ground. (Optional: Connect black lead (-) of power cable to (-) terminal on battery.)
4. Mount power cable connector to L.H. side on 5th wheel hitch using 1/4" x 1-1/2" bolts.

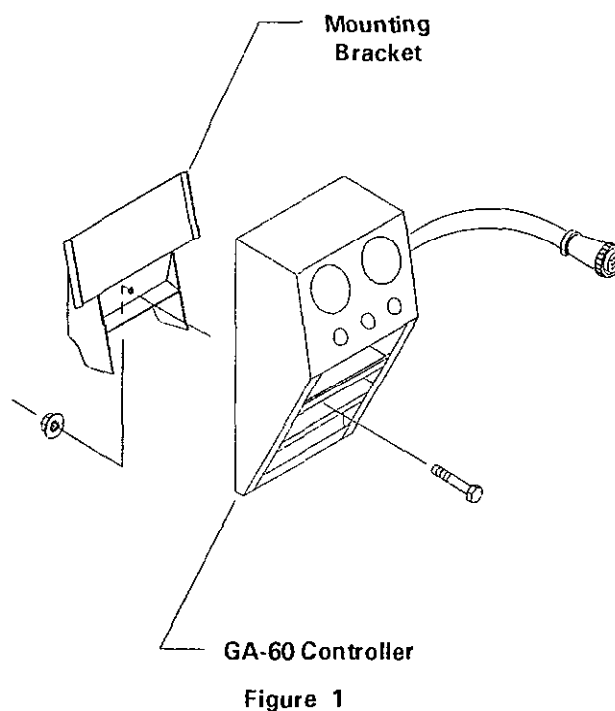
**NOTE:** It will be necessary to remove power cable before removing 5th wheel hitch.

5. Reconnect the negative (-) battery cable to the battery.

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"GA 60" is a trademark of Cushman.

#### **MOUNT GA-60 CONTROLLER (Fig. 1 & 2)**

1. Mount the GA-60 controller to the mounting bracket using (1) 3/8" x 1-1/2" bolt and flanged lock nut. (See Fig. 1)



**NOTE:** The long carriage bolt, spring and spacer from the Cushman GA-60 controller bracket are not required for this mounting. Save the knob for Step #3.

## INSTALLATION INSTRUCTIONS (Continued)

2. Mount the controller bracket to the R.H. shoulder restraint through the center hole on the control box bracket using a 3/8" x 1-1/4" carriage bolt. (See Fig. 2)

3. Place the controller to the inside of the shoulder restraint and the clamp to the outside of the shoulder restraint. Assemble with plastic knob already provided with the GA-60 controller. (See Fig. 2)

4. Tighten knob to secure controller to restraint.

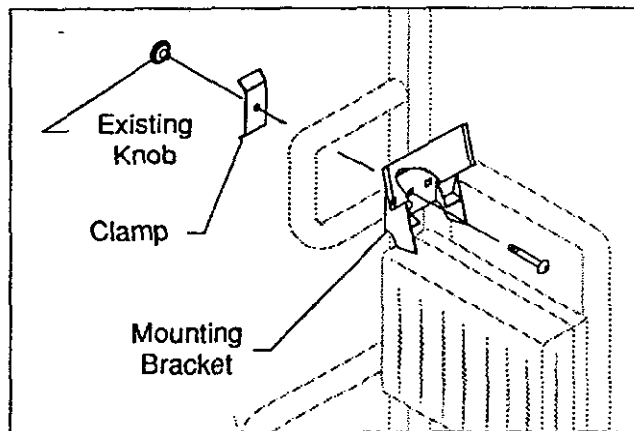


Figure 2

3. Connect (92-4543) splicer harness from brake controller receptacle on L.H. frame of Workman to GA-60 controller. Route and retain harness out of the way. (See Fig. 3)

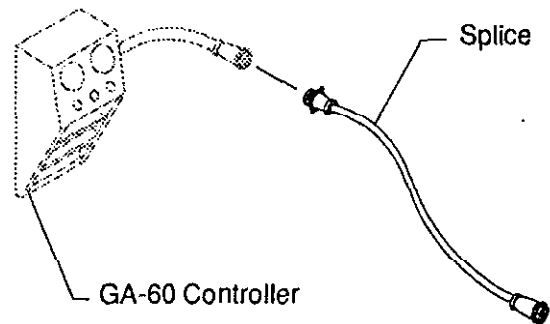


Figure 3



### CAUTION

**NEVER** connect the splicer (92-4543) harness directly to the GA-60. **ALWAYS** connect the splicer to the GA-60 Controller.

4. Connect GA-60 power cable to power cable previously installed onto Workman.

5. Route and secure all hoses and wires in a manner that will prevent entanglement with the Workman, yet provide sufficient slack to allow turns in either direction. Exit the wires from the GA-60 near the tongue socket and route through the wire bracket on the 5th wheel hitch. (See Fig. 4)

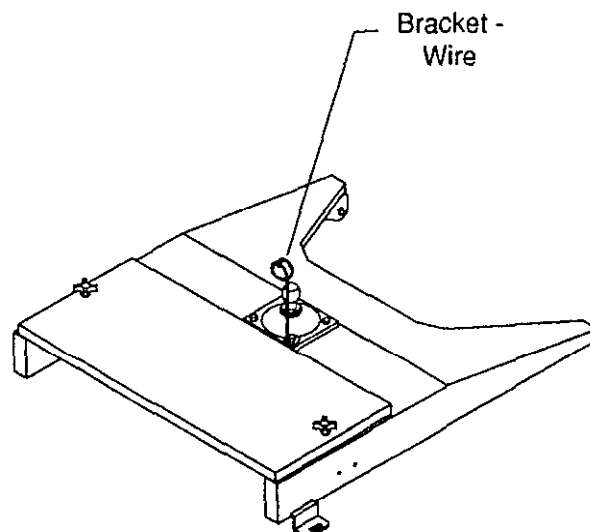


Figure 4

### CONNECT GA-60 AERATOR TO WORKMAN (Fig. 3 & 4)

1. Connect tongue of GA-60 Aerator to the ball of the Workman 5th wheel hitch following the procedure described in the 5th wheel hitch kit manual.

**NOTE:** Always apply a light coat of grease on the ball of the 5th wheel hitch before attaching the GA-60 Aerator.

2. Connect hydraulic hoses of the GA-60 Aerator to the Workman remote hydraulic quick couplers following the procedure in the 5th wheel hitch kit manual.

# INSTALLATION INSTRUCTIONS (Continued)

## OPERATING TIPS

1. Familiarize yourself with all the safety, maintenance, and operating instructions described in the Workman, 5th wheel hitch kit and Cushman GA-60 Aerator and follow them. This will help to insure safe and trouble free operation.

2. Check to make sure the electric brakes on the GA-60 Aerator are connected and function before use. **NEVER** operate without properly functioning brakes.

3. The pin must be removed from the uplatch bar of the GA-60 Aerator before lowering the aerator heads. Lock the uplatch bar in place whenever working on the GA-60 to prevent accidental lowering of the aerator heads. Also install the uplatch bar to relieve hydraulic pressure in the hoses when unhooking the GA-60 from the Workman. **NEVER** work on or around GA-60 with either Workman or GA-60 engines running.

4. The engine of the GA-60 can be started and stopped from the GA-60 control panel mounted on the Workman's R.H. shoulder restraint. (Refer to Cushman GA-60 operators manual for starting and operating procedures.) The GA-60 engine speed is automatically increased and the aerator heads are automatically engaged when the aerator heads are lowered via the remote hydraulic control of the Workman.

5. Assure the hydraulic hoses are plugged into the correct quick coupler parts of the Workman. Use the Workman remote hydraulic to raise and lower the GA-60. Moving the remote hydraulic control lever rearward should raise the GA-60 and disengage the aerator heads. Moving the remote hydraulic control lever forward should lower the GA-60 and engage the aerator heads. Never place the remote hydraulic control lever in the "run" detent position.

6. Tow the GA-60 aerator in 1st - Lo @ 1-2 mph to obtain 2-1/2"-5" hole spacing. In 1st-Lo :

1250 rpm = 1 mph = 2.5" (4mm) hole spacing

1850 rpm = 1.5 mph = 3.75" (45 mm) hole spacing

2500 rpm = 2 mph = 5" (127 mm) hole spacing

7. Check the grounds area prior to aerating and remove foreign objects which could damage the equipment or present a hazard to the operator. Do not operate over hard surfaces (i.e; driveways, parking lots, sidewalks, etc..) with aerator in lowered position.

8. Use extreme care when backing unit. **NEVER** back unit with GA-60 in DOWN position or damage will occur to tines.

9. **NEVER** run engine in a enclosed space where exhaust fumes and deadly carbon monoxide could collect.

10. ALWAYS stop both Workman and GA-60 aerator engines and DO NOT smoke when refueling. Gasoline is extremely flammable and can be highly explosive.

11. Make sure all shields and guards are kept in place.

# The Toro Commercial Products Two Year Limited Warranty

The Toro Company warrants your 1996 or newer Toro Commercial Product ("Product") purchased after January 1, 1997, to be free from defects in materials or workmanship for the period of time listed below\*. Where a warrantable condition exists, Toro will repair the Product at no cost to you including diagnosis, labor, parts, and transportation. This warranty begins on the date the Product is delivered to the original retail purchaser.

**Warranty Duration:** Two years or 1500 operational hours\*, whichever occurs first.

\*Product equipped with hour meter.

## Owner Responsibilities:

As the Product owner, you are responsible for required maintenance and adjustments stated in your Owner's Manual. Failure to perform required maintenance and adjustments can be grounds for disallowing a warranty claim.

## Instructions For Obtaining Warranty Service:

You are responsible for notifying the Commercial Products Distributor or Authorized Commercial Products Dealer from whom you purchased the Product as soon as you believe a warrantable condition exists.

If you need help locating a Commercial Products Distributor or Authorized Dealer, or if you have questions regarding your warranty rights or responsibilities, you may contact us at:

Toro Commercial Products Service Department  
8111 Lyndale Avenue South  
Minneapolis, MN, 55420-1196  
Telephone: (612) 888-8801  
Facsimile: (612) 887-8258  
E-Mail: Commercial.Service@Toro.Com

## Maintenance Parts:

Parts scheduled for replacement as required maintenance ("Maintenance Parts"), are warranted for the period of time up to the scheduled replacement time for that part.

## Items/Conditions Not Covered:

Not all product failures or malfunctions that occur during the warranty period are defects in materials or workmanship. The items / conditions listed below are not covered by this warranty:

- Product failures which result from the use of non-Toro replacement parts, or from installation and use of add-on, modified, or unapproved accessories are not covered.
- Product failures which result from failure to perform required maintenance and/or adjustments are not covered.
- Product failures which result from operating the Product in an abusive, negligent or reckless manner are not covered.

- This warranty does not apply to parts subject to consumption through use unless found to be defective. Examples of parts which are consumed, or used up, during normal Product operation include, but are not limited to, blades, reels, bedknives, tines, spark plugs, castor wheels, tires, filters, belts, etc.
- This warranty does not apply to failures caused by outside influence. Items considered to be outside influence include, but are not limited to, weather, storage practices, contamination, use of unapproved coolants, lubricants, additives, or chemicals, etc.
- This warranty does not apply to normal "wear and tear" items. Normal "Wear and Tear" includes, but is not limited to, damage to seats due to wear or abrasion, worn painted surfaces, scratched decals or windows, etc.

## Other Legal Disclaimers:

The above remedy of product defects through repair by an authorized distributor or dealer is the purchaser's sole remedy for any defect. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**Except for the Emissions warranty referenced below, if applicable, there is no other express warranty. All implied warranties of merchantability and fitness for use are limited to the duration of the express warranty.**

Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

**The Toro Company is not liable for indirect, incidental or consequential damages in connection with the use of the Product, including any cost or expense of providing substitute Product or service during periods of malfunction or non-use.**

Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

**Note to California residents:** The Emissions Control System on your Product may be covered by a separate warranty meeting requirements established by the U.S. Environmental Protection Agency (EPA), or the California Air Resources Board (CARB). The hour limitations set forth above do not apply to the Emissions Control System Warranty. Refer to the California Emission Control Warranty Statement printed in your Owner's Manual or contained in the engine manufacturer's documentation for details.