



## ***Roller Screed Operations Manual***

***Part# RS14***

***EDI# 19435***

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# INTRODUCTION

The Marshalltown Roller Sced is a quick and easy tool to use in screeding concrete. Its simplicity allows even the most inexperienced operators to effectively and accurately place a slab.

## Specifications:

Part #: RS14

EDI: 19435

## Dimensions:

Live handle length: 48"

Live handle width: 19"

Live handle diameter: 1¼"

Live end cap length: 5"

Motor enclosure: 4¾ X 4½ X 18"

End cap diameter: 3.98"

Motor: 10 amp, 300 RPM, 120V AC

Roller Tube Diameter: 4½"

Roller Tube Thickness: ¼"

Lag handle length: 61¾"

Lag handle width: 14½"

Lag handle diameter: 1"

Lag end cap length: 4"

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## SIGNAL WORDS

### UNDERSTAND SIGNAL WORDS

- A signal word - DANGER, WARNING, or CAUTION is used with the safety-alert symbol. DANGER identifies the most serious hazards.



- DANGER or WARNING safety signs are located near specific hazards.



- General precautions are listed on CAUTION safety signs.

# SAFETY PRECAUTIONS



## IMPORTANT—READ THIS MANUAL BEFORE ASSEMBLING OR OPERATING

After referring to the operation manual, if you still require assistance, please contact our customer service department.

### CAUTION!

This operator's manual has been prepared to provide the information you need to correctly operate and maintain your unit. Read it carefully and keep it for future reference.

The replacement of any part on this product by other than the manufacturer's authorized replacement part may adversely affect the performance, durability or safety of this product. Should you ever require repair parts or service, contact your authorized parts and service dealer.

The manufacturer reserves the right to make changes or add improvements to its product at any time without prior notice. The manufacturer also reserves the right to decide, upon its discretion at any time, to discontinue a product.

Read and follow all safety precautions and operating instructions in this manual.

Familiarity and proper training are required for the safe operation of this equipment. Equipment operated improperly or by untrained personnel can damage equipment or cause bodily harm. Read the operating instructions contained in this manual to familiarize yourself with the location and proper use of all the controls.

- DO NOT operate this machine until you have read the operating and safety instructions. ALWAYS operate the machine in accordance with the manufacturer's instructions.
- ALWAYS inspect your roller screed upon arrival for damage or tampering that can rarely occur during shipping. If damage is found, file a claim with your carrier immediately! Mark corresponding delivery receipt as "damaged shipment".



CAUTION!

NEVER allow untrained personnel to operate your roller screed. Individuals who operate this screed should have adequate training in operating procedures.

- NEVER use over-the-counter hardware to replace manufacturers' hardware. Contact MARSHALLTOWN Customer Service Department for information regarding replacement parts. 800-888-0127



CAUTION!

DO NOT attempt to clean or service screed while machine is running.



DANGER!

DO NOT use gasoline, other fuels, or any flammable solvent to clean parts, especially in enclosed areas. Fumes from fuels and solvents can cause serious health problems if you are exposed to them over an extended period of time.

- ALWAYS disconnect power to the motor before servicing or cleaning the roller screed to prevent accidental start-up.



CAUTION!

ALWAYS wear adequate hearing protection while running your roller screed.

- Refer to the included motor manufacturer's manual for specific electrical requirements and safety information.

# ROLLER SCREED WARRANTY

This product is warranted to the original purchaser only, to be free of defects in material and workmanship under normal use, for one year from purchase date. Marshalltown Company shall without charge for parts and labor, repair or replace such parts which are found to be defective. All transportation charges for replacement parts must be borne by the purchaser.

For warranty service, the product must be delivered, with proof of purchase date, to the dealer of original purchase, or any factory authorized service dealer. The delivery of the unit must be made no later than 30 days after the expiration of the warranty period.

If difficulty is encountered in having warranty work performed, contact the Customer Service Department.

All implied warranties, including those of merchantability and fitness for a particular purpose, are limited to one year from date of purchase by the original retail customer and to the extent permitted by law any and all implied warranties are excluded and disclaimed after the expiration of such period.

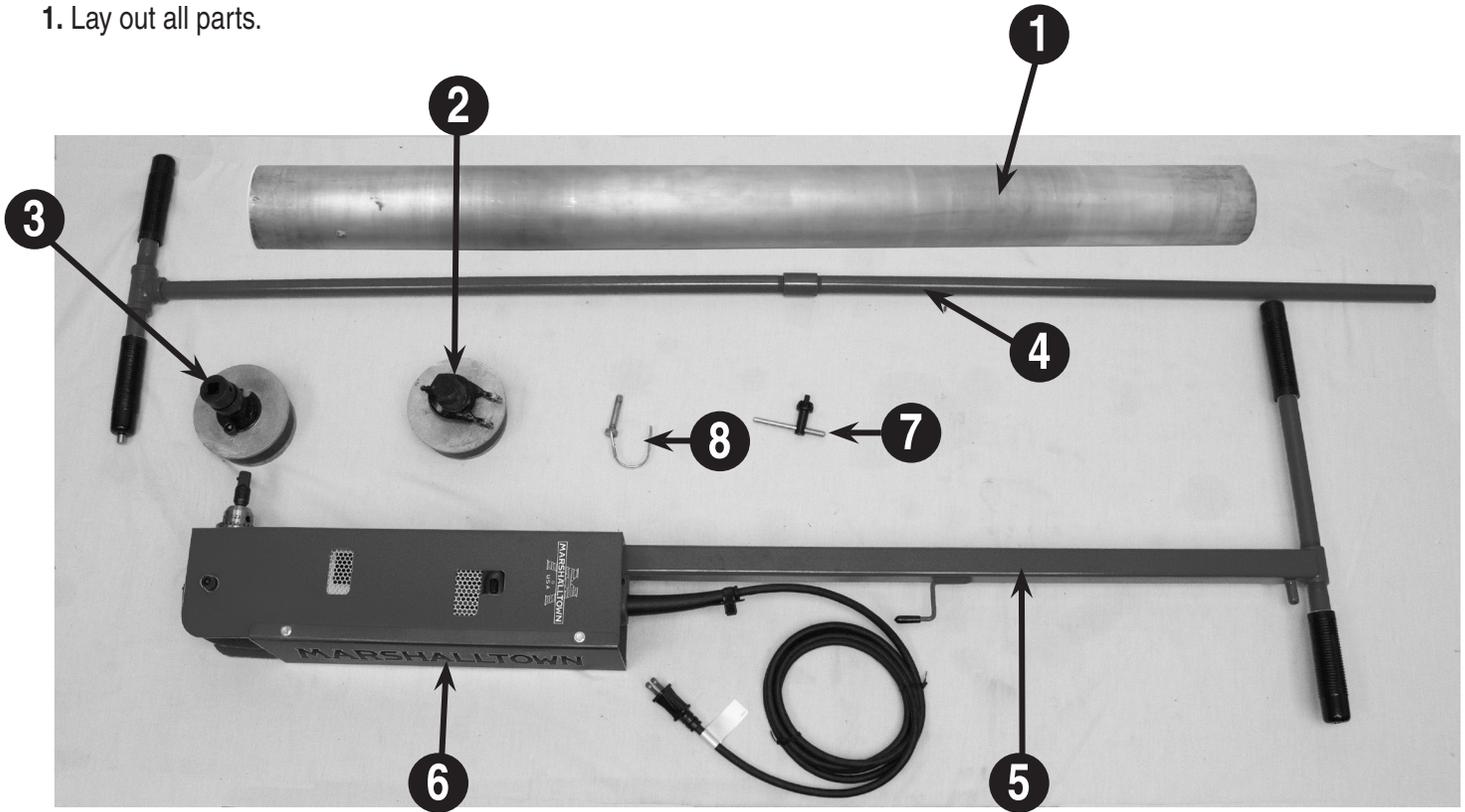
Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitations of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

Exclusion from this warranty:

1. All consequential damages, including pickup and delivery of the unit, communication, mileage charges and/or rental of a replacement unit during repairs are not covered under this warranty, nor are any loss of income and/or other loss resulting from the failure of the product to function due to a warranty defect.
2. This warranty will not apply when the product becomes inoperative due to misuse, normal wear, neglect, improper maintenance, accident or freight damage; has not been operated and maintained in accordance with the instructions furnished in the Operator's Manual; or has been altered or modified without approval from the factory Service Department.
3. No parts or products are to be returned to the factory without prior written approval from the factory.

# ASSEMBLY GUIDE

1. Lay out all parts.



- ① Roller Tube (lengths will vary)
- ② Lag end plug - three hex bolts and washers attached, but not tightened
- ③ Power end plug - three hex bolts and washers attached, but not tightened
- ④ Lag end handle
- ⑤ Power end handle - fixed to motor enclosure
- ⑥ Motor enclosure with power unit
- ⑦ Chuck key with machined end
- ⑧ Clevis pin

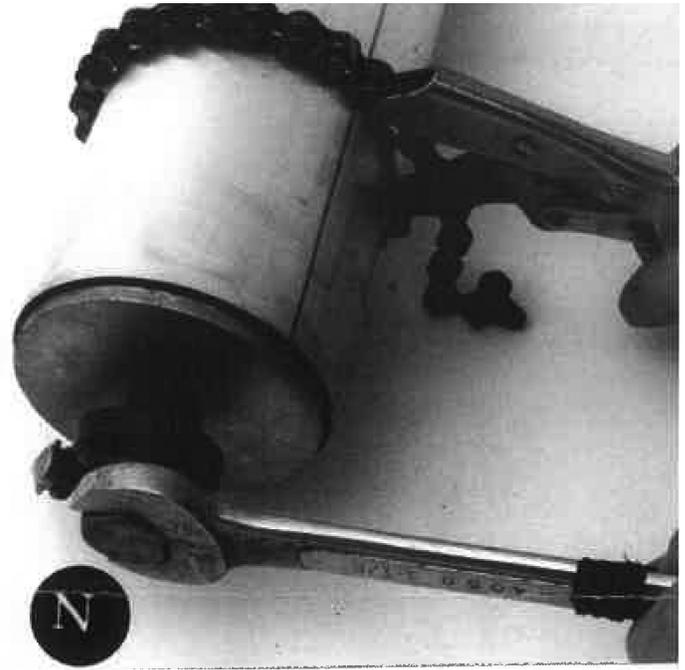
## PARTS AVAILABLE FOR REPLACEMENT

	NAME	PART#
1	Roller Tubes*	RS14TUBE4 - RS14TUBE28
2,8	Lag End Plug	RS14END2
3	Power end Plug	RS14END1
5,6,7	Power Head Assembly**	RS14MHDL

\* 17 roller tubes available from 4' to 28'

\*\* Handle & motor enclosure with power unit

## ASSEMBLY GUIDE



### **Instructions for installing Roller Screed ends:**

Live end installation. The end assemblies must be installed very firmly in the Roller Screed tube so that they will not come out during use. At least 60 to 70 ft-lbs of torque must be used when installing the ends.

**FIRST:** Remove the allen head set screw from the live end assembly.

**SECOND:** Grip each of the aluminum tapered discs with your hands and spin each end of the assembly so that the rubber gasket swells up between the aluminum discs. Tighten the assembly until the gasket swells up to the point so that when it is slipped into the tube there is some friction between the rubber gasket and the inside of the roller tube. When you have done this, you will be able to tighten the assembly with a pipe wrench mounted on the knurled portion of the universal joint assembly. During the initial tightening phase, you will also need to hold the outside exposed edge of the aluminum assembly with one hand so that it does not rotate inside of the tube. As soon as the rubber gasket has a good grip inside of the tube, you can then hold one hand on the chain clamp vise grip and the other hand on the pipe wrench and tighten very tightly. It is impossible to hold the tube firmly enough to produce the necessary torque without using some mechanical means. Simply having a co-worker hold the tube with their hands while you tighten the end with a wrench will not produce the necessary torque. You may tighten this to the point where the inner beveled components of the live end assembly come in contact with one another. You will feel the bolt you are tightening “bottom out” and can no longer be turned. Back the bolt off to the nearest slot and insert the allen head set screw. Installing the allen head set screw completes the installation of the live end and allows the electric power head to be operated either in the forward or reverse direction without the assembly becoming unthreaded. The electric power head has been set as the factory to the proper speed of 300 rpm. Never attempt to operate at a higher rpm.

**The dead end** can simply be tightened with an open end wrench as shown in photo N after following the “hand tighten” procedure outlined above. The dead end should be lubricated from time to time using the grease zerk.

# PRODUCT OPERATION

## BEFORE STARTING

Before starting the roller screed, there are a few items that need to be checked to prevent damage or personal injury.

- Make sure that both plugs are securely fastened to the end of the roller tube, and will not vibrate loose.
- Check all threaded connections to make sure that they are not loose.
- Check handles to make sure that they will not loosen or detach during the screed run.
- Look over the forms to check for unevenness so that the screed tube will not hang up.

## OPERATION

Operating your roller screed correctly will assist you in achieving the desired outcome of a pour. Follow the instructions below to operate your screed correctly and you will be very pleased with your results.

- Engage the power unit, and begin to pull the roller screed over forms, a screed pipe, or screed rail, distributing the concrete aggregate to the desired level.
- Each operator must properly maintain control of both handles, guiding the roller tube over the concrete aggregate at a speed and direction best suited for the aggregate's respective slump.
- DO NOT allow either end of the unit to enter wet concrete. Keep each end on the forms, screed pipes or screed rails to prevent contamination of the plugs or motor.
- If the concrete is not being added at the appropriate rate, slow the screed down to compensate.
- The speed at which the screed should be pulled back and forth depends on the slump of the concrete. It is important to pay close attention to the aggregates, slump and concrete modifying agents so the operator can compensate the speed of the motor adequately.
- Do not allow the roller screed to run in the same position for an extended period of time. If screeding is delayed, turn the motor off and let the roller screed sit in a position where it is best suited to start again. When the placement of aggregate resumes, slowly engage the motor and continue screeding.

The roller screed is capable of running two motor heads at the same time, on either side of the roller tube. It is recommended that two power ends are used for roller tube lengths 23' and above.

## IMPORTANT

If the roller screed is being used with two motor heads, one must be toggled in the forward position, and the other must be toggled in the reverse position. The roller screed will not operate if the directions of the motor are the same. When pour is completed, ensure screed is cleaned immediately to prevent concrete from curing in the motor drive shaft, motor enclosure, handle joints or on the roller tube.

Cleaning the motor enclosure should be done by blowing compressed air into the enclosure and washing by hand – avoid getting water directly into the motor assembly. Pressure washers are recommended for cleaning the roller tube, but should NOT be used to clean the motor enclosure.

# MAINTENANCE & TROUBLESHOOTING

## MAINTENANCE

After each use, ensure the roller screed is cleaned and stored carefully. Find a secure storage location for the roller tube which will prevent any objects from falling on, or damaging it.

After every three to four uses, lubricate the lag end cap through the grease fitting using a standard lever-action grease gun.

After each use, blow pressurized air into the motor enclosure to ensure there is no debris buildup that could potentially compromise the usage of the motor.

## TROUBLESHOOTING

If the roller screed is not spinning or functioning properly, refer to the following guide to diagnose and resolve your issue.

- Check to see if the power is connected – to both the roller screed motor and the source.
- Disconnect the power source and check if the motor shank is tightly connected to the chuck. If tightening is required, use the included chuck key to fully tighten the chuck to the motor shank.
- Disconnect the power source and check if the end plugs are fully tightened. Tighten them if required.
- Ensure the motor speed is set at the manufacturer default slow speed (300 RPM), and that it has not been shifted into the high speed (1200 RPM). High speed will not result in better performance and may overheat the motor.
- Refer to the motor manufacturer's manual for additional troubleshooting in regards to the specific device.
- If the roller screed is operating with two motor heads, ensure the heads are toggled to spin opposite directions. If both motor heads are set to spin in the same direction, the roller screed will not function properly.

# NOTES

# NOTES

