



**7 WHEEL PNEUMATIC ROLLER  
MODEL 700**

**OWNERS MANUAL**



PH: 877-690-3101  
Discount-Equipment.com  
West Palm, Tampa, and Orlando

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## SECTION I

# SAFETY PRECAUTIONS

**WARNING – LETHAL EXHAUST GAS!** An engine discharges carbon monoxide during operation, which may cause death if inhaled for even a short period of time. Operate only where deadly exhaust can be safely dissipated.

**WARNING – DANGEROUS FUEL!** Never add fuel to fuel tank while the engine is operating, Stop engine and allow it to cool thoroughly to prevent fuel from igniting on contact with hot parts.

**WARNING – MOVING HOT PARTS!** Careless operating of power equipment creates hazards to life and limb. Never operate with safety guards removed. Keep hands, feet, and clothing away from hot parts. Remember that an engine gets hot while operating, and exhaust system components get extremely hot. Never tamper with governor setting to gain more power. The governor establishes safe operating limits. Over speed not only shortens engine life but can be extremely hazardous. Keep people away from the operating area and be especially watchful for children. Stop the engine whenever you leave the machine. Do not allow it to idle unattended.

**WARNING – AVOID RUNAWAY!** Always engage the parking brake before dismounting the BASIC roller. When parking the machine overnight always park on a level surface when possible and secure the tires with blocks in the front and rear to prevent accidental rollaway. When it is not possible to park on level ground, position the machine at right angles to the slope. Make sure the machine is on a firm footing and that there is no danger of sliding.

Never mount or dismount a machine that is moving. Maintain control of your machine at all times.

Always operate your machine slowly until you are fully familiarized with its operation.

Constantly check your work area for possible hazards.

## SECTION II

# PRESTART CHECKLIST

NOTE: To assure fluid level readings, be sure the machine is parked on a level surface.

- ✓ Inspect fuel level and replenish as necessary
- ✓ Check engine oil level and replenish as necessary to the full mark
- ✓ Check radiator coolant level and replenish as needed
- ✓ Check battery cable connections and insure good contact is being made
- ✓ Check air cleaner for cleanliness and insure that components are tight to prevent intake of unfiltered air
- ✓ Check front of radiator for debris and clean if necessary
- ✓ Check hydraulic fluid level and replenish as necessary
- ✓ Inspect engine fan, all belts and hoses and adjust or replace if necessary
- ✓ Check cocoa mats for wear, and clean as needed
- ✓ Check the sprinkler tank water level and fill if roller is to be used in asphalt
- ✓ Make a general inspection of the machine for loose bolts and/or components

## SECTION III

# STARTING PROCEDURE

- ✓ Engage parking brake
- ✓ Place the directional/speed control lever in the “park” position
- ✓ Set throttle control to idle position
- ✓ Turn key switch to preheat position and hold for 10 to 15 seconds. If restarting a warm engine, no preheating is required
- ✓ Turn ignition key to “start” position and hold until engine starts. Release key, it will automatically return to “run” position
- ✓ Allow engine and hydraulic oil a few minutes to warm before beginning operations
- ✓ Make sure all personnel and objects are clear from the path of travel
- ✓ Release parking brake
- ✓ Move the directional control lever to the desired direction of travel slowly

**CAUTION:** Never attempt to start the engine except from the operator’s station.  
Never attempt to operate the controls except from the operator’s station.  
Never mount or dismount a machine that is moving.

## SECTION IV

# STOPPING PRECEDURE

- ✓ Slowly destroke speed control lever to the “park” position
- ✓ Engage parking brake
- ✓ Push engine throttle control to “idle” position
- ✓ Turn ignition key to “off” position
- ✓ Remove key
- ✓ Place block in front and rear of wheels to prevent movement
- ✓ Park on level ground whenever possible. When not possible, position the machine at right angles to the slope. Make sure the machine is on a firm footing and that there is no danger of sliding.

**CAUTION:** Never jump off of the machine.  
Dismount slowly and carefully.

## SECTION V

# OPERATION AT THE JOBSITE

1. Follow the instructions in Sections II and III of these operating instructions for prestart and starting procedures
2. Determine the amount of compaction desired and fill the front and rear tires and ballast tank with water
3. Fill the steel sprinkler tank with water
4. Position the machine next to the asphalt mat at the desired starting point
5. Lower the cocoa mats onto the tires
6. Before driving the roller onto the asphalt, turn the front and rear water valves to the maximum open position and allow the water to completely flood the tires
7. Set the engine throttle at desired speed
8. Slowly and steadily drive onto the asphalt
9. Begin rolling the outermost edge of the mat
10. Reduce the water sprinkling flow to the point that asphalt will not stick to the tires
11. When the roller nears the end of its travel, slowly decelerate and come to a smooth stop
12. Reverse the direction of travel by gradually moving the speed control lever to reverse
13. Gradually turn the steering wheel as the machine moves, to avoid leaving marks in the mat
14. As the machine reverses its direction of travel, steer it so that the machine moves over one tire width per pass
15. Continue this method until an entire section of the mat has been completed
16. Move on to the next section of asphalt and repeat steps 8 through 15 of the section

## SECTION VI

# MAINTENANCE

Regular and proper lubrication and maintenance is important to the safe and reliable operation of all vehicles. The information outlined in this guide is intended to assure continuing top performance of the BASIC 700 roller and to prolong its effective operating life. Follow this guide and the other maintenance information provided by component part manufacturers.

### Recommended Lubricants:

Due to chemical differences in petroleum products, see the engine maintenance and operators manual for recommended fuels and lubricants. The following lubricants and fluids are the factory recommendations. Any lubricants, fuels or fluids used which are not recommended here are used at your own risk. The manufacturer assumes no responsibility for the result due to the use of any lubricants, fuels or fluids which are not recommended.

### **Hydraulic Fluid:**

A good quality brand of AW46 (High Viscosity Index) Hydraulic Oil – Such as Citgo AW46

### **Hydraulics System Filter Replacement Elements:**

Hydraulic tank return filter	Part #FA10
Donaldson High Pressure Filter	Part #P170311

### **Grease:**

Quality, Multipurpose Lithium Grease #120

### **Gear Box Lubricant:**

Citgo EP320 Lubricant

### **Engine Fuel and Oil:**

Refer to engine maintenance and operator's manual

### **Paint:**

Quality grade acrylic enamel, Industrial Yellow



## **MAINTENANCE – cont.**

### Daily Maintenance and Inspections

1. Clean dirt, gravel, and debris from all moving parts on this machine. This includes steering king pin, as well as and inspection of collected material on and around the tires and wheels and between the tires and gear boxes.
2. Grease the front steering pin, as well as the upper and lower oscillation pins.
3. Grease the gear box oscillation located on the front and rear of each gear box.
4. Service the engine according to the recommendations of the Engine's Daily Service Manual.
5. Check Hydraulic Fluid Level, Fuel Level, Oil Level, and Water Level.
6. Inspect and replace coco mat if necessary.

### First 50 hours (break in period)

1. Service the engine according to the recommendations of the Engine's Daily Service Manual.
2. Check the hydraulic fluid level and change hydraulic system filters.

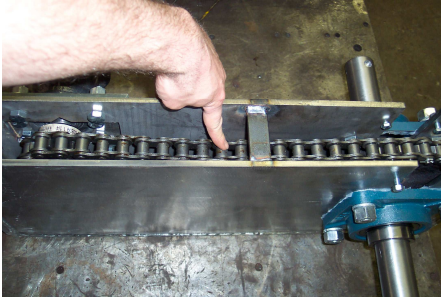
### Monthly or 150 hour Maintenance and Inspections

1. Service the engine according to the recommendations of the Engine's Daily Service Manual.
2. Check hydraulic fluid level and change hydraulic system filters.
3. Inspect the entire machine for loose bolts, leaking hoses, hose wear metal fatigue, and loose belts.
4. Inspect the tires for cuts or chips on the rolling surface and check air pressure.
5. Lubricate the forward and reverse linkage using WD40 or a similar type aerosol lubricant.

### Yearly or 400 hour Maintenance and Inspections

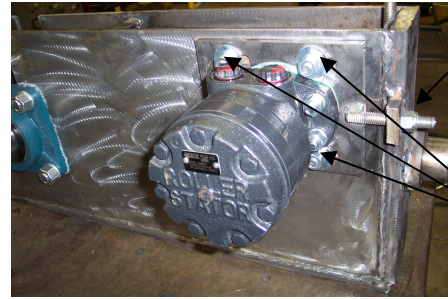
1. Check for wear of brass bushings in the front steering oscillation pins, the steering king pin and the gear box oscillation pins. Replace if necessary.
2. Grease all 4 axle bearings. This is done only once each year and this requires only a small amount of grease. (Too much grease may cause seal damage and this will allow dirt to enter the bearing and destroy it.) Two shots of grease per bearing is sufficient.
3. Inspect and adjust chain tension in gear boxes.

Chain should be loose enough to move 1/2"-3/4" when pressed with one finger.

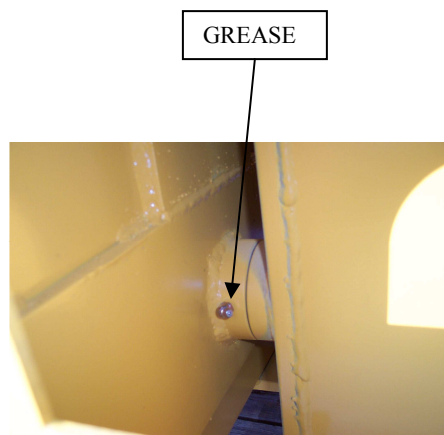
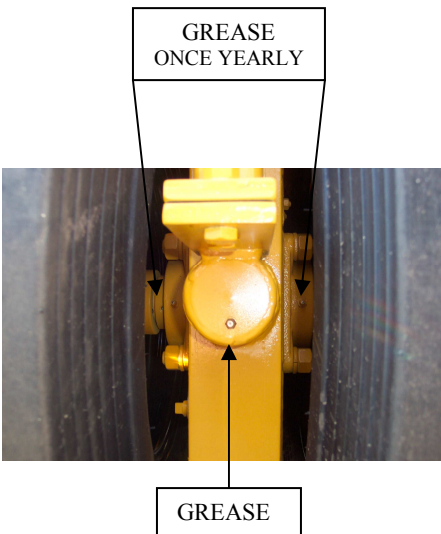
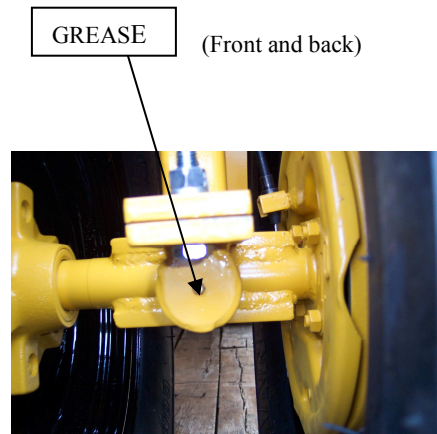
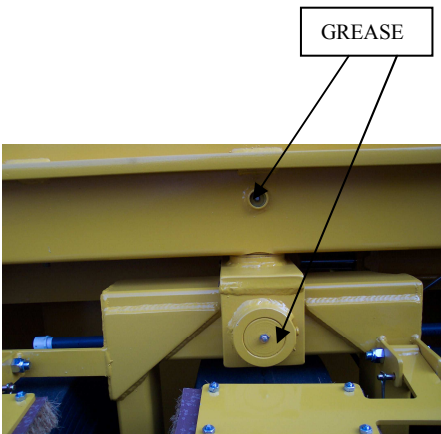


Note: (Do not over tighten chain.)  
This will damage the hydraulic motor shaft seal.

To adjust the drive chain, loosen the four bolts holding the motor adjuster plate to the gear box.



Adjust the chain tension with the adjuster bolt welded to the end of the adjuster plate.



## SECTION VII

### **LIMITED WARRANTY**

There are no warranties, expressed or implied, made by the manufacturer on new equipment except the manufacturer's warranty against defects in material and workmanship set out below.

Shannon Chastain Enterprises, herein referred to as "S.C.E." as manufacturer of BASIC equipment, warrants to the purchaser of new S.C.E. Equipment that this equipment is, at time of delivery to such purchaser, free from defects in material or workmanship if used and serviced according to the manufacturer.

S.C.E.'s obligation under this warranty is limited to repairing, or at its option replacing any part manufactured by S.C.E., that is returned within 1,000 HOURS OF USE or THREE HUNDRED SIXTY FIVE DAYS (365) DAYS following the date on which the equipment is first used (which ever comes first), that is defective in S.C.E.'s judgement. S.C.E. in no way warrants batteries, engines and other accessories and attachments, which are warranted separately by their manufacturers. S.C.E. will not be held responsible for any labor costs, freight, or travel times accumulated during repairs made outside of our facilities.

The provisions of this warranty shall not apply to any S.C.E. equipment which in the judgement of S.C.E., has been subject to misuse or negligent operation. S.C.E. shall not be liable for any delay in the performance of this warranty due to causes beyond its control. S.C.E. reserves the right to change specifications or discontinue models without notice.

S.C.E. shall not be liable for special, indirect, incidental, or consequential damages of any kind.

**THIS WARRANT IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE AND OF ANY OTHER OBLIGATIONS OR LIABILITY ON THE PART OF THE MANUFACTURER, AND S.C.E. NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY LIABILITY IN CONNECTION WITH SUCH EQUIPMENT.**

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