

# USER MANUAL Gas String Trimmers/Brushcutters

Models: MT3075/ MT3090/MT30775/ MT30790



### **WARNING · PLEASE READ**

For your own safety please read this manual before attempting to operate your new unit. Failure to follow instructions can result in serious personal injury. Spend a few moments to familiarize yourself with your trimmer before each use.

### INTRODUCTION

#### **PLEASE READ**

Dear Customer.

Thank you for purchasing a McCulloch product. With proper operation and maintenance, it will provide you with years of service.

In order to make the best use of your investment, be **CERTAIN** to familiarize yourself with the contents of the **ENTIRE** user manual before attempting to operate and maintain your unit.

Be sure to carefully follow the step-by-step instructions in this manual to start, operate and maintain your new product.

In the manual there will be the following call-outs: **NOTE:**, **WARNING / CAUTION** and **WARRANTY**.

A **NOTE**: is used to convey additional information, to highlight a particular explanation, or to expand a step description.

A **WARNING** or **CAUTION** identifies a procedure which, if not undertaken or if improperly done, can result in serious personal injury and/or damage to the unit.

The **W** (WARRANTY SYMBOL) serves notice that unless instructions or procedures are followed, any damage caused will void the warranty and repairs will be at owner's expense.

Pay particular attention to the safety precautions. They are written for your protection and contain important information you must know to safely operate your chain saw.

FOR WARRANTY OR SERVICE CONTACT THE NEAR-EST AUTHORIZED SERVICE CENTER - LOCATE YOUR NEAREST SERVICE CENTER BY CALLING THE TOLL FREE NUMBER IN THIS MANUAL.

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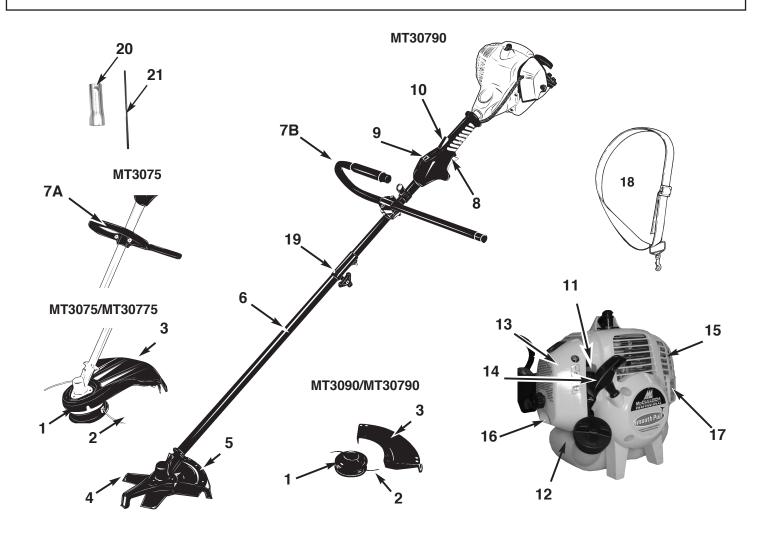
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### 1 - GENERAL INFORMATION

### 1-1. SPECIFICATIONS

Engine Type	Air-cooled, 2-Cycle, Chrome Cylinder
Displacement	30cc / 1.8 ci
Dry Weight (MT3075/MT3090)	14.1 lbs. / 6.4 kg
(MT30775/MT30790)	14.3 lbs. / 6.5 kg
Fuel Capacity	18.6 oz. / 550 ml
Drive Shaft Length (MT3075/MT3090)	52" / 132cm
(MT30775/MT30790)	26" + 26" / 66cm + 66cm
Cutting Swath (Twin Line Head )	17" / 43cm
(Blade - MT3090/MT30790)	9" / 23cm
Handle (MT3075)	"P" Handle
(MT30775/MT3090/MT30790)	"J" Handle
Carburetor	Primer / Diaphragm Type
Ignition	Electronic
Spark Plug	Champion DJ8J or equivalent
Drive	Clutch

### 2 - GENERAL IDENTIFICATION



### 2-1.GENERAL IDENTIFICATION

- 1. STRINGHEAD
- 2. CUTTER LINE
- 3. DEBRIS SHIELD
- 4. BLADE
- BLADE GUARD
- DRIVE SHAFT ASSEMBLY
- 7A. PHANDLE (MT3075)
- 7B. J HANDLE (MT3090/MT30775/ MT30790)
- 8. THROTTLE TRIGGER
- IGNITION ON/OFF SWITCH
- 10. SAFETY TRIGGER
- 11. CHOKE LEVER
- 12. FUEL TANK
- 13. AIR FILTER COVER
- 14. STARTER HANDLE
- 15. MUFFLER SHIELD
- 16. PRIMER BULB
- 17. SPARK ARRESTOR SCREEN
- 18. HARNESS (MT3090/MT30775/ MT30790)
- 19. COUPLER (MT30775/ MT30790)
- 20. SOCKET WRENCH (MT3090/ MT30790)
- 21. HOLDING PIN

#### 2-2. SAFETY FEATURES

Numbers preceding the descriptions correspond with numbers on preceding page to help you locate the safety feature.

- **5** BLADE GUARD must be installed to prevent debris from spraying up into the operator and to protect the operator form rotating blade.
- 15 MUFFLER SHIELD helps prevent hands, body and/or combustible materials from making contact with a hot muffler.
- 17 SPARK ARRESTER SCREEN retains carbon and other flammable particles over 0.023" (.6 mm) in size from exhaust flow.

**NOTE:** Compliance with local, state and federal laws and/or regulations governing the use of a spark arrester screen is the **user's responsibility**. See Safety Precautions (Section 3) and Maintenance Instructions (Section 8) for additional information.

### 3 - SAFETY PRECAUTIONS

#### 3-1. WHAT TO DO

# READ YOUR USER MANUAL AND ALL SUPPLEMENTS (IF ANY ENCLOSED) THOROUGHLY BEFORE OPERATING YOUR UNIT.

- CLOTHING Always wear heavy, long pants, boots, gloves and long sleeve shirt. Do not wear loose clothing, jewelry, short pants, sandals, or go barefoot. Secure hair so it is at shoulder level. Always wear a hard hat, a safety face shield, or safety glasses for eye protection and a good grade of ear plugs or other sound barriers for hearing protection.
- FUELING Mix and pour fuel outdoors where there are no sparks and flames. Slowly remove the fuel cap only after stopping the engine. Do not smoke while fueling or mixing fuel. Wipe spilled fuel from the unit. Move at least 30 ft (9m) away from the fueling source (gas can) and site before starting unit.
- 3. COMPLY WITH ALL FIRE PREVENTION REGULA-TIONS. COMPLIANCE WITH ALL LOCAL, STATE, OR FEDERAL LAWS IN THE UNITED STATES IS THE USER'S RESPONSIBILITY. Your unit comes with a spark arrester screen. Replacement spark arrester screen kits are available at your nearest McCulloch Authorized Service Center listed under "SAWS" in your Telephone Directory Yellow Pages.
- 4. TURN UNIT OFF before setting it down.
- ALWAYS HOLD UNIT FIRMLY WITH BOTH HANDS, the thumb and fingers encircling the handles.
- KEEP ALL SCREWS AND FASTENERS TIGHT. Never operate this equipment if it is improperly adjusted or not completely and securely assembled.
- 7. KEEP HANDLES DRY, clean and free of fuel mixture.
- KEEP STRINGHEAD AS CLOSE TO GROUND AS PRACTICAL. Avoid hitting small objects with stringhead. When cutting on a slope, stand below stringhead.
- CHECK AREA YOU WILL BE TRIMMING FOR DEBRIS that may be struck or thrown during operation.
- 10. KEEP ALL PARTS OF YOUR BODY AND CLOTHING AWAY FROM STRINGHEAD when starting or running engine. Before starting engine, make sure stringhead will not come in contact with any obstacle.
- 11. STOP ENGINE before examining cutting line.
- 12. STORE EQUIPMENT AWAY FROM POSSIBLE IGNITION SOURCES, such as gas-powered water heaters, clothes dryers, or oil-fired furnaces, portable heaters, etc.
- 13. ALWAYS KEEP the debris shield, stringhead, and engine free of debris build-up.
- OPERATION OF EQUIPMENT should always be restricted to mature and properly instructed individuals.

### 3-2 BRUSH / GRASS BLADE SAFETY PRE-CAUTIONS

- 1. FOLLOW ALL WARNINGS and instructions regarding operation and blade installation.
- BLADE CAN VIOLENTLY THRUST AWAY FROM MATERIAL IT CANNOT CUT - Blade thrust can cause amputation of arms or legs. Keep people and animals 50 feet (15 meters) away in all directions. If blade contacts foreign objects during operation, turn off engine and allow coasting blade to stop. Then check blade for damage. Always discard blade if it is warped or cracked.
- BLADE THROWS OBJECTS VIOLENTLY You can be blinded or injured. Wear eye, face, and leg protection. Always clear work area of any foreign objects before using blade. Keep people and animals 50 feet (15 meters) away in all directions.
- 4. INSPECT YOUR TRIMMER AND ATTACHMENTS BEFORE EACH USE Never use unless all blade-attaching hardware is properly installed.
- BLADE COASTS AFTER THROTTLE IS RELEASED -A coasting blade can cut you or bystanders. Before performing any service on the blade, always turn off engine, and be sure coasting blade has stopped.
- 6. 100-FOOT (30 meters) DIAMETER HAZARD ZONE Bystanders can be blinded or injured. Keep people and animals 50 feet (15 meters) away in all directions.

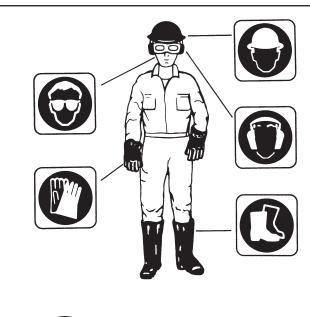
### 3-3. WHAT NOT TO DO

- 1. DO NOT USE ANY OTHER FUEL than that recommended in your manual. Always follow instructions in the Fuel and Lubrication section of this manual. Never use gasoline unless it is properly mixed with 2-cycle engine lubricant. Permanent damage to engine will result, voiding manufacturer's warranty.
- DO NOT SMOKE while refueling or operating equipment.
- 3. DO NOT OPERATE UNIT WITHOUT A MUFFLER and properly installed muffler shield.
- 4. DO NOT TOUCH or let your hands or body come in contact with a hot muffler or spark plug wire.
- DO NOT OPERATE UNIT IN AWKWARD POSITIONS, off balance, outstretched arms, or one-handed. Always use two hands when operating unit with thumbs and fingers encircling the handles.
- 6. DO NOT RAISE STRINGHEAD above ground level while unit is operating. Injury to operator could result.
- 7. DO NOT USE UNIT FOR ANY PURPOSES OTHER than trimming lawn or garden areas.
- 8. DO NOT OPERATE UNIT FOR PROLONGED PERI-ODS. Rest periodically.
- 9. DO NOT OPERATE UNIT WHEN TIRED, ILL OR UNDER THE INFLUENCE OF ALCOHOL OR DRUGS OR MEDICATION.

### 2 - SAFETY PRECAUTIONS

- 12. DO NOT operate your unit near or around flammable liquids or gases whether in or out of doors. An explosion and/or fire may result. Never start or run the unit inside a closed room or building, breathing exhaust fumes can kill.
- DO NOT USE ANY OTHER CUTTING ATTACH-MENT. Use only McCulloch replacement parts and accessories, which are designed specifically to enhance the performance and maximize the safe operation of our products. Failure to do so may cause poor performance and possible injury. Use only the stringhead supplied with this product. *Do not use any other cutting attachment*. Use of such attachments will void your factory warranty and could result in serious bodily injury. (Model MT3075, MT3090)

### 3-4.INTERNATIONAL SYMBOLS





Read the User Manual.

Use of these personal safety items is highly recommended to reduce the risk of accidental injury.



Minimum operating distance

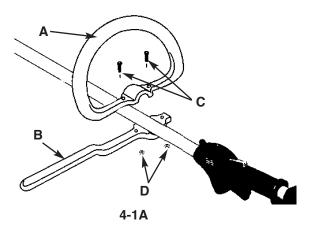


13

Pump the primer bulb 10 times.

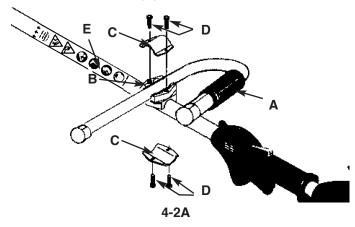
### 4-1. "P" HANDLE ASSEMBLY (MT3075)

- 1. To install handle onto unit, you will need the following components from your user kit: "P" handle (A & B), screws (C) and nuts (D). (Figure 4-1A).
- 2. Install the handle (B) on the shaft 160-200mm from throttle and tighten the 2 screws (C) and nuts (D).



### 4-2. "J" HANDLE ASSEMBLY (MT3090/ MT30775/MT30790)

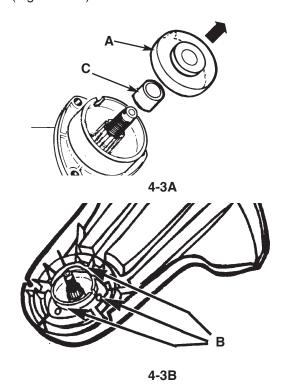
- 1. To install handle onto unit, you will need the following components from your user kit: "J" handle (A), middle clamp housing (B), upper and lower clamps (C) and screws (D). (Fig. 4-2A)
- 2. Install the middle clamp housing (B) on the shaft near the arrows on the sticker (warning label E), put the lowerclamp (C) under shaft and tighten with 2 screws (D).
- 3. Install the J handle (A) on the middle clamp housing, then put the upper clamp (C) over J-handle and tighten the other 2 screws (D).



# 4-3. BLADE GUARD INSTALLATION (MT3075/MT30775)

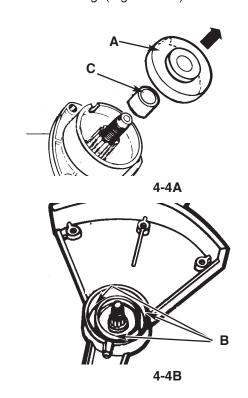
- 1. Remove gear collar (A) from the threaded gear housing shaft (Figure 4-3A).
- 2. Place the shield on the gear housing and align the mounting holes. Insert screws (B), found in the hardware bag as shown in illustration and tighten securely (Figure 4-3B).

 Reinstall the gear collar (A). Ensure the collar spacer
 is in place or the collar will rub the gear housing (Figure 4-3A).



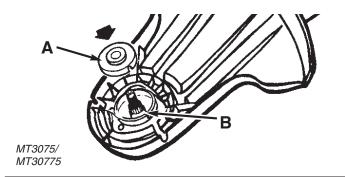
### 4-4. DEBRIS SHIELD (MT3090/MT30790)

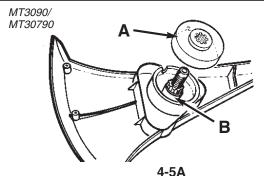
- 1. Remove gear collar (A) from the threaded gear housing shaft. Insure collor spacer (C) is in place (Figure 4-4A).
- 2. Install debris shield with 3 screws (B) provided in the hardware bag. (Figure 4-4B)

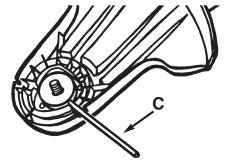


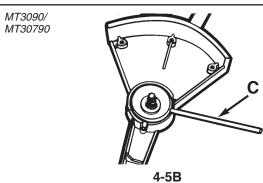
### 4-5. STRINGHEAD INSTALLATION

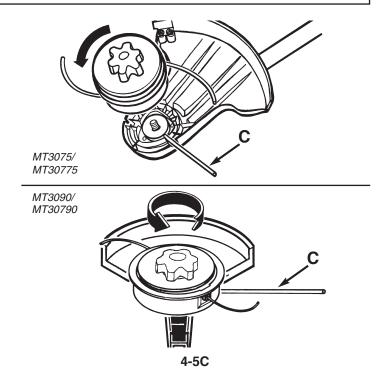
- 1. Install gear collar (A) ensuring that collar spacer (B) is in place (Figure 4-5A).
- Insert holding pin (C) and thread stringhead onto shaft.
   Tighten stringhead by hand only (Figures 4-5B and 4-5C).











# 4-6. DEBRIS SHIELD INSTALLATION (MT3090/MT30790)

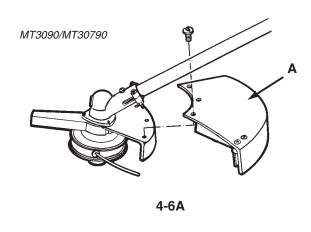
1. Turn the unit over and with screws found in the hardware bag install the debris shield (A) as shown (Figure 4-6A).

### CAUTION

Debris shield must be installed to properly dispense cutter line and protect operator.

### REMINDER

Be sure to remove holding pin before starting unit.



MT3075/ MT30775

# 4-7. BLADE INSTALLATION (MT3090/MT30790)

# **WARNING / CAUTION**

- NEVER use unit if blade is warped or has teeth that are chipped or missing. Replace a damaged blade immediately.
- NEVER operate unit with a blade unless metal blade guard is properly installed. NEVER operate a unit with a damaged guard.
- Always wear heavy-duty work gloves when handling and installing a blade.
- To install the blade you will need the items illustrated above (screwdriver not provided): holding pin (B), retaining nut (C), blade (D), screwdriver (E), flange (F), socket wrench (G), cotter pin (H). (Figure 4-7A)
- 2. Remove three screws (J). Remove the shield (A). Insert the holding pin into the gear collar slot to prevent the collar from turning while removing the stringhead (turn CLOCKWISE). (Figure 4-7B)
- 3. Leave the holding pin (B) in place. (Figure 4-7C)

### **WARNING**

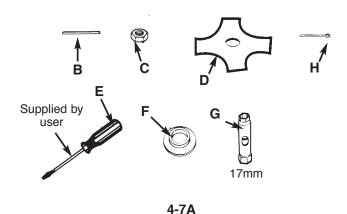
Be sure the blade center hole is properly sized to the collar arbor.

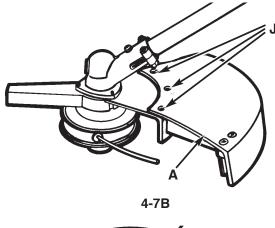
- 4. Install blade (D) with teeth pointing CLOCKWISE as shown in the illustration (Figure 4-7C).
- 5. Install flange (F) with FLAT SURFACE facing blade (Figure 4-7C).

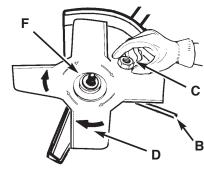
NOTE: Make sure blade is centered on collar arbor.

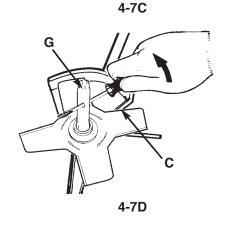
### **WARNING**

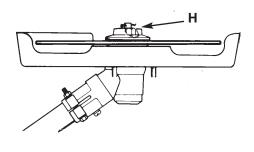
- Tighten nut (C) securely by turning it COUNTER-CLOCKWISE with socket wrench (G). Remove holding pin (Figure 4-7D).
- 7. Install cotter pin (H) (Figure 4-7E). Spread the ends of the cotter pin apart to ensure retention.











4-7E

# 4-8. INSTALLING THE ATTACHMENT (MT30775/MT30790)

### WARNING

To avoid serious personal injury, shut unit off before removing or installing attachment.

**NOTE:** To make installing or removing the attachment easier, place the unit on the ground or on a work bench.

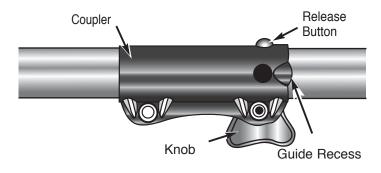
- 1. Turn the knob counterclockwise to loosen (Fig. 4-8A).
- 2. While firmly holding the attachment, push it straight into the coupler until the release button appears in the primary hole of the coupler. (Fig. 4-8B)
- 3. Turn the knob clockwise to tighten. (Fig. 4-8C)

### **CAUTION**

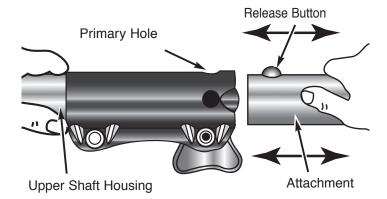
The release button must be in the primary hole and the knob securely tightened before operating this unit.

All attachments are designed to be used in the primary hole unless otherwise indicated in the specific attachments operators manual. If the incorrect hole is used, it could result in injury, or damage to the unit.

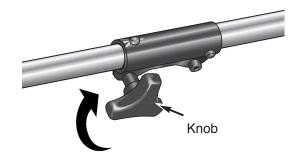
**NOTE:** Turn attachment rotating parts by hand to and fro to have the attachment shaft connect to the powerhead drive shaft slot more easily.



4-8A



4-8B



4-8C

### 5 - FUEL AND LUBRICATION

#### 5-1. FUEL

Use regular grade unleaded gasoline mixed with Genuine Factory Parts 40:1 custom 2-cycle engine oil for best results. Use mixing ratios in Section 5-3.

Never use straight gasoline in your unit. This will cause permanent engine damage and void the manufacturer's warranty for that product. Never use a fuel mixture that has been stored for over 90 days.

If 2-cycle lubricant other than Genuine Factory Parts Custom Lubricant is to be used, it must be a premium grade oil for 2-cycle air cooled engines mixed at a 40:1 ratio. Do not use any 2-cycle oil product with a recommended mixing ratio of 100:1. If insufficient lubrication is the cause of engine damage, it voids the manufacturer's engine warranty.

### 5-2. MIXING FUEL

Add oil to an approved fuel container followed by the gasoline to allow incoming gasoline to mix with oil. Shake container to ensure thorough mix.

Lack of lubrication voids engine warranty. Gasoline and oil must be mixed at 40:1.

### 5-3. FUEL MIXING TABLE

GASOLINE	Genune Factory Parts 40:1 Ratio Custom Lubricant				
1 U.S. Gal.	3.2 oz.	95ml (cc)			
5 Liters	4.3 oz.	125ml (cc)			
1 Imp. Gal.	4.3 oz.	125ml (cc)			
Mixing Procedure					
1ml = 1cc					

### 5-4. RECOMMENDED FUELS

Some conventional gasolines are being blended with oxygenates such as alcohol or an ether compound to meet clean air standards. Your McCulloch engine is designed to operate satisfactorily on any gasoline intended for automotive use including oxygenated gasolines.

### 5-5. FUEL AND LUBRICATION SYMBOLS



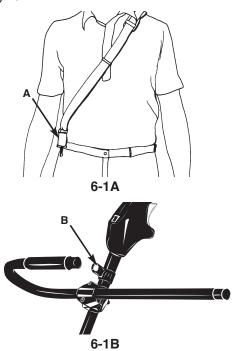
### 6 - OPERATING INSTRUCTIONS

# 6-1. SHOULDER HARNESS WARNING

**ALWAYS WEAR SHOULDER HARNESS** when operating unit with a blade. Attach harness to trimmer after starting unit and engine is running at IDLE. Turn ENGINE OFF before disconnecting shoulder harness.

- 1. Put the harness on so the shoulder strap is over your LEFT shoulder. (Figure 6-1A)
- 2. Attach the harness clip (A) to the ring (B) mounted on the shaft. (Figure 6-1A and 6-1B)
- Adjust length of shoulder strap so stringhead is parallel to the ground as it hangs from the strap. A few practice swings without starting engine should be made to determine correct balance.

**NOTE:** Detach the shoulder harness from the unit before starting engine.

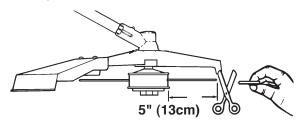


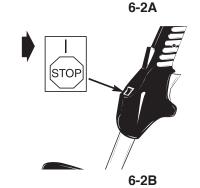
# 6-2. STARTING A COLD ENGINE (Put unit on the ground do not depress trigger before starting see fig. 6-2E)

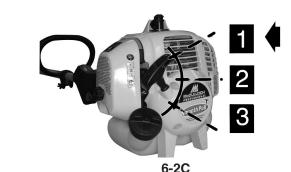
**NOTE:** To minimize load on engine during starting and warm-up, trim excess cutter line to 5" (13cm) (Figure 6-2A).

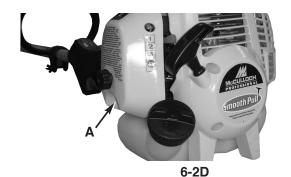
- Move on/off ignition switch to the "RUN (I)" position. (Figure 6-2B)
- Your unit is designed with a 3 position choke: FULL CHOKE "1", PARTIAL CHOKE "2", and RUN "3". Move choke lever to FULL CHOKE "1" position (Figure 6-2C).
- 3. Prime the carburetor. Pump the primer bulb (A) 10 times (Figure 6-2D).
- 4. Smooth pull starting requires much less effort than units without smooth pull-Pull with a smooth steady pull. Pull starter rope out a short way until resistance is

felt (approximately 4") (Figure 6-2E). A smooth rapid pull is required for a strong spark. Pull starter rope briskly 6 times.











6-2E

### 6 - OPERATING INSTRUCTIONS

- 5. Move choke lever to PARTIAL CHOKE "2" position then pull starter rope 4 times. (Figure 6-2F)
- 6. Move the choke to RUN "3" position. Warm up **30 seconds** in idle then depress trigger. (Figure 6-2G)
- 7. If engine fails to start, repeat steps 1 through 6.

**NOTE:** If engine fails to start after repeated attempts, refer to Troubleshooting section.

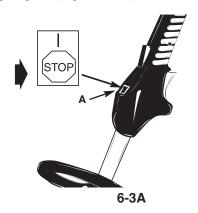
**NOTE:** Always pull starter rope straight out. Pulling starter at an angle will cause rope to rub against the eyelet. This friction will cause the rope to fray and wear more quickly. Always hold starter handle when rope retracts. Never allow rope to snap back from extended position. This could cause rope to snag or fray and also damage the starter assembly.





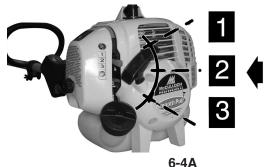
### 6-3. TO STOP ENGINE

 Release throttle trigger. Let engine return to idle. Move ignition switch (A) to the "STOP
"position for stopping engine. (Figure 6-3A).



#### 6-4. WARM ENGINE START

- 1. Move ignition switch to the "RUN (I)" position.
- 2. Place choke in PARTIAL CHOKE "2" position (Figure 6-4A).
- 3. Grasp throttle handle firmly, depress safety trigger, and squeeze throttle trigger to FULL position.
- 4. Pull starter rope briskly until engine starts, but no more than 6 times. Keep throttle at FULL position until engine runs smoothly. Move choke lever to 3 position.
- 5. If engine does not start, place choke lever in RUN "3" position and pull starter rope 5 more times. If engine still does not start it is probably flooded. Wait 5 minutes and repeat procedure with choke lever in RUN "3" position and throttle full open.



### 6-5. IDLING/CARBURETOR ADJUSTMENT

- Occassionally, due to atmospheric conditions such as altitude it might be necessary to make slight adjustment to idle speed.
- 2. Insert phillips or flat screwdriver into access hole A (figure 6-5A). Turn 1/8 turn clockwise to increase idle speed and 1/8 turn counterclockwise to decrease idle speed.





### 7 - TRIMMING INSTRUCTIONS

### 7-1. ADDITIONAL SAFETY PRECAUTIONS

Before operating your unit, review ALL SAFETY PRECAUTIONS in this manual.

### **WARNING / CAUTION**

- IF UNFAMILIAR WITH TRIMMING techniques, practice the procedures with ENGINE in "OFF" position.
- ALWAYS CLEAR WORK area of debris such as cans, bottles, rocks, etc. Striking objects can cause serious injury to operator or bystanders and also damage equipment. If an object is accidentally hit, immediately TURN ENGINE OFF and examine equipment. Never operate unit with damaged or defective equipment.
- ALWAYS TRIM OR CUT AT HIGH ENGINE SPEEDS.
   Do not run engine slowly at start or during trimming operations.
- DO NOT use equipment for purposes other than trimming or mowing weeds.
- NEVER raise stringhead above knee height during operation.
- DO NOT operate unit with other people or animals in the immediate vicinity. Allow a minimum of 50 feet (15 meters) between operator and other people and animals when trimming or mowing. Allow a distance of 100 feet (30 meters) between operator and other people and animals when SCALPING with stringhead cutter.
- IF OPERATING UNIT ON A SLOPE, stand below the cutting attachment. DO NOT OPERATE on a slope or hilly incline if there is the slightest chance of slipping or losing your footing.

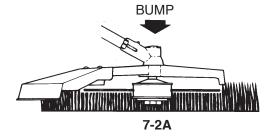
# 7-2. STRINGHEAD LINE RELEASE WARNING / CAUTION

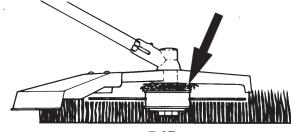
DO NOT use steel wire or plastic-coated steel wire of any kind with your stringhead. Serious operator injury can result.

To release fresh line, run engine at full throttle and "bump" stringhead against lawn. Line will automatically release. The knife in debris shield will trim excess line (Figure 7-2A).

# **CAUTION**

Be sure engine is off and string head has stopped before sttempting to remove weed wrap. Periodically remove weed wrap to prevent overheating the drive shaft. Weed wrap occurs when strands of weeds become entangled around the shaft beneath the debris shield (Figure 7-2B). This condition prevents the shaft from being properly cooled. Remove weed wrap with screwdriver or similar device.





7-2B

### 7-3. TRIMMING PROCEDURES

When properly equipped with a debris shield and stringhead, your unit will trim unsightly weeds and tall grass in those hard-to-reach areas - along fences, walls, foundations and around trees. It can also be used for scalping to remove vegetation down to the ground for easier preparation of a garden or to clean out a particular area.

**NOTE:** Even with care, trimming around foundations, brick or stone walls, curves, etc., will result in above normal string wear.

### TRIMMING / MOWING

Swing trimmer with a sickle-like motion from side to side. Do not tilt the stringhead during the procedure. Test area to be trimmed for proper cutting height. Keep stringhead at same level for even depth of cut (Figure 7-3A).



7-3A

#### **CLOSER TRIMMING**

Position trimmer straight ahead with a slight tilt so bottom of stringhead is above ground level and string contact occurs at proper cutting point. Always cut away from operator. Do not pull trimmer in toward operator.

### FENCE / FOUNDATION TRIMMING

Approach trimming around chain link fences, picket fences, rock walls and foundations slowly to cut close without whipping string against the barrier. If the string comes in contact with rock, brick walls, or foundations, it will break or fray. If string snags fencing, it will snap off.

### 7 - TRIMMING INSTRUCTIONS

#### TRIMMING AROUND TREES

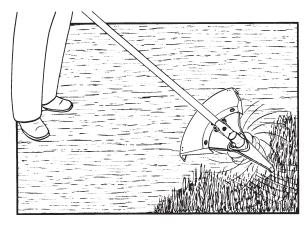
Trim around tree trunks with a slow approach so string does not contact bark. Walk around the tree trimming from left to right. Approach grass or weeds with the tip of the string and tilt stringhead slightly forward.

### WARNING

Use extreme caution when SCALPING. Keep a distance of 100 feet (30 meters) between operator, other people and animals during these operations.

#### **SCALPING**

Scalping refers to removal of all vegetation down to the ground. To do this, tilt the stringhead to about a 30 degree angle to the left. By adjusting the handle you will have better control during this operation. Do not attempt this procedure if there is any chance flying debris could injure operator, other people or cause damage to property (Figure 7-3B).



7-3B

### **WARNING**

### DO NOT SWEEP WITH TRIMMER

Sweeping refers to tilting stringhead to sweep away debris from walkways, etc. Your trimmer is a powerful tool and small stones or other such debris may be hurled 50 feet (15 meters) or more, causing injury or damage to nearby property such as automobiles, homes and windows.

### 7-4. CUTTING WITH BLADES

# WARNING

Before operating this machine with a blade check to ensure it is properly installed. Follow all warnings listed in the blade safety precautions section in this manual.

Always wear eye protection and protective clothing when cutting with a blade.

Always use the harness for blade operations.

# 7-5. USING WEED BLADES SCYTHING WEEDS

Scything refers to cutting by moving the blade from side to side in a level arc. It is most effective with grassy weeds

and light undergrowth. It should not be used to cut large, tough weeds or woody growth (Figure 7-5A).

### **CAUTION**

Do not use weed blades to cut brush or tree saplings.



7-5A

# 7-6. USING A BRUSH BLADE SCYTHING

Scything may be used with a brush blade for light brush and undergrowth. It is not recommended for tough growth.

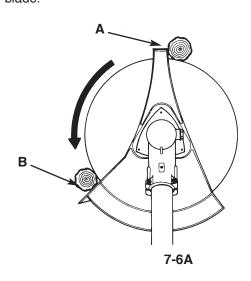
#### SAWING

Larger brush and saplings should be sawed. Do not attempt to saw growths larger than 3 inches (7.5 cm) in diameter.

Sawing is using the brush blade much like a circular saw. Make gradual cuts backing out every 1/2 inch (1.3 cm) or so to prevent binding.

#### **BINDING**

Top heavy growth such as saplings and heavy brush can bind and stop the blade. Avoid binding by anticipating which way the growth will lean, and cut from the opposite side. If the blade binds in a cut stop the engine immediately. Hold the unit up to prevent the blade from cracking or breaking while pushing the sapling away from the cut to free the blade.



# 8 - MAINTENANCE INSTRUCTIONS

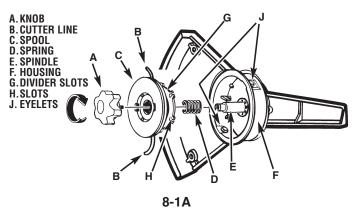
NCE CHECKLIST	EACH USE	HOURS OF OPERATION		
ACTION	_	10	20	
INSPECT / TIGHTEN	<b>✓</b>			
CLEAN OR REPLACE		~		
REPLACE			~	
CLEAN / ADJUST / REPLACE		~		
CLEAN OR REPLACE		V		
INSPECT	~			
*REPLACE AS REQUIRED				
INSPECT	~			
*REPLACE AS REQUIRED				
	INSPECT / TIGHTEN  CLEAN OR REPLACE  REPLACE  CLEAN / ADJUST / REPLACE  CLEAN OR REPLACE  INSPECT  *REPLACE AS REQUIRED  INSPECT	ACTION  INSPECT / TIGHTEN  CLEAN OR REPLACE  REPLACE  CLEAN / ADJUST / REPLACE  CLEAN OR REPLACE  INSPECT  *REPLACE AS REQUIRED  INSPECT	ACTION  INSPECT / TIGHTEN  CLEAN OR REPLACE  REPLACE  CLEAN / ADJUST / REPLACE  CLEAN OR REPLACE  INSPECT  *REPLACE AS REQUIRED	

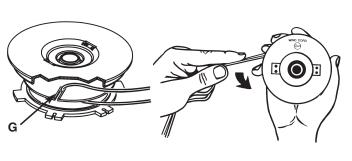
<sup>\*</sup>Recommended for maintenence by an authorized service center technician using Genuine Factory replacement parts

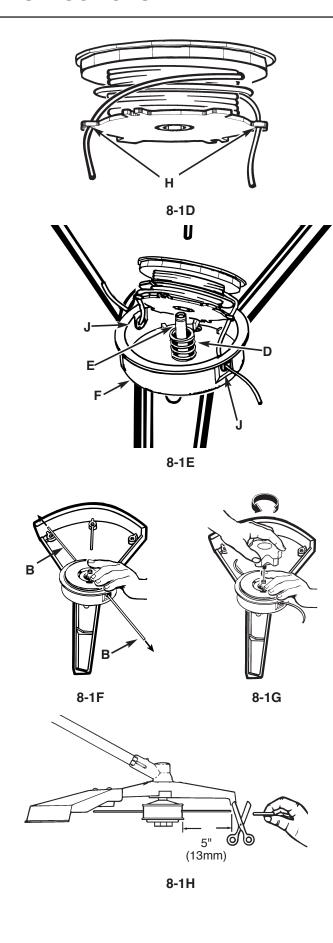
### 8 - MAINTENANCE INSTRUCTIONS

### 8-1. REPLACING CUTTER LINE

- 1. Turn the knob (A) CLOCKWISE and remove it (Figure 8-1A).
- 2. Remove the spool (C), and spring (D) from spindle (E).
- 3. Remove any remaining cutter line.
- 4. Fold over a 32' (9.8m) length of .095 or .105" (.24 or .27cm) cutter line. Place the looped center in one of the slots (G) of the spool divider (Figure 8-1B).
- Wind as shown in illustration (Figure 8-1C), keeping tension, with each half separated by the spool divider. Wind to within 6" (15cm) of the ends. (Figure 8-1D, page 32)
- 6. Lock each end of line into a slot (H) on opposite sides of the spool (Figure 8-1D).
- 7. Install the spring (D) over the spindle (E). Insert each end of the line through an eyelet (J) in the housing (F) (Figure 8-1E).
- 8. Lower the spool into the housing (F) while feeding the line through the eyelets (J). Insure the spring seats itself into the housing. (Figure 8-1E)
- Once the spool is in place, apply pressure on the spool compressing the spring. Pull each end of the line (B) sharply to unlock the line from the slots (Figure 8-1F).
- Continue to apply pressure to the spool until the knob can be threaded COUNTERCLOCKWISE onto the spindle. Tighten the knob securely by hand only (Figure 8-1G).
- Trim the excess line to approximately 5" (13cm). This will minimize load on engine during starting and warmup (Figure 8-1H).







### 8 - MAINTENANCE INSTRUCTIONS

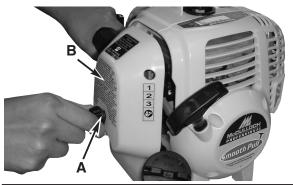
# 8-2. AIR FILTER CAUTION

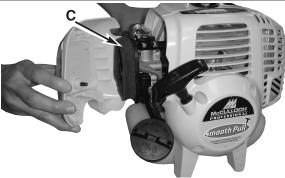
NEVER operate trimmer without the air filter. The air filter must be kept clean. If it becomes damaged, install a new filter.

#### To Clean Air Filter:

- Remove knob (A) holding air filter cover in place, remove cover (B) and lift filter (C) from air box (Figure 8-2A).
- Wash filter in soap and water. DO NOT USE GASO-LINE!
- 3. Air dry filter.
- 4. Reinstall filter.

**NOTE:** Replace filter if frayed, torn, damaged or unable to be cleaned.





8-2A

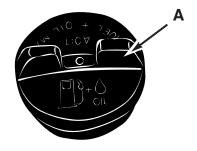
# 8-3. FUEL CAP / FUEL FILTER CAUTION

Remove fuel from unit and store in approved container before starting this procedure. Open fuel cap slowly to release any pressure which may have formed in fuel tank. **NOTE:** Keep vent (A) on fuel cap clean of debris (Figure 8-3A).

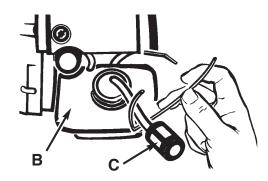
#### **Fuel Filter:**

- 1. Completely remove fuel cap from fuel tank (B) to be able to remove fuel filter (C) from tank. (Figure 8-3B)
- 2. Pull filter (D) off with a twisting motion. (Figure 8-3C)
- 3. Replace fuel filter (D). (Figure 8-3C)

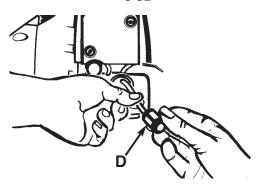
**NOTE:** Never operate the trimmer without the fuel filter. Internal engine damage could result!



8-3A



8-3B



8-3C

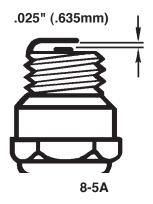
### 8-4. CARBURETOR ADJUSTMENT

The carburetor was pre-set at the factory for optimum performance. With the exception of idle adjustment, per section 6-1, important idling informantion.

### 8 - MAINTENANCE INSTRUCTIONS

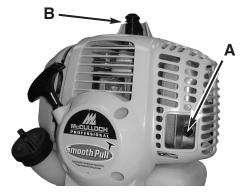
### 8-5. SPARK PLUG

- To remove spark plug B (figure 8-6A) for cleaning or replacement: make sure engine is off, spark plug is cool then grasp spark plug boot firmly and remove from spark plug. Remove spark plug with correct spark plug tool. Inspect, clean or replace as needed.
- 2. Spark plug gap = .025" (.635mm) (Figure 8-5A).
- 3. Torque to 105 to 130 inch pounds (12 to 15 N•m). Connect spark plug boot.



### 8-6. SPARK ARRESTER SCREEN

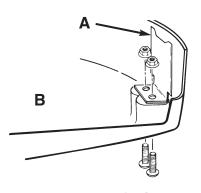
- To replace spark arrester screen (A) (Figure 8-6A), use a needle nose pliers, pinch an edge of the spark arrester screen. Pull the whole spark arrester screen out.
- 2. Use the needle nose pliers to push in a new spark arrester screen. Then open the pliers a little to press the inner surface of the spark arrester screen to fasten it.



8-6A

### 8-7. DEBRIS SHIELD KNIFE SHARPENING

- 1. Remove cutter knife (A) from debris shield (B) (Figure 8-7A).
- 2. Place knife in a bench vise. Sharpen knife using a flat file, being careful to maintain the angle of cutting edge. File in one direction only.



8-7A

### 8-8. STORING A UNIT

Failure to follow these steps may cause varnish to form in the carburetor and difficult starting or permanent damage following storage.

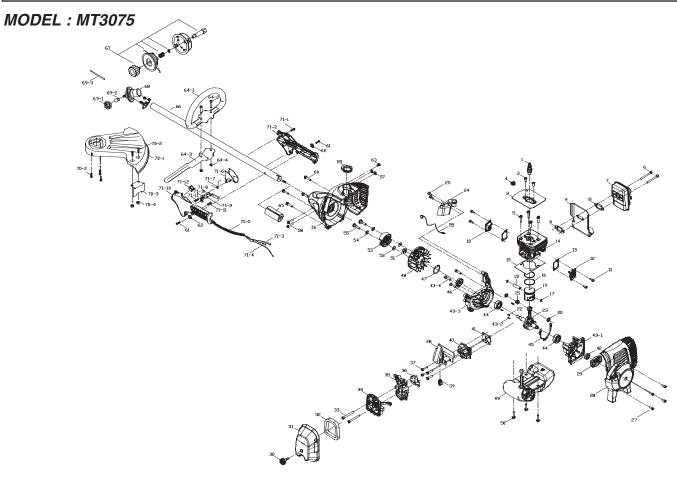
- 1. Perform all the general maintenance recommended in the Maintenance Section of your User Manual.
- 2. Clean exterior of engine, drive shaft assembly, debris shield and stringhead.
- 3. Drain fuel from the fuel tank.
- 4. After fuel is drained, start engine.
- 5. Run engine at idle until unit stops. This will purge the carburetor of fuel.
- 6. Allow engine to cool (approx. 5 minutes).
- 7. Using a spark plug wrench, remove the spark plug.
- 8. Pour 1 teaspoon of clean 2-cycle oil into the combustion chamber. Pull starter rope slowly several times to coat internal components. Replace spark plug.
- 9. Store unit in a cool, dry place away from any source of ignition such as an oil burner, water heater, etc.

### 8-9 REMOVING A UNIT FROM STORAGE

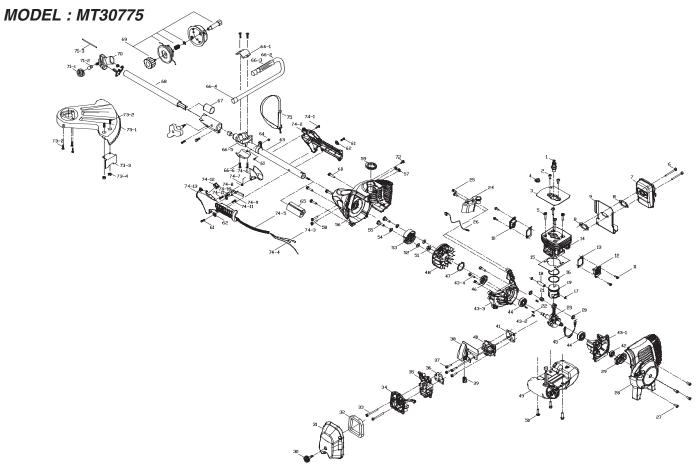
- 1. Remove spark plug.
- 2. Pull starter rope briskly to clear excess oil from combustion chamber.
- 3. Clean and gap spark plug or install a new spark plug with proper gap.
- 4. Prepare unit for operation.
- 5. Fill fuel tank with proper fuel / oil mixture. See Fuel and Lubrication Section.

# 9 - TROUBLESHOOTING THE ENGINE

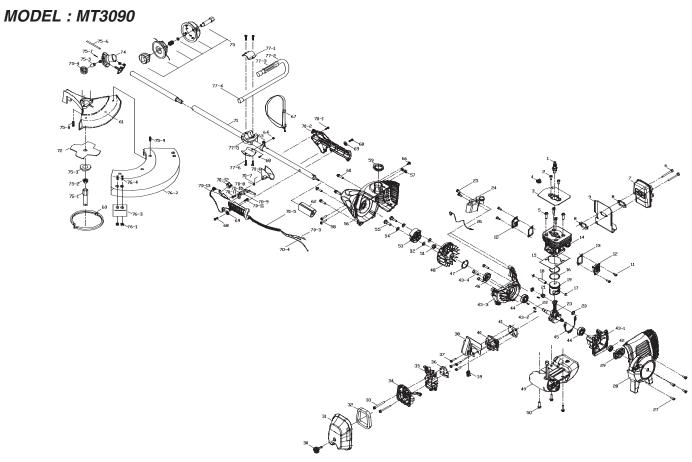
PROBLEM	PROBABLE CAUSE	CORRECTIVE ACTION
Unit won't start or starts but will not run.	Incorrect starting procedures.	Follow instructions in the User Manual.
	Incorrect carburetor mixture adjustment setting.	Have carburetor adjusted by an Authorized Service Center.
	Fouled spark plug	Clean / gap or replace plug.
	Fuel filter plugged.	Replace fuel filter.
Unit starts, but engine has low power.	Incorrect lever position on choke.	Move to RUN position.
	Dirty spark arrester screen.	Replace spark arrester screen.
	Dirty air filter.	Remove, clean and reinstall filter.
	Incorrect carburetor mixture adjustment setting.	Have carburetor adjusted by an Authorized Service Center.
Engine hesitates.	Incorrect carburetor mixture adjustment setting.	Have carburetor adjusted by an Authorized Service Center.
No power under load.	ootang.	
Runs erratically.	Incorrectly gapped spark plug.	Clean / gap or replace plug.
Smokes excessively.	Incorrect carburetor mixture adjustment setting.	Have carburetor adjusted by an Authorized Service Center.
	Incorrect fuel mixture.	Use properly mixed fuel (40:1 mixture).



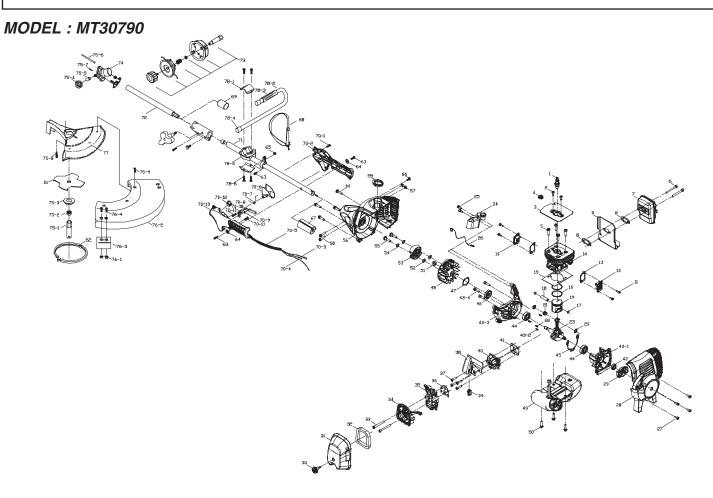
<u>No.</u>	Parts No.	Description	No.	Parts No.	Description	No.	Parts No.	Description
1	9295-310501	SPARK PLUG	33	9228-334507	FILTER ASS'Y	62-1	9068-330306	HOUSING, HANDLE-UPPER
2	9SGEB-05-10	SCREW	34	9287-334501	CARBURETOR	62-2	9SKKBY10/24-1	SCREW
3	9211-334502	PLATE (SPARK SIDE)	35	9014-334505	CARBURETOR GASKET	62-3	9068-330305	HOUSING, HANDLE-UNDER
4	9012-330301	GROMMET	36	9SKKB-05-19	SCREW	62-4	9NAC-10/24	NUT
5	9SRCB-05-22	SCREW	37	9211-334503	PLATE	63	9027-332101	REDUTION
6	9SXMBJ05-50	SCREW	38	9012-334501	GROMMET	64	9228-332627	HOUSING ASS'Y
7	9228-334503	MUFFLE ASS'Y	39	9072-334501	INSULATOR	65	9228-330319	STRINGHEAD ASS'Y
8	9014-GP0102	MUFFLE GASKET	40	9014-334506	INSULATOR GASKET	66	9110-330301	GEAR HOUSING ASS'Y
9	9211-334501	MUFFLE PLATE	41	9157-332101	SEAL	67	9125-332601	ACCESSORIES
10	9017-334501	COVER (FLYWHEEL SIDE)	42	9228-334501	CRANKCASE ASS'Y	67-1	9131-330304	COLLAR
11	9SGEB-04-10	SCREW	42-1	9151-334502F	CRANKCASE (STARTER SIDE)	67-2	9124-330309	SPLINE SLEEVE
12	9017-334502	GASKET	42-2	9PA-03-08S	PIN	67-3	9111-330301	NUT
13	9014-334507	GASKET	42-3	9151-334501F	CRANKCASE (FLYWHEEL SIDE)	68	9228-330324	COVER ASS'Y
14	9292-334501F	CYLINDER	42-4	9SGEB-05-20	SCREW	68-1	9017-330315	COVER
15	9014-334501	GASKET	43	9DB-620101	BEARING	68-2	9SKKBY10/24-0.5	SCREW
16	9189-334501	PISTON RING	44	9014-334502	GASKET	68-3	9250-330301	KIT, KNIFE
17	9131-334501	CIRCLLP	45	9157-334501	SEAL	68-4	6NGB-10/24	NUT
18	9115-334501	PISTON PIN	46	9CB-32	C RING	69	9228-334510	HANDLE ASS'Y
19	9290-334501	PISTON	47	9169-334501	FLYWHEEL	69-1	6SDABB04-12	SCREW
20	9067-334501	AXLS COVER	48	9228-334506	FUEL TANK ASS'Y	69-2	9068-332103	HOUSING, HANDLE
21	9NR-KV9129.8	NEEDLE BEARING	49	9SKKBY05-18	SCREW	69-3	9010-332103	WIRE ASS'Y, SWITCH
22	6221-830301	KEY	50	9NHC-08	NUT	69-4	9010-334501	THROTTLE CABLE
23	9228-334502	CRANK/ROD ASS'Y	51	9WFB-06-15	WASHER	69-5	9059-332101	HOSE
24	9288-334501-CH	IGNITION COIL	52	9176-GP0101	CLUTCH (WITH SPRING)	69-6	9028-332101	TRIGGER
25	9SGEB-05-20	SCREW	53	9WWB-08	WAVE PLATE	69-7	9024-332102	SPRING
26	9010-332102	COIL WIRE	54	9214-GP0101	SCREW	69-8	9176-332101	LIBERATE SHAFT
27	9SGKB-05-12.5	SCREW	55	9228-334508	TRANSMISSION SUPPORT ASS'Y	69-9	9024-332103	SPRING
28	9228-334504	STARTER HOUSING ASS'Y	56	9NDB-05	NUT	69-10	9176-332102	LIBERATE CHUNK
29	9228-MD0107	PAWLS ASS'Y	57	9SDABM05-25	SCREW	69-11	6SLABB3.5-10	SCREW
30	9228-334512	FILTER COVER ASS'Y	58	9SKKB-05-16	SCREW	69-12	9022-330502	SWITCH
30-1	9134-334501	KNOB	59	6SDAB-05-08	SCREW	69-13	9068-332104	HOUSING, HANDLE
30-2	9017-334505	FILTER COVER	60	9WFB-5.64-12	WASHER	70	9076-GP0101	SEAL
31	9183-334501	FILTER	61	9SGKBY10/24-0.625	SCREW			
32	9SGEB-05-52	SCREW	62	9228-330336	HANDLE ASS'Y			



No.	Parts No.	Description	No.	Parts No.	Description	No.	Parts No.	Description
1	9295-310501	SPARK PLUG	35	9014-334505	CARBURETOR GASKET	64-3	9068-330303	HANDLE
2	9SGEB-05-10	SCREW	36	9SKKB-05-19	SCREW	64-4	9070-330301	PLUG
3	9211-334502	PLATE (SPARK SIDE)	37	9211-334503	PLATE	64-5	9072-330402	CENTERPLECE
4	9012-330301	GROMMET	38	9012-334501	GROMMET	64-6	9125-330301	PARTS BAG
5	9SRCB-05-22	SCREW	39	9072-334501	INSULATOR	65	9105-330301	PLUG
6	9SXMBJ05-50	SCREW	40	9014-334506	INSULATOR GASKET	66	9228-A10505	HOUSING ASS'Y
7	9228-334503	MUFFLE ASS'Y	41	9157-332101	SEAL	67	9228-330319	STRINGHEAD ASS'Y
8	9014-GP0102	MUFFLE GASKET	42	9228-334501	CRANKCASE ASS'Y	68	9110-330301B	GEAR HOUSING ASS'Y
9	9211-334501	MUFFLE PLATE	42-1	9151-334502F	CRANKCASE (STARTER SIDE)	69	9125-332601	ACCESSORIES
10	9017-334501	COVER (FLYWHEEL SIDE)	42-2	9PA-03-08S	PIN	69-1	9131-330304	COLLAR
11	9SGEB-04-10	SCREW	42-3	9151-334501F	CRANKCASE (FLYWHEEL SIDE)	69-2	9124-330309	SPLINE SLEEVE
12	9017-334502	GASKET	42-4	9SGEB-05-20	SCREW	69-3	9111-330301	NUT
13	9014-334507	GASKET	43	9DB-620101	BEARING	70	9SGKBY10/24-0.625	SCREW
14	9292-334501F	CYLINDER	44	9014-334502	GASKET	71	9228-330324	GRASS SHIELD ASS'Y
15	9014-334501	GASKET	45	9157-334501	SEAL	71-1	9017-330315	GRASS SHIELD
16	9189-334501	PISTON RING	46	9CB-32	C RING	71-2	9SKKBY10/24-0.5	SCREW
17	9131-334501	CIRCLLP	47	9169-334501	FLYWHEEL	71-3	9250-330301	KIT, KNIFE
18	9115-334501	PISTON PIN	48	9228-334506	FUEL TANK ASS'Y	71-4	6NGB-10/24	NUT
19	9290-334501	PISTON	49	9SKKBY05-18	SCREW	72	9228-334510	HANDLE ASS'Y
20	9067-334501	AXLS COVER	50	9NHC-08	NUT	72-1	6SDABB04-12	SCREW
21	9NR-KV9129.8	NEEDLE BEARING	51	9WFB-06-15	WASHER	72-2	9068-332103	HOUSING, HANDLE
22	6221-830301	KEY	52	9176-GP0101	CLUTCH (WITH SPRING)	72-3	9010-332103	WIRE ASS'Y, SWITCH
23	9228-334502	CRANK/ROD ASS'Y	53	9WWB-08	WAVE PLATE	72-4	9010-334501	THROTTLE CABLE
24	9288-334501-CH	IGNITION COIL	54	9214-GP0101	SCREW	72-5	9059-332101	HOSE
25	9SGEB-05-20	SCREW	55	9228-334508	TRANSMISSION SUPPORT ASS'Y	72-6	9028-332101	TRIGGER
26	9010-332102	COIL WIRE	56	9NDB-05	NUT	72-7	9024-332102	SPRING
27	9SGKB-05-12.5	SCREW	57	9SDABM05-25	SCREW	72-8	9176-332101	LIBERATE SHAFT
28	9228-334504	STARTER HOUSING ASS'Y	58	9SKKB-05-16	SCREW	72-9	9024-332103	SPRING
29	9228-MD0107	PAWLS ASS'Y	59	6SDAB-05-08	SCREW	72-10	9176-332102	LIBERATE CHUNK
30	9228-334512	FILTER COVER ASS'Y	60	9WFB-5.64-12	WASHER	72-11	6SLABB3.5-10	SCREW
30-1	9134-334501	KNOB	61	9228-330354	BAG BEHIND	72-12	9022-330502	SWITCH
30-2	9017-334505	FILTER COVER	62	6NGB-05	NUT	72-13	9068-332104	HOUSING, HANDLE
31	9183-334501	FILTER	63	9027-332101	REDUTION	73	9149-330301-CH	HARNESS
32	9SGEB-05-52	SCREW	64	9228-330355	HANDLE ASS'Y	74	9076-GP0101	SEAL
33	9228-334507	FILTER ASS'Y	64-1	9014-330402	CLAMP			
34	9287-334501	CARBURETOR	64-2	9068-330312	J HANDLE			



No.         Parts No.         Description         No.         Parts No.         Description           1         9295-310501         SPARK PLUG         39         9012-334501         GROMMET         70-3         9010-332103         WIRE ASS'Y, SWIT           2         95GEB-05-10         SCREW         40         9072-334501         INSULATOR         70-4         9010-334501         THROTTLE CABLE           3         9211-334502         PLATE (SPARK SIDE)         41         9014-334506         INSULATOR GASKET         70-5         9059-332101         HOSE           4         9012-330301         GROMMET         42         9157-332101         SEAL         70-6         9028-332101         TRIGGER           5         9SRCB-05-22         SCREW         43         9228-334501         CRANKCASE ASS'Y         70-7         9024-332102         SPRING           6         9SXMBJ05-50         SCREW         43-1         9151-334502F         CRANKCASE (STARTER SIDE)         70-8         9176-332101         LIBERATE SHAFT           7         9228-334503         MUFFLE GASKET         43-2         9PA-03-08         PIN         70-9         9024-332103         SPRING           8         9014-90102         MUFFLE GASKET         43-3	
2         9SGEB-05-10         SCREW         40         9072-334501         INSULATOR         70-4         9010-334501         THROTTLE CABLE           3         9211-334502         PLATE (SPARK SIDE)         41         9014-334506         INSULATOR GASKET         70-5         9059-332101         HOSE           4         9012-330301         GROMMET         42         9157-332101         SEAL         70-6         9028-332101         TRIGGER           5         9SROB-05-22         SCREW         43         9228-334501         CRANKCASE ASS'Y         70-7         9024-332102         SPRING           6         9SXMBJ05-50         SCREW         43-1         9151-334502F         CRANKCASE (STARTER SIDE)         70-8         9176-332101         LIBERATE SHAFT           7         9228-334503         MUFFLE ASS'Y         43-2         9PA-03-08         PIN         70-9         9024-332103         SPRING           8         9014-GP0102         MUFFLE GASKET         43-3         9151-334501F         CRANKCASE (FLYWHEEL SIDE)         70-10         9176-332102         LIBERATE CHUNK           9         9211-334501         MUFFLE PLATE         43-4         9SGEB-05-20         SCREW         70-11         6SLABB3.5-10         SCREW	
3         9211-334502         PLATE (SPARK SIDE)         41         9014-334506         INSULATOR GASKET         70-5         9059-332101         HOSE           4         9012-330301         GROMMET         42         9157-332101         SEAL         70-6         9028-332101         TRIGGER           5         9SRCB-05-22         SCREW         43         9228-334501         CRANKCASE ASS'Y         70-7         9024-332102         SPRING           6         9SXMBJ05-50         SCREW         43-1         9151-334502F         CRANKCASE (STARTER SIDE)         70-8         9176-332101         LIBERATE SHAFT           7         9228-334503         MUFFLE ASS'Y         43-2         9PA-03-08         PIN         70-9         9024-332103         SPRING           8         9014-GP0102         MUFFLE GASKET         43-3         9151-334501F         CRANKCASE (FLYWHEEL SIDE)         70-10         9176-332102         LIBERATE CHUNK           9         9211-334501         MUFFLE PLATE         43-4         9SGEB-05-20         SCREW         70-11         6SLABB3.5-10         SCREW           10         9017-334501         COVER (FLYWHEEL SIDE)         44         9DB-620101         BEARING         70-12         9022-335002         SWITCH	Ή
4         9012-330301         GROMMET         42         9157-332101         SEAL         70-6         9028-332101         TRIGGER           5         9SRCB-05-22         SCREW         43         9228-334501         CRANKCASE ASS'Y         70-7         9024-332102         SPRING           6         9SXMBJ05-50         SCREW         43-1         9151-334502F         CRANKCASE (STARTER SIDE)         70-8         9176-332101         LIBERATE SHAFT           7         9228-334503         MUFFLE ASS'Y         43-2         9PA-03-08         PIN         70-9         9024-332103         SPRING           8         9014-GP0102         MUFFLE ASS'Y         43-2         9PA-03-08         PIN         70-9         9024-332103         SPRING           9         9211-334501         MUFFLE PLATE         43-4         9SGEB-05-20         SCREW         70-10         9176-332102         LIBERATE CHUNK           9         9017-334501         COVER (FLYWHEEL SIDE)         44         9DB-620101         BEARING         70-12         9022-330502         SWITCH           11         9SGEB-04-10         SCREW         45         9014-334502         GASKET         70-13         9068-332104         HOUSING, HANDLE           12         9017-33	
5         9SRCB-05-22         SCREW         43         9228-334501         CRANKCASE ASS'Y         70-7         9024-332102         SPRING           6         9SXMBJ05-50         SCREW         43-1         9151-334502F         CRANKCASE (STARTER SIDE)         70-8         9176-332101         LIBERATE SHAFT           7         9228-334503         MUFFLE ASS'Y         43-2         9PA-03-08         PIN         70-9         9024-332103         SPRING           8         9014-GP0102         MUFFLE GASKET         43-3         9151-334501F         CRANKCASE (FLYWHEEL SIDE)         70-10         9176-332102         LIBERATE CHUNK           9         9211-334501         MUFFLE PLATE         43-4         9S6EB-05-20         SCREW         70-11         6SLABB3.5-10         SCREW           10         9017-334501         COVER (FLYWHEEL SIDE)         44         9DB-620101         BEARING         70-12         9022-330502         SWITCH           11         9SGEB-04-10         SCREW         45         9014-334502         GASKET         70-13         9068-332104         HOUSING ASS'Y           12         9017-334502         GASKET         46         9157-334501         SEAL         71         9228-330617         HOUSING ASS'Y           <	
6 9SXMBJ05-50 SCREW 43-1 9151-334502F CRANKCASE (STARTER SIDE) 70-8 9176-332101 LIBERATE SHAFT 7 9228-334503 MUFFLE ASS'Y 43-2 9PA-03-08 PIN 70-9 9024-332103 SPRING 8 9014-GP0102 MUFFLE GASKET 43-3 9151-334501F CRANKCASE (FLYWHEEL SIDE) 70-10 9176-332102 LIBERATE CHUNK 9 9211-334501 MUFFLE PLATE 43-4 9SGEB-05-20 SCREW 70-11 65LABB3.5-10 SCREW 10 9017-334501 COVER (FLYWHEEL SIDE) 44 9DB-620101 BEARING 70-12 9022-330502 SWITCH 11 9SGEB-04-10 SCREW 45 9014-334502 GASKET 70-13 9068-332104 HOUSING, HANDLE 12 9017-334502 GASKET 46 9157-334501 SEAL 71 9228-332617 HOUSING ASS'Y 13 9014-334507 GASKET 47 9CB-32 C RING 72 9250-330601 BLADE, BRUSH 4-1 9292-334501F CYLINDER 48 9169-334501 FLYWHEEL 73 9228-330319 SRTINGHEAD ASS' 15 9014-334501 GASKET 49 9228-334506 FUEL TANK ASS'Y 74 9110-330301 GEAR HOUSING ASS'Y	
7         9228-334503         MUFFLE ASS'Y         43-2         9PA-03-08         PIN         70-9         9024-332103         SPRING           8         9014-GP0102         MUFFLE GASKET         43-3         9151-334501F         CRANKCASE (FLYWHEEL SIDE)         70-10         9176-332102         LIBERATE CHUNK           9         9211-334501         MUFFLE PLATE         43-4         9SGEB-05-20         SCREW         70-11         6SLABB3.5-10         SCREW           10         9017-334501         COVER (FLYWHEEL SIDE)         44         9DB-620101         BEARING         70-12         9022-330502         SWITCH           11         9SGEB-04-10         SCREW         45         9014-334502         GASKET         70-13         9068-332104         HOUSING, HANDLE           12         9017-334502         GASKET         46         9157-334501         SEAL         71         9228-332617         HOUSING ASS'Y           13         9014-334507         GASKET         47         9CB-32         C RING         72         9250-330601         BLADE, BRUSH 4-1           14         9292-334501F         CYLINDER         48         9169-334501         FLYWHEEL         73         9228-330319         SRTINGHEAD ASS'           15	
8         9014-GP0102         MUFFLE GASKET         43-3         9151-334501F         CRANKCASE (FLYWHEEL SIDE)         70-10         9176-332102         LIBERATE CHUNK           9         9211-334501         MUFFLE PLATE         43-4         9SGEB-05-20         SCREW         70-11         6SLABB3.5-10         SCREW           10         9017-334501         COVER (FLYWHEEL SIDE)         44         9DB-620101         BEARING         70-12         9022-330502         SWITCH           11         9SGEB-04-10         SCREW         45         9014-334502         GASKET         70-13         9068-332104         HOUSING, HANDLE           12         9017-334502         GASKET         46         9157-334501         SEAL         71         9228-332617         HOUSING ASS'Y           13         9014-334507         GASKET         47         9CB-32         C RING         72         9250-330611         BLADE, BRUSH 4-1           14         9292-334501F         CYLINDER         48         9169-334501         FLYWHEEL         73         9228-330319         SRTINGHADA ASS'Y           15         9014-334501         GASKET         49         9228-334506         FUEL TANK ASS'Y         74         9110-330301         GEAR HOUSING ASS'Y	
9 9211-334501 MUFFLE PLATE 43-4 9SGEB-05-20 SCREW 70-11 6SLABB3.5-10 SCREW 10 9017-334501 COVER (FLYWHEEL SIDE) 44 9DB-620101 BEARING 70-12 9022-330502 SWITCH 11 9SGEB-04-10 SCREW 45 9014-334502 GASKET 70-13 9068-332104 HOUSING, HANDLE 12 9017-334502 GASKET 46 9157-334501 SEAL 71 9228-332617 HOUSING ASS'Y 13 9014-334507 GASKET 47 9CB-32 C RING 72 9250-330601 BLADE, BRUSH 4-1 14 9292-334501F CYLINDER 48 9169-334501 FLYWHEEL 73 9228-330319 SRTINGHEAD ASS' 15 9014-334501 GASKET 49 9228-334506 FUEL TANK ASS'Y 74 9110-330301 GEAR HOUSING AS	
10         9017-334501         COVER (FLYWHEEL SIDE)         44         9DB-620101         BEARING         70-12         9022-330502         SWITCH           11         9SGEB-04-10         SCREW         45         9014-334502         GASKET         70-13         9068-332104         HOUSING, HANDLE           12         9017-334502         GASKET         46         9157-334501         SEAL         71         9228-332617         HOUSING ASS'Y           13         9014-334507         GASKET         47         9CB-32         C RING         72         9250-330601         BLADE, BRUSH 4-1           14         9292-334501F         CYLINDER         48         9169-334501         FLYWHEEL         73         9228-330319         SRTINGHEAD ASS'           15         9014-334501         GASKET         49         9228-334506         FUEL TANK ASS'Y         74         9110-330301         GEAR HOUSING AS	
11       9SGEB-04-10       SCREW       45       9014-334502       GASKET       70-13       9068-332104       HOUSING, HANDLE         12       9017-334502       GASKET       46       9157-334501       SEAL       71       9228-332617       HOUSING ASS'Y         13       9014-334507       GASKET       47       9CB-32       C RING       72       9250-330601       BLADE, BRUSH 4-1         14       9292-334501F       CYLINDER       48       9169-334501       FLYWHEEL       73       9228-330319       SRTINGHEAD ASS'         15       9014-334501       GASKET       49       9228-334506       FUEL TANK ASS'Y       74       9110-330301       GEAR HOUSING AS	
12       9017-334502       GASKET       46       9157-334501       SEAL       71       9228-332617       HOUSING ASS'Y         13       9014-334507       GASKET       47       9CB-32       C RING       72       9250-330601       BLADE, BRUSH 4-1         14       9292-334501F       CYLINDER       48       9169-334501       FLYWHEEL       73       9228-330319       SRTINGHEAD ASS'         15       9014-334501       GASKET       49       9228-334506       FUEL TANK ASS'Y       74       9110-330301       GEAR HOUSING AS	
13       9014-334507       GASKET       47       9CB-32       C RING       72       9250-330601       BLADE, BRUSH 4-1         14       9292-334501F       CYLINDER       48       9169-334501       FLYWHEEL       73       9228-330319       SRTINGHEAD ASS'         15       9014-334501       GASKET       49       9228-334506       FUEL TANK ASS'Y       74       9110-330301       GEAR HOUSING AS	
14         9292-334501F         CYLINDER         48         9169-334501         FLYWHEEL         73         9228-330319         SRTINGHEAD ASS'           15         9014-334501         GASKET         49         9228-334506         FUEL TANK ASS'Y         74         9110-330301         GEAR HOUSING AS	
15 9014-334501 GASKET 49 9228-334506 FUEL TANK ASS'Y 74 9110-330301 GEAR HOUSING AS	HTOC
	!
16 9189-334501 PISTON RING 50 9SKKRY05-18 SCREW 75 9125-332603 ACCESSORIES	3'Y
10 0100 00 1001 FIGURE 1010 00 TOTAL 1010 10 TOTAL 1010 10 TOTAL 1010 10 TOTAL 1010 1010 1010 1010 1010 1010 1010 10	
17 9131-334501 CIRCLLP 51 9NHC-08 NUT 75-1 9042-330301 SLEEVE	
18 9115-334501 PISTON PIN 52 9WFB-06-15 WASHER 75-2 9NAZ-10 NUT	
19 9290-334501 PISTON 53 9176-GP0101 CLUTCH (WITH SPRING) 75-3 9111-330601 FLANGE, SPINDLE	
20 9067-334501 AXLS COVER 54 9WWB-08 WAVE PLATE 75-4 9131-330304 COLLAR	
21 9NR-KV9129.8 NEEDLE BEARING 55 9214-GP0101 SCREW 75-5 9124-330309 SPLINE SLEEVE	
22 6221-830301 KEY 56 9228-334508 TRANSMISSION SUPPORT ASS'Y 75-6 9111-330301 STICK	
23 9228-334502 CRANK/ROD ASS'Y 57 9NDB-05 NUT 75-7 9PB-1.4-20 PIN	
24 9288-334501-CH IGNITION COIL 58 9SDABM05-25 SCREW 75-8 9SKKBY10/24-0.5 SCREW	
25 9SRCB-05-20 SCREW 59 9012-334502 GROMMET 75-9 9SKKB-06-15 SCREW	
26 9010-332102 COIL WIRE 60 9SKKB-05-16 SCREW 76 9228-330614 COVER ASS'Y	
27 9SGKB-05-12.5 SCREW 61 9017-330301 SHIELD, BLADE 76-1 6NGB-10/24 NUT	
28 9228-334504 STARTER HOUSING ASS'Y 62 9027-332101 EDUTION 76-2 9017-330310 COVER	
29 9228-MD0107 PAWLS ASS'Y 63 9015-330601 GUARD, CUTTING BLADE 76-3 9250-330301 KIT, KNIFE	
30 9134-334501 KNOB 64 6NGB-05 NUT 76-4 9SKKBY10/24-0.62 SCREW	
31 9017-334505 FILTER COVER 65 9131-330305 HARNESS RING 77 9228-330345 HANDLE ASS'Y	
32 9183-334501 FILTER 66 9SGKBY10/24-0.625 SCREW 77-1 9014-330401 CLAMP	
33 9SGEB-05-52 SCREW 67 9149-330301-CH HARNESS 77-2 9068-330309 J HANDLE	
34 9228-334507 FILTER ASS'Y 68 6SDAB-05-08 SCREW 77-3 9068-330303 HANDLE	
35 9287-334501 CARBURETOR 69 9WFB-5.64-12 WASHER 77-4 9070-330301 PLUG	
36 9014-334505 CARBURETOR GASKET 70 9228-334510 HANDLE ASS'Y 77-5 9072-330401 CENTERPLECE	
37 9SKKB-05-19 SCREW 70-1 6SDABB04-12 SCREW 77-6 9125-330301 PARTS BAG	
38 9211-334503 PLATE 70-2 9068-332103 HOUSING, HANDLE	



<u>No.</u>	Parts No.	Description	No.	Parts No.	Description	No.	Parts No.	Description
1	9295-310501	SPARK PLUG	39	9012-334501	GROMMET	70-3	9010-332103	WIRE ASS'Y, SWITCH
2	9SGEB-05-10	SCREW	40	9072-334501	INSULATOR	70-4	9010-334501	THROTTLE CABLE
3	9211-334502	PLATE (SPARK SIDE)	41	9014-334506	INSULATOR GASKET	70-5	9059-332101	HOSE
4	9012-330301	GROMMET	42	9157-332101	SEAL	70-6	9028-332101	TRIGGER
5	9SRCB-05-22	SCREW	43	9228-334501	CRANKCASE ASS'Y	70-7	9024-332102	SPRING
6	9SXMBJ05-50	SCREW	43-1	9151-334502F	CRANKCASE (STARTER SIDE)	70-8	9176-332101	LIBERATE SHAFT
7	9228-334503	MUFFLE ASS'Y	43-2	9PA-03-08	PIN `	70-9	9024-332103	SPRING
8	9014-GP0102	MUFFLE GASKET	43-3	9151-334501F	CRANKCASE (FLYWHEEL SIDE)	70-10	9176-332102	LIBERATE CHUNK
9	9211-334501	MUFFLE PLATE	43-4	9SGEB-05-20	SCREW `	70-11	6SLABB3.5-10	SCREW
10	9017-334501	COVER (FLYWHEEL SIDE)	44	9DB-620101	BEARING	70-12	9022-330502	SWITCH
11	9SGEB-04-10	SCREW`	45	9014-334502	GASKET	70-13	9068-332104	HOUSING, HANDLE
12	9017-334502	GASKET	46	9157-334501	SEAL	71	9228-330354	BEHIND HOUSING ASS'Y
13	9014-334507	GASKET	47	9CB-32	C RING	72	9228-A10505	FRONT HOUSING ASS'Y
14	9292-334501F	CYLINDER	48	9169-334501	FLYWHEEL	73	9228-330319	SRTINGHEAD ASS'Y
15	9014-334501	GASKET	49	9228-334506	FUEL TANK ASS'Y	74	9110-330301B	GEAR HOUSING ASS'Y
16	9189-334501	PISTON RING	50	9SKKBY05-18	SCREW	75	9125-332603	ACCESSORIES
17	9131-334501	CIRCLLP	51	9NHC-08	NUT	75-1	9042-330301	SLEEVE
18	9115-334501	PISTON PIN	52	9WFB-06-15	WASHER	75-2	9NAZ-10	NUT
19	9290-334501	PISTON	53	9176-GP0101	CLUTCH (WITH SPRING)	75-3	9111-330601	FLANGE, SPINDLE
20	9067-334501	AXLS COVER	54	9WWB-08	WAVE PLATE	75-4	9131-330304	COLLAR
21	9NR-KV9129.8	NEEDLE BEARING	55	9214-GP0101	SCREW	75-5	9124-330309	SPLINE SLEEVE
22	6221-830301	KEY	56	9228-334508	TRANSMISSION SUPPORT ASS'Y	75-6	9111-330301	STICK
23	9228-334502	CRANK/ROD ASS'Y	57	9NDB-05	NUT	75-7	9PB-1.4-20	PIN
24	9288-334501-CH	IGNITION COIL	58	9SDABM05-25	SCREW	75-8	9SKKBY10/24-0.5	SCREW
25	9SRCB-05-20	SCREW	59	9012-334502	GROMMET	75-9	9SKKB-06-15	SCREW
26	9010-332102	COIL WIRE	60	9SKKB-05-16	SCREW	76	9228-330614	COVER ASS'Y
27	9SGKB-05-12.5	SCREW	61	9250-330601	BLADE, BRUSH 4-TOOTH	76-1	6NGB-10/24	NUT
28	9228-334504	STARTER HOUSING ASS'Y	62	9015-330601	GUARD, CUTTING BLADE	76-2	9017-330310	COVER
29	9228-MD0107	PAWLS ASS'Y	63	6SDAB-05-08	SCREW	76-3	9250-330301	KIT, KNIFE
30	9134-334501	KNOB	64	9WFB-5.64-12	WASHER	76-4	9SKKBY10/24-0.62	SCREW
31	9017-334505	FILTER COVER	65	6NGB-05	NUT	77	9017-330301	SHIELD, BLADE
32	9183-334501	FILTER	66	9SGKBY10/24-0.625	SCREW	78	9228-330355	HANDLE ASS'Y
33	9SGEB-05-52	SCREW	67	9027-332101	REDUTION	78-1	9014-330402	CLAMP
34	9228-334507	FILTER ASS'Y	68	9149-330301-CH	HARNESS	78-2	9068-330312	J HANDLE
35	9287-334501	CARBURETOR	69	9105-330301	PLUG	78-3	9068-330303	HANDLE
36	9014-334505	CARBURETOR GASKET	70	9228-334510	HANDLE ASS'Y	78-4	9070-330301	PLUG
37	9SKKB-05-19	SCREW	70-1	6SDABB04-12	SCREW	78-5	9072-330402	CENTERPLECE
38	9211-334503	PLATE	70-2	9068-332103	HOUSING, HANDLE	78-6	9125-330301	PARTS BAG





For problems or questions, DO NOT return this product to the store. Contact your Customer Service Agent.

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