

OPERATION AND PARTS MANUAL



Tamping Rammer *Mikasa* Model MT-62HS

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Revision #2 (12/15/03)



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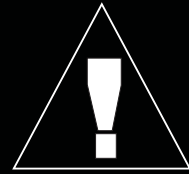
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FAX: 310-631-5032

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WARNING



CALIFORNIA — Proposition 65 Warning

Engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

HERE'S HOW TO GET HELP

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

MULTIQUIP'S MAIN PHONE NUMBERS

800-421-1244 FAX: 310-537-3927
310-537-3700

PARTS DEPARTMENT

800-427-1244 FAX: 800-672-7877
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800-478-1244 FAX: 310-537-4259
310-537-3700

MQ POWER SERVICE DEPARTMENT

800-835-2551 FAX: 310-638-8046
310-537-3700

TECHNICAL ASSISTANCE

800-478-1244 FAX: 310-631-5032

WARRANTY DEPARTMENT

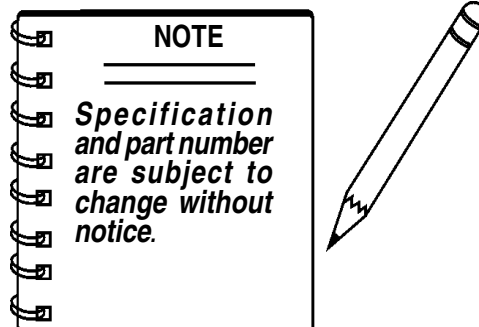
800-421-1244, EXT. 279 FAX: 310-537-1173
310-537-3700, EXT. 279

MT-62HS Tamping Rammer

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ROBIN EC-08HS ENGINE

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PARTS ORDERING PROCEDURES

When ordering parts, please supply the following information:

- Dealer account number
- Dealer name and address
- Shipping address (if different than billing address)
- Return fax number
- Applicable model number
- Quantity, part number and description of each part
- Specify preferred method of shipment:
 - ✓ FedEx or UPS Ground
 - ✓ FedEx or UPS Second Day or Third Day
 - ✓ FedEx or UPS Next Day
 - ✓ Federal Express Priority One
 - ✓ DHL
 - ✓ Truck

Note: Unless otherwise indicated by customer, all orders are treated as "Standard Orders", and will ship within 24 hours. We will make every effort to ship "Air Shipments" the same day that the order is received, if prior to 2PM west coast time. "Stock Orders" must be so noted on fax or web forms.



Here's how to get help...

Please have the model and serial number on hand when calling.

Parts Department

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

Mayco Parts

800-306-2926 Fax: 800-672-7877
310-537-3700 Fax: 310-637-3284

Service Department

800-478-1244 Fax: 310-537-4259
310-537-3700

MQ Power Service Department

800-835-2551 Fax: 310-638-8046
310-537-3700

Technical Assistance

800-478-1244 Fax: 310-631-5032

Warranty Department

800-421-1244, Ext. 279 Fax: 310-537-1173
310-537-3700, Ext. 279

Multiquip's Main Phone Numbers

800-421-1244 Fax: 310-537-3927
310-537-3700



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E-MAIL: mq@multiquip.com
WWW: multiquip.com

Place Your Parts Order Via Web or Fax For Even More Savings!

Extra Discounts!

All parts orders which include complete part numbers and are received by our automated web parts order system, or by fax qualify for the following extra discounts:

| Ordered via | Standard orders | Stock orders (\$750 list and above) |
|-------------|-----------------|-------------------------------------|
| Fax | 3% | 10% |
| Web | 5% | 10% |

Special freight allowances when you order 10 or more line items via Web or Fax! **

FedEx Ground Service **at no charge for freight**
No other allowances on freight shipped by any other carrier.

NOTE: DISCOUNTS ARE SUBJECT TO CHANGE

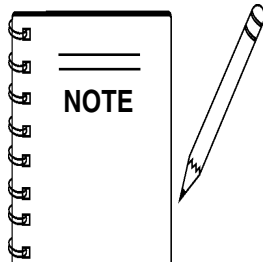
Direct TOLL-FREE access to our Parts Department:

Toll-free nationwide — 800-427-1244

MT-62HS — SAFETY MESSAGE ALERT SYMBOLS

FOR YOUR SAFETY AND THE SAFETY OF OTHERS!

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.



This Owner's Manual has been developed to provide complete instructions for the safe and efficient operation of the Multiquip MT-62HS Tamping Rammer. Refer to the engine manufacturer's instructions for data relative to its safe operation.

Before using this Rammer, ensure that the operating individual has read and understands all instructions in this manual.

SAFETY MESSAGE ALERT SYMBOLS

The three (3) 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 three words: **DANGER**, **WARNING**, or **CAUTION**.



DANGER: You **WILL** be **KILLED** or **SERIOUSLY** injured if you do not follow directions.



WARNING: You **CAN** be **KILLED** or **SERIOUSLY** injured if you do not follow directions.



CAUTION: You **CAN** be injured if you do not follow directions.

Potential hazards associated with the MT-62HS Tamping Rammer operation will be referenced with Hazard Symbols which appear throughout this manual, and will be referenced in conjunction with Safety Message Alert Symbols.

HAZARD SYMBOLS



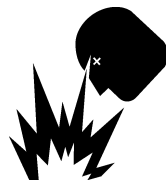
Lethal Exhaust Gases



Engine exhaust gases contain poisonous carbon monoxide. This gas is colorless and odorless, and can cause death if inhaled. **NEVER** operate this equipment in a confined area or enclosed structure that does not provide ample free flow air.



Explosive Fuel



GASOLINE is extremely flammable, and its vapors can cause an explosion if ignited. **DO NOT** start the engine near spilled fuel or combustible fluids. **DO NOT** fill the fuel tank while the engine is running or hot. **DO NOT** overfill tank, since spilled fuel could ignite if it comes into contact with hot engine parts or sparks from the ignition system. Store fuel in approved containers, in well-ventilated areas and away from sparks and flames. **NEVER** use fuel as a cleaning agent.



Burn Hazards



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.



Rotating Parts



NEVER operate equipment with covers, or guards removed. Keep fingers, hands, hair and clothing away from all moving parts to prevent injury.

MT-62HS — SAFETY MESSAGE ALERT SYMBOLS



Accidental Starting



OFF

ALWAYS place the engine ON/OFF switch in the **OFF** position, and remove the ignition key when the machine is not in use.



Respiratory Hazard



ALWAYS wear approved respiratory protection.



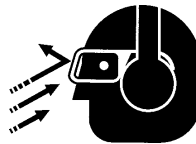
Over Speed Conditions



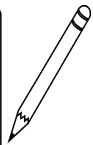
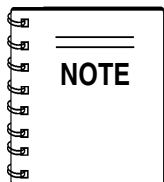
NEVER tamper with the factory settings of the engine governor or settings. Personal injury and damage to the engine or equipment can result if operating in speed ranges above maximum allowable.



Sight and Hearing hazard



ALWAYS wear approved eye and hearing protection.



This *rammer*, other property, or the surrounding environment could be damaged if you do not follow instructions.



Equipment Damage Messages

Other important messages are provided throughout this manual to help prevent damage to your rammer, other property, or the surrounding environment.

MT-62HS — RULES FOR SAFE OPERATION

DANGER:



Failure to follow instructions in this manual may lead to serious injury or even death! This equipment is to be operated by trained and qualified personnel only! This equipment is for industrial use only.

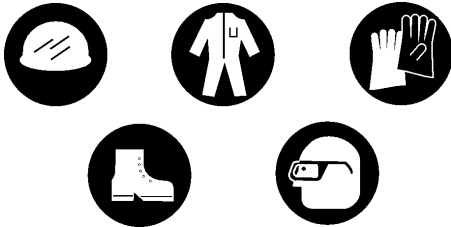
The following safety guidelines should always be used when operating the MT-62HS Tamping Rammer:

SAFETY

- **DO NOT** operate or service this equipment before reading this entire manual.



- This equipment should not be operated by persons under 18 years of age.
- **NEVER** operate the rammer without proper protective clothing, shatterproof glasses, steel-toed boots and other protective devices required by the job.



- **NEVER** operate this equipment when not feeling well due to fatigue, illness or taking medicine.



- **NEVER** operate the rammer under the influence of drugs or alcohol.



- **ALWAYS** check the rammer for loosened threads or bolts before starting.

- **ALWAYS** wear proper **respiratory** (mask), **hearing** and **eye** protection equipment when operating the rammer.



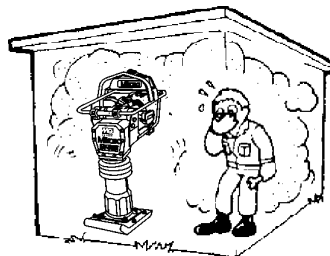
- Manufacturer does not assume responsibility for any accident due to equipment modifications.

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



- **High Temperatures** – Allow the engine to cool before adding fuel or performing service and maintenance functions. Contact with **hot!** components can cause serious burns.

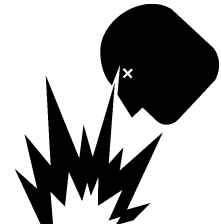
- The engine of this rammer requires an adequate free flow of cooling air. **NEVER** operate the rammer in any enclosed or narrow area where free flow of the air is restricted. If the air flow is restricted it will cause serious damage to the rammer's engine and may cause injury to people. Remember the rammer's engine gives off **DEADLY** carbon monoxide gas.



Remember the rammer's engine gives off **DEADLY** carbon monoxide gas.

- **ALWAYS** refuel in a well-ventilated area, away from sparks and open flames.

- **ALWAYS** use extreme caution when working with **flammable** liquids. When refueling, **stop the engine** and allow it to cool.



- **NEVER smoke** around or near the machine. Fire or explosion could result from **fuel vapors**, or if fuel is spilled on a **hot!** engine.



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

- Topping-off to filler port is dangerous, as it tends to spill fuel.

MT-62HS — RULES FOR SAFE OPERATION

- **NEVER** use accessories or attachments, which are not recommended by Multiquip for this equipment. Damage to the equipment and/or injury to user may result.
- Whenever necessary, replace nameplate, operation and safety decals when they become difficult read.
- **NEVER** Run engine without air filter. Severe engine may occur. Service air filter frequently to prevent carburetor malfunction.
- **AVOID** wearing jewelry or loose fitting clothing that may snag on the controls or moving parts, this can cause a serious injury.
- **ALWAYS** check to make sure that the operating area is clear before starting the engine.
- **NEVER** leave the machine *unattended* while running.
- **ALWAYS** be sure the operator is familiar with proper safety precautions and operations techniques before using rammer.
- **ALWAYS** read, understand, and follow procedures in Operator's Manual before attempting to operate equipment.
- **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.
- Refer to the *ROBIN Engine Owner's Manual* for engine technical questions or information recommended by Multiquip for this equipment. Damage to the equipment and/or injury to user may result.

Transporting

- **ALWAYS** shutdown engine before transporting.
- Tighten fuel tank cap securely and close fuel cock to prevent fuel from spilling.
- Drain fuel when transporting rammer over long distances or bad roads.
- When placing the rammer inside a truck-bed for transport, always tie-down the rammer.
- **ALWAYS** use proper lifting techniques when moving the rammer.

Maintenance Safety

- **NEVER** lubricate components or attempt service on a running rammer.
- **ALWAYS** allow the rammer a proper amount of time to cool before servicing.
- Keep the rammer in proper running condition.
- Fix damage to the rammer immediately and always replace broken parts.
- 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.

Emergencies

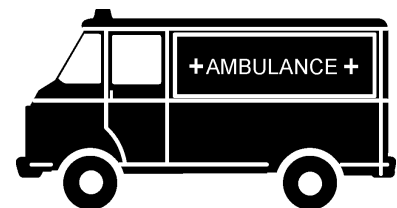
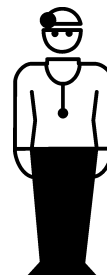
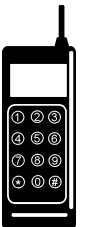
- **ALWAYS** know the location of the nearest *fire extinguisher*.



- **ALWAYS** know the location of the nearest and *first aid kit*.




- In emergencies *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.





P/N 920100240




▲ CAUTION
▲ ATTENZIONE
▲ ATENÇÃO
▲ PRECAUCION

* Read operator's manual carefully before use.
* Libre le manual attentivement avant utilisation.
* Bitte lesen Sie vor inbetriebnahme der Maschine de Bedienungsanleitung sorgfältig durch.
* Prima dell' uso leggere attentamente il manuale.
* Lee com atenção o manual de instruções antes de usar.
* Leer detenidamente el manual de instrucciones antes de usar la maquina.

NPA-769

P/N NPA-769



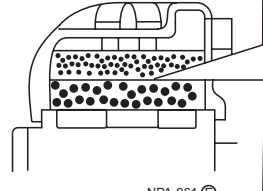
NPA-910

P/N 920209100

CLEANING ELEMENT: NPA-963

Remove the element from the pre-cleaner
Clean the element with solvent
Apply SAE30 motor oil with 7~9 cc, and
squeeze out excess oil before re-installing.

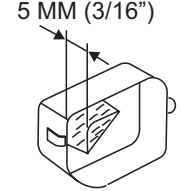
P/N NPA-963



Oil
öl
l'huile
SAE30
7~9 cc

NPA-961

P/N 920209610



5 MM (3/16")

PROPER SPONGE
INSTALLATION

NPA-398

P/N 920203980

NOTICE

CLEAN THE ELEMENT WITH KEROSENE WHEN DIRTY. AFTER THE
CLEANING, LUBRICATE IT MIXED OIL (KEROSENE 2-4; ENGINE OIL
1). SQUEEZE OUT THE OIL, AND REPLACE IT. AND CLEAN IT MORE
OFTEN WHEN OPERATING IN DUSTY CONDITIONS. NP-831

P/N 920108310

**DO NOT ALLOW WATER
TO ENTER FUEL AND OIL TANKS**

NP-599

P/N 920205990

To start, switch must be
in the "ON" position

NPA-293

P/N 920202930

- READ OWNER'S SERVICE MANUAL BEFORE OPERATING OR SERVICING THIS MACHINE.
- ALWAYS KEEP UNAUTHORIZED, INEXPERIENCED, UNTRAINED PEOPLE AWAY FROM THIS MACHINE.
- MAKE SURE ALL SAFETY DEVICES ARE OPERATIONAL BEFORE THIS MACHINE IS STARTED. MAKE SURE ENGINE IS TURNED OFF AND SPARK PLUG WIRE DISCONNECTED BEFORE SERVICING THE MACHINE OR COMING IN CONTACT WITH ANY MOVING PART. IF EQUIPMENT IS POWERED BY AN ELECTRIC MOTOR DISCONNECT ELECTRICAL PLUG.
- NEVER LEAVE MACHINE UNATTENDED WHEN OPERATING. ALWAYS STOP ENGINE AND ALLOW ENGINE TO COOL BEFORE ADDING FUEL OR OIL.

NPA-329

P/N 920203290

3800 ~ 4000 RPM

NPA-984

P/N 920209840

**SAE 10W-30
Motor Oil**

NPA-195

P/N 920201950

When you stop
the engine, be
sure to close
the fuel cock

NPA-399

P/N 920203990

NAMEPLATE

**CONTACT MULTIQUIP
SERVICE DEPT.**

P/N 920205810

CAUTION

1. Check that all bolts are tight.
2. Before operation, check oil level at the sight gauge located on the operator's side of the oil tank. Fill the oil tank to the "H" level using only outboard (2-stroke) oil.
3. Fill the fuel tank. Use only regular unleaded gasoline.
4. To start the engine: Turn the ignition switch to the "on" position. Open the fuel-cock located under the fuel tank. Close the choke lever located on the carburetor and pull starter rope. When engine starts, open choke fully.
5. Should the engine become difficult to start, open the drain cock located on the lower side of the crankcase and discharge any excess fuel by cranking the engine 2 or 3 times.
6. Allow the engine to warm up for 4 to 5 minutes before operation.
7. To begin operation, move the throttle lever quickly from the "start" to the "run" or "on" position.
8. Remember to close the engine drain-cock after starting to ensure proper operation.
9. When operation is complete, stop the engine by turning the ignition switch to the "off" position.
10. Note: Transport the machine with the fuel-cock in the "off" position only.

NPA-581

Definition of Tamping Rammer

The Mikasa MT-62HS Tamping Rammer is a powerful compacting tool capable of applying a tremendous force in consecutive impacts to a soil surface. Its applications include soil compacting for backfilling for gas pipelines, water pipelines and cable installation work.

The impact force of the MT-62HS levels and uniformly compacts voids between soil particles to increase dry density.

Circular motion is converted to create impact force. The MT-62HS tamping rammer develops a powerful compacting force at the foot of the rammer. To maintain optimum performance, proper operation and service are essential.

Construction of Tamping Rammer

The Mikasa MT-62HS is equipped with an Robin air cooled, oil-injected two cycle gasoline engine. Transmission of the power takes place by increasing the engine speed to engage the centrifugal clutch.

Rammer Gearbox and Spring Cylinder

The Mikasa MT-62HS uses an oil bath lubrication system. Always check the oil level through the oil level sight glass at the rear of the tamper foot.

Controls

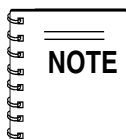
Before starting the MT-62HS Tamping Rammer identify and understand the function of the controls, see Figure 1 on page 13.

Table 1. MT-62HS Rammer Specifications

| MODEL | MT-62HS U.S. (metric) |
|----------------------|--|
| Overall Height | 40.6 in. (1,030 mm) |
| Overall Width | 13.8 in. (350 mm) |
| Over Length | 27.6 in. (700 mm) |
| Shoe Size | 10.8 x 13.4 in. (274 x 340 mm) |
| Blows/minute | 600 ~ 690 |
| Travel Speed | 36 ft./min. (11 meters/min.) |
| Stroke (Jump Height) | 2.75 in. (70 mm) |
| Impact Force | 1,650 ~ 2,250 lbs./blow (750 ~ 1,000 Kg/blow) |
| Compacted Area | 1,944 ft ² /hr (181 m ² /hr) |
| Clutch | Automatic Centrifugal |
| Operating Weight | 123 lbs. (56.0 Kg) |
| Weight without fuel | 119 lbs. (54 Kg) |
| Fuel Tank Capacity | 2.1 qt. (2 liters) |

Table 2. ROBIN EC-08HS Engine Specifications

| | Model | ROBIN EC08HS |
|------------------------------|---|--|
| Engine | Type | Air-Cooled 2 Stroke Gasoline Engine |
| | Bore x Stroke | 1-31/32 in. x 1-7/32 in. (50 mm x 40 mm) |
| | Piston Displacement | 5.12 cu.in. (78.5 cc) |
| | Compression Ratio | 6.5 : 1 |
| | Continuous Rated Output | 1.8 hp/ 4,000 rpm |
| | Max. Output | 3.3 hp/5,500 rpm |
| | Max. Torque | 3.7 ft-lb/3,600 rpm (0.551 Kg-m/3,600 rpm) |
| | Cooling System | Air-Cooled By Fan |
| | Lubrication System | Fuel-Lubrication Oil Spraying System |
| | Fuel Consumption | 0.84 lb/hp/h (2.2hp/4,500 rpm) |
| | Fuel | Gasoline |
| | Spark Plug | NGK B-6HS |
| | Starting System | Recoil Starter |
| Dimension (L x W x H) | 11 x 9.75 x 12 in. 280 x 248 x 305 (mm.) | |
| Dry Net Weight | 17 lbs. (7.7 Kg.) | |



Specifications are general and are subject to change without notice. If exact measurements are required, equipment should be weighed and measured.

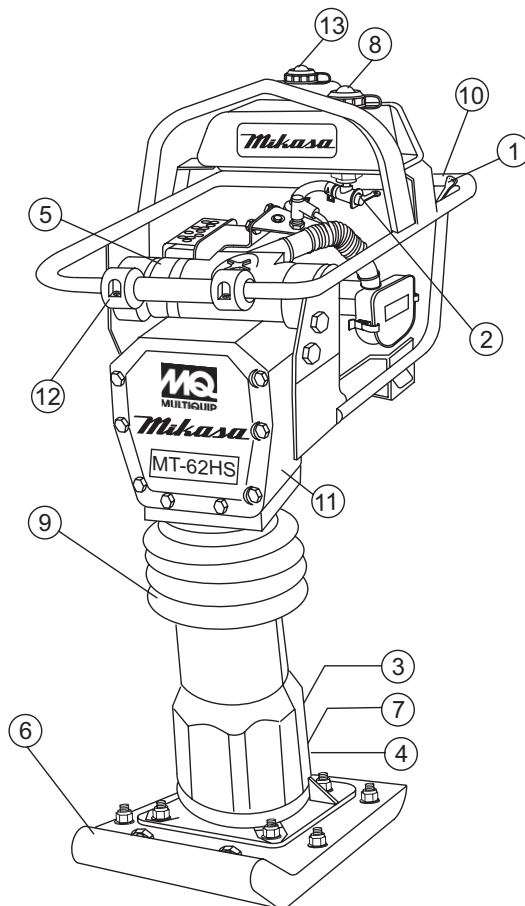


Figure 1. MT-62HS Rammer

Figure 1 shows the location of the controls and components for the MT-62HS Tamping Rammer. The functions of each control is described below:

1. **Throttle Lever** – Controls engine speed and the tamping action of the rammer.
2. **Fuel Shut-Off Valve** – Supplies fuel from the fuel tank to the engine. To begin fuel flow move the fuel shut-off valve downward.
3. **Oil Bath Fill Plug** – Open this plug to add oil to the oil bath reservoir.
4. **Drain Valve** – Open this valve to remove oil from the bellows.
5. **Primary Air Cleaner** – Pre-cleans (first stage) dirt and other debris from entering the engine.
6. **Foot** – Laminated wood with tempered steel plate for superior shock absorption.
7. **Oil Level Sight Glass** – Indicates the level of oil in the oil bath reservoir.
8. **Fuel Tank/Cap** – Remove this cap to add unleaded gasoline to the fuel tank. Make sure cap is tightened securely. **DO NOT** over fill.
9. **Bellows** – Reservoir for oil bath.
10. **Handle** – To operate rammer **GRIP** handle assembly firmly on both sides.
11. **Nameplate** – Displays information regarding the rammer.
12. **Roller Bar** – Used when transporting rammer onto a truck bed. Place rammer on this roller bar then slide.
13. **Oil Tank/Cap** – Fill oil tank with 2-stroke motor oil.



WARNING

Adding fuel to the tank should be accomplished only when the engine is stopped and has had an opportunity to **cool down**. In the event of a fuel spill, **DO NOT** attempt to start the engine until the fuel residue has been completely wiped up, and the area surrounding the engine is dry.

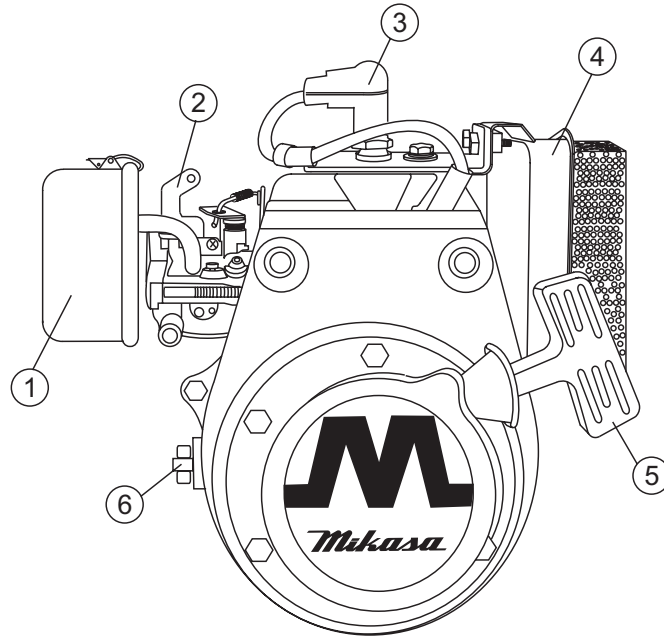


Figure 2. Engine Controls and Components

INITIAL SERVICING

The engine (Figure 2) must be checked for proper lubrication and filled with fuel prior to operation. Refer to the manufacturers Engine manual for instructions & details of operation and servicing.

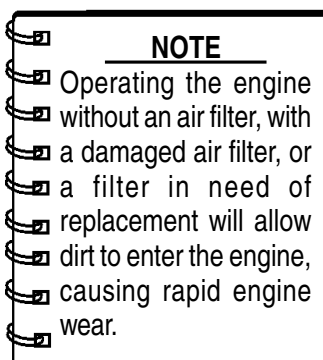
1. **Secondary Air Cleaner** – Prevents dirt and other debris from entering the fuel system. Remove wing-nut on top of air filter cannister to gain access to filter element.
2. **Choke Lever** –Used when starting the engine. Normally used in cold weather conditions. In cold weather turn the choke lever to the fully closed position, in warm weather set choke lever half way or completely open.
3. **Spark Plug** – Provides spark to the ignition system. Set spark plug gap to 0.6 - 0.7 mm (0.024 - 0.028 inch). Clean spark plug once a week.
4. **Muffler** – Used to reduce noise and emissions.

5. **Recoil Starter (pull rope)** – Manual-starting method. Pull the starter grip until resistance is felt, then pull briskly and smoothly.
6. **Engine ON/OFF Switch** – Controls the starting and stopping of the engine. Switch must be in the "ON" position when starting the engine.



WARNING

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



NOTE

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

This section is intended to assist the operator with the **pre-inspection** of the **MT-62HS Tamping Rammer**. It is extremely important that this section be **read carefully** before attempting to operate the rammer.



DO NOT use your rammer until this section is thoroughly understood.

Inspection

- Check all nuts, bolts fasteners for tightness. Retighten as necessary.
- Clean any dirt from the recoil starter and engine cooling fins. Wipe the entire rammer clean before operating.
- Replace any missing or damaged Safety Operation decals.

CAUTION:



Failure to perform the pre-inspection procedures for the **MT-62HS Tamping Rammer** could result in severe damage to the rammer or personal injury.

Rammer Gearbox and Spring Cylinder Oil Bath

This unit uses an oil bath lubrication system. Perform the following:

1. Check the oil level through the oil level sight glass (Figure 3) at the rear of the tamping foot.

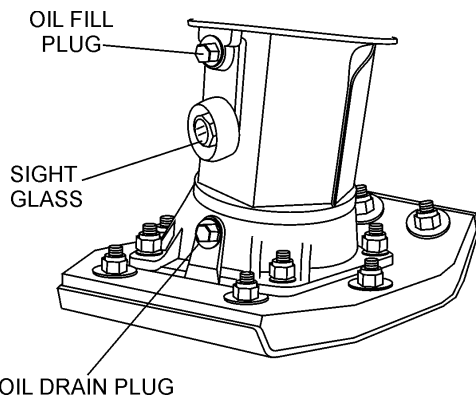
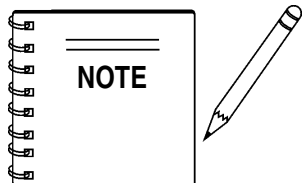


Figure 3. Foot Housing Sight Glass

2. If oil is not visible, add 10W-30 SE, SF or higher grade motor oil into the oil fill plug opening (Figure 3). The bath contains approximately 1.7 pints (800 cc.)



NOTE

The oil level should be kept at the half way point of the sight glass.

Fuel

1. If fuel is low, remove the fuel filler cap (Figure 4) and fill with only **unleaded** gasoline. Motor fuels are highly flammable and can be dangerous if mishandled. **DO NOT** smoke while refueling. **DO NOT** attempt to refuel the pump if the engine is **hot!** or **running**.

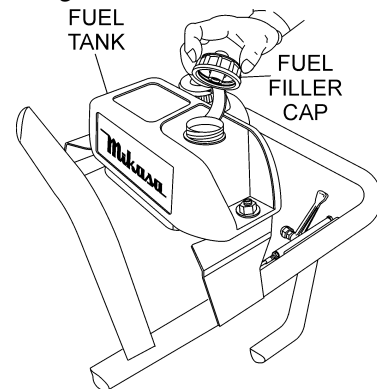


Figure 4. Fuel Tank

Engine Oil Check

1. This rammer is equipped with a two-cycled gasoline engine. Use only unleaded gasoline. High test ethyl gasoline **is not recommended**.
2. Check the engine oil level at the sight gauge located on the operator's side of the **oil tank** (Figure 5). Fill the oil tank to the "H" level using only outboard (2-stroke) oil. Replenish the oil regularly before the oil level reaches the "L" level of the oil tank.
3. Make sure the oil hose is not pinched or squeezed. A sensor detects lack of oil and shuts down the engine automatically.
4. Remember low levels of engine oil may result in engine seizure due to high levels of consumption during operation. Always check oil regularly.

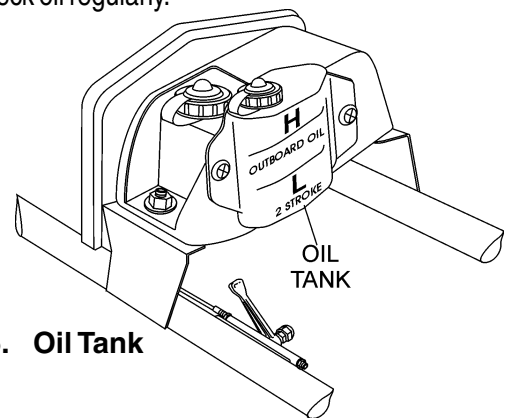


Figure 5. Oil Tank

CAUTION:



DO NOT USE REGULAR AUTOMOTIVE-TYPE MOTOR OIL.

This section is intended to assist the operator with the **initial start-up** of the **MT-62HS** rammer. It is extremely important that this section be **read carefully** before attempting to use the rammer in the field.



DO NOT use your rammer until this section is thoroughly understood.

CAUTION:



Failure to understand the **initial start-up procedures** of the **MT-62HS** rammer could result in severe damage to the rammer or personal injury.

See Figure 1 (Page 13) for the location of any control referenced in this manual.

Initial Start-up

The following steps outline the procedure for starting the engine:

1. Open the **fuel shut-off valve** by moving the **fuel cock** lever to the **open** position (Figure 6).

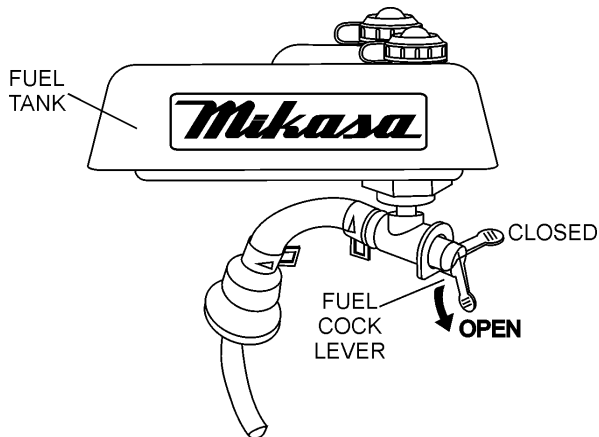


Figure 6. Fuel Shut-Off Valve (Open)

2. Turn the engine **ON/OFF** switch (Figure 7) to the **"ON"** position.

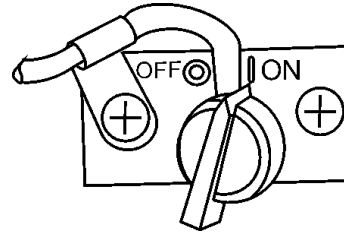


Figure 7. Engine ON/OFF Switch

3. Move the **throttle lever** to the **"IDLE"** position (Figure 8).

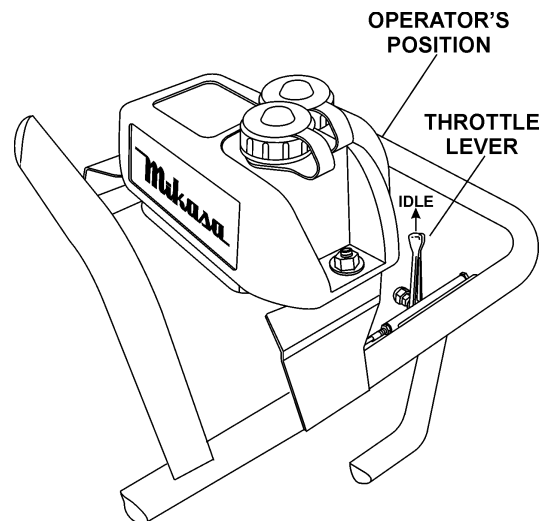


Figure 8. Throttle Lever (Idle)

4. In cold weather, start the rammer with the **choke lever** in the **"Fully Closed"** position (Figure 9). In warm weather or when the engine is warm, the unit can be started with choke halfway or completely **open**.

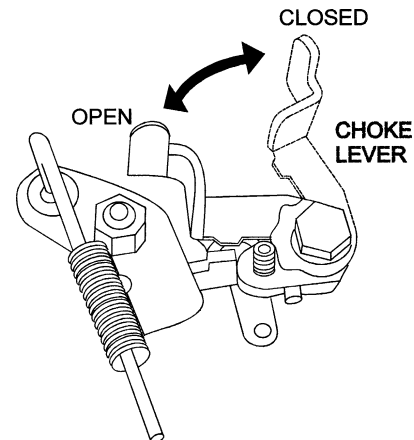


Figure 9. Choke Lever (Closed)

5. Grip the recoil starter (Figure 10) handle and pull it until you feel a slight resistance. Then pull sharply and quickly. Return the recoil starter handle to the starter position before releasing.

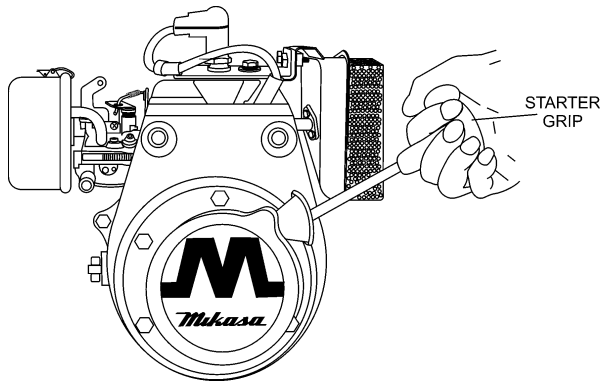


Figure 10. Recoil Starter

8. If the engine does not start after repeated attempts, check the spark plug for excess fuel. Clean and replace the spark plug as needed.
9. If the carburetor is flooded or the crankcase is loaded with excess fuel, open the drain plug as shown in (Figure 11) and drain out excess fuel, then try and start engine.

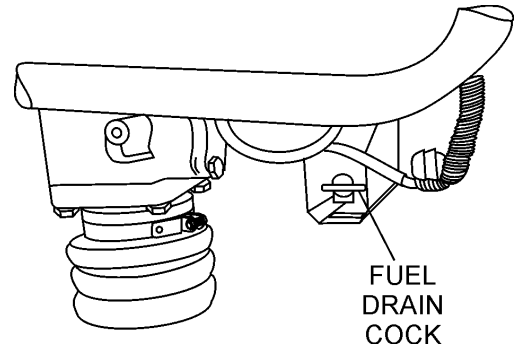


Figure 11. Fuel Drain Cock

6. If engine fails to start, move the choke lever (Figure 9) to the half open position to avoid flooding.
7. Repeat steps 1 through 6.

Operation

1. To start the rammer tamping action, move the throttle lever (Figure 12) **quickly** from **IDLE** (close) to the **FULL OPEN** position. **DO NOT** move the throttle lever slowly as this may cause damage to the clutch or spring.

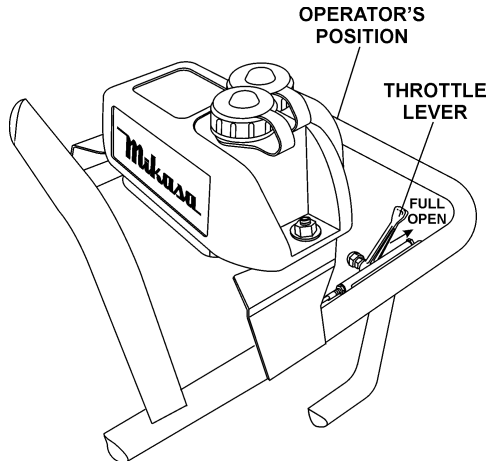


Figure 12. Throttle Lever (Full Open)

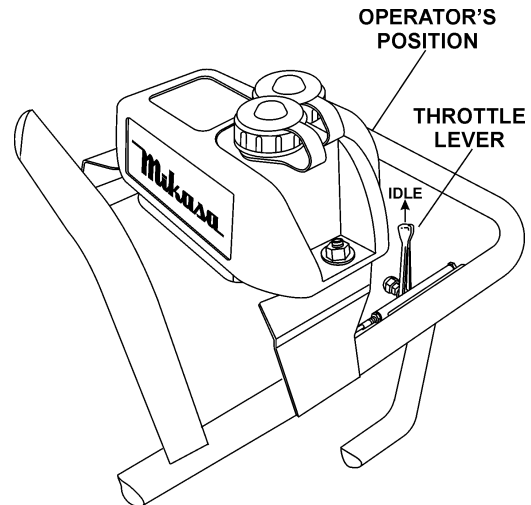


Figure 13. Throttle Lever (Idle)

2. After the engine **cools**, turn the engine **ON/OFF** switch to the **"OFF"** position (Figure 14).

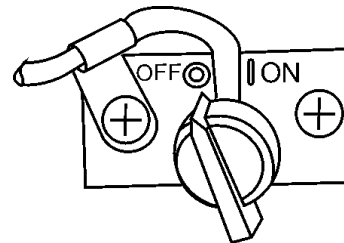


Figure 14. ON/OFF Switch (Off Position)

CAUTION:



Make sure that the throttle lever is moved to the **FULL OPEN** position. Operating the rammer at less than full speeds can result in damage to the clutch springs or foot

2. The MT-62HS Tamping rammer is designed to run at 3,850 **rpm**. At optimum rpm the foot hits at the rate of 600~690 impacts per minute. Increasing throttle speed past factory set rpm does not increase impacts and may damage unit. The MT-62HS is designed to advance while tamping. For faster advance, pull back slightly on the handle so that rear of foot contacts soil first.

3. Close the **fuel shut-off valve** (Figure 15) by moving the fuel cock lever to the **CLOSED** position.

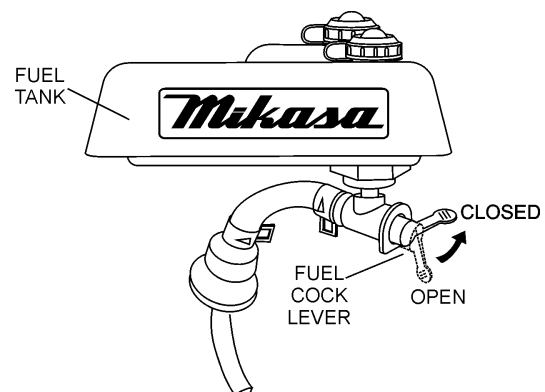


Figure 15. Fuel Shut-Off Valve (Closed Position)

Stopping The Engine

Normal Shutdown

1. Move throttle lever quickly from the **FULL OPEN** to **IDLE** position (Figure 13) and run the engine for three minutes at low speed.

Emergency Showdown

1. Move the throttle lever quickly to the **IDLE** position, and turn the engine **ON/OFF** switch to the **OFF** position. Turn the fuel valve lever to the **CLOSED** position.

MAINTENANCE

Perform the scheduled maintenance procedures as defined by Table 3 and below:

DAILY

- Thoroughly remove dirt and oil from the engine compartment and rammer. Clean or replace the air cleaner elements as necessary. Check and retighten all fasteners as necessary. Check the bellows for oil leaks. Repair or replace as needed.

200 - 300 HOURS (Pre-Cleaner)

- Remove the element from the pre-cleaner (Figure 16) at the top of the crankcase (body side) and clean it with cleaning oil (kerosene).

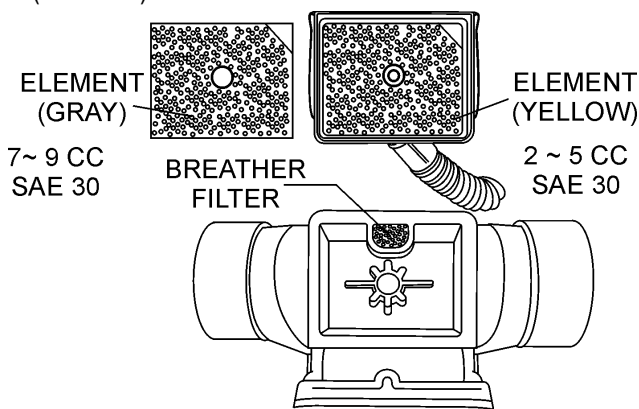


Figure 16. Primary Air Cleaner

- Lubricate the top element (yellow) with 2~5 cc of engine oil SAE-30.
- Lubricate bottom element (gray) with 7~9 cc of engine oil SAE-30 and completely squeeze out the excess oil from the element before installing.
- The air cleaner (Figure 17) on the engine side will hardly be contaminated, if it is, clean the outer foam gray element with cleaning solvent. Tightly squeeze outer foam element to remove any excess solvent before reinstalling.

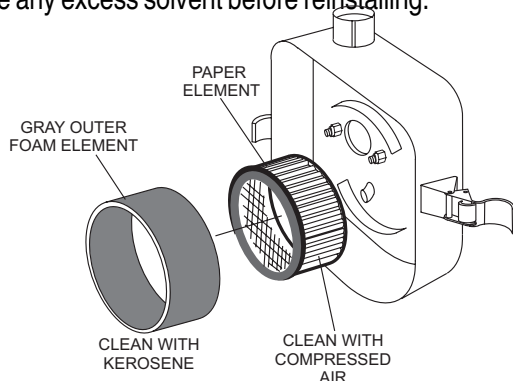
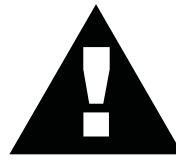


Figure 17. Engine Air Cleaner

CAUTION:



It is normal for a new 2-stroke engine to emit excess smoke, until moving parts have been seated to their normal operating specifications. This excess smoke normally stops after one full tank of fuel.

200 - 300 HOURS (Oil Bath)

- Drain oil reservoir on foot housing (Figure 18). Refill with approximately 1.7 pt. (800cc) of 10W-30 motor oil. Oil should be midway in sight glass. Break in oil should be changed after first 50 hours.

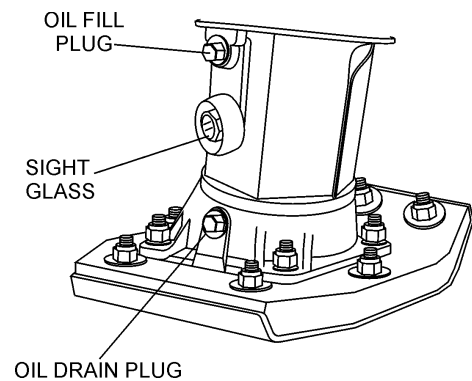


Figure 18. Oil Drain Plug

SPARK PLUG

- Remove and clean the spark plug (Figure 19), 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.

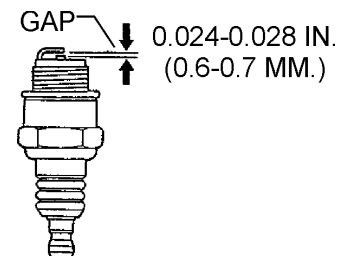


Figure 19. Spark Plug Gap

CLEANING THE OIL TANK

- Clean the inside of the oil tank regularly, preferably 2 or 3 times a year.
- In winter, be sure to clean the inside of oil tank to avoid the freezing of water that may have accumulated inside the tank.

CAUTION:



If water accidentally got inside the oil tank, the oil may appear muddy. If this situation occurs, simply flush the tank, removing all foreign matter including water, and fill oil tank with fresh 2-stroke outboard motor oil.

- When cleaning the oil tank (Figure 20) perform the following procedure:

1. Remove the cock holder cover, oil hose, red and black lead wires from the float sensor.

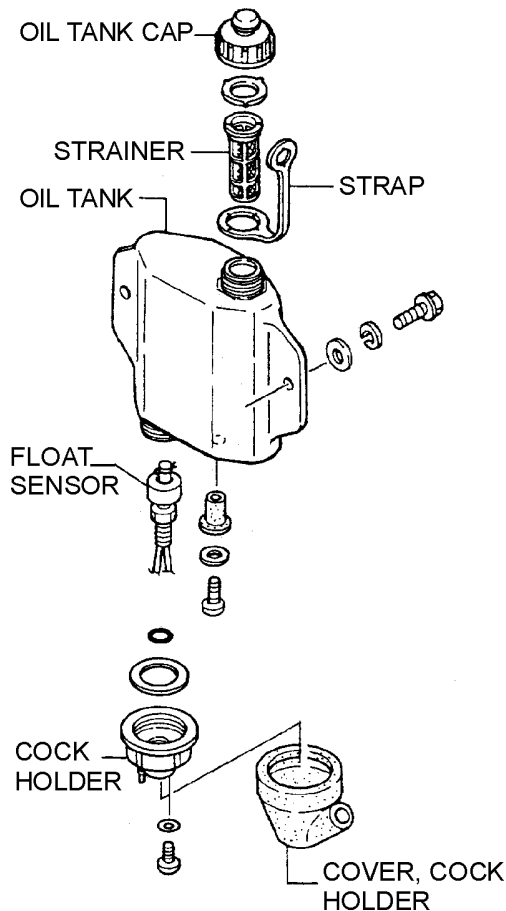


Figure 20. Oil Tank

2. Remove the bolts that secure the oil tank to the fuel tank, and drain all oil from the tank.
3. Remove cock holder, then clean strainer and cock holder in a kerosene solution.
4. Make sure every part is clean and dry, then reassemble oil tank. Fill oil tank with 2-stroke outboard motor oil (FB class) to the "H" level.

FUEL AND OIL LINES

- Check the fuel and oil lines regularly for damage and ensure that there are no leaks.
- Replace fuel and oil lines every 2 years to maintain performance.
- When replacing the oil hose perform the following procedure:
 1. Replace oil hose with manufactures suggested type hose or equivalent.
 2. If necessary, fill oil tank with 2-stroke outboard motor oil and fuel tank with unleaded gasoline.
 3. Operate rammer until all air is bled from oil injection line.

CLEANING THE RAMMER

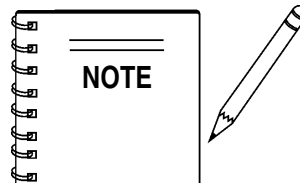
- If using a high pressure spray washer, be careful not to splash water directly on the air cleaner, carburetor, muffler, fuel and oil tank caps. Excessive amounts of water may cause severe engine damage.

Yearly

- Check the fuel line and the oil line regularly for damage and to ensure that there are no leaks.
- Replace the oil and fuel lines every two years to maintain the performance and flexibility lines.

Long Term Storage

- Drain fuel from fuel tank, fuel line and carburetor.
- Remove spark plug and pour a few drops of motor oil into cylinder. Crank engine 3 to 4 times so that oil reaches all internal parts.
- Clean exterior of rammer with an oil-moistened cloth.
- Store unit covered with plastic sheet in moisture free and dust free location out of direct sunlight



Reference manufacturer engine manual for specific servicing instructions.

MT-62HS — MAINTENANCE (ENGINE)

Perform the scheduled engine maintenance procedures as defined by Table 3 below:

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

(1) Service more frequently when used in **DUSTY** areas.

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

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

MT-62HS — TROUBLESHOOTING GUIDE

TABLE 4. ENGINE TROUBLESHOOTING

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

MT-62HS —TROUBLESHOOTING GUIDE

TABLE 4. ENGINE TROUBLESHOOTING (continued)

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

TABLE 5. RAMMER TROUBLESHOOTING

| SYMPTOM | POSSIBLE PROBLEM | SOLUTION |
|---|---|---|
| Engine rotates but amplituide not uniform or does not strike. | Operating speed of throttle lever is incorrectly set? | Set throttle lever to correct position. |
| | Oil in excess? | Drain excess oil. Bring to correct level. |
| | Clutch slips? | Replace or adjust clutch. |
| | Spring Failure? | Replace sprial spring. |
| | Speed of engine improper? | Adjust engine speed to correct operating RPM setting. |

MT-62HS — EXPLANATION OF CODE IN REMARKS COLUMN

How to read the marks and remarks used in this parts book.

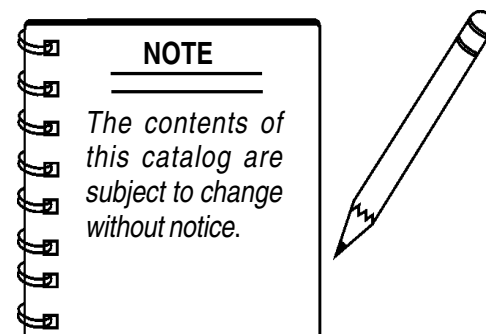
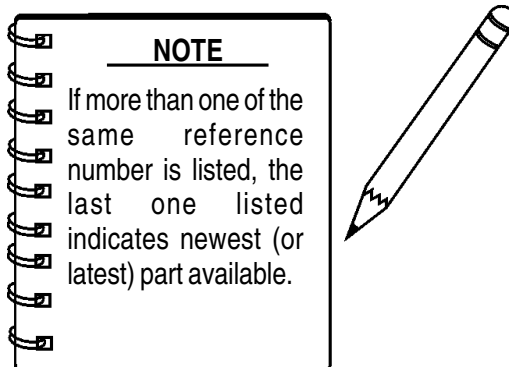
Items Found In the “Remarks” Column

Serial Numbers-Where indicated, this indicates a serial number range (inclusive) where a particular part is used.

Model Number-Where indicated, this shows that the corresponding part is utilized only with this specific model number or model number variant.

Items Found In the “Items Number” Column

All parts with same symbol in the number column, *, #, +, %, or >, belong to the same assembly or kit.



MT-62HS — SUGGESTED SPARE PARTS

MT-62HS 1 TO 3 UNITS WITH ROBIN EC08HS ENGINE

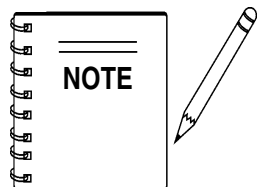
1 to 3 Units

| Qty. | P/N | Description |
|------|------------|---------------------------------|
| 1 | 362910060 | THROTTLE LEVER ASSY. |
| 1 | 956100044 | THROTTLE WIRE |
| 1 | 083000010 | SPRING, COIL |
| 3 | 362030030 | ELEMENT, AIR CLEANER (YELLOW) |
| 3 | 1573620101 | ELEMENT SET (ENGINE) |
| 3 | 0650140031 | SPARK PLUG |
| 1 | 361910021 | CAP, FUEL TANK W/STRAP (ORANGE) |
| 1 | 353030071 | CAP, OIL TANK W/STRAP (YELLOW) |
| 3 | 301419750 | FUEL FILTER, IN-LINE |
| 1 | 954404890 | STRAINER, FUEL TANK (INSIDE) |
| 1 | 954406010 | STRAINER, FUEL (BOTTOM) |
| 1 | 5805011040 | STARTER ROPE |
| 1 | 0660000361 | SWITCH, STOP |

MT-62HS 3 TO 5 UNITS WITH ROBIN EC08HS ENGINE

3 to 5 Units

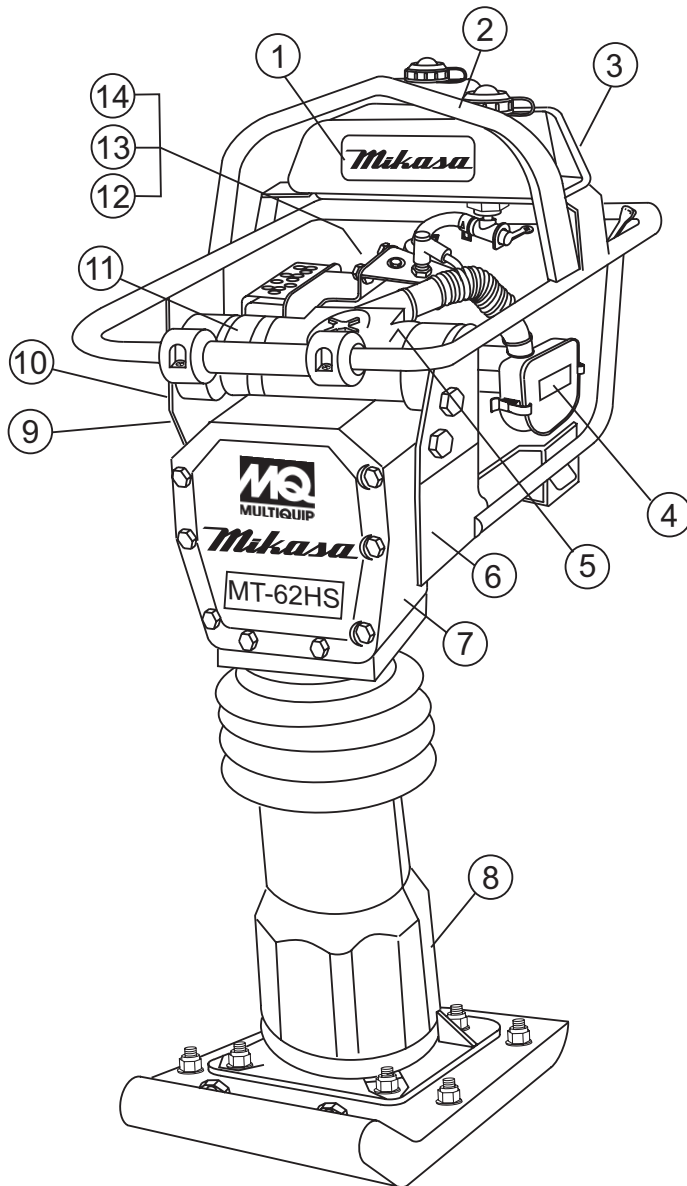
| Qty. | P/N | Description |
|------|--------------|---------------------------------|
| 2 | 362910060 | THROTTLE LEVER ASSY. |
| 2 | 956100044 | THROTTLE WIRE |
| 2 | 083000010 | SPRING, COIL |
| 6 | 362030030 | ELEMENT, AIR CLEANER (YELLOW) |
| 6 | 1573620101 | ELEMENT SET (ENGINE) |
| 6 | 0650140031 | SPARK PLUG |
| 2 | 361910021 | CAP, FUEL TANK W/STRAP (ORANGE) |
| 2 | 353030071 | CAP, OIL TANK W/STRAP (YELLOW) |
| 6 | 301419750 | FUEL FILTER, IN-LINE |
| 2 | 954404890 | STRAINER, FUEL TANK (INSIDE) |
| 2 | 954406010 | STRAINER, FUEL (BOTTOM) |
| 2 | 5805011040 | STARTER ROPE |
| 2 | 0660000361 | SWITCH, STOP |
| 1 | 1293500403 | GASKET, COMPLETE EXHAUST |
| 1 | 2263272008 | GASKET, AIR CLEANER |
| 2 | 1063500103 | GASKET, INSULATOR, CARBURETOR |
| 1 | KITCARBEC08H | CARBURETOR KIT |
| 1 | 5806111000 | CARBURETOR ASSEMBLY |
| 2 | 050100800 | O-RING, UPPER GUIDE CYLINDER |



Part number on this Suggested Spare Parts List may super cede/replace the P/N shown in the text pages of this book.

MT-62HS — NAMEPLATE AND DECALS

NAMEPLATE AND DECALS



MT-62HS — NAMEPLATE AND DECALS

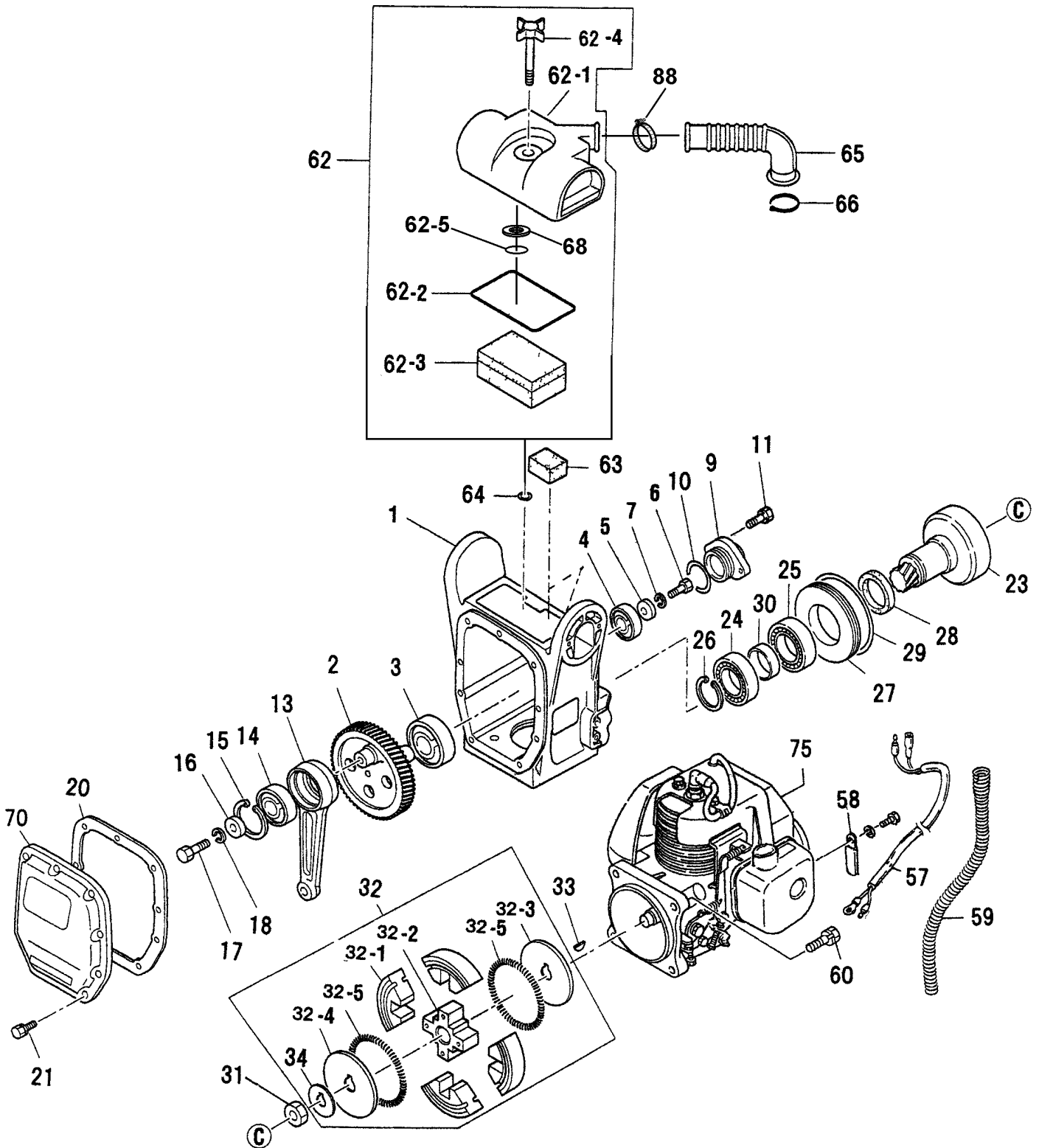
NAME PLATE AND DECALS

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|------------------------------------|-------------|------------------------|
| 1 | 920100240 | DECAL: (M- MARK) | 1 | |
| 2 | 920205990 | DECAL: CAUTION (WATER) | 1 | NPA599 |
| 3 | 920205810 | DECAL: CAUTION/OIL INJECT | 1 | NPA581 |
| 4 | 920203290 | DECAL: CAUTION | 1 | NPA329 |
| 5 | NPA963 | DECAL: CLEANING ELEMENT | 1 | |
| 6 | 920108310 | DECAL: CLEANER ELEMENT | 1 | NPA831 |
| 7 | | PLATE: SERIAL NO. | 1 | CONTACT MQ PARTS DEPT. |
| 8 | 920201950 | DECAL: OIL SAE 10W- 30 | 1 | NPA195 |
| 9 | 920209100 | DECAL: CAUTION (RAMMER) | 1 | NPA910 |
| 10 | NPA769 | DECAL: READ | 1 | |
| 11 | 920209610 | DECAL: CLEANING ELEMENT | 1 | NPA961 |
| 12 | 920203990 | DECAL: CAUTION (FUEL COCK) | 1 | NPA399 |
| 13 | 920209840 | DECAL: E/G R.P.M. 3800- 4000 | 1 | NPA984 |
| 14 | 920202930 | DECAL: SWITCH- ON | 1 | NPA293 |

FOR DECAL ILLUSTRATIONS SEE PAGE 10.

MT-62HS — CRANKCASE AND ENGINE ASSY.

CRANKCASE AND ENGINE ASSY.



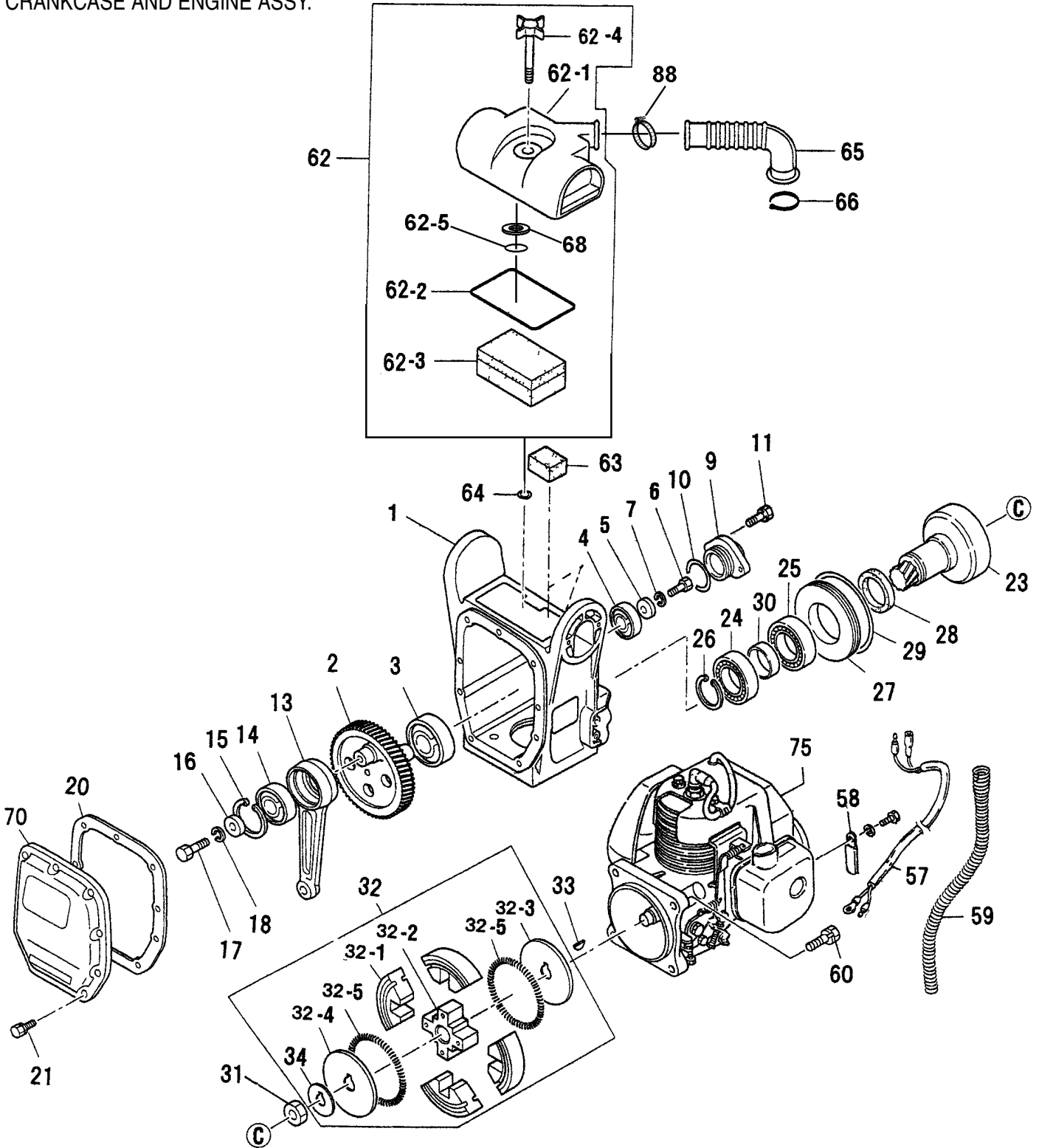
MT-62HS — CRANKCASE AND ENGINE ASSY.

CRANKCASE & ENGINE ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|---------------------------|-------------|--------------------|
| 1 | 362116510 | CRANKCASE | 1 | |
| 2 | 362341650 | CRANK GEAR 1300- 59Z | 1 | |
| 3 | 040006305 | BEARING 6305 | 1 | |
| 4 | 040006203 | BEARING 6203 | 1 | |
| 5 | 952401450 | WASHER 8.5 X22 X 3 | 1 | |
| 6 | 001220825 | BOLT 8 X25 T | 1 | |
| 7 | 030208200 | LOCK WASHER M8 | 1 | |
| 9 | 362455660 | BEARING COVER | 1 | |
| 10 | 050100350 | O- RING G- 35 | 1 | |
| 11 | 002210620 | BOLT 6X20 H, SW | 2 | |
| 13 | 303010060 | CONNECTING ROD | 1 | |
| 14 | 040006304 | BEARING 6304 | 1 | |
| 15 | 080100520 | STOP RING R- 52 | 1 | |
| 16 | 952400130 | WASHER 9304 | 1 | |
| 17 | 001220825 | BOLT 8X25 T | 1 | |
| 18 | 030208200 | LOCK WASHER M8 | 1 | |
| 20 | 362341610 | PACKING, FRONT COVER | 1 | |
| 21 | 002210620 | BOLT 6X20 H, SW | 9 | |
| 23 | 303010080 | PINION | 1 | |
| 24 | 040006007 | BEARING 6007 | 1 | |
| 25 | 041006007 | BEARING 6007Z | 1 | |
| 26 | 080200350 | STOP RING S- 35 | 1 | |
| 27 | 351421900 | SPACER, CLUTCH DRUM | 1 | |
| 28 | 060404010 | OIL SEAL TC- 40528 | 1 | |
| 29 | 050300900 | O- RING S- 90 | 1 | |
| 30 | 351437750 | SPACER 35.4- 42.7- 11 | 1 | |
| 31 | 0173120010 | LOCK NUT | 1 | |
| 32 | 301421365 | CLUTCH ASSY. CE120E | 1 | INCLUDES ITEMS W/* |
| 32-1* | 943020020 | CLUTCH SHOE | 4 | |
| 32-2* | 943050050 | CLUTCH BOSS | 1 | |
| 32-3* | 943060010 | CLUTCH GUIDE (A) | 1 | |
| 32-4* | 943060020 | CLUTCH GUIDE (B) | 1 | |
| 32-5* | 943030020 | CLUTCH SPRING | 2 | |
| 33 | 0053204201 | WOODRUFF KEY | 1 | |
| 34* | 301010210 | LOCK WASHER, CLUTCH | 1 | |
| 57 | 353448490 | WIRE CP | 1 | |
| 58 | 2267510103 | CLAMP | 1 | |
| 59 | 355450600 | OUTER LINER 525L | 1 | |
| 60 | 002210830 | BOLT 8X30 H, SW | 4 | |

MT-62HS — CRANKCASE AND ENGINE ASSY.

CRANKCASE AND ENGINE ASSY.



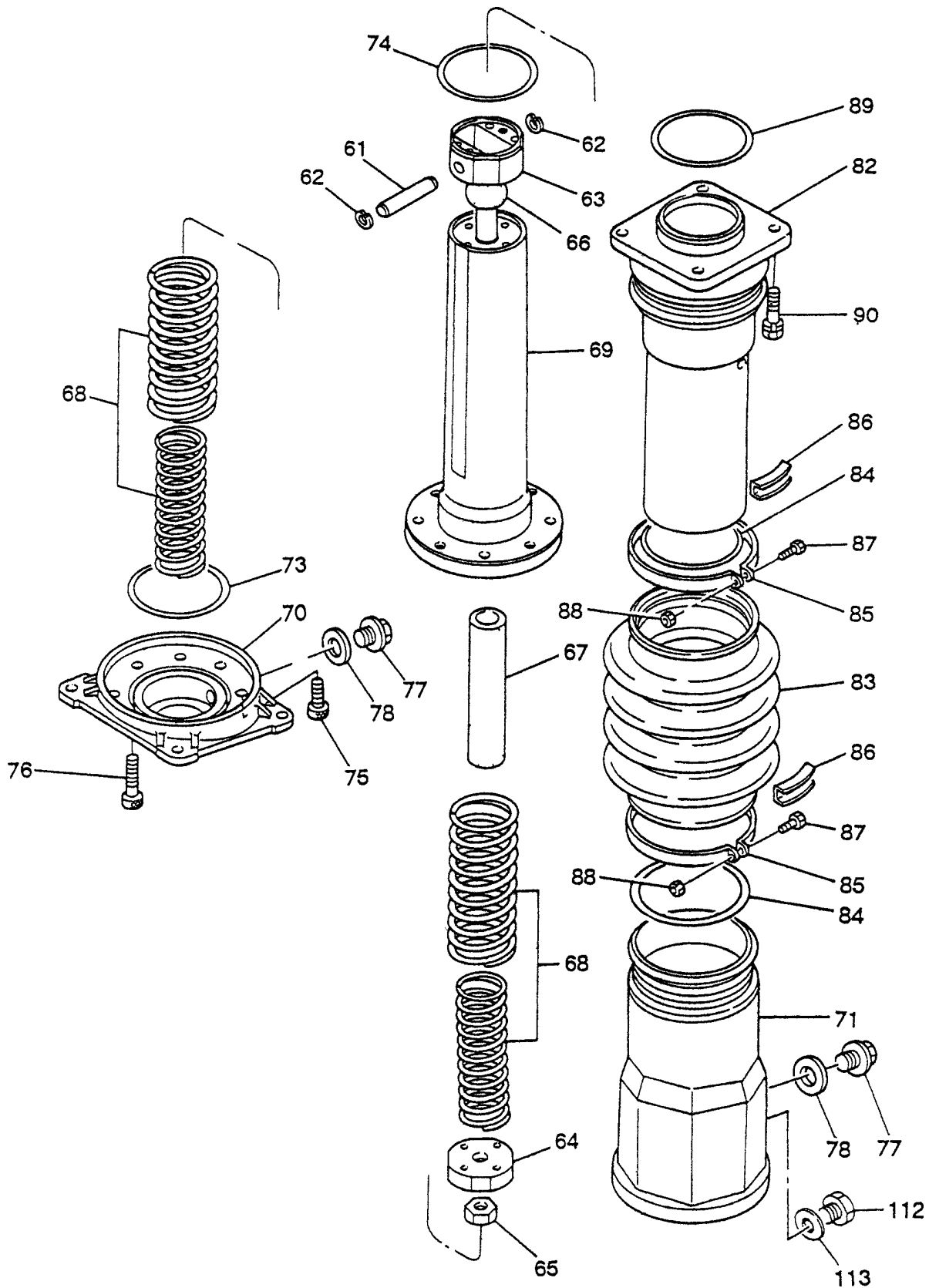
MT-62HS — CRANKCASE AND ENGINE ASSY.

CRANKCASE & ENGINE ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|-----------------------------|-------------|--------------------|
| 62 | 362116870 | AIR CLEANER ASSY. | 1 | INCLUDES ITEMS W/# |
| 62-1# | 362030010 | COVER CP, AIR CLEANER | 1 | |
| 62-2# | 362030020 | PACKING, AIR CLEANER | 1 | |
| 62-3# | 362030030 | ELEMENT CP, AIR CLEANER | 1 | |
| 62-4# | 362030040 | BOLT CP, AIR CLEANER | 1 | |
| 62-5# | 050300070 | O-RING (S7) | 1 | |
| 63 | 362455670 | ELEMENT 25X30X20T | 1 | |
| 64 | 031108160 | PW M8 | 1 | |
| 65 | 353342400 | INTAKE PIPE | 1 | |
| 66 | 507010110 | CLAMP TC- 200 | 2 | |
| 68# | 031108160 | WASHER, FLAT M8 | 1 | |
| 70 | 362010050 | FRONT COVER | 1 | |
| 75 | 911100843 | ENGINE ASSY. EC08DXX (EPA) | 1 | |
| 88 | 64016 | HOSE CLAMP 13x16, 1-1/2" SS | 1 | |

MT-62HS — GUIDE CYLINDER ASSY.

GUIDE CYLINDER ASSY.



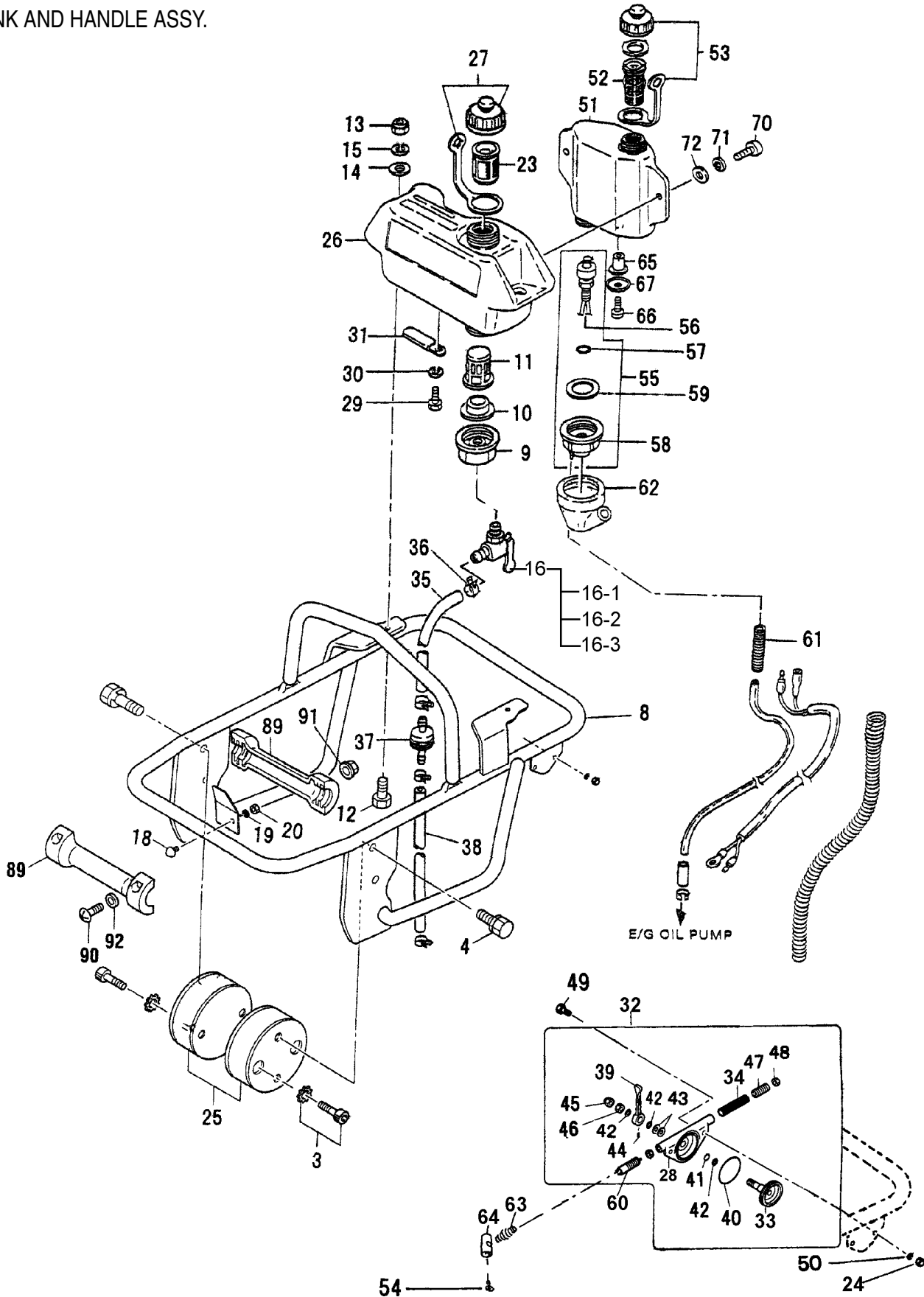
MT-62HS — GUIDE CYLINDER ASSY.

GUIDE CYLINDER & FOOT ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|------------------------------|-------------|----------------|
| 61 | 351420390 | PISTON PIN | 1 | |
| 62 | 080100120 | STOP RING R- 12 | 2 | |
| 63 | 351324120 | PISTON ROD | 1 | |
| 64 | 362455680 | PISTON END | 1 | |
| 65 | 020116130 | NUT M16, P1.5 | 1 | |
| 66 | 351434200 | STOPPER, UPPER | | |
| 67 | 351434211 | STOPPER, LOWER D: 30 | 1 | |
| 68 | 351324140 | MAIN SPRING A, B | 2 | |
| 69 | 362341640 | SPRING CYLINDER | 1 | |
| 70 | 351209600 | FOOT PLATE | 1 | |
| 71 | 351109020 | PROTECTION SLEEVE | 1 | |
| 73 | 050100750 | O- RING G- 75 | 1 | |
| 74 | 050930850 | O- RING JASO3085 | 1 | |
| 75 | 001521020 | SOCKET HEAD BOLT 10X20 T | 4 | |
| 76 | 001521035 | SOCKET HEAD BOLT 10X35 T | 4 | |
| 77 | 953405270 | PLUG 1/4X14 13L | 2 | |
| 78 | 953405260 | PACKING 1/4 (CU) | 2 | |
| 82 | 351209590 | GUIDE CYLINDER | 1 | |
| 83 | 353332850 | BELLOWS (OR) | 1 | |
| 84 | 050100950 | O- RING G- 95 | 2 | |
| 85 | 351316870 | BELLOWS CLAMP, W/B40L, N, SW | 2 | |
| 86 | 351433250 | BAND GUIDE/ BELLOWS | 2 | |
| 87 | 001220840 | BOLT 8X40 T | 2 | |
| 88 | 020308060 | NUT M8 | 2 | |
| 89 | 050100800 | O- RING G- 80 | 1 | |
| 90 | 002211040 | BOLT 10X40 H, SW | 4 | |
| 112 | 959010150 | LEVEL GAUGE, PLUG TYPE | 1 | |
| 113 | 953404670 | COPPER PACKING 17X25.5X1 | 1 | |

MT-62HS — TANK AND HANDLE ASSY.

TANK AND HANDLE ASSY.



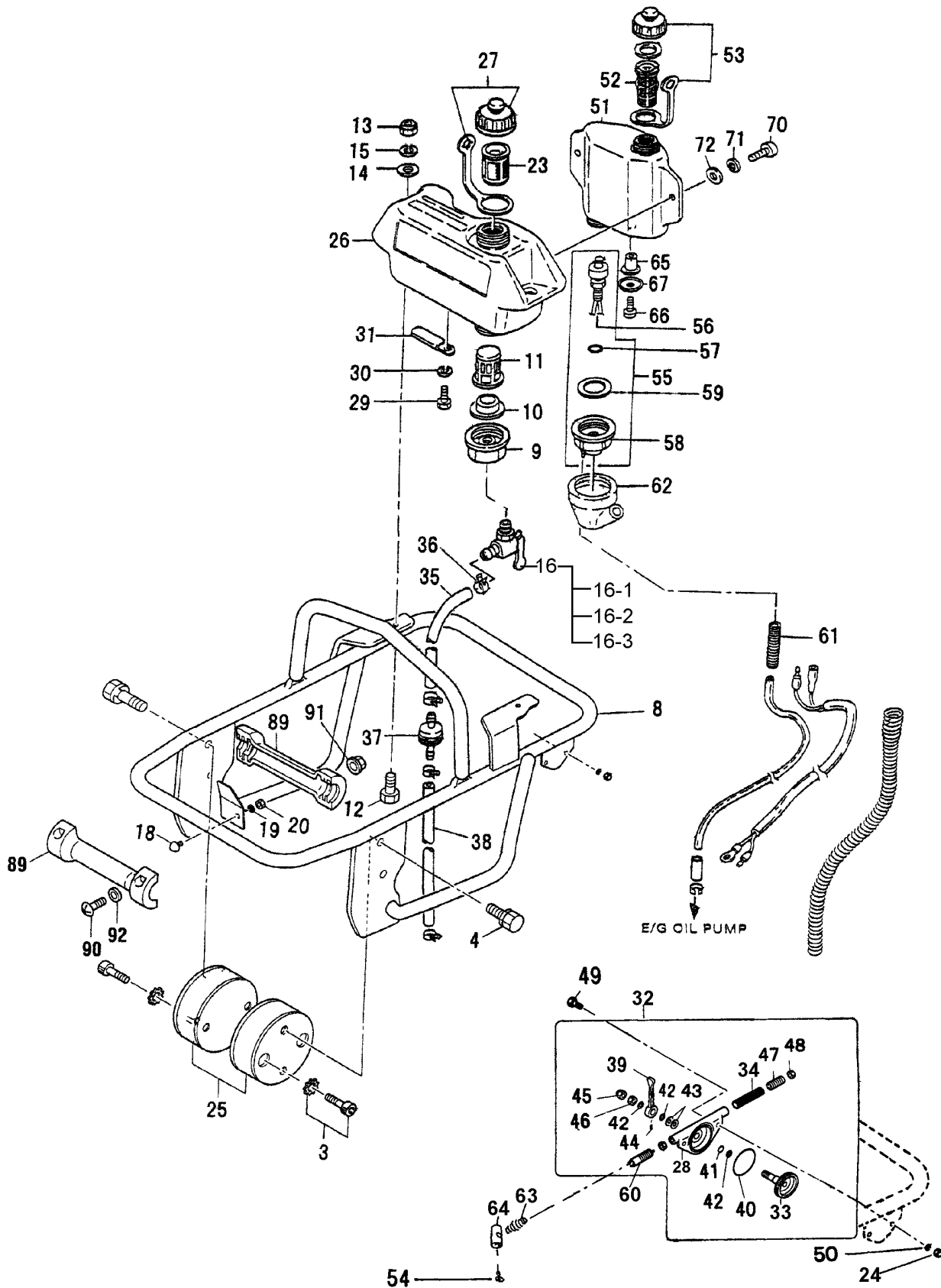
MT-62HS — TANK AND HANDLE ASSY.

TANK & HANDLE ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|--------------------------------|-------------|--------------------|
| 3 | 009110007 | BOLT W/STAR WASHER, 10X20 | 4 | |
| 4 | 002211020 | BOLT 10X20 H, SW | 4 | |
| 8 | 353117320 | HANDLE (FOR ROLLER) | 1 | |
| 9 | 351437785 | HOLDER, COCK | 1 | |
| 10 | 954406020 | PACKING, FUEL TANK | 1 | |
| 11 | 954406010 | STRAINER (#110) | 1 | |
| 12 | 001220830 | BOLT 8X30 T | 2 | |
| 13 | 022710809 | NYLON NUT M8 | 2 | |
| 14 | 952401450 | WASHER 8.5X22X3 | 2 | |
| 15 | 030208200 | WASHER, LOCK M8 | 2 | |
| 16 | 954406000 | FUEL COCK ASSY. N18L- 02 | 1 | INCLUDES ITEMS W/# |
| 16-1# | 0642001410 | CUP | 1 | |
| 16-2# | 0642001420 | SCREEN | 1 | |
| 16-3# | 0642001430 | RUBBER PACKING | 1 | |
| 18 | 939010210 | STOPPER RUBBER EH1002 | 1 | |
| 19 | 030208200 | WASHER, LOCK M8 | 1 | |
| 20 | 020308060 | NUT M8 | 1 | |
| 23 | 954404890 | FILTER, FUEL TANK | | |
| 24 | 022130605 | CAP NUT M6 | 2 | |
| 25 | 351319900 | SHOCK ABSORBER | 2 | |
| 26 | 361116910 | FUEL TANK (2.5L) P, G | 1 | |
| 27 | 361910021 | TANK CAP CP (ORANGE) | 1 | |
| 28* | 362341550 | THROTTLE BODY | 1 | |
| 29 | 001200610 | BOLT 6X10 | 1 | |
| 30 | 030206150 | WASHER, LOCK M6 | 1 | |
| 31 | 226710103 | CLAMP | 1 | |
| 32 | 362910060 | THROTTLE LEVER ASSY. | 1 | INCLUDES ITEMS W/* |
| 33* | 362455610 | THROTTLE GEAR | 1 | |
| 34* | 362455620 | SLIDER | 1 | |
| 35 | 301420330 | FUEL HOSE R- 170 | 1 | |
| 36 | 954403030 | HOSE BAND (8) | 2 | |
| 37 | 301419750 | FUEL FILTER CP, MQ75MIC. | 1 | |
| 38 | 302443340 | FUEL HOSE R- 75 | 1 | |
| 39* | 362455630 | THROTTLE LEVER | 1 | |
| 40* | 050100450 | O- RING G- 45 | 1 | |
| 41* | 050200100 | O- RING P- 10 | 1 | |
| 42* | 031110160 | WASHER, FLAT M10 | 3 | |
| 43* | 033910070 | CONICAL SPRING WASHER | 2 | |
| 44* | 096206006 | SOCKET HEAD SCREW 6X6 | 1 | |
| 45* | 022131008 | CAP NUT M10 | 1 | |
| 46* | 020410060 | NUT M10, H=6 | 1 | |
| 47* | 096208020 | SOCKET HEAD SCREW 8X20 | 1 | |
| 48 | 020408050 | NUT M8, H=5 | 2 | |
| 49 | 001220620 | BOLT 6X20 T | 2 | |
| 50 | 030206150 | WASHER, LOCK M6 | 2 | |

MT-62HS — TANK AND HANDLE ASSY.

TANK AND HANDLE ASSY.

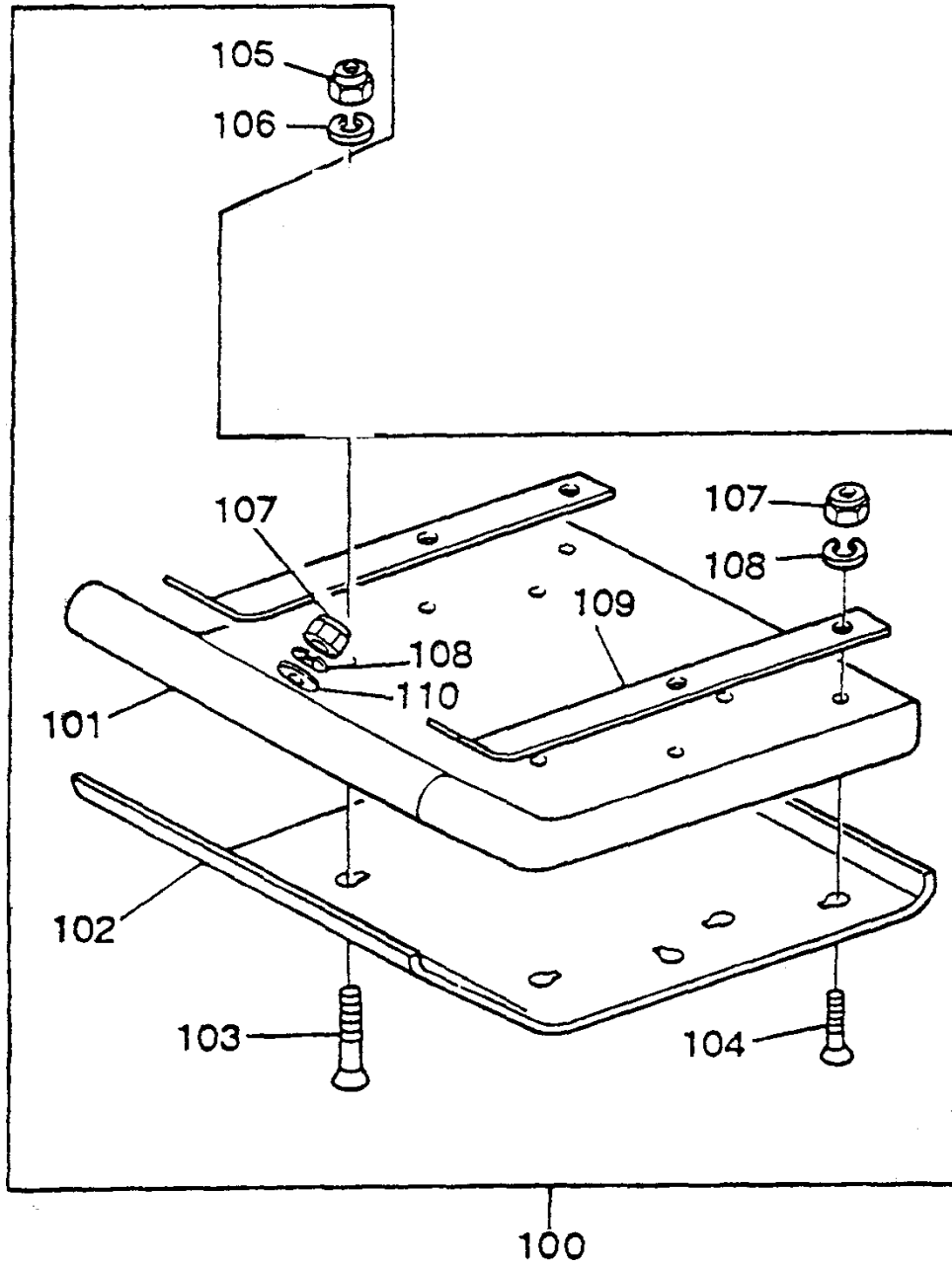


MT-62HS — TANK AND HANDLE ASSY.

TANK & HANDLE ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|---------------------------|-------------|---|
| 51 | 353213710 | OIL TANK | 1 | |
| 52 | 355448251 | STRAINER, OIL TANK | 1 | |
| 53 | 353030071 | OIL TANK CAP CP (YELLOW) | 1 | |
| 54 | 091004010 | SCREW 4X10 | 1 | |
| 55 | 353910020 | OIL SENSOR ASSEMBLY | 1 | INCLUDES ITEMS W/% |
| 56% | 1617260101 | SWITCH FLOAT CP | 1 | |
| 57% | 0062610091 | O- RING | 1 | |
| 58% | 353449031 | SENSOR HOLDER | 1 | |
| 59% | 953405640 | PACKING, COCK HOLDER | 1 | |
| 60 | 956100044 | THROTTLE WIRE S390- 485 | 1 | |
| 61 | 353450220 | GUARD, OIL HOSE | 1 | |
| 62 | 355448071 | COVER, COCK HOLDER | 1 | |
| 63 | 0830000010 | COIL SPRING | 1 | |
| 64 | 959401750 | WIRE STOPPER ASSY. (2.5D) | 1 | |
| 65 | 353030080 | WELL NUT M5 | 1 | |
| 66 | 091005015 | SCREW 5X15 | 1 | |
| 67 | 952405970 | WASHER 6.4D- 20D | 1 | |
| 70 | 009110011 | SOCKET HEAD SCREW 8X20 | 2 | |
| 71 | 030208200 | WASHER, LOCK M8 | 2 | |
| 72 | 952401450 | WASHER 8.5X22X3 | 2 | |
| 89 | 361910040 | ROLLER, W/PIN ASSY. | 1 | INCLUDES ITEMS W/\$ REPLACES 955200051 |
| 90\$ | 091005025 | SCREW 5X25 | 4 | |
| 91 | 022610505 | FLANGE NUT M5 H | 4 | |
| 92\$ | 031105080 | WASHER, FLAT M5 | 4 | |

FOOT ASSY.

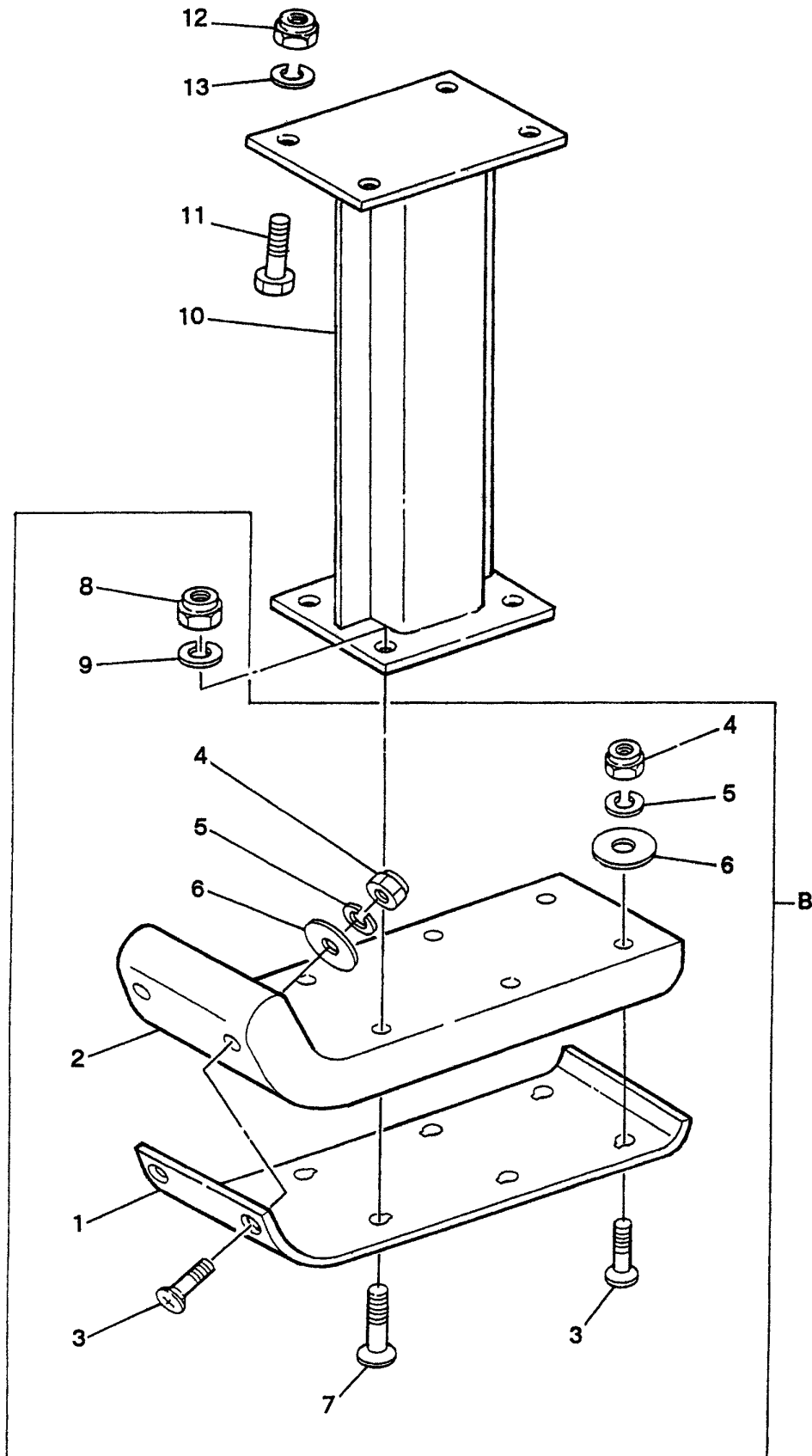


FOOT ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|-------------------|------------------------|-----------------------------|--------------------|-----------------------|
| 100 | 351910130 | FOOT ASSY. 265W- 215P | 1 | INCLUDES ITEMS W/* |
| 101* | 351109030 | FOOT, 265W- 215P | 1 | |
| 102* | 351109040 | METAL SHEET 265W- 215P- 4.5 | 1 | |
| 103* | 001611253 | SUNK HEAD BOLT 12X65 H | 4 | |
| 104* | 001611051 | SUNK HEAD BOLT 10X55 H | 7 | |
| 105* | 022711214 | NYLON NUT M12 | 4 | |
| 106* | 030212300 | WASHER, LOCK M12 | 4 | |
| 107* | 022711012 | NYLON NUT M10 | 7 | |
| 108* | 030210250 | WASHER, LOCK M10 | 7 | |
| 109* | 352322581 | FOOT FITTING 38B- 3T | 2 | |
| 110* | 301010540 | WASHER, FLAT 11X34X3.2 | 1 | |

MT-62HS — TRENCH SHOE ASSY. (OPTION)

TRENCH SHOE ASSY. (OPTION)



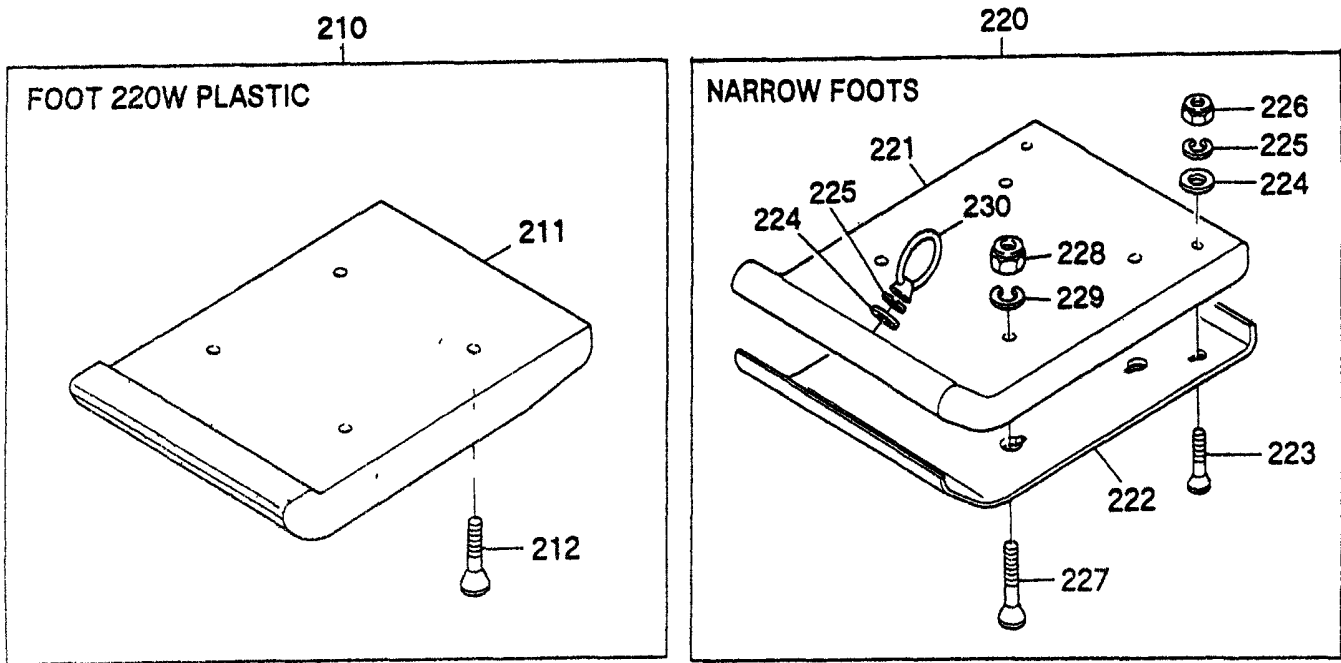
MT-62HS — TRENCH SHOE ASSY. (OPTION)

TRENCH SHOE ASSY. (OPTION)

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|-------------------------------------|-------------|--------------------|
| A | 351910200 | FOOT ASSY. W/STRUT 114W- 340H | | INCLUDES ITEMS W/* |
| A | 351910210 | FOOT ASSY. W/STRUT 170W- 340H | | INCLUDES ITEMS W/* |
| A | 351910110 | FOOT ASSY. W/STRUT 150W | | INCLUDES ITEMS W/* |
| B* | 351910220 | FOOT ASSY. 114W, FOR STRUT | | INCLUDES ITEMS W/# |
| B* | 301910130 | FOOT ASSY. 150W, FOR STRUT | | INCLUDES ITEMS W/# |
| B* | 351910230 | FOOT ASSY. 170W, FOR STRUT | | INCLUDES ITEMS W/# |
| 1*# | 351327020 | METAL SHEET 114, FOR STRUT | 1 | |
| 1*# | 351205710 | METAL SHEET 150, FOR STRUT | 1 | |
| 1*# | 351327040 | METAL SHEET 170, FOR STRUT | 1 | |
| 2*# | 351327050 | FOOT 114W, FOR STRUT | 1 | |
| 2*# | 351206700 | FOOT 150W / FOR STRUT | 1 | |
| 2*# | 351327070 | FOOT 170W, FOR STRUT | 1 | |
| 3*# | 001611052 | SUNK HEAD BOLT 10X60 H | 6 | |
| 4*# | 022711012 | NYLON NUT M10 | 6 | |
| 5*# | 030210250 | WASHER, LOCK M106 | 6 | |
| 6*# | 301010540 | WASHER 11X34X3.2 | 6 | |
| 7*# | 001611254 | SUNK HEAD BOLT 12X70 H | 4 | |
| 8*# | 022711214 | NYLON NUT M12 | 4 | |
| 9*# | 030212300 | WASHER, LOCK M12 | 4 | |
| 10* | 351105241 | STRUT 305H | 1 | |
| 11* | 001211240 | BOLT 12X40 H | 4 | |
| 12* | 022711214 | NYLON NUT M12 | 4 | |
| 13* | 030212300 | WASHER, LOCK M12 | 4 | |

MT-62HS — NARROW FOOT ASSY. (OPTION)

NARROW FOOT ASSY. (OPTION)



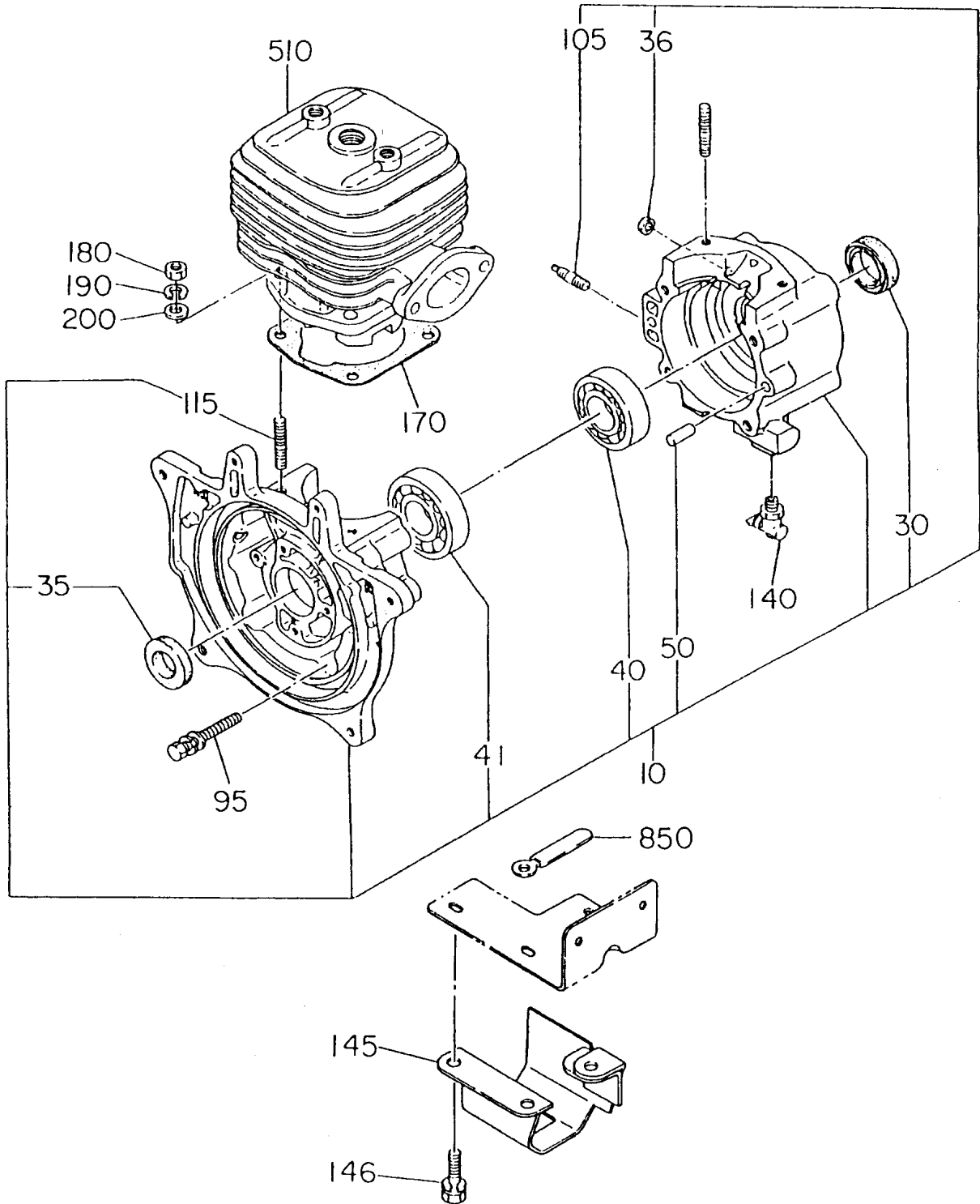
MT-62HS — NARROW FOOT ASSY. (OPTION)

NARROW FOOT ASSY. (OPTION)

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|------------------------------|-------------|--------------------|
| 210 | 351910270 | FOOT ASSY., PLASTIC | 1 | INCLUDES ITEMS W/* |
| 211* | 351323750 | FOOT 220W, PLASTIC | 1 | |
| 212* | 001611256 | SUNK HEAD BOLT 12X80 H | 4 | |
| 220 | 351910140 | NARROW FOOT ASSY. 170W | 1 | INCLUDES ITEMS W/# |
| 220 | 351910150 | NARROW FOOT ASSY. 200W | 1 | INCLUDES ITEMS W/# |
| 220 | 351910160 | NARROW FOOT ASSY. 220W | 1 | INCLUDES ITEMS W/# |
| 221# | 351324240 | NARROW FOOT 170W | 1 | |
| 221# | 351324250 | NARROW FOOT 200W | 1 | |
| 221# | 351324260 | NARROW FOOT 220W | 1 | |
| 222# | 351324270 | METAL SHEET 170W | 1 | |
| 222# | 351324280 | METAL SHEET 200W | 1 | |
| 222# | 351324290 | METAL SHEET 220W | 1 | |
| 223# | 001611051 | SUNK HEAD BOLT 10X55 H | 5 | |
| 224# | 301010540 | WASHER, FLAT 11X34X3.2 | 5 | |
| 225# | 030210250 | WASHER, LOCK M10 | 5 | |
| 226# | 022711012 | NYLON NUT M10 | 4 | |
| 227# | 001611253 | SUNK HEAD BOLT 12X65 H | 4 | |
| 228# | 022711214 | NYLON NUT M12 | 4 | |
| 229# | 030212300 | WASHER, LOCK M12 | 4 | |
| 230# | 959010413 | EYE NUT M10 | 1 | |

ROBIN EC-08HS ENGINE — CRANKCASE AND CYLINDER ASSY.

CRANKCASE AND CYLINDER ASSY.



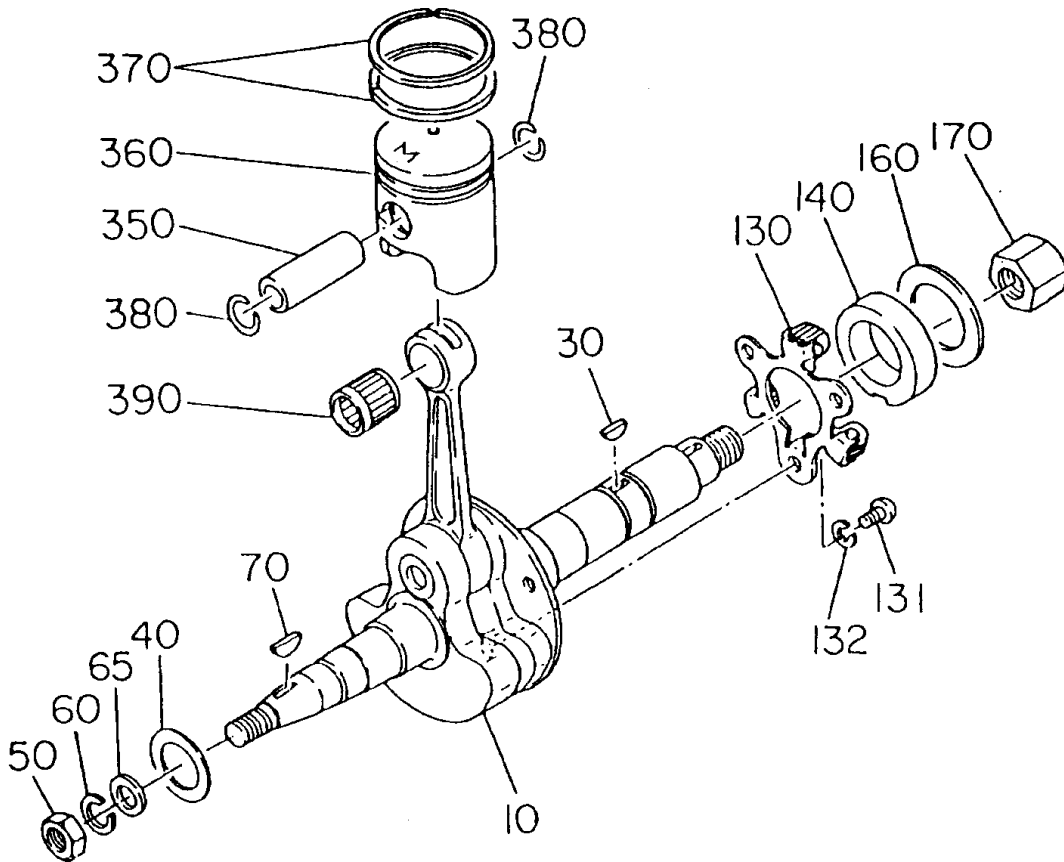
ROBIN EC-08HS ENGINE — CRANKCASE AND CYLINDER ASSY.

CRANKCASE AND CYLINDER ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|-----------|----------------|----------------------|-------------|---------------------|
| 10 | 5801056000 | CRANK CASE CP | 1 | INCLUDES ITEMS W/* |
| 30* | 0440200020 | OIL SEAL | 1 | |
| 35* | 0440200020 | OIL SEAL | 1 | |
| 36* | 0440060010 | OIL SEAL | 1 | |
| 40* | 0600200010 | BALL BEARING 6004C3 | 1 | |
| 41* | 0600200020 | BALL BEARING 6204C3 | 1 | |
| 50* | 0052606140 | DOWEL PIN | 2 | |
| 95 | 0011406450 | BOLT ASSY | 4 | |
| 105* | 0105060050 | STUD | 1 | |
| 115* | 0105064940 | STUD | 4 | |
| 140 | 0643000101 | DRAIN COCK | 1 | REPLACES 0643109980 |
| 145 | 5809501600 | PROTECTOR COMP. | 1 | REPLACES 5809011000 |
| 146 | 0011308180 | BOLT AND WASHER ASSY | 3 | |
| 170 | 5801501800 | GASKET, CYLINDER | 1 | |
| 180 | 0021706000 | NUT | 4 | REPLACES 0021806000 |
| 190 | 030206150 | SPRING WASHER | 4 | REPLACES 0032006000 |
| 200 | 0031006000 | WASHER | 4 | |
| 510 | 5801501400 | CYLINDER CP | 1 | |
| 850 | 1507520103 | CLAMP | 1 | REPLACES 0566099950 |

ROBIN EC-08HS ENGINE — CRANKSHAFT AND PISTON ASSY.

CRANKSHAFT AND PISTON ASSY.



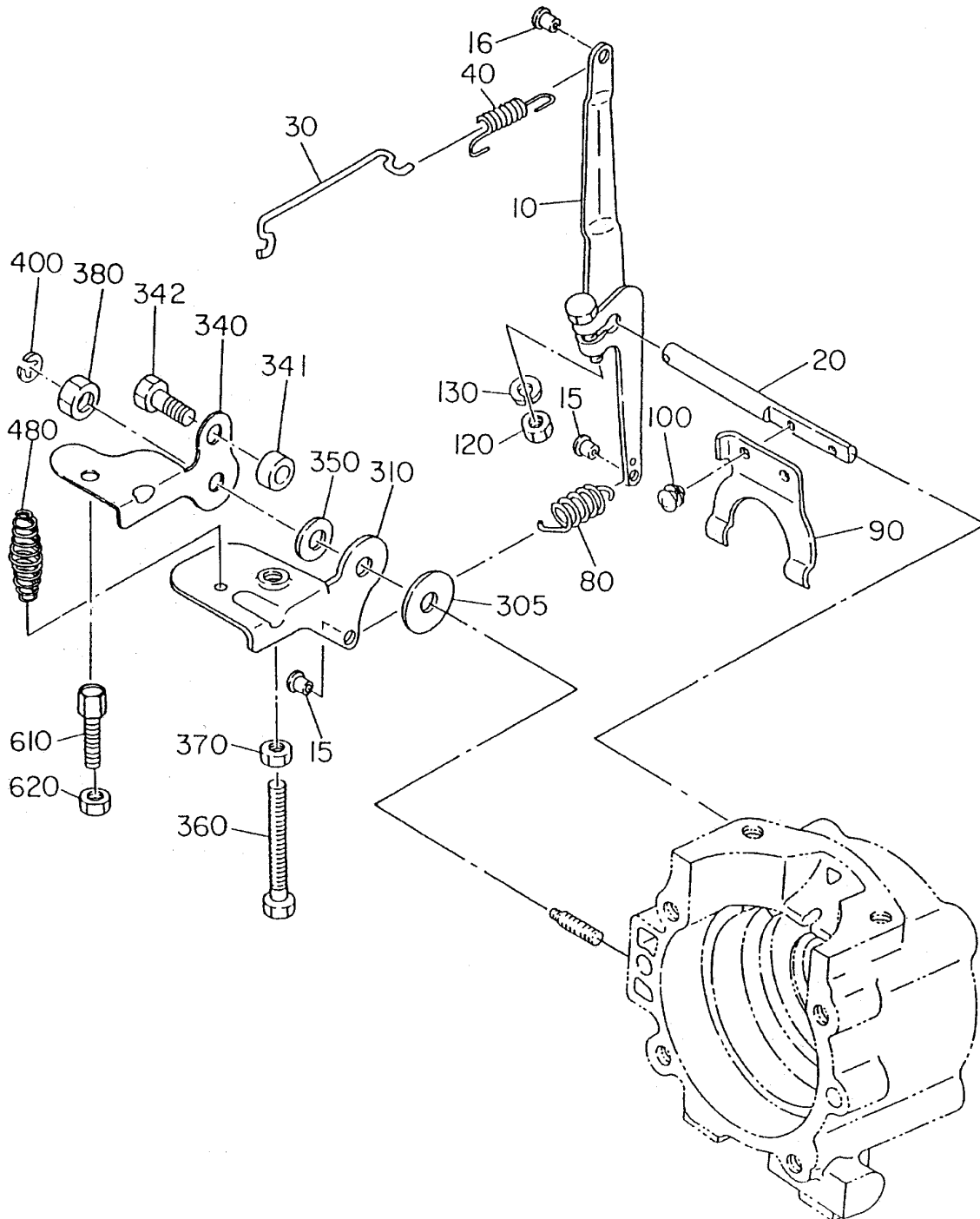
ROBIN EC-08HS ENGINE — CRANKSHAFT AND PISTON ASSY.

CRANKSHAFT AND PISTON ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|-----------|----------------|------------------------|-------------|---------------------|
| 10 | 5802028000 | CRANK SHAFT | 1 | |
| 30 | 0323049950 | WOODRUFF KEY | 1 | |
| 40 | 1292500103 | SPACER | 2 | |
| 50 | 0039310000 | NUT | 1 | REPLACES 0021810000 |
| 60 | 030210250 | SPRING WASHER | 1 | REPLACES 0032010000 |
| 65 | 030206150 | WASHER | 1 | REPLACES 0031010000 |
| 70 | 0053204201 | WOODRUFF KEY | 1 | REPLACES 0323049950 |
| 130 | 5804010000 | PLATE, GOVERNOR | 1 | |
| 131 | 0131050020 | SCREW (PAN HEAD) | 3 | REPLACES 0043105080 |
| 132 | 0032005000 | SPRING WASHER | 3 | |
| 140 | 5514500100 | GOVERNOR SLEEVE | 1 | |
| 160 | 0230230020 | SPACER | 1 | |
| 170 | 0173120010 | LOCK NUT | 1 | |
| 350 | 5802500700 | PISTON PIN | 1 | REPLACES 5802500400 |
| 360 | 5802500600 | PISTON | 1 | |
| 370 | 5802023000 | PISTON RING SET | 1 | REPLACES 5000008100 |
| 380 | 0565119990 | CLIP | 2 | |
| 390 | 0610120010 | NEEDLE BEARING | 1 | |

ROBIN EC-08HS ENGINE — GOVERNOR ASSY.

GOVERNOR ASSY.



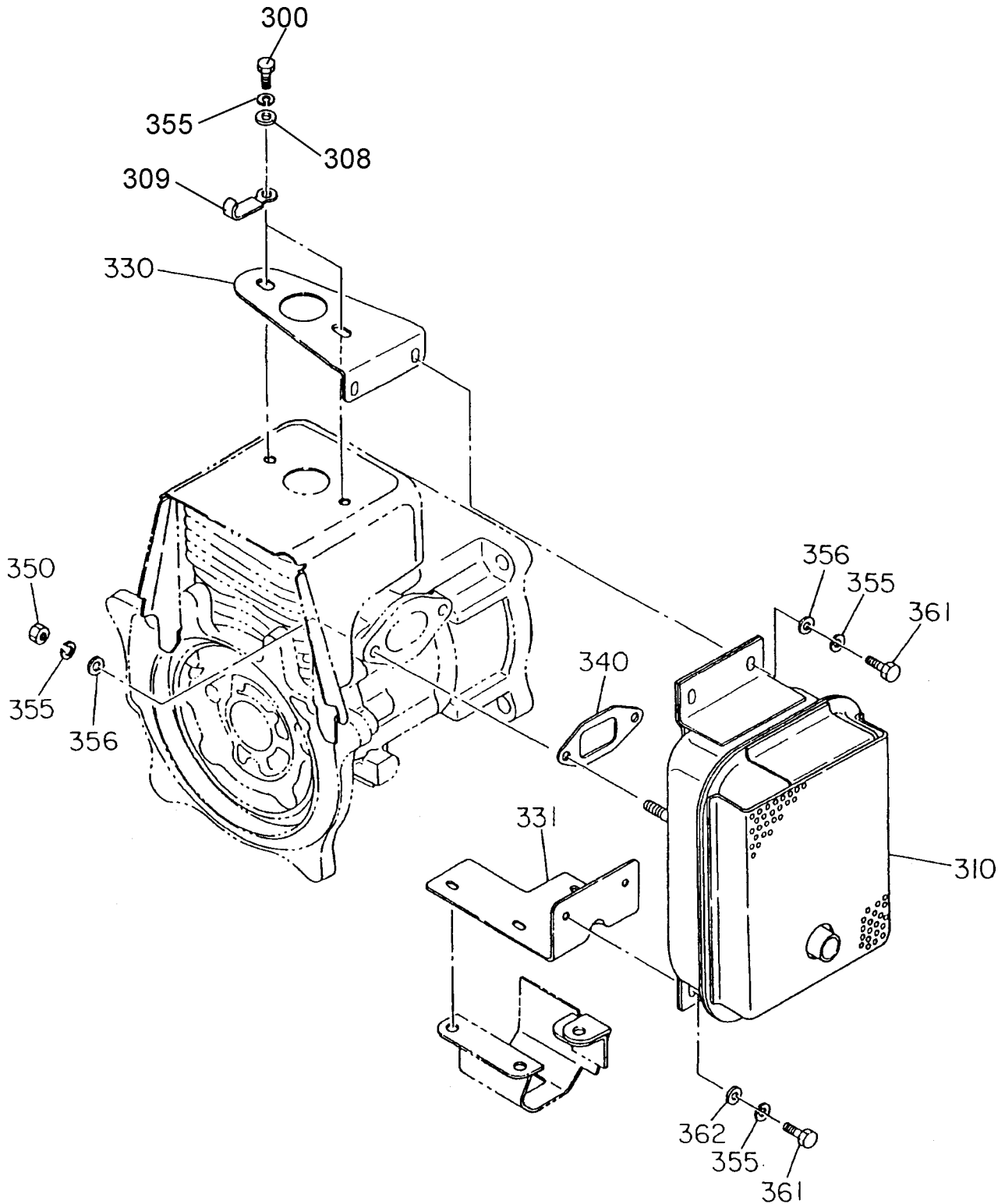
ROBIN EC-08HS ENGINE — GOVERNOR ASSY.

GOVERNOR ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|-----------|----------------|-----------------------|-------------|---------------------|
| 10 | 5804005000 | GOVERNOR LEVER | 1 | |
| 15 | 5804500900 | BUSH | 2 | |
| 16 | 2266255008 | BUSH, NYLON | 1 | REPLACES 5806083060 |
| 20 | 1294220103 | GOVERNOR SHAFT | 1 | |
| 30 | 1054270111 | GOVERNOR ROD | 1 | |
| 40 | 1064280113 | ROD SPRING | 1 | REPLACES 1064280111 |
| 80 | 1294250111 | GOVERNOR SPRING | 1 | |
| 90 | 1294210113 | GOVERNOR YOKE | 1 | |
| 100 | 0140039980 | SCREW ASSY | 2 | |
| 120 | 57028 | NUT | 1 | REPLACES 0021706000 |
| 130 | 030206150 | SPRING WASHER | 1 | REPLACES 0032006000 |
| 305 | 0217060020 | FRICTION WASHER | 1 | |
| 310 | 5804500800 | CONTROL LEVER | 1 | |
| 340 | 5804500600 | STOP PLATE | 1 | |
| 341 | 0230060090 | SPACER | 1 | |
| 342 | 0105050616 | BOLT | 1 | REPLACES 6202500400 |
| 350 | 0200070010 | WASHER | 1 | |
| 360 | 0016506400 | BOLT | 1 | |
| 370 | 57028 | NUT | 1 | REPLACES 0021706000 |
| 380 | 0170069960 | U NUT | 1 | |
| 400 | 1294500103 | CLIP | 1 | |
| 480 | 402010110 | COIL SPRING | 1 | REPLACES 0830000010 |
| 610 | 0149060040 | ADJUSTING SCREW | 1 | REPLACES 0149069981 |
| 620 | 020106050 | NUT | 1 | REPLACES 0022706000 |

ROBIN EC-08HS ENGINE — MUFFLER ASSY.

MUFFLER ASSY.



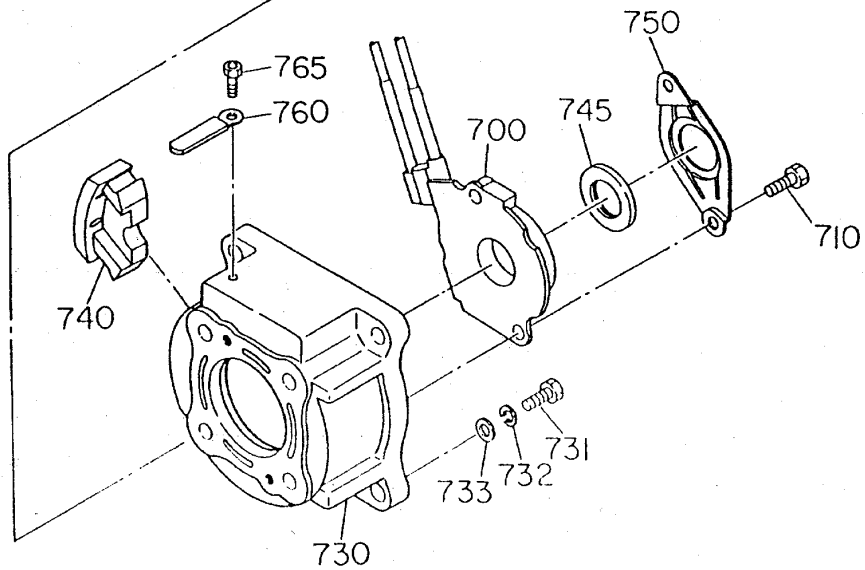
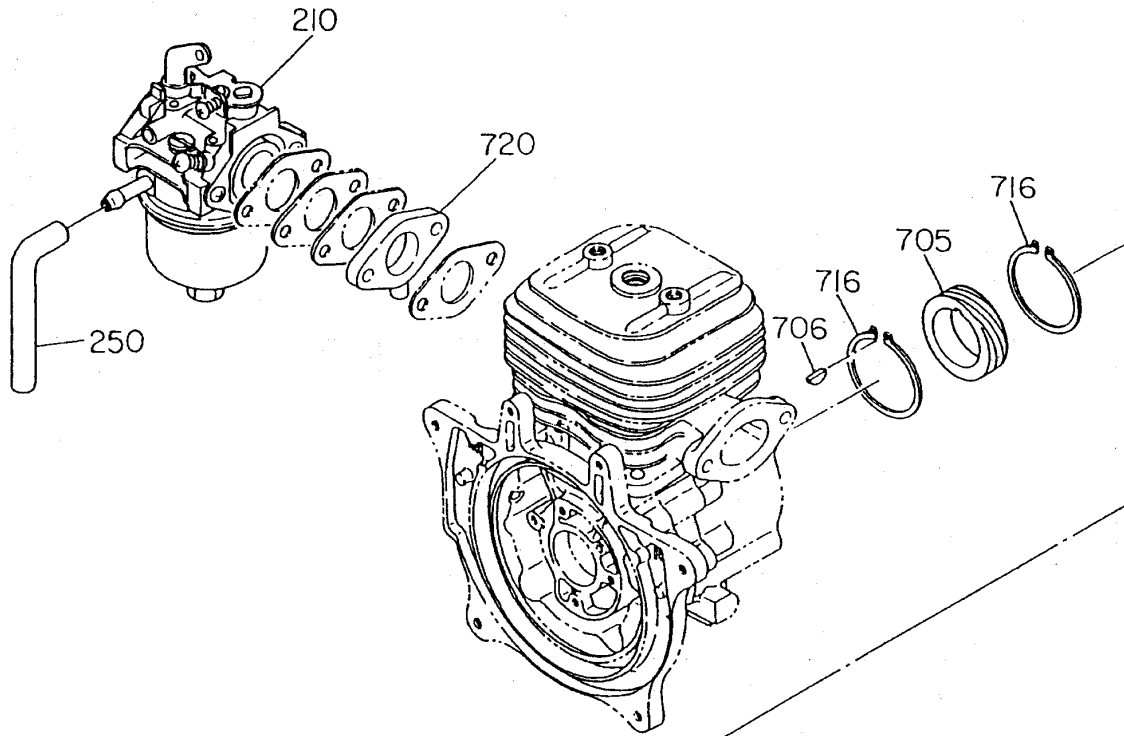
ROBIN EC-08HS ENGINE — MUFFLER ASSY.

MUFFLER ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|-----------|----------------|---------------------|-------------|---------------------------|
| 300 | 0016706200 | MUFFLER | 2 | |
| 308 | 0031206000 | WASHER, FLAT | 2 | |
| 309 | 0566099950 | CLAMP | 1 | |
| 310 | 5803032000 | MUFFLER | 1 | |
| 330 | 5803033000 | MUFFLER BRACKET A | 1 | |
| 331 | 5803034000 | MUFFLER BRACKET B | 1 | |
| 340 | 1293500403 | GASKET (MUFFLER) | 1 | |
| 350 | 0170069960 | U-NUT | 2 | |
| 355 | 030206150 | SPRING WASHER | 7 | REPLACES 0032006000 |
| 356 | 0031006000 | WASHER | 4 | |
| 361 | 0016706160 | BOLT (MUFFLER) | 4 | |
| 362 | 0031006000 | WASHER | 2 | |

ROBIN EC-08HS ENGINE — CARBURETOR AND OIL PUMP ASSY.

CARBURETOR AND OIL PUMP ASSY.



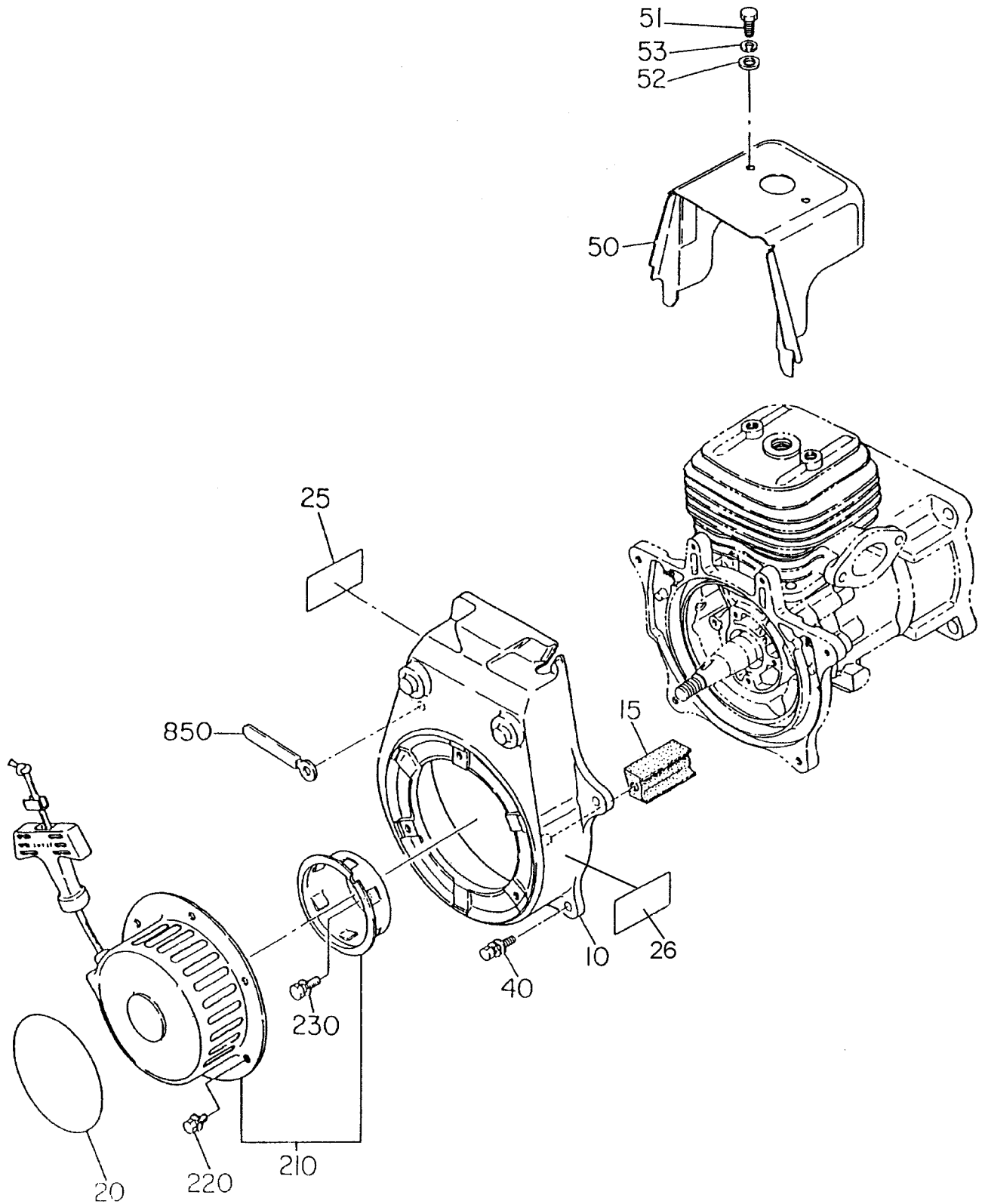
ROBIN EC-08HS ENGINE — CARBURETOR AND OIL PUMP ASSY.

CARBURETOR AND OIL PUMP ASSY.

| NO | PART NO | PART NAME | QTY. | REMARKS |
|-----------|----------------|-----------------------|-------------|------------------------------------|
| 210 | 5806111000 | CARBURETOR ASSY | 1 | SEE CARBURETOR FIG. FOR COMPONENTS |
| 250 | 1616235308 | HOSE | 1 | |
| 700 | 5806113000 | OIL PUMP ASSY | 1 | |
| 705 | 5806502300 | WORM GEAR | 1 | |
| 706 | 0323039980 | WOODRUFF KEY | 1 | |
| 710 | 0011306250 | BOLT AND WASHER ASSY | 2 | |
| 716 | 0031520000 | SNAP RING, OUTER | 2 | |
| 720 | 1616350101 | COLLAR CP (OIL INJ.) | 1 | |
| 730 | 5806501900 | OIL PUMP HOUSING | 1 | |
| 731 | 0119089970 | SOCKET HEAD BOLT | 4 | |
| 732 | 030208200 | SPRING WASHER | 4 | REPLACES 0032008000 |
| 733 | 0031008000 | WASHER | 4 | |
| 740 | 5806502000 | GROMMET | 1 | |
| 745 | 5806502100 | SEAL | 1 | |
| 750 | 5806502200 | PLATE | 1 | |
| 760 | 0566059980 | CLAMP | 1 | |
| 765 | 0119059610 | SOCKET HEAD BOLT | | |

ROBIN EC-08HS ENGINE — RECOIL STARTER AND BLOWER ASSY.

RECOIL STARTER AND BLOWER ASSY.



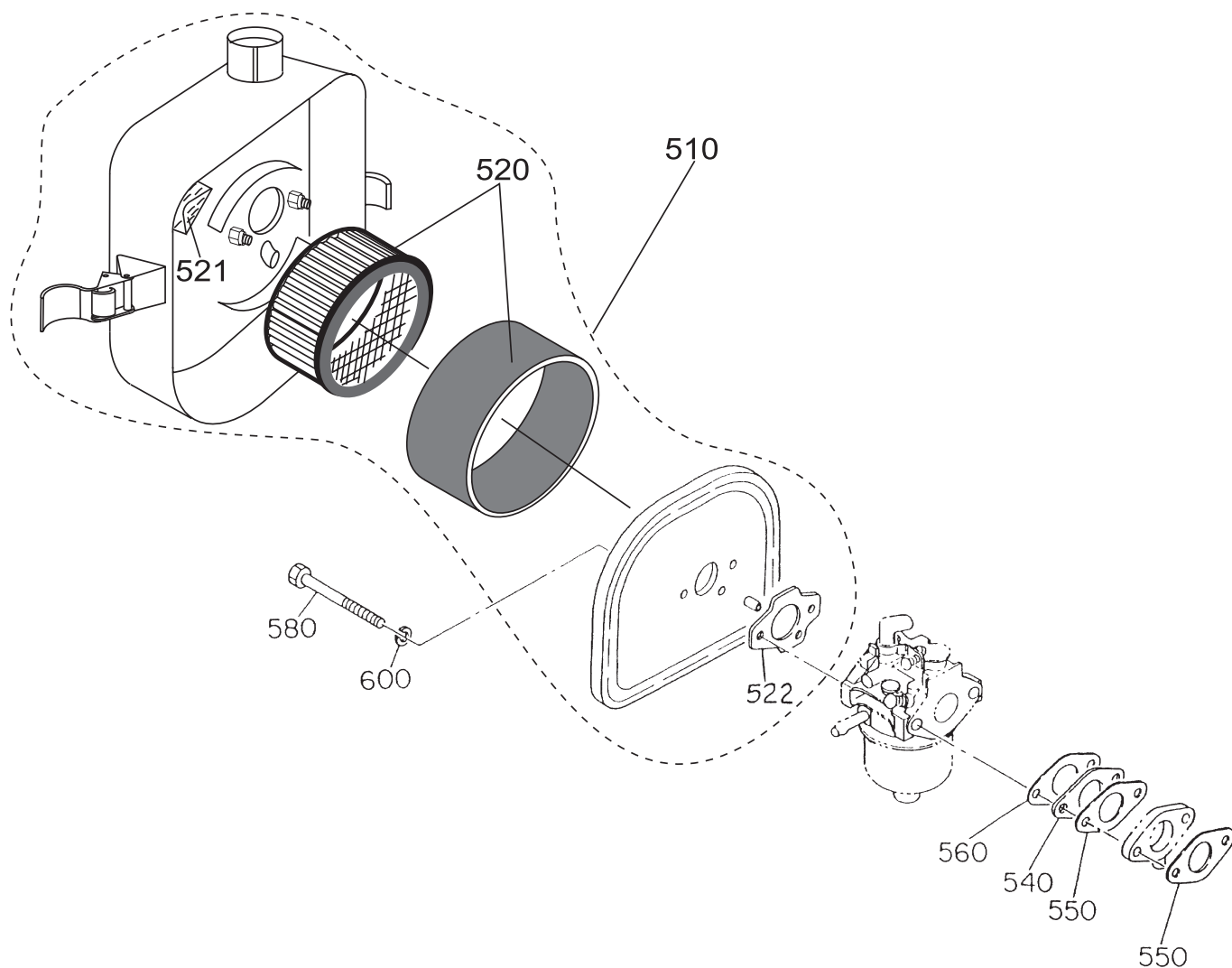
ROBIN EC-08HS ENGINE — RECOIL STARTER AND BLOWER ASSY.

RECOIL STARTER AND BLOWER ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|-----------|----------------|---------------------------|-------------|--|
| 10 | 5805501200 | FAN COVER | 1 | |
| 15 | 5515500200 | GUIDE RUBBER | 1 | |
| 20 | 920100240 | DECAL, (M-MARK) | 1 | |
| 25 | 5809503800 | LABEL, ENGINE | 1 | |
| 26 | 5809500501 | LABEL, MODEL | 1 | |
| 40 | 0011106200 | BOLT ASSY | 4 | |
| 50 | 5805022000 | CYLINDER COVER CP | 1 | |
| 51 | 011206020 | BOLT (CYLINDER) | 2 | REPLACES 0016706200 |
| 52 | 0031206000 | WASHER | 2 | |
| 53 | 030206150 | SPRING WASHER | 2 | REPLACES 0032006000 |
| 210 | 5805001000 | RECOIL STARTER ASSY | 1 | SEE RECOIL STARTER FIG. FOR COMPONENTS' REPLACES 5805011001 |
| 220 | 0011006100 | BOLT AND WASHER ASSY | 3 | |
| 230 | 0011006140 | BOLT ASSY | 2 | |
| 850 | 0566000250 | CLAMP | 2 | |

ROBIN EC-08HS ENGINE — AIR CLEANER ASSY.

AIR CLEANER ASSY.



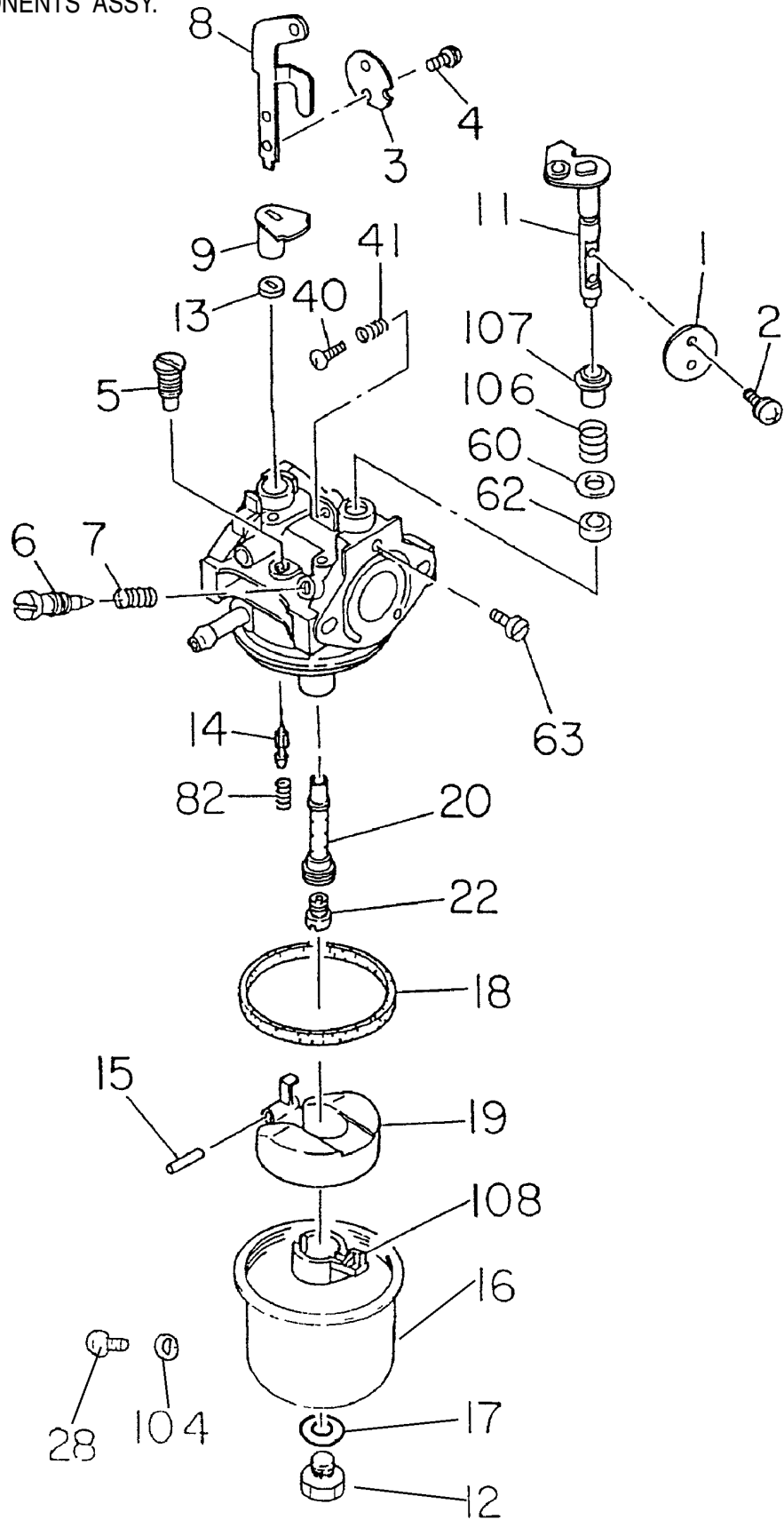
ROBIN EC-08HS ENGINE — AIR CLEANER ASSY.

AIR CLEANER ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|-----------|----------------|------------------------|-------------|---------------------|
| 510 | 5803052000 | AIR CLEANER ASSY | 1 | INCLUDES ITEMS W/* |
| 520* | 1573620101 | ELEMENT SET | 1 | REPLACES 1573260007 |
| 521* | 1613261008 | ELEMENT | 1 | |
| 522* | 2263272008 | GASKET (AIR CLEANER) | 1 | |
| 540 | 1293290103 | INSULATOR | 1 | |
| 550 | 1063500103 | GASKET (INSULATOR) | 2 | |
| 560 | 2373590303 | GASKET 2 (INSULATOR) | 1 | |
| 580 | 0011306800 | BOLT | 2 | |
| 600 | 030206150 | SPRING WASHER | 2 | REPLACES 0032006000 |

ROBIN EC-08HS ENGINE — CARBURETOR COMPONENTS ASSY.

CARBURETOR COMPONENTS ASSY.



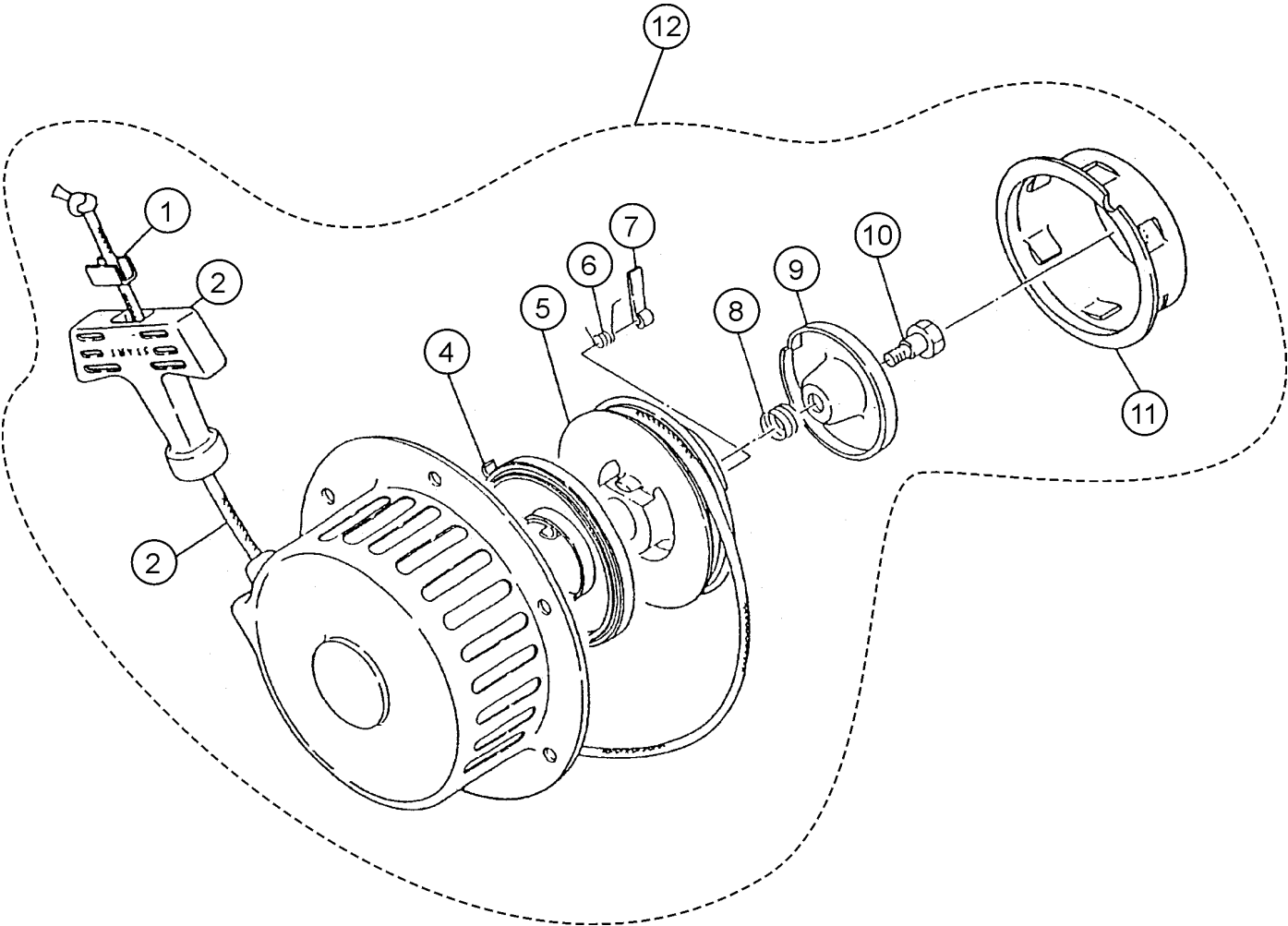
ROBIN EC-08HS ENGINE — CARBURETOR COMPONENTS ASSY.

CARBURETOR COMPONENTS ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|-----------|----------------|------------------------------|-------------|---------------------|
| A | 5806117000 | CARBURETOR ASSY (EPA) | 1 | INCLUDES ITEMS W/* |
| 1* | 1616253508 | THROTTLE VALVE | 1 | REPLACES 5806083110 |
| 2* | 5806111010 | SCREW AND WASHER ASSY | 2 | |
| 3* | 5806083310 | CHOKE VALVE | 1 | |
| 4* | 5806111010 | SCREW AND WASHER ASSY | 2 | |
| 5*# | 2076242008 | PILOT JET | 1 | REPLACES 5606003020 |
| 6*# | 2136239008 | PILOT SCREW | 1 | REPLACES 5416002150 |
| 7*# | 2096244508 | SPRING | 1 | REPLACES 8046001230 |
| 8* | 5806083040 | CHOKE LEVER | 1 | |
| 9* | 5806083050 | RING | 1 | |
| 11* | 5806083030 | THROTTLE SHAFT ASSY | 1 | |
| 12*# | 5806083020 | BOLT | 1 | |
| 13* | 5806083360 | RING | 1 | |
| 14*# | 1616235208 | NEEDLE | 1 | REPLACES 5806083400 |
| 15*# | 2146251508 | PIN | 1 | REPLACES 5416002050 |
| 16* | 1616235008 | FLOAT BODY ASSY | 1 | REPLACES 5806083010 |
| 17*# | 2366245008 | PACKING | 1 | REPLACES 5806083330 |
| 18*# | 2366254008 | PACKING | 1 | REPLACES 5806083340 |
| 19*# | 5806083350 | FLOAT | 1 | |
| 20* | 5806083260 | MAIN NOZZLE | 1 | |
| 22*# | 1296240008 | MAIN JET | 1 | REPLACES 5306011010 |
| 28* | 5806083150 | SCREW | 1 | |
| 40*# | 2366235008 | SCREW | 1 | REPLACES 5416002230 |
| 41*# | 2096244508 | SPRING | 1 | REPLACES 8046001230 |
| 60* | 5806083230 | PACKING | 1 | REPLACES 5806083230 |
| 62* | 5806083210 | SEAL | 1 | |
| 63* | 5806083230 | SCREW | 1 | REPLACES 5806083230 |
| 82*# | 2366244508 | SPRING | 1 | REPLACES 5806083240 |
| 104* | 2366254108 | PACKING | 1 | REPLACES 5806083320 |
| 106* | 5806083140 | SPRING | 1 | |
| 107* | 5806083120 | RING | 1 | |
| 108* | 5806083370 | FLOAT STOPPER | 1 | |
| # | KITCARBEC08H | KIT, CARBURETOR EC08HS | 1 | INCLUDES ITEMS W/# |

ROBIN EC-08HS ENGINE — RECOIL STARTER COMPONENTS ASSY.

RECOIL STARTER COMPONENTS ASSY.



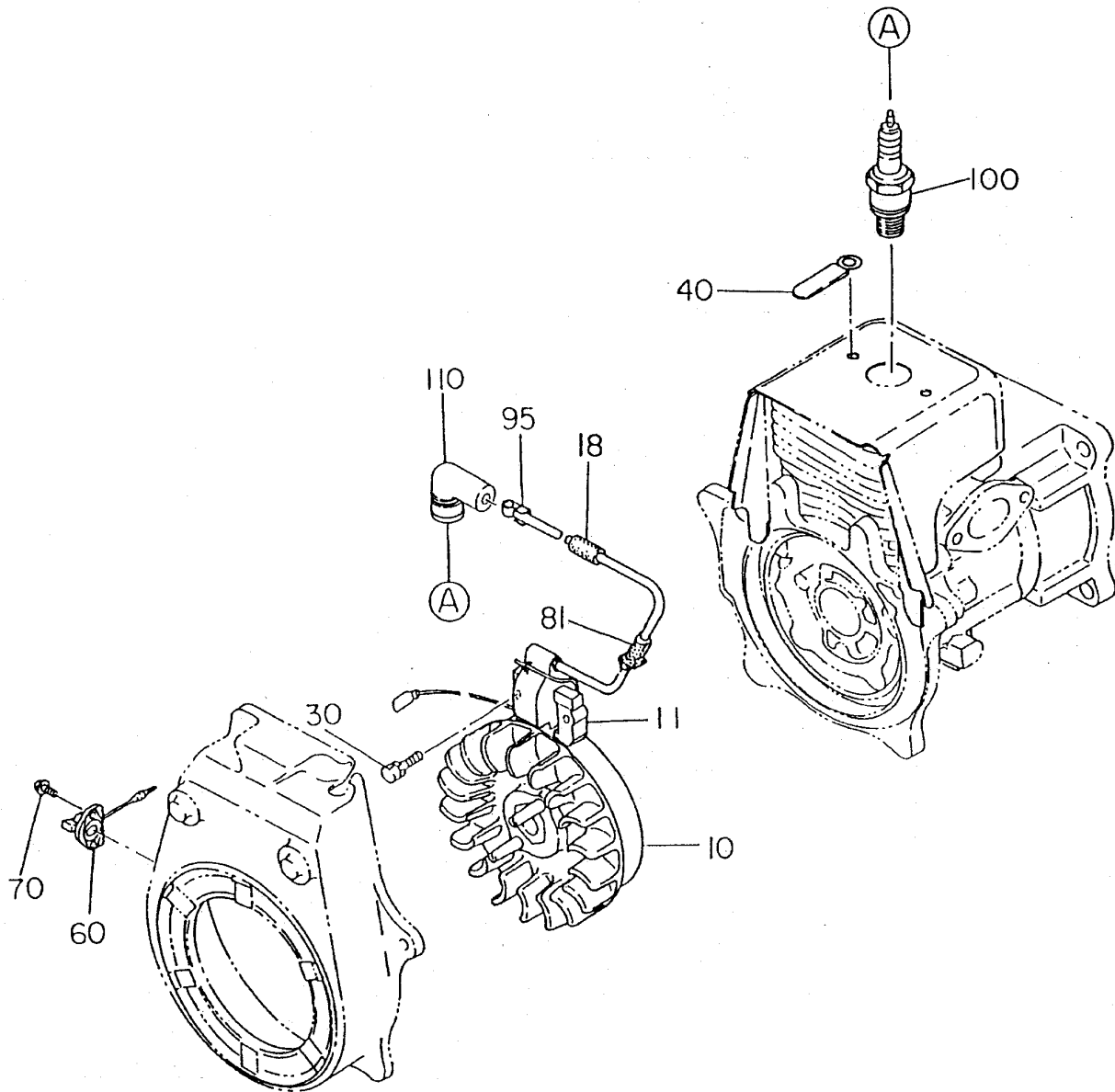
ROBIN EC-08HS ENGINE — RECOIL STARTER COMPONENTS ASSY.

RECOIL STARTER COMPONENTS ASSY.

| <u>NO</u> | <u>PART NO</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|-----------|----------------|---------------------------|-------------|----------------------------|
| 1* | 5515005160 | ROPE STOPPER | 1 | |
| 2* | 5805001030 | STARTER HANDLE | 1 | |
| 3* | 5805011040 | STARTER ROPE | 1 | |
| 4* | 5805004020 | SPIRAL SPRING | 1 | |
| 5* | 5805004030 | REEL | 1 | |
| 6* | 5805004050 | RETURN SPRING | 1 | |
| 7* | 5805004040 | RATCHET | 1 | |
| 8* | 5805004110 | FRICTION SPRING | 1 | |
| 9* | 5805004120 | FRICTION PLATE | 1 | REPLACES EC08A05038 |
| 10* | 5805011020 | CENTER SCREW | 1 | |
| 11* | 5805004140 | STARTER PULLEY | 1 | REPLACES EC08A050311 |
| 12 | 5805001000 | RECOIL STARTER ASSY. | 1 | INCLUDES ITEMS W/* |

ROBIN EC-08HS ENGINE — MAGNETO ASSY.

MAGNETO ASSY.



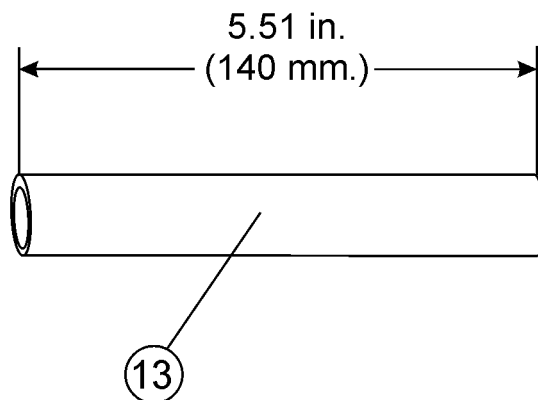
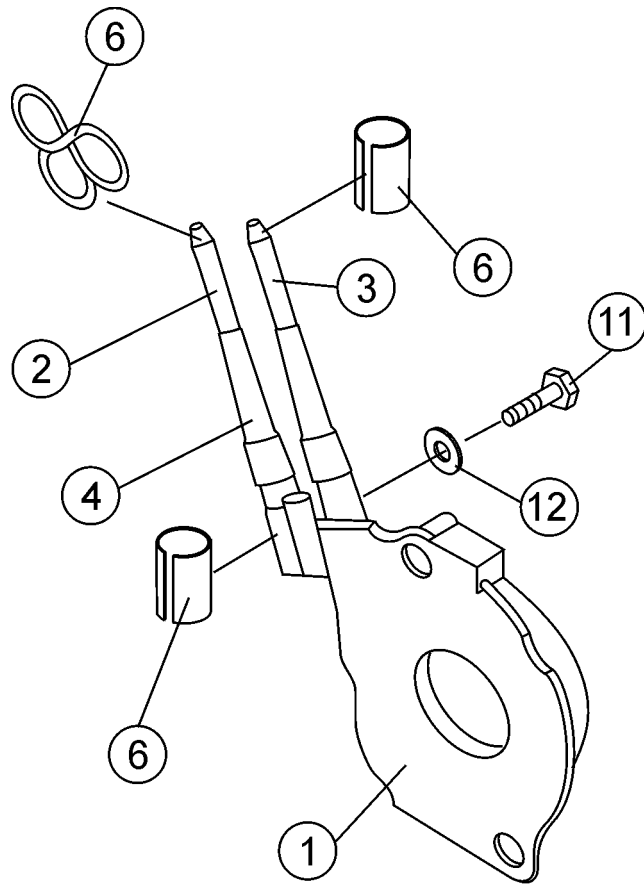
ROBIN EC-08HS ENGINE — MAGNETO ASSY.

MAGNETO ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|---------------------------|-------------|---------------------------|
| 10 | 5807005010 | FLYWHEEL | 1 | |
| 11 | 5807007020 | IGNITION COIL | 1 | |
| 18 | 0851029960 | VINYL PIPE | 1 | |
| 30 | 0011105250 | BOLT AND WASHER ASSY | 2 | |
| 40 | 1507520103 | CLAMP | 1 |REPLACES 0566099950 |
| 60 | 0660000361 | STOP SWITCH ASSY (ON-OFF) | 1 | |
| 70 | 0043304100 | SCREW 4X10 | 2 | |
| 81 | 0241069980 | GROMMET | 1 | |
| 95 | 0659000010 | SPARK PLUG CLIP | 1 |REPLACES 0655000100 |
| 100 | 0650140031 | SPARK PLUG | 1 |REPLACES 00650149730 |
| 110 | 0655000140 | SPARK PLUG CAP | 1 | |

ROBIN EC-08HS ENGINE — OIL PUMP ASSY.

OIL PUMP ASSY.



ROBIN EC-08HS ENGINE — OIL PUMP ASSY.

OIL PUMP ASSY.

| <u>NO.</u> | <u>PART NO.</u> | <u>PART NAME</u> | <u>QTY.</u> | <u>REMARKS</u> |
|------------|-----------------|------------------|-------------|--------------------------|
| 1 | 5806113000 | OIL PUMP ASSY. | 1 | |
| 2 | 5806113020 | OIL HOSE | 1 | |
| 3 | 5806113030 | OIL HOSE | 1 | |
| 4 | 5806113040 | PROTECTOR | 1 | |
| 6 | 1616391608 | CLIP | 3 | |
| 7 | 1616391008 | CLIP | 1 |REPLACES 0566099950 |
| 11 | 2266235408 | SCREW | 1 | |
| 12 | 1616391909 | PACKING | 1 | |
| 13 | 5806113140 | PROTECTOR | 1 | |

PAYMENT TERMS

Terms of payment for parts are net 10 days.

FREIGHT POLICY

All parts orders will be shipped collect or prepaid with the charges added to the invoice. All shipments are F.O.B. point of origin. Multiquip's responsibility ceases when a signed manifest has been obtained from the carrier, and any claim for shortage or damage must be settled between the consignee and the carrier.

MINIMUM ORDER

The minimum charge for orders from Multiquip is \$15.00 net. Customers will be asked for instructions regarding handling of orders not meeting this requirement.

RETURNED GOODS POLICY

Return shipments will be accepted and credit will be allowed, subject to the following provisions:

1. A Returned Material Authorization must be approved by Multiquip prior to shipment.
2. To obtain a Return Material Authorization, a list must be provided to Multiquip Parts Sales that defines item numbers, quantities, and descriptions of the items to be returned.
 - a. The parts numbers and descriptions must match the current parts price list.
 - b. The list must be typed or computer generated.
 - c. The list must state the reason(s) for the return.
 - d. The list must reference the sales order(s) or invoice(s) under which the items were originally purchased.
 - e. The list must include the name and phone number of the person requesting the RMA.
3. A copy of the Return Material Authorization must accompany the return shipment.
4. Freight is at the sender's expense. All parts must be returned freight prepaid to Multiquip's designated receiving point.

5. Parts must be in new and resalable condition, in the original Multiquip package (if any), and with Multiquip part numbers clearly marked.
6. The following items are not returnable:
 - a. Obsolete parts. (If an item is in the price book and shows as being replaced by another item, it is obsolete.)
 - b. Any parts with a limited shelf life (such as gaskets, seals, "O" rings, and other rubber parts) that were purchased more than six months prior to the return date.
 - c. Any line item with an extended dealer net price of less than \$5.00.
 - d. Special order items.
 - e. Electrical components.
 - f. Paint, chemicals, and lubricants.
 - g. Decals and paper products.
 - h. Items purchased in kits.
7. The sender will be notified of any material received that is not acceptable.
8. Such material will be held for five working days from notification, pending instructions. If a reply is not received within five days, the material will be returned to the sender at his expense.
9. Credit on returned parts will be issued at dealer net price at time of the original purchase, less a 15% restocking charge.
10. In cases where an item is accepted, for which the original purchase document can not be determined, the price will be based on the list price that was effective twelve months prior to the RMA date.
11. Credit issued will be applied to future purchases only.

PRICING AND REBATES

Prices are subject to change without prior notice. Price changes are effective on a specific date and all orders received on or after that date will be billed at the revised price. Rebates for price declines and added charges for price increases will not be made for stock on hand at the time of any price change.

Multiquip reserves the right to quote and sell direct to Government agencies, and to Original Equipment Manufacturer accounts who use our products as integral parts of their own products.

SPECIAL EXPEDITING SERVICE

A \$35.00 surcharge will be added to the invoice for special handling including bus shipments, insured parcel post or in cases where Multiquip must personally deliver the parts to the carrier.

LIMITATIONS OF SELLER'S LIABILITY

Multiquip shall not be liable here under for damages in excess of the purchase price of the item with respect to which damages are claimed, and in no event shall Multiquip be liable for loss of profit or good will or for any other special, consequential or incidental damages.

LIMITATION OF WARRANTIES

No warranties, express or implied, are made in connection with the sale of parts or trade accessories nor as to any engine not manufactured by Multiquip. Such warranties made in connection with the sale of new, complete units are made exclusively by a statement of warranty packaged with such units, and Multiquip neither assumes nor authorizes any person to assume for it any other obligation or liability whatever in connection with the sale of its products. Apart from such written statement of warranty, there are no warranties, express, implied or statutory, which extend beyond the description of the products on the face hereof.

OPERATION AND PARTS MANUAL

HERE'S HOW TO GET HELP

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

MULTIQUIP'S MAIN PHONE NUMBERS

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310-537-3700

PARTS DEPARTMENT

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310-537-3700 FAX: 310-637-3284

MAYCO PARTS

800-306-2926 FAX: 800-672-7877
310-537-3700 FAX: 310-637-3284

SERVICE DEPARTMENT

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