

# Hydra-Screed

**MODEL HS3000**

**OWNER'S MANUAL**

[www.curbroller.com](http://www.curbroller.com)

785-467-3132

Congratulations on your purchase of the Hydra-Screed!

**Curb Roller Manufacturing proudly manufactures the Hydra-Screed HS3000 in the USA.**

**Before using the Hydra-Screed HS3000 you must read and follow this instruction manual for proper use and set up.**

The Hydra-Screed HS3000 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 Hydra-Screed 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 (Without Pipe\*)  
50 in (1270 mm)

Width (Without Pipe)  
25 in (635 mm)

Weight (Without Pipe)  
100 lbs (45 kg)

Minimum Hydraulic Flow  
5 gpm (9 lpm)

Maximum Hydraulic Pressure  
2250 psi (11 bar)

**\*Various standard and custom pipes/drums are available.**

## Hydra-Screed HS3000 Package

- (1) Handlebar Assembly
- (1) Directional Control Knob
- (1) Hydraulic Motor & Motor Cage
- (1) Flow Control Block
- (2) Rubber Bushing Assembly
- (1) T-Bar Pull Handle
- (1) Hose Assembly



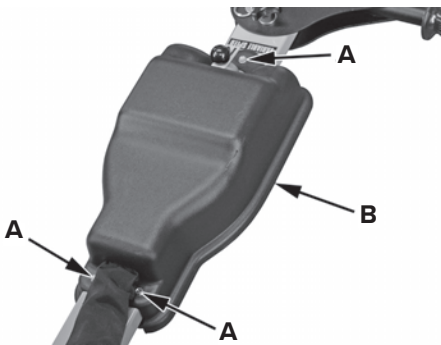
**\*NOTE: Pipes and custom drums sold separately.**

## Assembly

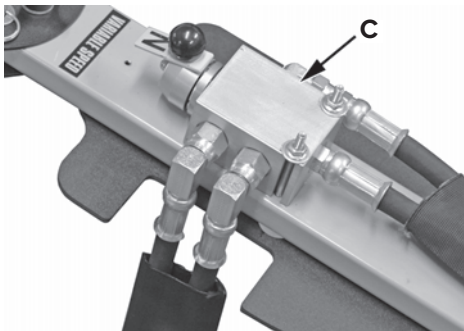
### **⚠ WARNING**

Hydra-Screed assembly weight (without pipe or drum) is approx. 100 lbs (45 kg). Plan a safe handling procedure before lifting.

1. Remove screws (A) and cover (B).

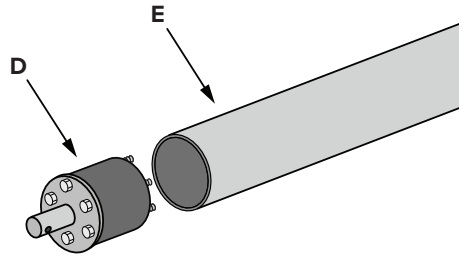


2. Install hydraulic hoses to directional valve (C). Hoses must be oriented down through opening in plate as shown.

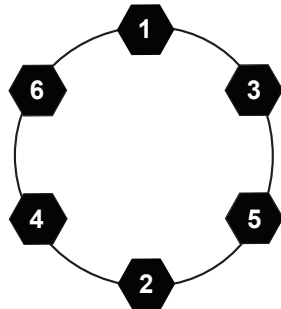


3. Install cover (B) and screws (A).

4. Install drive and pull bushing end assemblies (D) into screed pipe (E).



5. Tighten bolts uniformly in the sequence shown in the graphic below until tight.



### **⚠ WARNING**

Do not alter, change, or modify the Hydra-Screed. 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

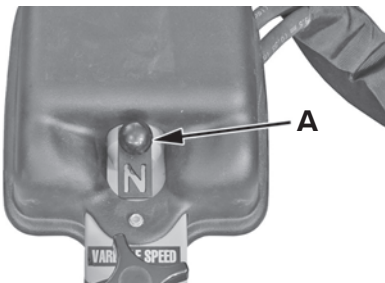
### ⚠ WARNING

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.

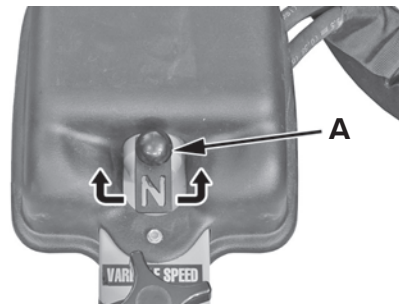
1. Verify directional valve (A) is in neutral position as shown.

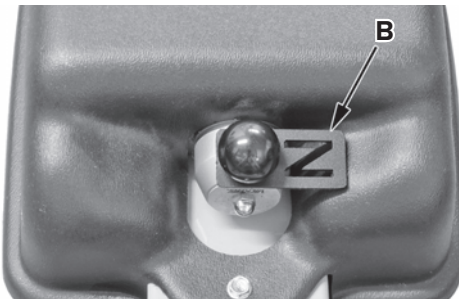


2. Connect hydraulic hoses to hydraulic power source.

The Hydra-Screed's assembly weight (without pipe or drum) is approximately 100 lbs (45 kg). Plan a safe handling procedure before lifting.

3. Move Hydra-Screed to grass or sand.
4. Turn on hydraulic power source.
5. Grasp Hydra-Screed handle and move directional valve (A) to one side, left or right. Pipe or drum is turning correctly if spinning away from the operator. If not spinning correctly, move directional valve in opposite direction.
6. Once pipe or drum rotation is determined, loosen knob and move neutral stop plate (B) 90° to opposite side. Tighten knob. Stop plate will prevent accidental reversing of pipe/drum rotation.





7. If the pipe or 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 Hydra-Screed 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 pipe or drum will turn. Fast speeds may vibrate concrete to the point that concrete may slump off. Slow speeds may not produce a flawless finish. Adjust speed on directional

control valve so that the Hydra-Screed is comfortable to handle during operation.

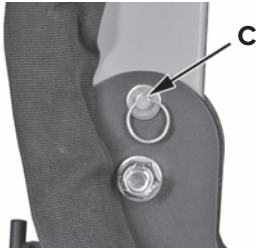
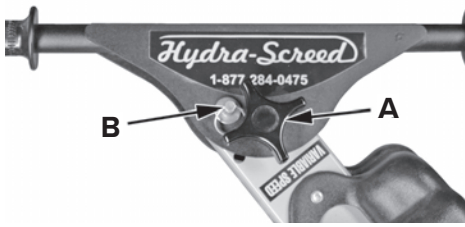
## Operation

1. Verify stakes or pins are below top of forms to prevent interference with the Hydra-Screed.
2. Pour concrete into forms.
3. Keep top of forms free of concrete.
4. Place the Hydra-Screed pipe or drum on top of forms. Hydra-Screed operation requires two people.



5. If necessary, handle may be moved to an offset position. Loosen knob (A), remove pins (B & C), move handle and handlebar assembly to desired offset position. Install pin (B) and tighten knob (A). Lower pin (C) will not be used when handle is in the offset position.





6. With one person on the operators handlebar and one on the T-Bar handle, begin screeding with pipe or drum spinning in the opposite direction that the screed is being pulled. Excess concrete that is being spun towards the operator must be raked away by a third person.

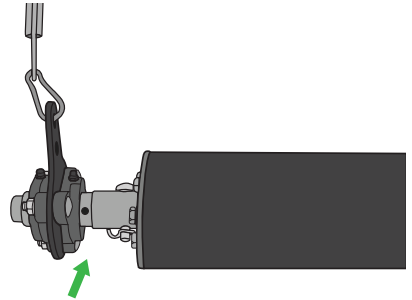
7. If there are bad spots or voids, fill them in with concrete and run the Hydra-Screed back over the area.

## Cleanup

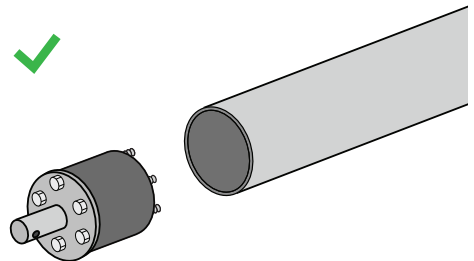
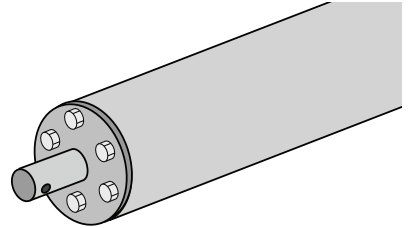
1. Move the Hydra-Screed away from poured concrete.
2. Remove all concrete from the Hydra-Screed with a garden hose or pressurized water supply.

## Maintenance

Pump grease into pull bushing before each use.



Remove rubber bushings from screed pipe after each use. Rubber bushing assemblies left inside the screed pipe for long periods of time can cause seizing.



Bolts in the bushing assemblies are coated with anti-seize when assembled. Re-apply anti-seize to all bushing assembly bolts at least once a year.

## **Troubleshooting**

### **Pipe/Drum Does Not Spin**

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

of concrete in front of the pipe/drum. In certain areas of the United States, some concrete mixes may require additional weight. Please contact a Curb Roller Manufacturing representative for more information.

### **Pipe/Drum 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.

### **Pipe/Drum Is Spinning Too Fast**

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

### **The Hydra-Screed Will Not Stay On Forms (Riding Up On Concrete)**

Check the amount of concrete in front of the pipe/drum. Be sure to maintain no more than two inches

## **Frequently Asked Questions**

### **What is the pipe made out of?**

The roller pipe is made of 6 inch 10 gauge round stouting.

### **How many feet of hydraulic hose can I run?**

The Hydra-Screed comes standard with 40 feet of hydraulic hose and can be used with any length of hose up to 100 feet.

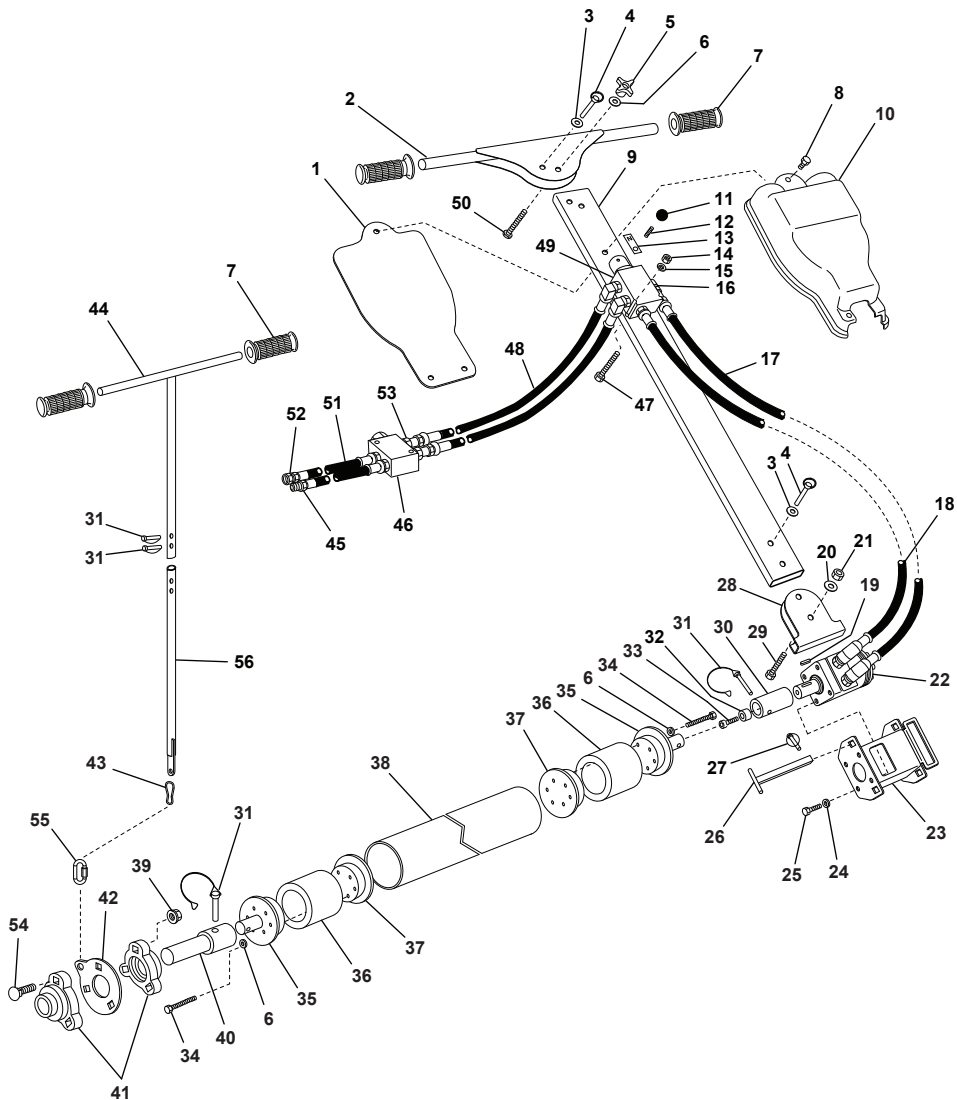
### **What drives the Hydra-Screed?**

Any hydraulic source that maintains 4 gallons per minute can effectively run the Hydra-Screed, i.e skid-steer, mini-excavator, tractor, or hydraulic power pack.

### **How do I adjust the speed of the Hydra-Screed?**

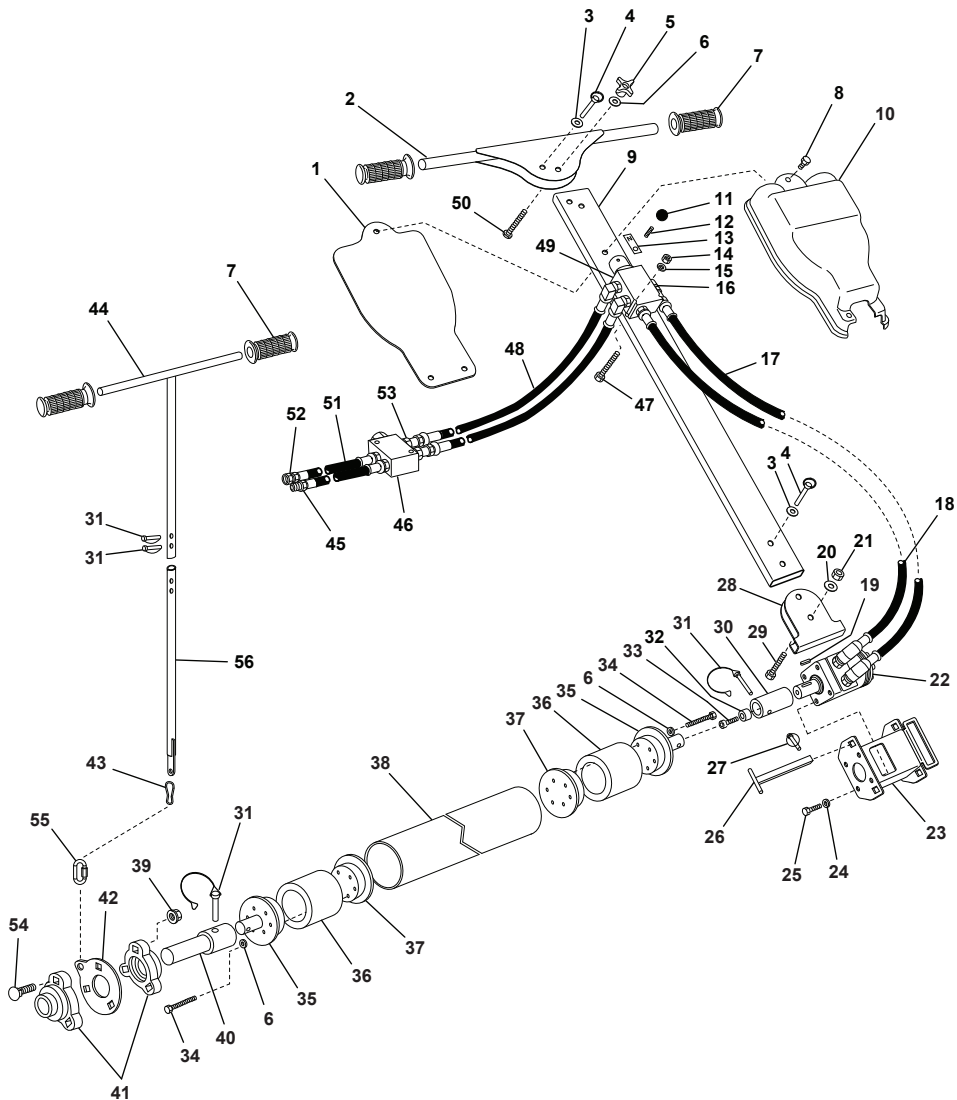
The Hydra-Screed comes standard with a flow control block. This is factory set and NOT adjustable. On the handle of the Hydra-Screed is a variable speed directional valve which operates left to right depending on the direction of desired rotation. The Hydra-Screed

has 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 to 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.



## Parts

No.	Qty.	Description	Part No.
1	1	Cover-Valve, Rear, CM4000/HS3000	30004-003
2	1	Handle Wdmt-Pivot, CM4000/HS3000	30000-001
3	2	Washer-Flat, 5/16", USS, Zc Pltd	101-178
4	2	Pin-Detent, 3/8 x 1-1/2"	1001-055
5	1	Knob-Blind, 4-Prong (1/2"-13 x 5/8" Dp)	1021-111
6	13	Wshr-Flat, M12, 8.8, Zc	102-010
7	4	Grip-Handle, Rbbr, 1" ID x 1.63" OD x 4.75 OAL	1143-001
8	7	Screw-Self Tap, HWH, #10 x 3/4", Zc Pltd	151-019
9	1	Handle-Main, CM4000/HS3000	30002-001
10	1	Cover-Valve, Front, CM4000/HS3000	30004-001
11	1	Knob-Ball, 1" Rd, 1/4"-20 x 7/8"	1021-101
12	1	Screw-Sckt Set, Cup Pt, 1/4"-20 x 3/4", Blk Ox	071-029
13	1	Tab-Neutral	30016-001
14	2	Nut-Lock, Srrtd Flg, 1/4", Zc Pltd	105-101
15	2	Wshr-Flat, 1/4", G2, Zc Pltd	00101-107
16	1	Fitting-Cnctr, 90 Elb, 3/8 M-JIC X 3/8 M-ORB	1211-015
17	1	Hose Assy-3/8" x 37" OAL	17103-003
18	1	Hose Assy-3/8" x 36" OAL	17103-001
19	1	Key-Drive, Motor 1/4"x1/4"x1" (Rd both ends)	1023-301
20	1	Wshr-Flat, M16, 8.8, Zc Pltd	102-012
21	1	Nut-Prvlg Torq, 5/8"-11, Zc Pltd	119-113
22	1	Motor-Hyd, 4.45 Disp., 1" Dia Shft w/key	1501-001
23	1	Housing Wdmt-Motor, HS3000	30005-001
24	4	Washer-Lck, 3/8", Zc Pltd	101-109
25	4	Bolt-HCS, 3/8"-16 UNC x 1", Zc Pltd	383-504
26	1	Pin Wdmt-Cnctng	30007-001
27	1	Pin-Lynch, 1/4" x 1-1/4", Zc Pltd	1001-704
28	1	Yoke Wdmt-Cnctng, Handle x Mtr Cage, HS3000	30003-001
29	1	Bolt-Hxhd, 5/8"-11 X 2-1/2", Zc Pltd, Unc, G2	631-505
30	1	Coupler-Drive, HS3000	30009-001
31	1	Pin-Lock, 3/8" Rd, Dbl Wire, 1-3/4" Eff Lg, Zc Plt	1001-109
32	1	Washer-Rtng, Drive Coupler	30008-001



## Parts

No.	Qty.	Description	Part No.
33	1	Screw-SHC, 1/4"-20 UNC x 3/4", Blk Ox	153-074
34	12	Bolt-Tap, 1/2"-13 x 6" UNC	501-509
35	2	Flange Wdmt-Rtng, Drive(Short Shaft)	30010-001
36	2	Bushing-Expansion, Rbbr, 6" Pipe	1151-001
37	2	Flange-Rtng, Inside, 6" Tube	30015-003
38	1	Tube-6" OD x 10ga x Length Req'd	30525-000
39	3	Nut-Lock, Srrtd Flg, 5/16"-18 UNC, Zc Pltd	105-102
40	1	Coupler-Static End, HS3000 (304 SS)	1001-107
41	2	Bearing-Flgd, 3-Bolt, 1" ID	60503-003
42	1	Plate-Pull, Static End	60011-001
43	1	Link-Snap, 3/8", Zc Pltd	1003-024
44	1	Handle Wdmt-Upper	30013-001
45	1	Coupler-Stucci, Male, 1/2" x 1/2" NPT FF, QD	1205-022
46	1	Valve-Flow Control, Hydraulic	1501-021
47	2	Bolt-HCS, 1/4"-20 x 3-1/4", Zc, G5	253-542
48	2	Hose Assy-3/8" x 40' OAL	17103-005
49	1	Valve-Directional, CM4000/HS3000 Variable Spd	1501-031
50	1	Bolt-Crge, 1/2"x2, Unc, Zc Pltd	503-008
51	2	Hose Assy-1/2" x 2' OAL	17105-001
52	1	Coupler-Stucci, Female, 1/2" x 1/2" NPT FF, QD	1205-002
53	2	Fitting-Cnctr, 1/2" Male JIC x 1/2" Male St Thd O-	1207-012
54	3	Bolt-Crge, 5/16"-18 Unc x 1-1/2", Zc Pltd	313-006
55	1	Link-Cnctng, Qk, 1/4", Zc Pltd	1003-003
56	1	Handle Wdmt-Lower	60020-003
57	1	Manual-Operating, HS3000	19001-101
58	1	Decal Kit-HS3000	19000-001

## Hydra-Screed HS3000 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](http://www.curbroller.com) to register your product.







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