





Steel Drum Utility Mixer

Includes Model Number 300UT

104 S. 8th Ave. Marshalltown, IA Phone 800-888-0127 / 641-753-0127 Fax 800-477-6341 / 641-753-6341 www.MARSHALLTOWN.com

INTRODUCTION

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. Should you ever need repair parts or service, contact your authorized parts and service dealer.

Be sure safety precautions are observed. Read and Follow all safety and operating instructions in this Operations Manual.

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.

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

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SAFETY PRECAUTIONS



THE FOLLOWING PRECAUTIONS ARE SUGGESTED TO HELP PREVENT ACCIDENTS. A CAREFUL OPERATOR IS THE BEST OPERATOR. MOST ACCIDENTS CAN BE AVOIDED BY OBSERVING CERTAIN PRECAUTIONS. READ AND TAKE THE FOLLOWING PRECAUTIONS BEFORE OPERATING THIS EQUIPMENT TO HELP PREVENT ACCIDENTS. EQUIPMENT SHOULD BE OPERATED ONLY BY **CAUTION!** THOSE WHO ARE RESPONSIBLE AND INSTRUCTED TO DO SO.

- Read all mixer and electric motor/engine instructions before operation.
- Use a grounded, three wire plug-in for all mixers using an electric motor or an electric starting engine.
- Do not use mixer in standing water if powered by an electric motor or an electric starting engine.
- Do not over-fill the mixer. There should not be any liquid running out of the mixer drum.
- Know how to stop the motor/engine instantly.
- Keep hands and feet away from all moving parts.
- If you are unfamiliar with the mixer, test run the empty mixer prior to actual use.
- Never charge or fill unit prior to starting, as the over-load initially encountered could damage the motor/engine.
- Stop motor/engine whenever you leave or clean the unit. Disconnect power cord on electric motor.
- Never operate mixer without guards being properly positioned and secure.
- Avoid spilling gasoline. Never fill tank while the engine is running or while you are smoking.
- Open doors if engine is running in an enclosed area. Exhaust fumes are dangerous.
- Store gasoline in safe container. Store the container in a cool, dry place. Do not keep in the house or near heating appliances.
- Never reach into drum while mixer is running.
- Keep mixer in good operating condition. Loose or damaged parts are dangerous and should be tightened or replaced before operating.
- Keep bystanders, especially children, away from mixer while operating.

SAFETY DECALS (if applicable)

If your safety and operating decals are damaged, they can be replaced by contacting Customer Service

WS1068 22 to 25 rpm 1. To avoid motor burnout start mixer before putting anything in drum 2. Make a cement solution by putting in water, cement and coarse stones to break up cement lumps 3. Add aggregate as required by the application WS1068

WS1066

SAFETY AND OPERATING INSTRUCTIONS

CAUTION!

- 1. Never reach into drum while it is rotating.
- 2. Stop engine or motor before cleaning or servicing.
- 3. Keep children and unauthorized people away from machine.
- 4. Never allow machine to run unattended.
- 5. Read owner's manual before operating or servicing this machine.

GENERAL PURPOSE CONCRETE

- Proportions by volume:
- 1 part cement 21/2 parts sand
- 3 parts aggregate 2/3 parts water

With drum rotating, add water, aggregate, cement and sand in that order. Mix will be "mushy" not "soupy" for average moisture sand. Add or reduce water if sand is dry or wet.

CLEANING

- 1. With drum rotating, add water and aggregate.
- 2. Allow drum to turn for several minutes.
- 3. Dump water and aggregate.
- 4. Stop mixer by disconnecting motor or stopping engine.
- 5. Thoroughly clean with water before cement hardens.

LUBRICATION & SERVICE

- 1. Lubricate pinion shaft and drum shaft daily when in use.
- 2. Service engine or motor per manual supplied.

MIXERS ONE-YEAR 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.

If difficulty is encountered in having warranty work performed, contact the factory 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. The following items are not covered under the Marshalltown Company one year warranty and are warranted by their respective manufacturer.
 - a) Engines, including starters, generators, alternators and gear reducers
 - b) Hydraulic components, including pumps, motors and valves
- 2. 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.
- 3. 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.
- 4. No parts or products are to be returned to the factory without prior written approval from the factory.

NOTICE: Record the model and serial numbers in the spaces provided.

Product Model Number:
Product Serial Number:
Engine/Motor Model Number:
Engine/Motor Code Number:
Purchase Date:
Dealer Purchased From:
Dealer Address:
Dealer Phone Number:

GETTING READY FOR MIXING

Lay out forms for your concrete floor, patio, driveway, sidewalk, etc. The quality of concrete is directly related to the quality of the cement paste. The quality of the paste, in turn, is directly related to the amount of water mixed with the cement. For a given amount of cement, as the amount of mixing water is reduced, the strength of the paste increases, making the concrete stronger and more durable. Calculate the proportions of your mix components (cement, sand and coarse aggregate) according to the job specifications.

LOADING THE MIXER

Start the mixer. Refer to motor/engine instructions. After drum has started rotating, pour about half of the water in the drum. NOTE: The drum my leak slightly when first used. This will stop after a few batches. Add aggregate (gravel) first then cement and last sand.

MIXING INSTRUCTIONS

- 1. Start the drum rotating. The drum should revolve between 20 and 25 R.P.M.'s for best results in mixing concrete
- Add water.
- 3. Add cement and one shovelful of coarse aggregate. The coarse aggregate will break up any lumps in the cement.
- 4. Add remaining aggregate: crushed stone, pit-run gravel or sand.
- 5. Mix batch for approximately one minute. Drum speed should be about 20-25 r.p.m.

UNLOADING THE MIXER

Allow the entire mixture to mix for one full minute. Do not stop mixer from rotating. Hold the tilt handle and unlock the stop lever. Dump concrete to either side by tilting the tilt handle in the direction required. Before reloading the mixer, slowly pour a pail of water over the lip of the drum, permitting water to clean the inside of drum. Mix batch for approximately one minute. Drum speed should be about 25 r.p.m. When cleaned, dump water. Now you are ready for your next batch.

CLEANING THE MIXER

After each run of concrete has been poured, do the following: With the drum rotating, spray water into drum permitting the water to run down the inside and outside of drum. Add one shovel full of coarse aggregate and permit this mixture to scour the inside of drum for about two minutes. This practice will help keep the drum clean, which is essential in obtaining the best mixing result. Never permit concrete to harden on either the inside or outside of drum.

EXTENSION CORDS-ELECTRIC MOTOR

The following size extension cords should be used for this mixer: length of cord, up to 100 ft-14 gauge wire; up to 200 ft-12 gauge wire; up to 300 ft – 10 gauge wire; up to 400 ft – 8 gauge wire.

LUBRICATION & STORAGE

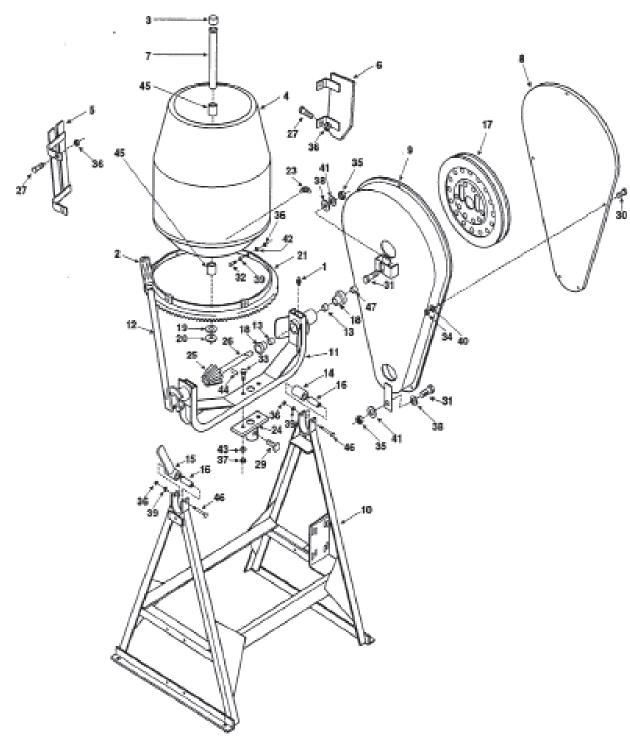
Engine/Motor: Refer to engine/motor operating instructions for all maintenance and lubrication instructions and requirements.

Grease Fittings: Clean off grease fitting before greasing. Use pressure type grease gun. Grease lightly with general purpose grease (2 to 3 pumps) Drum Shaft Bearings (where used), Drive shaft Bearings, Tilt Wheel Shaft Bearings (where used), Brake Lever Shaft (where used)

Yoke Tilt Mechanism: Oil: Use SAE 30 engine oil.

For short term storage, clean the mixer and store in a dry place. If the mixer is not to be used for an extended period of time, service mixer completely and store it in a dry place. Cover exposed metal surfaces with a thin coat of SAE 30 engine

300UT PARTS BREAKDOWN



300UT PARTS BREAKDOWN

REF#	NAME	PART#	Quantity
1	Grease Fitting	MIX1102	1
2	Grip	MIX1183	1
3	Bearing Cap	MIX19866	1
4	Drum Assembly	MIX19902	1
5	Blade Assembly	MIX19911	2

300UT PARTS BREAKDOWN CONTINUED

REF#	NAME	PART#	Quantity
6	Paddle Assembly	MIX19913	2
7	Drum Shaft Assembly	MIX19914	1
8	Belt Guard Cover	MIX214858	1
9	Belt Guard Assembly	MIX214907	1
10	Frame Assembly	MIX245948	1
11	Yoke Assembly	MIX245949	1
12	Tilt Handle	MIX245952	1
13	Bushing Spacer	MIX245956	2
14	Yoke Lock Tube	MIX245977	1
15	Yoke Lock Assembly	MIX245978	1
16	Pivot Tube	MIX245980	2
17	Pulley	MIX29209	1
18	Bushing	MIX4959	2
19	Drum Shaft Spacer (Light)	MIX5450	As Req'd
20	Drum Shaft Spacer (Heavy)	MIX5452	As Req'd
21	Ring Gear	MIX5498	1
23	Grease Fitting (Drum)	*	1
24	Drum Shaft Bearing	MIX763-40033	1
25	Pinion Gear	MIX6007	1
26	Drive Shaft	MIX6008	1
27	Bolt, Carriage 3/8-16 x 3/4	MIX70448	8
29	Set Screw, Square Hd. 1/2-13 x 1	MIX70069	4
30	Cap Screw, Hex Hd. 1/4-20 x 1/2 Plated	MIX70090	5
31	Cap Screw, Hex Hd. 5/16-18 x 1 Plated	*	2
32	Cap Screw, Hex Hd. 3/8-16 x 1 1/2	MIX70249	5
33	Cap Screw, Hex Hd. 1/2-13 x 1 1/2	MIX70343	2
34	Nut, Hex 1/4-20 Plated	*	5
35	Nut, Hex 5/16-18 Plated	MIX70549	2
37	Nut, Hex 1/2-13	*	2
38	Washer,Flat 5/16 Plated	MIX70701	2
39	Washer,Flat 3/8	MIX70703	5
40	Washer, Spring Lock 1/4 Plated	*	5
41	Washer,Spring Lock 5/16 Plated	*	2
42	Washer, Spring Lock 3/8	*	7
43	Washer,Spring Lock 1/2	*	2
44	Roll Pin 7/32 x 1 1/2	MIX71017	1
45	Drum Shaft Bushing	MIX5269	2
46	Bolt, Hex Hd. 3/8-16 x 3 1/4	*	2
47	Pulley Spacer	MIX760-40043	1

^{*} Common hardware, can be purchased locally.



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