

# OPERATION AND PARTS MANUAL



## **MODEL DSGPULW** **DuoScreed LightWeight** **(HONDA GX35SAT GASOLINE ENGINE)**

Revision #7 (09/19/18)

To find the latest revision of this  
publication, visit our website at:  
[www.multiquip.com](http://www.multiquip.com)



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



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

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

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

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

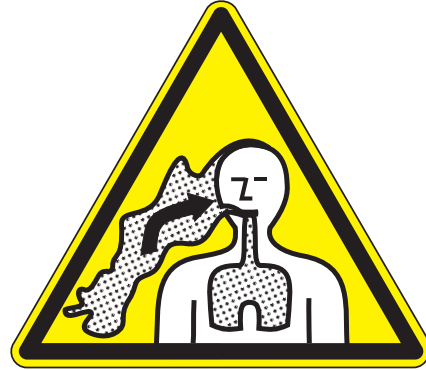
## **WARNING**



### **SILICOSIS WARNING**

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

## **WARNING**



### **RESPIRATORY HAZARDS**

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

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

# DSGPULW DUOSCREED —TABLE OF CONTENTS

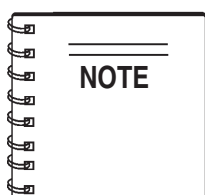
## Multiquip DS-Series — Vibratory DuoScreed

Here's How To Get Help .....	3
Table Of Contents .....	4
Parts Ordering Procedures .....	5
Rules For Safe Operation .....	8-9
Operation and Safety Decals .....	10
Specifications .....	11
General Information .....	12
Components (DuoScreed) .....	13
Components (Honda GX35SAT Engine) .....	14
Assembly Instructions .....	15-17
Starting .....	18
Application/Operation .....	19-22
Maintenance .....	23-24
Troubleshooting (DuoScreed) .....	25
Troubleshooting (Honds GX35SAT Engine) .....	26
Explanation Of Codes In Remarks Column .....	28
Suggested Spare Parts .....	29
Nameplate and Decals .....	30-31
Main Assembly .....	32-35
Blade Assembly .....	36-37

## Honda GX35SAT Engine

Air Cleaner Assembly .....	38-39
Cam Pulley Assembly .....	40-41
Carburetor Assembly .....	42-43
Crankcase Assembly .....	44-45
Crankshaft and Piston Assembly .....	46-47
Fan Cover and Clutch/Assembly .....	48-49
Recoil Starter Assembly .....	50-51
Flywheel and Ignition Coil Assembly .....	52-53
Fuel Tank .....	54-55
Muffler Assembly .....	56-57
Engine Top Cover Assembly .....	58-59
Labels .....	60-61

Terms and Conditions Of Sale — Parts .....	62
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***Specification and part  
number are subject to  
change without notice.***

# DSGPULW DUOSCREED — PARTS ORDERING PROCEDURES

## Ordering parts has never been easier! Choose from three easy options:

Effective:  
January 1<sup>st</sup>, 2006



### Order via Internet (Dealers Only):

Order parts on-line using Multiquip's SmartEquip website!

- View Parts Diagrams
- Order Parts
- Print Specification Information



If you have an MQ Account, to obtain a Username and Password, E-mail us at: **parts@multiquip.com**.

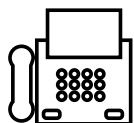
To obtain an MQ Account, contact your District Sales Manager for more information.

Goto [www.multiquip.com](http://www.multiquip.com) and click on

**Order Parts** to log in and save!

Use the **internet** and qualify for a **5% Discount** on *Standard orders* for all orders which include complete part numbers.\*

Note: Discounts Are Subject To Change



### Order via Fax (Dealers Only):

All customers are welcome to order parts via Fax.

**Domestic (US) Customers dial:**

1-800-6-PARTS-7 (800-672-7877)

**Fax** your order in and qualify for a **2% Discount** on *Standard orders* for all orders which include complete part numbers.\*

Note: Discounts Are Subject To Change



**Order via Phone: Domestic (US) Dealers Call:**  
1-800-427-1244

### Non-Dealer Customers:

Contact your local Multiquip Dealer for parts or call 800-427-1244 for help in locating a dealer near you.



**International Customers** should contact their local Multiquip Representatives for Parts Ordering information.

## When ordering parts, please supply:

- |   |  |
|---|--|
| <input type="checkbox"/> Dealer Account Number                                | <input type="checkbox"/> Specify Preferred Method of Shipment:                             |
| <input type="checkbox"/> Dealer Name and Address                              | <input checked="" type="checkbox"/> UPS/Fed Ex <input checked="" type="checkbox"/> DHL     |
| <input type="checkbox"/> Shipping Address (if different than billing address) | <input checked="" type="checkbox"/> Priority One <input checked="" type="checkbox"/> Truck |
| <input type="checkbox"/> Return Fax Number                                    | <input checked="" type="checkbox"/> Ground   |
| <input type="checkbox"/> Applicable Model Number                              | <input checked="" type="checkbox"/> Next Day   |
| <input type="checkbox"/> Quantity, Part Number and Description of Each Part   | <input checked="" type="checkbox"/> Second/Third Day                                       |

### NOTICE

All orders are treated as *Standard Orders* and will ship the same day if received prior to 3PM PST.

WE ACCEPT ALL MAJOR CREDIT CARDS!



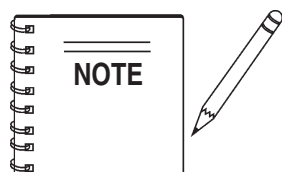
www.multiquip.com



# DSGPULW DUOSCREED — 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 **Model DSGPULW LightWeight (LW) DuoScreed**. Refer to the engine manufacturers instructions for data relative to its safe operation.

Before using this screed, 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 these directions.

### **WARNING**

You **CAN** be **KILLED** or **SERIOUSLY INJURED** if you **DO NOT** follow these directions.

### **CAUTION**

You **CAN** be **INJURED** if you **DO NOT** follow these directions.

Potential hazards associated with the MQ DSGPULW DuoScreed 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.

# DSGPULW DUOSCREED — SAFETY MESSAGE ALERT SYMBOLS



## Accidental Starting



OFF

**ALWAYS** place the engine ON/OFF switch in the **OFF** position when the DuoScreed is not in use.



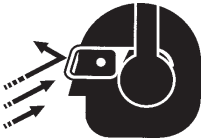
## Respiratory Hazard



**ALWAYS** wear approved respiratory protection.



## Sight and Hearing hazard

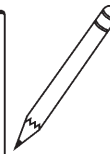
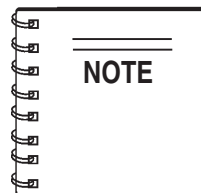


**ALWAYS** wear approved eye and hearing protection.



## Equipment Damage Messages

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



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

# DSGPULW DUOSCREED — RULES FOR SAFE OPERATION

## DANGER - READ THIS MANUAL!

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 **MQ DSGPULW DuoScreed**.

### General Safety:

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



The operator **MUST BE** familiar with proper safety precautions and operations techniques before using generator.

- This equipment should not be operated by persons under 18 years of age.
- **NEVER** operate this equipment 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 this equipment under the influence of drugs or alcohol.

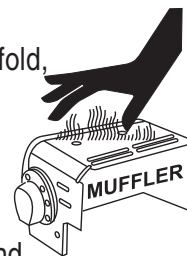


- **NEVER** use accessories or attachments, which are not recommended by Multiquip for this equipment. Damage to the equipment and/or injury to user may result.
- Manufacturer does not assume responsibility for any accident due to equipment modifications. Unauthorized equipment modification will void all warranties.
- Whenever necessary, replace nameplate, operation and safety decals when they become difficult read.

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

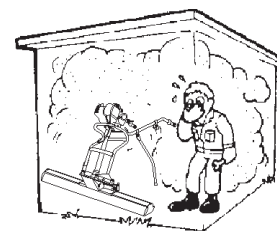
- **NEVER** operate the DuoScreed in an explosive atmosphere or near combustible materials. An explosion or fire could result causing severe **bodily harm or even death**.

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



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

- The engine of the DuoScreed requires an adequate free flow of cooling air. **NEVER** operate the DuoScreed 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 engine and may cause injury to people. The DuoScreed'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. **DO NOT 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 DuoScreed 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. Wipe up any spilled fuel immediately.



# DSGPULW DUOSCREED — RULES FOR SAFE OPERATION

- **ALWAYS** read, understand, and follow procedures in Operator's Manual before attempting to operate equipment.
- **ALWAYS** be sure the operator is familiar with proper safety precautions and operations techniques before using DuoScreed.
- Refer to the **HONDA Engine Owner's Manual** for engine technical questions or information.
- **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.
- **NEVER** run engine without air cleaner. Severe engine damage may occur.
- **ALWAYS** service air cleaner frequently to prevent carburetor malfunction.
- **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.



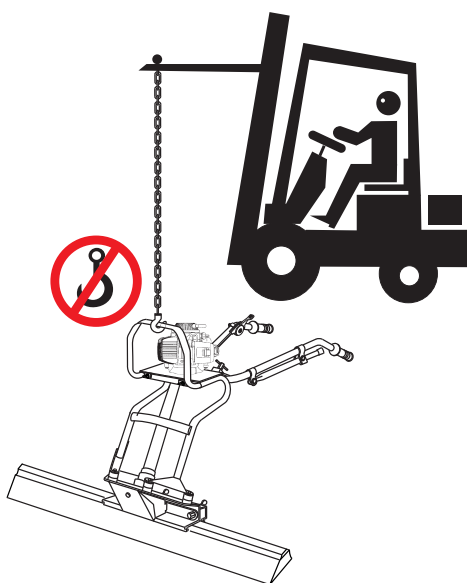
## Emergencies

- **ALWAYS** know the location of the nearest **fire extinguisher**.
- **ALWAYS** know the location of the nearest and **first aid kit**.
- **ALWAYS** know the location of the nearest phone or **keep a phone on the job site**, in case of emergencies.
- **ALWAYS** have easy access to the phone numbers of the nearest **Ambulance, Doctor** and **Fire Department**. This information will be invaluable in the case of an emergency.



## Transporting

- **ALWAYS** shutdown engine before transporting.
- Tighten fuel tank cap securely and close fuel cock to prevent fuel from spilling.
- Drain fuel when transporting DuoScreed over long distances or bad roads.
- **ALWAYS** tie-down the DuoScreed during transportation by securing the DuoScreed with rope.
- **NEVER** attach a forklift or other lifting device to the lifting bar. This bar is only for **manual lifting on the jobsite**.











## Maintenance Safety

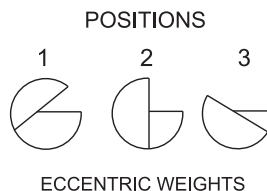
- **NEVER** lubricate components or attempt service on a running machine.
- **ALWAYS** allow the machine a proper amount of time to cool before servicing.
- Keep the machinery in proper running condition.
- Fix damage to the machine immediately and always replace broken parts.
- Dispose of hazardous waste properly. Examples of potentially hazardous waste are used motor oil, fuel and fuel filters.
- **DO NOT** use plastic containers to dispose of hazardous waste.
- **DO NOT** pour waste, oil or fuel directly onto the ground, down a drain or into any water source.

# DSGPULW DUOSCREED — OPERATION AND SAFETY DECALS

## Machine Safety Decals

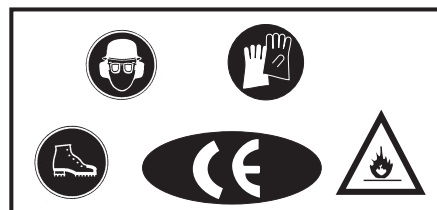
The DUOSCREED is equipped with a number of safety decals. These decals (Figure 1) are provided for operator safety and maintenance information. The illustrations below shows these decals as they appear on the machine. Should any of these decals become unreadable, replacements can be obtained from your dealer.

DuoScreed Safety Decals	
	Symbol indicates that it is mandatory to wear safety glasses, safety helmet and ear protection.
	Symbol indicates that it is mandatory to wear gloves.
	Symbol indicates that it is mandatory to wear safety shoes, with extra protection (steel toed).
	Symbol indicates unit <u>should not be</u> operated near flammable materials.
 P/N DCL121	Symbol indicates <b>DO NOT</b> use a pressure washer to clean unit.
	Symbol indicates unit complies with European standards.
POSITIONS  P/N DCL141	Symbol indicates position of eccentric weights depending on blade length.
 P/N DCL140	Symbol indicates alignment point when attaching blade to main body clamps.

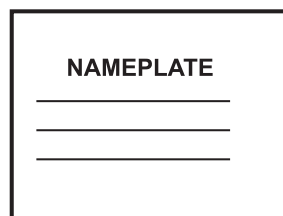


BLADE LENGTH		ECCENTRIC WEIGHT POSITION
FEET	METERS	
4.9	1.5	1
6.2	1.9	1
8.2	2.5	1
9.5	3.0	1
12.3	3.75	2
13.9	4.25	2
16.4	5.00	3
18.0	5.50	3
19.6	6.00	3

P/N DCL141



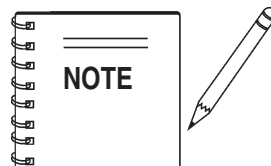
P/N DCL122



CONTACT MULTIQUIP  
PARTS DEPT.



P/N BF260002



**ALL LW blades will use eccentric position number 1.** Decal DCL 141 is for HD blades.

Figure 1. Operation and Safety Decals

# DSGPULW DUOSCREED — SPECIFICATIONS

**Table 1. DUOSCREED SPECIFICATIONS**

Power Unit Model	DSGPULW
Number of Vibrations	5,500 v/min
Drive System	Flexible Shaft
Noise (Open Air)	50 dB(A)
Vibration Acceleration	1.5 m/sec <sup>2</sup>
Drive Unit Weight (LW)	29 lbs. (13 Kg.)
Blade Construction	Extruded Aluminum Alloy
Blade Widths LW	6, 8, 10, 12, 14 and 16 ft. (1.82, 2.43, 3.04, 3.65, 4.26, and 4.87 meters)
Blade Weights LW	Approx. 1.95 lb./ft. ( 2.9 kg/m )

**TABLE 2. ENGINE SPECIFICATIONS**

Engine Make	HONDA
Engine Model	GX35SAT
Engine Type	4-Stroke OHC Gasoline Engine
Number Of Cylinders	1
Displacement	2.18 cu. in (35.8 cm <sup>3</sup> )
Maximum Output	1.6 HP/7,000 rpm
Oil Grade	SAE 10W-30
Oil Capacity	0.11 qt./(0.10 liter)
Fuel Type	Unleaded
Fuel Tank Capacity	.172 gal./(.65 liters)
Spark Plug Gap	0.024-0.028 inch (0.60-0.70 mm)
Spark Plug Type	CMR5H (NGK)
Starting Method	Recoil Start
Weight (Dry)	7.34 lbs. (3.33 kg)

# DSGPULW DUOSCREED — GENERAL INFORMATION

## Introduction

The Multiquip DuoScreed is a hand held vibratory screed designed to strike-off and consolidate concrete slabs. It is comprised of two major components, the power unit (gasoline engine), and the strike-off blade. **Generally this screed operates ideally in concrete with a slump of 2 inches or greater.** Its applications include patios, driveways, sidewalks and floor slabs.

## Assembly

There are no tools required to assemble the DuoScreed. The power unit (engine) is connected to the blade by means of a spring-loaded clamp. Springs within the clamp assembly prevent vibration from loosening the power unit from the blade.

## Handle Adjustments

The handle assembly on the DuoScreed is height adjustable for operator comfort. The handle design used on this screed allows the operator to remain upright at all times and can be quickly adjusted without any tools.

## Vibratory System

The vibratory system of the DuoScreed produces low amplitude high frequency vibrations, designed to level and compact concrete. This vibratory system is mounted at an angle to transmit vibration laterally and vertically through the blade to produce a strong, dense slab.

The engine drives a two piece eccentric weight by means of a one-piece flexible shaft. This weight produces a vibratory action which simultaneously allows the DuoScreed to level the slab and consolidate the concrete beneath the surface.

## Blades

The DuoScreed can utilize various blade widths. This screed uses a **lightweight** (LW) type blade. The widths can range anywhere from 6~16 feet (1.82~ 4.87 meters). See Table 1 for more detailed information. Since different length blades will require varying amounts of vibration, the DuoScreed features adjustable eccentric weights.

## Engine

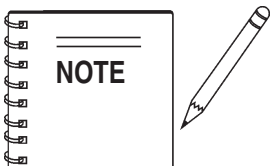
The Multiquip DuoScreed is equipped with a Honda Model GX35SAT, 1.6 HP, mini 4-cycle gasoline engine. This engine is lightweight and requires no fuel mixing.

## Drive System

The Honda 1.6 HP engine drives a flexible shaft that requires no greasing. Its short one piece design runs directly to the vibrator housing and does not bend. This type of design eliminates a major source of friction and reduces the likelihood of shaft failure.

## Transport

To transport your DuoScreed simply unclamp the power unit from its base. Additionally, the handles can be folded down for storage. The power unit weighs approximately 29 lbs. (13.0 kg), and the LW blades weigh approximately 1.95 lbs/ft (2.9 kg/m). Figure 2 shows the location of the components of the DuoScreed. The function of each component is described on the next page.



Some blade widths may not be available. Please contact MQ unit sales for available blades.

Figure 2. DuoScreed Components

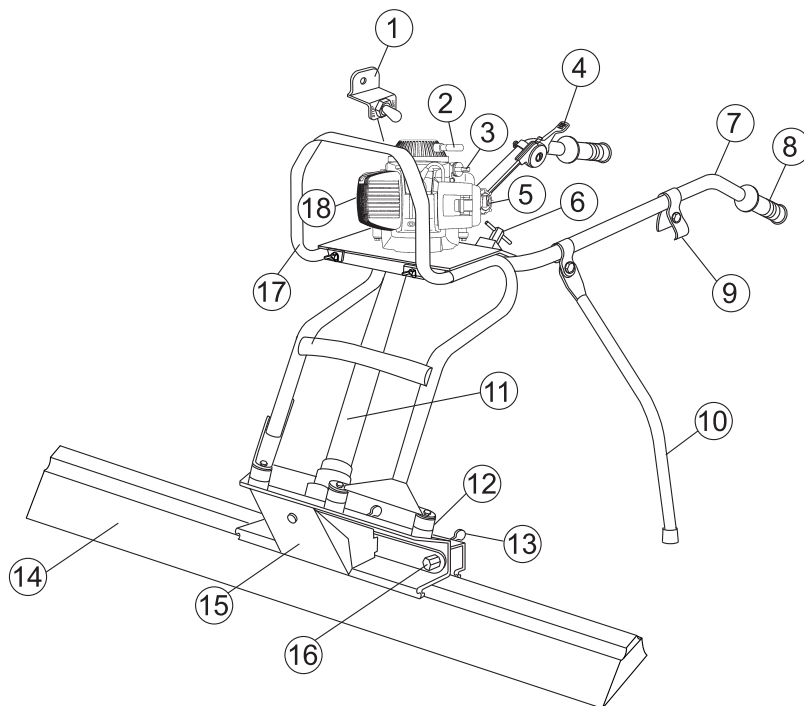


Figure 1 shows the location of the components of the DuoScreed. The function of each component is described below:

1. **START/STOP Switch** – When starting the engine, place this switch in the **START** position. When stopping the engine, place in the **STOP** position.
2. **Recoil Starter** – Manual-starting method. Pull the starter grip until resistance is felt, then pull briskly and smoothly.
3. **Oil Cap** – Remove this cap to add engine oil.
4. **Throttle Control Lever** – Move the throttle lever to the **down** position for full throttle (max RPM's), for engine idle, move the throttle lever to the **up** position.
5. **Fuel Cap/Tank** – Remove the fuel tank cap to add unleaded fuel **ONLY! DO NOT** mix fuel. **DO NOT** over fill. Tank holds approximately .172 gallons (.65 liters).
6. **Handle Bar Adjustment Knobs** – Loosen these two knobs to adjust the handle bar to a suitable working position.
7. **Handle Bar** – Used in the steering of DuoScreed.
8. **Hand Grip** – When operating the DuoScreed use this hand grip to maneuver the machine.
9. **Support Stand Latch** – Use this latch to lock support stand in place when DuoScreed is in operation.
10. **Support Stand** – Use this stand to support the DuoScreed when not in use.
11. **Flexible Drive Shaft** – Connected to the drive shaft of the engine, provides the vibrational force for the eccentric weights.
12. **Shock Mounts** – Used to absorb the vibration generated by the DuoScreed. These shock mounts minimize the transfer of vibration to the operator.
13. **Spring-Loaded Wing Nuts** – Turn these 3 spring loaded wing nuts counterclockwise to release the blade from the aluminum clamping strip, turn clockwise to secure the blade to the clamping strip.
14. **Blades** – The DuoScreed comes equipped from the factory with LW type blades. Reference Table 1 for details.
15. **Eccentric Cover** – Encloses the adjustable eccentric weights. Press the spring clip tab inward and slide the cover upward to gain access to the eccentric weights.
16. **Locking Nuts** – These 3 locking nuts are used in conjunction with the 3 spring loaded wing nuts which secure the blade to the aluminum clamping strip. Important! always cover the two outer nuts with the provided plastic cap. This will prevent concrete and other debris from entering the quick disconnect system.
17. **Lifting Bar** – This bar is only for manual lifting on the jobsite. Not to be used for manual lifting with a forklift or other lifting device.
18. **Gasoline Engine** – This DuoScreed uses a HONDA GX35SAT 1.6 HP gasoline engine. Refer to the **HONDA** owners manual for engine information and related topics.

## DSGPULW DUOSCREED — COMPONENTS (HONDA GX35SAT ENGINE)

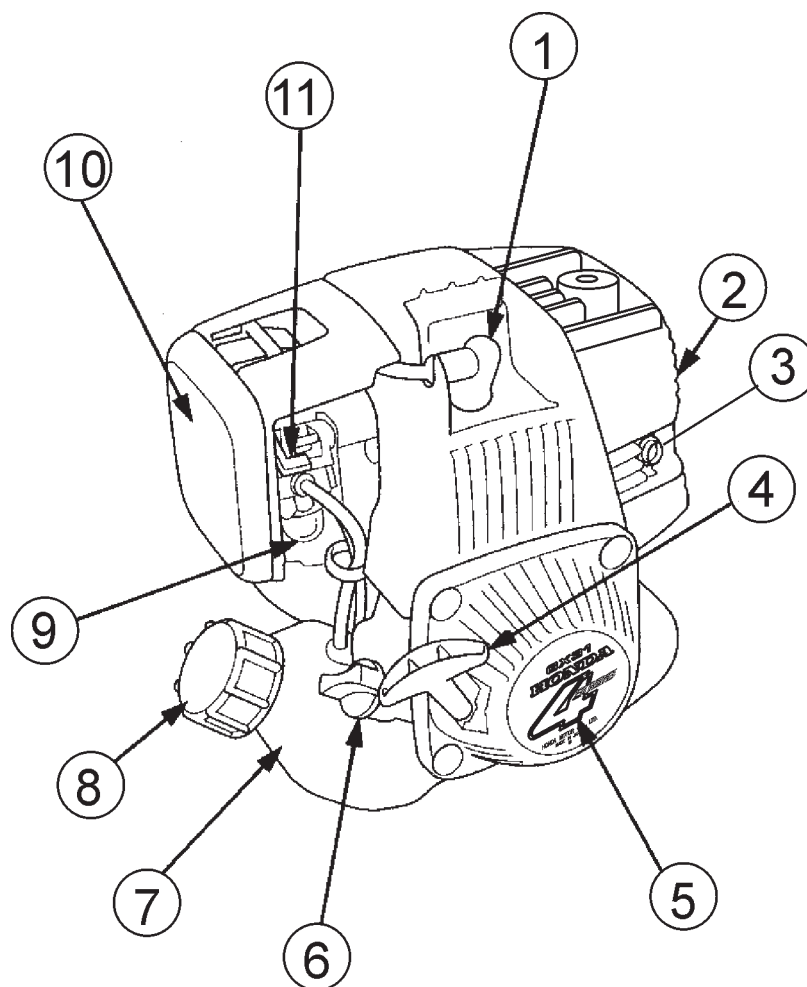


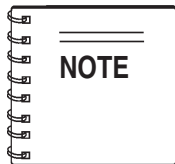
Figure 2. HONDA GX35SAT Components

1. **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.
2. **Muffler** – Used to reduce noise and emissions. **DO NOT** touch muffler while engine is running, let engine cool before performing any maintenance.
3. **Spark Arrester** – Prevents sparks from leaving the engine exhaust system, which could ignite flammable materials.
4. **Starter Grip** – Grip this handle to start engine. See engine starting section of this manual.
5. **Recoil Starter (pull rope)** – Type of engine starting method.
6. **Oil Filler Cap** – Remove this cap to add engine oil. Engine oil capacity is 0.11 quart (0.1 liters). Use SAE 10W-30.
7. **Fuel Tank** – Holds .65 liters (approximately .172 gallon) of unleaded gasoline.
8. **Fuel Filler Cap** – Remove this cap to add unleaded gasoline to the fuel tank. Make sure cap is tighten securely. **DO NOT** over fill.
9. **Priming Bulb** – Used in the starting of a cold engine or an engine that has run out of fuel. Press the priming bulb repeatedly until fuel can be seen inside the clear plastic bulb.
10. **Air Cleaner** – Prevents dirt and other debris from entering the fuel system. Release latch on side of air filter compartment to gain access to filter element.
11. **Choke Lever** – Used in the starting of a cold engine, or in cold weather conditions. The choke enriches the fuel mixture for starting a cold engine.

# DSGPULW DUOSCREED — ASSEMBLY INSTRUCTIONS

## Assembly Instructions

This section will explain how to assemble the DuoScreed.



It is recommended that you familiarize yourself with the DuoScreed's components. For assistance identifying components called out in the text, refer to Figure 1.

1. The DuoScreed is comprised of two major components. The power unit (Honda GX35SAT Engine) and the strike-off blade. This DuoScreed is equipped with a quick disconnect system, with which the power unit can be mounted onto two aluminum clamping strips with ease.
2. The aluminum clamping strip (retaining plate) is located at the base of the power unit. This clamping strip is what holds the blade in place with the aid of three quick disconnect spring loaded wing nuts (Figure 3) that can either be tightened or loosened by hand.
3. Determine whether you will be using the DuoScreed on **forms** or as a **wet screed**. This will decide how the power unit will be mounted. If the DuoScreed will be used as a wet screed the wing nuts should be located above the smooth edge of the blade. If the DuoScreed will be used on forms (Figure 3) the wing nuts should be located above the curled edge of the blade.
4. Loosen each of the three wing nuts about 1/4 inch (8 mm). It is not necessary to completely remove the wing nuts from the aluminum clamping strip.
5. Locate the two red indicator arrows (Figure 4) on the top of the blade. The power unit should be placed squarely between the two markers.

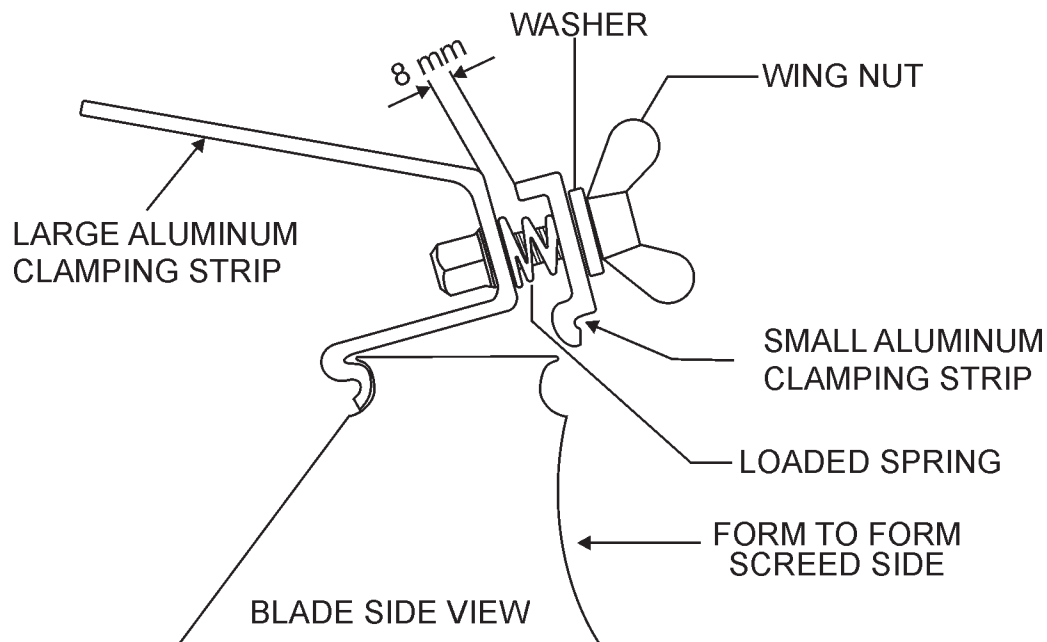
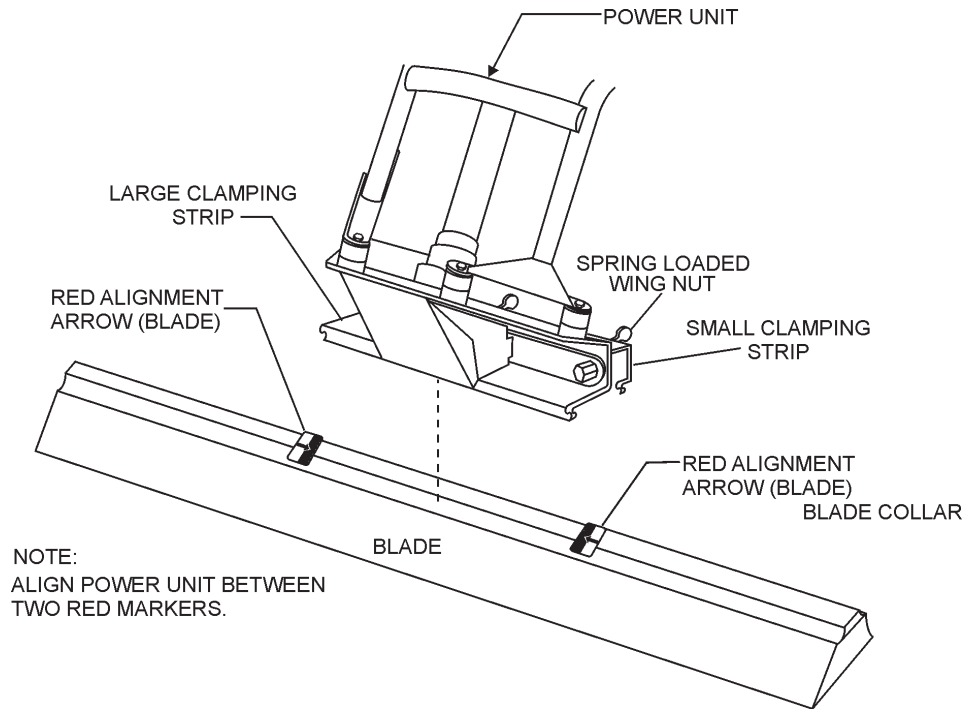


Figure 3. Blade Quick Disconnect System

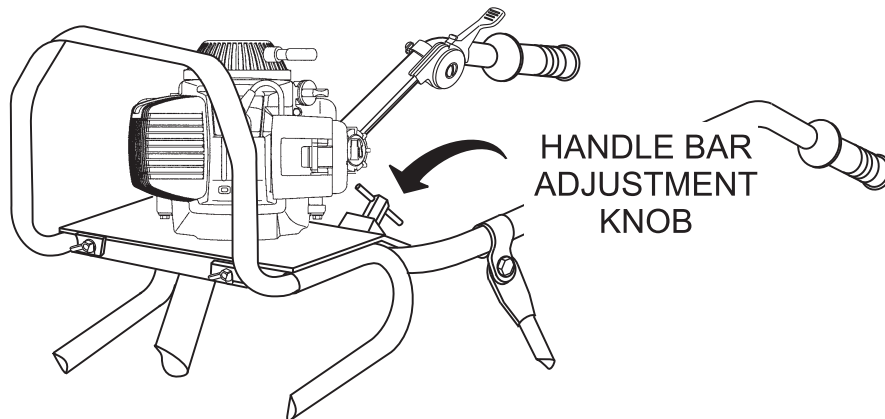


# DSGPULW DUOSCREED — ASSEMBLY INSTRUCTIONS



**Figure 4. Blade Mounting Diagram**

6. Place the front of the power unit over the blade (Figure 3) until the front of the clamp is seated within the front blade collar.
7. Ease the power unit back to allow the rear clamp to seat itself within the rear blade collar. It may be necessary to further loosen the wing nuts to allow the clamp to fit around the blade collar.
8. Securely hand tighten each of the three wing nuts. The wing nuts are spring loaded to prevent them from coming loose during operation.
9. Two handle bar adjustment knobs (Figure 5) are located at the base of the steering handle bar. Loosen these two knobs to adjust the height of the steering handle bar to a suitable working position.
10. The DuoScreed is now ready for operational use.



**Figure 5. Handle Bar Adjustment Knob**



# DSGPULW DUOSCREED — ASSEMBLY INSTRUCTIONS

## Eccentric Weight Adjustment

There are two eccentric weights (Figure 6) that are supplied with the DuoScreed. These weights are located inside the eccentric weight compartment, which is located at the bottom of the unit.

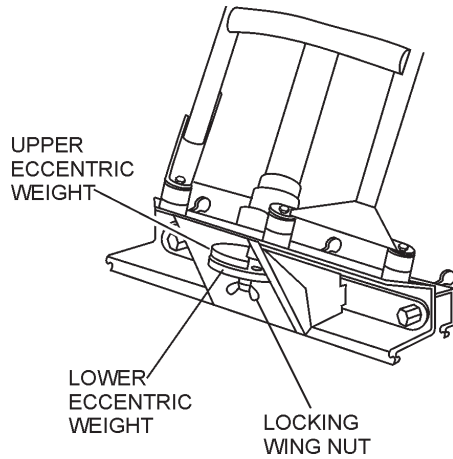


Figure 6. Eccentric Weight Location

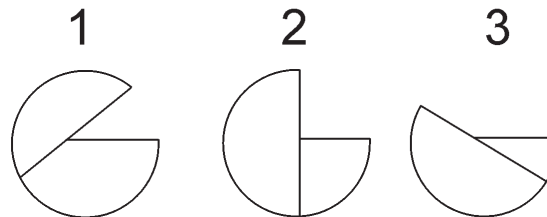
These weights determine the amount of vibration that will travel down the blade. Depending on the type of blade that is used, will determine the position of the two eccentric weights. Reference Figure 7 in determining how your eccentric weights should be positioned.

1. To gain access to the eccentric weight compartment, press the spring clip tab on the eccentric cover and slide the cover upward to remove.
2. Loosen the eccentric locking wing nut.
3. Use the chart in Figure 7 to determine what position your eccentric weights should be in (position 1, 2 or 3).

### Example:

A 16 ft. (5.0 meters) blade will place the eccentric weights in position 3. Please note that all LW blades widths use position 1.

## POSITIONS



## ECCENTRIC WEIGHTS

HD BLADE WIDTH			LW BLADE WIDTH		
FEET	METERS	EWP	FEET	METERS	EWP
6.2	1.9	1	6.0	1.82	1
8.2	2.5	1	8.0	2.43	1
9.5	3.0	1	10.0	3.04	1
12.3	3.75	2	12.0	3.65	1
13.9	4.25	2	14.0	4.26	1
16.4	5.00	3	16.0	4.87	1
18.0	5.50	3*			
19.6	6.00	3*			

\*TWO POWER UNITS REQUIRED PER BLADE

Eccentric Weight Position = EWP

Figure 7. Eccentric Weight Positions

# DSGPULW DUOSCREED — STARTING

## Engine Pre-Check

1. Fill the fuel tank (Figure 8) with unleaded gasoline. **DO NOT** over fill. Topping-off to filler port is dangerous, as it tends to spill fuel. Wipe up any spilled fuel immediately.

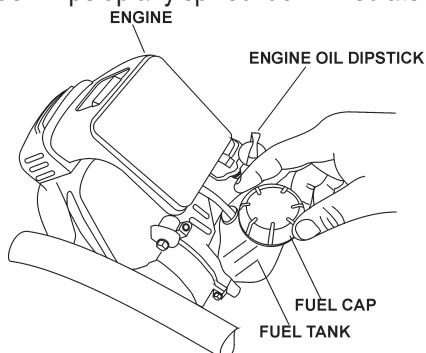


Figure 8. Fuel Tank

1. Place the engine in a level position.
2. Check the engine oil level by unscrewing the engine oil dip stick (Figure 9) from its holder.
3. If oil is not observed at the edge of the oil filler hole, fill with oil until oil is present at edge of oil filler hole. Remember to add oil slowly to avoid overflowing, as the engine oil tank capacity is small.

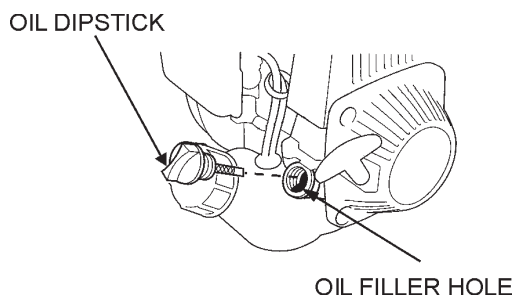


Figure 9. Engine Oil Dipstick/Oil Filler Hole

4. Reinstall the engine oil dipstick securely.

## Starting The Engine

1. To start a cold engine, move the choke lever (Figure 10) to the **CLOSED** position. If restarting a warm engine leave the choke lever in the **OPEN** position.

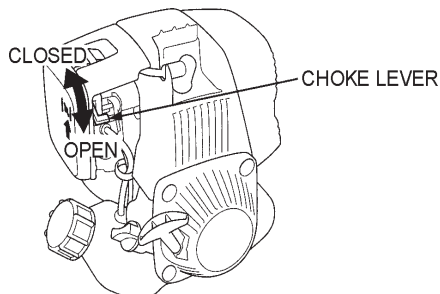


Figure 10. Choke Lever

2. Press the priming bulb (Figure 11) repeatedly until fuel can be seen inside the clear plastic bulb.

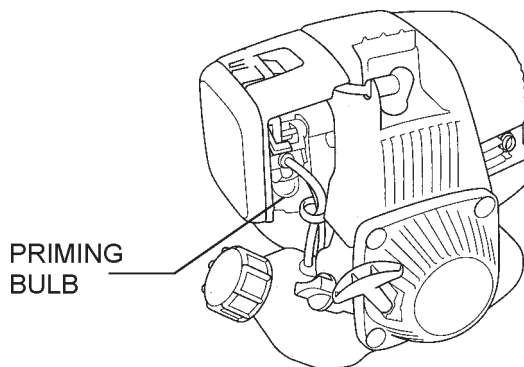


Figure 11. Priming Bulb Location

3. Set the engine START/STOP switch (Figure 12) to the **START** position.

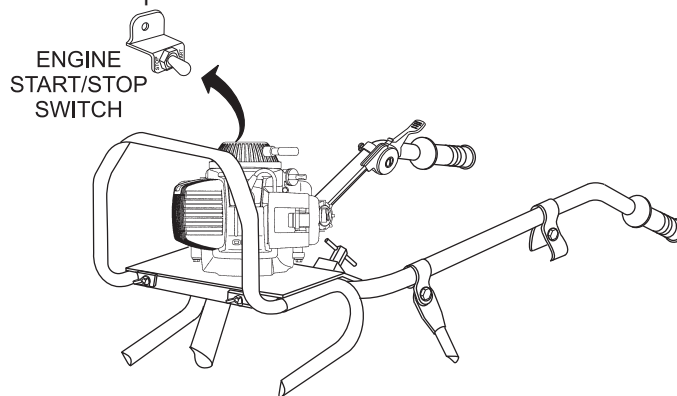


Figure 12. Engine START/STOP Switch

4. Pull the starter rope (Figure 13) lightly until you feel resistance, the pull briskly. Return the starter rope gently.

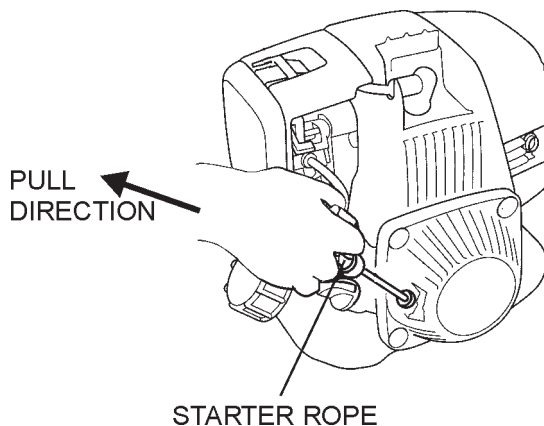


Figure 13. Engine Starter Rope

5. Once the engine has started, allow it to idle for 3 to 5 minutes.

# DSGPULW DUOSCREED — APPLICATION/OPERATION

## Application/Operation

1. Before placing the DuoScreed in concrete for screeding, it is a good idea to apply **form oil** to the blade and all frame parts that may come in contact with the concrete. This form oil will become useful when cleaning the DuoScreed. Make sure to saturate the unit with a good amount of form oil.
2. Prepare a grid of #5 rebar pins (Figure 14) equally spaced approximately every 9 to 11 feet. If a 10 ft. screed blade is going to be used space the grade pins every 9 feet, if a 12 ft. screed blade is required, space the grade pins every 11 ft. Make sure to drive the pins deeply into the ground.
3. Use a **string line** or **laser** to set the pins to grade (height). The grade should be to the top of the grade pins. Remember, before any concrete is to be poured, make sure that the top of the pins are dead on grade.
4. Once all the grade pins have been placed correctly and are dead on grade, concrete can then be poured on top of grade pins.
5. Level, and form the concrete as close as possible to grade. Mark the top of each pin so that its exact location will be known. Use a hand trowel to float the edges and plumbing grade pins.
6. If chalk lines are used for grade against forms, walls or existing concrete, float out the grade with a hand float along the edge.
7. Two workers will be required to assist the DuoScreed operator when making the 12-18 concrete bases, one on each side. These workers will rake the concrete in toward the center of the DuoScreed away from the bases to avoid changing base elevation.

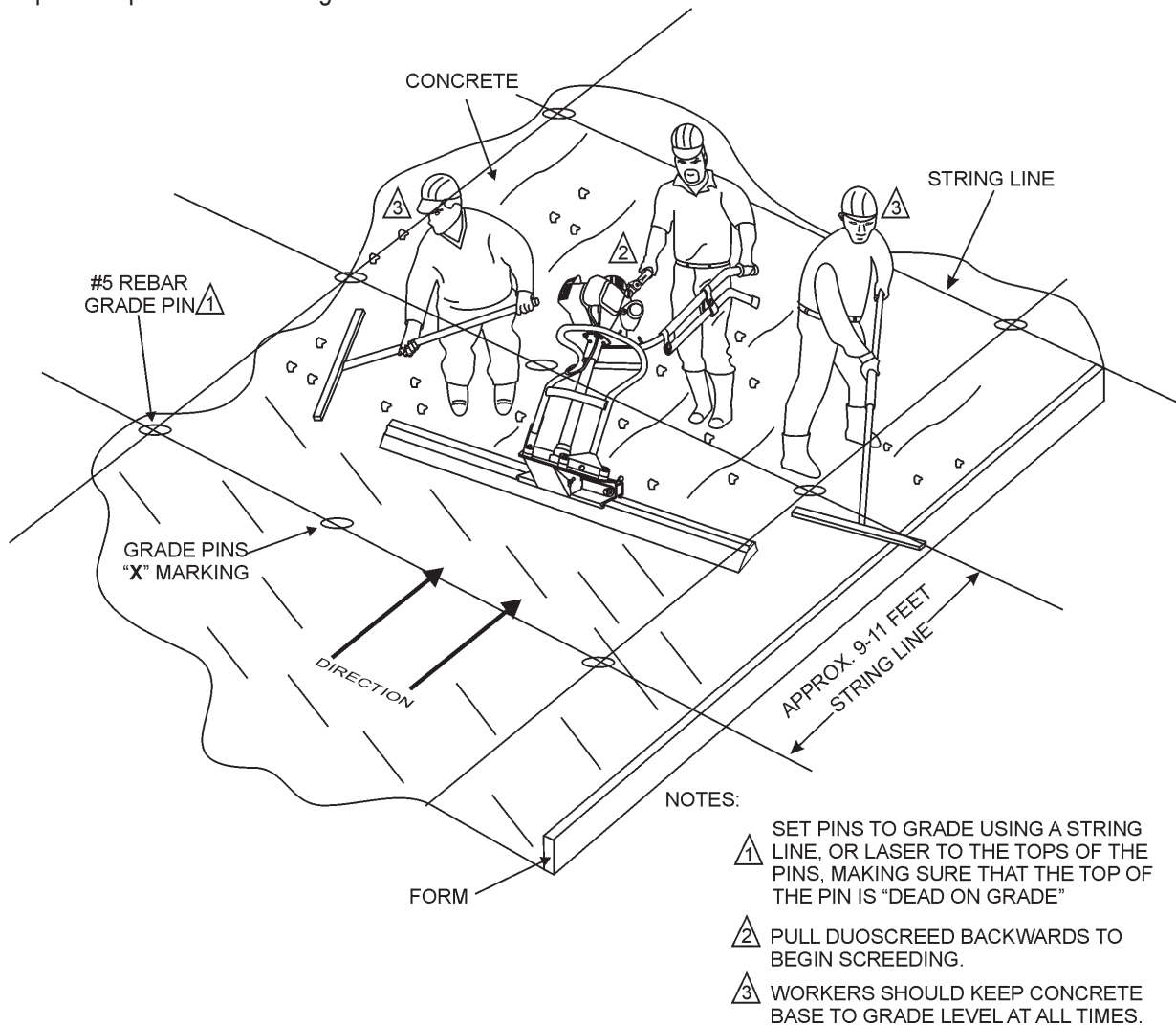


Figure 14. DuoScreed On Forms and Grade Pins

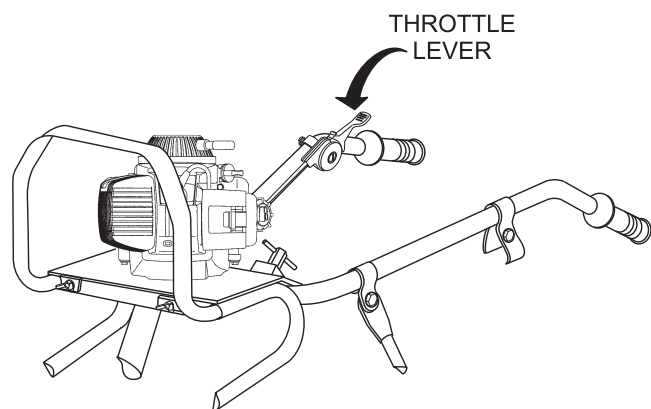
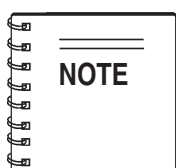


Figure 15. Throttle Lever



Before placing the DuoScreed in concrete, make certain the unit has been set up (blade) for **wet screeding**. This can be verified by observing that the operator's toes are pointing towards the smooth side of the blade (Figure 3), from the operator's position (handle bars).

8. Set the DuoScreed blade down in the concrete base in the **left** most corner of the grid between the two grade pins as shown in Figure 16. Adjust the DuoScreed's handle bar to a height where the operator is not bending over, but standing upright with arms extended forward.
9. To begin screeding move the engine throttle lever (Figure 15) midway between idle and full throttle. Notice that the DuoScreed's vibration will cause the blade to sink into the concrete base until it touches the top of the grade pins.
10. Pull the DuoScreed from the edge of the grid's **top left** corner, horizontally toward the **center**. Notice that as the DuoScreed passes over the grade pins a small circle of concrete around the grade pins will appear. This indicates that the DuoScreed has vibrated the grade pin, and that the operator is **dead on grade**.
11. Keep the DuoScreed blade level and create a level base between 12-18 inches wide.
12. After a complete pass over the first set of grade pins has been made, remove the DuoScreed from the concrete base and position it over the second set of grade pins (Figure 16), overlapping the first set of grade pins between 12-18 inches. Repeat this process until all **left** edge grade pins have a level base between 12-18 inches wide.

13. Repeat steps 9 through 12 pulling the DuoScreed from the edge of the grid's **top right** corner, horizontally toward the center.
14. Remember to build the bases in long parallel strips across the pins and on the hand floated edges and against plumbing or other outs, leaving the long unfinished areas about 8 or 9 feet wide. Once the bases are built, the workers can more accurately shape the concrete to grade.
15. When **all** the bases have been completed, the operator and his two workers can begin to work down the long parallel unfinished 8 to 9 foot wide middle portions. When moving the DuoScreed down the middle portions, the ends of the DuoScreed blade should be resting on the bases, and the leading edge of the blade should be approximately 1/8 to 1/4 inch above each base depending on the slump and condition of the concrete. Have workers adjust the concrete along the face of the DuoScreed's blade to assure that the base is level with no high or low areas ahead of the blade.
16. Keep the engine throttle between 1/2 to 2/3 of full speed, if necessary readjust the DuoScreed's vibration to meet the condition of the concrete. Remember to move rapidly and watch both ends of the blade to assure that the blade remains 1/8 to 1/4 of an inch above the concrete base. Always keep the workers alert for concrete height changes.

## Shut-Down

1. **NEVER** stop the engine suddenly while running at high speed.
2. Move the engine **throttle lever** (Figure 15) to the low speed position (idle).
3. Set the engine ON/OFF switch (Figure 12) to the **OFF** position.
4. Remove the DuoScreed from the slab surface.

## Cleaning

1. Allow the engine to **cool** before cleaning. When the engine has cooled, use a damp and a mild detergent to remove all concrete and foreign debris. **DO NOT** spray the engine with water.
2. To remove all concrete and foreign debris from the DuoScreed, wash the DuoScreed's blade and frame using water and a mild detergent. Remember, if form oil was applied before the machine was placed in concrete, the cleanup will be much easier.

# DSGPULW DUOSCREED — APPLICATION/OPERATION

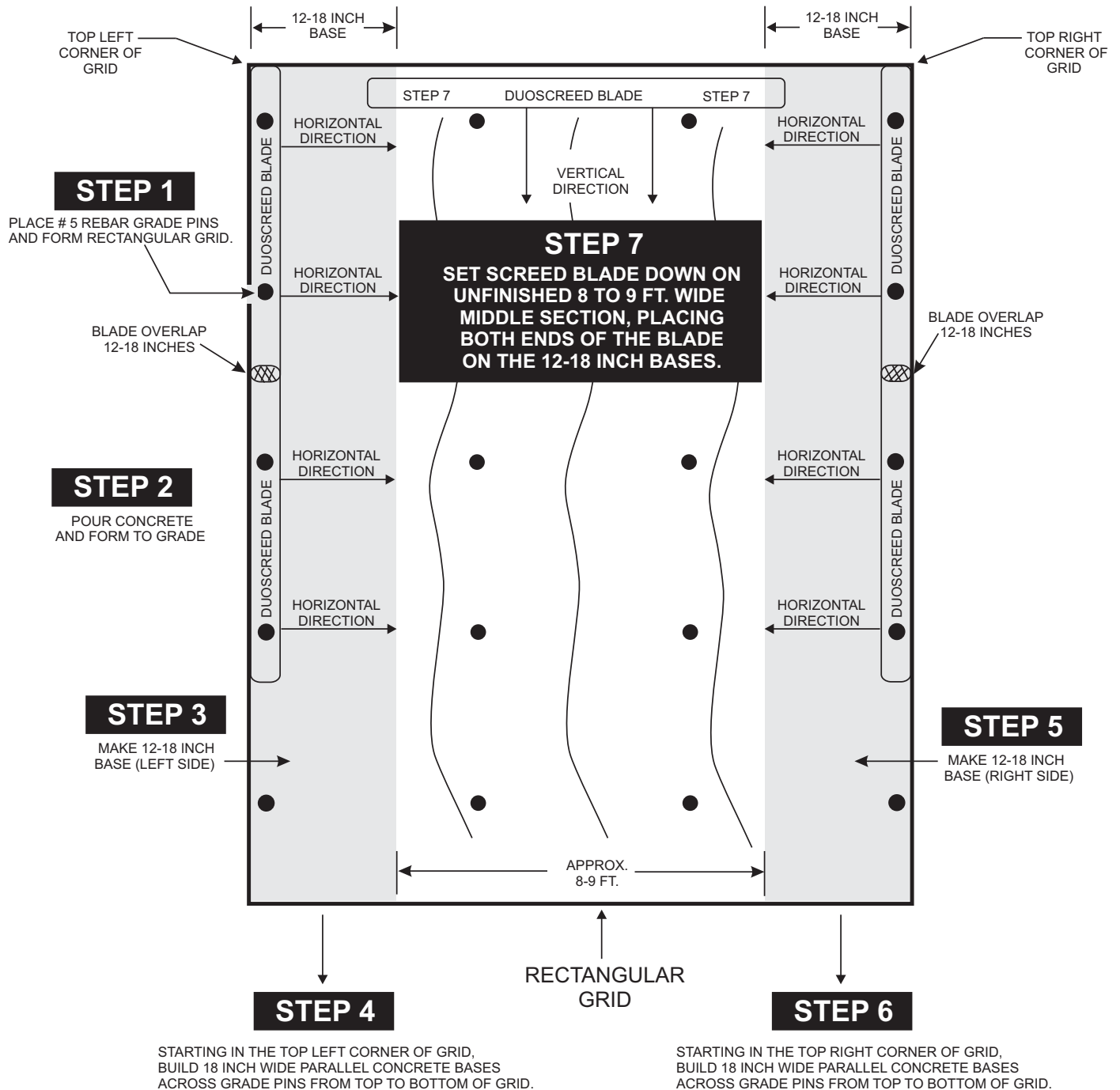


Figure 16. DuoScreed Wet Screeding Application

## DSGPULW DUOSCREED — APPLICATION/OPERATION

### Important Tips to Remember

- Do not allow the engine to run out of fuel as this may cause problems with starting. Always maintain an extra supply of fuel on the job site.
- Always keep the DuoScreed moving backwards during operation. Allowing the DuoScreed to vibrate in the same location for too long will cause it to sink into the concrete.
- When using the DuoScreed with low slump (dry) concrete do not attempt to walk it quickly across the slab. Walk slowly to allow the vibratory action to consolidate and level the slab surface. When using the DuoScreed with high slump (wet) concrete you will be able to walk the machine across the slab at a faster pace.
- In applications where the DuoScreed is being used as a wet screed it is recommended that grade or height of the concrete slab be adjusted with a laser device.
- Proper vibratory force is essential to producing a *level, hard, durable* slab. If the DuoScreed is vibrating too strongly the ***eccentric weights*** will require adjustment. Refer to the troubleshooting section of this manual.
- When screeding using forms or rails, always size your screed blade appropriately for the job. It is best to have the blade extend beyond the forms, by about 6-inches on each side.
- When screeding make sure the blade is kept straight. **DO NOT** let blade turn.
- **DO NOT** run the DuoScreed with one part of the blade on forms and the other on base. The blade must either be placed on forms or float (wet screeding), but not a combination of the two techniques.
- **DO NOT** stand in the concrete with the engine throttle engaged. This will cause the DuoScreed to sink.
- If the concrete appears too wavy, you are moving too slowly, increase your backing-up speed.
- Always keep the workers back far enough too allow the operator to see the cutting face of the blade as it rides on the wet screed base.
- The operator should keep the screed blade about 1/8 to 1/4 inch above the concrete base at all times.
- Should the DuoScreed stick to the wet concrete slab, **DO NOT** attempt to lift it. Quickly increase engine rpm's while pushing forward on the handles to free the machine.



# DSGPULW DUOSCREED — MAINTENANCE

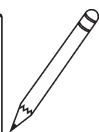
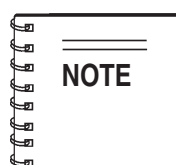
## Maintenance



### CAUTION - Pressure Washer

**DO NOT** clean the DuoScreed with a *pressure washer*.

1. **NEVER** clean the DuoScreed with the engine running.
2. Allow the engine to cool down before cleaning.



**DO NOT** allow concrete to *harden* on the DuoScreed. Wipe all concrete off the chrome frame and any other parts including the engine of the DuoScreed.

3. Use a low pressure water hose, soft brush, wiping cloth and a mild cleaning detergent and remove all concrete from the DuoScreed. Be careful not to get excessive amounts of water in the engine compartment.
4. Keep the drive unit free from grease, dirt and grime as this can effect the performance of your DuoScreed

### 30 - Day Storage Procedure

For storage of the DuoScreed for over 30 days, the following is required:

- Drain the fuel tank completely.
- Run the engine until the fuel in the injection system is completely consumed.
- Completely drain used oil from the engine crankcase and fill with fresh clean oil, then follow the procedures described in the engine manual for engine storage.
- Cover DuoScreed and engine with plastic covering or equivalent and store in a clean, dry place.

**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		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	
Clutch Shoes	CHECK				X (2)		
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.

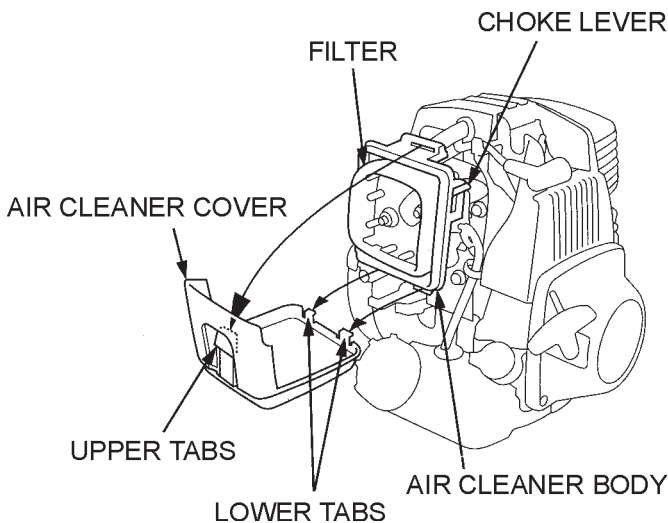
(2) These items should be serviced by your servc dealer, unless you have the proper tools and are mechanically proficient. Refer to the HONDA shop Manual for service procedures

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

# DSGPULW DUOSCREED — MAINTENANCE

## Air Cleaner

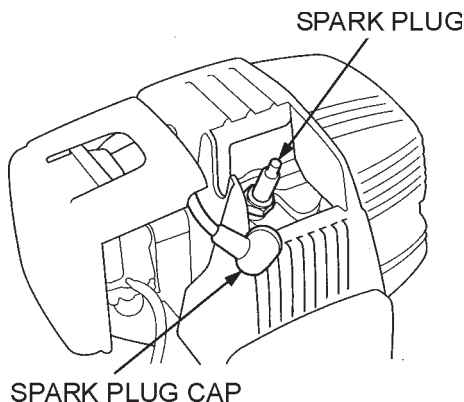
1. The air cleaner element should be cleaned because a clogged air cleaner can cause poor engine starting, lack of power and shorten engine life substantially.
2. Before opening the air cleaner compartment, wipe any dirt or foreign matter from the air cleaner body and cover, using a moist cloth. Be careful to prevent dirt from entering the carburetor
3. Press the latch tab on the top of the air cleaner cover (Figure 16), and remove the cover. Check the filter to be sure that it is clean and in good condition.



**Figure 16. Air Cleaner**

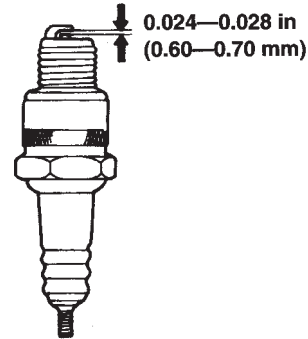
## Spark Plug

1. Make sure the engine is off and cool.
2. Disconnect the spark plug cap ( Figure 17), and remove any dirt from around the spark plug area.



**Figure 17. Spark Plug Removal**

3. Remove the spark plug with 5/8-inch wrench.
4. Inspect the spark plug. Replace it if the electrodes are worn, or if the insulator is cracked or chipped. Clean the spark plug with a wire brush if you are going to reuse it.
5. Set the spark plug gap (Figure 18) using a suitable gauge. The gap should be between 0.024-0.028 inch (0.60-0.70 mm).



**Figure 18. Spark Plug Gap**

6. Carefully install the spark plug by hand to avoid cross threading, then tighten
7. Attach spark plug cap.



**TABLE 4. DUOSCREED TROUBLESHOOTING**

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Vibrates insufficient and as a result the concrete floor cannot be leveled and smoothed in the proper way.	The centrifugal force of the vibrator is set too low?	Adjust the eccentric weights per Figure 7 or increase engine speed.
	There is excessive amounts of concrete along the leading edge of the blade?	Remove the excessive concrete from the blade.
	The chosen width of the blade is too large?	Work with a smaller blade Remember maximum width is 20 ft. (2 engines)
The DuoScreed when used as a form-to-form screed vibrates too much and does not travel smoothly across the rail supports.	Selected blade and eccentric weights do not match?	Adjust eccentric weights to match selected blade width. Reference Figure 7.
Concrete looks "WAVY" as the screed blade passes over it.	Operator moving too slowly?	Walk backwards at a faster pace.
	Too much vibration for the type of concrete?	Reduce engine speed and walk backwards at a faster pace.
Leaving HIGH or LOW spots during wet screeding.	Concrete too high or low on one side?	Have workers shape the concrete close as possible to grade. Maintain about 1 inch of concrete across the front of the blade at all times.
Blade digs into wet concrete.	Is blade positioned correctly?	Each end of the blade must ride on the same surface. Either each end of the blade rides on forms or concrete (wet screed) not both.

**TABLE 5. ENGINE TROUBLESHOOTING**

SYMPTOM	POSSIBLE CAUSE	SOLUTION
Difficult to start, "fuel is available, but no SPARK at spark plug".	Spark plug bridging?	Check gap, insulation or replace spark plug.
	Carbon deposit on spark plug?	Clean or replace spark plug.
	Short circuit due to deficient spark plug insulation?	Check spark plug insulation, replace if worn.
	Improper spark plug gap?	Set to proper gap.
Difficult to start, "fuel is available, and SPARK is present at the spark plug".	ON/OFF switch is shorted?	Check switch wiring, replace switch.
	Ignition coil defective?	Replace ignition coil.
	Improper spark gap, points dirty?	Set correct spark gap and clean points.
	Condenser insulation worn or short circuiting?	Replace condenser.
	Spark plug wire broken or short circuiting?	Replace defective spark plug wiring.
Difficult to start, "fuel is available, spark is present and compression is normal"	Wrong fuel type?	Flush fuel system, and replace with correct type of fuel.
	Water or dust in fuel system?	Flush fuel system.
	Air cleaner dirty?	Clean or replace air cleaner.
	Choke Open?	Close Choke.
Difficult to start, "fuel is available, spark is present and compression is low"	Suction/exhaust valve stuck or protruded?	Re-seat valves.
	Piston ring and/or cylinder worn?	Replace piston rings and or piston.
	Cylinder head and/or spark plug not tightened properly?	Torque cylinder head bolts and spark plug.
	Head gasket and/or spark plug gasket damaged?	Replace head and spark plug gaskets.
No fuel present inside priming bulb.	Fuel not available in fuel tank?	Fill with correct type of fuel.
	Fuel filter clogged?	Replace fuel filter.
	Fuel tank cap breather hole clogged?	Clean or replace fuel tank cap.
	Air in fuel line?	Bleed fuel line.

## DSGPULW DUOSCREED — NOTE PAGE

[illegible]

# DUOSCREED — EXPLANATION OF CODE IN REMARKS COLUMN

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

## NOTICE

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

## SAMPLE PARTS LIST

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	12345	BOLT.....	1	INCLUDES ITEMS W/%
2%		WASHER, 1/4 IN.....		NOT SOLD SEPARATELY
2%	12347	WASHER, 3/8 IN....	1	MQ-45T ONLY
3	12348	HOSE .....		A/R ...MAKE LOCALLY
4	12349	BEARING .....	1	S/N 2345B AND ABOVE

## NO. Column

**Unique Symbols** — All items with same unique symbol

(@, #, +, %, or >) in the number column belong to the same assembly or kit, which is indicated by a note in the “Remarks” column.

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

## NOTICE

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

## PART NO. Column

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

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

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

## QTY. Column

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

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

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

## REMARKS Column

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

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

Indicated by:

“INCLUDES ITEMS W/(unique symbol)”

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

Indicated by:

“S/N XXXXX AND BELOW”

“S/N XXXX AND ABOVE”

“S/N XXXX TO S/N XXX”

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

Indicated by:

“XXXXX ONLY”

“NOT USED ON XXXX”

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

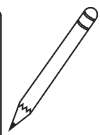
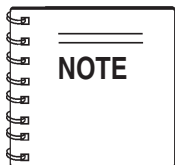
**“Not Sold Separately”** — Indicates that an item cannot be purchased as a separate item and is either part of an assembly/kit that can be purchased, or is not available for sale through Multiquip.

# DSGPULW DUOSCREED — SUGGESTED SPARE PARTS

## DUOSCREED 1 TO 3 UNITS WITH HONDA GX35SAT ENGINE

### *1 to 3 Units*

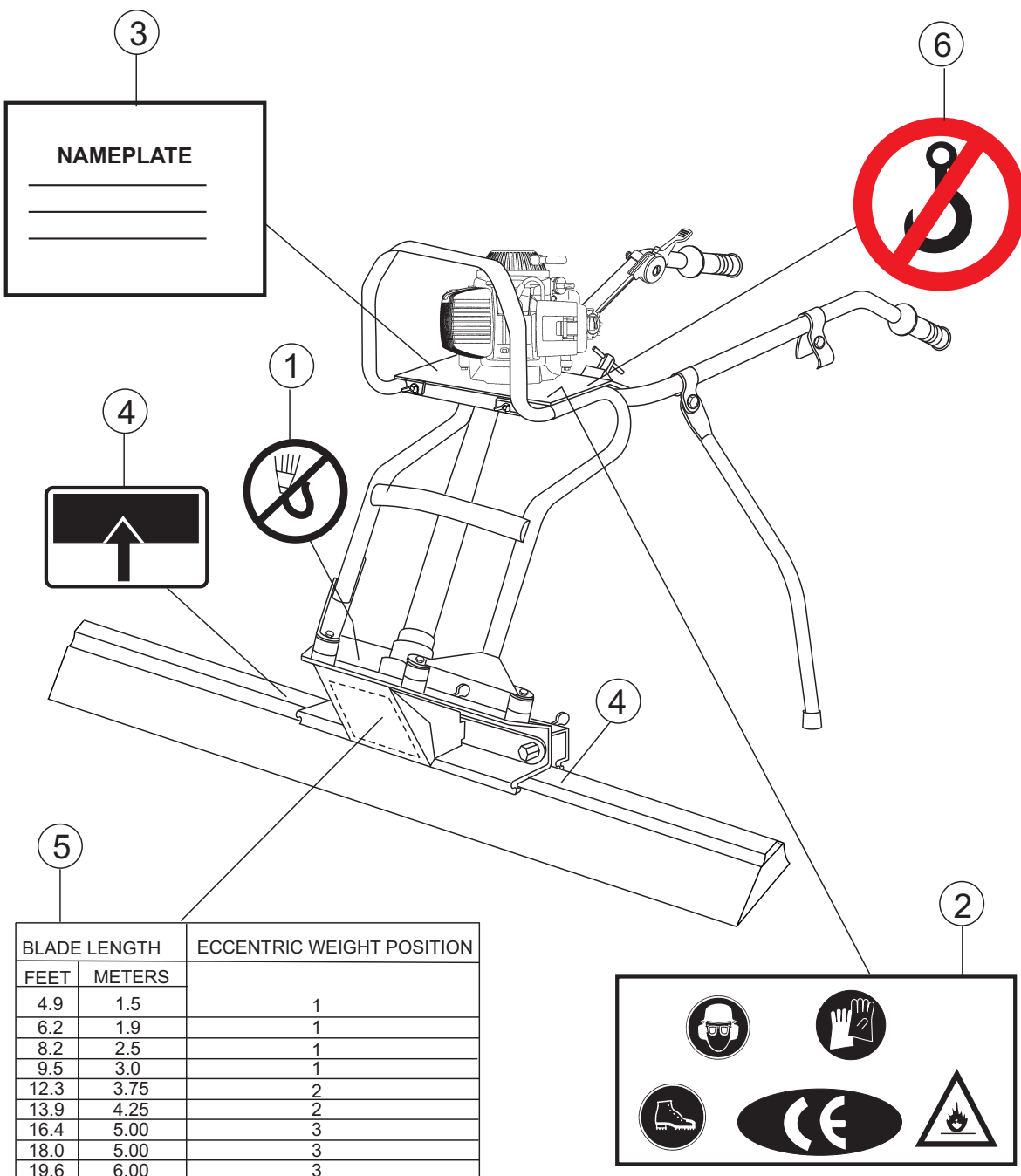
Qty.....	P/N.....	Description
2 .....	BF2648 .....	HANDLE GRIP
1 .....	BF2647 .....	THROTTLE GRIP
2 .....	BF2645LW .....	THROTTLE CABLE
1 .....	BF2621LW .....	FLEXIBLE SHAFT
1 .....	BF2609N .....	ECCENTRIC COVER
3 .....	BF2607 .....	COMPRESSION SPRING
1 .....	BF2605LW .....	ALUMINUM CLAMPING STRIP
3 .....	BF0176 .....	WASHER
3 .....	BF2606 .....	WING BOLT
1 .....	BF2643 .....	STOP SWITCH
3 .....	BF0325 .....	WING BOLT M6X12
3 .....	31915Z0H003 .....	SPARK PLUG, NGK
3 .....	17211Z0Z000 .....	ELEMENT AIR
1 .....	15600ZM3003 .....	CAP, OIL FILLER
1 .....	28400Z0Z003 .....	RECOIL STARTER ASSY.
3 .....	17672ZM3003 .....	FILTER, FUEL
1 .....	17620ZM3043 .....	CAP ASSY., FUEL TANK
1 .....	28462ZM3003 .....	ROPE, RECOIL STARTER



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

# DSGPULW DUOSCREED — NAME PLATE AND DECALS

NAME PLATE AND DECALS.



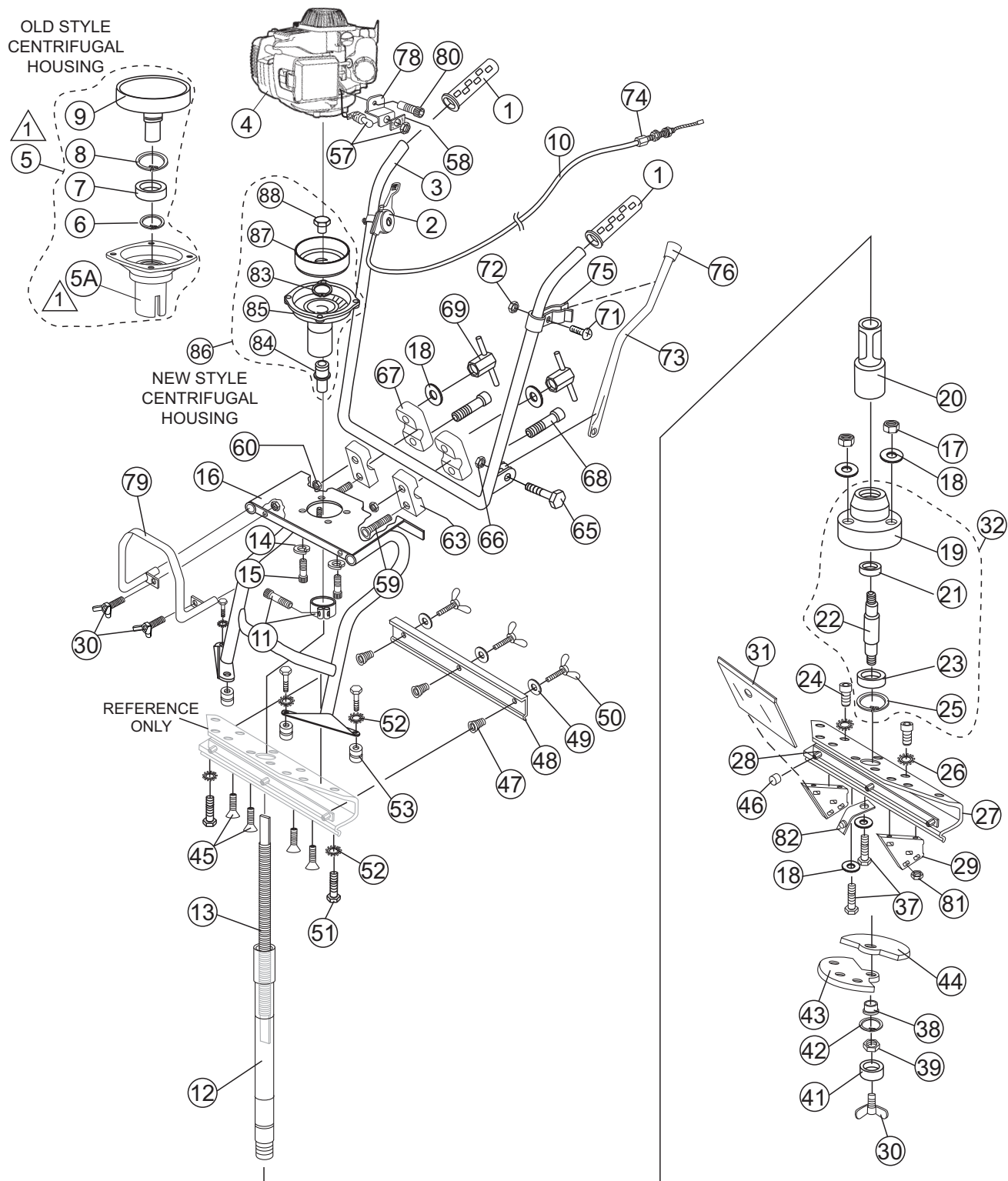
## DSGPULW DUOSCREED — NAME PLATE AND DECALS

### NAME PLATE AND DECALS.

<u>NO</u>	<u>PART NO</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1*	DCL121	DECAL, PRESSURE HOSE	1	
2*	DCL122	DECAL, SAFETY	1	
3		PLATE, SERIAL NO. ....	1	..... CONTACT MQ PARTS DEPT. W/MODEL & S/N
4*	DCL140	DECAL, ALIGNMENT ARROWS .....	2	
5*	DCL141	DECAL, ECCENTRIC WT. CHART	1	
6	BF260002	DECAL, DO NOT LIFT (HOOK)	1	
	DCLDS-SERIES	KIT, DECAL .....	1	..... INCLUDES ITEMS W/*

# DSGPULW DUOSCREED — MAIN ASSY.

## DUO SCREED MAIN ASSY.



### NOTES

- 1 OLD STYLE CENTRIFUGAL HOUSING ASSEMBLY  
NO LONGER AVAILABLE. IF REPLACEMENT OF ITEM 5A  
IS REQUIRED, ORDER NEW STYLE HOUSING ASSEMBLY, ITEM 86.



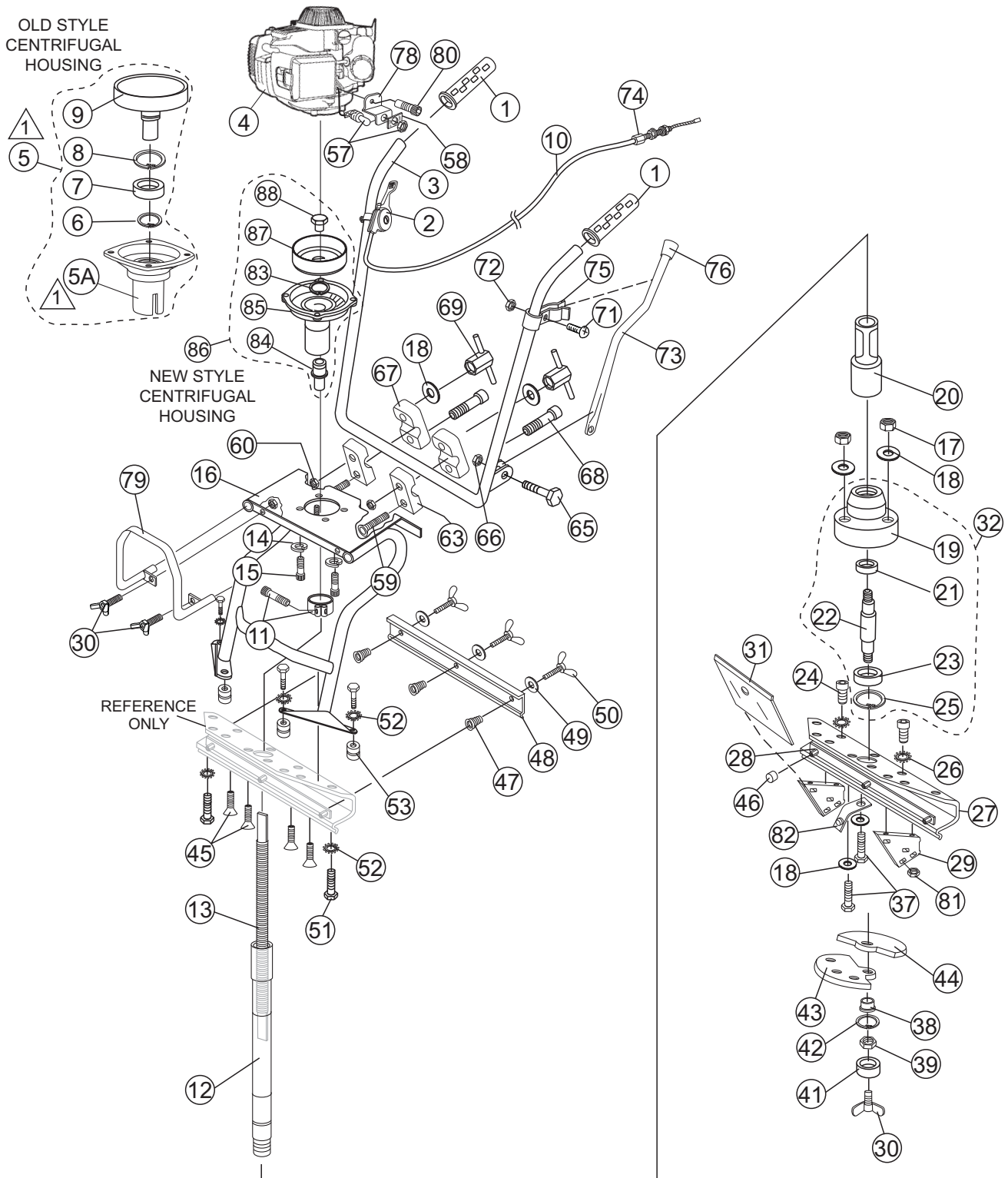
# DSGPULW DUOSCREED — MAIN ASSY.

## DUO SCREED MAIN ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	BF2648	HANDLE GRIP	2	
2	BF2647	THROTTLE HANDLE	1	
3	BF2633LW	UPPER OPERATING HANDLE	1	
4	2640A35	ENGINE HONDA GX-35SAT	1	
5		CENTRIFUGAL CLUTCH HOUSING CP .....	1 .....	NO LONGER AVAILABLE S/N 0185 AND BELOW SEE NOTE ON DRAWING INCLUDES ITEM W/*
5A*		CENTRIFUGAL CLUTCH HOUSING .....	1 .....	NO LONGER AVAILABLE S/N 0185 AND BELOW SEE NOTE ON DRAWING
6*	BF0201	RETAINING RING 17 X 1 MM .....	1 .....	S/N 0185 AND BELOW IN CENTRIFUGAL HOUSING
7*	BF2642C	BEARING IN CENTRIFUGAL HOUSING .....	1 .....	S/N 0185 AND BELOW
8*	BF0205	RETAINING RING ( BIG ) .....	1 .....	S/N 0185 AND BELOW
9*	BF2642	CENTRIFUGAL DRUM .....	1 .....	S/N 0185 AND BELOW
10	BF2645LW	INNER & OUTER CABLE, 87 CMS.	1	
11	BF2626	CENTRIFUGAL HOUSING CLAMP	1	
12	BF2625LW	RUBBER HOSE WITH CONNECTORS	1	
13	BF2621LW	FLEXIBLE SHAFT	1	
14	BF0178	SPRING WASHER M6 TYPE B	4	
15	BF0165	SOCKET HEAD BOLT M6 X 25	4	
16	BF2632LW	LOWER OPERATING HANDLE	1	
17	BF0101	SELF LOCKING NUT M8	3	
18	BF0155	FLAT WASHER M8	8	
19%	BF2611	ECCENTRIC HOUSING	1	
20	BF1100000008	COUPLING DRIVE PIN	1	
21%	BF2619	BEARING (SMALL)	1	
22%	BF2612	ECCENTRIC SHAFT	1	
23%	BF2314	BEARING (BIG)	1	
24	BF0278	TAP BOLT M8 X 30 .....	4 .....	REPLACES P/N BF0125
25%	BF0201	RETAINING RING 17 X 1MM	1	
26	BF0213	TOOTH WASHER M8	4	
27	BF2604LW	ECCENTRIC ASSEMBLY PLATE	1	
28	BF2610LW	STRIP & NUTS FOR ALUMINUM CLAMP	1	
29	BF2608N	SUPPORT BLOCK	2	
30	BF0325	WING BOLT M6 X12	3	
31	BF2609N	ECCENTRIC COVER	1	
32	BF2611KOMPL	ECCENTRIC HOUSING COMPLETE .....	1 .....	INCLUDES ITEMS W/%
37	BF0129	TAP BOLT M8 X 40	3	
38	BF2614	ECCENTRIC HINGE BUSHING	1	
39	BF0177	NUT M12 (FINE)	1	
41	BF2613	ECCENTRIC CLAMPING BUSH	1	

# DSGPULW DUOSCREED — MAIN ASSY.

## DUO SCREED MAIN ASSY.



### NOTES

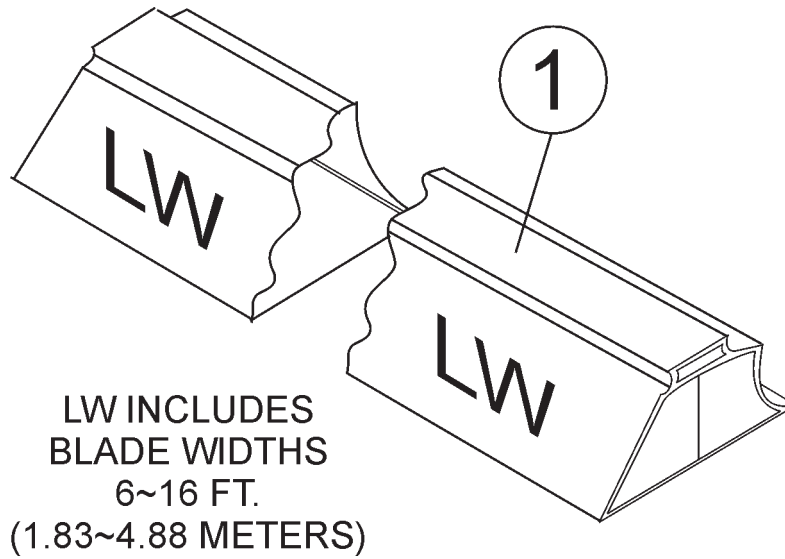
- 1 OLD STYLE CENTRIFUGAL HOUSING ASSEMBLY  
NO LONGER AVAILABLE. IF REPLACEMENT OF ITEM 5A  
IS REQUIRED, ORDER NEW STYLE HOUSING ASSEMBLY, ITEM 86.

# DSGPULW DUOSCREED — MAIN ASSY.

## DUO SCREED MAIN ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
42	BF0175	RETAINING RING M12	1	
43	BF2615A	ECCENTRIC PLATE (SMALL)	1	
44	BF2615B	ECCENTRIC PLATE (BIG)	1	
45	BF0207	COUNTERSUNK HEADSCREW 8.8 M8X25	4	
46	BF2617	PLASTIC PROTECTION CAP M12	3	
47	BF2607	COMPRESSION SPRING FOR CLAMPING STRIP	3	
48	BF2605LW	ALUMINUM CLAMPING STRIP	1	
49	BF0176	WASHER M12X6	3	
50	BF2606	WING BOLT	3	
51	BF0285	TAP BOLT M8X12	3	
52	BF0212	INTERNAL TOOTHING RING M8	8	
53	BF0056	RUBBER BUFFER 30X30 M8	4	
54	BF0124	TAP BOLT M8X10	4	
56	BF2643A	GROUND WIRE FOR STOP SWITCH	1	
57	BF2643	STOP SWITCH .....	1	INCLUDES ITEMS W/#
58#	BF2658	START-STOP DECAL	1	
59	BF0283	CARRIAGE BOLT M8X50	2	
60	BF0089	SELF LOCKING FLANGE NUT M6	2	
63	BF2635	LOWER ALUMINUM CLAMP	2	
65	BF0181	TAP BOLT M6X30 .....	1	REPLACES P/N BF0258
66	BF0100	SELF LOCKING NUT	1	
67	BF2635A	UPPER ALUMINUM CLAMP	2	
68	BF0284	SOCKET HEAD BOLT M6X40	2	
69	BF2636	CLAMP FOR HEIGHT ADJUSTMENT	2	
71	BF0167	SCREW M5X16 .....	1	REPLACES P/N BF0261
72	BF0099	SELF LOCKING NUT M5	1	
73	BF2637LW	SUPPORTING LEG	1	
74	BF2644	GAS THROTTLE ADJUSTMENT BOLT	1	
75	BF2639	CLAMP FOR SUPPORTING LEG	1	
76	BF2634	RUBBER PROTECTION CAP FOR SUPPORT LEG	1	
78	BF2321H	SWITCH BRACKET	1	
79	260075LW	LIFTING HANDLE STEEL	1	
80	BF0269	SOCKET HEAD BOLT M5 X12	1	
81	BF0206	SQUARE NUTS M8	8	
82	BF26061	SPRING CLIP, COVER PLATE	1	
83@	BF0217	RETAINING RING .....	1	S/N 0186 AND ABOVE
84@	BF2653	COUPLING DRIVE PIN .....	1	S/N 0186 AND ABOVE
85@	BF2641LOS	CENTRIFUGAL HOUSING W/BEARING .....	1	S/N 0186 AND ABOVE
86	BF2641	CENTRIFUGAL HOUSING COMPLETE .....	1	INCLUDES ITEMS W/@
		.....		S/N 0186 AND ABOVE
87@	BF2652	CENTRIFUGAL DRUM .....	1	S/N 0186 AND ABOVE
88@	BF2627	BOLT M12 X 16 .....	1	S/N 0186 AND ABOVE

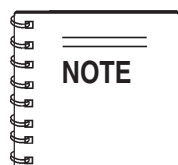
DUO SCREED BLADE ASSY.



## DSGPULW DUOSCREED — BLADE ASSY.

### DUO SCREED BLADE ASSY.

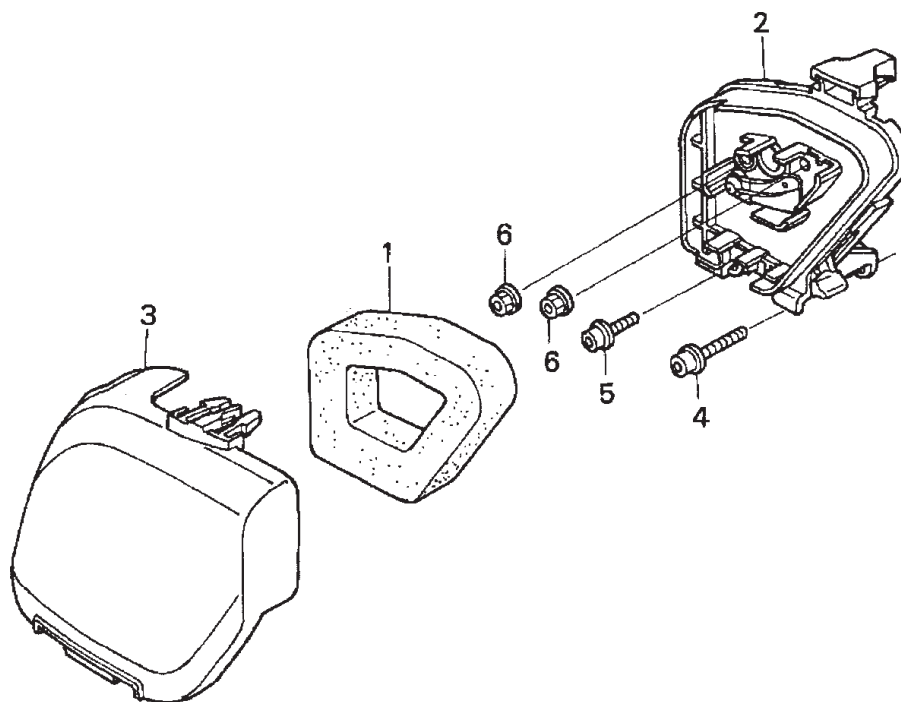
<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	DSB6LW	DUOSCREED BLADE 1.83 MTR. - 6 FT. ....	1	REPLACES P/N BF260018LW
1	DSB8LW	DUOSCREED BLADE 2.44 MTR. - 8 FT. ....	1	REPLACES P/N BF260024LW
1	DSB10LW	DUOSCREED BLADE 3.05 MTR. - 10 FT. ....	1	REPLACES P/N BF260030LW
1	DSB12LW	DUOSCREED BLADE 3.66 MTR. - 12 FT. ....	1	REPLACES P/N BF260036LW
1	DSB14LW	DUOSCREED BLADE 4.27 MTR. - 14 FT. ....	1	REPLACES P/N BF260042LW
1	DSB16LW	DUOSCREED BLADE 4.88 MTR. - 16 FT. ....	1	REPLACES P/N BF260048LW



ITEM 1, IS AN ACCESSORY. ORDER FROM UNIT  
SALES DEPT.

## HONDA GX35SAT ENGINE — AIR CLEANER ASSY.

AIR CLEANER ASSY.



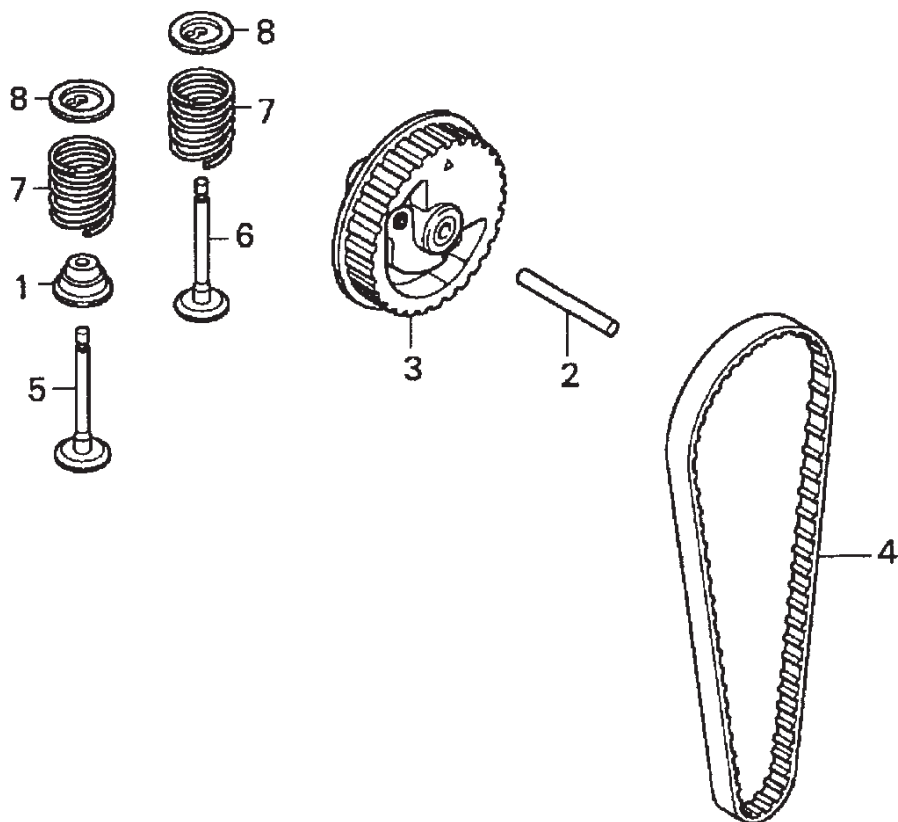
## HONDA GX35SAT ENGINE — AIR CLEANER ASSY.

AIR CLEANER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	17211Z0Z000	ELEMENT, AIR CLEANER	1	
2	17220Z0Z000	HOUSING, AIR CLEANER	1	
3	17231Z0Z000	COVER, AIR CLEANER	1	
4	90009Z0Z003	BOLT, SOCKET 5X25	1	
5	90018Z0H003	BOLT, SOCKET 5X16	1	
6	9405005000	NUT FLANGE 5MM	2	

## HONDA GX35SAT ENGINE — CAM PULLEY ASSY.

CAM PULLEY ASSY.





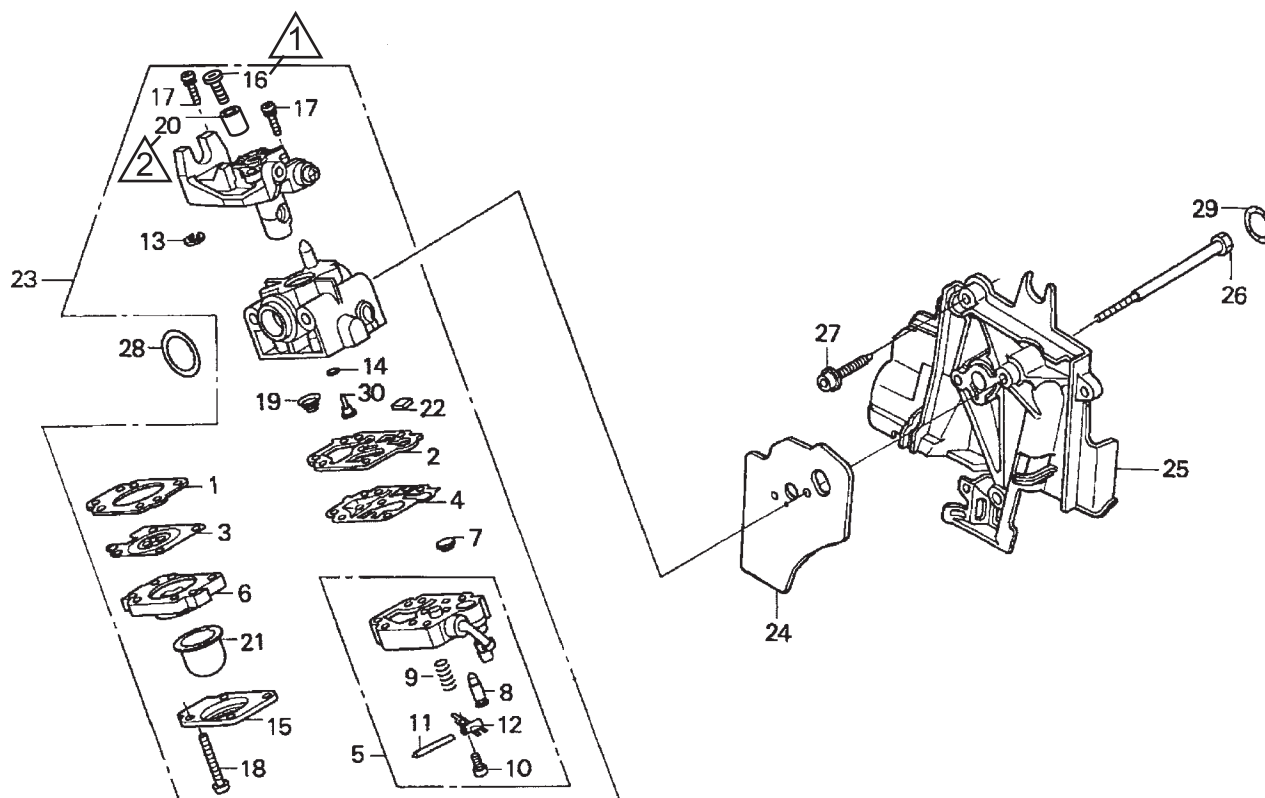
## HONDA GX35SAT ENGINE — CAM PULLEY ASSY.

### CAM PULLEY ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	12209Z0H003	SEAL, VALVE STEM	1	
2	14123Z0Z003	ROLLER 4X31.8	1	
3	14320Z0Z000	PULLEY, CAMSHAFT	1	
4	14400Z0Z003	BELT, TIMING 76ZU7 G-300	1	
5	14711Z0Z000	VALVE, IN.	1	
6	14721Z0Z000	VALVE, EX.	1	
7	14751Z0Z000	SPRING VALVE	2	
8	14771Z0H000	RETAINER, VALVE SPRING	2	

# HONDA GX35SAT ENGINE — CARBURETOR ASSY.

## CARBURETOR ASSY.



△1 REPLACE HONDA  
P/N 16027ZM3004 ITEM 16,  
WITH MQ P/N BF0239

△2 REPLACE HONDA  
P/N 16031ZM3004 ITEM 20,  
WITH MQ P/N BF2646

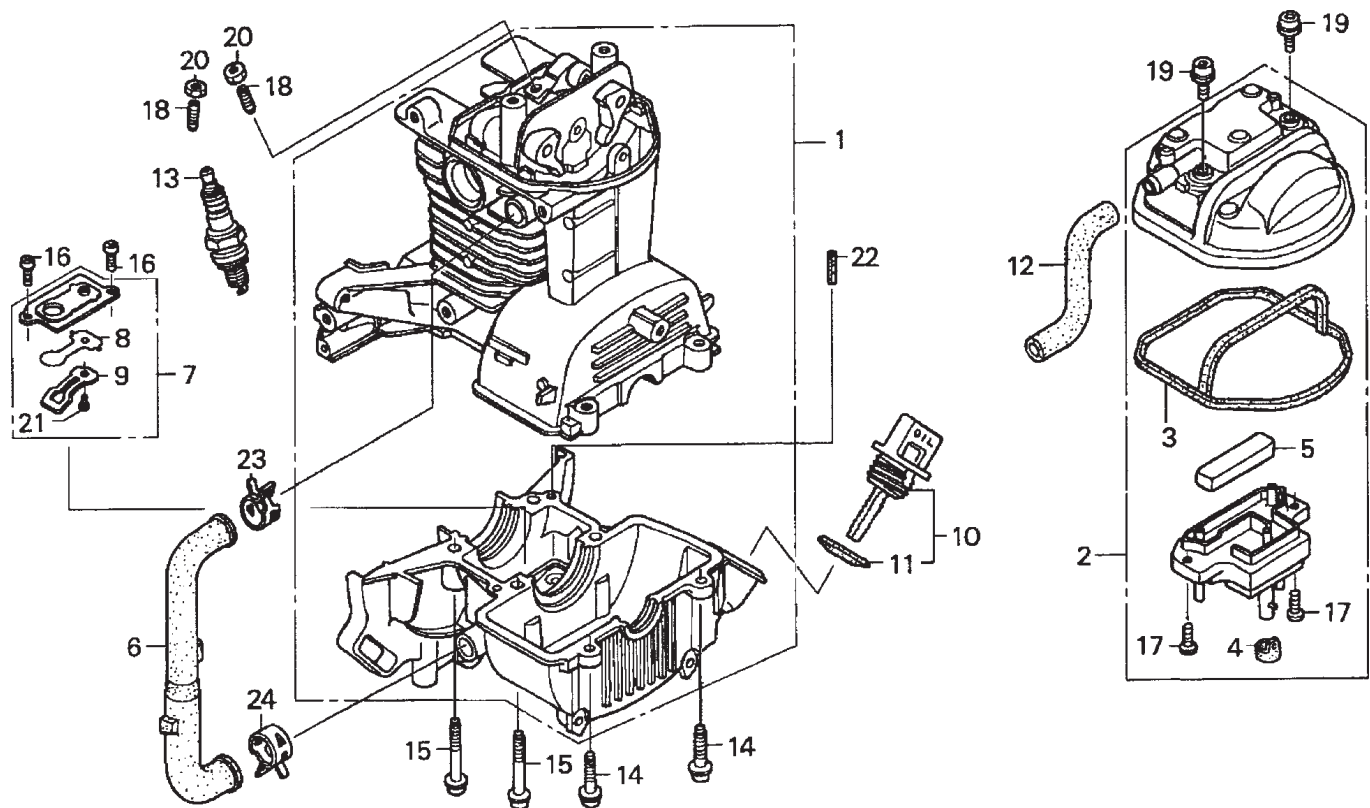
# HONDA GX35SAT ENGINE — CARBURETOR ASSY.

## CARBURETOR ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1#	16010ZM3004	GASKET,METERING DIAPHRAGM	1	
2#	16011Z0H003	GASKET, PUMP	1	
3#	16013Z0H003	DIAPHRAGM ASSY.,METERING	1	
4#	16014ZM3004	DIAPHRAGM, PUMP	1	
5#	16015Z0H003	BODY ASSY., PUMP .....	1	INCLUDES ITEMS W/*
6#	16017ZM3004	BODY ASSY.,AIR PURGE	1	
7#	16018ZM3802	SCREEN, INLET	1	
8*#	16019ZM3004	VALVE, INLET NEEDLE	1	
9*#	16020ZM3004	SPRING, METERING LEVER	1	
10*#	16021ZM3004	SCREW, METERING LEVER PIN	1	
11*#	16022ZM3004	PIN, METERING LEVER	1	
12*#	16023ZM3004	LEVER, METERING	1	
13#	16024Z0H003	RING, RETAINING	1	
14#	16025ZM3004	O-RING	1	
15#	16026ZM3004	COVER, PRIMER PUMP	1	
16#	BF0239	SCREW, M3 X 16 .....	1	MQ PART ONLY
17#	16028ZM3004	SCREW, THROTTLE COLLAR	2	
18#	16029ZM3004	SCREW, PUMP COVER	4	
19#	16030ZM3004	SPRING PUMP	1	
20	BF2646	RPM LIMITER WASHER .....	1	MQ PART ONLY
21#	16032ZM3004	PUMP, PRIMER	1	
22#	16035ZM3802	FILTER, FUEL INLET	1	
23	16100Z0Z004	CARBURETOR ASST. WYB 16A .....	1	INCLUDES ITEMS W/#
24	16221Z0Z000	GASKET, CARBURETOR	1	
25	19631Z0Z000	SHROUD	1	
26	90014Z0H003	BOLT, 5X35	2	
27	90018Z0H003	BOLT, SOCKET 5X16	2	
28	91301ZM3000	O-RING, 14.8X2.4	1	
29	91308Z0H003	O-RING, 12.3X2.4	1	
30	99101ZM50350	JET, #35 OPTIONAL	1	
30	99101Z0Z0360	JET, #36 OPTIONAL	1	
30#	99101Z0Z0370	JET, #37	1	

# HONDA GX35SAT ENGINE — CRANKCASE ASSY.

## CRANKCASE ASSY.



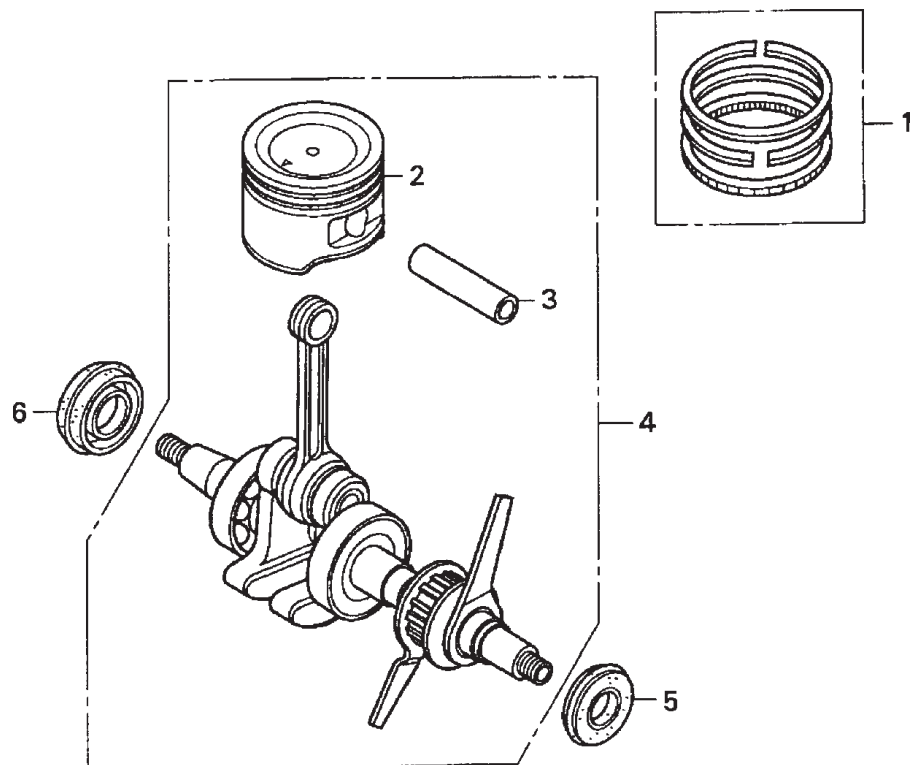
# HONDA GX35SAT ENGINE — CRANKCASE ASSY.

## CRANKCASE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	10100Z0Z405	CRANKCASE SET	1	
2	12310Z0Z000	COVER, CYLINDER HEAD .....	1	INCLUDES ITEMS W/★
3★	12312Z0Z300	SEAL, HEAD COVER	1	
4★	12314Z0H300	GROMMET, HEAD COVER	1	
5★	12367Z0H000	FILTER, BREATHER	1	
6	15422Z0Z000	TUBE, OIL	1	
7	15510Z0H000	PLATE ASSY., OIL OUTLET VAL. ....	1	INCLUDES ITEMS/W#
8#	15571ZM3003	VALVE, OIL OUTLET	1	
9#	15572Z0H000	PLATE, STOPPER	1	
10	15600ZM3003	CAP ASSY., OIL FILLER .....	1	INCLUDES ITEM/W%
11%	15625ZE1003	GASKET, OIL FILLER CAP	1	
12	15721Z0Z000	TUBE, BREATHER	1	
13	31915Z0H003	SPARK PLUG, CMR5H NGK	1	
13	31916Z0H003	SPARK PLUG, CMR6H NGK OPTIONAL	1	
14	90009Z0H003	BOLT, SOCKET 5X20	2	
15	90010Z0Z003	BOLT, SOCKET 5X32	4	
16	90013Z0H004	SCREW, PAN 4X8	2	
17★	90013Z0Z003	SCREW, PAN 4X8	2	
18	90017Z0H000	SCREW, TAPPET ADJUSTING	2	
19	90019Z0H003	BOLT, SOCKET 5X12	2	
20	90206ZM3000	NUT, TAPPET ADJUSTING	2	
21#	93500030050A	SCREW, PAN 3X5	1	
22	9430540102	PIN, SPRING 4X10	1	
23	950024120008	CLIP, TUBE D12	1	
24	950024130004	CLIP TUBE D13.0	1	

## HONDA GX35SAT ENGINE — CRANKSHAFT AND PISTON ASSY.

CRANKSHAFT AND PISTON ASSY.



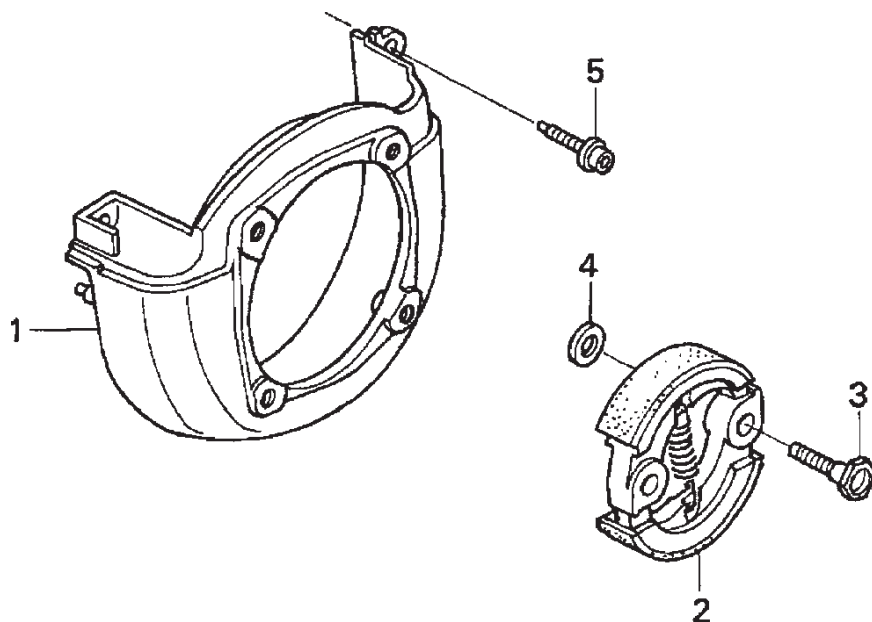
## HONDA GX35SAT ENGINE — CRANKSHAFT AND PISTON ASSY.

### CRANKSHAFT AND PISTON ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	13010ZM5000	RING SET, PISTON	1	
2*	13101Z0Z000	PISTON	1	
3*	13111ZM5000	PIN, PISTON	1	
4	13310Z0Z000	CRANKSHAFT .....	1	INCLUDES ITEMS W/*
5	91212Z0H003	OIL SEAL, 10X20X5	1	
6	91214ZM3003	OIL SEAL, 15X25X6	1	

## HONDA GX35SAT ENGINE — FAN COVER AND CLUTCH ASSY.

FAN COVER AND CLUTCH ASSY.





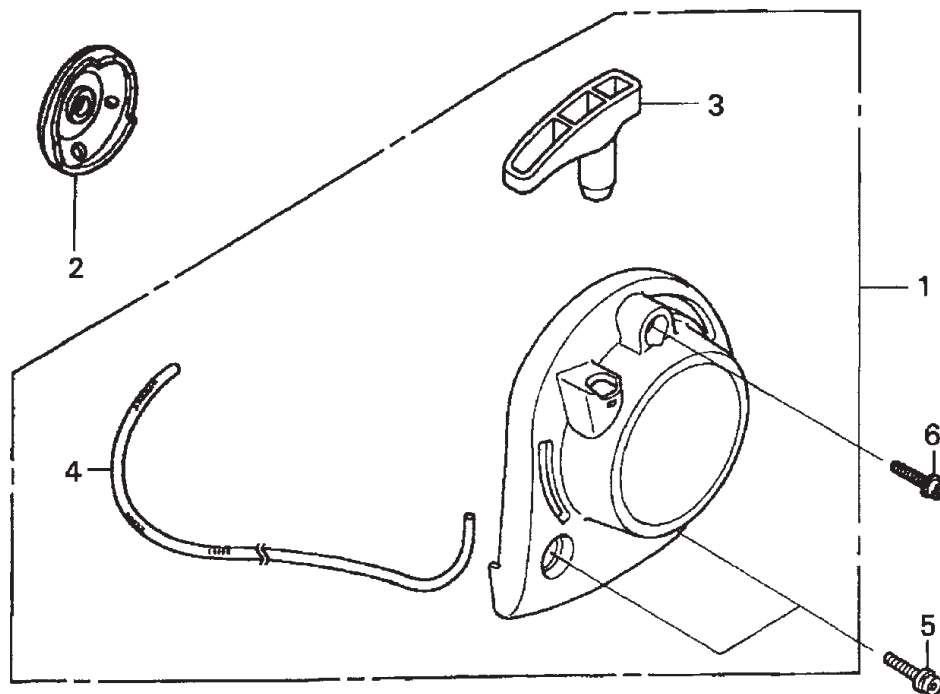
## HONDA GX35SAT ENGINE — FAN COVER AND CLUTCH ASSY.

FAN COVER AND CLUTCH ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	19611Z0Z000	COVER, FAN	1	
2	22000ZM5003	CLUTCH ASSY.	1	
3	22253ZM5003	BOLT, CLUTCH 8MM	2	
4	22254ZM5003	WASHER, CLUTCH 8X17	2	
5	90009Z0H003	BOLT, SOCKET 5X20	3	

## HONDA GX35SAT ENGINE — RECOIL STARTER ASSY.

RECOIL STARTER ASSY.



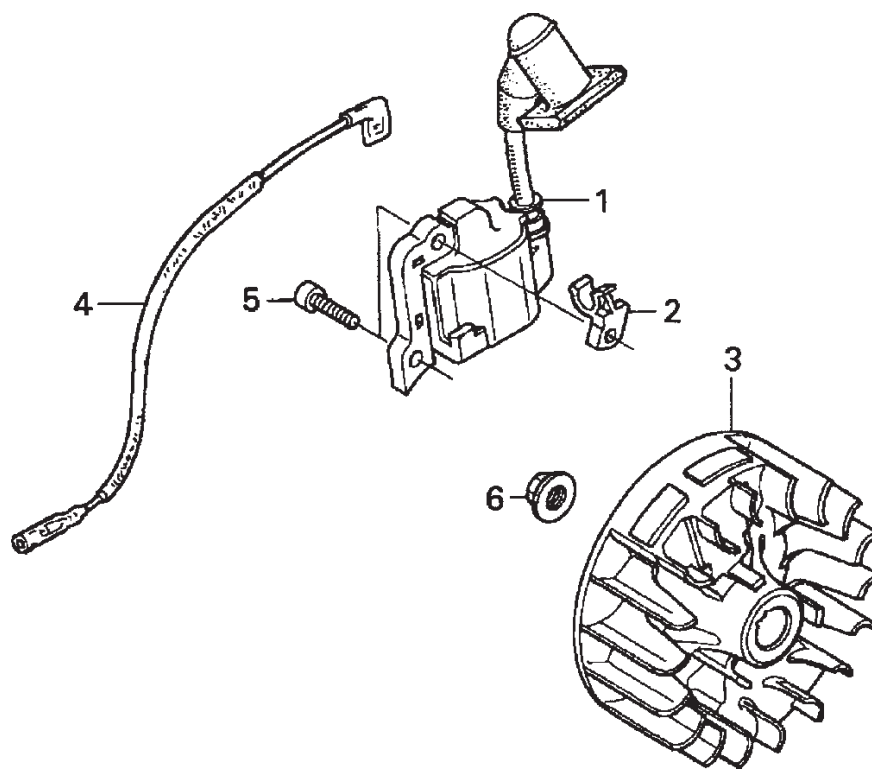
## HONDA GX35SAT ENGINE — RECOIL STARTER ASSY.

RECOIL STARTER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	28400Z0Z003	STARTER ASSY., RECOIL .....	1 .....	INCLUDES ITEMS W/★
2	28451Z0H003	PULLEY, RECOIL STARTER	1	
3★	28461ZM3003	KNOB, RECOIL STARTER	1	
4★	28462ZM3003	ROPE, RECOIL STARTER #3.5X40"	1	
6	90018Z0H003	BOLT, SOCKET 5X16	1	

## HONDA GX35SAT ENGINE — FLYWHEEL/IGNITION COIL ASSY.

FLYWHEEL/IGNITION COIL ASSY.



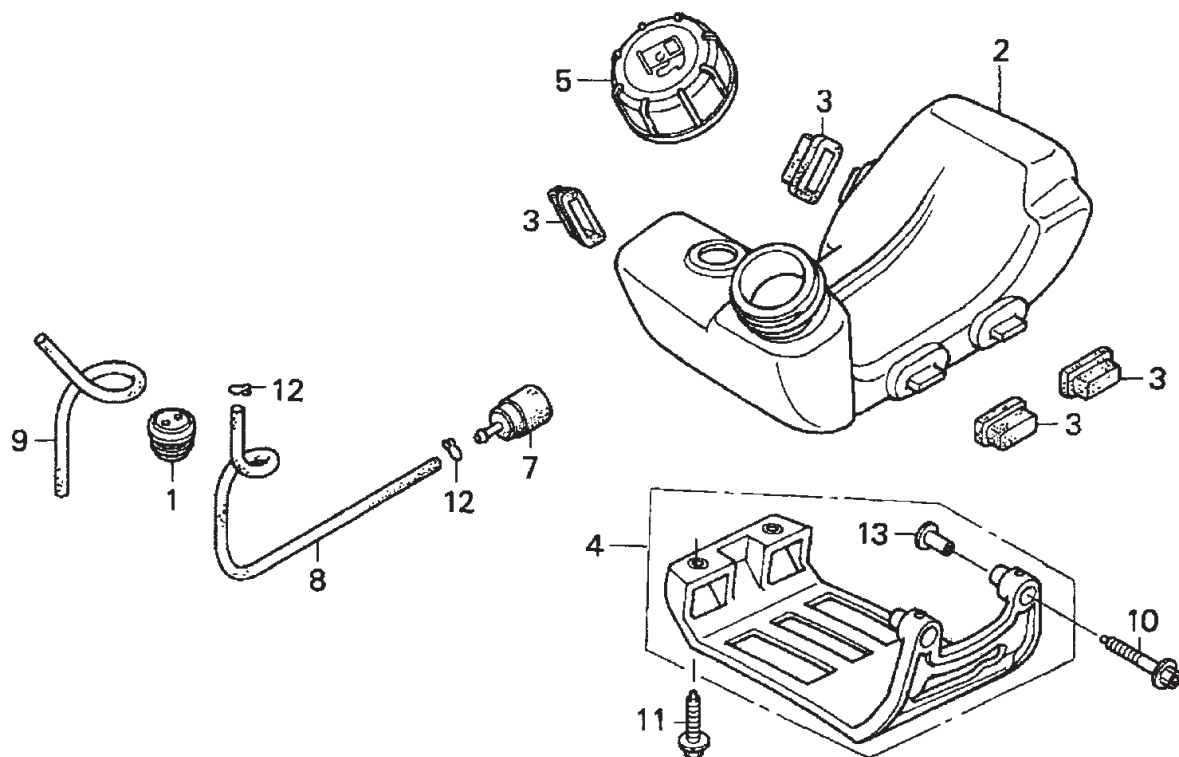
## HONDA GX35SAT ENGINE — FLYWHEEL/IGNITION COIL ASSY.

FLYWHEEL/IGNITION COIL ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	30500Z0Z013	COIL ASSY., IGNITION	1	
2	30522Z0Z000	CLIP, IGNITION WIRE	1	
3	31110Z0Z003	FLYWHEEL	1	
4	32195Z0Z000	WIRE, STOP SWITCH	1	
5	90012Z0H005	BOLT, SOCKETC 4X14	2	
6	9405008000	NUT FLANGE 8MM	1	

## HONDA GX35SAT ENGINE — FUEL TANK ASSY.

FUEL TANK ASSY.



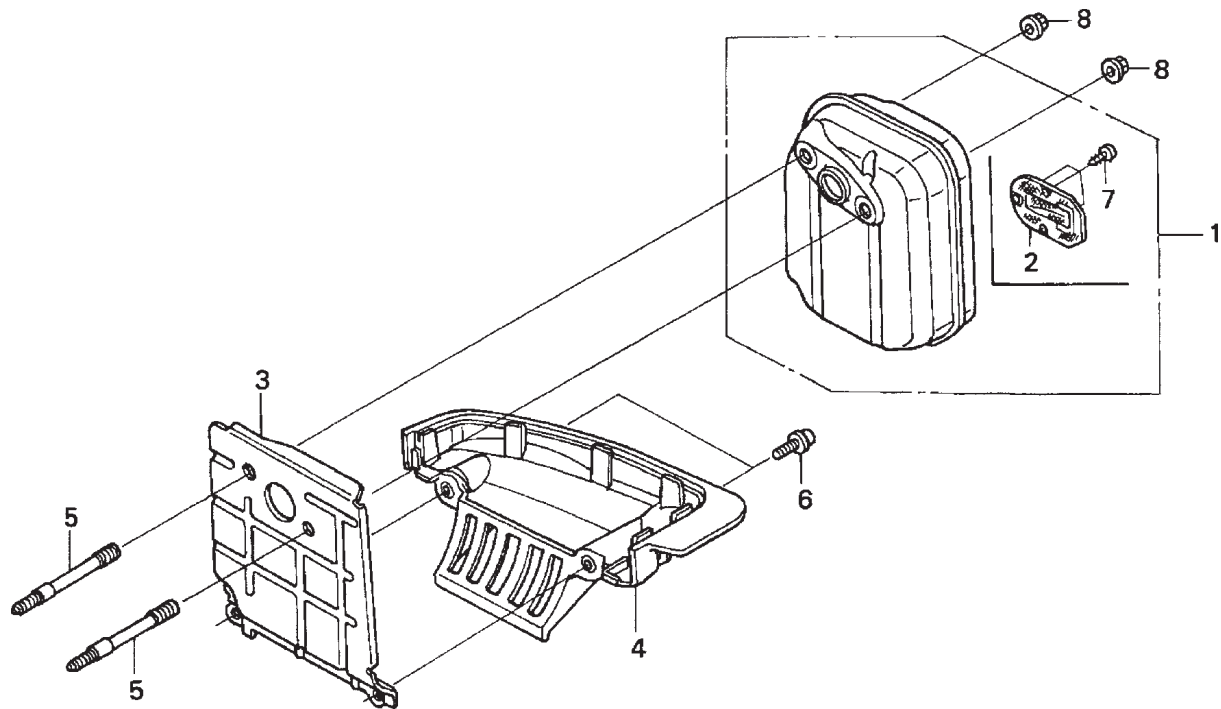
## HONDA GX35SAT ENGINE — FUEL TANK ASSY.

### FUEL TANK ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	17504ZM3003	GROMMET FUEL TUBE	1	
2	17511Z0Z003	TANK, FUEL	1	
3	17533Z0H000	RUBBER, TANK MOUNTING	4	
4	17555Z0Z000	GUARD, TANK .....	1	INCLUDES ITEMS W/*
5	17620ZM3043	CAP ASSY., FUEL TANK	1	
7	17672ZM3003	FILTER, FUEL	1	
8	17701Z0Z000	TUBE, FUEL TANK	1	
9	17702Z0Z000	TUBE, FUEL RETURN	1	
10	90010Z0H003	BOLT, SOCKET 5X30	2	
11	90018Z0H003	BOLT, SOCKET 5X16	2	
12	91401ZM30063	CLIP, TUBE	2	
13*	91501Z0H000	COLLAR, TANK GUARD	2	

## HONDA GX35SAT ENGINE — MUFFLER ASSY.

MUFFLER ASSY.





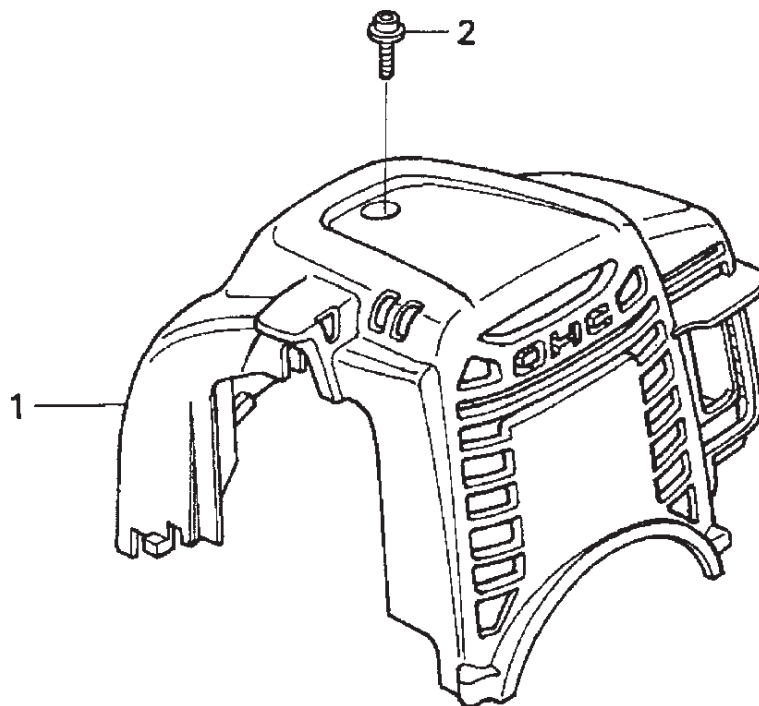
## HONDA GX35SAT ENGINE — MUFFLER ASSY.

### MUFFLER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	18310Z0Z800	MUFFLER.....	1 .....	INCLUDES ITEMS W/*
2*	18350Z0Z800	ARRESTER SPARK	1	
3	18515Z0Z300	GUIDE, AIR	1	
4	18518Z0Z000	GUIDE, AIR LOWER	1	
5	90001Z0Z003	BOLT 2, STUD 5X45.5	2	
6	90018Z0H003	BOLT, SOCKET 5X16	2	
7*	90055ZE1000	SCREW, TAPPING 4X6	3	
8	90136SM4901	NUT, SELF-LOCK 5MM	2	

## HONDA GX35SAT ENGINE — ENGINE TOP COVER ASSY.

ENGINE TOP COVER ASSY.



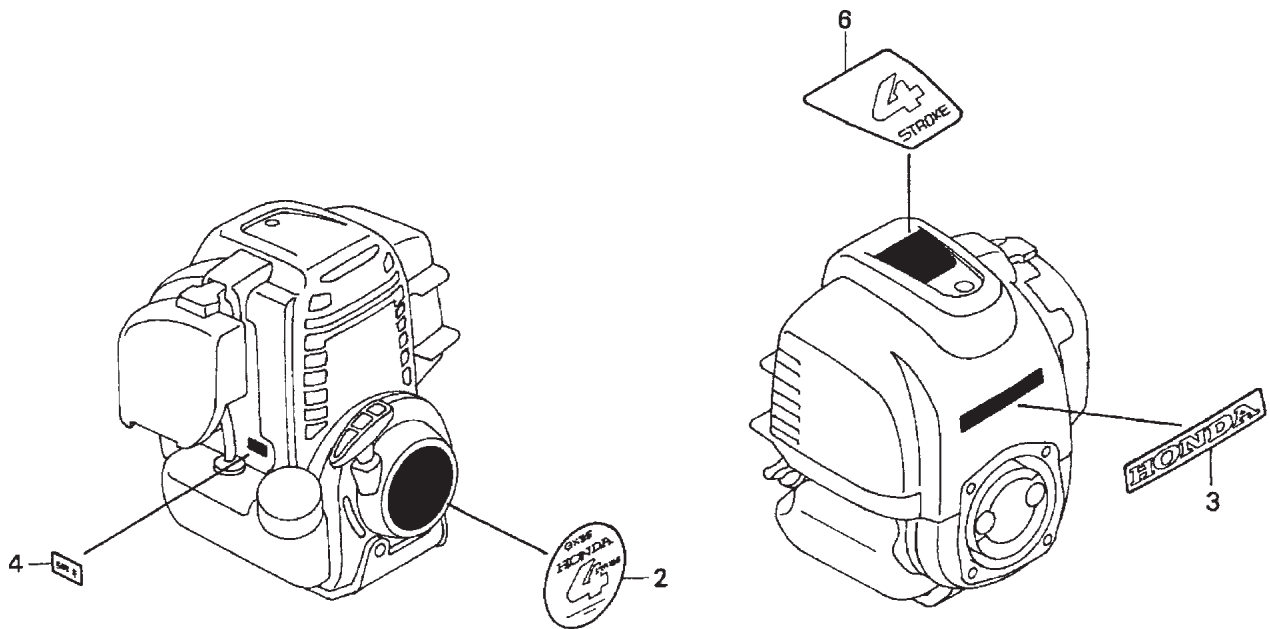
## HONDA GX35SAT ENGINE — ENGINE TOP COVER ASSY.

ENGINE TOP COVER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	19720Z0Z000ZA	COVER, TOP *R280* POWER RED	1	
2	90015Z0H003	BOLT, TOP COVER	1	

## HONDA GX35SAT ENGINE — LABELS ASSY.

LABELS ASSY.



## HONDA GX35SAT ENGINE — LABELS ASSY.

LABELS ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
2	87521Z0Z000	MARK, EMBLEM	1	
3	87531Z0Z000	MARK, HONDA	1	
4	87601Z0H860	MARK, TYPE SAT	1	
6	87660Z0Z000	MARK, 4-STROKE	1	

# TERMS AND CONDITIONS OF SALE — PARTS

## PAYMENT TERMS

Terms of payment for parts are net 30 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 hereunder 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.

Effective: February 22, 2006

[illegible]

# OPERATION AND PARTS MANUAL

## HERE'S HOW TO GET HELP

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

### **UNITED STATES**

#### ***Multiquip Corporate Office***

18910 Wilmington Ave.      Tel. (800) 421-1244  
Carson, CA 90746      Fax (310) 537-3927  
Contact: mq@multiquip.com

#### ***Service Department***

800-421-1244      Fax: 310-537-4259  
310-537-3700

#### ***Technical Assistance***

800-478-1244      Fax: 310-943-2238

#### ***MQ Parts Department***

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

#### ***Warranty Department***

800-421-1244      Fax: 310-943-2249  
310-537-3700

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### **CANADA**

#### ***Multiquip***

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

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### **UNITED KINGDOM**

#### ***Multiquip (UK) Limited Head Office***

Unit 2, Northpoint Industrial Estate,      Tel: 0161 339 2223  
Globe Lane,      Fax: 0161 339 3226  
Dukinfield, Cheshire SK16 4UJ  
Contact: sales@multiquip.co.uk

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This manual MUST accompany the equipment at all times. This manual is considered a permanent part of the equipment and should remain with the unit if resold.

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