# **OPERATION MANUAL**



# MIX N' GO MODELS MC3SEA, MC3SBA (B&S) MINI CONCRETE STEEL DRUM MIXERS

# MODELS MC3PEA, MC3PBA (B&S) MINI CONCRETE PLASTIC DRUM MIXERS EFFECTIVE S/N 230502698

Revision #5 (12/08/21)

To find the latest revision of this publication, visit our website at: www.multiquip.com



THIS MANUAL MUST ACCOMPANY THE EQUIPMENT AT ALL TIMES.



### **CALIFORNIA** — Proposition 65 Warning

Engine exhaust and some of its constituents, and some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to the State of California to cause cancer, birth defects and other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints.
- Crystalline silica from bricks.
- Cementand other masonry products.
- Arsenic and chromium from chemically treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: <u>ALWAYS</u> work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

# **AWARNING**



### SILICOSIS WARNING

Grinding/cutting/drilling of masonry, concrete, metal and other materials with silica in their composition may give off dust or mists containing crystalline silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory diseases, including silicosis. In addition, California and some other authorities have listed respirable crystalline silica as a substance known to cause cancer. When cutting such materials, always follow the respiratory precautions mentioned above.

# **AWARNING**



### **RESPIRATORY HAZARDS**

Grinding/cutting/drilling of masonry, concrete, metal and other materials can generate dust, mists and fumes containing chemicals known to cause serious or fatal injury or illness, such as respiratory disease, cancer, birth defects or other reproductive harm. If you are unfamiliar with the risks associated with the particular process and/or material being cut or the composition of the tool being used, review the material safety data sheet and/or consult your employer, the material manufacturer/supplier, governmental agencies such as OSHA and NIOSH and other sources on hazardous materials. California and some other authorities, for instance, have published lists of substances known to cause cancer, reproductive toxicity, or other harmful effects.

Control dust, mist and fumes at the source where possible. In this regard use good work practices and follow the recommendations of the manufacturers or suppliers, OSHA/NIOSH, and occupational and trade associations. Water should be used for dust suppression when wet cutting is feasible. When the hazards from inhalation of dust, mists and fumes cannot be eliminated, the operator and any bystanders should always wear a respirator approved by NIOSH/MSHA for the materials being used.

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### **NOTICE**

Specification and part number are subject to change without notice.



Do not operate or service the equipment before reading the entire manual. Safety precautions should be followed at all times when operating this equipment. Failure to read and understand the safety messages and operating instructions could result in injury to yourself and others.

### **SAFETY MESSAGES**

The four safety messages shown below will inform you about potential hazards that could injure you or others. The safety messages specifically address the level of exposure to the operator and are preceded by one of four words: DANGER, WARNING, CAUTION or NOTICE.

### **SAFETY SYMBOLS**



#### **DANGER**

Indicates a hazardous situation which, if not avoided, WILL result in **DEATH** or **SERIOUS INJURY**.



### WARNING

Indicates a hazardous situation which, if not avoided, **COULD** result in **DEATH** or **SERIOUS INJURY**.



### **CAUTION**

Indicates a hazardous situation which, if not avoided, **COULD** result in **MINOR** or **MODERATE INJURY**.

### **NOTICE**

Addresses practices not related to personal injury.

Potential hazards associated with the operation of this equipment will be referenced with hazard symbols which may appear throughout this manual in conjunction with safety messages.

Symbol	Safety Hazard
2	Lethal exhaust gas hazards
ANK.	Explosive fuel hazards
ahlliihliin.	Burn hazards
	Rotating parts hazards

#### GENERAL SAFETY

# **CAUTION**

■ **NEVER** operate this equipment without proper protective clothing, shatterproof glasses, respiratory protection, hearing protection, steel-toed boots and other protective devices required by the job or city and state regulations.











- Avoid wearing jewelry or loose fitting clothes that may snag on the controls or moving parts as this can cause serious injury.
- **NEVER** operate this equipment when not feeling well due to fatigue, illness or when under medication.



■ **NEVER** operate this equipment under the influence of drugs or alcohol.







- ALWAYS clear the work area of any debris, tools, etc. that would constitute a hazard while the equipment is in operation.
- ALWAYS check the equipment for loosened threads or bolts before starting.
- **DO NOT** use the equipment for any purpose other than its intended purposes or applications.

### **NOTICE**

- This equipment should only be operated by trained and qualified personnel 18 years of age and older.
- Whenever necessary, replace nameplate, operation and safety decals when they become difficult read.
- Manufacturer does not assume responsibility for any accident due to equipment modifications. Unauthorized equipment modification will void all warranties.
- NEVER use accessories or attachments that are not recommended by Multiquip for this equipment. Damage to the equipment and/or injury to user may result.
- ALWAYS know the location of the nearest fire extinguisher.



■ ALWAYS know the location of the nearest + FIRST AID first aid kit.



■ ALWAYS know the location of the nearest phone or keep a phone on the job site. Also, know the phone numbers of the nearest ambulance, doctor and fire department. This information will be invaluable in the case of an emergency.









#### MIXER SAFETY

### **DANGER**

■ **NEVER** operate the equipment in an explosive atmosphere or near combustible materials. An explosion or fire could result causing severe bodily harm or even death.



■ DO NOT mix flammable or explosive substances.

### WARNING

- **NEVER** place your hands inside the drum while starting or operating this equipment.
- NEVER disconnect any emergency or safety devices. These devices are intended for operator safety. Disconnection of these devices can cause severe injury, bodily harm or even death. Disconnection of any of these devices will void all warranties.
- Before operating mixer, ensure that safety grate is in position and correctly fitted.

### CAUTION

■ **NEVER** lubricate components or attempt service on a running machine.

### **NOTICE**

- ALWAYS keep the machine in proper running condition.
- ALWAYS ensure mixer is on level ground before mixing.
- Fix damage to machine and replace any broken parts immediately.
- **DO NOT** tip mixer onto drum mouth when the drum is rotating.
- Ensure the drum is rotating while filling and emptying the drum.
- ALWAYS store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children and unauthorized personnel.

### **ENGINE SAFETY (GASOLINE MODELS ONLY)**

### **DANGER**

- Engine fuel exhaust gases contain poisonous carbon monoxide. This gas is colorless and odorless, and can cause death if inhaled.
- The engine of this equipment requires an adequate free flow of cooling air. NEVER operate this equipment

in any enclosed or narrow area where free flow of the air is restricted. If the air flow is restricted it will cause injury to people and property and serious damage to the equipment or engine.



### WARNING

- DO NOT place hands or fingers inside engine compartment when engine is running.
- NEVER operate the engine with heat shields or guards removed.
- Keep fingers, hands hair and clothing away from all moving parts to prevent injury.



■ **DO NOT** remove the engine oil drain plug while the engine is hot. Hot oil will gush out of the oil tank and severely scald any persons in the general area of the mixer.

### CAUTION

■ **NEVER** touch the hot exhaust manifold, muffler or cylinder. Allow these parts to cool before servicing equipment.



■ Make certain the operator knows how to and is capable of turning the engine OFF in case of an emergency.

### **NOTICE**

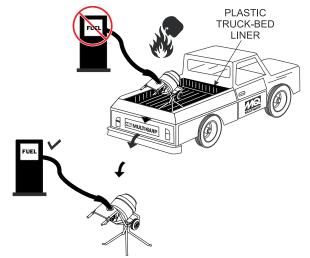
- NEVER run engine without an air filter or with a dirty air filter. Severe engine damage may occur. Service air filter frequently to prevent engine malfunction.
- **NEVER** tamper with the factory settings of the engine or engine governor. Damage to the engine or equipment can result if operating in speed ranges above the maximum allowable.



### **FUEL SAFETY (GASOLINE MODELS ONLY)**

### **DANGER**

DO NOT add fuel to equipment if it is placed inside truck bed with plastic liner. Possibility exists of explosion or fire due to static electricity.



- **DO NOT** start the engine near spilled fuel or combustible fluids. Fuel is extremely flammable and its vapors can cause an explosion if ignited.
- ALWAYS refuel in a well-ventilated area, away from sparks and open flames.
- ALWAYS use extreme caution when working with flammable liquids.
- **DO NOT** fill the fuel tank while the engine is running or hot.
- DO NOT overfill tank, since spilled fuel could ignite if it comes into contact with hot engine parts or sparks from the ignition system.
- Store fuel in appropriate containers, in well-ventilated areas and away from sparks and flames.
- NEVER use fuel as a cleaning agent.
- DO NOT smoke around or near the equipment. Fire or explosion could result from fuel vapors or if fuel is spilled on a hot engine.



#### **GENERATOR SAFETY**

If using a generator to power mixer, refer to applicable generator manual safety information section.



# ELECTRIC MOTOR SAFETY (ELECTRIC MODELS ONLY)

### NOTICE

- Operate electric motor only at the specified voltage indicated on the nameplate.
- **DO NOT** spray water onto electric motor.
- **ALWAYS** disconnect AC power plug from power source before moving mixer.
- ALWAYS make sure the ON/OFF switch on the electric motor is in the OFF position when not in use and before inserting the mixer's power plug into an AC receptacle.



### **Power Cord/Cable Safety**

### **DANGER**

- NEVER let power cords or cables lay in water.
- NEVER use damaged or worn cables or cords when connecting equipment to generator. Inspect for cuts in the insulation.
- NEVER grab or touch a live power cord or cable with wet hands. The possibility exists of electrical shock, electrocution or death.
- Make sure power cables are securely connected. Incorrect connections may cause electrical shock and damage to the mixer.

### **CAUTION**

Ensure that cables and cords will not be tripped over or trapped underneath the mixer.

### **NOTICE**

■ **ALWAYS** make certain that proper power or extension cord has been selected for the job.

#### TRANSPORTING SAFETY

### **CAUTION**

■ **NEVER** allow any person or animal to stand underneath the equipment while lifting.

### **NOTICE**

- ALWAYS make sure forklift forks are inserted into pockets (if applicable) as far as possible when lifting the mixer.
- ALWAYS shutdown engine before transporting.
- **NEVER** lift the equipment while the engine is running.
- Tighten fuel tank cap securely and close fuel cock to prevent fuel from spilling.
- **DO NOT** lift machine to unnecessary heights.
- ALWAYS tie down equipment during transport by securing the equipment with rope.
- **NEVER** tip the engine to extreme angles during lifting as it may cause oil to gravitate into the cylinder head, making the engine start difficult.

### **ENVIRONMENTAL SAFETY**

### **NOTICE**

■ Dispose of hazardous waste properly. Examples of potentially hazardous waste are used motor oil, fuel and fuel filters.



- DO NOT use food or plastic containers to dispose of hazardous waste.
- **DO NOT** pour waste, oil or fuel directly onto the ground, down a drain or into any water source.

# **OPERATION AND SAFETY DECALS**

### **Machine Safety Decals**

The Mix N' Go mixer is equipped with a number of safety decals. These decals are provided for operator safety and maintenance information. The illustration below and on the next page shows these decals as they appear on the machine. Should any of these decals become unreadable, replacements can be obtained from your dealer.









ENGLISH - WARNING! TO REDUCE THE RISK OF INJURY, USER MUST READ AND UNDERSTAND INSTRUCTION MANUAL ESPAÑOL - ATENCION! PARA REDUCIR EL RIESGO DEL LESIONES EL USUARIO DEBE LEER Y ENTENDER EL MANUAL DE INSTRUCCIONES FRANÇAIS - ATTENTION! AFIN DE DIMINUER LE RISQUE DE BLESSURES L'UTILISATEUR DOIT LIRE ET COMPRENDRE CE MANUEL D' INSTRUCTIONS





















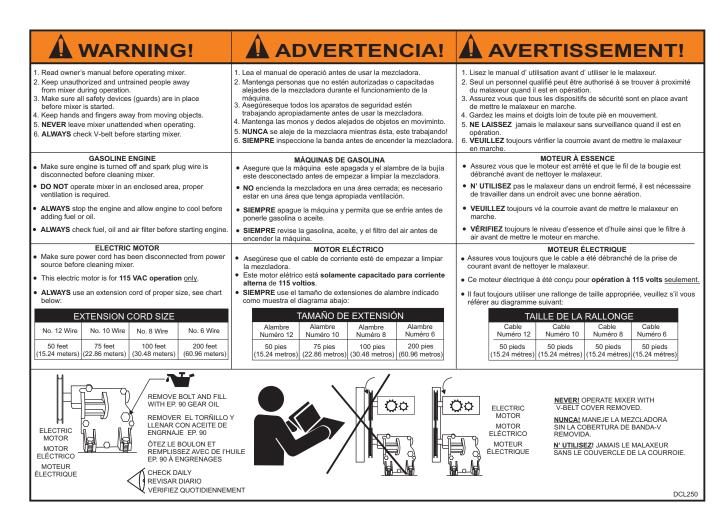
DCL251

P/N: DCL251



P/N: 510165

# **OPERATION AND SAFETY DECALS**



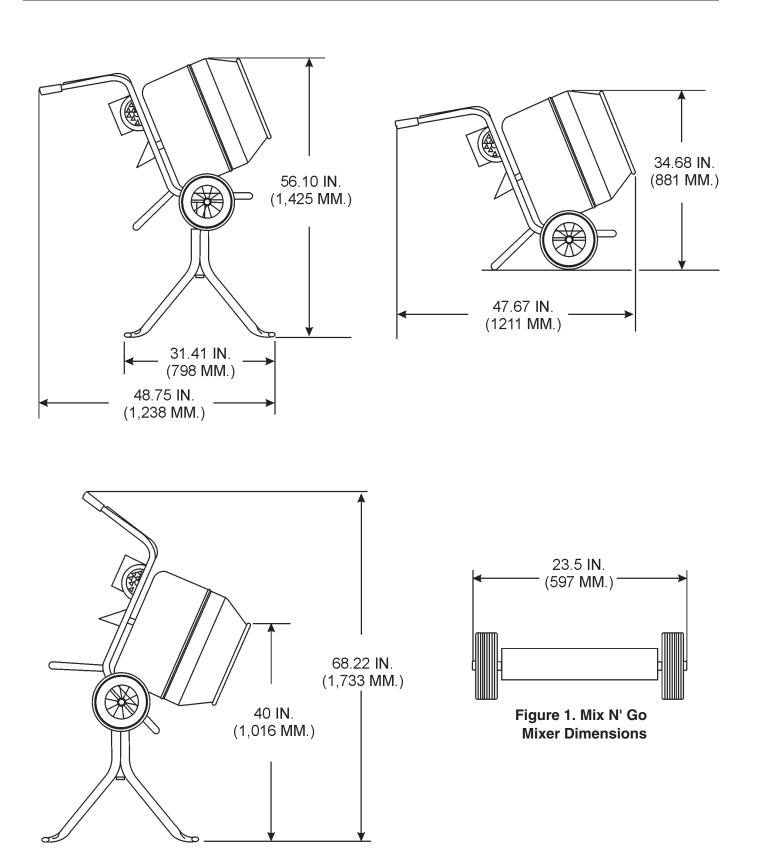
**P/N DCL250** 

# MIX N' GO MIXER — SPECIFICATIONS

Table 1. Specifications (Engine & Electric Motor)					
	Model	BRIGGS & STRATTON 91200	BALDOR 17LYE304		
	Туре	4-stroke, Vertical valve, Single Cylinder	3/4 HP, 120 VAC, Single Phase Electric Motor		
	Bore X Stroke	2.56 in. x 1.75 in. (65.1 mm x 44.4 mm)	N/A		
	Displacement	9.0 cu. in. (148 cc)	N/A		
	Max Output	3.5 HP at 3,600 R.P.M.	3/4 H.P./3,450 RPM		
Engine/Electric Motor	Standard Idle Speed	1,800 ± 100 R.P.M.	N/A		
	Fuel Tank Capacity	Approx. 0.5 U.S. Gallons (1.89 Liters)	N/A		
	Fuel	Unleaded Gasoline	N/A		
	Lube Oil Capacity	2 U.S. Quarts (1.89 Liters)	N/A		
	Speed Control Method	Centrifugal Fly-weight Type	N/A		
	Starting Method	Recoil Start	N/A		
Dimensions (L x W x H	)	12.5 x 11.47 x 12.18 in. (317.5 x 291.4 x 309.4 mm)	11.75 x 6.0 X 8.0 in. (298 X 152 X 203 mm)		
Dry Net Weight		20.3 lbs (9.2 kg)	Approx. 12 lbs. (5.4 Kg.)		

Table 2. Mix N'	Go Mixer Specifications
Height	34 in. (863.6 mm)
Width	23-5/8 in. (584.2 mm)
Length	48-1/2 in. (1,219.2 mm)
Stand Weight	35 lbs. (15.9 Kg)
Maximum Drum Capacity	4.5 cu. ft. (0.13 m³)
Maximum Mixing Capacity (1/2 bag)	3.0 cu. ft. (0.08 m³)
Unladen Weight - Electric Motor	129 lbs. (58.5 Kg)
Unladen Weight - Gasoline Engine	138 lbs. (62.6 Kg)

# MIX N' GO MIXER — DIMENSIONS (MIXER)



# MIX N' GO MIXER — DIMENSIONS (ELECTRIC MOTOR)

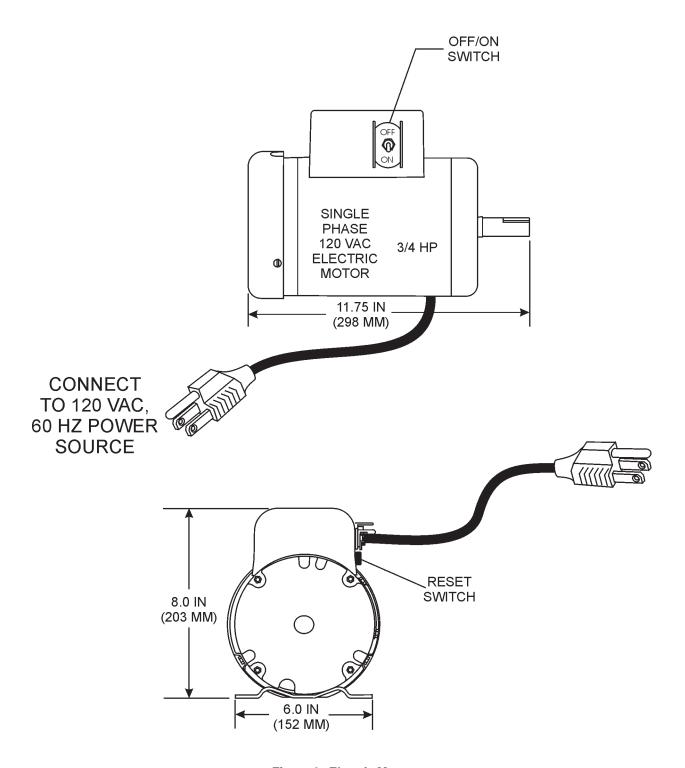


Figure 2. Electric Motor

# **MIX N' GO MIXER — GENERAL INFORMATION**

### **APPLICATION**

This mixer is <u>only</u> intended for the production of **concrete** and **mortar**. The mixer must be used for its intended purposes and is not suitable for the mixing of **flammable** or **explosive** substances. The mixer must not be used in an explosive atmosphere.

#### **POWER PLANTS**

This portable mixer is powered by either a Briggs and Stratton 4-stroke, verticle valve, single cylinder, gasoline engine rated at 3.5 hp @3,600 rpm. or a 0.75 hp electric motor.

### **DRUM ASSEMBLY**

The drum is instantly removable by unscrewing counterclockwise. When inserting drum onto gearbox shaft, make sure that drum is fully screwed onto shoulder or threads may be damaged. Use extreme care when screwing on the drum, spinning drum onto the gearbox shaft too fast may damage gearbox.

#### **ELECTRICAL**

If mixer is equipped with an *electric motor*, make sure that the power being supplied to the motor corresponds to the voltage rating label on the motor. Supplying the wrong voltage to the electric motor will cause severe electrical damage to the motor.

Always make sure that *OFF/ON* switch on the electric motor is in the *OFF* position before applying power.

It is **strongly recommended** that when plugging in the mixer's power cord into a receptacle, that a G.F.C.I. (**Ground Fault Current Interrupter**) receptacle be used.

### **EXTENSION CABLES**

The extension cable should be a 3-wire configuration that includes a ground wire that conforms to UL code. The wire cross section must be a minimum of 2.5 mm<sup>2</sup>. Choose an extension cord of adequate current carrying as Reference in Table 5. Remember *distance* affects the wire size of the extension cable.

Ensure that the extension cable is carefully laid out avoiding *wet areas*, *sharp edges* and locations where vehicles might run over it. Avoid allowing the extension cable to be trapped underneath the mixer.

Unroll the extension cable fully or it will overheat and could catch fire. Make sure that all extension cable connections are dry and safe. Replace any defective or badly worn extension cable immediately.

#### PORTABLE GENERATORS

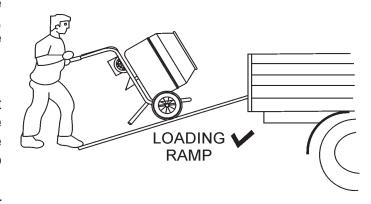
When using a *portable generator* it must have a minimum output of 2.5 kw and be continuous rated.

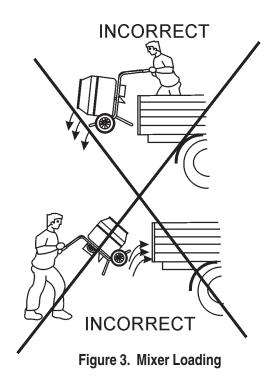
#### **GEARBOX**

The gearbox oil level has been preset at the *factory* prior to shipping. Before inspecting the gearbox oil level (Figures 30 and 31), make sure the gearbox is cold before removing the filler plug. Fill up with **EP90**. or similar gear oil.

### TRANSPORTING THE MIXER

Use a ramp (Figure 3) to load and unload the mixer from the transport vehicle. Never drop the mixer onto the ground; damage to the mixer could result.





# MIX N' GO MIXER — MIXER COMPONENTS

Figure 4 shows the basic components of the *Mix N' Go Mixer*.

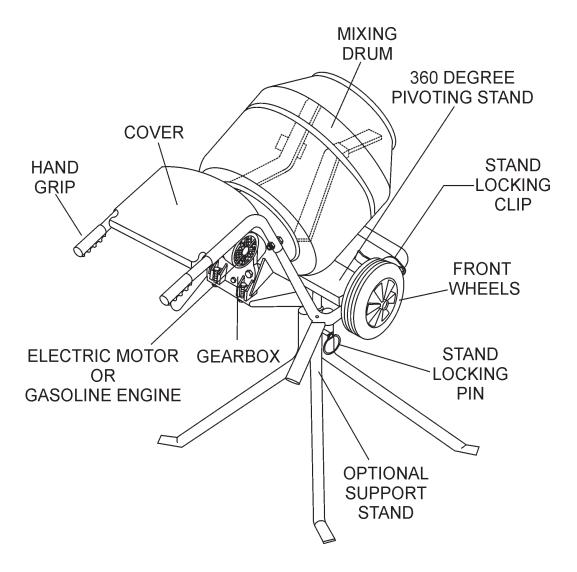
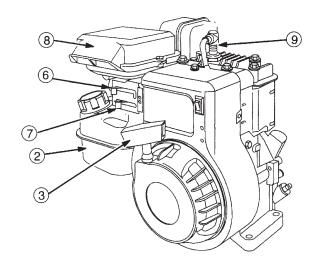


Figure 4. Mixer Components

# MIX N' GO MIXER — BASIC ENGINE



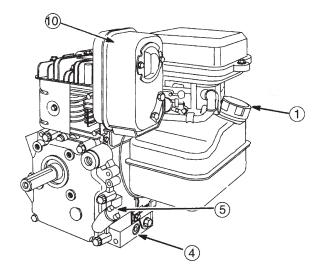


Figure 5. Engine Controls and Components

#### **INITIAL SERVICING**

The engine (Figure 5) must be checked for proper lubrication and filled with fuel prior to operation. Refer to the manufacturers engine manual for instructions and details of operation and servicing. The engine shown above is a **Briggs and Stratton** engine, operation for other types of engines may vary somewhat.

 Fuel Filler Cap – Remove this cap to add unleaded gasoline to the fuel tank. Make sure cap is tightened securely. DO NOT over fill.



### DANGER

Adding fuel to the tank should be done only when the engine is stopped and has had an opportunity to cool down. In the event of a fuel spill, **DO NOT** 

attempt to start the engine until the fuel residue has been completely wiped up, and the area surrounding the engine is dry.

- 2. **Fuel Tank** Holds unleaded gasoline. For additional information refer to engine owner's manual.
- 3. Recoil Starter (pull rope) Manual-starting method. Pull the starter grip until resistance is felt, then pull briskly and smoothly.
- 4. **Oil Drain Plug** Remove this plug to remove oil from the engine's crankcase.
- 5. **Dipstick/Oil Filler Cap** Remove this cap to determine if the engine oil is low. Add oil through this filler port as recommended in Table 4.

- Throttle Lever Used to adjust engine RPM speed (lever advanced forward SLOW, lever back toward operator FAST).
- Choke Lever Used in the starting of a cold engine, or in cold weather conditions. The choke enriches the fuel mixture.



Operating the engine without an air filter, with a damaged air filter, or a filter in need of replacement will allow dirt to enter the engine, causing rapid engine wear.

- Air Cleaner Prevents dirt and other debris from entering the fuel system. Remove wing-nut on top of air filter cannister to gain access to filter element.
- 9. **Spark Plug** Provides spark to the ignition system. Set spark plug gap to 0.6 0.7 mm (0.024 0.028 inch) Clean spark plug once a week.
- 10. Muffler Used to reduce noise and emissions.



### **WARNING**



Engine components can generate extreme heat. To prevent burns, **DO NOT** touch these areas while the engine is running or immediately after operating. **NEVER** operate the engine with the muffler removed.

# MIX N' GO MIXER — ASSEMBLY INSTRUCTIONS

### **Assembly**

 Remove the mixer drum and associated components from the packing container (Figure 6). Match the components against the parts list to make sure that they are all accounted for.

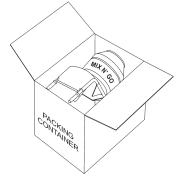
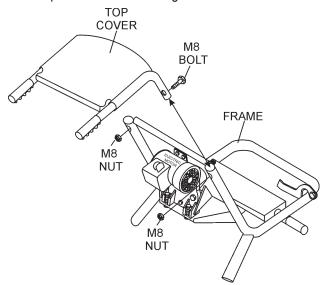


Figure 6. Packing Container

2. Place the mixer frame on a secure level surface, and attach the top cover as shown in Figure 7.



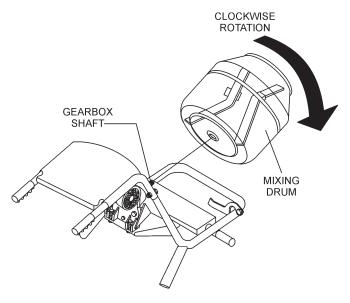
**Figure 7. Top Cover Placement** 

3. Fit the mixing drum onto gearbox shaft as shown in Figure 8. Rotate drum in a clockwise direction, make sure the drum fits right up to the shoulder on the gearbox shaft.

### **CAUTION**



**DO NOT** *spin* the drum on *fast*, as this may damage the gearbox.



**Figure 8. Mixing Drum Placement** 

- 4. Place the two halves of the optional support stand together (Figure 9). The left support stand fits into the center boss on the right support stand.
- 5. Insert the adapter pin through bosses as shown in Figure 9. Once the adapter pin has been inserted and aligned, insert the locking pin. Place the round part of the locking pin over the bottom section of the adapter pin.

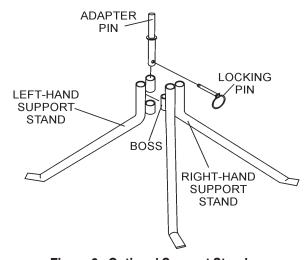


Figure 9. Optional Support Stand

# MIX N' GO MIXER — ASSEMBLY INSTRUCTIONS

6. Tip mixer onto mouth as shown in Figure 10, and insert support stand into frame swivel point.

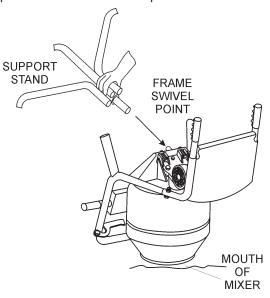


Figure 10. Attaching Support Stand

- 7. Remove both wheels and wheel retainers from the packing container.
- Place one wheel on each side of the mixer's axle as shown in Figure 11. Position wheel retainer over axle to secure wheel in place. Use a rubber mallet when striking wheel retainer.

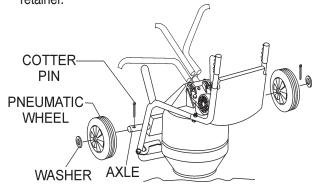


Figure 11. Wheels and Wheel Retainers

Before attempting to lift mixer, locate the frame locking clip.
 Attach the locking clip as shown in Figure 12. This will prevent
 the mixing drum from moving when the mixer is positioned
 in an upright position.

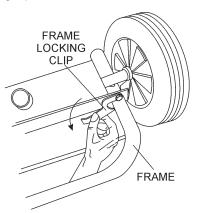


Figure 12. Frame Locking Clip

10. **DO NOT** tilt the mixer on a wet, smooth or slippery surface.



Figure 13. Slippery or Wet Surfaces

 Once the stand has been assembled, and the locking clip has been secured, begin tilting the mixer to an upright position. Remember *always* tilt from the front of the mixer as shown in Figure 14.

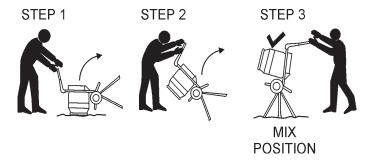


Figure 14. Tilting Mixer to Upright Position

# MIX N' GO MIXER — PRE-INSPECTION (GASOLINE ENGINE)

### CAUTION



**NEVER** operate the mixer in a confined area or enclosed area structure that does not provide ample *free flow of air*.



**ALWAYS** wear approved eye and hearing protection before operating the mixer.



**NEVER** place hands inside drum while the engine is running. **ALWAYS** shut the engine down before performing any kind of maintenance service on the mixer.



### **Before Starting**

- 1. Read safety instructions at the beginning of manual.
- 2. Clean the mixer, removing dirt and dust, particularly the engine cooling air inlet, carburetor and air cleaner.
- 3. Check the air filter for dirt and dust. If air filter is dirty, replace air filter with a new one as required.
- 4. Check carburetor for external dirt and dust. Clean with dry compressed air.
- 5. Check fastening nuts and bolts for tightness.

### **Engine Oil Check**

- To check the engine oil level, place the mixer on secure level ground with the engine stopped.
- 2. Remove the filler dipstick from the engine oil filler hole (Figure 15) and wipe clean.

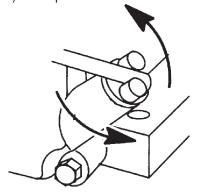


Figure 15. Engine Oil Dipstick (Removal)

- Insert and remove the dipstick without screwing it into the filler neck. Check the oil level shown on the dipstick.
- 4. If the oil level is low (Figure 16), fill to the edge of the oil filler hole with the recommended oil type (Table 4). Maximum oil capacity is 0.48 quarts (.45 liters)

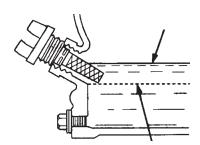


Figure 16. Engine Oil Dipstick (Oil Level)

Table 4. Oil Type				
Season Temperature Oil Type				
Summer	25°C or Higher	SAE 10W-30		
Spring/Fall 25°C~10°C SA		SAE 10W-30/20		
Winter	0°C or Lower	SAE 10W-10		





### **Fuel Check**

Motor fuels are highly flammable and can be dangerous if mishandled. **DO NOT** smoke while refueling. **DO NOT** attempt to refuel the mixer if the engine is *hot!* or *running*.

- 1. Remove the gasoline cap located on top of fuel tank.
- 2. Visually inspect to see if fuel level is low. If fuel is low, replenish with unleaded fuel.
- 3. When refueling, be sure to use a strainer for filtration. **DO NOT** top-off fuel. Wipe up any spilled fuel.

#### **V-Belt Check**

A worn or damaged V-belt can adversely affect the performance of the mixer. If a V-belt is defective or worn simply replace the V-belt as outlined in the maintenance section of this manual.

# MIX N' GO MIXER — INITIAL START-UP (ELECTRIC MOTOR)

**Initial Start-up Instructions (Electric Motor)** 

**Starting** 

### **CAUTION:**



**DO NOT** attempt to operate the mixer until the Safety, General Information and Inspection sections have been read and understood.

- 1. Before starting, make sure mixer is positioned on a secure flat surface to prevent tipping.
- 2. Use an extension cord (see Table 5) of adequate current carrying capacity, insert the electric motor's power plug into one end of the extension cord.
- 3. **NEVER!** use a **worn** or **frayed** extension cord.
- 4. **NEVER!** operate mixer with V-belt cover removed.

Table 5. Extension Cord Size				
No. 12 Wire	No. 10 Wire	No. 8 Wire	No. 6 Wire	
50 (feet) (15.24 meters)	75 (feet) (22.86 meters	100 (feet) (30.48 meters	200 (feet) (60.96 meters	

### **DANGER**



**NEVER!** touch the power cord (Figure 17) with **wet hands** or while **standing in water** when it is connected to a power source. The possibly exists of electrical shock (electrocution) even death. **NEVER!** spray

water directly on the electric motor.

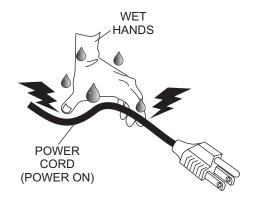


Figure 17. Extension Cord (Wet Hands)

 Plug the other end of the extension cord into a 120 VAC G.F.C.I.protected receptacle. Remember the power requirements for this electric motor is 120 VAC, 60 Hz. The use of any other input voltage will severely damage the motor.

### **WARNING:**



**ALWAYS** read the label on the electric motor before applying power. The label will indicate the proper power requirements for the motor. Remember the use of any other input voltage will severely damage the motor.

### **WARNING:**



To prevent tripping (Figure 18) of both the mixer and personnel, position the extension cord so that it lays flat and is not curled underneath the

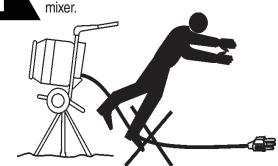


Figure 18. Mixer (Tripping)

5. The drum should be rotating allowing the mixing process to begin. Use a shovel (Figure 19) to place the cement mix inside the drum, add water as required. Be careful to only place the *tip* of the shovel inside the drum. Placing the shovel all the way inside the drum will cause the shovel to strike the blades. This condition will make the shovel rotate, and could cause injury to personnel.





Figure 19. Mixing Drum (Placing Cement Mix)

6. See Table 3 for mixing hints. **NEVER!** place hands inside the drum while the drum is rotating.

# MIX N' GO MIXER — INITIAL START-UP (GASOLINE ENGINE)

### **CAUTION:**



**DO NOT** attempt to operate the mixer until the Safety, General Information and Inspection sections of this manual have been read and thoroughly understood.

This section is intended to assist the operator with the initial start-up of the walk-behind trowel. It is extremely important that this section be read carefully before attempting to use the trowel in the field.

### Starting the Engine (BRIGGS & STRATTON)

Place the *choke lever* (Figure 21) in the *CHOKE* (CLOSED) position if starting a *cold* engine.

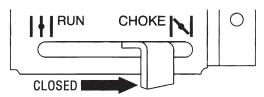


Figure 20. Engine Choke Lever (Closed)

Place the *choke lever* (Figure 20) in the *RUN* (OPEN) position if starting a *warm engine* engine or if the *temperature is warm*.

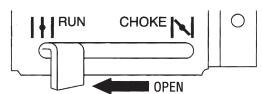


Figure 21. Engine Choke Lever (Open)

3. Place the *throttle lever* (Figure 22) in the "*TURTLE*" (IDLE) position.

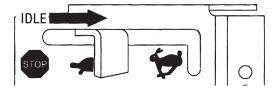


Figure 22. Throttle Lever (Idle Position)

Grasp the starter grip (Figure 23) and slowly pull it out. The
resistance becomes the hardest at a certain position, corresponding to the compression point. PULL the starter grip
briskly and smoothly for starting.

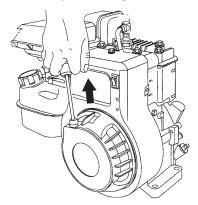


Figure 23. Starter Grip

7. If the engine has started, slowly return the choke lever to the **RUN (OPEN)** position if needed (Figure 24). If the engine has not started repeat steps 1 through 4.

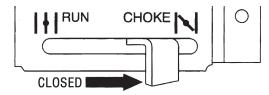


Figure 24. Engine Choke Lever (Closed)

- 8. Before the mixer is placed into operation, run the engine for several minutes. Check for fuel leaks, and noises that would associate with a lose V-belt cover or component.
- 9. To begin mixing, place the throttle lever (Figure 25) in the "*RABBIT*" (FAST) position

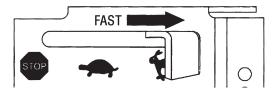


Figure 25. Throttle Lever (Fast Position)

# MIX N' GO MIXER — INITIAL START-UP (GASOLINE ENGINE)

### **Stopping The Engine**

### Normal Shutdown

1. Move the throttle lever to the "TURTLE" (IDLE) position (Figure 26) and run the engine for three minutes at low speed.

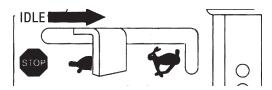


Figure 26. Throttle Lever (Idle Position)

2. After the engine *cools*, move the throttle lever to the *STOP* position (Figure 27).



Figure 27. Throttle Lever (Stop Position)

### **Emergency Showdown**

Move the throttle lever quickly to the *OFF* position (Figure 28).



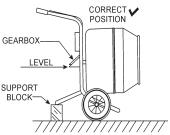
Figure 28. Throttle Lever (Stop Position)

# **MIX N' GO MIXER — MAINTENANCE**

# Maintenance Gearbox Oil Check



- Position the mixer on a level surface and place a support block under the front of the mixer frame as shown in Figure 29. This will level the mixer.
- 2. **NEVER!** check the gearbox oil level with the mixer tilted up or down. **ALWAYS** check the gearbox oil level with the mixer in a level position.



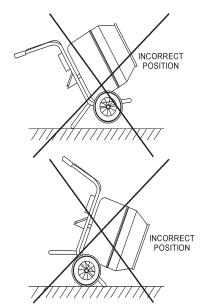


Figure 29. Mixer Positioning (Gearbox Oil Level)

### **CAUTION:**



Check the gearbox oil level *monthly* before operating mixer. Low oil level or no oil will severely damage gearbox.

- 3. Before inspecting the gearbox oil level, make sure the gearbox is cold before removing the filler plug. Hot! oil can burn skin and cause injury. Let oil *cool* before checking.
- 4. Remove gearbox oil filler plug (Figure 30) and fill with EP90 or similar gear oil to the level of the filler plug. Replace gearbox oil every 3,000 hours. Gerabox oil capacity is **8-10 ounces**.

Insert oil filler plug and tighten.

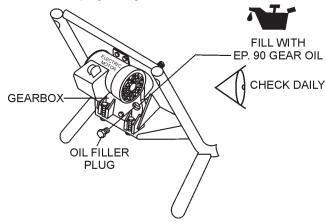


Figure 30. Gearbox Oil Level Check

### **V-Belt Check**

- To adjust V-belts, remove V-belt cover and loosen the main motor mount bolts (Figure 31), raise electric motor and retighten bolts. Belt tension should be adjusted so that the maximum deflection is approximately 3/8 inch (10 mm).
- 2. Replace V-belt cover.

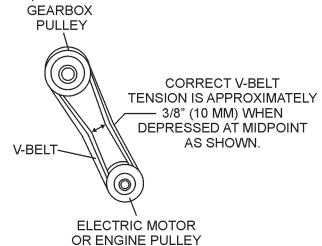


Figure 31. V-belt Adjustment

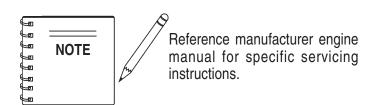
### **Gerarbox Removal**

- Remove drum by turning counter-clockwise to release from gearbox shaft.
- 2. Remove pulley, remember the nut securing the pulley is left-hand threaded. Remove circlip, and draw out shaft.
- 3. Remove the 5 bolts securing rear plate.
- 4. Reassemble in reverse order, taking care to ensure gear teeth are meshed correctly.

# MIX N' GO MIXER — MAINTENANCE (GASOLINE ENGINE)

Table 6. Engine Maintenance Schedule							
DESCRIPTION (3)	OPERATION	BEFORE	FIRST MONTH OR 10 HRS.	EVERY 3 MONTHS OR 25 HRS.	EVERY 6 MONTHS OR 50 HRS.	EVERY YEAR OR 100 HRS.	EVERY 2 YEARS OR 200 HRS.
Engine Oil	CHECK	Х					
Engine Oil	CHANGE		Х				
Air Cleaner	CHECK	Х					
Air Cleaner	CHANGE			X (1)			
All Nuts & Bolts	Re-tighten If Necessary	Х					
Charle Dive	CHECK-CLEAN				Х		
Spark Plug	REPLACE						Х
Cooling Fins	CHECK				Х		
Spark Arrester	CLEAN					Х	
Fuel Tank	CLEAN					Х	
Fuel Filter	CHECK					Х	
Idle Speed	CHECK-ADJUST					X (2)	
Valve Clearance	CHECK-ADJUST						X (2)
Fuel lines	CHECK	Every 2 years (replace if necessary) (2)					

- (1) Service more frequently when used in **DUSTY** areas.
- (2) These items should be serviced by your service dealer, unless you have the proper tools and are mechanically proficient. Refer to the BRIGGS AND STRATTON Shop Manual for service procedures
- (3) For commercial use, log hours of operation to determine proper maintenance intervals.



# MIX N' GO MIXER — MAINTENANCE (GASOLINE ENGINE)

#### Maintenance

Perform the scheduled maintenance procedures as definded by Table 6 and below:

#### **DAILY**

■ Thoroughly remove dirt and oil from the engine and control area. Clean or replace the air cleaner elements as necessary. Check and retighten all fasteners as necessary. Check the gearbox for oil leaks. Repair or replace as needed.

#### **WEEKLY**

- Remove the fuel filter cap and clean the inside of the fuel tank.
- Remove or clean the filter at the bottom of the tank.
- Remove and clean the spark plug (Figure 32), then adjust the spark gap to 0.024 ~0.028 inch (0.6~0.7 mm). This unit has electronic ignition, which requires no adjustments.

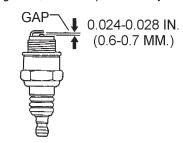


Figure 32. Spark Plug Gap

### **ENGINE OIL**

- 1. Drain the engine oil when the oil is *warm* as shown in Figure 33.
- 2. Remove the oil drain bolt and sealing washer and allow the oil to drain into a suitable container.
- Replace engine oil with recommended type oil as listed in Table 4. Engine oil capacity is .48 quarts (0.45 liters).
   DO NOT overfill.
- 4. Install drain bolt with sealing washer and tighten securly.

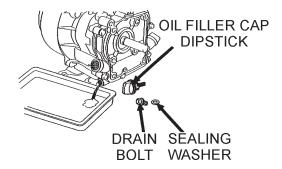


Figure 33. Engine Oil (Draining)

### **DANGER:**



**DO NOT** use gasoline as a cleaning solvent, because that would create a risk of fire or explosion.

#### **ENGINE AIR CLEANER**

- 1. Remove the air cleaner cover and foam filter element as shown in Figure 34.
- Clean foam element in warm, soapy water or nonflammable solvent. Rinse and dry thoroughly. Dip the element in clean engine oil and completely squeeze out the excess oil from the element before installing.

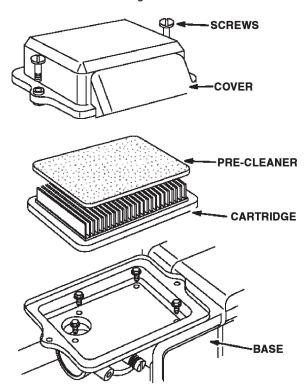


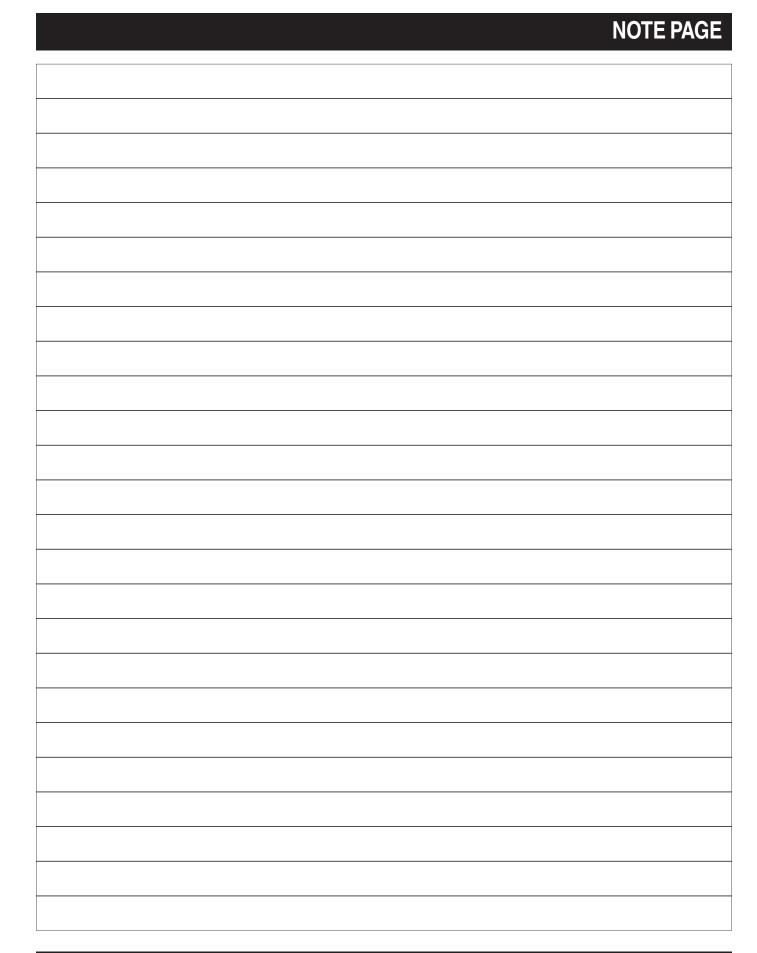
Figure 34. Engine Air Cleaner

# MIX N' GO MIXER — PREPARATION FOR LONG -TERM STORAGE

### **Mixer Storage**

For storage of the mixer for over 30 days, the following is recommended:

- Drain the fuel tank completely, or add STA-BIL to the fuel.
- Run the engine until the fuel is completely consumed.
- Completely drain used oil from the engine crankcase and fill with fresh clean oil, then follow the procedures described in the engine manual for engine storage.
- Clean the entire mixer and engine compartment.
- Cover the mixer and place it a clean dry area, that is protected from harsh elements.



# MIX N' GO MIXER — TROUBLESHOOTING (ENGINE)

	TABLE 7. ENGINE 1	ROUBLESHOOTING
SYMPTOM	POSSIBLE PROBLEM	SOLUTION
Difficult to start		
	Ignition plug being bridge?	Check ignition system.
Fuel is available but spark plug	Carbon deposit at ignition?	Clean or replace ignition.
will not ignite. (Power available at high tension cable).	Short circuit due to defective insulators?	Replace insulators.
	Improper spark gap?	Set spark plug gap to the correct gap.
Fuel is available but spark plug	Short circuit at stop switch?	Check stop switch circuit. Replace stop switch if defective.
will not ignite. (Power <b>NOT</b> available at high tension cable).	Ignition coil defective?	Replace ignition coil.
Fuel is available and spark plug ignites (compression <b>normal</b> ).	Muffler clogged with carbon deposits?	Clean or replace muffler.
	Fuel in use inadequate (water, dust)?	Flush fuel sytem and replace with fresh fuel.
	Air Cleaner clogged?	Clean or replace air cleaner.
	Defective cylinder head gasket?	Tighten cylinder head bolts or replace head gasket.
Fuel is available and spark plug ignites (compression <b>low</b> ).	Cylinder worn?	Replace cylinder.
	Spark plug loose?	Tighen spark plug.
Operation not satisfactory		
	Air cleaner clogged?	
Not enough power available	Air in fuel line?	Bleed (remove air) from fuel line.
(compression normal, no miss-firing).	Fuel level in carbureator float chamber improper?	Adjust carbureator float
	Carbon deposits in cylinder?	Clean or replace cylinder
	Ignition coil defective?	Flush fuel sytem and replace with fresh fuel.
Not enough power available (compression normal, miss-	Ignition plug often shorts?	Replace ignition wires, clean ignition.
firing).	Fuel in use inadequate (water, dust)?	Flush fuel sytem and replace with fresh fuel.
Engine overheats.	Excessive carbon deposition in combustion chamber?	Clean or replace crankcase.
	Exhaust or muffler clogged with carbon.	Clean or replace muffler.
	Spark plug heat value incorrect?	Replace spark plug with correct type spark plug.

# MIX N' GO MIXER — TROUBLESHOOTING (ENGINE/MIXER)

TABLE 7. ENGINE TROUBLESHOOTING (Continued)				
SYMPTOM	POSSIBLE PROBLEM	SOLUTION		
Operation not satisfactory				
Rotational speed fluctuates.	Governor adjustment improper?	Adjust governor to correct lever.		
	Governor spring defective?	Clean or replace ignition.		
	Fuel flow erratic?	Check fuel line.		
	Air taken in through suction line?	Check suction line.		
Recoil starter not working properly.	Dust in rotating part?	Clean recoil starter assembly.		
	Spring spring failure?	Replace sprial spring.		

TABLE 8. MIXER TROUBLESHOOTING				
SYMPTOM POSSIBLE PROBLEM		SOLUTION		
	Defective gearbox?	Check that the gears and bearings are not worn . Replace as necessary.		
Drum rotates rough.	Worn V-belt?	Replace V-belt.		
	Loose pulley?	Tighten or replace pulley.		
Drum does not rotate at all.	Incorrect or no voltage being supplied to electric motor?	Check that the electric motor has the correct supply voltage.		
	Power to electric motor?	Inspect power source and extension cord. Push reset button on electric motor.		
	Fuel?	Check level of fuel in fuel tank. Add fuel if necessary. Make sure fuel is being supplied to the engine. Check to ensure that the fuel filter is not clogged.		
	Broken V-belt?	Replace V-belt.		
	Defective gearbox?	Check that the gears and bearings are not broken. Replace as necessary.		
	Defective motor?	Replace motor.		

# **OPERATION MANUAL**

# HERE'S HOW TO GET HELP

## PLEASE HAVE THE MODEL AND SERIAL NUMBER ON-HAND WHEN CALLING

### **UNITED STATES**

Multiquip Corporate Office

18910 Wilmington Ave. Tel. (800) 421-1244 Carson, CA 90746 Fax (800) 537-3927

Contact: mg@multiquip.com

Service Department

800-421-1244 310-537-3700

Technical Assistance

800-478-1244

### **MEXICO**

MQ Cipsa

Carr. Fed. Mexico-Puebla KM 126.5 Momoxpan, Cholula, Puebla 72760 Mexico Contact: pmastretta@cipsa.com.mx

Tel: (52) 222-225-9900 Fax: (52) 222-285-0420

# Multiquip

**CANADA** 

4110 Industriel Boul. Tel: (450) 625-2244 Laval, Quebec, Canada H7L 6V3 Tel: (877) 963-4411 Fax: (450) 625-8664 Contact: jmartin@multiquip.com

Fax: 310-537-4259

Fax: 310-943-2238

### MQ Parts Department

800-427-1244 Fax: 800-672-7877 310-537-3700 Fax: 310-637-3284

### Warranty Department

800-421-1244 310-537-3700

Fax: 310-537-1173

#### **UNITED KINGDOM**

### Multiquip (UK) Limited Head Office

Unit 2, Northpoint Industrial Estate, Globe Lane.

Dukinfield, Cheshire SK16 4UJ Contact: sales@multiquip.co.uk Tel: 0161 339 2223 Fax: 0161 339 3226

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