# **OPERATION AND PARTS MANUAL**



MP1 SERIES

MODELS: MP115E, MP120E, MP1H MASONRY SAWS

(1.5 HP 1Ø ELECTRIC MOTOR)
(2.0 HP 1Ø ELECTRIC MOTOR)
(4.8 HP HONDA GASOLINE ENGINE)

Revision #3 (10/08/19)

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THIS MANUAL MUST ACCOMPANY THE EQUIPMENT AT ALL TIMES.

## **PROPOSITION 65 WARNING**



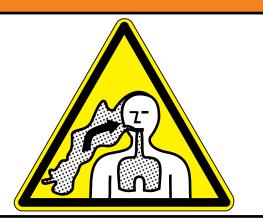
# **AWARNING**



## **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.

## **TABLE OF CONTENTS**

Proposition 65 Warning Silicosis/Respiratory Warnings Table Of Contents Safety Information Specifications Dimensions General Information Saw Components Electric Motor Components Engine Components Set-Up Operation Maintenance Wiring Diagram (Engine) Wiring Diagram (Electric Motor) Troubleshooting (Blade) Troubleshooting (Electric Motor) Troubleshooting (Engine) Explanation Of Codes In Remarks Column Suggested Spare Parts	
<b>Component Drawings</b>	
Name Plate And Decals	42-43 44-45 46-47 48-49 50-51 52-53

## **HONDA GX160K1QXC9 Drawings**

Air Cleaner Assembly	56-57
Camshaft Assembly	
Carburetor Assembly	60-61
Control Assembly	
Crankcase Cover Assembly	
Crankshaft Assembly	66-67
Cylinder Barrel Assembly	68-69
Cylinder Head Assembly	70-71
Fan Cover Assembly	72-73
Flywheel Assembly	74-75
Fuel Tank Assembly	76-77
Ignition Coil Assembly	78-79
Muffler Assembly	80-81
Piston And Rings Assembly	82-83
Recoil Starter Assembly	
Gasket Kit Assembly	
Labels Assembly	88-89

#### **NOTICE**

Specifications are subject to change without notice.

## **NOTES**


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	
	Rotating parts hazards	
No.	Cutting and crushing hazards	
*	Electric shock hazards	

#### **GENERAL SAFETY**

## WARNING

■ Adherence to the OSHA 2017 Ruling governing Occupational Exposure to Respirable Crystalline Silica, requires that all sawing operations MUST BE conducted with an integrated water delivery system that feeds water to the blade.

## 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.

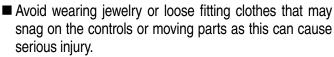


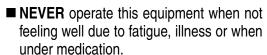














■ **NEVER** operate this equipment under the influence of drugs or alcohol.







- ALWAYS clear the work area of any debris, tools, etc. that would constitute a hazard while the equipment is in operation.
- No one other than the operator is to be in the working area when 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.









#### **SAW 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**.

#### **WARNING**

- Accidental starting can cause severe injury or death. ALWAYS place the ON/OFF switch in the OFF position.
- Keep hands away from moving parts at all times.
- 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.

## **CAUTION**

- ALWAYS ensure saw is **securely** placed on appropriate blocks or jackstands when maintenance requires elevation of the saw.
- If the machine malfunctions, stop the saw immediately and secure it. Fix the problem as soon as possible.

#### **NOTICE**

- ALWAYS keep the machine in proper running condition.
- Fix damage to machine and replace any broken parts immediately.
- Make sure there is no buildup of grease, oil or debris on the machine.
- 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.

#### **BLADE SAFETY**

## **WARNING**

Rotating blade can cut and crush. ALWAYS keep hands and feet clear while operating the saw.



#### **A** CAUTION

■ NEVER operate the saw without blade guards and covers in place. Exposure of the diamond blade must not exceed 180 degrees.



- Verify the motor start switch is set to the OFF position before installing a blade.
- ALWAYS inspect blade before each use. The blade should exhibit no cracks, dings, or flaws in the steel centered core and/or rim. Center (arbor) hole must be undamaged and true.



#### **NOTICE**

- Use proper blades and follow blade manufacturer's recommendations. Match the blade RPM (blade shaft RPM) to the recommended blade surface feet per minute (SFPM).
- Ensure the blade-mounting bolt is tightened adequately
- ALWAYS examine blade flanges for damage and excessive wear.
- Ensure the blade is marked with an operating speed greater than the spindle speed of the saw.
- Only cut the material that is specified for the diamond blade. Read the specification of the diamond blade to ensure the proper tool has been matched to the material being cut.
- Ensure that water is used during sawing operations and that a sufficient flow of water is applied to both sides of the blade.
- DO NOT drop the diamond blade on ground or surface.
- Ensure that the blade is mounted for proper operating direction.
- Adhere to the blade manufacturer's recommendations on handling, storage and safe usage of blades.

#### **ELECTRIC MOTOR SAFETY**

#### **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 saw, changing blade, or performing maintenance.
- ALWAYS make sure the ON/OFF switch on the electric motor is in the OFF position when not in use and before inserting the saw'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 saw.



#### **CAUTION**

- Ensure that cables and cords will not be tripped over or trapped underneath the saw.
- Never use the cable to pull out the plug from the power source.

#### **NOTICE**

- ALWAYS make certain that proper power or extension cord has been selected for the job.
- Protect the cable from heat, oil, and sharp edges.

#### **LIFTING SAFETY**

## **A** CAUTION

- **NEVER** allow any person or animal to stand underneath the equipment while lifting.
- Some saws are very heavy and awkward to move around. Use proper heavy lifting procedures.
- **DO NOT** lift machine to unnecessary heights.
- **NEVER** lift the equipment while the motor is running.

#### TRANSPORTING SAFETY

#### NOTICE

- **ALWAYS** shutdown motor before transporting.
- ALWAYS tie down equipment during transport by securing the equipment with rope.
- Ensure that the diamond blade does not come into contact with the ground or surface during transportation.
- **NEVER** transport the saw to or from the job site with the blade mounted.

#### **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.

Table 1. Saw Specifications				
<b>Dimensions</b> 43.75" x 33" x 27" (111.125 cm x 83.82 cm x 68.58 cm)				
Approximate Weight	165 lbs. (75 Kg.)			
Electric				
Motor Speed	3450 RPM (See Table 2)			
Blade Shaft Speed	2,729 RPM			
Water Pump 115V/60Hz Oil-filled, 300 GPM				
Engine (Gasoline)				
Type  4.8 HP 4 cycle, Single Cylinder, Air Cooled, F (See Table 2)				
Blade Shaft Speed	2,958 RPM			
Water Pump	Mechanical centrifugal, 138 GPM			
General				
Blade Capacity	14 in. blade maximum			
Cutting Depth 5 in. with 14 in. blade				

	Table 2. MP1 Electric Motor/En	gine Specifications	
Saw Model	MP1H	MP115E	MP120E
Engine/Motor	Honda GX160K1QXC9		
Type	4-Stroke OHV Single Cylinder		
Bore xStroke	2.7 x 1.8in. (68 x 45mm)		
Displacement	9.9 cu. in. (163 cc)	1.5 HP	2.0 HP
Max Engine Output	4.8 HP @ 3600 rpm	Heavy Duty Electric	Heavy Duty Electric
Fuel Tank Cap.	0.95 US Gal. (3.6 liters)	115/230V	115/230V
Fuel	Unleaded Gasoline	Single Phase	Single Phase
Lube Oil Cap.	0.63 US Qt. (0.60 liters)	60Hz	60Hz
Speed Control Method	Centrifugal Fly-Weight type	Dual Voltage Amps F.L 17.2/8.6	Dual Voltage Amps F.L 16.8/8.4
Starting Method	Recoil Start	17.2/0.0	10.0/0.4
Dimension	12.0 x 14.3 x 13.2 in (304 x 362 x 335mm)		
Dry Net Weight	33.1 lbs. (15.0 kg)		

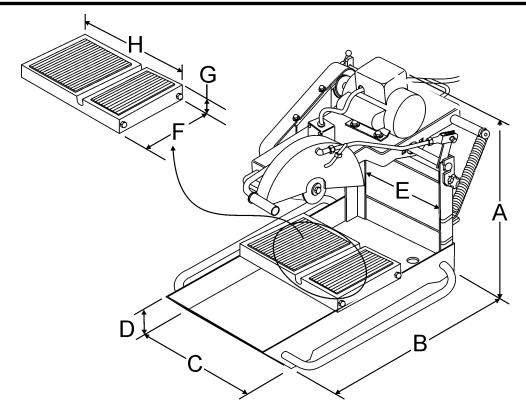


Figure 1. Dimensions

Table 3. Dimension				
Reference Letter	Dimensions			
A (electric motor)	29.0 in. (74 cm)			
A (gasoline engine)	29.0 in. (74 cm)			
В	42.0 in. (106 cm)			
С	27.0 in. (58.6 cm)			
D	5.5 in. (13.97 cm)			
E	14.5 in. (36.8 cm)			
F	11.5 in. (29.2 cm)			
G	2.5 in. (6.35 meters)			
Н	19.0 in. (48.2 meters)			

#### **MP1 MASONRY SAW**

The MP1 masonry saw is designed for vigorous wet-cutting masonry applications. The heavy-duty aluminum conveyor cart and ball bearing roller wheels ensure material stability and smooth travel. In addition a reinforced jig-welded steel frame provides rigidity for cutting accuracy and long service life.

This saw is available with either an *electric motor* or a *gasoline engine*. The heavy duty electric motors are available in either 1.5 HP or 2.0 HP with overload protection. Each motor can operate at either 115 VAC or 230 VAC. The electric motor input voltage is selectable by means of a toggle switch. Always make sure that the input voltage being supplied to the motor matches the position of the voltage selector toggle switch located on top of the motor.

If desired, the MP1 saw can be configured with a 4.8 HP Honda GX160 gasoline engine.

All MP1 models include a high flow water pump, cutting jig, water hoses and associated plumbing to enable the operator to begin wet cutting.

#### WET CUTTING APPLICATIONS

For operator safety, ALL sawing must be conducted with the water delivery system that is provided with the masonry saw. Ensure that a free flow of clean water is properly routed from the pump through the plumbing system so that the blade receives an ample amount of water. This action is required to safeguard against the operational hazards of silica exposure.



Adherence to the OSHA 2017 Ruling governing Occupational Exposure to Respirable Crystalline Silica, requires that all sawing operations **MUST BE** conducted with an integrated water delivery system that feeds water to the blade.

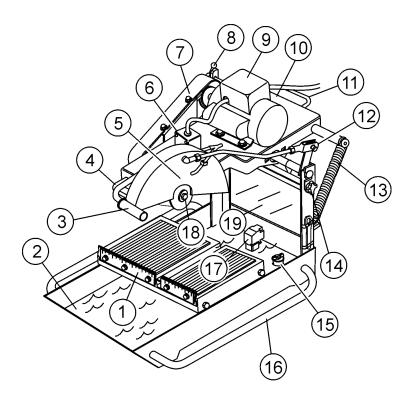
#### **BLADE APPLICATIONS**

This saw has been designed to incorporate the use of diamond blades as the cutting tool. The optimum performance of this saw is best evidenced by using 14-inch (356 mm) diamond blades that match the material being cut. Ask your dealer, or call **MULTIQUIP** about your specific cutting application.

#### **FEATURES**

- 1.5 or 2.0 HP, 115/230 VAC , 60 Hz heavy duty electric motors with overload protection.
- 4.8 HP Honda GX160 gasoline engine.
- 14-inch blade capacity provides 5-inch depth of cut.
- Rugged aluminum conveyor cart for optimum stability.
- Open back design permits capability of cutting large materials.
- Ergonomically designed cutting head provides operator relief in high tempo operations.
- Mounted carrying handles for easy transportation.
- Rubber-matted cutting table helps hold the material being cut in place while resisting vibrations for smoother cuts with less chipping.
- Cutting table marked in inches and centimeters (ruler) for precision cuts.
- Stay-level blade guard for operator safety.
- Rigid steel frame minimizes vibrations and assures accurate cutting.
- Mechanical Water Pump Kit (Gasoline Model Only)
- Electric Submersible Water Pump Kit (Electric Models Only).

## **NOTES**



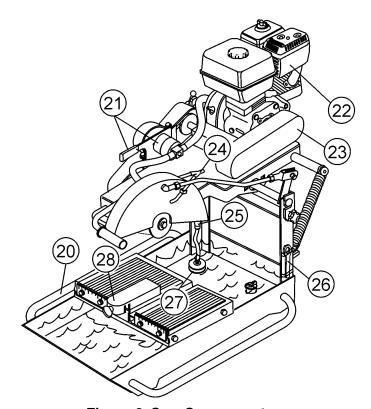


Figure 2. Saw Components

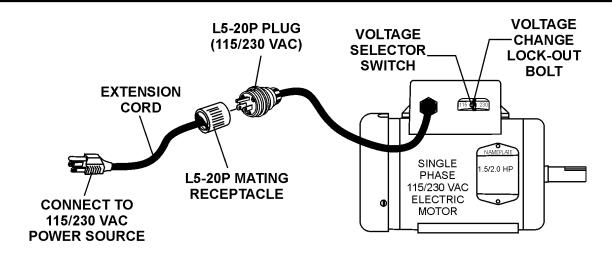
#### **SAW COMPONENTS**

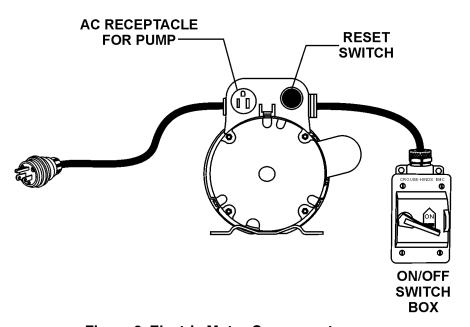
Figure 2 shows the location of the basic components of the MP1 Saw. Listed below is a brief explanation of each component.

- Ruler Backstop When cutting, place material against backstop. Use measurement rail (ruler) to determine where material is to be cut.
- Water Tray When wet cutting is required, fill with clean fresh water. Make sure submersible is totally immersed in water.
- Cutting Head Handle Grab hold of this handle to move the cutting blade head either up or down. To move the cutting head, release the mounting plate release/ lock lever.
- 4. **Carrying Handle (Head)** Grip this handle (front) to lift the mounting plate.
- Blade Guard Protects the user from the cutting blade.
   NEVER operate the saw with the blade guard removed.
- Power ON/OFF Box This box is used on *electric* models saws only. To turn on the saw place in the ON position. Place in the OFF position to shut-down the saw.
- V-belt Cover Remove this cover to access the drive V-belt. NEVER operate the saw with the V-belt cover removed.
- Mounting Plate Release/Lock Lever Push this lever backwards to release the mounting plate. This will allow the cutting head to move either up or down. Push the lever forward to lock the mounting plate in place.
- 9. Electric Motor/Conduit Box This unit uses 2 different types of electric motors and voltages (see Table 2). Always make sure the voltage selector switch has been set to the correct position for the voltage being supplied to the motor. Plug the water pump (electric models only) power cord into the AC receptacle located on the conduit box.
- Mounting Plate Supports the electric motor/gasoline engine. Plate has slotted holes for horizontal (right-side) and vertical (left-side) adjustment of cutting head.
- 11. **Carrying Handle (Head)** Grip this handle (rear) to lift the mounting plate.
- 12. **Tie Rod** The tie rod length has been set at the factory for best blade guard position for the majority of the cutting that will be done.
- 13. **Spring Tensioner** Allows for an easy up and down movement of the mounting plate.

- 14. **Mounting Plate Lock/Release Knobs** Turn knob (2) clockwise to release the mounting plate. Turn counterclockwise to tighten.
- 15. **Stopper** Place stopper in tray when filling with water.
- 16. **Carrying Handle (Tray)** Grip this handle (right-side) to trasport the saw.
- 17. Electric Water Pump For best results place the pump between the splash shield and the rear of the water tray. This is for electric models only. Plug water pump power cord into AC receptacle on electric motor conduit box. NEVER run pump dry. Pump must be immersed in water.
- 18. Spindle Bolt/Outside Blade Flange When mounting of the cutting blade is required, remove the spindle bolt and outside blade flange. Align cutting blade with inside flange arbor and reassemble spindle and outside blade flange.
- 19. **Splash Guard** Keeps water and debris from leaving the water tray.
- 20. **Carrying Handle (Tray)** Grip this handle (left-side) to trasport the saw.
- Mechanical Water Pump This pump is used on gasoline models only. Saw is shipped from the factor for wet cutting applications (pump handle down). Place pump handle upwards to disengage pump. NEVER run pump dry.
- 22. **Engine** The gasoline model saws uses a 4.8 HP Honda GX160, 4-stroke, OHV, single cylinder, air cooled gasoline engine.
- V-belt Cover (Gasoline Only) Remove this cover to access the engine shaft-side V-belt. NEVER operate the saw with the V-belt cover removed.
- 24. **Water Lines** Replace the clear vinyl tubing water lines when they become brittle, worn or clogged. Water kits are available through your dealer.
- 25. **Priming Bulb** Squeeze this bulb to prime the mechanical water pump (gasoline models only).
- 26. **Blade Wrench** Use this tool to mount and remove cutting blade.
- 27. Strainer For best results place the strainer between the splash shield and the rear of the water tray. This is for gasoline models only. NEVER run pump dry. Strainer must be immersed in water.
- 28. **Miter Box** For angled cuts, place the lip of the miter box on the measurement rail with the threaded thumb knob facing you and tighten.

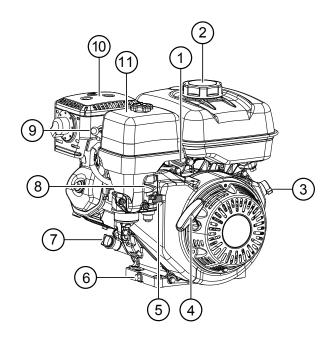
## **ELECTRIC MOTOR COMPONENTS**





**Figure 3. Electric Motor Components** 

#### **ENGINE COMPONENTS**



**Figure 4. Engine Components** 

#### **INITIAL SERVICING**

The engine (Figure 4) must be checked for proper lubrication and filled with fuel prior to operation. Refer to the manufacturer's engine manual for detailed operation and service instructions.

- 1. **Throttle Lever** Adjusts engine RPM speed.
- Fuel Filler Cap/Fuel Tank Remove this cap to add unleaded gasoline to the fuel tank. Refer to Table 2 for fuel tank capacity. Make sure the cap is tightened securely. DO NOT overfill

## **A** DANGER



Add fuel to the tank **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 all fuel residue has been completely wiped up and the area surrounding the engine is dry.

- 3. **Engine ON/OFF Switch ON** position permits engine starting. **OFF** position stops engine operation.
- 4. **Recoil Starter** Manual starting method. Pull the starter grip until resistance is felt, then pull briskly and smoothly to start the engine.
- 5. **Fuel Valve Lever** Open to allow fuel to flow. Close to prevent fuel flow.
- 6. **Oil Drain Bolt** Remove this bolt to drain oil from the engine crankcase.
- Oil Filler Cap/Dipstick Remove this cap to determine if engine oil is low. Add oil through this filler port as recommended in Table 2.
- 8. **Choke Lever** Used in cold weather conditions or for the starting of a cold engine. The choke enriches the fuel mixture.
- Spark Plug Provides spark to the ignition system.
   Set the spark plug gap according to the engine manufacturer's instructions. Clean the spark plug once a week.
- Muffler Reduces noise and emissions. NEVER touch the muffler while it is hot!





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.

 Air Cleaner — Prevents dirt and other debris from entering the fuel system. Remove the wing nut on top of the air cleaner cover to gain access to the filter elements.

#### **NOTICE**

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

#### **WARNING**

Whenever cleaning, adjusting or lubricating any part of the saw, MAKE SURE to place the power ON/OFF switch in the OFF position and disconnect the plug from the power source.

### ASSEMBLY (ELECTRIC POWERED SAWS ONLY)

- Open the shipping container carefully, lift the saw by its carrying handles and place it on a suitable table or platform. Make sure the table or platform can support the weight of the saw. The saw platform should be rigid and stationary so that it will not move, sag, or sway due to the vibrations and movements of the saw.
- 2. If using the MP1 series support stand kit (P/N TRAK14SS), attach stand to the under-side of the water tray. Follow the instructions supplied with the support stand kit when attaching it to the water tray.
- 3. Attach the clear plastic water hose (Figure 5) coming from the blade guard to the water pump.
- Fill the water tray with clean fresh water. The water pump intake must always be fully covered by water. Also, keep the pump intake free of sludge, debris and other materials that may accumulate in the tray.
- Make certain that the water hose will not come in contact with the blade or interfere with any moving parts. The best location for the water pump/strainer is between the splash shield and the rear of the water tray. This will prevent some of the abrasive particles from flowing through the pump.

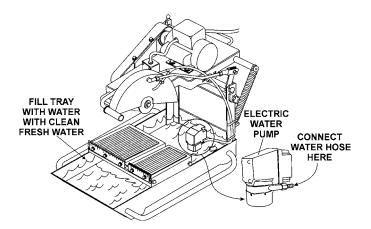


Figure 5. Water Tray/Water Pump

6. Insert the water pump power plug into the outlet receptacle on the electric motor conduit box as shown in Figure 6.

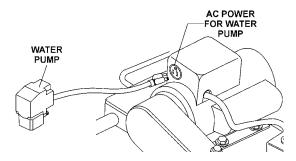


Figure 6. Water Pump Power Connection

#### CONVEYOR CART PLACEMENT

1. Place the conveyor cart across the water tray as shown in Figure 7. Align the wheels of the cart with the outer edge of the water tray. Push the cart back and forth, it should move freely in both directions.

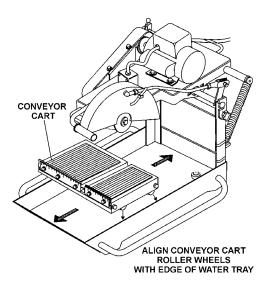


Figure 7. Conveyor Cart Placement

#### **BLADES**

## **WARNING**



Failure to thoroughly inspect the blade for operational safety could result in damage to the blades or the saw and may cause serious injury to the user or others in the operating area. Inspect the blade flanges and shaft for damage before installing the blade.

#### **Blade Components**

Diamond blades are recommended for your saw. Ask your Multiquip dealer about your specific cutting application. Figure 8 highlights the components of a diamond blade.

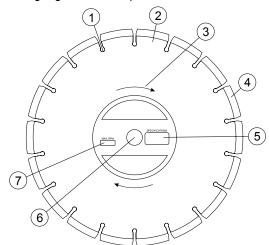


Figure 8. Diamond Blade

- Stress Relief Holes (Gullets) Check the steel core for cracks that may have propagated from the slots and/or gullets. Cracks indicate extreme fatigue failure and if sawing continues, catastrophic failure will occur.
- 2. Edge of the Steel Core Check the diameter edge for discoloration (blue oxidation) indicating an overheating condition caused by insufficient cooling water/air. Overheating of blades may lead to loss of core tension and/or increase the possibility for blade failure. Check to make sure the steel core's width is uniform about the rim of the blade, and not succumbing to an "under cutting" condition brought about by highly abrasive material or improper under cutting core protection.
- Directional Arrow Check to ensure that the blade is oriented properly on the spindle for sawing. Reference the directional arrow on the blade and place it so the direction of rotation "downcuts" with the turn of the shaft.

- 4. Diamond Segment or Rim Ensure that there are no cracks, dings, or missing portions of the diamond segment/rim. DO NOT use a blade that is missing a segment or a portion of the rim. Damaged and/or missing segments/rims may cause damage to your saw and injury to the user or others in the operating area.
- Specifications Ensure that the blade specifications, size and diameter properly match up to the sawing operation. Wet blades must have water to act as a coolant. Utilizing a diamond blade not matched properly to the task may result in poor performance and/or blade damage.
- 6. **Arbor Hole** It is essential that the arbor hole diameter properly matches the shaft arbor, and that it is free from distortions. Correct blade flanges (collars) must be used. The inside face of the flanges must be clean and free of debris. An out of round arbor condition will cause damage to the blade and the saw.
- 7. MAX RPM This RPM reference is the maximum safe operating speed for the blade selected. NEVER exceed the max RPM on the diamond blade. Exceeding the MAX RPM is dangerous and may cause poor performance and may damage the blade. All blades used must be designed for the maximum spindle RPM.

#### **Blade Installation**

- 1. Use the *blade nut wrench* (Figure 9) supplied with the saw to install the cutting blade.
- 2. Ensure the capacity of the blade guard matches the diameter of your cutting blade.
- 3. Using the blade nut wrench, remove the *blade shaft nut* and *outside blade flange*. Install the cutting blade onto the *inside blade flange arbor*. Re-install the outside blade flange and blade shaft nut. Tighten securely. **DO NOT** overtighten.

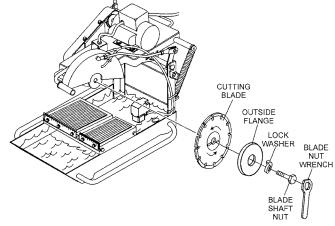


Figure 9. Blade Installation

#### **CONNECTING THE POWER**

1. Place the power **ON/OFF** switch (Figure 10) in the **OFF** position (down).



Figure 10. Power ON/OFF Switch

- 2. Connect an extension cord of adequate current carrying capacity to the power plug on the electric motor.
- 3. MAKE CERTAIN that the correct size extension cord (Figure 11) is used. Undersized wires will burn out motors. Use Table 4 to determine the correct extension cord size.

Table 4. Extension Cord Sizes					
MOTOR	VOLTAGE VAC	50 ft (15. 2 m) Long	75 ft (22.9 m) Long	100 ft (30.5 m) Long	
1.5 HP	115	NO. 10	NO. 10	NO. 8	
1.5 HP	230	NO. 14	NO. 14	NO. 14	
2.0 HP	115	NO. 10	NO. 8	NO. 6	
2.0 HP	230	NO. 12	NO. 12	NO. 12	



**NEVER** grab or touch a live power cord with wet hands, the possibility exists of electrical shock, electrocution and even death!

**NEVER** use a damaged or worn extension cable when connecting

to a power source. Defective cables may cause damage to the saw's electric motor or electrical shock.

**ALWAYS** use a grounded (3-wire) extension cord and **MAKE CERTAIN** that the motor is connected to a properly grounded electric circuit. If possible, use a ground fault circuit interrupter to protect the operator from possible electric shock.

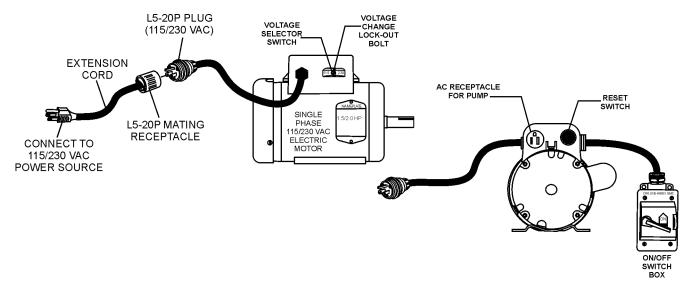


Figure 11. Extension Cord Connection

4. This unit is shipped from the factory with the *voltage selector switch* (Figure 12) in the 115 VAC position. To change the position of the switch from 115 VAC to 230 VAC, remove the locking bolt and place the switch in the 230 VAC position. Re-install the locking bolt to prevent accidently flipping the switch.

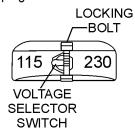


Figure 12. Voltage Selector Switch

 Plug the free end of the extension cord into an AC power receptacle. Whenever possible, use a GFCI receptacle (Figure 13) to reduce the risk of electrical shock.

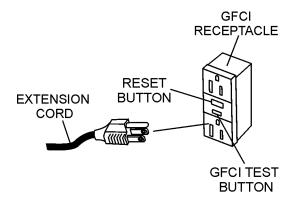


Figure 13. GFCI Receptacle

The MP1 masonry saw is now ready for wet cutting.
 The pre-setup procedures for electric models saws only is now complete.



#### **WARNING**

Adherence to the OSHA 2017 Ruling governing Occupational Exposure to Respirable Crystalline Silica, requires that all sawing operations **MUST BE** conducted with an integrated water delivery system that feeds water to the blade.

#### **⚠** WARNING

Whenever cleaning, adjusting or lubricating any part of the saw, MAKE CERTAIN to stop the engine and disconnect the spark plug wire from the spark plug

#### ASSEMBLY (GASOLINE POWERED SAWS ONLY)

- 1. Remove the MP1 saw from its container and place it on a suitable table or platform. Make sure the table or platform can support the weight of the saw. The saw platform should be rigid and stationary so that it will not move, sag or sway due to the vibrations and movements of the saw.
- 2. If using the MP1 series support stand kit (P/N TRAK14SS), attach stand to the under-side of the water tray. Follow the instructions supplied with the support stand kit when attaching it to the water tray.
- 3. The *gasoline powered* saw uses a *mechanical water* pump. This pump operates by drawing power from the drive V-belts and has been adjusted and locked for wet cutting operation when shipped from the factory.
- 4. Fill the water tray with clean fresh water. The water pump intake (strainer) must always be fully covered by water to operate effectively. Also, keep the pump intake free of sludge, debris and other materials that may accumulate in the tray.
- 5. Make certain that the water hose will not come in contact with the blade or interfere with any moving parts. The best location for the water pump/strainer is between the splash shield and the rear of the water tray. This will prevent some of the abrasive particles from flowing through the pump.



#### **WARNING**

**ALWAYS** position the **strainer** in the water tray in a manner that will allow the free movement of the conveyor cart and clearance from the cutting blade and cutting action.

#### **NOTICE**

The mechanical water pump is shipped from the factory for wet cutting applications.

#### WET CUTTING (GASOLINE ONLY)

To connect the **mechanical water pump** to the drive V-belts perform the following:

- 1. Loosen the 2 hex head cap screws (Figure 14) that secure the pump mount bracket.
- 2. **Push** the pump handle **downward** to engage the pump.
- 3. Tighten the 2 hex head cap screws that secure the pump mount bracket.

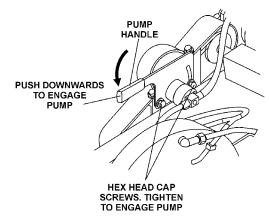


Figure 14. Pump Engage

#### **BEFORE STARTING**

- 1. Read safety instructions at the beginning of manual.
- 2. Clean the saw, 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**

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

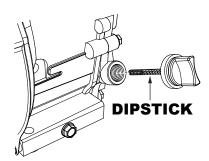


Figure 15. Engine Oil Dipstick (Removal)

- 3. 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 5). Maximum oil capacity is 0.63 guarts (0.60 liters)

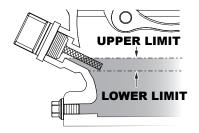


Figure 16. Engine Oil Dipstick (Oil)

Table 5. Oil Type				
Season	Temperature	Oil Type		
Summer	25°C or Higher	SAE 10W-30		
Spring/Fall	25°C~10°C	SAE 10W-30/20		
Winter	0°C or Lower	SAE 10W-10		

#### **FUEL CHECK**

# **⚠** DANGER

## **EXPLOSIVE FUEL!**

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

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

#### START-UP PROCEDURE (ELECTRIC MOTOR)

#### **NOTICE**

Read and fully understand this manual before starting or attempting to operate the saw.

Before starting the saw's electric motor make sure that the Safety, General Information, and Set-Up sections have been completed and understood. **DO NOT** proceed until the above mentioned sections have been completed.

## **WARNING**



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

#### **MARNING**



**NEVER** place hands or feet inside the belt guard or blade guard while the motor is running. **ALWAYS** shut the motor down before performing any kind of maintenance

#### **WARNING**



**NEVER** place hands and fingers near the cutting blade. The possibility exists of severe bodily harm if hands and fingers come in contact with rotating saw blade.

#### **WARNING**



**ALWAYS** ensure that the cutting blade has been mounted correctly.

#### **DANGER**



**NEVER** touch a live power cord with wet hands. The possibility exists of electrical shock, electrocution which could cause severe bodily harm, even death.

## **WARNING**



**NEVER** lift the blade guard while the blade is rotating. The possibility exists of severe bodily harm if fingers or hands come in contact with the rotating saw blade. Wait for the blade to stop rotating before lifting the blade guard.

1. Place the material to be cut (Figure 17) on the conveyor cart against the backstop.

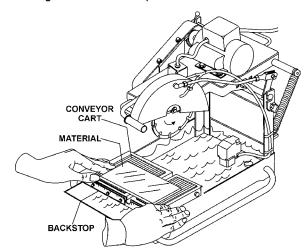


Figure 17. Material Placement

2. Place the *mounting plate release/lock lever* (Figure 18) in the **release** position (pull back to release). When releasing the lock, hold on to the mounting plate handle to prevent the plate from rising rapidly, possibly causing the saw to become unstable. Let the plate raise **slowly**.

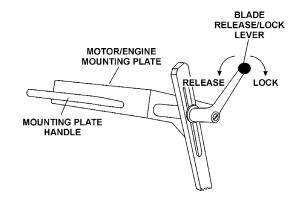


Figure 18. Mounting Plate Release/Lock Lever

3. Adjust the cutting depth by pulling up or down on the *Cutting Head Handle* (Figure 19). This saw is designed, and is best utilized as a "*Chop-Saw*". Once the mounting plate release/lock lever is released, the optimum cutting action is attained by using the *Raise/Lower Handle* to rotate down onto the material to be cut. Simultaneously the *conveyor cart is moved slowly forward* to advance the material and cutting action.

A heavy-duty spring supports ergonomic return-toheight action of the cutting head assembly.

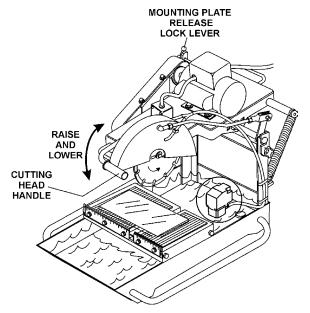


Figure 19. Cutting Head Handle

## **A** DANGER

**ALWAYS** be alert to the fact that there is a rotating blade on the saw and be extremely aware of your body position — especially your hands in relationship to the rotating blade. The possibility exists of severe bodily harm or even death if your body comes in contact with the rotating saw blade.

Turn the power ON/OFF switch (Figure 20) to the ON position with the blade away from the material to be cut, the cutting blade should begin to rotate. Before cutting, remember to follow all safety rules referenced in this manual.

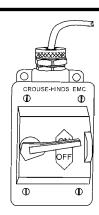


Figure 20. Power ON/OFF Switch (ON)

- 5. Push the *conveyor cart* with the material, slowly and evenly until the cut is complete. Move the cart back and remove the cut pieces.
- 6. Avoid overloading the motor when cutting. However, the electric motors are protected with a manual-reset thermal overload switch that will turn the saw off if the motor is overheated. In the event that the switch is tripped, turn the "ON/OFF" switch to the "OFF" position and allow the motor to cool before attempting to restart.

#### SHUT DOWN PROCEDURE

1. Place the power ON/OFF switch (Figure 21) in the OFF position (down).

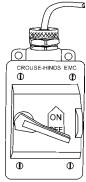


Figure 21. Power ON/OFF Switch (OFF)

- 2. Wait for the cutting blade to stop rotating.
- Disconnect the saw's AC power cord from the power source. NEVER leave the saw connected to a power source when unattended. This will prevent accidental starting.
- 4. Using a soft cloth, clean any excess debris or residue that may have accumulated on the saw.
- 5. Store saw in a clean dry location where it will be out of the reach -of children.

#### **START-UP PROCEDURE (ENGINE)**

#### **NOTICE**

Read and fully understand this manual before starting or attempting to operate the saw.

Before starting the saw's electric motor, make sure that the Safety, General Information, and Set-Up sections have been completed and understood. **DO NOT** proceed until the above mentioned sections have been completed.

6. Place the engine fuel valve lever (Figure 22) to the "**ON**" position.



#### **WARNING**



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

## **⚠** WARNING



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

#### **WARNING**



**NEVER** place hands or feet inside the belt guard or blade guard while the motor is running. **ALWAYS** shut the motor down before performing any kind of maintenance

#### **WARNING**



**NEVER** place hands and fingers near the cutting blade. The possibility exists of severe bodily harm if hands and fingers come in contact with rotating saw blade.

#### **WARNING**



**ALWAYS** ensure that the cutting blade has been mounted correctly.

#### Figure 22. Engine Fuel Valve Lever (ON Position)

7. Place the *Engine ON/OFF switch* (Figure 23) in the "ON" position.

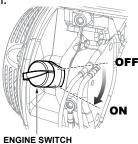


Figure 23. Engine ON/OFF Switch

8. Place the choke lever (Figure 24) in the "CLOSED" position if starting a cold engine.



Figure 24. Choke Lever

#### **NOTICE**

The **CLOSED** position of the choke lever enriches the fuel mixture for starting a **COLD** engine. The **OPEN** position provides the correct fuel mixture for normal operation after starting, and for restarting a warm engine.

9. Rotate the *throttle lever* (Figure 25) halfway between fast and slow for starting. All cutting is done at full throttle. The engine governor speed is factory set to ensure optimum blade operating speeds.



Figure 25. Throttle Lever

10. Grasp the starter grip (Figure 26) 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.

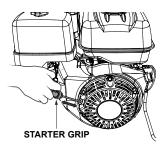


Figure 26. Starter Grip

- 11. If the engine has started, slowly return the choke lever (Figure 24) to the "OPEN" position. If the engine has not started, repeat steps 1 through 5.
- 12. Before the saw is placed into operation, run the engine for several minutes. Check for fuel leaks and noises that would associate with loose guards and/or covers.
- 13. Gradually move the engine throttle lever toward the fast position. (All cutting should be done at full throttle) Squeeze the water pump priming bulb (Figure 27) until water begins to flow through the water lines. If the pump is working correctly, the cutting blade should be covered with a steady water mist. This will keep the blade cool.

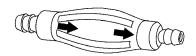


Figure 27. Priming Bulb

#### WARNING

ALWAYS cut with the saw at FULL THROTTLE. Attempting to cut with the saw at less than full throttle could cause the blade to bind or stop abruptly in the slab resulting in serious injury to the operator or others in the area.

#### **DANGER**

**ALWAYS** be alert to the fact that there is a rotating blade on the saw and be extremely aware of your body position — especially your hands in relationship to the rotating blade. The possibility exists of severe bodily harm or even death if your body comes in contact with the rotating saw blade.

- 14. Push the *conveyor cart* with the material, slowly and evenly until the cut is complete. Move the cart back and remove the cut pieces.
- 15. Avoid overloading the engine when cutting. In the event that the engine becomes overloaded, turn the engine ON/OFF switch to the OFF position and allow the engine to *cool* before attempting to restart.

#### **STOPPING**



#### **CAUTION**



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

- 1. Set the engine throttle lever to **slow** speed and let the engine idle for 3-5 minutes.
- 2. Turn the engine **ON/OFF** switch to the "**OFF**" position.
- 3. Place the fuel valve lever in the *closed* position.
- 4. Let the engine cool.
- 5. Using a soft cloth, clean any excess debris or residue that may have accumulated on the saw.
- 6. Store saw in a clean, dry location where it will be out of the reach of children.

#### **MAINTENANCE**

A good preventive maintenance program of regular inspection and care will increase life and improve the performance of the saw and cutting blades.

#### WARNING

Whenever cleaning, adjusting or lubricating any part of the saw, MAKE CERTAIN to do the following:

#### **Electric Powered Saws**

- Place power **ON/OFF** switch to the **OFF** position.
- Disconnect power cord from AC source.
- NEVER attempt to check the V-belt with the engine running. Severe bodily injury can occur.

#### **Gasoline Powered Saws**

- Turn the engine switch to the "OFF" position, disconnect the spark plug wire and secure it away from the spark plug.
- NEVER attempt to check the V-belt with the engine running. Severe bodily injury can occur

#### **BASIC MAINTENANCE**

- 1. Tighten loose nuts or screws and replace any cracked or broken parts.
- 2. Clean the machine frequently. **DO NOT** use aggressive cleaners (i.e. containing solvents). DO NOT use high high-pressure water jets, aggressive detergents or solutions and liquids with a temperature exceeding 86°. Use a fluff-free cloth only. Use a cloth which may be lightly moistened only for removing dust and dirt. Hard packed dirt can be removed with a soft brush.

**DO NOT** let any water/cleaning liquid/vapor penetrate into the electric motor, connectors/plugs, switches, etc. Cover all apertures, holes in the housing, connectors or plugs, etc. or seal them with adhesive tape.

Use a soft, low-pressure water jet and a brush to rinse dirt and incrustations away. Be particularly careful when near hazardous parts of the machine (e.g. switch, motor). Clean the motor and switches only by wiping with a moist cloth.

3. Clean the sludge that accumulates on the bottom of the water tray at least once a day and refill with clean water. It may be necessary to clean the tray out twice a day in heavy cutting. The sludge is abrasive and will shorten the life of the blades.

- 4. Keep the drive belts tight. It is very important to replace worn belts as soon as possible.
  - a. Electric Powered Saws To adjust belt tension, loosen the four (4) motor mounting bolts and remove the belt guard. Tighten the two (2) adjusting nuts on the back of the motor plate to increase the tension. Proper belt tension is 4-5 lbs. of force with approximately 3/16" of belt deflection measured at a point midway between the pulleys. Tighten the motor mounting bolts and re-attach the belt quard.
  - b. Gasoline Powered Saws To adjust belt tension, loosen the four (4) jackshaft mounting bolts and remove the belt quard. Screw the adjusting bolt back to increase the tension. Proper belt tension is 4-5 lbs. of force with approximately 1/8" of belt deflection measured at a point halfway between the pulleys.

#### **NOTICE**

It is very important that the jackshaft and blade arbor remain parallel to each other. This can be accomplished by using the adjusting bolt located on the engine mounting plate to help keep the jackshaft from cocking...

Tighten the jackshaft bearing mounting bolts (4) that are located under the weldment. Next, loosen the (4) engine mounting bolts and remove the belt guard. Tighten the (2) nuts on the engine tensioning bolts that are at the rear of the weldment. Proper belt tension is 4-5 lbs. of force with approximately 1/8" of belt deflection measured at a point halfway between the pulleys. Tighten the engine mounting bolts.

Pull on the recoil to make certain everything moves smoothly and freely. If the recoil pulls hard, the belts are probably adjusted a little too tight. Belt tensions should be readjusted before continuing. Attach the belt quards to the saw. Make certain that the quards do not come in contact with the belts or each other. There are slots in the guard mounting plates so adjustments can be made if necessary. Tighten all bolts on the guards and their mounts.

5. MAKE CERTAIN that the cutting head is aligned properly. Misalignment can adversely affect blade life.

- The blade flanges must have a diameter of 4".
   Undersize flanges will reduce blade life and cause breakage. Therefore, they should be replaced at once.
- Cutting blades must fit the arbor snugly. This is very important with diamond blades as pounding will occur and serious blade damage can result. If the arbor shoulder of the inner blade flange is grooved from blade slippage, the flange must be replaced.
- 8. Inspect the conveyor cart periodically. Replace the wood insert and wheels when necessary.
- 9. Lubricate spindle bearings after each day's operation. When dry cutting, grease bearings several times during the day's operation to protect them from the dust.
- Replace the spindle bearings as soon as they begin to make any strange noises. Worn bearings can destroy blades very quickly.
- 11. Grease pivot bearings periodically.

#### **CUTTING HEAD ALIGNMENT (BLADE)**

Make certain the *cutting head* is aligned properly. Misalignment can adversely affect blade life. The motor/ engine plate is slotted so adjustment to the blade can be made as needed. The left side has vertical slots, and the right side has horizontal slots. To adjust the cutting head either vertical or horizontally perform the following:

#### **VERTICAL ADJUSTMENT**

Remove the motor or engine from the mounting plate. Loosen the pivot bearing bolts (2) on the left side of the mounting plate. Move the pivot bearing to the extreme top of the slots in the mounting plate. Thread a 3/8-16 bolt (adjusting bolt) down through the hole in the top of the mounting plate. Tighten the bolt against the bearing.

This will raise the mounting plate. Continue to tighten the bolt until the blade is perpendicular to the conveyor cart. Tighten the pivot bearing bolts. Remove the adjusting bolt and reassemble.

#### HORIZONTAL ADJUSTMENT

Loosen the pivot bearings (2) on the right-side of the mounting plate. Slide the pivot bearing forward or backwards as needed, until the blade is parallel with the conveyor cart. Tighten the pivot bearing bolts.

#### **BEARING LUBRICATION CARE**

There are two (2) grease points (Figure 28) for the MP1 *gasoline* model saw. Use only Premium Lithium 12 based Grease, conforming to NLG1 Grade #2 consistency. Grease *daily*.

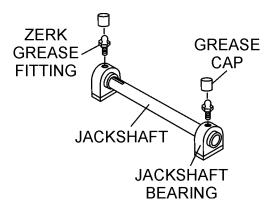


Figure 28. Zerk Fittings Lubrication

#### **CUTTING HEAD REMOVAL**

To remove the cutting head (Figure 29) perform the following:

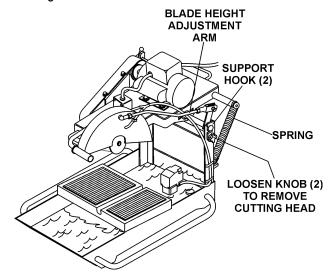


Figure 29. Cutting Head Removal

- 1. Loosen the knobs (2) located on each side of uprights.
- 2. Slide the hooks (2) up and away from the pivot shaft.
- 3. Remove the handle lock that fastens the blade height adjusting arm to the motor/engine plate. This is accomplished by simply removing the cotter pin.
- 4. Disconnect the spring from the pivot shaft by raising the cutting head until the tension is relieved from the spring.

### **MAINTENANCE**

Use Figure 5 as a general maintenance guideline when servicing your engine. For more detail engine maintenance information, refer to the engine owner's manual supplied with your engine.

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		Χ				
Air Cleaner	Check	Χ					
All Cleaner	Change			X (1)			
All Nuts and Bolts	Re-tighten if necessary	Х					
Charle Dlugg	Check/Clean				Х		
Spark Plugs	Replace						Х
Cooling Fins	Check				Х		
Spark Arrester	Clean					Χ	
Fuel Tank	Clean					Χ	
Fuel Filter	Check					Χ	
Idle Speed	Check/ Adjust					X (2)	
Valve Clearance	Check/ Adjust						X (2)
Fuel Lines	Check	Every 2 years (replace if necessary) (2)					

<sup>(1)</sup> Service more frequently when used in **DUSTY** areas.

<sup>(2)</sup> These items should be serviced by your service dealer, unless you have the proper tools and are mechanically proficient. Refer to the HONDA Shop Manual for service procedures.

<sup>(3)</sup> For commercial use, log hours of operation to determine proper maintenance intervals.

Perform the scheduled maintenance procedures as defined by Figure 5 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**

- 1. Remove the fuel filter cap and clean the inside of the fuel tank.
- 2. Remove or clean the filter at the bottom of the tank.
- 3. Remove and clean the spark plug (Figure 30), 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.

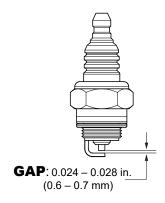


Figure 30. Spark Plug Gap

#### **ENGINE OIL**

- 1. Drain the engine oil when the oil is warm as shown in Figure 31.
- 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 1. For engine oil capacity, see Table 2 (Engine Specifications). DO NOT overfill.
- 4. Install drain bolt with sealing washer and tighten securely.

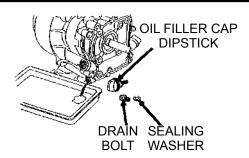


Figure 31. Engine Oil (Draining)

#### **ENGINE AIR CLEANER**

Remove the air cleaner cover and foam filter element as shown in Figure 32.

Tap the paper filter element (Figure 32) several times on a hard surface to remove dirt, or blow compressed air [not exceeding 30 psi (207 kPa, 2.1 kgf/cm2)] through the filter element from the air cleaner case side. **NEVER** brush off dirt. Brushing will force dirt into the fibers. Replace the paper filter element if it is excessively dirty.

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.



**DO NOT** use gasoline as a cleaning solvent to avoid creating the risk of fire or an explosion.

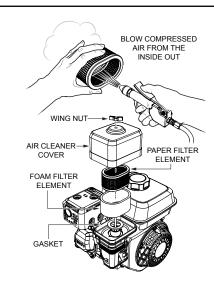
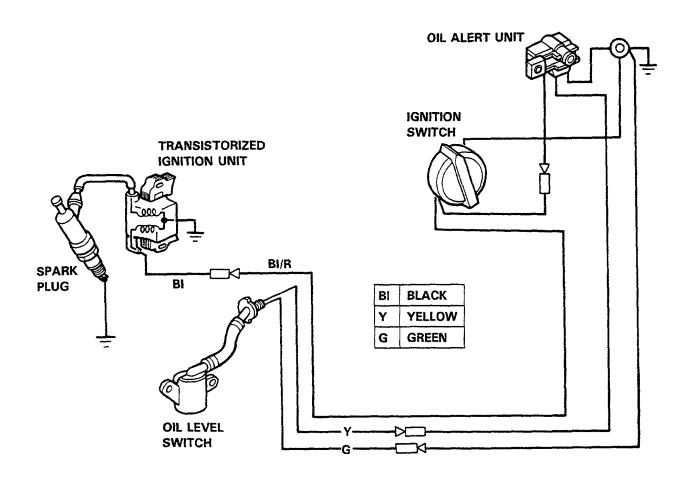
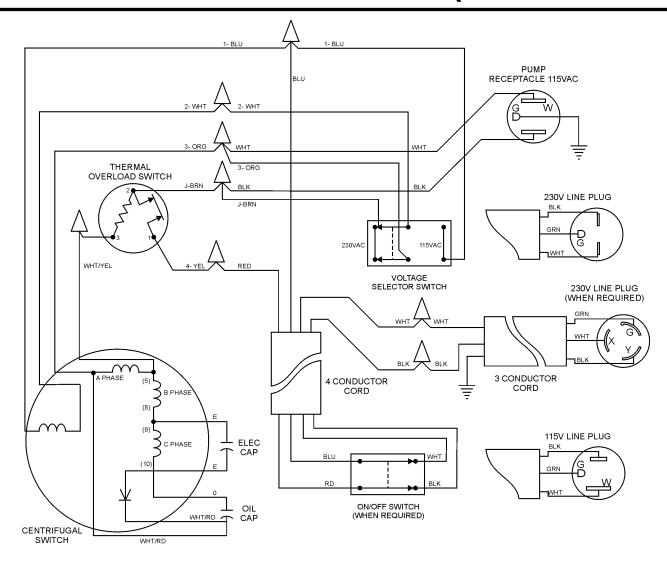


Figure 32. Engine Air Cleaner



## **WIRING DIAGRAM (ELECTRIC MOTOR)**



#### NOTES:

- CONNECTIONS ARE SHOWN FOR CC ROTATION FACING END OPPOSITE SHAFT EXTENSION (STD). FOR CW ROTATION, INTERCHANGE (5) AND (8) INTERNALLY, AND INTERCHANGE (9) AND (10) INTERNALLY.
- MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
- 3. USE 2PDT VOLTAGE CHANGE SWITCH. CONTACTS ARE SHOWN IN <u>HIGH-VOLT</u> POSITION. VIEW IS FROM TERMINAL SIDE.
- 115V SIDE OF SWITCH GUARD SHOULD BE ON THE SAME SIDE OF SWITCH AS ANTI-ROTATION SLOT.
- LEAD COLORS ARE OPTIONAL. LEADS MUST <u>ALWAYS</u> BE NUMBERED AS SHOWN.

COLOR CODE					
	WIRE COLOR		WIRE COLOR		
BLK	BLACK	RD	RED		
BLU	BLUE	WHT	WHITE		
BR	BROWN	Υ	YELLOW		
GRN	GREEN	LB	LIGHT BLUE		
GR	GRAY	LG	LIGHT GREEN		
٧	VIOLET	ORG	ORANGE		
Р	PINK				

# **TROUBLESHOOTING (BLADE)**

Troubleshooting (Blades)				
Symptom	Possible Problem	Solution		
Blade slows or Stops cutting,still remains on blade.	Blade too hard for the material being cut?	Consult Dealer or Multiquip for correct blade. Try cutting very soft material (sandstone, silica brick, cinder block) to "Redress" the blade.		
	Engine Torgue diminished because of loose V-Belts?	Tighten and/or replace V-Belts.		
	Insufficent Engine power?	Check Throttle setting. Check Engine horespower.		
	Improper direction of rotation?	Check that the blade is oriented and rotational arrow points are in a "Down-Cutting" direction.		
	Blade is slipping on the blade shaft?	Check that the blade and flange pin are properly installed on the blade shaft.		
Blade does not cut straight and/or true.	Blade being used on misaligned saw?	Check blade shaft bearings and alignment integrity.		
	Blade is excessively hard for the material being cut?	Check specifications of the blade with the material being cut. Consult Dealer or Multiquip for information.		
	Blade being used at improper RPM?	Ensure blade surface feet per minute speed (SFPM) is approximately 6,000.		
	Blade improperly mounted on arbor shoulders and flanges?	Ensure blade is properly affixed on the blade shaft.		
	Excessive force applied to blade while cutting?	Do not force the blade in the cut. Apply a slow, steady pace to sawing.		
Blade discoloring, crackling and/or wearing excessively.	Blade too hard for the material being cut?	Consult Dealer or Multiquip for correct blade. Try cutting very soft material (sandstone, silica brick, cinder block) to "Redress" the blade.		
	Blade improperly mounted on arbor shoulders and flanges?	Ensure blade is properly affixed on the blade shaft. Ensure the blade flanges are clean and free of debris.		
	Blade not receiving enough cooling water?	Ensure proper flow and volume of water is provided for blades.		
	Abor hole out of round?	Ensure blade is properly affixed on the blade shaft.		
	Incorrect blade chosen for material being cut?	Check specifications of the blade with the material being cut. Consult Dealer or Multiquip for information.		
	Excessive force applied to blade while cutting?	Do not force the blade in the cut. Apply a slow, steady pace to sawing.		

# **TROUBLESHOOTING (ELECTRIC MOTOR)**

Troubleshooting (Electric Motor)				
Symptom	Possible Cause	Solution		
Electric motor will not start.	Is there power?	Check power source. Check reset button.		
	Is power cable plugged in?	Plug in power cable.		
	Is ON/OFF switch placed in ON position?	Place ON/OFF switch in ON position.		
	Defective cable?	Check cable.		
Electric motor continuously stops.	Reset button OK?	Check power source.		
Electric motor RPM's too low.	Low voltage?	Check input voltage.		
Electric motor RPM's too high.	High voltage?	Check input voltage.		

# **TROUBLESHOOTING (ENGINE)**

Troubleshooting (Engine)				
Symptom	Possible Problem	Solution		
Difficult to start, fuel is available, but no spark at spark plug.	Spark plug bridging?	Check gap, insulation or replace spark plug.		
	Carbon deposit on spark plug?	Clean or replace spark plug.		
	Short circuit due to deficient spark plug insulation?	Check spark plug insulation, replace if worn.		
	Improper spark plug gap?	Set to proper gap.		
	Spark plug is red?	Check transistor ignition unit.		
	Spark plug is bluish white?	If insufficient compression, repair or replace engine. If injected air leaking, correct leak. If carburetor jets clogged, clean carburetor.		
	No spark present at tip of spark plug?	Check if transistor ignition unit is broken, and replace defective unit. Check if voltage cord cracked or broken and replace. Check if spark plug if fouled and replace.		
	No oil?	Add oil as required.		
	Oil pressure alarm lamp blinks upon starting? (if applicable)	Check automatic shutdown circuit, "oil sensor". (if applicable)		
	ON/OFF switch is shorted?	Check switch wiring, replace switch.		
	Ignition coil defective?	Replace ignition coil.		
Difficult to start, fuel is available, and spark is present at the spark plug.	Improper spark gap, points dirty?	Set correct spark gap and clean points.		
	Condenser insulation worn or short circuiting?	Replace condenser.		
	Spark plug wire broken or short circuiting?	Replace defective spark plug wiring.		
Difficult to start, fuel is available, spark is present and compression is normal.	Wrong fuel type?	Flush fuel system, replace with correct type of fuel.		
	Water or dust in fuel system?	Flush fuel system.		
	Air cleaner dirty?	Clean or replace air cleaner.		
	Choke open?	Close choke.		
	Suction/exhaust valve stuck or protruded?	Reseat valves.		
Difficult to start fuel is evailable enact is	Piston ring and/or cylinder worn?	Replace piston rings and/or piston.		
Difficult to start, fuel is available, spark is present and compression is low.	Cylinder head and/or spark plug not tightened properly?	Torque cylinder head bolts and spark plug.		
	Head gasket and/or spark plug gasket damaged?	Replace head and spark plug gaskets.		
No fuel present at carburetor.	No fuel in fuel tank?	Fill with correct type of fuel.		
	Fuel cock does not open properly?	Apply lubricant to loosen fuel cock lever, replace if necessary.		
	Fuel filter/lines clogged?	Replace fuel filter.		
	Fuel tank cap breather hole clogged?	Clean or replace fuel tank cap.		
	Air in fuel line?	Bleed fuel line.		

#### **NOTES**

#### **EXPLANATION OF CODES IN REMARKS COLUMN**

The following section explains the different symbols and remarks used in the Parts section of this manual. Use the help numbers found on the back page of the manual if there are any questions.

#### **NOTICE**

The contents and part numbers listed in the parts section are subject to change **without notice**. Multiquip does not guarantee the availability of the parts listed.

#### SAMPLE PARTS LIST

<u>art name</u>	<u>QTY.</u>	<u>REMARKS</u>
OLT	1	.INCLUDES ITEMS W/%
/ASHER, 1/4 IN.		NOT SOLD SEPARATELY
/ASHER, 3/8 IN.	1	.MQ-45T ONLY
OSE	.A/R	.MAKE LOCALLY
EARING	1	.S/N 2345B AND ABOVE
(	OLT 'ASHER, 1/4 IN. 'ASHER, 3/8 IN. OSE	'ASHER, 1/4 IN 'ASHER, 3/8 IN1 OSEA/R

#### NO. Column

**Unique Symbols** — All items with same unique symbol (@, #, +, %, or >) in the number column belong to the same assembly or kit, which is indicated by a note in the "Remarks" column.

**Duplicate Item Numbers** — Duplicate numbers indicate multiple part numbers, which are in effect for the same general item, such as different size saw blade guards in use or a part that has been updated on newer versions of the same machine.

#### **NOTICE**

When ordering a part that has more than one item number listed, check the remarks column for help in determining the proper part to order.

#### PART NO. Column

**Numbers Used** — Part numbers can be indicated by a number, a blank entry, or TBD.

TBD (To Be Determined) is generally used to show a part that has not been assigned a formal part number at the time of publication.

A blank entry generally indicates that the item is not sold separately or is not sold by Multiquip. Other entries will be clarified in the "Remarks" Column.

#### QTY. Column

**Numbers Used** — Item quantity can be indicated by a number, a blank entry, or A/R.

A/R (As Required) is generally used for hoses or other parts that are sold in bulk and cut to length.

A blank entry generally indicates that the item is not sold separately. Other entries will be clarified in the "Remarks" Column.

#### **REMARKS Column**

Some of the most common notes found in the "Remarks" Column are listed below. Other additional notes needed to describe the item can also be shown.

**Assembly/Kit** — All items on the parts list with the same unique symbol will be included when this item is purchased.

Indicated by:

"INCLUDES ITEMS W/(unique symbol)"

**Serial Number Break** — Used to list an effective serial number range where a particular part is used.

Indicated by:

"S/N XXXXX AND BELOW"

"S/N XXXX AND ABOVE"

"S/N XXXX TO S/N XXX"

**Specific Model Number Use** — Indicates that the part is used only with the specific model number or model number variant listed. It can also be used to show a part is NOT used on a specific model or model number variant.

Indicated by:

"XXXXX ONLY"

"NOT USED ON XXXX"

"Make/Obtain Locally" — Indicates that the part can be purchased at any hardware shop or made out of available items. Examples include battery cables, shims, and certain washers and nuts.

"Not Sold Separately" — Indicates that an item cannot be purchased as a separate item and is either part of an assembly/kit that can be purchased, or is not available for sale through Multiquip.

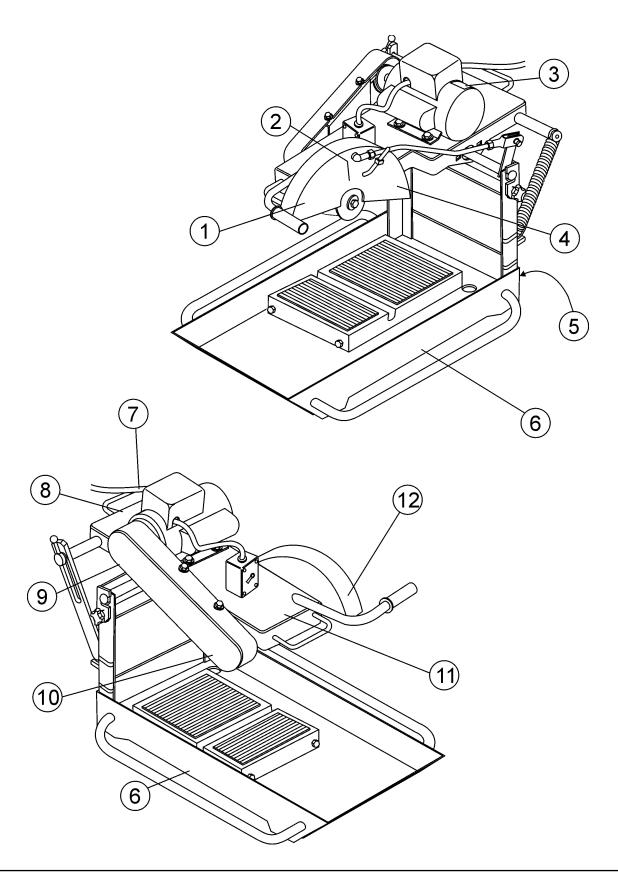
# MP1 MASONRY SAW 1 to 3 units

#### **Electric Motor Models**

QTY.	P/N	DESCRIPTION
2	.15503	.KNOB, COMFORT GRIP
2	.10136	.WASHER, FLAT 3/8
2	.0166 A	.WASHER, LOCK 3/8
1	.23783-001	.WRENCH, HEX 3/4
4	.521003	V-BELT, ELECTRIC MOTOR AX-34
1	.23843-001	WATER PUMP, ELECTRIC MOTOR
4 FT	.23867-002	. VINYL WATER TUBING
1	.24301-501	.CONVEYOR CART
2	.29713-001	BLADE SHAFT BEARING
2	.8136	BLADE SCREW
2	.5054 A	.WASHER, LOCK
2	.23832-001	OUTER BLADE FLANGE
2	.23846-001	OUTER BLADE FLANGE
2	.29719-001	.HANDLE LOCK

# Gasoline Engine Model

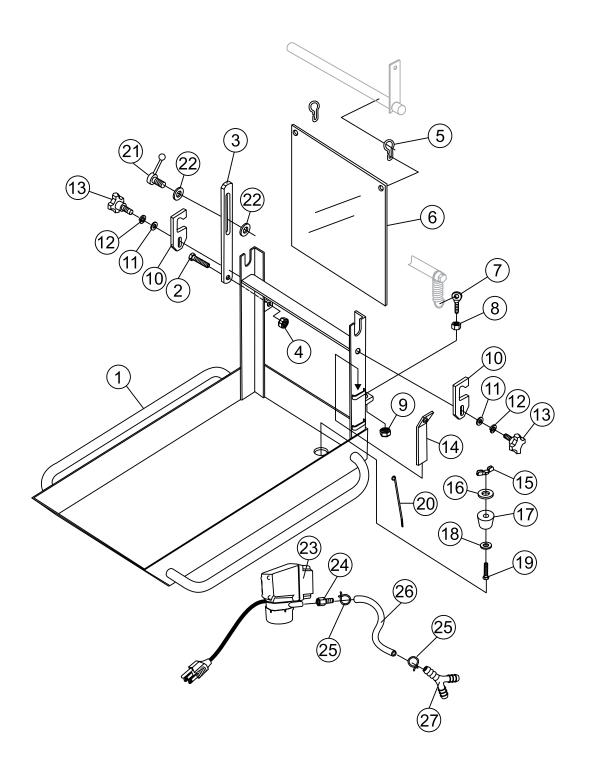
Qty.	P/N	Description
2	.15503	.KNOB, COMFORT GRIP
2	.28321-001	BLADE SHAFT BEARING
2	.8136	.BLADE SCREW
2	.5054 A	. WASHER, LOCK
		.WASHER, FLAT 3/8
		. WASHER, LOCK 3/8
1	.23783-001	.WRENCH, HEX 3/4
4	.16779-012	.V-BELT, DRIVE, 3VX250
4	.16779-006	V-BELT, JACK SHAFT 3VX300
1	.25807-502	. WATER PUMP KIT
4 FT	.23867-002	. VINYL WATER TUBING
1	.25685-001	.STRAINER
1	.24301-501	.CONVEYOR CART
2	.23832-001	OUTER BLADE FLANGE
2	.23846-001	OUTER BLADE FLANGE
2	.29719-001	.HANDLE LOCK
3	.17210ZE1505	.ELEMENT, AIR CLEANER
3	.9807956846	.SPARK PLUG
1	.17620ZH7023	.CAP, FUEL FILLER
1	.28462ZH8003	ROPE, RECOIL STARTER



PAGE 40 — MP1 SERIES MASONRY SAW • OPERATION AND PARTS MANUAL — REV. #3 (10/08/19)

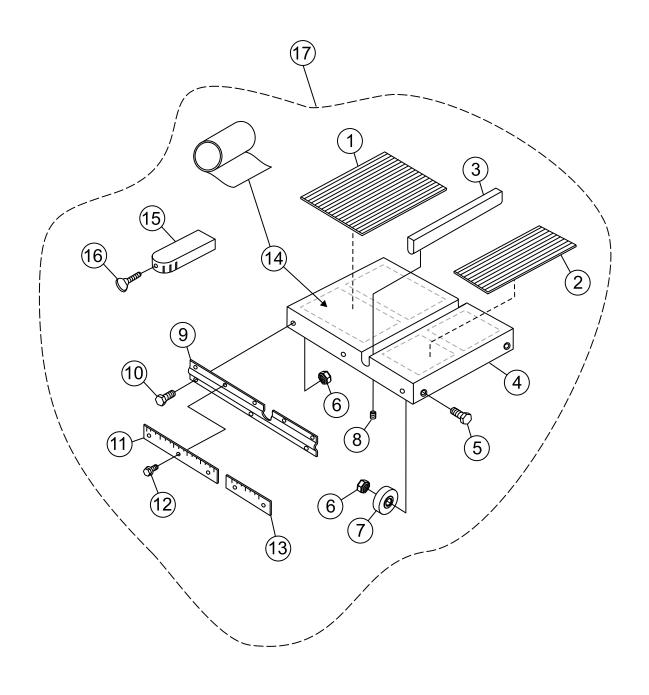
### NAME PLATE AND DECALS

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	25249-001	DECAL, KEEP HANDS CLEAR	1	
2	25678	DECAL, CCW ROTATION	1	
3	25139-001	DECAL, EXTENSION CORD SIZE	1	ELECTRIC MODELS ONLY
4	38213	DECAL, MULTIQUIP BLACK	1	
5	13118	DECAL, POWDER COATED	1	
6	38240	DECAL, MP1	2	
7	25215-001	DECAL, ELECTRIC CORD WARNING	1	ELECTRIC MODELS ONLY
8		PLATE, MODEL/SERIAL NUMBER	1	CONTACT PARTS DEPT.
9	25349-001	DECAL, GUARD WARNING	1	
10	38239	DECAL, MULTIQUIP	1	
11	20525	DECAL, PROP 65	1	
12	22122-001	DECAL, SERIOUS INJURY WARNING	1	



#### TRAY ASSY.

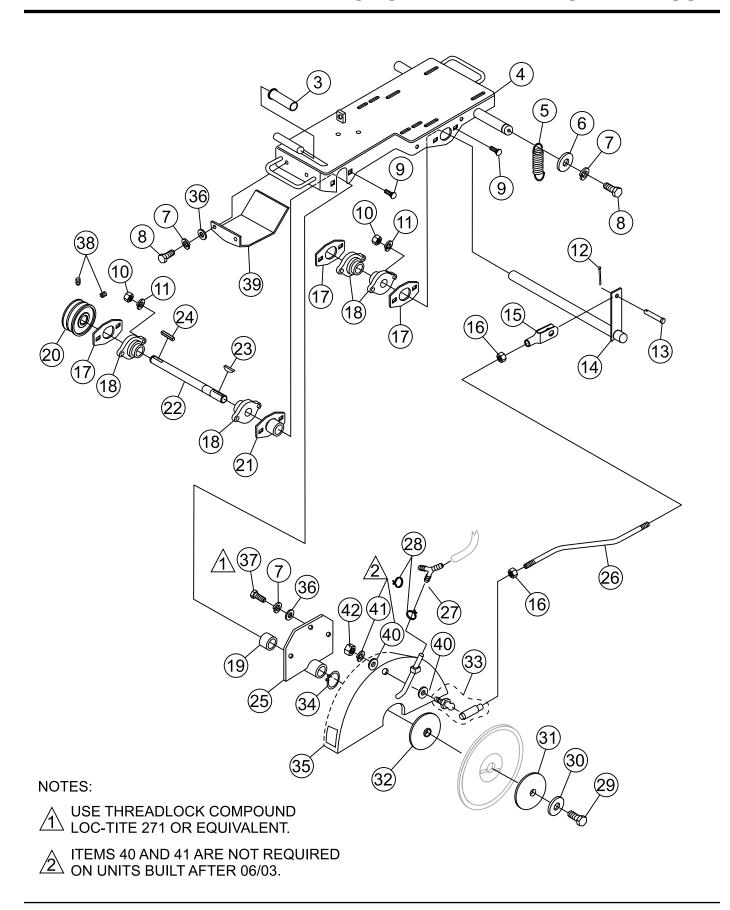
NO.	PART NO.	PART NAME	QTY.	REMARKS
1	29695-351	TRAY, WATER	1	
2	0105	SCREW. HHC 5/16 - 18 X 1-1/2	1	
3	29685-001	ARM, BLADE HEIGHT ADJST.	1	
4	08233-005	NUT, LOCK 5/16 - 18 GRIPCO	1	
5	23853-001	SNAP HOOK, SHOWER CURTAIN	2	
6	23848-001	CURTAIN, SPLASH	1	
7	23858-001	BOLT, WIRE EYE	1	
8	1456	NUT, HEX FINISH 3/8 - 16	1	
9	08233-006	NUT, LOCK 3/8 - 16 GRIPCO	1	
10	29684-001	HOOK	2	
11	10136	WASHER, FLAT 3/8	2	
12	0166 A	WASHER, LOCK 3/8	5	
13	15503	KNOB, COMFORT GRIP	2	
14	23783-001	WRENCH, HEX 3/4	1	
15	2509	NUT, WING 1/4 - 20 PLTD	1	
16	12391-004	WASHER, FLAT 1/4 AN970-4	1	
17	23847-001	RUBBER STOPPER	1	
18	0948	WASHER, FLAT SAE 1/4	1	
19	5277	SCREW, HHC 1/4 - 20 X 1-1/2	1	
20	1622	TIE, CABLE	1	
21	29719-001	HANDLE LOCK	1	
22	0447	WASHER, FLAT SAE 1/2	2	
23	23843-001	WATER PUMP, ELECTRIC	1	
24	26077-001	FITTING, BRASS 6 BARB 1/4FP	1	
25	12694-001	HOSE CLAMP	2	
26	23867-002	TUBING, VINYL 5/16	4 FT.	
27	14233-002	Y-FITTING	1	



### **CART ASSY.**

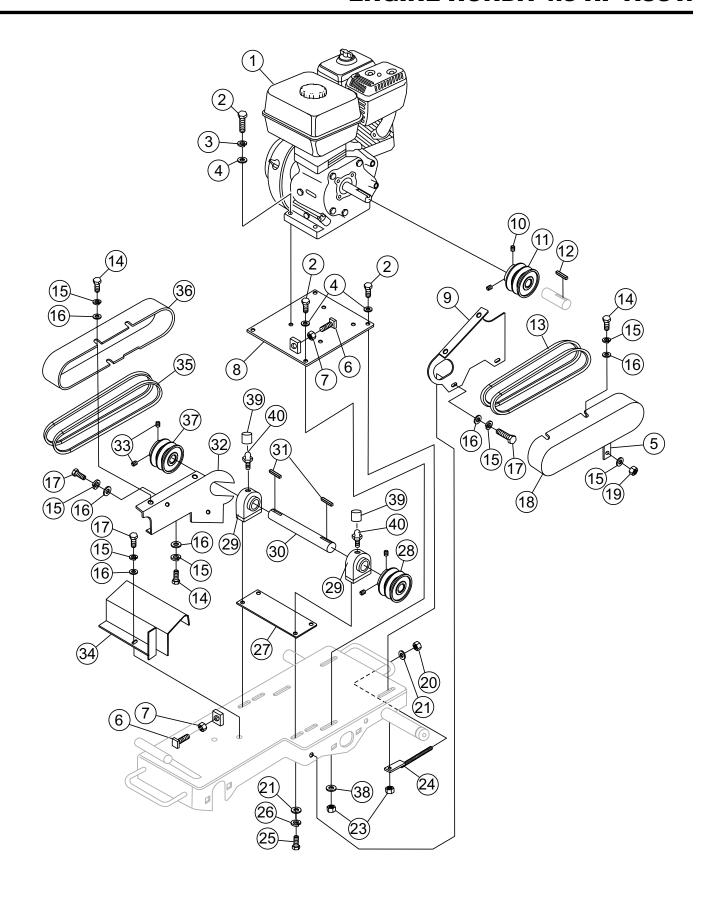
NO.	PART NO.	PART NAME	QTY.	REMARKS
1*	23804-002	MAT, RUBBER V-RIB 11.91 X 10.10	1	
2.*	23804-001	MAT, RUBBER V-RIB 5.79 X 10.10	1	
2° 3*	24569-001	INSERT	1	
4 <b>*</b>	24289-001	CART, CONVEYOR	1	
5 <b>*</b>	0730	SCREW, HHC 1/4 - 20 X 1	4	
4 5 6 7 8 *	08233-004	NUT, LOCK 1/4 - 20 GRIPCO	7	
7.	23793-001	WHEEL, CONVEYOR CART	4	
8.	23796-001	SCREW, RD HD	2	
9	24300-001	SIDE CONVEYOR	1	
10*	0131 A	SCREW, HHC 1/4 - 20 X 3/4	3	
11*	23807-001	RULER, R-L 12 IN.	1	
12*	23866-001	SCREW, HHST 10 32 X 1/2	5	
13*	23808-001	RULER, SHORT L-R X 5 IN.	1	
14*	26076-301	TAPE, ROLL ADHESIVE TRNSFR	7 FT.	
15*	24288-001	GUIDE, CUTTING	1	
16 <sup>*</sup>	08622-012	SCREW, THUMB 5/16 - 18 X 1-1/2	1	т.
17	24301-501	CART ASSEMBLY	1	INCLUDES ITEMS W/*

#### **MOTOR PLATE AND SHAFT ASSY.**



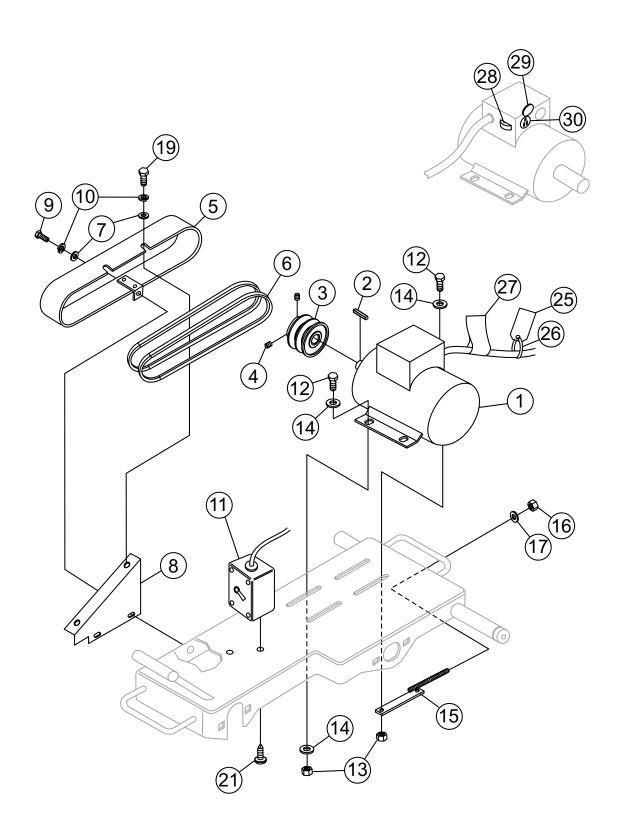
#### **MOTOR PLATE AND SHAFT ASSY.**

<u>NO.</u>	PART NO.	PART NAME	QTY.	<u>REMARKS</u>
3	26138-001	GRIP, HAND	1	
4	29707-351	PLATE, ELECTRIC MOTOR	1	
4	29708-351	PLATE, GASOLINE ENGINE	1	
5	23846-001	SPRING, 6 X 1.5 X 1.77 WIRE	1	
6	12391-004	WASHER, FLAT 1/4 AN970-4	1	
7	0181 B	WASHER, LOCK 1/4	3	
8	0131 A	SCREW, HHC 1/4 - 20 X 3/4	3	
9	17985-012	· · · · · · · · · · · · · · · · · · ·	8	
10	1456	NUT, HEX FINISH 3/8 - 16	8	
11	0166 A	WASHER, LOCK 3/8 MED	8	
12	0683	PIN, COTTER	1	
13	08326-005	PIN, CLEVIS 5/16 X 1	1	
14	29672-351	PIVOT BAR	1	
15	08327-009	YOKE END, 5/16 - 24 X 2.25	1	
16	07038-005	NUT, HEX JAM 5/16 - 24	3	
17	29678-001	SPACER	3	
18	29713-001	BEARING, FLANGE 1/8 ID	4	
19	29712-001	BUSHING	1	
20	29711-001	PULLEY, 2MA30X 7/8 PULLEY, 2F3V30X 7/8	1	ELECTRIC MODELS
20	28322-004	PULLEY, 2F3V30X 7/8	11	GAS MODELS
21	29680-351	PIVOT	1	
22	29697-001	SHAFT, SPINDLE BLADE	1	
23	07011-017	KEY, WOODRUFF #403	1	
24	0627	KEY, 3/16 X 1-1/4	1	
25	29683-351	MOUNT, BLADE GUARD	1	
26	29699-001	TIE ROD ELECTRIC MOTOR	1	
26	29715-001	TIE ROD GASOLINE ENGINE	1	
27	14233-002	Y-FITTING	1	
28	12694-001	CLAMP, HOSE	2	
29	8136	SCREW, HHC 1/2 - 20 X 1-1/2GR5	2	
30	5054 A	WASHER, LOCK 1/2 MED	1	
31	23832-001	FLANGE, OUTER	1	
32	29709-001	FLANGE, INNER	1	
33	23844-001	BALL JOINT - QD	1	
34	17510-003	SNAP RING	1	
35	23819-501	BLADE GUARD	1	
36	0948	WASHER, FLAT 1/4	5	
37	0730	SCREW, 1/4 - 20 X 1	3	
38	08696-008	SCREW, SET	2	
39	29727-351	GUARD, SPINDLE	1	
40	0300 B	WASHER, FLAT 5/16	2	NOTUSEDONUNITS AFTER 06/03
41	0161 C	WASHER, LOCK 5/16		
42	07038-005	NUT, HEX JAM 5/16-24 PLTD	1	



## **ENGINE HONDA 4.8 HP ASSY.**

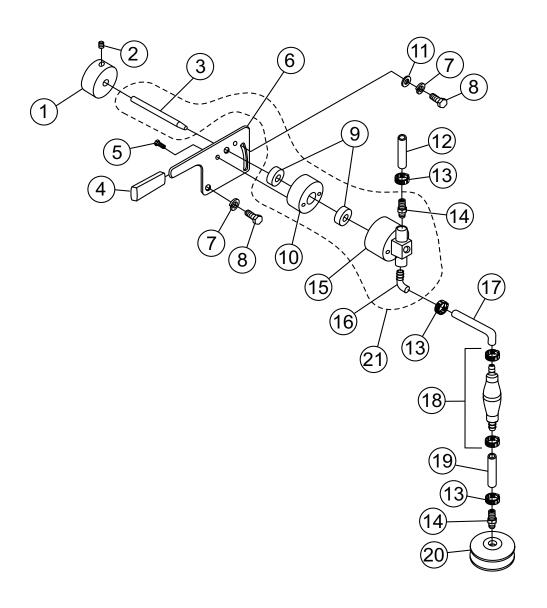
<u>NO.</u>	PART NO.	PART NAME	QTY.	<u>REMARKS</u>
1	22052-404	ENGINE, HONDA 4.8 H.P.	1	
2	2623	SCREW, HHC 5/16 - 18 X 1-1/4	8	
3	0161 C	WASHER, LOCK 5/16	4	
4	0300 B	WASHER, FLAT 5/16	4	
5	29724-001	BRACKET, MOUNTING	1	
6	27058-001	SCREW, SQHS 3/8 - 16 X 2	2	
7	1456	NUT, HEX 3/8 - 16	2	
8	28316-351	PLATE, ENGINE MOUNT	1	
9	29716-351	BRACKET, REAR BELT GUARD	1	
10	08696-006	SCREW, SHS 1/4 - 20 X 3/8	2	
11	28322-002	PULLEY, ENGINE	1	
12	0627	KEY, 3/16 X 1-1/4	1	
13	16779-012	BELT, 3VX250	2	
14	1579	SCREW, HHC 1/4 - 20 X 1/2	5	
15	0181 B	WASHER, LOCK 1/4	11	
16	0948	WASHER, FLAT 1/4	12	
17	0131 A	SCREW, HHC 1/4 - 20 X 3/4	5	
18	29648-501	GUARD, JACKSHAFT BELT	1	
19	10024	NUT, NYLOC 1/4 - 20	1	
20	10133	NUT, NYLOC 3/8 - 16	2	
21	10136	WASHER, FLAT 3/8	6	
23	5283	NUT, NYLOC 5/16 - 18	4	
24	23811-353	BELT TIGHTENER	2	
25	1023	SCREW, HHC 3/8 - 16 X 1-1/4	4	
26	0166 A	WASHER, LOCK 3/8	4	
27	29677-001	PLATE, JACKSHAFT SUPPORT	1	
28	28322-001	PULLEY, JACKSHAFT 2F3V30X1	1	
29	28321-001	BEARING, JACKSHAFT	2	
30	29666-001	JACKSHAFT	1	
31	10057-011	KEY, SQUARE 1/4 X 1-1/4	2	
32	29718-351	MT ASSY., BELT GUARD	1	
33	08697-006	SCREW, SHS 5/16 - 18 X 3/8	4	
34	29669-351	GUARD, JACKSHAFT	1	
35	16779-006	BELT, 3VX300	2	
36	29646-501	GUARD, BELT	1	UNITS WITHOUT PUMP
36	29647-001	GUARD, BELT	1	UNITS WITH PUMP
37	28322-003	PULLEY, JACKSHAFT 2F3V26X1	1	
38	19470	WASHER, FLAT 5/16	2	
39	1162 A	CAP, GREASE ZERK #2 YLW	2	
40	2621	ZERK, GREASE STR 1/4-28	2	
•		,		



### **ELECTRIC MOTOR ASSY.**

NO.	PART NO.	PART NAME	QTY.	<u>REMARKS</u>
1	23871-403	ELECTRIC MOTOR, 1-1/2 HP	1	
1	25140-402	ELECTRIC MOTOR, 2 HP	1	
2	0627	KEY, 3/16 X 1-1/4	2	
3	23863-001	PULLEY (MOTOR)	1	
4	08696-006	SCREW, SHS 1/4 - 20 X 3/8	2	
5	29053-501	BELT GUARD	1	
6	521003	BELT - AX-34	2	
7	0948	WASHER, FLAT 1/4	4	
8	29710-351	MOUNT, BELT GUARD	1	
9	0131 A	SCREW, HHC 1/4 - 20 x 3/4"	2	
10	0181 B	WASHER, LOCK 1/4	4	
11	24037-501	SWITCHBOX ASSEMBLY	1	
12	2623	SCREW, HHC 5/16 -18 x 1-1/4"	4	
13	08233-005	NUT, LOCK 5/16 - 18 GRIPCO	4	
14	19470	WASHER, FLAT 5/16	8	
15	23811-353	BELT TIGHTENER	2	
16	10133	NUT, NYLOC 3/8 - 16	2	
17	10136	WASHER, FLAT 3/8	2	
19	1579	SCREW, HHC 1/4 - 20 x 1/2"	2	
21	23865-001	SCREW, SELF-TAP	2	
25	25139-001	LABEL, CORD SIZE	1	
26	1662	TIE, CABLE	1	
27	25215-001	DECAL, WARNING	1	
28	NS2536	VOLTAGE SELECTOR SWITCH	1	
29	35CB3801A78	COVER, RECEPTACLE	1	
30	LD5196A01	AC RECEPTACLE, PUMP	1	

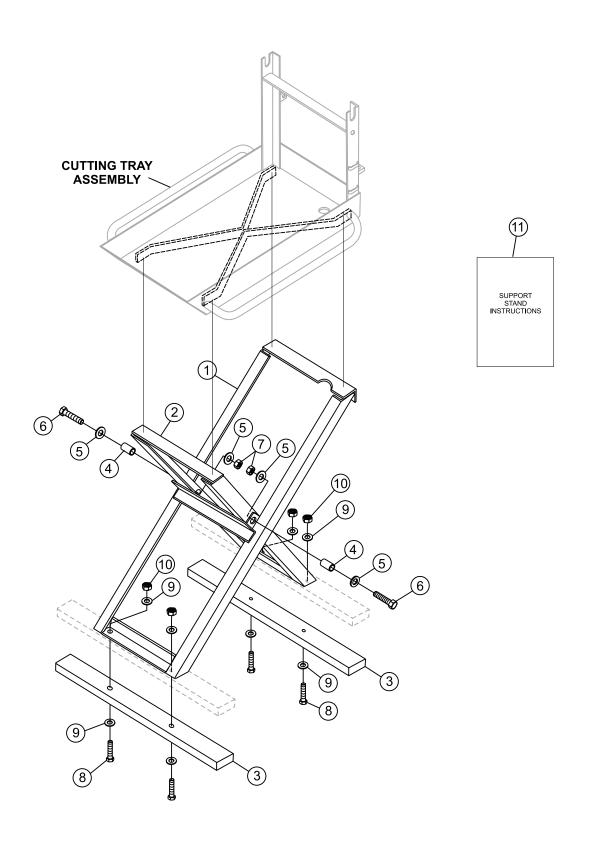
# WATER PUMP ASSY. (GASOLINE ONLY)



# **WATER PUMP ASSY. (GASOLINE ONLY)**

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	28917-001	PULLEY, WATER PUMP 3"	1	
2*	10138	SCREW, SHS 1/4 - 20 X 1/2	1	
3 <sup>^</sup>	28910-001	PUMP SHAFT	1	
4	25799-001	HAND GRIP	1	
5	10120-010	SCREW, RHM 1/4 - 20 X 5/8	2	
6	28964-001	BRACKET, PUMP MOUNT	1	
7	0166 A	WASHER, LOCK 3/8	2	
8 *	0205	SCREW, HHCS 3/8 - 16 x 1"	2	
9 🕹	09189-006	BEARING, BALL	2	
10 ^	28916-001	CAP, PUMP	1	
11	10136	WASHER, FLAT 3/8	1	
12	24892-011	HOSE, 3/8 X 10.5	1	
13*	12696-004	CLAMP, HOSE	4	
14	25874-001	FITTING, PLASTIC STR 6 BARB	2	
15 <sup>*</sup>	25802-001	WATER PUMP	1	
16 <sup>^</sup>	2925	FITTING, PLASTIC 90 6 BARB	1	
17	24892-012	HOSE, WATER 3/8 X 17	1	
18	25875-001	PRIMER BULB W/CLAMP	1	
19	24892-013	HOSE, WATER 3/8 X 6	1	
20	25685-001	STRAINER	1	<b>+</b>
21	25807-502	PUMP ASSEMBLY	1	INCLUDES ITEMS W/*

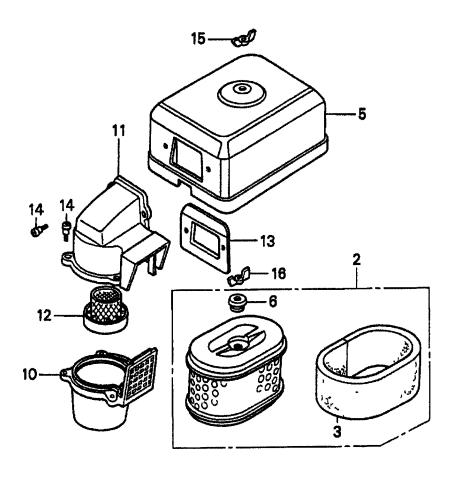
## **SUPPORT STAND ASSY. (OPTION)**

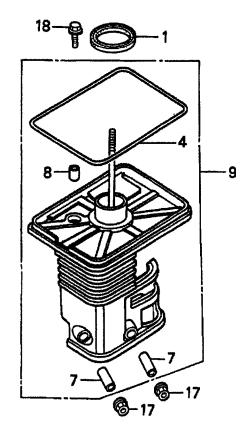


# **SUPPORT STAND ASSY. (OPTION)**

NO.	PART NO.	PART NAME	QTY.	<u>REMARKS</u>
1	23748-351	STAND ASSEMBLY OUTER	1	
2	23747-351	STAND ASSEMBLY INNER	1	
3	25396-001	PLATFORM STAND 2X4 TREX		
		WOOD POLYMER	1	
4	26045-001	BUSHING	2	
5	07030-006	WASHER, FLAT 3/8"	4	
6	06501-010	SCREW, HHCS 3/8-16 X 1-1/4	2	
7	08233-006	LOCK NUT 3/8-16" GRIPCO	2	
8	06500-016	SCREW, HHCS 5/16-18 X2"	4	
9	07030-005	WASHER, FLAT 5/16"	8	
10	08233-005	LOCK NUT 5/16-18" GRIPCO	2	
11	25949	INSTRUCTIONS, SUPPORT STAND	1	

## HONDA GX160K1QXC9 — AIR CLEANER ASSY.

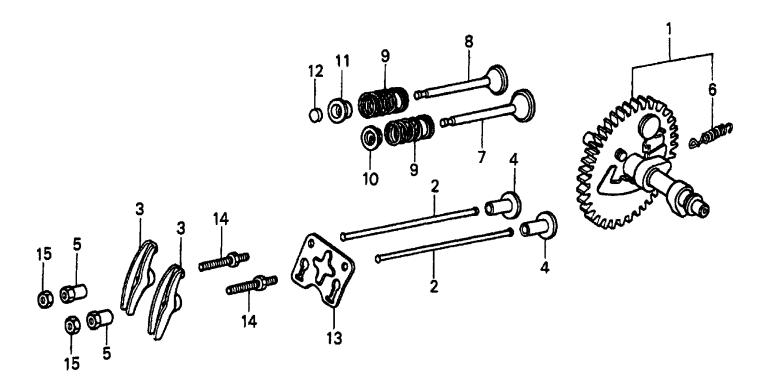




### HONDA GX160K1QXC9 — AIR CLEANER ASSY.

<u>NO.</u>	PART NO.	PART NAME	QTY.	<u>REMARKS</u>
1	16271ZE1000	GASKET, ELBOW ELEMENT, AIR CLEANER (DUAL)	1	INCLUDED ITEMO W/*
2 3*	17210ZE1505 17218ZE1505	FILTER, OUTER		INCLUDES ITEMS W/
		•	1	
4#	17219733010	GASKET, AIR CLEANER COVER	!	
5 6*	17230ZE1841	COVER, AIR CLEANER (DUAL)	1	
6	17232891000	GROMMET, AIR CLEANER	1	
7#	17238ZE7010	COLLAR, AIR CLEANER	2	
8#	17239733000	COLLAR B, AIR CLEANER	1	
9	17410ZE1840	ELBOW, AIR CLEANER	1	INCLUDES ITEMS W/#
10	17470ZE1841	CASE, PRE AIR CLEANER	1	
11	17475ZE1841	CAP, PRE AIR CLEANER	1	
12	17476ZE1841	GUIDE, PRE AIR CLEANER	1	
13	17478ZE1841	PLATE, PRE AIR CLEANER	1	
14	90300GB0900	BOLT, MUDGUARD	5	
15	90325044000	WINGNUT, TOOL BOX SETTING	1	
16	90325044000	WINGNUT, TOOL BOX SETTING	1	
17	9405006000	NUT, FLANGE (6MM)	5	
18	957010602000	BOLT, FLANGE (6X20)	1	

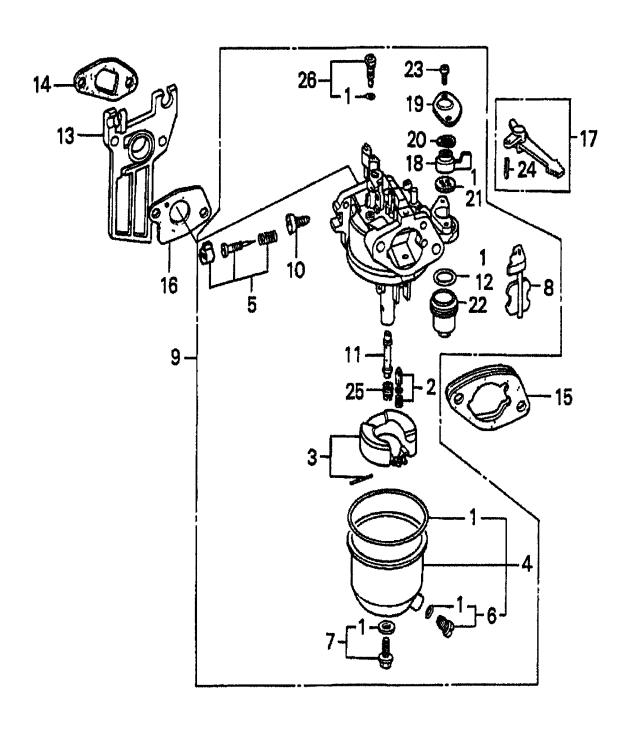
## HONDA GX160K1QXC9 — CAMSHAFT ASSY.



### HONDA GX160K1QXC9 — CAMSHAFT ASSY.

NO. 1	PART NO. 14100ZE1812	PART NAME CAMSHAFT ASSEMBLY	<u>QTY.</u>	REMARKS INCLUDES ITEMS W/*
2	14410ZE1010	ROD, PUSH	2	
3	14431ZE1000	ARM, VALVE ROCKER	2	
4	14441ZE1010	LIFTER, VALVE	2	
5_	14451ZE1013	PIVOT, ROCKER ARM	2	
5 6*	14568ZE1000	SPRING, WEIGHT RETURN	1	
7	14711ZF1000	VALVE, INTAKE	1	
8	14721ZF1000	VALVE, EXHAUST	1	
9	14751ZF1000	SPRING, VALVE	2	
10	14771ZE1000	RETAINER, INTAKE VALVE SPRING	1	
11	14773ZE1000	RETAINER, EXHAUST VALVE SPRING	1	
12	14781ZE1000	ROTATOR, VALVE	1	
13	14791ZE1010	PLATE, PUSH ROD GUIDE	1	
14	90012ZE0010	BOLT, PIVOT 8MM	2	
15	90206ZE1000	NUT, PIVOT ADJ.	2	

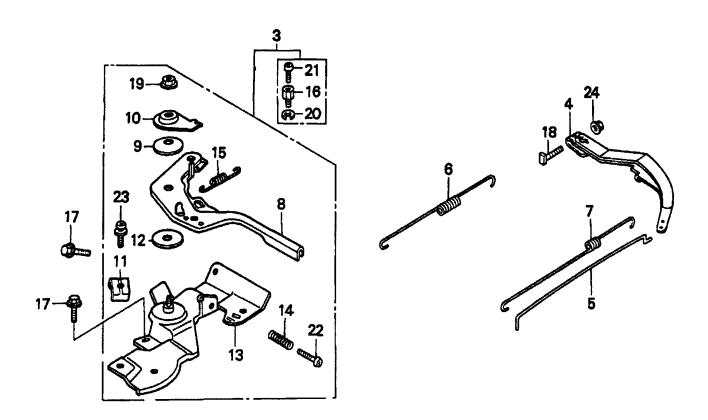
### HONDA GX160K1QXC9 — CARBURETOR ASSY.



### HONDA GX160K1QXC9 — CARBURETOR ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS
1 #%+	16010ZE1812 16011ZE0005 16013ZE0005	GASKET SET	1	
2 *	16011ZE0005	VALVE SET, FLOAT	1	
3.	16013ZE0005	FLOAT SET	1	
4.	16015ZE0831	CHAMBER SET, FLOAT	1	
4" 5*	16016ZH8W01	SCREW SET	1	
6	16024ZE1811	SCREW SET, DRAINSCREW SET B	1	INCLUDES ITEMS W/%
7 8*	16028ZE0005	SCREW SET B	1	INCLUDES ITEMS W/#
8*	16044ZE0005	CHOKE SET	1	
9 .	16100ZH8V21	CARBURETOR ASSEMBLY, BE65G B	1	INCLUDES ITEMS W/*
10_	16124ZE0005	SCREW, THROTTLE STOP	1	
11	16166ZH8W00	NOZZLE, MAIN	1	
11* 12*	16173001004	O- RING	1	
13	16211ZE1000	INSULATOR, CARBURETOR	1	
14	16212ZH8800	GASKET, INSULATOR	1	
15	16220ZE1020	SPACER, CARBURETOR	1	
16	16221ZH8801	GASKET, INSULATOR	1	
17*	16610ZE1000	LEVER, CHOKE (STANDARD)	1	INCLUDES ITEMS W/>
18.	16953ZE1812	LEVER, VALVE	1	
19*	16954ZE1812	PLATE, LEVER SETTING	1	
20	16956ZE1811	SPRING, VALVE LEVER	1	
21*	16957ZE1812	GASKET, VALVE	1	
22,*	16967ZE0811	CUP, FUEL STRAINER	1	
23	93500030060H	SCREW, PAN 3X6	2	
24 <sub>&gt;</sub>	9430520122	PIN, SPRING 2X12	1	
25 ~	99101ZH80680	JET, MAIN #68	1	
25	99101ZH70620	JET, MAIN #62 ( OPTIONAL)	1	
25	99101ZH80620	JET, MAIN #62 (OPTIONAL)	1	
25_	99101ZH80650	JET, MAIN #65 (OPTIONAL)	1	
25 26*	99204ZE20400	JET SET, PILOT #40	1	INCLUDES ITEMS W/+

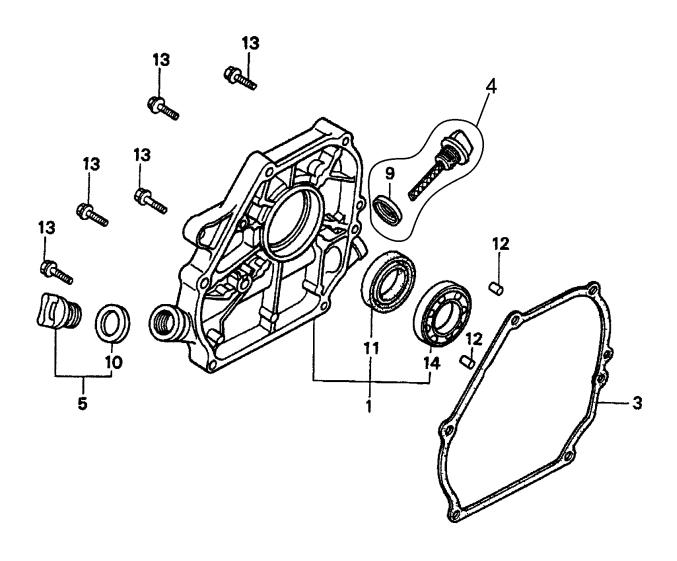
## HONDA GX160K1QXC9 — CONTROL ASSY.



### HONDA GX160K1QXC9 — CONTROL ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS +
3	16500ZH8853	CONTROL ASSEMBLY, CYCLONE	1	INCLUDES ITEMS W/^
4	16551ZE0010	ARM, GOVERNOR	1	
5	16555ZE1000	ROD, GOVERNOR	1	
6	16561ZE1020	SPRING, GOVERNOR	1	
7 *	16562ZE1020	SPRING, THROTTLE RETURN	1	
8 <sub>*</sub>	16571ZH8020	LEVER, CONTROL	1	
9^*	16574ZE1000	SPRING, LEVER	1	
10_	16575ZH8000	WASHER, CONTROL LEVER	1	
11*	16576891000	HOLDER, CABLE	1	
12,*	16578ZE1000	SPACER, CONTROL LEVER	1	
13,*	16580ZH8853	BASE, CONTROL (CYCLONE)	1	
14*	16584883300	SPRING, CONTROL ADJUSTING	1	
15*	16592ZE1810	SPRING, CABLE RETURN	1	
16 <sup>*</sup>	16594883010	HOLDER, WIRE	1	
17	90013883000	BOLT, FLANGE 6X12 (CT200)	2	
18*	90015ZE5010	BOLT, GOVERNOR ARM	1	
19*	90114SA0000	NUT, SELF- LOCK 6MM	1	
20*	90605230000	CIRCLIP 5MM	1	
21*	93500040060H	SCREW, PAN 4X6	1	
22*	93500050250H	SCREW, PAN 5X25	1	
23 <sup>*</sup>	93500050160A	SCREW, PAN 5X16	1	
24	9405006000	NUT, FLANGE 6MM	1	

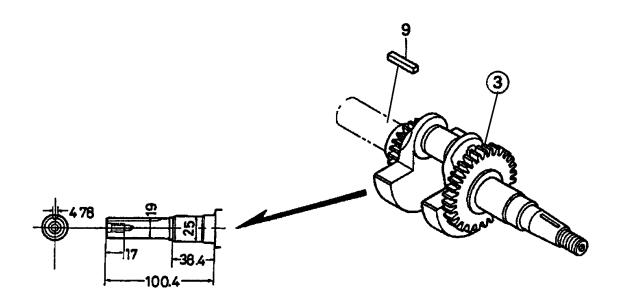
### HONDA GX160K1QXC9 — CRANKCASE COVER ASSY.



### HONDA GX160K1QXC9 — CRANKCASE COVER ASSY.

NO.	PART NO.	PART NAME	QTY.	<u>REMARKS</u>
1	11300ZE1641	COVER ASSY., CRANKCASE U- TYPE	1	INCLUDES ITEMS W/*
3	11381ZH8801	GASKET, CASE COVER (NON-ASBESTOS	) 1	
4	15600ZE1003	CAP ASSEMBLY, OIL FILLER	1	INCLUDES ITEMS W/#
5	15600ZG4003	CAP ASSEMBLY, OIL FILLER	1	INCLUDES ITEMS W/%
9#	15625ZE1003	GASKET, OIL FILLER CAP	1	
10% 11*	15625ZE1003	GASKET, OIL FILLER CAP	1	
11 ~	91202883005	OIL SEAL 25X41X6	1	
12	9430108140	PIN A, DOWEL 8X14	2	
13 14*	957010803200	BOLT, FLANGE 8X32	6	
14*	961006205000	BEARING, RADIAL BALL 6205	1	

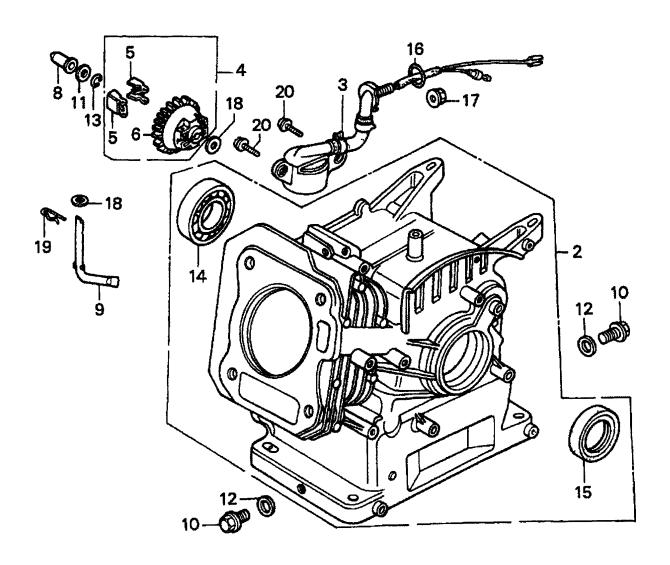
### HONDA GX160K1QXC9 — CRANKSHAFT ASSY.



### HONDA GX160K1QXC9 — CRANKSHAFT ASSY.

<u>NO.</u>	PART NO.	PART NAME	QTY.	<u>REMARKS</u>
3	13310ZE1601	CRANKSHAFT (Q- TYPE)	1	
9	90745ZE1600	KEY 4.78X4.78X38	1	

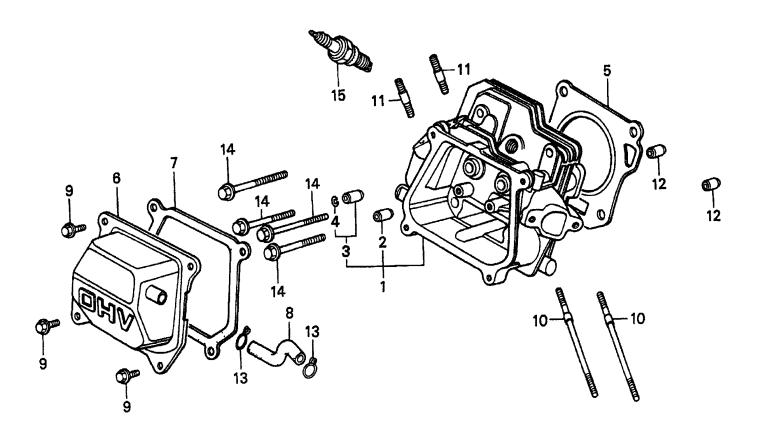
### HONDA GX160K1QXC9 — CYLINDER BARREL ASSY.



### HONDA GX160K1QXC9 — CYLINDER BARREL ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS +
2	12000ZH8811	CYLINDER ASSEMBLY, OIL ALERT	11	INCLUDES ITEMS W/^
3	15510ZE1033	SWITCH ASSEMBLY, OIL LEVEL	1	
4	16510ZE1000	GOVERNOR ASSEMBLY	1	INCLUDES ITEMS W/#
5#	16511ZE1000	WEIGHT, GOVERNOR	2	
6#	16512ZE1000	HOLDER, GOVERNOR WEIGHT	1	
8	16531ZE1000	SLIDER, GOVERNOR	1	
9	16541ZE1000	SHAFT, GOVERNOR ARM	1	
10	90131ZE1000	BOLT, DRAIN PLUG	2	
11	90451ZE1000	WASHER, THRUST 6MM	1	
12	90601ZE1000	WASHER DRAIN PLUG 10.2MM	2	
13*	90602ZE1000	CLIP, GOVERNOR HOLDER	1	
14*	91001ZF1003	BEARING, RADIAL BALL 6205	1	
15 <sup>*</sup>	91202883005	OIL SEAL 25X41X6	1	
16	91353671003	O- RING 13.5X1.5 (ARAI)	1	
17	9405010000	NUT, FLANGE 10MM	1	
18	9410106800	WASHER, PLAIN 6MM	2	
19	9425108000	PIN, LOCK 8MM	1	
20	957010601200	BOLT, FLANGE 6X12	2	

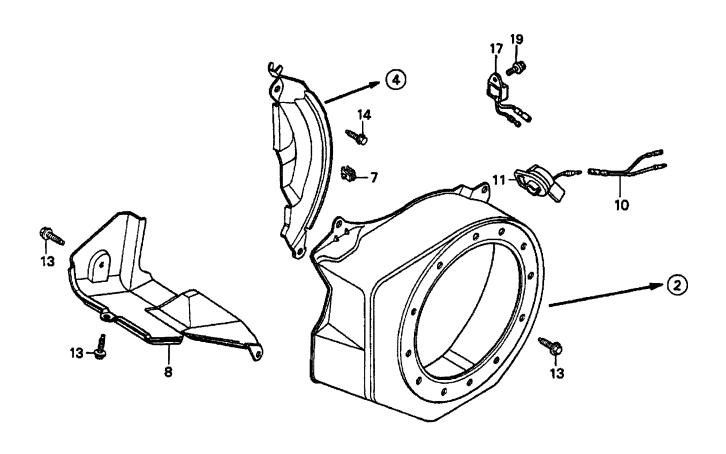
### HONDA GX160K1QXC9 — CYLINDER HEAD ASSY.



### HONDA GX160K1QXC9 — CYLINDER HEAD ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS
1.	12210ZH8000	CYLINDER HEAD	1	INCLUDES ITEMS W/*
2*	12204ZE1306	GUIDE, VALVE OS (OPTIONAL)	1	
1 2* 3*	12205ZE1315	GUIDE, EXHAUST VALVE OS (OPT.)	1	INCLUDES ITEMS W/#
4#	12216ZE5300	CLIP, VALVE GUIDE	1	
5	12251ZF1800	GASKET, CYLINDER HEAD	1	
6	12310ZE1841	COVER, HEAD	1	
7	12391ZE1000	GASKET, CYLINDER HEAD COVER	1	
8	15721ZE1840	TUBE, BREATHER	1	
9	90013883000	BOLT, FLANGE 6X12 (CT200)	4	
10	90043ZE1020	BOLT, STUD 6X109	2	
11	90047ZE1000	BOLT, STUD 8X32	2	
12	9430110160	PIN A, DOWEL 10X16	2	
13	9500280000	CLIP, TUBE C12	2	
14	957230806000	BOLT, FLANGE 8X60	4	
15	9807956846	SPARK PLUG BPR6ES (NGK)	1	

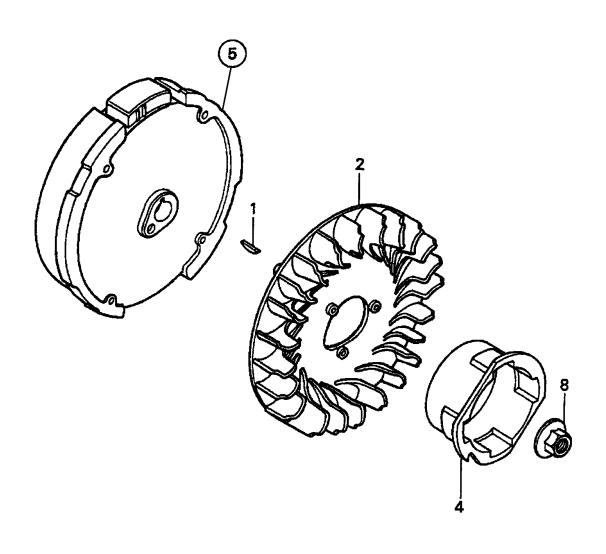
## HONDA GX160K1QXC9 — FAN COVER ASSY.



#### HONDA GX160K1QXC9 — FAN COVER ASSY.

<u>NO.</u>	PART NO.	PART NAME	QTY.	<u>REMARKS</u>
2	19610ZE1000ZA	COVER, FAN *R8* BRIGHT RED	1	
4	19611ZH8810	PLATE, SIDE (OIL ALERT)	1	
7	90601ZH7013	CLIP, HARNESS	1	
8	19630ZH8000	SHROUD	1	
10	32197ZH8003	SUB- HARNESS	1	
11	36100ZE1015	SWITCH ASSEMBLY, ENGINE STOP	1	
11	36100ZH7003	SWITCH ASSEMBLY, ENGINE STOP	1	
13	90013883000	BOLT, FLANGE 6X12 (CT200)	6	
14	90022888010	BOLT, FLANGE 6X20 (CT200)	1	
17	34150ZH7003	ALERT UNIT, OIL	1	
19	957010600800	BOLT, FLANGE 6X8	1	

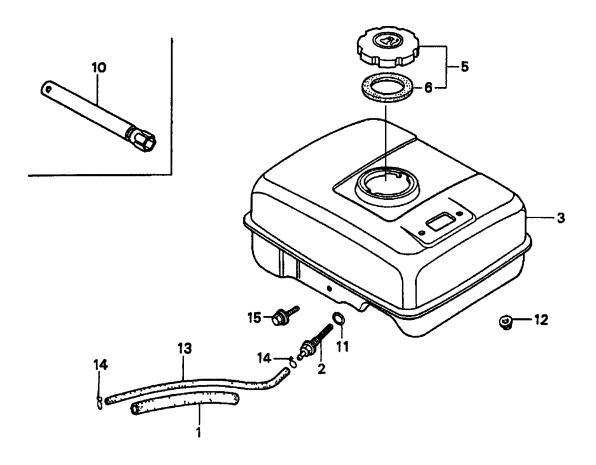
#### HONDA GX160K1QXC9 — FLYWHEEL ASSY.



#### HONDA GX160K1QXC9 — FLYWHEEL ASSY.

<u>NO.</u>	PART NO.	PART NAME	QTY.	<b>REMARKS</b>
1	13331357000	KEY, SPECIAL WOODRUFF 25X18	1	
2	19511ZE1000	FAN, COOLING	1	
4	28451ZH8003	PULLEY, STARTER	1	
5	31100ZE1010	FLYWHEEL	1	
5	31100ZE1810	FLYWHEEL, LAMP	1	
8	90201878003	NUT, SPECIAL 14MM	1	

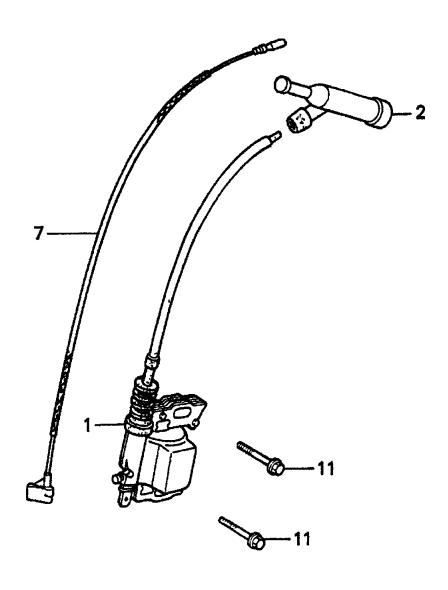
## HONDA GX160K1QXC9 — FUEL TANK ASSY.



#### HONDA GX160K1QXC9 — FUEL TANK ASSY.

NO.	PART NO.	PART NAME	QTY.	<b>REMARKS</b>
1	16854ZH8000	RUBBER, SUPPORTER 107MM	1	
2	16955ZE1000	JOINT, FUEL TANK	1	
3	17510ZE1020ZA	TANK, FUEL *NH31* MCKINLEY WHITE	1	
5	17620ZH7023	CAP, FUEL FILLER	1	
6	17631ZH7003	GASKET, FUEL FILLER CAP	1	
10	89218ZE1000	WRENCH, SPARK PLUG	1	
11	91353671003	O-RING 13.5X1.5 (ARAI)	1	
12	9405006000	NUT, FLANGE 6MM	2	
13	950014500360M	BULK HOSE, FUEL 4.5X3000 (4.5X140)	1	
14	9500202080	CLIP, TUBE B8	2	
15	957010602500	BOLT, FLANGE 6X25	1	

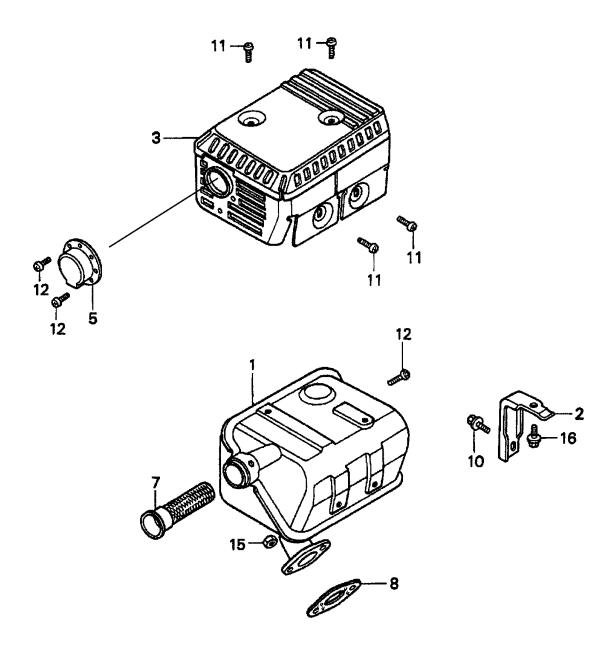
## HONDA GX160K1QXC9 — IGNITION COIL ASSY.



#### HONDA GX160K1QXC9 — IGNITION COIL ASSY.

NO.	PART NO.	PART NAME	QTY.	<b>REMARKS</b>
1	30500ZE1033	COIL ASSEMBLY, IGNITION	1	
2	30700ZE1013	CAP ASSEMBLY, NOISE SUPPRESSOR	1	
7	36101ZE1010	WIRE, STOP SWITCH 370MM	1	
11	90121952000	BOLT, FLANGE 6X25	2	

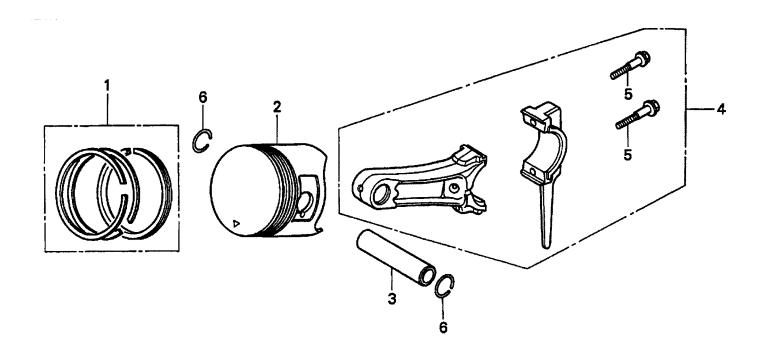
## HONDA GX160K1QXC9 — MUFFLER ASSY.



#### HONDA GX160K1QXC9 — MUFFLER ASSY.

NO.	PART NO.	PART NAME	QTY.	<b>REMARKS</b>
1	18310ZE1821	MUFFLER, SILENT	1	
2	18315ZE1000	STAY, MUFFLER	1	
3	18320ZF1H51	PROTECTOR, MUFFLER	1	
5	18331883810	CAP, MUFFLER	1	
7	18355ZE1810	ARRESTER, SPARK (SILENT)	1	
8	18381ZH8800	GASKET, MUFFLER	1	
10	90016ZE1000	BOLT, FLANGE 6X13	1	
11	90050ZE1000	SCREW, TAPPING 5X8	4	
12	90055ZE1000	SCREW, TAPPING 4X6	3	
15	94001080000S	NUT, HEX. 8MM	2	
16	957010601200	BOLT, FLANGE 6X12	1	

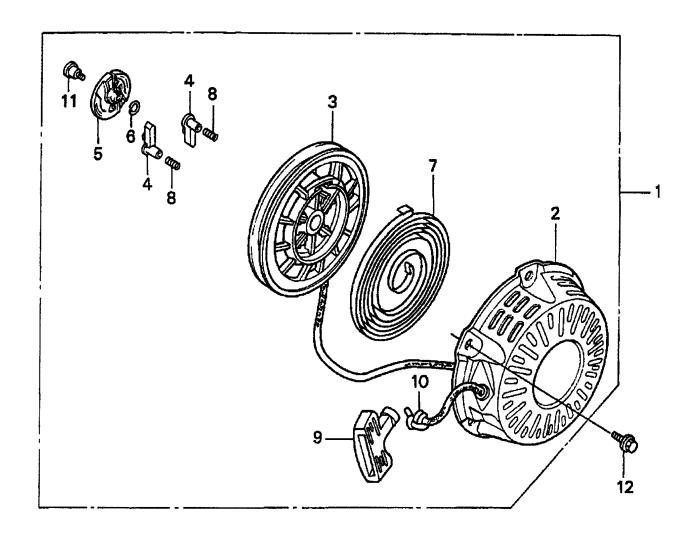
## HONDA GX160K1QXC9 — PISTON AND RINGS ASSY.



#### HONDA GX160K1QXC9 — PISTON AND RINGS ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	13010ZF1023	RING SET, PISTON (STANDARD)	1	
1	13010ZH8941	RING SET, PISTON (STANDARD	1	
1	13011ZF1023	RING SET, PISTON (OS 0.25) (OPTIONAL)	1	
1	13011ZH8941	RING SET, PISTON (OS 0.25) (OPTIONAL)	1	
1	13012ZF1023	RING SET, PISTON (OS 0.50) (OPTIONAL)	1	
1	13012ZH8941	RING SET, PISTON (OS 0.50) (OPTIONAL)	1	
1	13013ZF1023	RING SET, PISTON (0.75) (OPTIONAL)	1	
1	13013ZH8941	RING SET, PISTON (0.75 (OPTIONAL)	1	
2	13101ZH8000	PISTON, STANDARD	1	
2	13102ZH8000	PISTON, OS 0.25 (OPTIONAL)	1	
2	13103ZH8000	PISTON, OS 0.50 (OPTIONAL)	1	
2	13104ZH8000	PISTON, 0.75 (OPTIONAL)	1	
3	13111ZE1000	PIN, PISTON	1	4
4 5*	13200ZE1010	ROD ASSEMBLY, CONNECTING	1	INCLUDES ITEMS W/*
5 <b>^</b>	90001ZE1000	BOLT, CONNECTING ROD	2	
6	90551ZE1000	CLIP, PISTON PIN 18MM	2	

## HONDA GX160K1QXC9 — RECOIL STARTER ASSY.



#### HONDA GX160K1QXC9 — RECOIL STARTER ASSY.

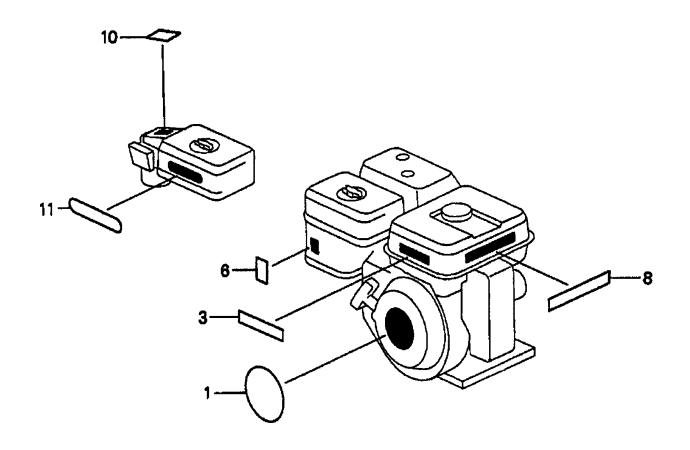
NO.	PART NO.	PART NAME	QTY.	REMARKS +
1_	28400ZH8013ZA	STARTER ASSY., RECOIL *R8*BRIG	GHT RED1	INCLUDES ITEMS W/ ^
2,	28410ZH8003ZA	CASE, RECOIL STARTER *R8* BRI		
2° 3*	28420ZH8013	REEL, RECOIL STARTER	1	
4 <b>*</b>	28422ZH8013	RATCHET, STARTER	2	
5 <b>*</b>	28433ZH8003	GUIDE, RATCHET	1	
6 <b>*</b>	28441ZH8003	SPRING, FRICTION	1	
7.	28442ZH8003	SPRING, RECOIL STARTER	1	
7 <sup>*</sup> 8 <sup>*</sup> 9 <sup>*</sup> .	28443ZH8003	SPRING, RETURN	2	
9 <sup>*</sup>	28461ZH8003	KNOB, RECOIL STARTER	1	
10*	28462ZH8003	ROPE, RECOIL STARTER	1	
10 <sup>^</sup> 11 <sup>*</sup>	90003ZH8003	SCREW, SETTING	1	
12	90008ZE2003	BOLT, FLANGE 6X10	3	

# NO ART WORK

#### HONDA GX160K1QXC9 — GASKET KIT ASSY.

NO.	PART NO.	PART NAME	QTY.	<u>REMARKS</u>
1	11381ZH8801	GASKET, CASE COVER (NON- ASBESTO	)S 1	
2 *	12251ZF1800	GASKET, CYLINDER HEAD	1	
2 <sup>*</sup> 3 <sup>*</sup>	12391ZE1000	GASKET, CYLINDER HEAD COVER	1	
4	16212ZH8800	GASKET, INSULATOR	1	
5_	16221ZH8801	GASKET, CARBURETOR	1	
6 <b>*</b>	18381ZH8800	GASKET, MUFFLER	1	
7	06111ZH8405	GASKET KIT	1	INCLUDES ITEMS W/*

## HONDA GX160K1QXC9 — LABELS ASSY.



#### HONDA GX160K1QXC9 — LABELS ASSY.

NO.	PART NO.	PART NAME	QTY.	<b>REMARKS</b>
1	87521ZH8020	EMBLEM, GX160	1	
3	87522ZH9000	LABEL, CAUTION	1	
6	87528ZE1810	MARK, CHOKE	1	
8	87532ZH8810	MARK, OIL ALERT (E)	1	
10	87534ZE1841	LABEL, AIR CLEANER CAUTION	1	
11	87535ZE1840	MARK, AIR CLEANER SALES POINT	1	

## **OPERATION MANUAL**

## **HERE'S HOW TO GET HELP**

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

#### **UNITED STATES**

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