

Curb Roller™



Owner's Manual 001

Curb Roller Manufacturing

7/31/2007

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INTRODUCTION

This operator's manual contains important information for assembly, operation, disassembly and maintenance of your Curb Roller. Please visit our website for any product and safety manual updates at www.curbroller.com.

Thank you for purchasing your new curb roller. It will be a lifetime investment for your company and your employees' health.

IMPORTANT

- Read the entire operator's manual before using the curb roller. If any information is not understood or if more information is needed, contact your distributor. All persons operating the Curb Roller must read this manual or be trained by a dealer or factory representative before starting the curb roller.
- The curb roller is to be used on curb level, freshly poured concrete products **ONLY**. Any other use of the curb roller could cause damage or premature wear which will void the warranty.

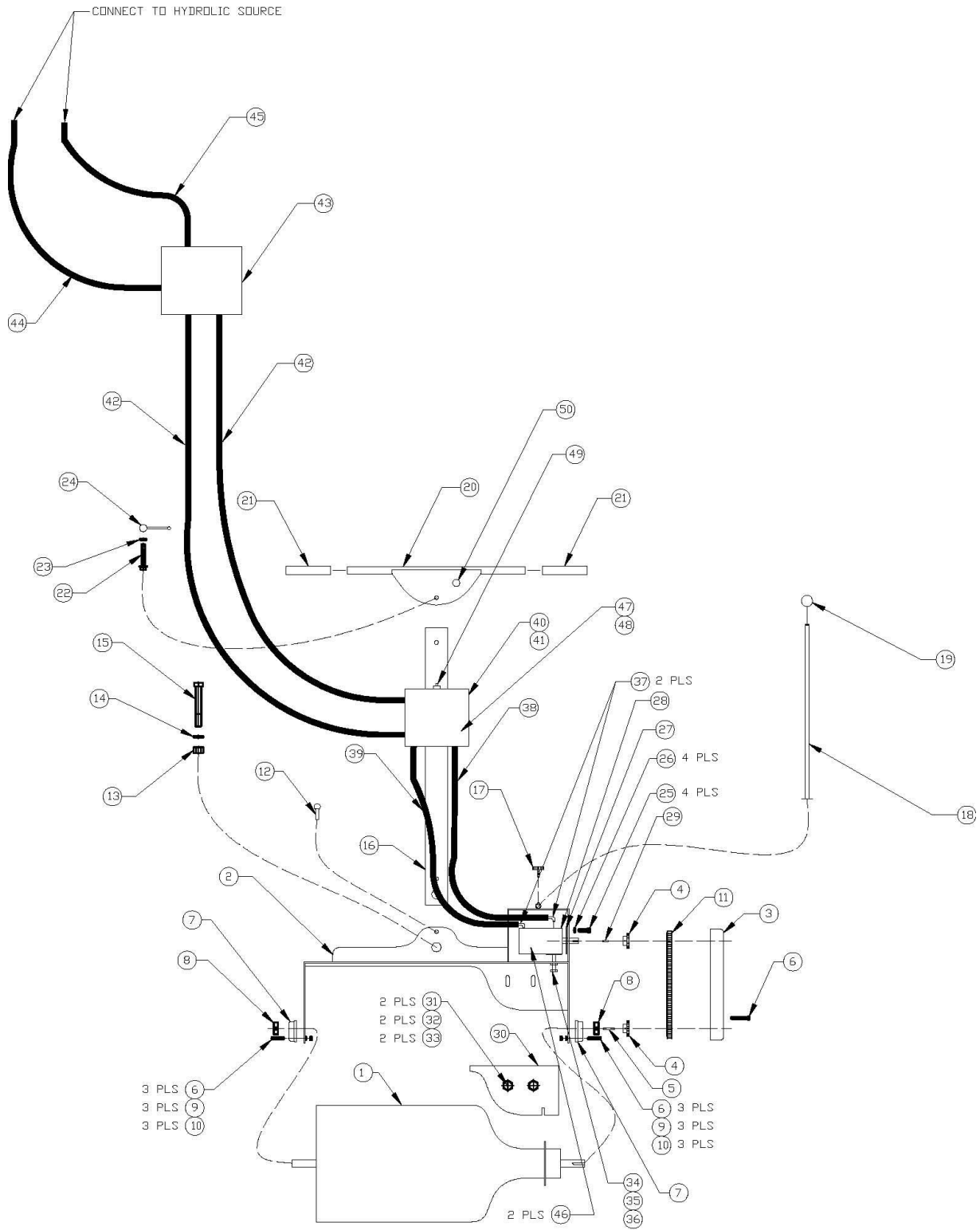
SAFETY

- Keep fingers away from all moving parts.
- Do NOT wear loose clothing (shoe laces, baggy pants, torn clothing) around moving parts.
- Read and understand **ALL** safety decals on the machine.
- Learn and practice safe use of the curb roller in a clear area before operating the machine on a job site.
- Always be sure the valve is in the neutral position (middle) before starting hydraulics.
- Clear the area around the curb roller before starting the curb roller at the job site.
- Keep both hands on the handle while the motor is running.

POWER REQUIREMENTS

- The curb roller runs off of any hydraulic power source with a minimum of five gallons per minute flow. Excess flow from the machine is alright as it will revert back to the power source at the flow control valve.

NOTE: Curb Roller Manufacturing reserves the right to make improvements in design or to make changes in specifications at any time without incurring any obligation to install them on units previously sold.



PARTS

| Reference No. | Number/Name | Description | Qty |
|---------------|-------------------------|------------------------------|-----|
| 1 | BAS2 | drum assembly | 1 |
| 2 | Frame Assembly | frame assembly | 1 |
| 3 | 69537 | chain guard | 1 |
| 4 | R99TH05000 | sprocket | 2 |
| 5 | Key Way | 1/4" key way | 2 |
| 6 | Carriage Bolts | 1 1/4" x 5/6" carriage bolts | 6 |
| 7 | R995X05000 | 1" bearing flange | 2 |
| 8 | R99TH05000 | 1" bearing | 2 |
| 9 | Lock Washers | 5/6" lock washers | 6 |
| 10 | Nuts | 5/6" nut | 6 |
| 11 | 40-1RIV | chain | 1 |
| 12 | Pull Pin | 3/8" pull pin | 1 |
| 13 | Lock Nut | 5/8" lock nut | 1 |
| 14 | Washer | 5/8" washer | 1 |
| 15 | Bolt | 5/8" x 2 1/2" bolt | 1 |
| 16 | Frame Handle | handle frame | 1 |
| 17 | Kickstand Locking Lever | kickstand locking lever | 1 |
| 18 | Kickstand | kickstand | 1 |
| 19 | Kickstand Knob | kickstand knob | 1 |
| 20 | 534320 D Ten Handle | handle bar assembly | 1 |
| 21 | Handle Grips | handle grips | 2 |
| 22 | Carriage Bolt | 1/2" x 2 1/4" carriage bolt | 1 |
| 23 | Flat Washer | 1/2" flat washer | 1 |
| 24 | Handle Lock Lever | handle lock lever | 1 |
| 25 | Bolt | 3/8" x 1" bolt | 4 |
| 26 | Locking Washer | 3/8" locking washer | 4 |
| 27 | Motor Shim | motor shim | 1 |
| 28 | 151-2041 | hydraulic motor | 1 |
| 29 | Key Way | half moon key way | 1 |
| 30 | 69539 | drum sweep | 1 |
| 31 | Bolts | 5/16" x 3/4" bolts | 2 |
| 32 | Washers | 5/16" washers | 2 |
| 33 | Locking Nuts | 5/16" locking nuts | 2 |
| 34 | Alan Bolt | 3/8" x 2" alan bolt | 1 |
| 35 | Jam Nut | 3/8" jam nut | 1 |
| 36 | Tension Block | 1/2" tension block | 1 |
| 37 | Elbows | 90 degree elbows | 2 |
| 38 | 24504U-PO6606-03100 | motor hose | 1 |

| | | | |
|------------|---------------------------|---------------------------|---|
| 39 | 245045-R66606-03400 | motor hose | 1 |
| 40 | MR10-47A-6T-N Valve | bi-pass valve assembly | 1 |
| 41A | 69534 | valve cover 41A | 1 |
| 41B | 69535 | valve cover 41B | 1 |
| 42 | 24506U-R66108-30000 | 25' hose | 1 |
| 43 | Flow Control Manifold | flow control manifold | 1 |
| 44 | 24508U-108108-2400 | flow control hose | 1 |
| 45 | 24508U-108108-2700 | flow control hose | 1 |
| 46 | Motor covers | Motor cover | 2 |
| 47 | Plastic valve cover front | Plastic valve cover front | 1 |
| 48 | Plastic valve cover back | Plastic valve cover back | 1 |
| 49 | Replacement valve handle | Replacement valve handle | 1 |
| 50 | Locking pin | Locking pin | 1 |

Not included with your curb roller are the hose couplers for your hydraulic source.

SET UP

Your curb roller comes mostly assembled for your convenience and to save you time. Simply follow the steps listed below to complete the assembly of your curb roller.

STEP 1

Insert the handle into the drum frame and install the hinge bolt through the intersection of the drum frame and handle. Hand-tighten the lock nut on the hinge bolt. **NOTE:** Do not over tighten as it needs to be somewhat loose to allow the handle to move into different positions.



STEP 2

Insert the handle alignment pin into desired position.

STEP 3

Install the hose ends (not provided) for your hydraulic power source (takes ½" pipe thread fittings). The curb roller comes with 25 foot of hose. Optional hose lengths are available in 25 foot sections for a total footage of 100 foot (maximum).

STEP 4

Turn the valve, located on the handle of the machine, into the neutral position (middle). This is very important to do prior to every hook up as you do not want the drum spinning when it is first turned on.



STEP 5

Hook up hydraulic hoses to the hydraulic source (one option is a skid loader).

- At this point, the assembly of your curb roller is completed but as a first time user, there are other steps to complete. The curb roller is easy to handle and to operate but adjustments need to be made

to the operator's specifications. Among other things, it is highly recommended that run-throughs are completed to ensure maximum operating potential.

- The following steps are the completion steps to setting up your curb roller before operation begins for commercial or residential curbs.

STEP 6

While holding onto the handle with both hands, have someone turn the hydraulics on. Note: be sure to still have the valve in the neutral position.

STEP 7

As the hydraulics are running, with a firm grip on the handle, turn the valve into position. The drum needs to spin in the opposite direction that the machine is being pulled.

This manual cannot specify turning the valve left or right as the source is variable. Depending on what is used for the power source, left and right could be different from one source to another.

At this point, if the drum is not spinning the correct direction it should be (away from the operator) then the valve simply needs to be moved from the position it is currently in to the other side (middle position will turn it off).

If the drum does not spin at all when the hydraulic source is turned on and the valve out of its neutral position (which is pushed either left or right) then do the following: put the valve in neutral position (middle), stop the hydraulic source, disconnect the hose ends you previously installed and switch ends on the hoses. This is due to flow control purposes: although most sources are designed to flow in both directions, the curb roller contains a directional check valve installed inline for flow control purposes. After you have completed switching the hose ends, plug the curb roller back into the source and try again (starting with Step 6).



STEP 8

The curb roller has adjustments for the speed at which the drum spins. The speed can be and should be changed from operator to operator depending on his/her preference. This option should be completed prior to pouring the concrete. To adjust the flow (that distinguishes the speed in which the drum spins), have someone unscrew the cap on the flow control box. To make the drum spin faster, the screw should be pulled back (and the opposite done for the drum to spin faster: push the screw back in). Keep in mind that fast speeds may vibrate the curb to the point that it may slump off. Just in the same, slow speeds also may not produce flawless curbs. Adjust the speed so that when it is being operated, it is comfortable to handle. After the adjustments have been made, put the cap back onto the screw.

- The completion steps (steps 6 through 8) are recommended to be completed in grass or sand. These two steps will get you familiar with your new product and help your confidence. Once handle position,

speed preference, and familiarity develops with run-throughs (highly recommended), you will be ready to pour your first flawless curbs.

Enjoy this masterfully designed product and produce professional curbs in a fraction of the time!

Comes with standard 6" type S curb, however the drum can be customizable for your curb project. Please contact us with further details to see how we can help with your next project.

OPERATION

Although much of the operation was covered in the completion steps (6 through 8) of the set up portion of this manual, it will now be covered more precisely.

STEP 1

Set up forms, securely and properly: steel, wood, masonite, or other form. Be sure forms are straight and properly braced. Always drive pins or stakes at the top of below the top of forms to prevent the curb roller from “snagging” on stakes.

STEP 2

The pour should be done as though it would be for a hand sculpted curb: pour cement between forms and form the concrete into the shape of a curb as close as possible with rakes. Always keep the form boards free of concrete so that the curb roller can run along the forms with no difficulty.

STEP 3

Place the curb roller on the top of the forms. When placed on top, be sure that the guide is lined up on the inside edge of the taller form. This guide will need to be kept along the form for the duration of the screed. Begin screeding with the roller spinning in the opposite direction it is being pulled. This will spin the excess concrete up behind the curb roller. As it does this, a flawless curb will be produced to the front of the machine. To ensure that this flawless curb is achieved with each passing, be sure there are no low spots in the concrete within the forms before passing over. The excess concrete that is being spun towards the operator needs to be raked away by a second party; this is a good time to fill in those low spots. The operator wants to always be looking ahead to see what product has been attained. If there are some bad spots, simply let the machine spin itself towards these bad spots, past them, fill in them in with excess concrete, and run back over it as if you were doing it for the first pass. It is best to take care of these bad spots while in the same area with the curb roller still running.



STEP 4

After screeding is completed, finish the curb with hand tools and broom.

Tips

- Use a “curb mix” with smaller aggregate
- Keep excess concrete cleaned away from the machine as it is spinning and being pulled backwards as good as possible

- Keep the tops of the forms cleaned
- A low slump concrete should be used on all curbs

CLEAN UP

STEP 1

Remove the curb roller from the location in which the curbs were formed. Using any easily accessible hose, spray off the drum, from end to end, all of the way around until it's free of concrete. The drum sweep should have kept most of the concrete off of the drum but be sure that it and the form guide itself are washed free of drying concrete.

Clean up is important not only for upkeep but also for the next time's usage; keeping these parts clean make for an easy start for the next job.

With one easy step, clean up is done. The 140 pound machine can be easily transported and stored: any truck bed can hold this machine with ease.

UPDATES

Updates are available online on our website:
curbroller.com

Also available at curbroller.com is general information about Curb Roller Manufacturing itself as well as contact information if necessary.

Thank you again for purchasing this, one and only, curb and gutter machine; it was inspired by coworkers and personal experience. Brought by the making of this machine among these fellow coworkers has not only been less time spent on curbs and gutters but better health as a whole. Workers are no longer tired by the long, inevitable hours known to be spent on a project containing curbs and gutters. But instead they are more focused and seize opportunities as we all should.

Good luck with your projects to come, satisfaction is guaranteed. With the anticipation of such, please feel free to contact us via email with questions, concerns, and/or comments.