



MODEL CM4000

OWNER'S MANUAL

www.curbroller.com

785-467-3132

Congratulations on your purchase of the Curb Roller!

Curb Roller Manufacturing proudly manufactures the Curb Roller CM4000 in the USA.

Before using the Curb Roller CM4000 you must read and follow this instruction manual for proper use and set up.

The Curb Roller CM4000 has been designed and manufactured to provide years of service.

NOTICE

Carefully examine your equipment upon receipt. Report any damage immediately to the freight carrier and register any claim. If any material or manufacturing defects be discovered, contact a Curb Roller Manufacturing representative.

NOTICE

Information provided in this manual was current as of the issue date. Curb Roller Manufacturing reserves the right to make design changes without notice or liability.

Information furnished in this manual does not include all of the details of design, production, or variations of the equipment. It does not cover all of the possible contingencies which may emerge during operation. If special problems arise or further information be desired, please contact Curb Roller Manufacturing.

⚠ WARNING

Equipment modifications from original design and specifications are strictly prohibited. Modifications may compromise safe operation, subjecting users to serious injury or death. Modifications not authorized by a Curb Roller Manufacturing representative may void any remaining warranty.

NOTICE

Curb Roller Manufacturing reserves the right to change, improve, modify, or expand features of this equipment at any time. Specifications, models, or equipment are subject to change without notice and without incurring any obligations to change, improve, or expand features of previously delivered equipment. Because of the variations in optional equipment and continued design improvement, certain information contained within this manual may not apply.

This operators manual does not replace, nor does its use release the owner/operator from observing all safety codes or operating limitations as well as any applicable federal, state, provincial or local regulations.

Safety

Before assembling and operating this equipment you must read, understand, and follow the instructions and safety warnings in this manual. Your Curb Roller may not be equipped with some of the optional equipment shown in the illustrations in this manual.

If you have any safety concerns or questions that are not covered by this manual, please contact a Curb Roller Manufacturing representative at 785-467-3132.

Hazards

⚠ WARNING

Do not operate, work on or around this machine while under the influence of alcohol, drugs, or if feeling ill.

⚠ WARNING

Entanglement hazard. Keep away from moving parts. Do not wear loose fitting clothing. Loose fitting clothing and long hair can become entangled in moving or rotating parts. Long hair must be tied back or netted.

⚠ WARNING

Never operate machine with open or missing guards or shields.

⚠ WARNING

Observe all federal, state, provincial, and local safety codes and regulations that apply to the job site.

⚠ WARNING

Pressurized fluids can penetrate the skin. Hydraulic hoses can fail from age, damage, or exposure. Do not search for hydraulic leaks without body and face protection. A tiny, almost invisible leak can penetrate the skin thereby requiring immediate medical attention.

Use wood or cardboard to detect hydraulic leaks. Never use your hands.

Specifications

Length
59.75 in (1518 mm)

Width
43.25 in (1099 mm)

Weight
160 lbs (73 kg)

Minimum Hydraulic Flow
5 gpm (9 lpm)

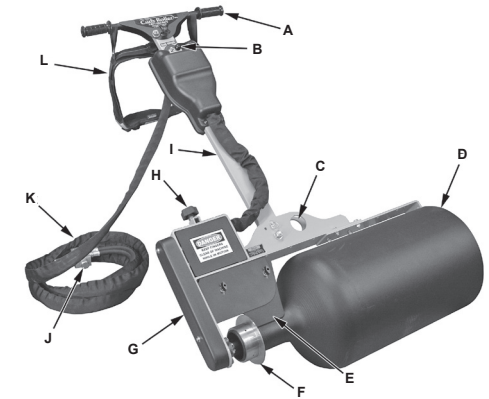
Maximum Hydraulic Pressure
2250 psi (11 bar)

Maximum Curb Size*
32 in (813 mm)

***Various standard and custom drums are available from Curb Roller Manufacturing.**

Curb Roller CM4000 Package

- A. Handlebar Assembly
- B. Directional Control Knob
- C. Lifting Point
- D. Drum
- E. Drum Sweep
- F. Guide Ring
- G. Chain Guard
- H. Kickstand Locking Knob
- I. Handle
- J. Flow Control Block
- K. Hose Assembly
- L. Belt

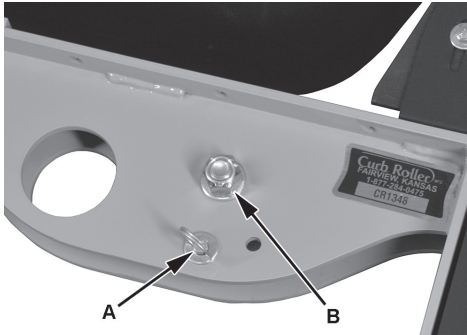


Assembly

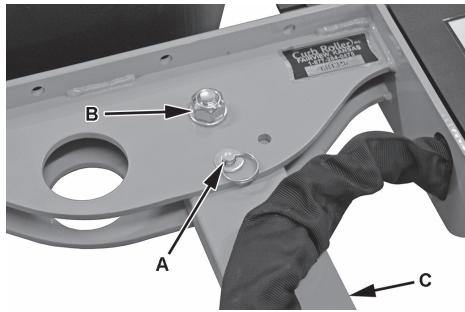
⚠ WARNING

Curb Roller assembly weight is approx. 160 lbs (73 kg). Plan a safe handling procedure before lifting.

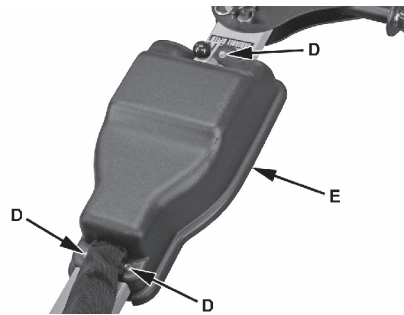
1. Remove alignment pin (A) and washer.
2. Remove 5/8 lock nut (B), washer and 5/8 x 2-1/2 bolt.



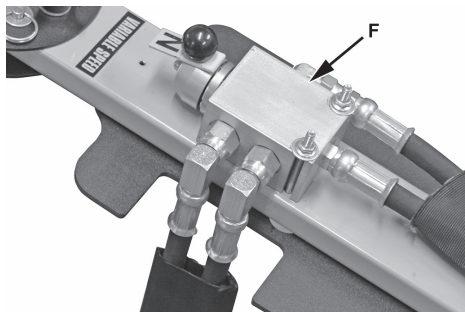
3. Insert handle (C) into frame with directional control valve facing up.
4. Install 5/8 x 2-1/2 bolt, 5/8 washer and 5/8 lock nut (B). Snug lock nut, but do not over tighten. Handle must move freely to offset position.
5. Position handle in desired position and insert handle alignment pin (A).



6. Remove screws (D) and cover (E).



7. Install hydraulic hoses to directional valve (F). Hoses must be oriented down through opening in plate as shown.



8. Install cover (E) and screws (D).

⚠ WARNING

Do not alter, change, or modify the Curb Roller. Altering, changing, or modifying the equipment may cause unsafe conditions or damage the equipment, and may void the manufacturer's warranty.

Contact Curb Roller Manufacturing with any questions.

Connecting To Power Source

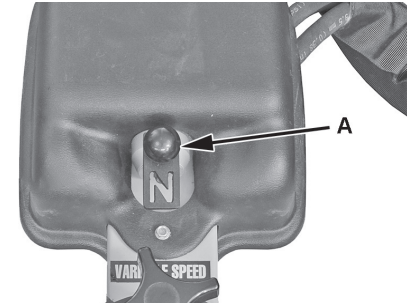
⚠ WARNING

Prevent injury. Verify directional valve is in neutral position before connecting hydraulics.

⚠ WARNING

Pressurized fluids and grease can penetrate the skin. Hydraulic hoses can fail from age, damage, or exposure. Do not search for hydraulic leaks without body and face protection. A tiny, almost invisible leak can penetrate the skin, thereby requiring immediate medical attention. Use wood or cardboard to detect hydraulic leaks; never use your hands.

1. Verify directional valve (A) is in neutral position as shown.



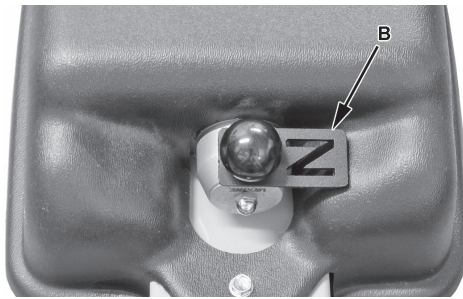
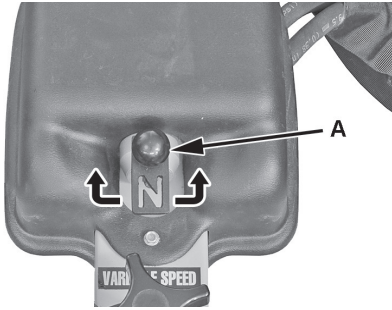
2. Connect hydraulic hoses to hydraulic power source.

⚠ WARNING

Curb Roller assembly weight is approx. 160 lbs (73 kg). Plan a safe handling procedure before lifting.

3. Move Curb Roller to grass or sand.
4. Turn on hydraulic power source.
5. Grasp Curb Roller handle and move directional valve (A) to one side, left or right. Drum is turning correctly if spinning away from the operator. If not spinning correctly, move directional valve in opposite direction.

6. Once drum rotation is determined, loosen knob and move neutral stop plate (B) 90° to opposite side. Tighten knob. Stop plate will prevent accidentally reversing drum rotation.



7. If the drum does not spin when hydraulic source is turned on and directional valve is out of neutral position:
- Move directional valve to neutral position.
 - Stop hydraulic power source.
 - Disconnect hoses from hydraulic power source and switch hose ends.
 - Reconnect hoses to

- hydraulic power source.
- Turn on hydraulic power source.
- Grasp Curb Roller handle and move directional valve either left or right.
- Verify proper operation.
- Set neutral stop plate as described in step 6.

8. The further the directional valve is moved, the faster the drum will turn. Fast speeds may vibrate curb to the point that concrete may slump off. Slow speeds may not produce flawless curbs. Adjust speed on directional control valve so that the Curb Roller is comfortable to handle during operation.

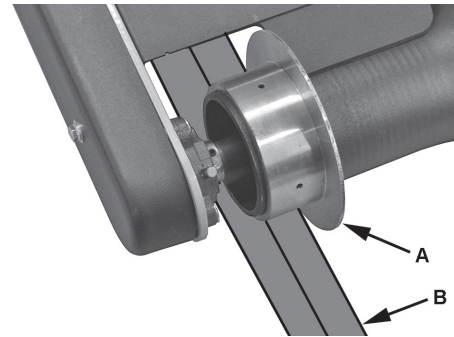
Operation

1. Verify stakes or pins are below top of forms to prevent interference with the Curb Roller.
2. Pour concrete as if it were to be hand formed.
3. Form concrete as close as possible to the shape of a curb with rakes. Keep top of forms free of concrete.

⚠ WARNING

Curb Roller assembly weight is approx. 160 lbs (73 kg). Plan a safe handling procedure before lifting.

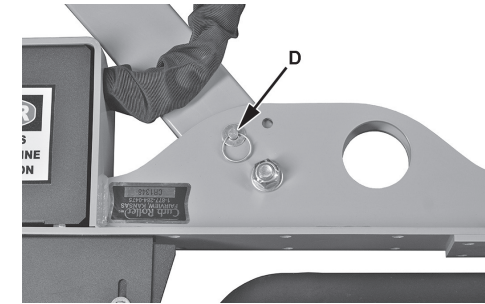
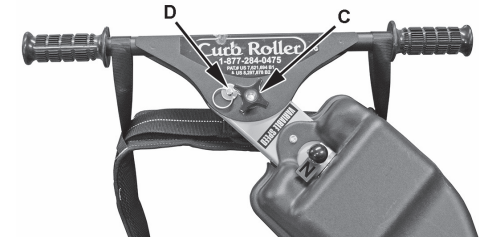
4. Place Curb Roller on top of forms. Verify that guide (A) is lined up on inside edge of taller form (B). Guide will need to be kept along inside of form for the duration of the screed work.



5. Place belt around the operators waist and adjust size as needed. Place loops over Curb Roller handles.



6. To set handle in offset position, loosen knob (C), remove alignment pins (D), move handle and handlebar assembly to offset position. Install pins (D) and tighten knob (C).



7. Begin screeding with drum spinning in the opposite direction it is being pulled. Excess concrete that is being spun towards the operator must be raked away by a second person.

8. If there are bad spots, fill them in with concrete and run the Curb Roller back over those areas.

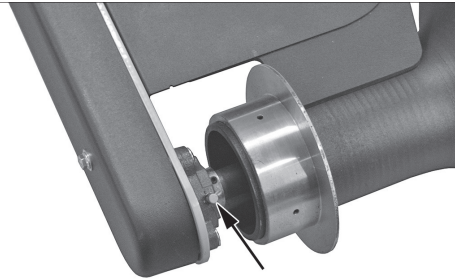
Cleanup

1. Move the Curb Roller away from poured concrete.
2. Remove all concrete from Curb Roller with garden hose or pressurized water supply.

Maintenance

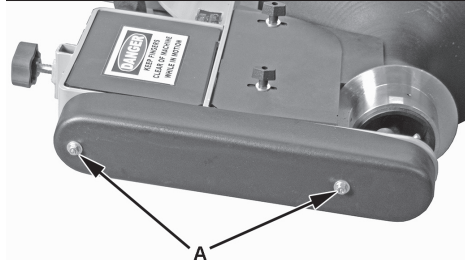
Drum Bearings

1. Pump grease into drum bearings before each use.

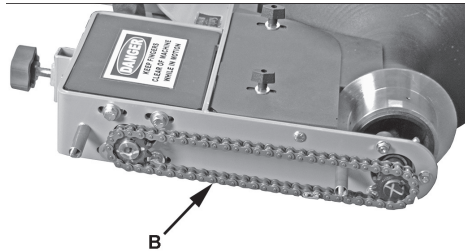


Drive Chain

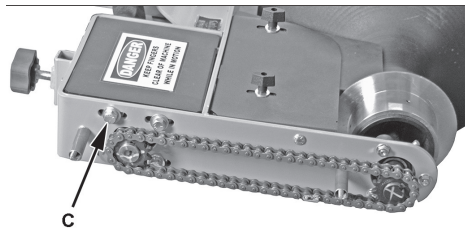
1. Remove nuts (A), washers and chain cover.



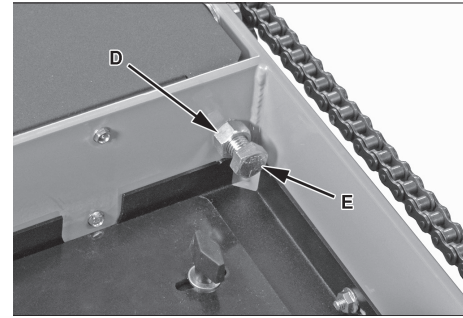
2. Lubricate chain (B) every 40 hours of operation.



3. If chain is too loose, loosen drive motor mounting bolts (C).



4. Loosen jam nut (D) and tighten bolt (E) to tension chain. When slack is removed from chain, tighten jam nut (D).



⚠ WARNING

Prevent Injury. Do not operate Curb Roller with chain cover removed.

5. Tighten drive motor mounting bolts (C), install cover, washers and nuts (A).

Troubleshooting

Curb Roller Drum Does Not Spin

The Curb Roller must be connected to an active hydraulic power source. Check the power source for any safety features that may be limiting the auxiliary flow.

Curb Roller Spins Very Slowly

Reverse direction of flow from the power source and verify that the machine has not been altered in any way from the factory settings.

Curb Roller Is Spinning Too Fast

The Curb Roller is equipped with a variable speed valve on the handle. To achieve the desired speed, move the directional valve right to left to open and increase speed or close the valve and reduce flow to reduce the speed.

Curb Roller Is Hard To Pull

The Curb Roller comes from the factory with an operator's belt. While utilizing the belt, the operator greatly reduces the difficulty in pulling the machine. To acquire a new belt, you can order online at www.curbroller.com/store or contact your local Curb Roller Mfg dealer.

The Curb Roller Will Not Stay On Forms (Riding Up On Concrete)

Check the amount of concrete in front of the machine. Be sure to maintain no more than two (2) inches of concrete in front of the

drum. In certain areas of the U.S. some concrete mixes require an additional weight. Please contact Curb Roller Manufacturing for further information.

Frequently Asked Questions

What are the drums made out of?

Curb Roller drums are made out of steel. The average life of a drum is 40 to 60,000 linear feet.

Can I pour just one curb shape with the Curb Roller?

The Curb Roller can be purchased with any of our stocked drum styles or a custom fabrication for specific jobs.

How many feet of hydraulic hose can I run?

The Curb Roller comes standard with 25 feet of hydraulic hose and can be used with any length of hose up to 100 feet.

What drives the Curb Roller machine?

Any hydraulic power source that maintains 4 gallons per minute can effectively run the Curb Roller. This can be a skid-steer, mini-excavator, tractor, hydraulic power pack, etc.

Can I use the Curb Roller for catch or spill curb?

A standard drum can be used to pour catch or spill curb with the heights being adjusted by the forms.

How do I adjust the direction or speed of the Curb Roller?

The Curb Roller comes standard with a flow control block. This is factory set and NOT ADJUSTABLE. On the handle of the Curb Roller is a VARIABLE SPEED DIRECTIONAL VALVE which operates left to right depending on the direction of desired rotation. The Curb Roller also comes with a SAFETY TAB which is located on the DIRECTIONAL KNOB and can be manually set to allow the valve to open towards the right or open towards the left. To set the safety tab- loosen the knob on the directional valve, turning it counter-clockwise. Once the safety stop is

in the desired position, RE-TIGHTEN the knob.

Can I change the drum profile on a Curb Roller?

The Curb Roller is designed to easily adapt between different curb profiles by changing the drums attached to the main frame.

Suggested Mix

SUGGESTED CURB MIX ID: 4000 PSI AE 70/30 mix

Est. Strength @ 28 Days 4080 PSI

Vol.= 27.30 ft 3yd 3

Free Moisture

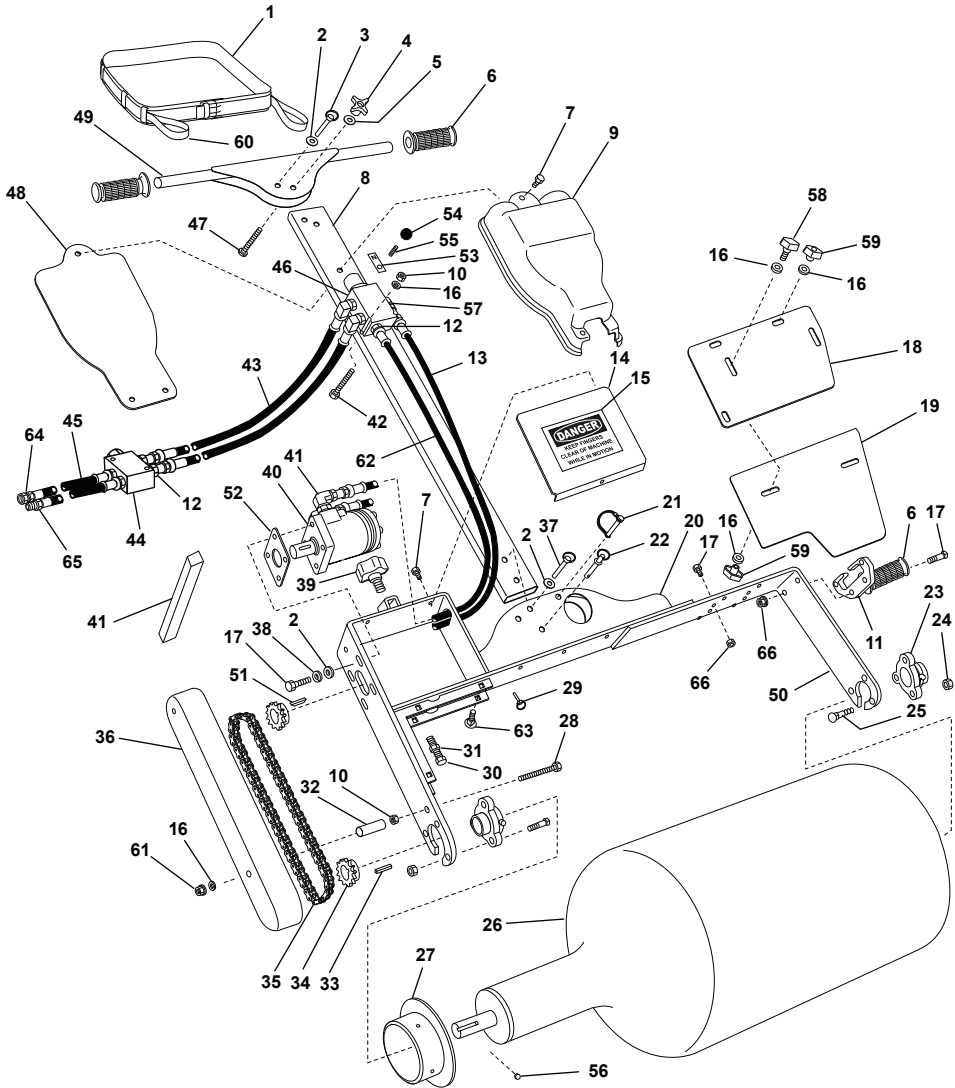
Rock SSD

Yards	Cement lbs	Agg. lbs	Sand lbs	Total lbs	AES ozs.	WR	Water gal.
1/4	141	225	549	774	8.00%	0	6
1/2	282	450	1098	1548	8.00%	0	11.9
3/4	423	675	1646	2321	8.00%	0	17.9
1	564	900	2195	3095	8.00%	0	23.9
1 1/4	705	1125	2744	3869	8.00%	0	29.8
1 1/2	846	1360	3293	4643	8.00%	0	35.8
1 3/4	987	1575	3841	5416	8.00%	0	41.7
2	1128	1800	4390	6190	8.00%	0	47.7
2 1/4	1269	2025	4939	6964	8.00%	0	53.7
2 1/2	1410	2250	5488	7738	8.00%	0	59.6
2 3/4	1551	2475	6036	8511	8.00%	0	65.6
3	1692	2700	6585	9285	8.00%	0	71.6
3 1/4	1833	2925	7134	10059	8.00%	0	77.5
3 1/2	1974	3150	7683	10833	8.00%	0	83.5
3 3/4	2115	3375	8231	11606	8.00%	0	89.5
4	2256	3600	8780	12380	8.00%	0	95.4
4 1/4	2397	3825	9329	13154	8.00%	0	101.4
4 1/2	2538	4050	9878	13928	8.00%	0	107.4
4 3/4	2679	4275	10426	14701	8.00%	0	113.3
5	2820	4500	10975	15475	8.00%	0	119.3
5 1/4	2961	4725	11524	16249	8.00%	0	125.2
5 1/2	3102	4950	12073	17023	8.00%	0	131.2
5 3/4	3243	5175	12621	17796	8.00%	0	137.2
6	3384	5400	13170	18570	8.00%	0	143.1
6 1/4	3525	5625	13719	19344	8.00%	0	149.1
6 1/2	3666	5850	14268	20118	8.00%	0	155.1
6 3/4	3807	6075	14817	20892	8.00%	0	161

Suggested Mix

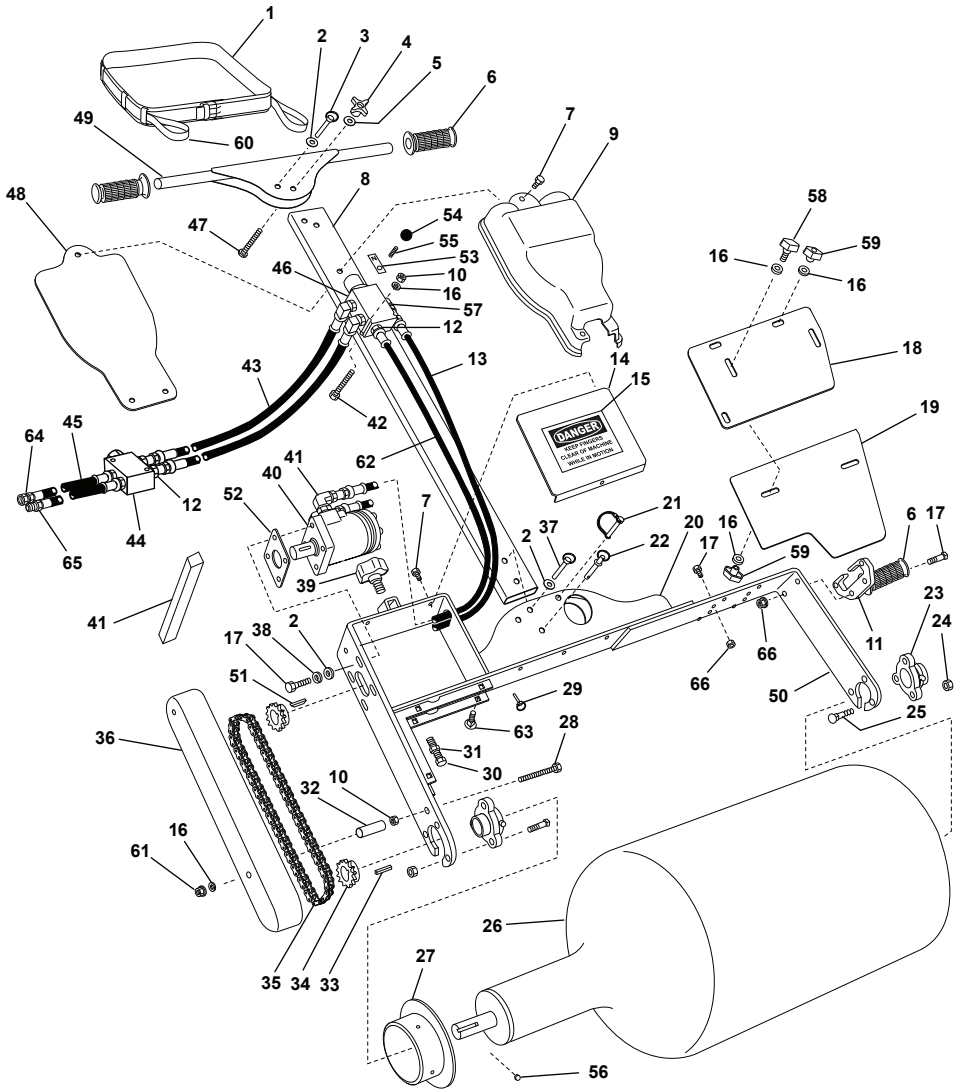
Yards	Cement lbs	Agg. lbs	Sand lbs	Total lbs	AES ozs.	WR	Water gal.
7	3948	6300	15365	21665	8.00%	0	167
7 1/4	4089	6525	15914	22439	8.00%	0	173
7 1/2	4230	6750	16463	23213	8.00%	0	178.9
7 3/4	4371	6975	17012	23987	8.00%	0	184.9
8	4512	7200	17560	24760	8.00%	0	190.8
8 1/4	4653	7425	18109	25534	8.00%	0	196.8
8 1/2	4794	7650	18658	26308	8.00%	0	202.8
8 3/4	4935	7875	19207	27082	8.00%	0	208.7
9	5076	8100	19755	27855	8.00%	0	214.7
9 1/4	5217	8325	20304	28629	8.00%	0	220.7
9 1/2	5358	8550	20853	29403	8.00%	0	226.6
9 3/4	5499	8775	21402	30177	8.00%	0	232.6
10	5640	9000	21950	30950	8.00%	0	238.6

Parts



No.	Qty.	Description	Part No.
1	1	Belt Assy-Pull	40504-001
2	8	Wshr-Flat, 5/16", SAE, Zc Pltd	101-178
3	1	Pin-Detent, 3/8" x 1-1/2"	1001-055
4	1	Knob-Blind, 4 Prong (1/2"-13 x 5/8" Dp)	1021-111
5	1	Wshr-Flat, M12", 8.8, Zc Pltd	102-010
6	3	Grip-Handle, Rbbr, 1" ID x 1.63" OD x 4.75 OAL	1143-001
7	13	Screw-Self Tap, HWH, #10 x 3/4", Zc Pltd	151-019
8	1	Handle-Main, CM4000/HS3000	30002-001
9	1	Cover-Valve, Front, CM4000/HS3000	30004-001
10	4	Nut-Lock, Srrtd Flg, 1/4", Zc Pltd	105-101
11	1	Handle Wdmt-Lift, CM4000 Auxiliary	40511-001
12	2	Fitting-Cnctr, 1/2" MJIC x 1/2" MORB	1211-023
13	1	Hose Assy-3/8" x 37"(3/8 Hose x JIC FSswl x 3/8)	17103-013
14	2	Cover-Mtr, CM4000	40024-001
15	1	Decal Kit-CM4000	19000-003
16	11	Wshr-Flat, 1/4", SAE, Zc Pltd	101-107
17	10	Bolt-HC, 3/8"-16 UNC x 1",Zc Pltd	383-504
18	1	Plate-Mtg, Sweep	40012-001
19	1	Sweep-Drum, Plastic	40013-001
20	1	Frame Assy-Lower, CM4000	40500-001
21	1	Pin-Lock, 3/8" Rd, Dbl Wire, 1-3/4" Eff Lg, Zc Pltd	1001-109
22	1	Pin-Clevis, 5/8" x 2.00 w/Collar & Ring, Zc Pltd	1001-353
23	2	Bearing-Flgd, 3 Bolt, 1" ID	1147-001
24	6	Nut-Lock, Srrtd Flg, 5/16"-18 Unc, Zc Pltd	105-102
25	6	Bolt-HC, 5/16"-18 UNC x 1",Zc Pltd	313-504
26	1	Drum-Stock	40525-000
27	1	Ring-Guide	40009-001
28	2	Bolt-Crge, 1/4"-20 Unc x 2-3/4" Lg, Zc Pltd	253-011
29	1	Pin-Lynch, 1/4" x 1-1/4". Zc Pltd	1001-704
30	1	Bolt-Tap, 1/2"-13 Unc x 2-1/2" Lg, Zc Pltd	501-505
31	1	Bolt-Tap, 1/2"-13 Unc x 2-1/2" Lg, Zc Pltd	111-105
32	2	Conduit-PVC, 1/2" x 1.875"	1115-001

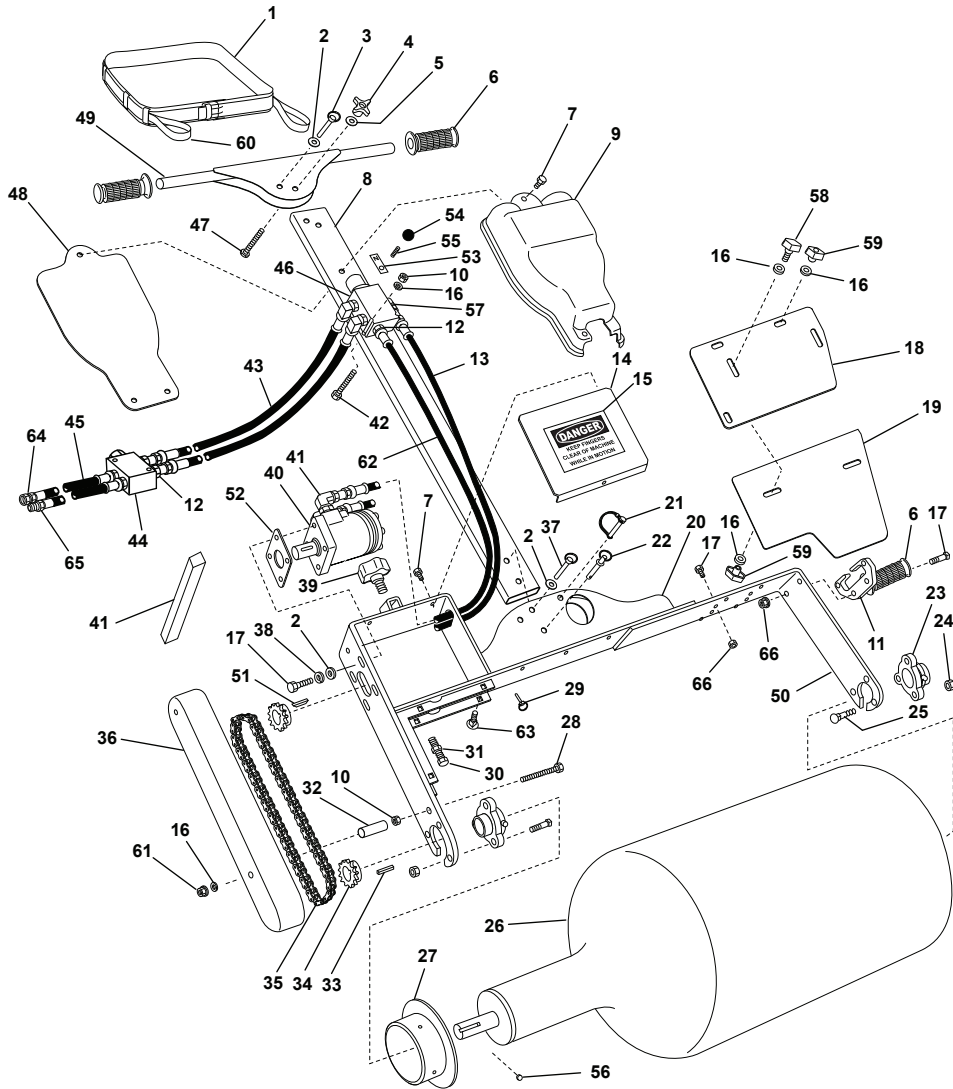
Parts



No.	Qty.	Description	Part No.
33	1	Key-Machine, Drum/Sprkt, 1/4"x1/4x1"(Sq Both Ends)	1023-101
34	2	Sprocket-40BS12H-1, 2.17" OD x 1" Bore Thru	1029-101
35	1	Chain-Assy-Drive, CM4000	40513-001
36	1	Guard-Drive Chain, CM4000	40001-001
37	1	Pin-Detent, 3/8" x 2"	1001-058
38	4	Washer-Lck, 3/8", Zc Pltd	103-109
39	1	Knob-Star, Soft (1/2"-13 x 1-1/4" Lg)	1021-121
40	1	Motor-Hyd, 4.45 Disp., 1" Dia Shft w/Key	1501-001
41	2	Fitting-Cnctr, 90 Elb, 3/8" MJIC x 5/8" M O-RB	1213-005
42	2	Bolt-HCS, 1/4"-20 x 3-1/4", Zc Pltd, G5	253-542
43	2	Hose Assy-3/8" x 25'(1/2 JIC FSwwl x 3/8 90 MOR)	17103-015
44	1	Valve-Flow Control, Hydraulic	1501-021
45	2	Hose Assy-1/2"x2' OAL	17105-001
46	1	Valve-Directional, CM4000/HS3000 Variable Spd	1501-031
47	1	Bolt-Crge, 1/2"x2", Unc, Zc Pltd	503-008
48	1	Cover-Valve, Rear, CM4000/HS3000	30004-003
49	1	Handle Wdmt-Pivot, CM4000/HS3000	30000-001
50	1	Support-Bearing, Idle	40004--001
51	1	Key-Machine, 1/4" X 1/4" X 1", Form A	1023-301
52	1	Spacer-Drive Mtr, CM4000	40006-001
53	1	Tab-Nuetral	30016-001
54	1	Knob-Ball, 1" Rnd, 1/4" x 20 x 7/8"	1021-101
55	1	Screw-Sckt Set, Cup Pt, 1/4" x 20 x 3/4 Blk Ox	071-029
56	4	Screw-Sckt Set, Cup Pt, 3/8"-16 x 1/4", Blk Ox	071-056
57	1	Fitting-Cnctr, 90 Elb, 3/8" MJIC x 3/8" M O-RB	1211-015
58	2	Knob-Tee, Male (1/4"-20 x 3/4" Lg)	1021-141
59	5	Knob-Tee, Female, 1/4"-20 x Thru	1021-131
60	1	Strap-Lashing, 1" x 8'	1133-001
61	2	Nut-Acorn, 1/4"-20 Unc, Chrome Pltd	117-002
62	1	Hose Assy-3/8" x 36" (3/8 Jic FSwwl x 3/8 MOR)	17103-011
63	3	Bolt-Crge, 1/4"-20 Unc x 3/4", Zc Pltd	253-003
64	1	Coupler-Stucci, Female, 1/2" x 1/2" NPT FF, QD	1205-002

Parts

No.	Qty.	Description	Part No.
65	1	Coupler-Stucci, Male, 1/2" x 1/2" NPT FF, QD	1205-022
66	6	Nut-Lock, Srtrd Flg, 3/8"-16 Unc, Zc Pltd	105-103
67	1	Manual	19001-301



Curb Roller CM4000 Warranty

Curb Roller Manufacturing warrants to the original purchaser that this product will be free from defects in material and workmanship.

Curb Roller Manufacturing agrees to repair or replace, at manufacturer's discretion, any defective product free of charge within three years from the date of purchase.

Curb Roller Manufacturing must authorize all work and returns prior to any work being performed or returns made. If the customer does perform work and makes a return without authorization, the customer does so with the understanding that Curb Roller Manufacturing or any of its agents shall not be obligated for the cost of any such unauthorized expenses or actions.

Proof of purchase in the form of your dated sales receipt showing serial number and the model of the product will be required before our dealers can perform warranty service on the product.

All allowances will be credited at factory cost with no provisions for overtime, travel time, mileage, freight charges, or special services (i.e. down time).

The purchaser of any goods covered by this warranty understands and agrees that the

sole and exclusive remedy against Curb Roller Manufacturing shall be for the replacement or repair of defective goods as provided herein.

Machine is warranted for a period of three (3) years after date of original purchase to original purchaser.

NOTICE

Curb Roller Manufacturing product warranty shall not extend or apply to:

1. Defects which in our judgment are the result of misuse, negligence, accident, or failure to perform regular maintenance or service, and any parts that may wear and need to be replaced.
2. Products and component parts not manufactured by Curb Roller Manufacturing beyond the warranty period provided by the original manufacturer or supplier.
3. Products improperly installed, maintained, or used not in accordance with all applicable Curb Roller Manufacturing instructions.

4. Goods or component parts that are modified or changed in any way other than by, or authorized by, Curb Roller Manufacturing.

Warranty questions or service information can be obtained from your dealer or by contacting Curb Roller Manufacturing at 785-467-3132 .

Please visit www.curbroller.com to register your product.



Curb Roller Mfg., 112 South Main Street, Fairview, KS 66425
Registered Trademarks: 87624718, 87837508, 87855416
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