



Operations Manual & Parts List

***Model: 300UT/300UTPL
3 Cu. Ft.***

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*QR Code
if applicable*

Add in “How to switch from Poly to Steel”

INTRODUCTION

Congratulations on your purchase of a Gilson by MARSHALLTOWN UT Series Utility Mixer. Made in the USA, Gilson by MARSHALLTOWN mixers are rugged and heavy-duty, ready for years of service. Gilson by MARSHALLTOWN Utility mixers have several options to suit a variety of end users, from contractors to industrial customers and home owners. Among those options are:

- Steel or poly drums
- 1/3 HP or 1/2 HP electric motors
- 3.5 HP Honda® Gasoline engine
- Stationary, hand tow, or high-speed tow kits
- On/Off switch for electric motors available

Your Gilson by MARSHALLTOWN Utility Mixer has a variety of uses and can handle larger jobs. The mixer is capable of mixing anything from concrete to seed and feed. The FDA/NSF/USDA approved, non-stick poly liner is sanitary and easy to replace. Aside from concrete, poly drums are used in several applications in the food and pharmaceutical industries. Other features of your Gilson by MARSHALLTOWN mixer include: 5 position drum lock, easy to dump tilt handle, 4-piece Quad-Mixing System on steel drum mixers, in-mold mixing blades on poly drum are easy to clean and never need replaced. Both models product 1 batch a minute.

This owner's manual provides the information needed to operate and maintain this Gilson by Marshalltown Mixer. Carefully read and follow all safety and operating instructions in this manual. Also, be sure every operator of this mixer reads this manual before operating the mixer. The replacement of any part on this mixer by other than the manufacturer's authorized replacement part may adversely affect the performance, durability or safety of the product. Be sure safety precautions are observed. Read and follow all safety and operating instructions in this operator's manual. The manufacturer reserves the right to make changes to, or add improvements to its product at any time without prior notice or obligation. The manufacturer reserves the right to decide, upon its sole discretion and at any time, to discontinue a product.

Information regarding operation and maintenance of the engine can be found in a separate engine manual supplied with this mixer, if the mixer is supplied with an engine. The engine manual provides all the information required regarding engine adjustments, operation and maintenance. Should any questions arise concerning engine operation or service, contact the nearest engine repair facility or the engine manufacturer.

This manual covers all Gilson by MARSHALLTOWN UT Series Utility mixer models and options. For technical questions or repair parts, please call MARSHALLTOWN customer service at 800-888-0127, 641-753-6341 or visit www.marshalltown.com.

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SAFETY PRECAUTIONS

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.

• This notation appears before warnings in the text. It means that the step that follows must be carried out to avoid the possibility of personal injury or death. These warnings are intended to help the technician avoid any potential hazards encountered in the normal service procedures. We strongly recommend that the reader takes advantage of the information provided to prevent personal injury or injury to others.

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 THOSE WHO ARE RESPONSIBLE AND INSTRUCTED TO DO SO.



CALIFORNIA PROPOSITION 65 WARNING: Operation of this equipment and/or engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm

- Read all operating and maintenance instructions before operating or servicing mixer. Test run empty prior to actual use.
- A mixer is only as safe as its operator. Give complete and undivided attention to the operation of the mixer.
- Know how to stop the mixer and the engine instantly.
- Always have all guards and safety devices attached and in place before operating mixer. Close engine housing during operation.
- Keep inexperienced and unauthorized people away from the mixer at all times.
- Never leave the mixer unattended while it is running.
- Shut off engine or disconnect the electric motor before making any adjustments or putting hands or tools in the drum.



Never reach into the drum or place tools into the drum while the mixer is running

- Do not overfill the drum. Do not exceed the mixer's rated capacity.
- Do not smoke while refueling the engine. Shut off the engine and allow it to cool before refueling. Do not spill fuel.
- Block mixer wheels when mixing.
- Use safety chains while towing mixer.
- Keep the mixer in good operating condition. Loose or damaged parts are dangerous.
- Avoid loose clothing that could get caught in moving parts or on control levers.



Keep hands and feet away from moving parts

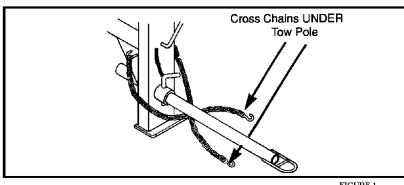
- Do not add material to the drum while stopped. Start the drum before adding material.
- Keep all warning, caution and safety instruction labels in good condition. Replace missing, damaged or illegible labels.
- Clear the work area around the machine to prevent tripping or falling onto the mixer.
- Operate on level ground to prevent the mixer from tipping over.
- **DO NOT OPERATE** this mixer under the influence of alcohol or while taking medication that impairs your reactions.
- Do not pull the cord to disconnect it. Keep the cord away from heat, oil, and sharp edges.

SAFETY PRECAUTIONS CONTINUED

- Do not pull the cord to disconnect it. Keep the cord away from heat, oil, and sharp edges.
- Use factory authorized parts for replacement.
- Wear safety glasses when mixer is in use.
- Never attempt to move the mixer while the motor is on.
- With electric motors, properly grounded electric circuit is required to protect the operator from possible electric shock.
- **NEVER** unplug the motor while standing in or around wet ground.

TOWING & SAFETY CHAINS (High Speed Tow Kit Only)

For transporting the mixer, slide the tow pole out as far as possible and insert the locking pin. When operating the mixer, slide the tow pole in and lock it in place. Make sure drum is locked in position and engine housing is closed and secured. Cross the safety chains under the tow pole and fasten them to the tow vehicle. (See figure 1.)



NOTE! Safety chain length may need to be altered for proper connection to tow vehicle. Reposition the hooks, DO NOT cut chain. Allow enough slack to permit proper vehicle turning while keeping chains snug enough to prevent tow pole from contacting the ground in case the hitch uncouples.

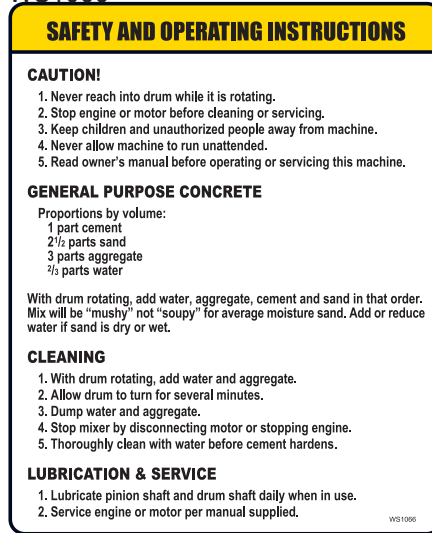
SAFETY DECALS

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

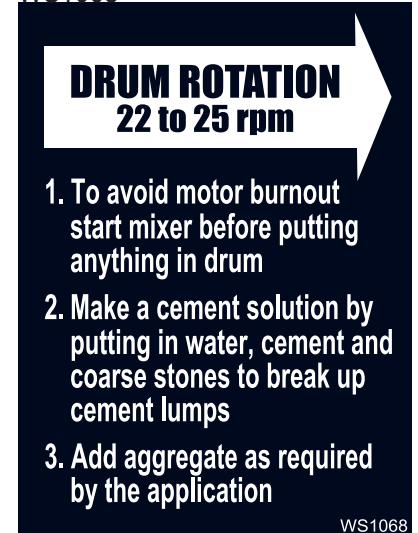
WS1065



WS1066



WS1068



WS1067



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.

SPECIFICATIONS

Model	Batch Dry Cu. Ft.	Total Drum Volume Cu. Ft.	Drum Dimensions	Drum Drive	Tilt Mechanism	Frame Description
300UT	3	5.5	24" Dia. 15-1/4" Opening 24.75" Depth	V-belt	Tilt Handle	1 1/2" Welded Steel Angle
300UT-PL	3	5.5	24" Dia. 15-1/4" Opening 28" Depth	V-belt	Tilt Handle	1 1/2" Welded Steel Angle

Model	Tow Pole	Hitch Description	Wheel & Tire High-Speed Tow Kit	Overall Dimensions L X W X H	Discharge Height	Power Options
300UT	1 1/4" Hand Tow 2 3/8" High-Speed	Large Grip Hand Tow 2" Ball Coupler High-Speed	4.8" X 12" Wheels 20" O.D. Tires	46" X 30" X 48"	20"	1/3 HP Electric 1/2 HP Electric 3.5 HP Honda®
300UT-PL	1 1/4" Hand Tow 2 3/8" High-Speed	Large Grip Hand Tow 2" Ball Coupler High-Speed	4.8" X 12" Wheels 20" O.D. Tires	46" X 30" X 48"	20"	1/3 HP Electric 1/2 HP Electric 3.5 HP Honda®

ASSEMBLY

TOW POLE (If Equipped)

The tow pole assembly is located on the front of the mixer and is used for transport only. For transport, pull the tow pole assembly out, line up the holes and insert the L-shaped pin through each hole. While operating the mixer, pull the L-shaped pin out of the hole and push tow pole assembly all the way in. Line up the holes and insert the L-shaped pin through each hole.

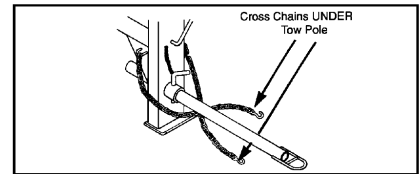
MIXER TRANSPORT

HIGH SPEED TOW KIT (If Equipped)

Secure drum by lowering the drum so the opening is facing the ground. Engage drum lock to keep lock in this position. Secure all moveable parts, including the engine house (gas mixers only). Secure tow pole coupler to vehicle and attach safety chains and hooks. (See FIGURE 1, Safety Chains). The included pintle-type couplers require the appropriate tow vehicle coupler retainer.



Never exceed 55 Miles Per Hour. Adjust speed according to road and weather conditions.
Never exceed 15 Miles Per Hour off-road or on job sites.



PRE-OPERATIONAL CHECKS

The following steps should be taken prior to placing the mixer in use:

1. The operator must be familiar with the location and operation of all controls.
2. The unit ships with oil, but check the crankcase oil level on gasoline powered units, and fill the fuel tank before starting.
3. While empty and with mixer running, ensure the drum spins and dumps freely.



Make sure no foreign objects or tools are in drum before starting engine/motor.

CONTROLS AND OPERATIONS

1. Read through the manual for all operation, adjustment and maintenance instructions. Be sure all engine/motor and drive system operation instructions are followed as outlined.
2. All nuts and cap screws should be checked and tightened during the first two (2) hours of use. Periodic checks should be made thereafter.

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.

STARTING THE MIXER



Do not load the mixer until it is warmed up and running smoothly.

Refer to the engine/motor manual for proper starting procedures.

EXTENSION CORDS FOR ELECTRIC MOTORS

The following size extension cords should be used (length of cord):

- Up to 100 ft. -14 gauge wire
- Up to 200 feet -12 gauge wire
- Up to 300 feet -10 gauge wire
- Up to 400 feet -8 gauge wire

NOTE: Extension cord must be a 3-wire power cord and 3-wire power plug that is approved for outdoor use. When connecting the power cord, always connect cord to motor first and then plug into a grounded receptacle. When disconnecting the power cord, always unplug the grounded receptacle first.

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 may leak slightly when first used. This will stop after a few batches. If mixing by component, add aggregate (gravel) first then cement and last sand. If using pre-mixed bags, follow instructions on the bag.

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
2. 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.

NOTICE – If using pre-mixed bags, follow the batching instructions on the bag

DISCHARGING 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, and the mixer will be ready for the 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. Discard according to local regulations. 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.

To achieve satisfactory performance from the mixer, it is essential to give the drum reasonable care. Never permit concrete to harden on either the inside or outside of the drum. Do not pound or dent the drum as this impairs mixing efficiency and can cause spot wear on the drum surface. Spray the entire unit off after each use.

To avoid personal injury, always turn engine/motor off and wait for all motion to stop before cleaning.

LUBRICATION AND STORAGE

I think we need location pictures for each grease point. NEED ZACK'S HELP HERE

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 oil. Refer to engine/motor manual for storage instructions.

WHEEL BEARINGS (High Speed Tow Kit Only): Wheel bearings should be packed once a year. Thoroughly clean old lubricant from the bearings, hub and spindles before repacking. Pack bearings only one-half to two-thirds full with grease to prevent overheating. Use no. 2 wheel bearing grease.

ZACH - I took these from the MP mixer manual. Do they still make sense here?

ADJUSTMENT



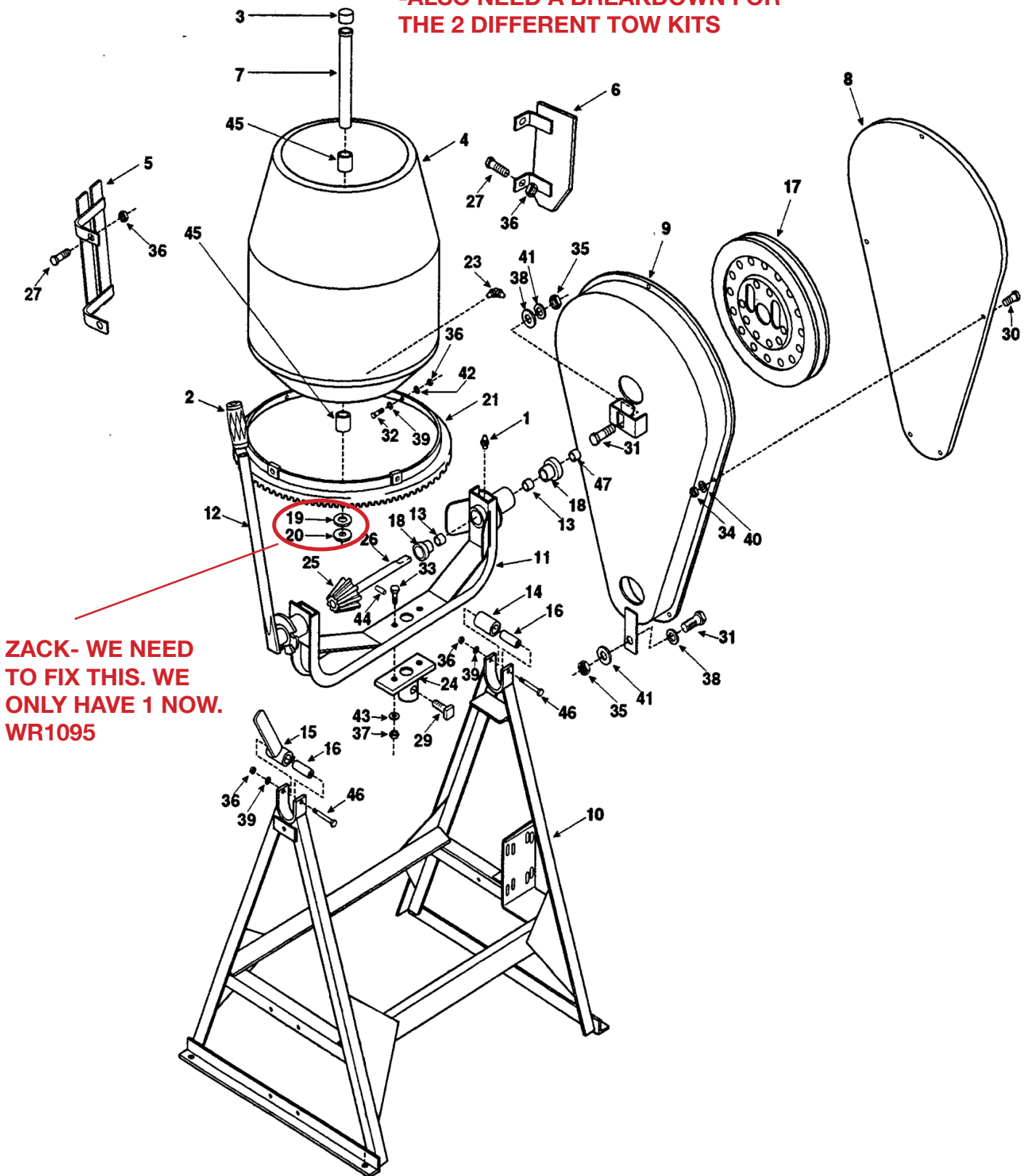
To avoid personal injury, always turn off engine/motor and wait for all motion to stop before making adjustments or repairs.

ZACK - Any adjustments here? If not we will remove this section.

MIXER DIAGRAM

ZACK-
- NEED A BREAKDOWN FOR THE
GAS MODELS

**-ALSO NEED A BREAKDOWN FOR
THE 2 DIFFERENT TOW KITS**



**ZACK- WE NEED
TO FIX THIS. WE
ONLY HAVE 1 NOW.
WR1095**

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
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

WR1095
ZACK
FIX...

MAINTENANCE SCHEDULE

Zack - MAINTENANCE SCHEDULE NEEDS TO BE WRITTEN

Stone's old manuals used to have the following in their maintenance section:

! warnings stating:

Never pour or spray water over the engine or motor

- A. Engine – check daily, refer to manual, etc
- B. Weekly – grease trunnions (2) places
- C. Monthly – grease drum spindle through grease fitting (1) place
- D. Yearly – Repack drum spindle (with instructions) Repack drum bearings (with instructions)
- E. Yearly – Wheel hubs, clean and repack (with instructions)
- F. Belt Tension Weekly

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

Mixer serial numbers can be located on the nameplate

Engine Model, Type and Code numbers are located on the blower housing, cylinder head or backplate

Product Model Number: _____

Product Serial Number: _____

Engine/Motor Model Number: _____

Engine/Motor Code Number: _____

Purchase Date: _____

Dealer Purchased From: _____

Dealer Address: _____

Dealer Phone Number: _____

TROUBLE SHOOTING GUIDE FOR UT MIXERS

ENGINE WON'T START:

1. Check for sufficient fuel.
2. Check oil level (some engines have an oil alert, preventing the engine from starting when oil level is low)
3. Was engine choked when starting?
4. Is engine flooded?
5. Check spark plug. (Clean and check gap)
6. If engine still won't start, take to service center

Anything here for electric motors not working?

- Make sure the motor is wired correctly (does the wiring and motor specification match the supply voltage?)
- Check fuses and circuit breakers. Tripped breakers/blown fuses could result from a jammed or overloaded mixer.

BELT DRIVEN MODELS:

What is this troubleshooting? There is no problems, just ways to correct it.

1. Check condition of belts, replace if necessary.
2. Check for oil or grease on belts as well as for loose belts.
3. Adjust set screw under engine base down until belts are tight.



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