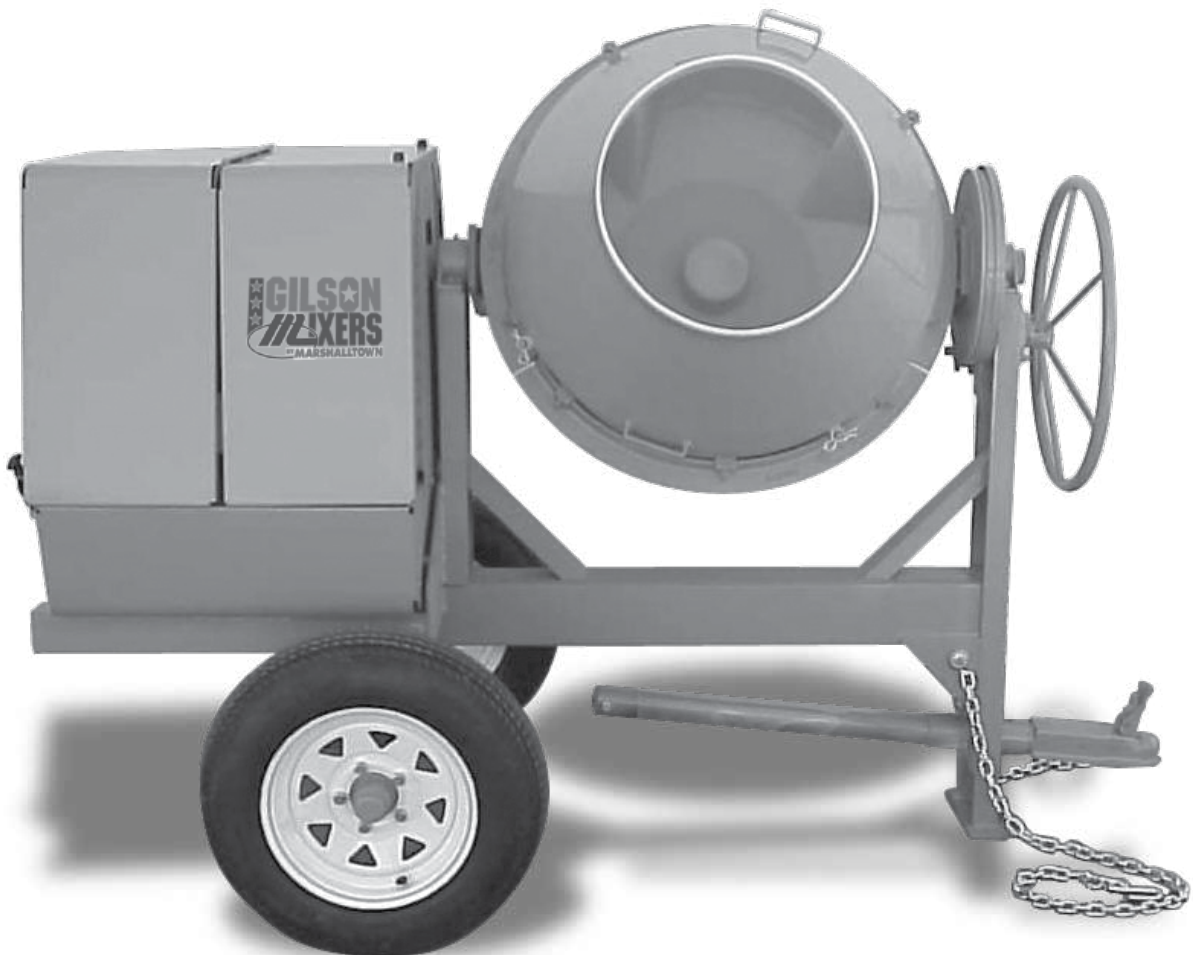


# **GILSON** **MIXERS** **BY MARSHALLTOWN**



## ***OPERATIONS MANUAL & PARTS LIST***

***MODEL: 600cm  
6 CU. FT.***

104 S. 8th Ave.  
Marshalltown, IA  
Phone 800-888-0127 / 641-753-0127  
Fax 800-477-6341 / 641-753-6341  
[www.MARSHALLTOWN.com](http://www.MARSHALLTOWN.com)



# INTRODUCTION

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 on, 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.

# TABLE OF CONTENTS

Safety Precautions .....	4
Towing & Safety Chains .....	4
Warranty Information .....	5
Lubrication And Storage .....	6-7
Mixing Instructions.....	7
Care of Mixer .....	7
Parts List .....	8-15

**IMPORTANT: if safety or standard decals are missing, illegible, or damaged, they should be replaced. Please contact Marshalltown Customer Service at 800-888-0127 • 641-753-0127 for replacement decals.**

## SAFETY PRECAUTIONS



**CAUTION!**

This is the industry's safety alert symbol. This symbol calls attention to items or operations that could be dangerous. This symbol can be found throughout this manual and on safety decals on the mixer. Read these messages carefully.

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.

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



**CAUTION!**

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

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



**CAUTION!**

**Keep hands and feet away from moving parts**

14. Do not add material to the drum while stopped. Start the drum before adding material.
15. Keep all warning, caution and safety instruction labels in good condition. Replace missing, damaged or illegible labels.

## TOWING & SAFETY CHAINS

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. (fig.1)

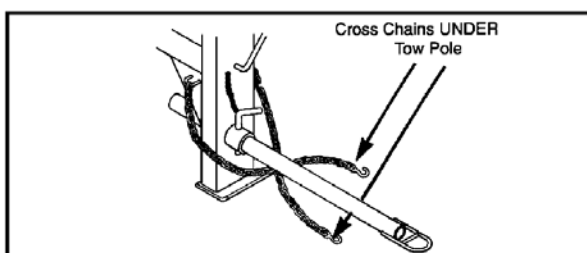


FIGURE 1

**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.

# WARRANTY

This mixer 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, repair or replace 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 not later than 30 days after the expiration of the warranty period.

## EXCLUSIONS FROM WARRANTY:

1. The following items are not covered under the Gilson by Marshalltown Mixer One Year Limited Warranty and are warranted by the 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 is 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 Dept.
4. No parts or products are to be returned to the factory without prior written approval from the factory.

**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 of limitations of incidental or consequential damages, so the above limitations and 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.**

**NOTICE:** Record the model and serial numbers of the mixer (located on the nameplate) in the spaces provided. 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: \_\_\_\_\_

## PRIOR TO START UP

1. Examine the mixer carefully to make sure there was no damage during shipment or since the last use. Report any damage immediately to the transportation company. Repair any damage before using the mixer.
2. Check for free rotation of the mixer drum yoke by rotating the drum through one complete dump-charge-dump cycle. Make sure no foreign objects or tools are in the drum before starting the motor.
3. Check the engine oil. Fill as required. Refer to the engine manual for oil specifications.
4. Fill the fuel tank with fresh, clean fuel. Refer to the engine manual for fuel specifications.
5. Grease all fittings as called out in the lubrication specifications.
6. Start the motor and check for smooth operation of the drum, ring gear, and pinion.

**Note:** After initial 10 hours of operations, check chain/belts for proper tension and sprockets/pulleys for alignment. Check these items monthly to prevent premature wear/failure.

## LUBRICATION

Use lithium based grade 2 multi-purpose grease.

### Drum Shaft Tube:

Drum shaft lubrication can be performed by removing the 1/8" pipe plug and installing the appropriate grease fitting. Greasing should be done yearly.

### Yoke Bearing Hangers:

Yoke bearing hangers are located on the yoke ends and are equipped with grease fittings. These bearings should be greased weekly.

### Wheel Bearings:

Grease wheel bearings once per year. Thoroughly remove old grease from bearings and spindle before repacking. Pack bearings 1/2 to 2/3 full to prevent overheating.

### Drum Tilt Brake Bearing:

The brake bearing casting is located near the front of the mixer and should be greased weekly.

### Handwheel Bearing:

The handwheel hub bearing is located on the front of the mixer, behind the handwheel. This bearing should be greased weekly.

**WARNING: DO NOT GREASE BRAKE BAND OR OUTER BRAKING SURFACE OF TILT GEAR.**

### Jack Shaft Bearings:

Pillow block style bearings are used on the drive train counter shaft. These bearings should be greased weekly.

### Drive Chain:

The drive chain should be lubricated monthly with SAE #20 or SAE #30 oil. Apply the oil between the side plates.

### Engine/Motor:

Refer to the manufacturer's engine or motor operating instructions for all maintenance and lubrication requirements and instructions.

## LUBRICATION FREQUENCY CHART:

ITEM	FREQUENCY	CODE	PLACES
Drum Shaft Tube	yearly	grease	1
Yoke Bearing Casting	weekly	grease	2
Wheel Bearings	yearly	grease	2
Drum Tilt Brake Bearing Casting	weekly	grease	1
Handwheel Hub	weekly	grease	1
Drive Shaft	weekly	grease	1
Jackshaft (Electric motor only)	weekly	grease	2
Drive Chain	monthly	oil	1

## STORAGE

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.

1. Refer to motor/engine instructions for storage instructions.
2. Cover exposed metal surfaces with a thin coat of SAE 30 engine oil.
3. Lubricate per instructions under LUBRICATION & STORAGE section.

## 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 may leak slightly when first used. This will stop after a few batches. Add aggregate (gravel) first then cement and last sand.

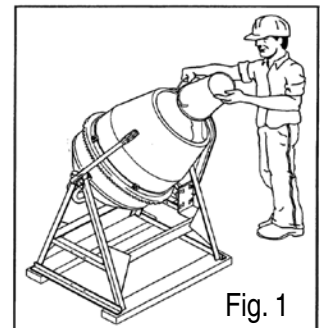
## MIXING INSTRUCTIONS

1. Start the drum rotating.
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 25 r.p.m.

## UNLOADING THE MIXER

 Refer to Fig. 1

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.

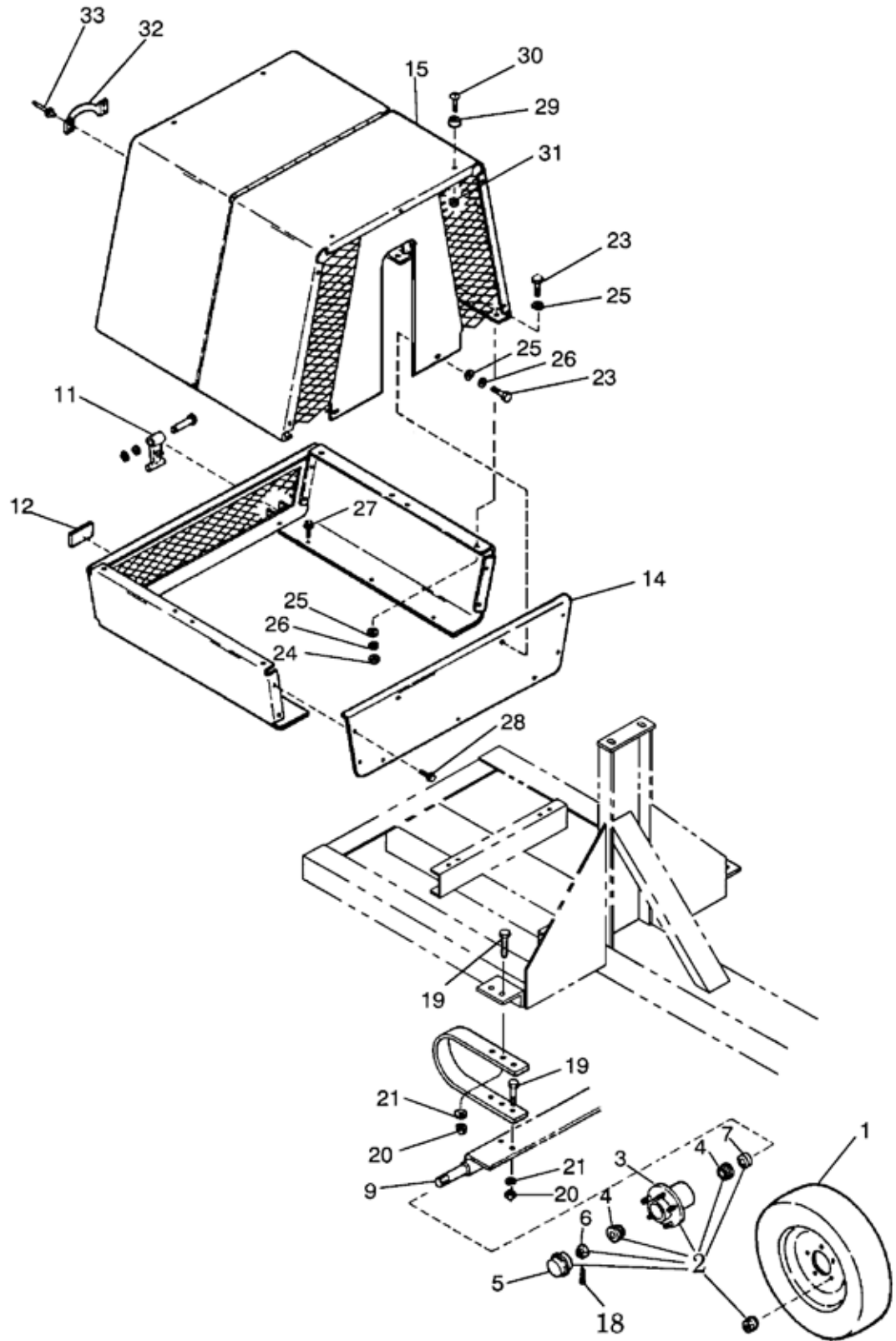
## EXTENSION CORDS-ELECTRIC MOTOR

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.

## CARE OF MIXER

It is important to keep the inside of the mixing drum free of hardened concrete. After discharging the last batch of concrete each day, add a pailful of water and two shovelfuls of gravel to the drum. This will scour the inside of the drum. Mix for about two minutes, discharge and rinse the drum with water.

**FIGURE 1: ENGINE HOUSE, WHEEL & AXLE**



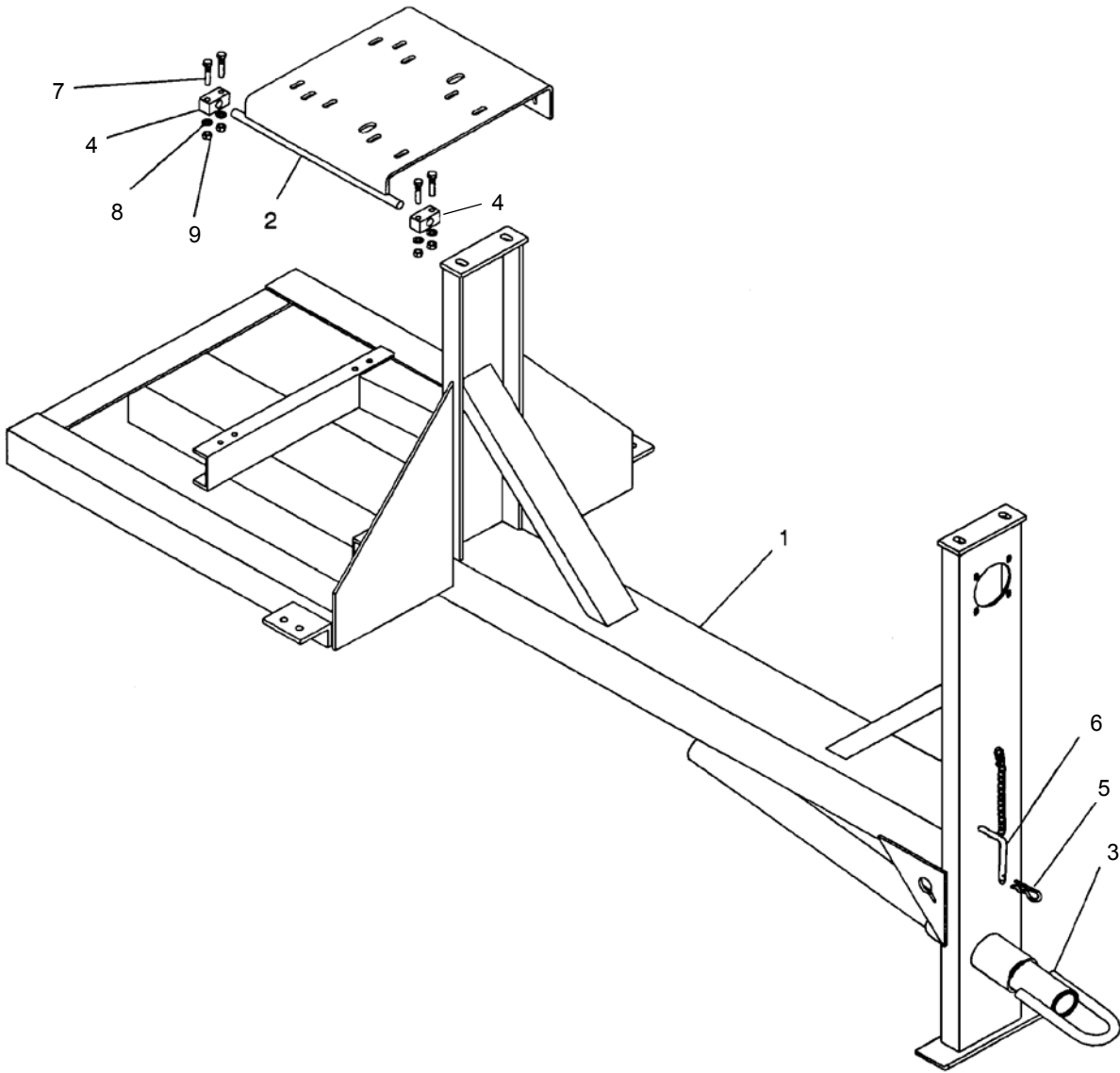


## FIGURE 1: ENGINE HOUSE, WHEEL & AXLE

REF #	NAME	PART#
1	WHEEL AND TIRE ASSEMBLY	MIX232385
2	HUB ASSEMBLY	MIX38565
4	BEARING CONE	MIX1045
5	HUB CAP	MIX5037
6	WHEEL NUT	MIX38567
7	SEAL	MIX19981
8	SUSPENSION SPRING	MIX232496
9	AXLE ASSMEBLY	MIX232299
10	SUSPENSION BUMPER	MIX245843
11	T-HANDLE LATCH	MIX232623
12	REFLECTOR, RED	MIX32082
13	HOUSING BASE ASSEMBLY	MIX245701
14	HOUSE BASE FRONT PLATE	MIX232614
15	HOUSE SUB-ASSEMBLY	MIX232379
16	RIVET, HANDLE	MIX220521
17	HANDLE, ENGINE HOUSE	MIX5402
18	PIN, COTTER 1/8 x 1 1/2	MIX70969
19	CAPSCREW, 1/2-13 x 1 1/2	MIX70343
20	NUT, 1/2-13 PLATED	MIXSI3498
21	WASHER, 1/2 LOCK	MIX70655
22	RUBBER BUMPER	MIX245843
23	CAPSCREW, 5/16-18 x 1	MIX70151
24	NUT 5/16-18	*
25	WASHER, 5/16 FLAT	MIX70701
26	WASHER, 5/16 SPRING LOCK	MIX70646
27	CAPSCREW, 1/4-20 x 1	*
28	SCREW, SHEET METAL	MIX29065
29	MACHINE SCREW, 10-24 x 1	*
30	NUT, 10-24 LOCK	*

\* Common hardware, can be purchased locally.

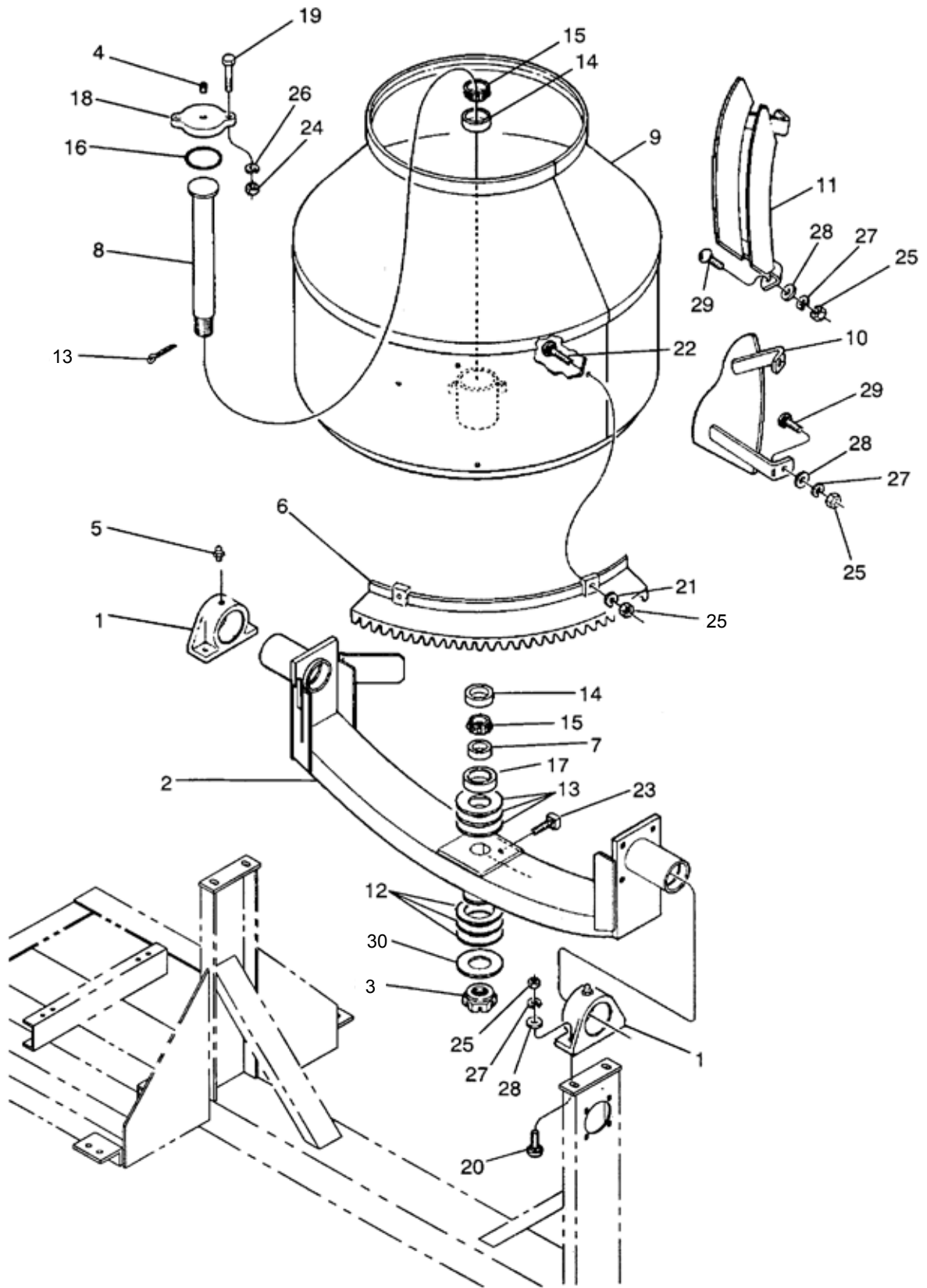
**FIGURE 2: FRAME, ENGINE BASE & TOW POLE**



## FIGURE 2: FRAME, ENGINE BASE & TOW POLE

REF #	NAME	PART#
1	FRAME	MIX772-40624
2	ENGINE BASE PLATE ASSEMBLY	MIX245400
3	TOW POLE ASSEMBLY	MIX232301
4	ENGINE BASE PIVOT BLOCK	MIX232548
5	SPRING CLIP	MIX2776
6	TOW POLE PIN AND CHAIN ASSEMBLY	MIX232276
7	CAPSCREW, 3/8-16 x 2	MIX70258
8	WASHER, 3/8 LOCK	MIX70649
9	HEX NUT, 3/8-16	MIX70553

# FIGURE 3: DRUM AND YOKE PARTS



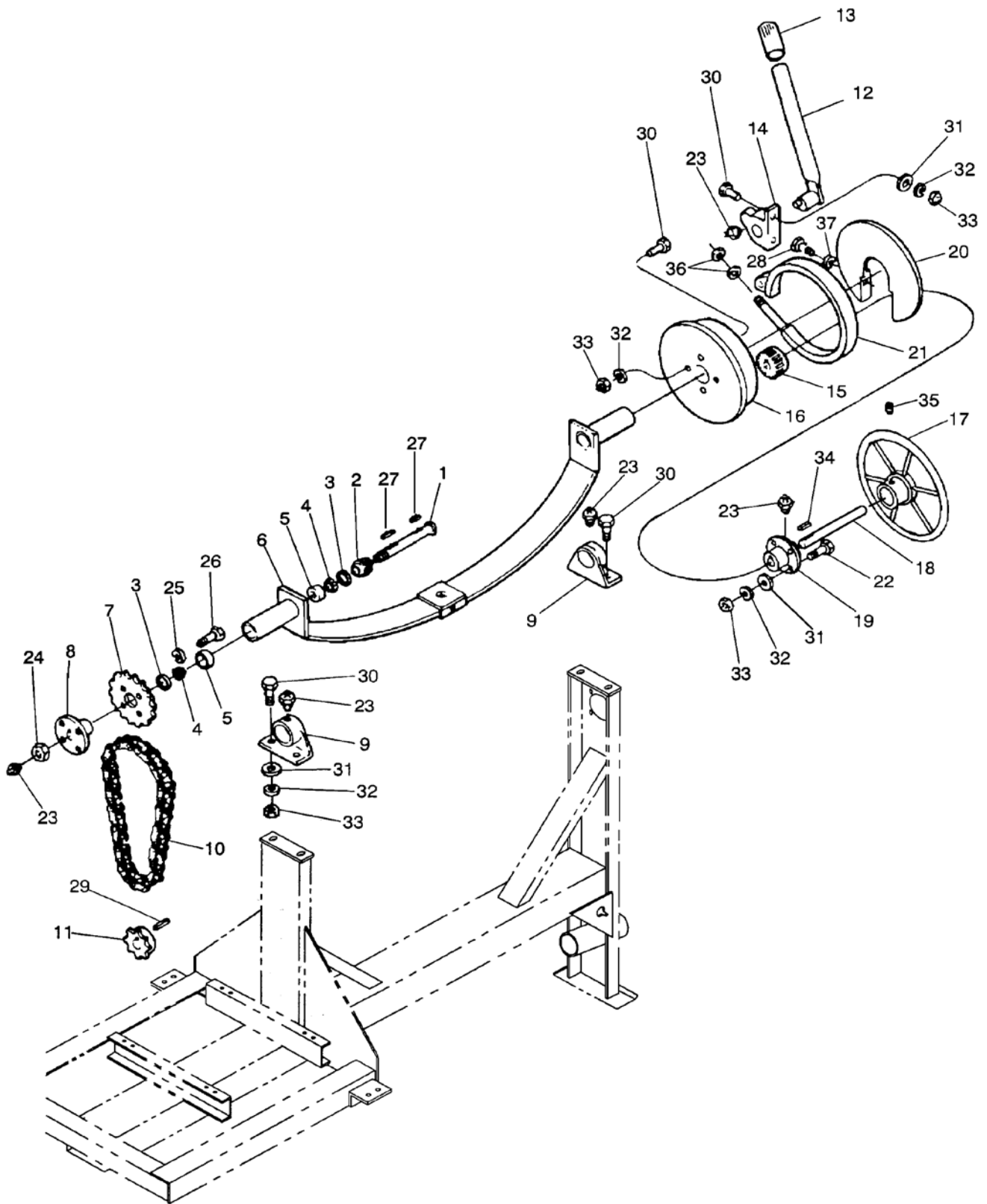
### FIGURE 3: DRUM AND YOKE PARTS

REF #	NAME	PART#
1	YOKE BEARING CASTING	MIX19027
2	YOKE	MIX19262
3	DRUM SHAFT NUT	MIX71001
4	PIPE PLUG W/HEX SOCKET	MIX29199
5	GREASE FITTING	MIX5041
6	RING GEAR	MIX245250
7	DRUM SHAFT SPACER	MIX5755
8	DRUM SHAFT	MIX19059
9*	DRUM+	MIX19461*
10*	BOTTOM BLADE+	MIX5733*
11*	TOP BLADE+	MIX5734*
12	WASHER, DRUM SHAFT	MIX5872
13	COTTER PIN, 3/16 X 2	MIX71008
14	DRUM BEARING CUP	MIX19506
15	DRUM BEARING CONE	MIX19507
16	DRUM SHAFT O-RING SEAL	MIX772P40612
17	DRUM SHAFT BEARING SEAL	MIX19509
18	DRUM HUB COVER	MIX772-40611
19	CAPSCREW, 5/16-18 X 2 1/4	MIX70179
20	CAPSCREW, 3/8-16 X 1/2	MIX70242
21	WASHER, 3/8	MIX70703
22	CAP SCREW 3/8-16 X 1 1/2	MIX70249
23	SETSCREW, 5/8-11 X 2 1/4	MIX70489
24	NUT, 5/16-18	*
25	NUT, HEX 3/8-16	MIX70553
26	WASHER, 5/16	MIX70701
27	WASHER, 3/8 LOCK	MIX70649
28	WASHER, FLAT 3/8	MIX70703
29	BOLT, CARRIAGE 3/8-16 X 1 1/4	*
30	SHIM, DRUM SHAFT	MIX70716

+ Reference number 9, 10, 11 not used on Poly-Lined Mixer- Instead, 9 Drum 245883 and 10 Poly Liner 245881

\* Common hardware, can be purchased locally.

**FIGURE 4: DRIVE AND TILT PARTS**



## FIGURE 4: DRIVE AND TILT PARTS

REF #	NAME	PART#
1	DRIVE SHAFT	MIX19060
2	DRIVE PINION	MIX19103
3	DRIVE SHAFT BEARING SEAL	MIX5008
4	DRIVE SHAFT BEARING CONE	MIX19507
5	DRIVE SHAFT BEARING CUP	MIX5005
6	YOKE	MIX19262
7	SPROCKET, 45T	MIX19158
8	SPROCKET HUB	MIX5953
9	YOKE BEARING CASTING	MIX19027
10	DRIVE CHAIN	MIX19766
11	SPROCKET, 13T/SPROCKET 18T	MIX19174
12	BRAKE LEVER	MIX1183
13	BRAKE LEVER GRIP	MIX5976
14	BRAKE BEARING CASTING	MIX1183
15	TILT PINION	MIX19098
16	INTERNAL TILT GEAR	MIX19102
17	HANDWHEEL	MIX5961
18	TILT PINION SHAFT	MIX19061
19	HANDWHEEL BEARING CASTING	MIX19029
20	TILT GEAR COVER	MIX19703
21	BRAKE BAND	MIX19119
22	CAP SCREW, 3/8-16 X 1 1/4	MIX70242
23	GREASE FITTING	MIX5041
24	DRIVE SHAFT LOCKNUT	MIX5449
25	WASHER, 5/16 LOCK	MIX70646
26	CAPSCREW, 5/16-18 X 1 1/4	MIX70151
27	KEY, 5/16 X 1/4 X 1 1/2 / KEY, 5/16 SQUARE X 1 1/4	MIX29437
28	CAPSCREW, 1/4-20 X 3/4	MIX70097
29	KEY, 1/4 SQUARE X 2	MIX70804
30	CAPSCREW, 5/16-18 X 2 1/4	MIX70179
31	WASHER, FLAT 3/8	MIX70703
32	WASHER, 3/8 LOCK	MIX70649
33	NUT, HEX 3/8-16	MIX70553
34	KEY, 3/8 SQUARE X 1 3/4	*
35	SETSCREW, SOC. HD. 3/8-24 UNF X 3/8	MIX70512
36	NUT, 1/2-13 HEX JAM	MIX70581
37	WASHER, 1/4 LOCK	MIX70643

\* Common hardware, can be purchased locally.



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