



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 #3 (09/20/11)

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



THIS MANUAL **MUST** ACCOMPANY THE EQUIPMENT AT ALL TIMES.

WARNING

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.
- Cement and 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: **ALWAYS** 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.

SILICOSIS/RESPIRATOR WARNINGS

WARNING

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.

WARNING

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.

SAFETY INFORMATION

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.

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.

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.

Symbol	Safety Hazard
	Lethal exhaust gas hazards
	Explosive fuel hazards
	Burn hazards
	Rotating parts hazards

SAFETY INFORMATION

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 to 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 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.

SAFETY INFORMATION

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.

SAFETY INFORMATION

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.
- NOTICE**
- 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.

SAFETY INFORMATION

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.

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.



P/N: DCL251



P/N: 510165



P/N DCL250

MIX N' GO MIXER — SPECIFICATIONS

Table 1. Specifications (Engine & Electric Motor)

	Model	BRIGGS & STRATTON 91200	BALDOR 17LVE304
Type		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
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 m ³)
Maximum Mixing Capacity (1/2 bag)	3.0 cu. ft. (0.08 m ³)
Unladen Weight - Electric Motor	129 lbs. (58.5 Kg)
Unladen Weight - Gasoline Engine	138 lbs. (62.6 Kg)

MIX N' GO MIXER — GENERAL INFORMATION

APPLICATION

This mixer is *only* 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, vertical 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 mm². 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.

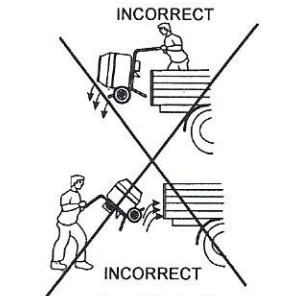
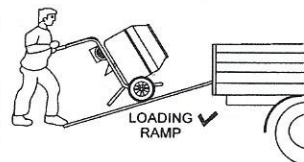


Figure 3. Mixer Loading

MIX N' GO MIXER — MIXER COMPONENTS

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

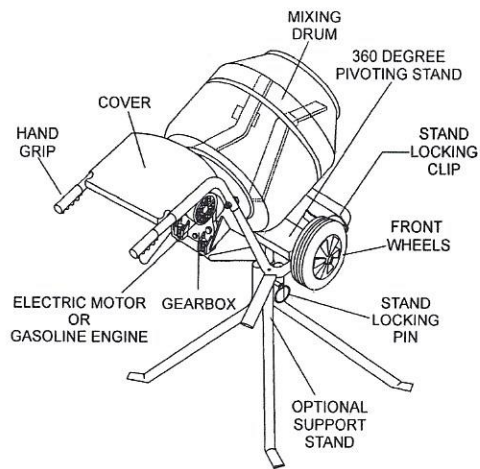


Figure 4. Mixer Components

MIX N' GO MIXER — 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.

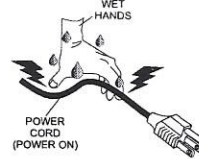


Figure 17. Extension Cord (Wet Hands)

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 mixer.



Figure 18. Mixer (Tripping)

6. 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.