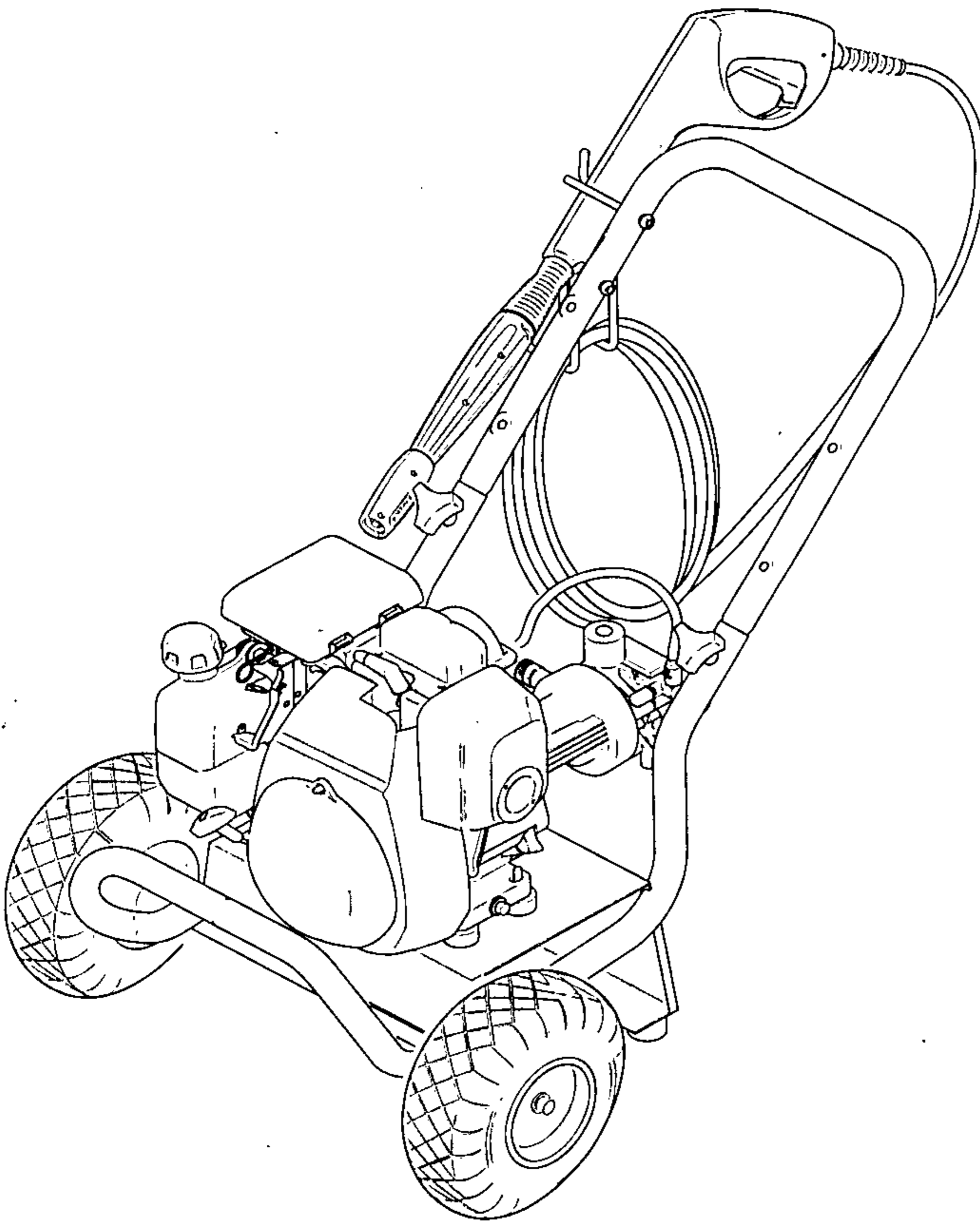


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 **KÄRCHER**

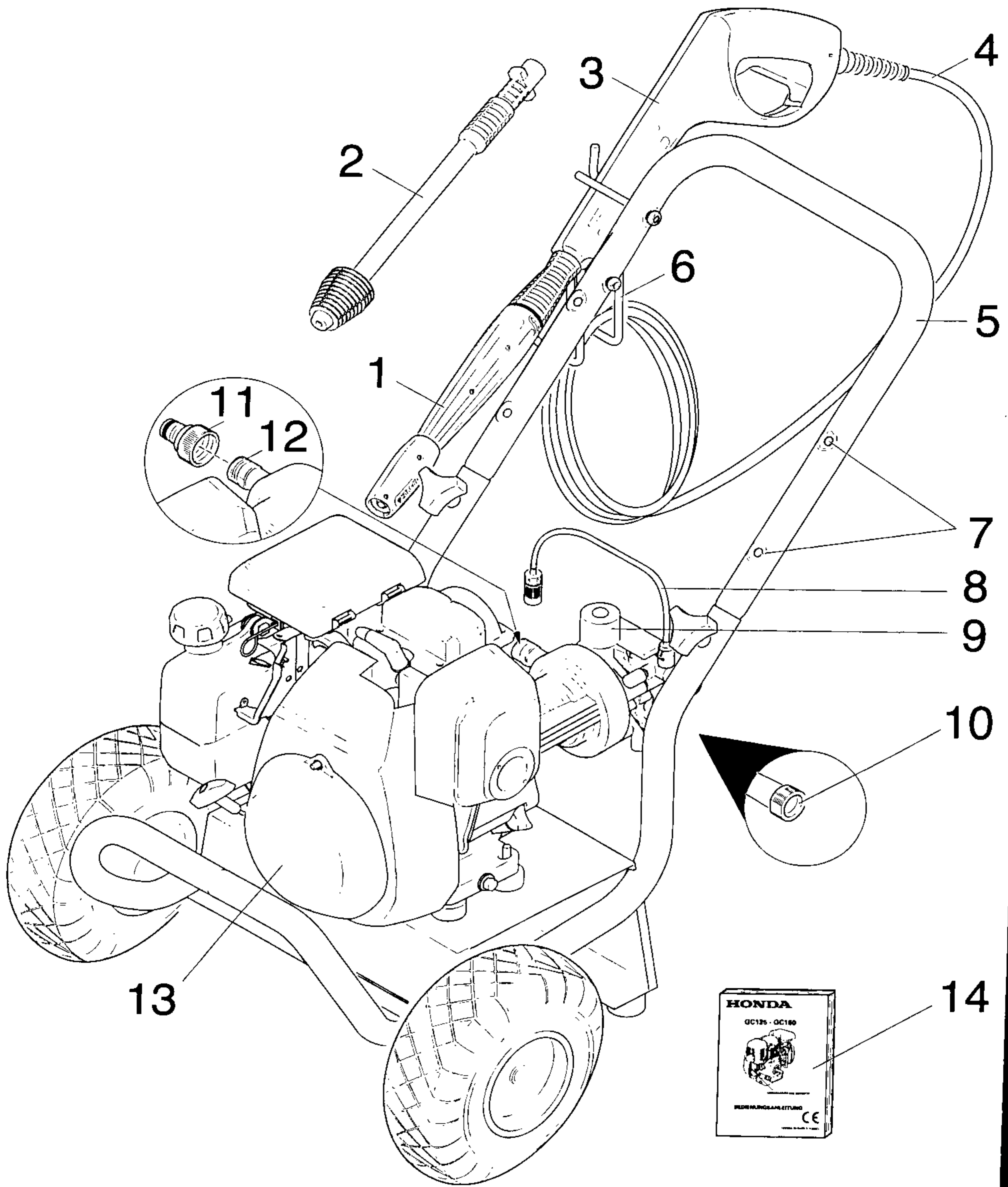
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9.139-174.0 (05/07)



Technische Daten

Motor	Honda GC 160
Leistung	4,0 kW
Details siehe Betriebsanleitung des Motorenherstellers	
Wasseranschluss	
Zulauftemperatur (max.)	40 °C
Zulaufmenge (min.)	10 l/min
Zulaufdruck (max.)	1,2 MPa
Ansaughöhe	0,5 m
Leistungsdaten	
Arbeitsdruck	14 MPa
Max. zulässiger Druck	16 MPa
Fördermenge, Wasser	7,9 l/min
Fördermenge, Reinigungsmittel	0,3 l/min
Rückstoßkraft der Handspritzpistole	26,5 N
Hand-Arm Vibrationswert (ISO 5349)	3,1 m/s ²
Schalldruckpegel L _{pA} (EN60704-1)	90 dB(A)
Schalleistungspegel L _{WA} (2000/14/EG)	104 dB(A)
Maße	
Länge	835 mm
Breite	580 mm
Höhe	800 mm
Gewicht	28 kg
Reifendruck (max.)	172 kPa

Technische Änderungen vorbehalten!

CE-Erklärung

Hiermit erklären wir, dass die nachfolgend bezeichnete Maschine aufgrund ihrer Konzipierung und Bauart sowie in der von uns in Verkehr gebrachten Ausführung den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen der EG-Richtlinien entspricht. Bei einer nicht mit uns abgestimmten Änderung der Maschine verliert diese Erklärung ihre Gültigkeit.

Produkt: Hochdruckreiniger
Typ: 1.194-xxx

Einschlägige EG-Richtlinien

98/37/EG
2006/95/EG
89/336/EWG (+91/263/EWG, 92/31/EWG, 93/68/EWG)
2000/14/EG

Angewandte harmonisierte Normen

EN 60335-1
EN 60335-2-79
EN 50082-2: 1994

Angewandte nationale Normen

CISPR 12

Angewandtes Konformitätsbewertungsverfahren

Anhang V

Schalleistungspegel dB(A)

Gemessen: 103 dB(A)
Garantiert: 104 dB(A)

Die Unterzeichnenden handeln im Auftrag und mit Vollmacht der Geschäftsführung.


H. Jenner


S. Reiser

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Dear Customer,




Please read and comply with these instructions prior to the initial operation of your appliance. Retain these operating instructions for future reference or for subsequent possessors.

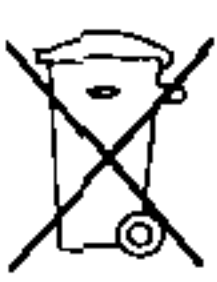
Proper Use

This high-pressure cleaner is designed for domestic use only:

- to clean machines, vehicles, buildings, tools, facades, terraces, garden equipment etc. using a high-pressure water jet (and detergents if required).
- with accessories, replacement parts and detergents approved by Kärcher. Observe the instructions provided with these detergents.

Environmental protection

 The packaging material can be recycled. Please do not place the packaging into the ordinary refuse for disposal, but arrange for the proper recycling.

 Old appliances contain valuable materials that can be recycled. Please arrange for the proper recycling of old appliances. Please dispose your old appliances using appropriate collection systems

Please do not release engine oil, fuel oil, diesel and petrol into the environment. Protect the ground and dispose of used oil in an environmentally-clean manner.

Please do not let mineral oil contaminated waste water reach soil, water or the sewage system. Perform engine cleaning and bottom cleaning therefore only on specified places with an oil trap.

Symbols



The appliance contains hot surfaces that can lead to burn injuries.

Safety instructions

- Read the operating instructions of the engine manufacturer before start-up and follow the safety instructions carefully.
- The appliance may not be used in areas where a risk of explosion is present.
- If the appliance is used in hazardous areas (e.g. filling stations) the corresponding safety provisions must be observed.
- Ensure that there is adequate ventilation or provision for diverting the exhaust gas while operating the appliance in closed rooms (risk of poisoning).
- The appliance must not be used if the power cord or important parts of the appliance, e.g. safety devices, high-pressure hoses, spray guns, are damaged.
- **Warning:**
High-pressure hoses, fixtures and couplings are important for the safety of the appliance. Only use high-pressure hoses, fixtures and couplings recommended by the manufacturer.
- Check the high-pressure hose for damage before every use. Please arrange for the immediate exchange of a damaged high-pressure hose.
- Do not use the appliance when there are other persons around unless they are also wearing safety gear.
- The appliance must not be operated by children or persons who have not been instructed accordingly.
- The operator must use the appliance properly. When working with the appliance, he must consider the local conditions and pay due care and attention to other persons, in particular children, who are nearby.
- **Warning:**
High-pressure jets can be dangerous if improperly used. The jet must not be directed at persons, animals, live electrical equipment or at the appliance itself.



- *The jet must not be directed at other persons or directed by the user at him/herself to clean clothing or footwear.*
- *Never use the appliance to clean objects containing hazardous substances (e.g. asbestos).*
- **Warning:**
Vehicle tyres/ tyre valves may be cleaned only with a minimum spray distance of 30 cm. Otherwise, the high pressure spray can cause damage to the vehicle tyre/ tyre valve. The discolouring of the tyre is the first sign of damage. Damaged vehicle tyres are a source of danger.
- *Observe a distance of at least 30 cm when using the jet to clean painted surfaces to avoid damaging paintwork.*
- *Never draw in fluids containing solvents or undiluted acids and solvents! This includes petrol, paint thinner and heating oil. The spray mist thus generated is highly inflammable, explosive and poisonous. Do not use acetone, undiluted acids and solvents as they are aggressive towards the materials from which the appliance is made.*
- *Risk of hearing impairment. Always use proper ear-protection aids while working with the appliance.*
- *Wear protective clothing and safety goggles to protect against back spray containing water or dirt.*
- *Never leave the appliance unattended when it is in operation.*
- *This appliance was designed to be used with detergents which are supplied or recommended by the manufacturer. The use of other detergents or chemicals may compromise the safety of the appliance.*

⚠ Caution

When operating the machine, do not place it in such a way that it can cause damage to persons, for e.g. on scaffoldings, etc.

⚠ Danger

Long hours of using the appliance can cause circulation problems in the hands on account of vibrations.

It is not possible to specify a generally valid operation time, since this depends on several factors:

- Proneness to blood circulation deficiencies (cold, numb fingers).
- Low ambient temperature. Wear warm gloves to protect hands.
- Continuous operation is worse than an operation interrupted by pauses.

In case of regular, long-term operation of the device and in case of repeated occurrence of the symptoms (e.g. cold, numb fingers) please consult a physician.

Safety Devices

Safety devices serve for the protection of the user and must not be put out of operation or bypassed with respect to their function.

Safety catch

The safety catch on the handgun prevents the handgun from being released unintentionally.

Overflow valve

The overflow valve prevents the permissible working pressure from being exceeded. The overflow valve opens if the handgun is closed. The high pressure pump redirects the water back into the suction side of the pump (circulation operations).

Thermo-valve at the pump

The thermostat valve prevents the pump from over-heating. The circulation heats up the water. At 60 °C water temperature, the thermostat valve opens and lets out hot water.

Commissioning/Operations

Definition of abbreviations used:

HP = High pressure

DT = Detergent

Description of the Appliance

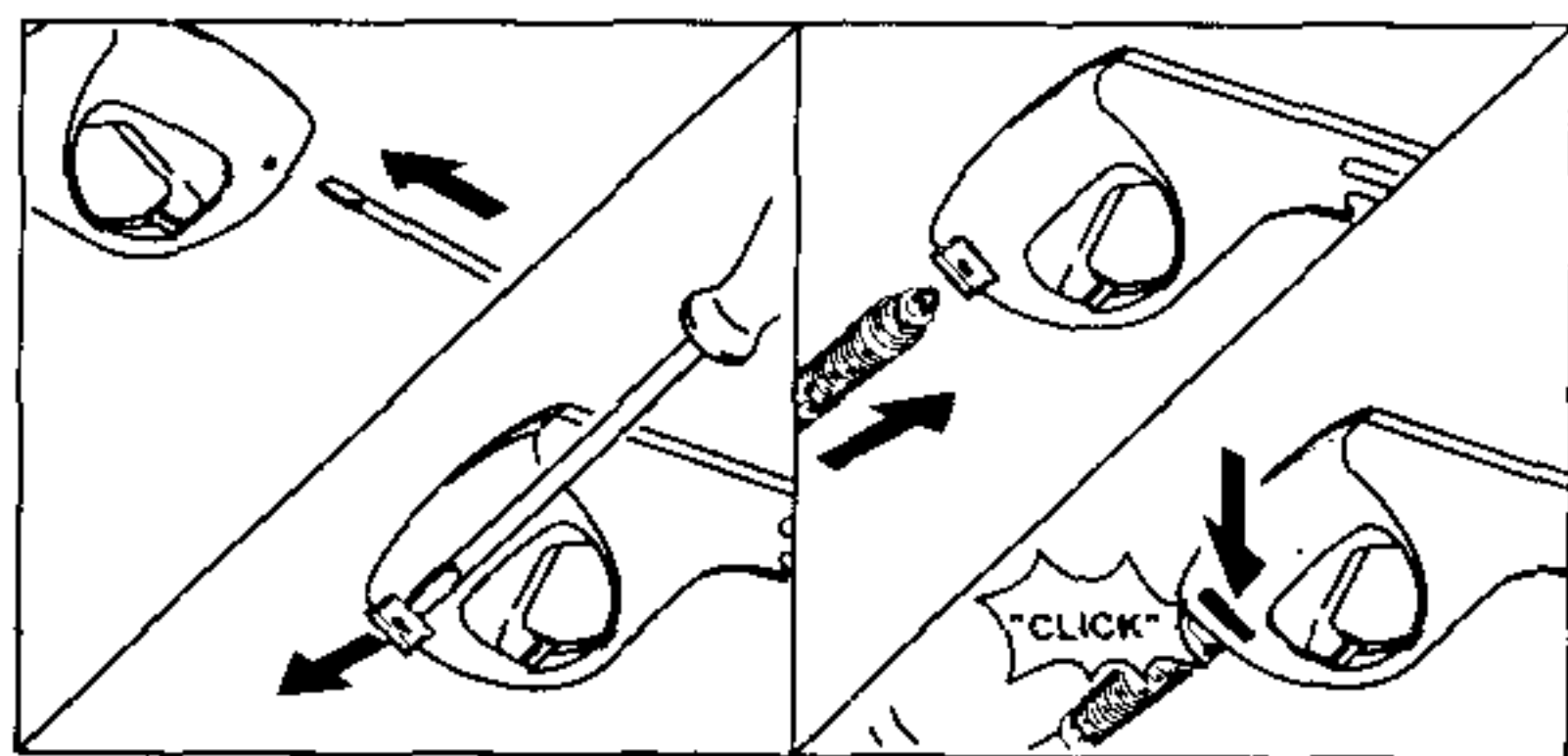
When unpacking the product, make sure that no accessories are missing and that none of the package contents have been damaged. If you detect any transport damages please contact your dealer.

Illustrations on Page 2

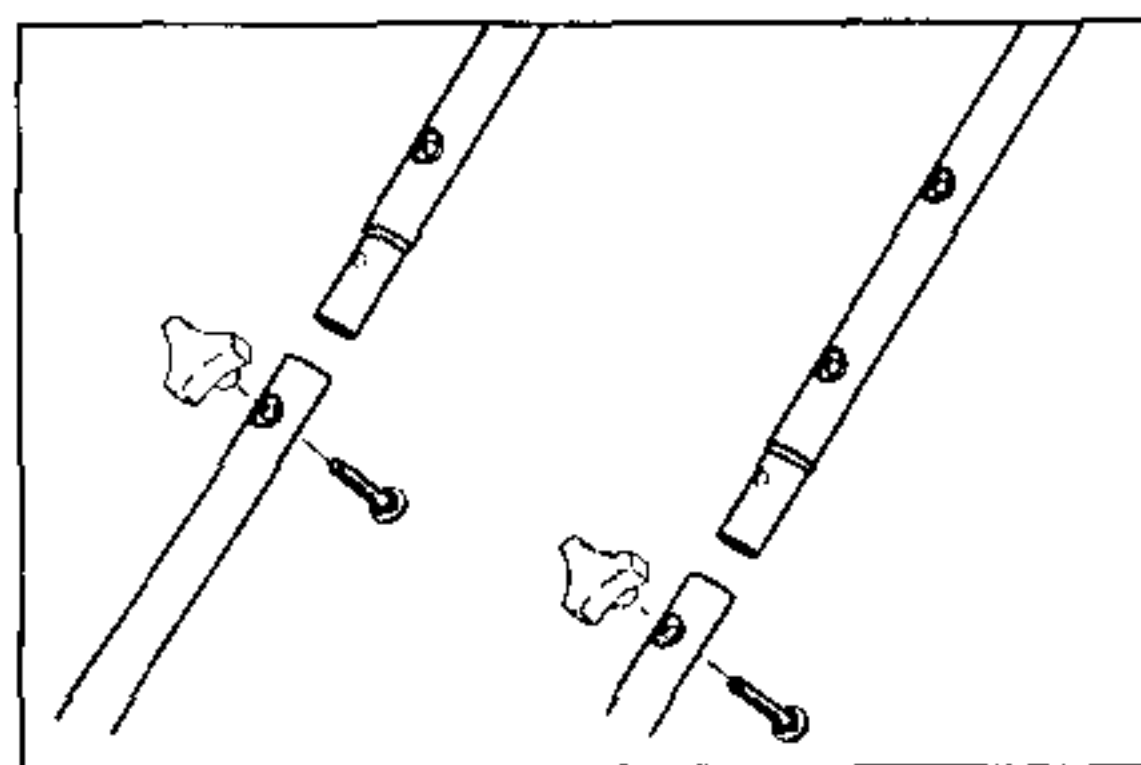
- 1 Spray lance with pressure regulation (Vario Power)
- 2 Spray lance with dirt blaster
- 3 Trigger gun with safety catch
- 4 HP hose
- 5 Transport handle
- 6 Accessory mount
- 7 Fastening for tube drum (optional)
- 8 DT suction hose with filter
- 9 Thermostat valve
- 10 HP outlet
- 11 Coupling element for water connection
- 12 Connection for water supply with filter
- 13 Motor; see operations instructions of the motor manufacturer
- 14 Operating instructions for the motor

Before Startup

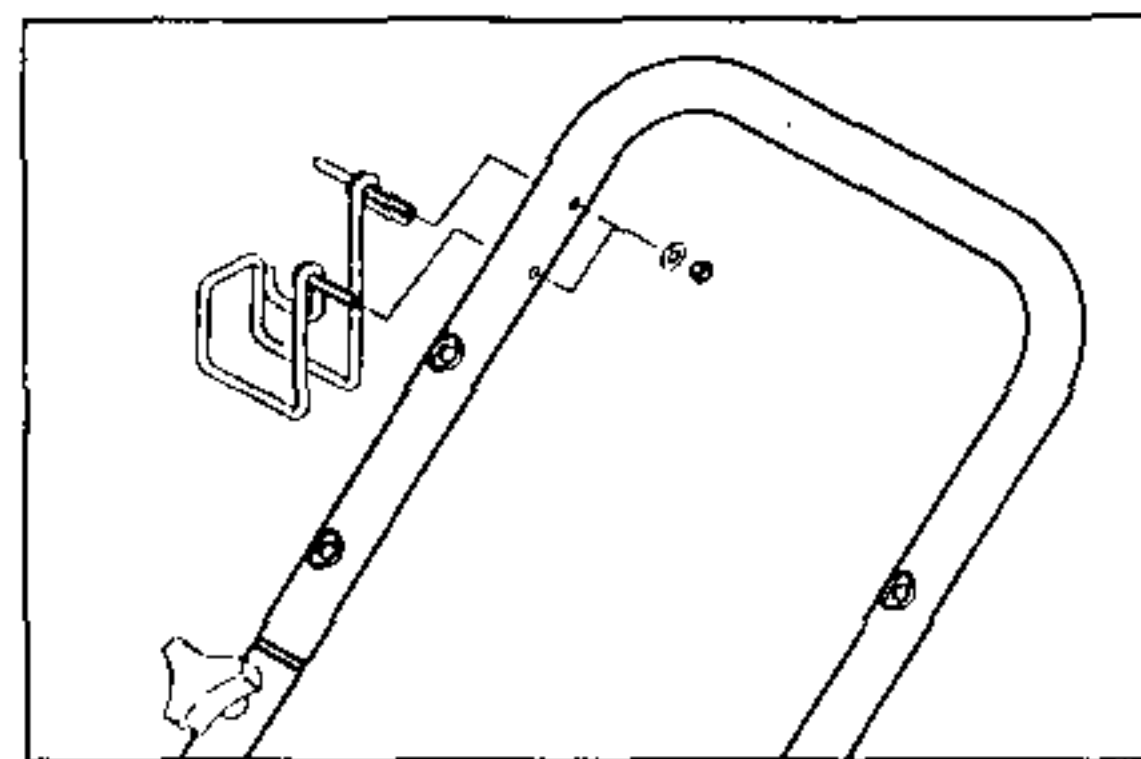
- Push out the safety clip in the trigger gun using e.g. a small screwdriver.
- Join HP hose and trigger gun together.
- Push clip in until it engages and check that it is securely fastened by pulling on the HP hose.



- Fasten the transport handle to the frame. Align the holes in such a way that the screws can pass through and then fasten the nuts.



- Fasten the accessoried holder.



Water supply

According to the applicable regulations, the appliance must never be used on the drinking water net without a system separator. Use a suitable system separator manufactured by Kärcher; or, as an alternative, a system separator as per EN 12729 Type BA.



Water supply from mains

For connection values, see type plate/technical data.

Observe regulations of water supplier.

- Use a fibre-reinforced hose (not included) with a standard coupling: - Minimum diameter, 1/2 inches (13 mm).
- Screw the coupling unit (supplied) to the water connection on the appliance.
- Push the water supply hose onto the coupling unit, then connect it to the tap.

⚠ Caution

Never operate the high-pressure cleaner when the tap is turned off as dry running will damage the HP pump.

If the water supply is not clean, the Kärcher water filter must be used (special accessory - order No. 4.730-059).

Drawing in water from open reservoirs

When fitted with the appropriate accessories, this high-pressure cleaner can draw in surface water, e.g. from water butts or ponds.

- As the coupling system is not suitable for use in suction mode, the Kärcher suction hose with integrated filter should be used instead (special accessory, order no. 4.440-238) and suspended inside the water butt.
- Use the Kärcher water filter to protect the HP pump and accessories (special accessories, order no. 4.730-059). This filter removes dirt from incoming water.
- Appliance ventilation.
Let the appliance run when the HP hose is not connected and run it until the water which discharges from the HP outlet is free of bubbles. Switch off appliance and connect HP hose.

Start up

- Fill up the fuel tank and check the oil level.
See Operating Instructions of motor.
- Screw HP hose on to HP outlet on appliance.
- Push the appropriate spray lance on to the trigger gun and fasten it by turning it through 90°.
- Open tap.
- Start the motor.
See Operating Instructions of motor.
- Press safety catch on the trigger gun to release it and pull lever.

High pressure operation

⚠ Risk of injury

The trigger gun is subjected to a recoil force when the water jet is discharged. Make sure that you have a firm footing and are also holding the trigger gun and spray lance firmly.

Spray lance with pressure regulation

Carrying out the most common cleaning tasks. The work pressure can be stagelessly regulated between "Min" and "Max".

- Release the lever on the trigger gun.
- Turn the spray lance to the desired position.

Spray lance with dirt blaster

For strong contaminations.

Operation with detergent

Note:

Detergent can only be added when the appliance is being operated in low pressure mode.

- Use spray lance with pressure regulation (Vario Power).
- Turn the spray lance to "Mix" position - low pressure.

DT take-up from container

- Dose the detergent at the DT filter.
 - Medium quantity: Central position
 - Large quantity: "+" position
 - Small quantity: "-" position
- Place the end the DT suction hose in a container with DT solution.

Recommended Cleaning Method

- 1 Spray a small dose of the detergent on the dry surface, and allow it to react (make sure the detergent does not dry up).
- 2 Wash off the loosened dirt using the high-pressure jet.

Detergents

To ensure a trouble-free operation of the appliance and to match the individual cleaning task, we recommend our Kärcher detergent and maintenance agents. Please ask for our advice, or request information on the products.

Interrupting operation

- Release the lever on the trigger gun.
Note: *When the lever of the handgun is released, the motor continues to run at zero speed. The water thus circulates within the pump and gets heated. When the water has reached the maximum permissible temperature (60°C), the thermostat valve opens and water flows out.*
- Use the safety catch to secure the handgun lever.
- During longer breaks (more than 5 minutes), also turn off the motor.

Finish operation

- If detergent has been added: Suspend detergent suction hose in a container filled with clear water, switch the appliance on for around 1 minute once the spray lance has been removed and rinse until water runs clear.
- Release the lever on the trigger gun.
- Stop the motor.
See Operating Instructions of motor.
- Turn off tap.
- Press the lever on the trigger gun to release any remaining pressure in the system.
- Disconnect the appliance from the water supply.
- Detach spray lance from the trigger gun.
- Use the safety catch to secure the handgun lever.

Frost protection

⚠ Risk of frost

Protect the appliance and accessories against frost.

The appliance and its accessories can get destroyed through frost if there are any water residues in them. To avoid damage to them:

- Store the appliance and the entire accessories in a frost-safe room.

Flush device with anti-freeze agent

During longer breaks in operation, it is advisable to pump in anti-frost agents into the appliance.

A certain corrosion protection is achieved with this as well.

- Pump in conventional frost protection agents through the appliance.

Note

Observe handling instructions of the anti-freeze agent manufacturer.

Maintenance and care

⚠ Warning

To avoid risks, all repairs and replacement of spare parts may only be carried out by the authorised customer service personnel.

Cleaning

Prior to longer periods of storage, e.g. in the winter:

- Remove filter from suction hose for detergent and clean with running water.
- Pull out filter in water connection using flat-nose pliers and clean with running water.

Maintenance

Pump: The pump is maintenance-free.

Motor: Carry out maintenance tasks to the motor according to the specifications provided in the operating instructions of the motor manufacturer.

Adjust the air pressure in the tyres

⚠ Warning

- Please check and confirm that all 4 screws of the rim are tightened before correcting the tire filling pressure.
- Set the pressure reducer on the compressor at 170 kPa (1.7 bar) before correcting the tire pressure.
- Tire pressure should not exceed 170 kPa (1.7 bar).

Troubleshooting

You can rectify minor faults yourself with the help of the following overview.

If in doubt, please consult the authorized customer service!

Appliance is not running

- Follow operating instructions of the motor manufacturer!

Pressure does not build up in the appliance

- Check the setting at the spray lance.
- Evacuate air from the appliance: Switch on the appliance when the HP hose is not connected and allow it to run until the water which discharges from the HP outlet is free of bubbles. Then connect the HP hose again.
- Clean the filter in the water supply connection: This can be easily removed using flat-nose pliers.
- Check all supply lines to the HP pump for leaks or blockages.
- Overflow valve blocked: Press the lever on the handgun many times.

Strong pressure fluctuations

- Clean the high-pressure nozzle: Remove dirt and debris from the nozzle bore with a needle and rinse through with water towards the front.
- Check the volume of incoming water.

HP pump leaking

- Slight leakage from the HP pump is normal. If the leaks are heavy, please consult the authorized customer service.

No detergent infeed

- Select the low-pressure setting for the spray lance.
- Clean the filter of the detergent suction hose.
- Check the DT suction hose for kinks.

Accessories and Spare Parts

The appliance may only be equipped with original accessories and spare parts.

At the end of the operating instructions you will find a selected list of spare parts that are often required.

For additional information about spare parts, please go to the Service section at www.kaercher.com.

Warranty

The terms of the guarantee applicable in each country have been published by our respective national distributors. We will repair possible faults on your unit free of charge within the warranty period, insofar as the faults are caused by material defects or defective workmanship. Guarantee claims should be addressed to your dealer or the nearest authorized customer service centre, and supported by documentary evidence of purchase.

Special accessories

Special accessories expand the possibilities of using your appliance. Please contact your Kärcher dealer for further information.

Specifications

Motor	Honda GC 160
Power	4,0 kW
Motor; see operations instructions of the motor manufacturer	
Water connection	
Max. feed temperature	40 °C
Min. feed volume	10 l/min
Max. feed pressure	1,2 MPa
Suction height	0,5 m
Performance data	
Working pressure	14 MPa
Max. permissible pressure	16 MPa
Water flow rate	7,9 l/min
Detergent flow rate	0,3 l/min
Recoil force of trigger gun	26,5 N
Hand-arm vibration (ISO 5349)	3,1 m/s ²
Sound pressure level L _{PA} (EN60704-1)	90 dB(A)
Sound power level L _{WA} (2000/14/EG)	104 dB(A)
Dimensions	
Length	835 mm
Width	580 mm
Height	800 mm
Weight	28 kg
Tyre pressure (max.)	172 kPa

Subject to technical modifications!

CE declaration

We hereby declare that the machine described below complies with the relevant basic safety and health requirements of the EU Directives, both in its basic design and construction as well as in the version put into circulation by us. This declaration shall cease to be valid if the machine is modified without our prior approval.

Product: High-pressure cleaner

Type: 1.194-xxx

Relevant EU Directives

98/37/EC

2006/95/EC

89/336/EEC (+91/263/EEC, 92/31/EEC, 93/68/EEC)

2000/14/EC

Applied harmonized standards

EN 60335-1

EN 60335-2-79

EN 50082-2: 1994

Applied national standards

CISPR 12

Applied conformity evaluation method

Appendix V

Sound power level dB(A)

Measured: 103 dB(A)

Guaranteed: 104 dB(A)

The undersigned act on behalf and under the power of attorney of the company management.


H. Jenner


S. Reiser

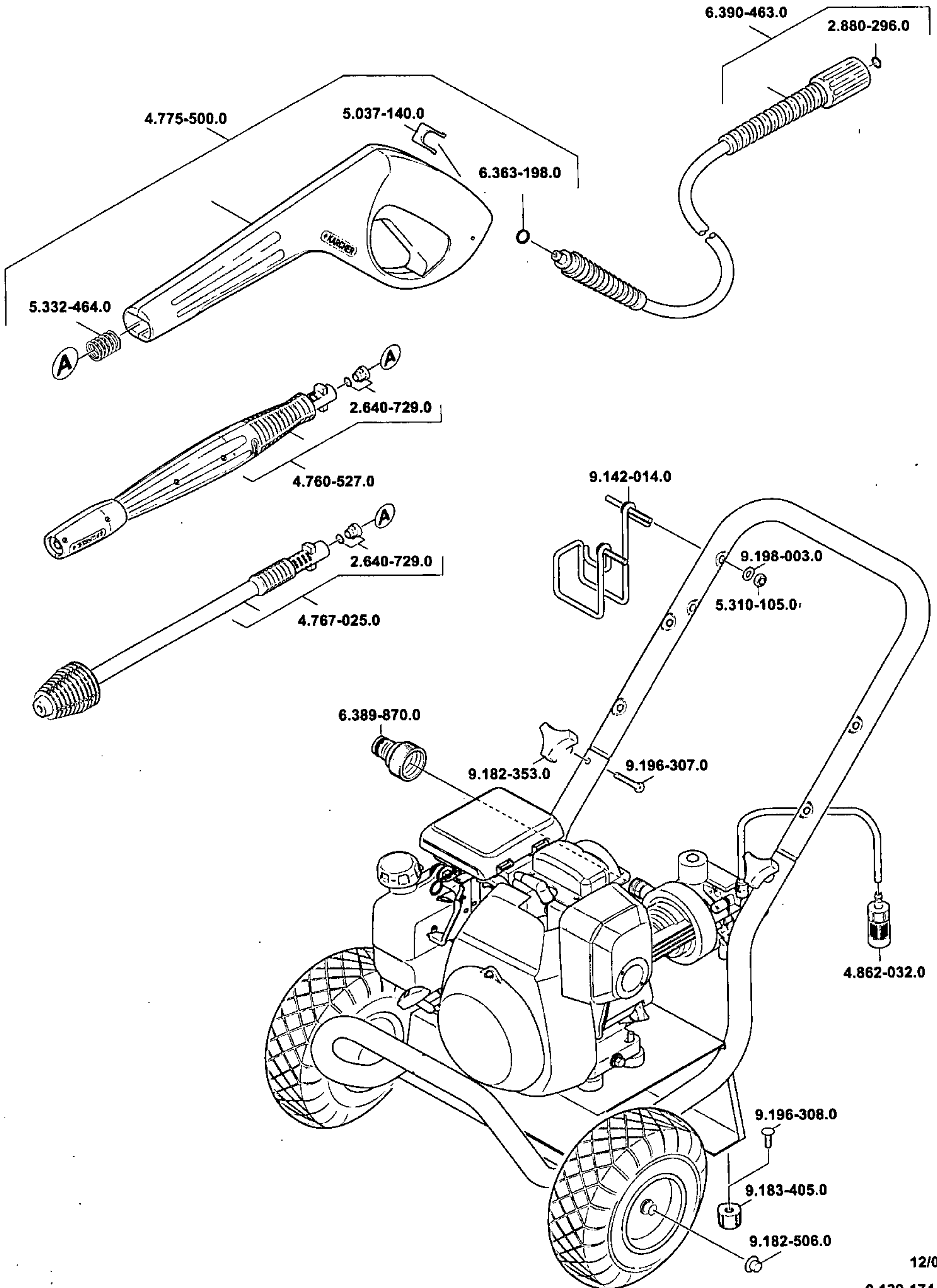
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12/05
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 **KÄRCHER**

www.kaercher.com

INTRODUCTION

Thank you for purchasing a Honda engine. We want to help you to get the best results from your new engine and to operate it safely. This manual contains information on how to do that; please read it carefully before operating the engine. If a problem should arise, or if you have any questions about your engine, consult an authorized Honda servicing dealer.


All information in this publication is based on the latest product information available at the time of printing. American Honda Motor Co., Inc. reserves the right to make changes at any time without notice and without incurring any obligation. No part of this publication may be reproduced without written permission.

This manual should be considered a permanent part of the engine and should remain with the engine if resold.

Review the instructions provided with the equipment powered by this engine for any additional information regarding engine startup, shutdown, operation, adjustments or any special maintenance instructions.

SAFETY MESSAGES

Your safety and the safety of others is very important. We have provided important safety messages in this manual and on the engine. Please read these messages carefully.

A safety message alerts you to potential hazards that could hurt you or others. Each safety message is preceded by a safety alert symbol  and one of three words, DANGER, WARNING, or CAUTION.

These signal words mean:

 **DANGER**

You WILL be KILLED or SERIOUSLY HURT if you don't follow instructions.

 **WARNING**

You CAN be KILLED or SERIOUSLY HURT if you don't follow instructions.

 **CAUTION**

You CAN be HURT if you don't follow instructions.

Each message tells you what the hazard is, what can happen, and what you can do to avoid or reduce injury.

DAMAGE PREVENTION MESSAGES

You will also see other important messages that are preceded by the word NOTICE.

This word means:

NOTICE

Your engine or other property can be damaged if you don't follow instructions.

The purpose of these messages is to help prevent damage to your engine, other property, or the environment.

SAFETY INFORMATION

- Understand the operation of all controls and learn how to stop the engine quickly in case of emergency. Make sure the operator receives adequate instruction before operating the equipment.
- Your engine's exhaust contains poisonous carbon monoxide. Do not run the engine without adequate ventilation, and never run the engine indoors.
- The engine and exhaust become very hot during operation. Keep the engine at least 3 feet (1 meter) away from buildings and other equipment during operation. Keep flammable materials away, and do not place anything on the engine while it is running.

HONDA ENGINES

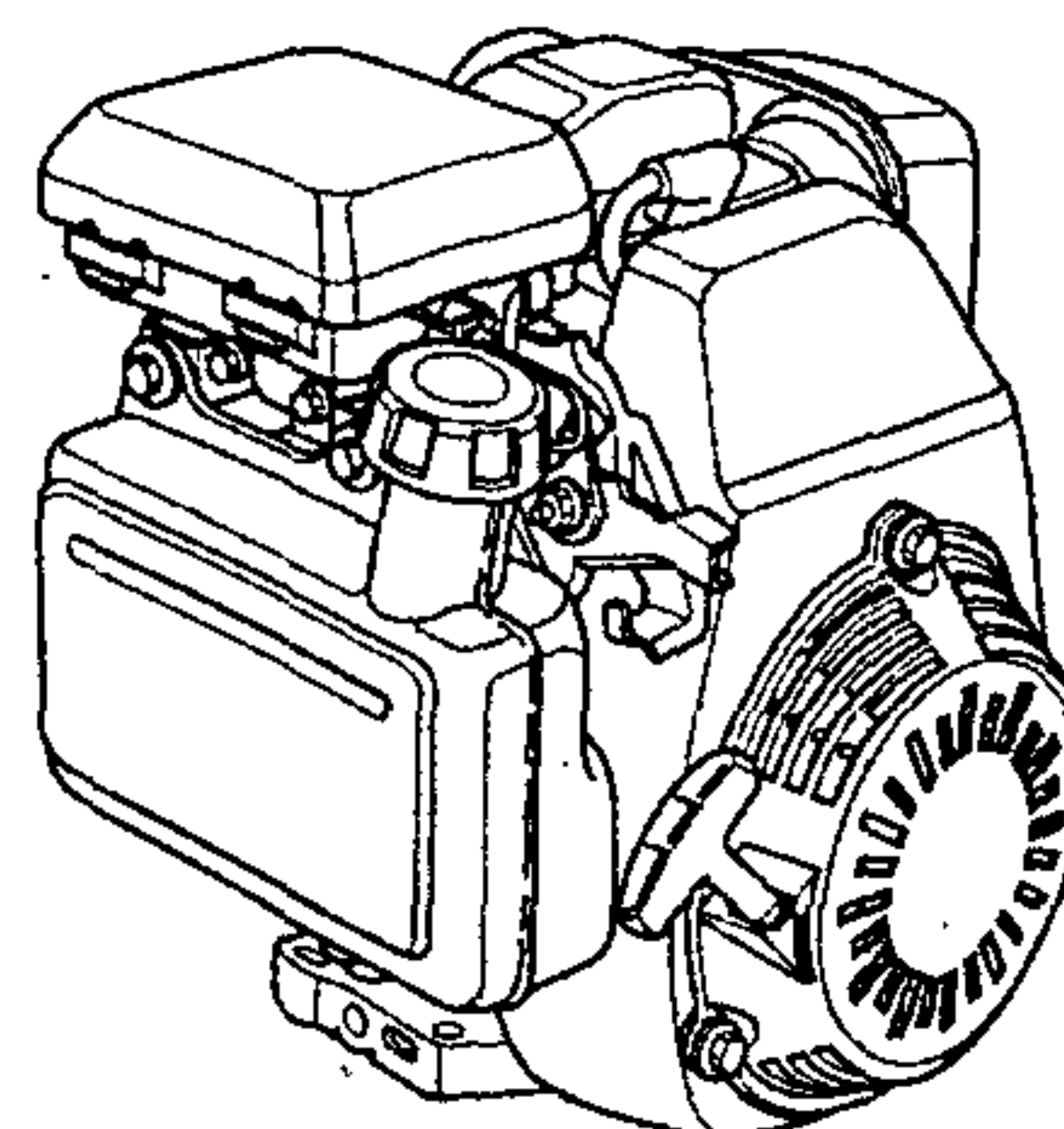
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OWNER'S MANUAL

MANUEL DE L'UTILISATEUR

MANUAL DEL USUARIO

GC160 • GC190



39Z0JA00
00X39-Z0J-A000

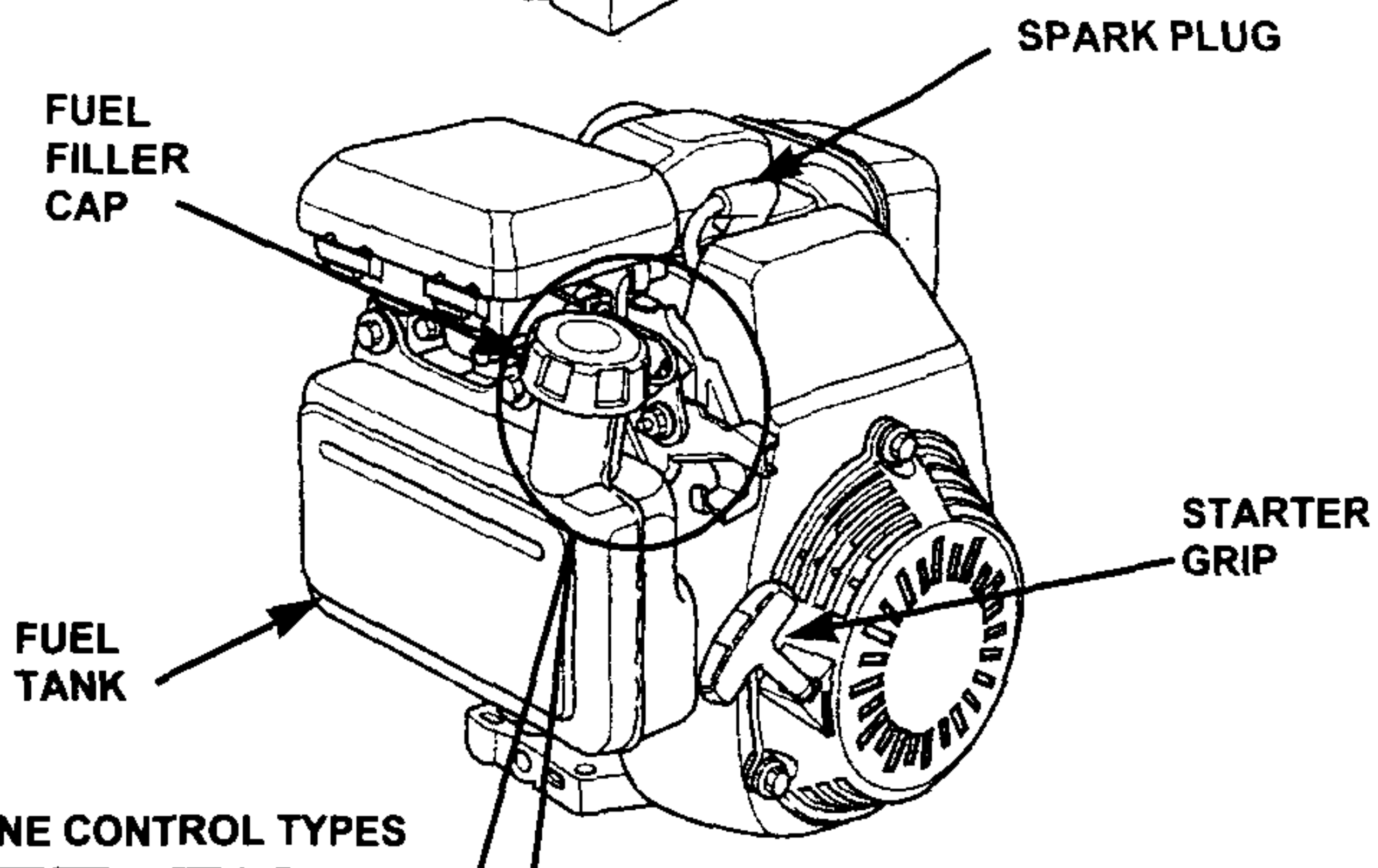
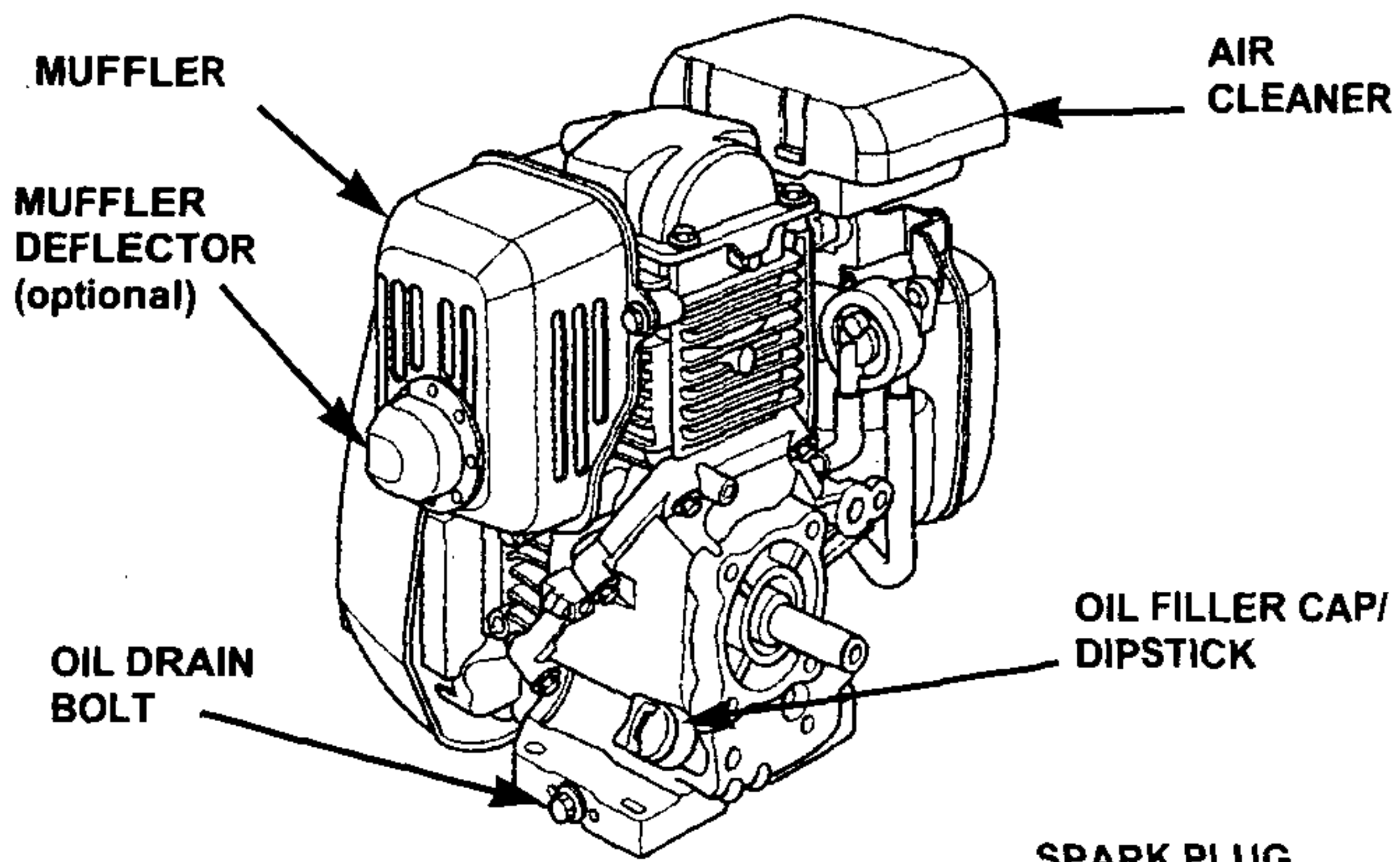


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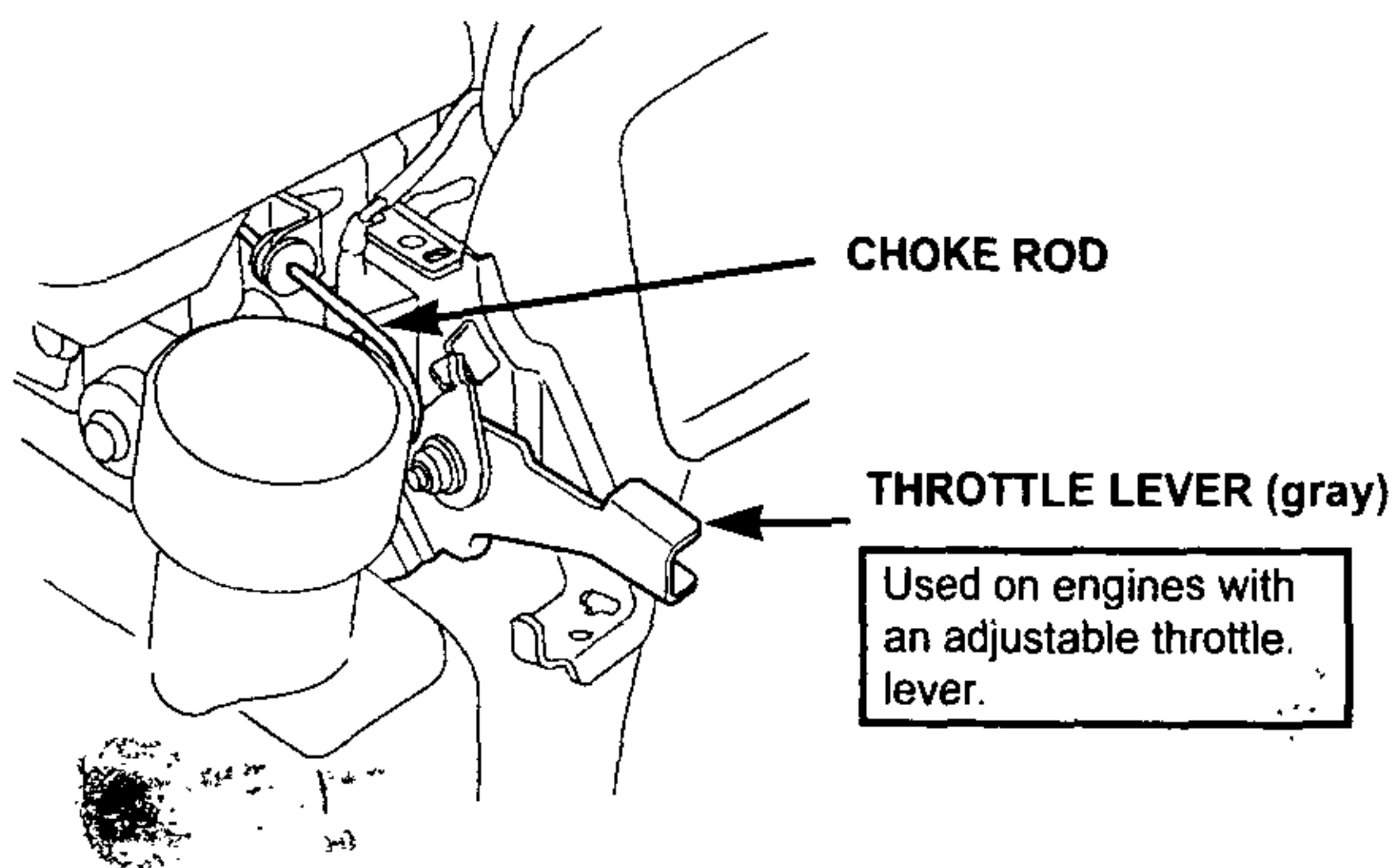
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COMPONENT & CONTROL LOCATION

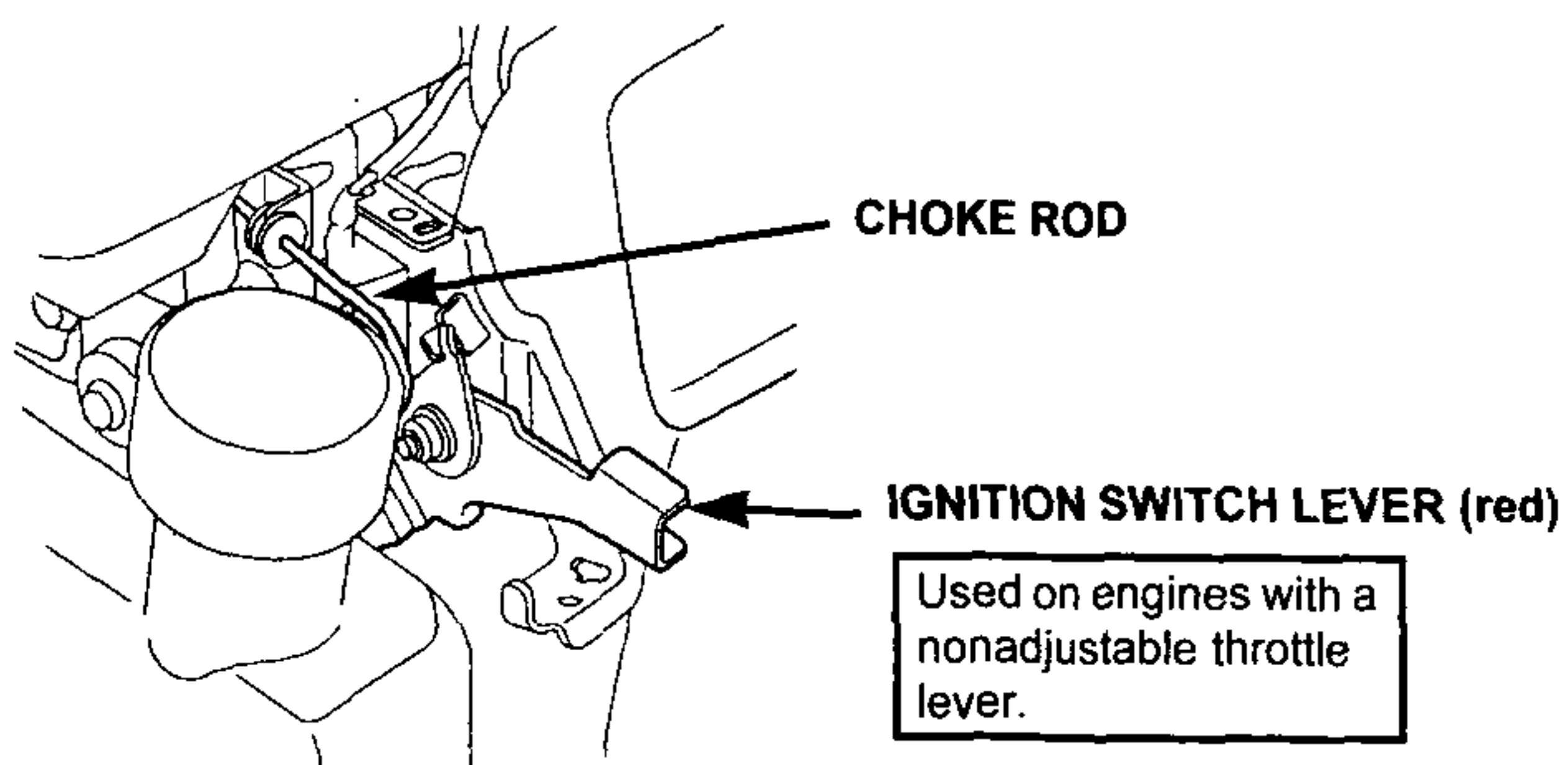


ENGINE CONTROL TYPES

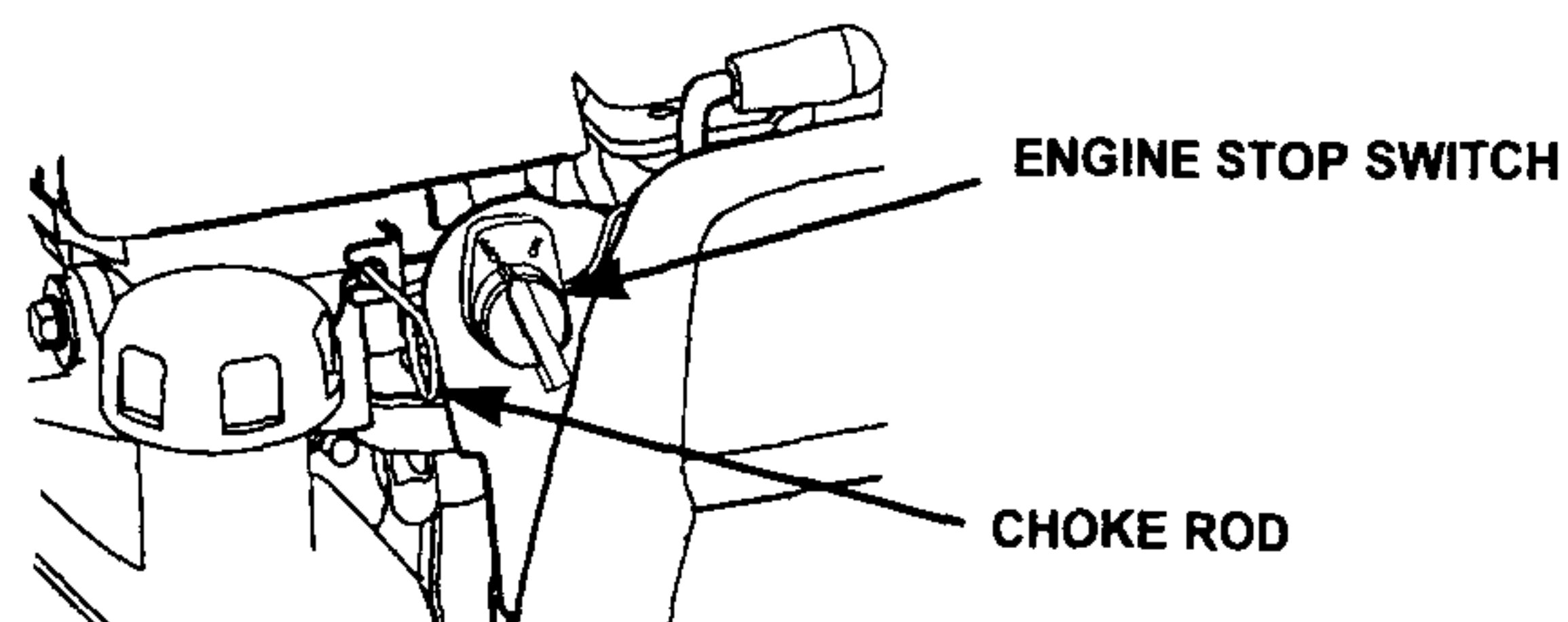
TYPE 1: MANUAL THROTTLE / MANUAL CHOKE



TYPE 2: FIXED THROTTLE / IGNITION SWITCH LEVER / MANUAL CHOKE



TYPE 3: FIXED THROTTLE / ENGINE STOP SWITCH / MANUAL CHOKE



BEFORE OPERATION CHECKS

IS YOUR ENGINE READY TO GO?

For your safety, and to maximize the service life of your equipment, it is very important to take a few moments before you operate the engine to check its condition. Be sure to take care of any problem you find, or have your servicing dealer correct it, before you operate the engine.

⚠ WARNING

Improperly maintaining this engine, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously hurt or killed.

Always perform a preoperation inspection before each operation, and correct any problem.

Before beginning your preoperation checks, be sure the engine is level and the throttle lever (ignition switch lever or engine stop switch) is in the STOP position.

Always check the following items before you start the engine:

1. Fuel level (see page 5).
2. Oil level (see page 5).

The Oil Alert[®] system (applicable engine types) will automatically stop the engine before the oil level falls below safe limits. However, to avoid the inconvenience of an unexpected shutdown, always check the engine oil level before startup.

3. Air cleaner (see page 6).
4. General inspection: Check for fluid leaks and loose or damaged parts.
5. Check the equipment powered by this engine.

Review the instructions provided with the equipment powered by this engine for any precautions and procedures that should be followed before engine startup.

OPERATION

SAFE OPERATING PRECAUTIONS

Before operating the engine for the first time, please review the **SAFETY INFORMATION** section on page 1 and the **BEFORE OPERATION CHECKS** above.

⚠ WARNING

Carbon monoxide gas is toxic. Breathing it can cause unconsciousness and even kill you.

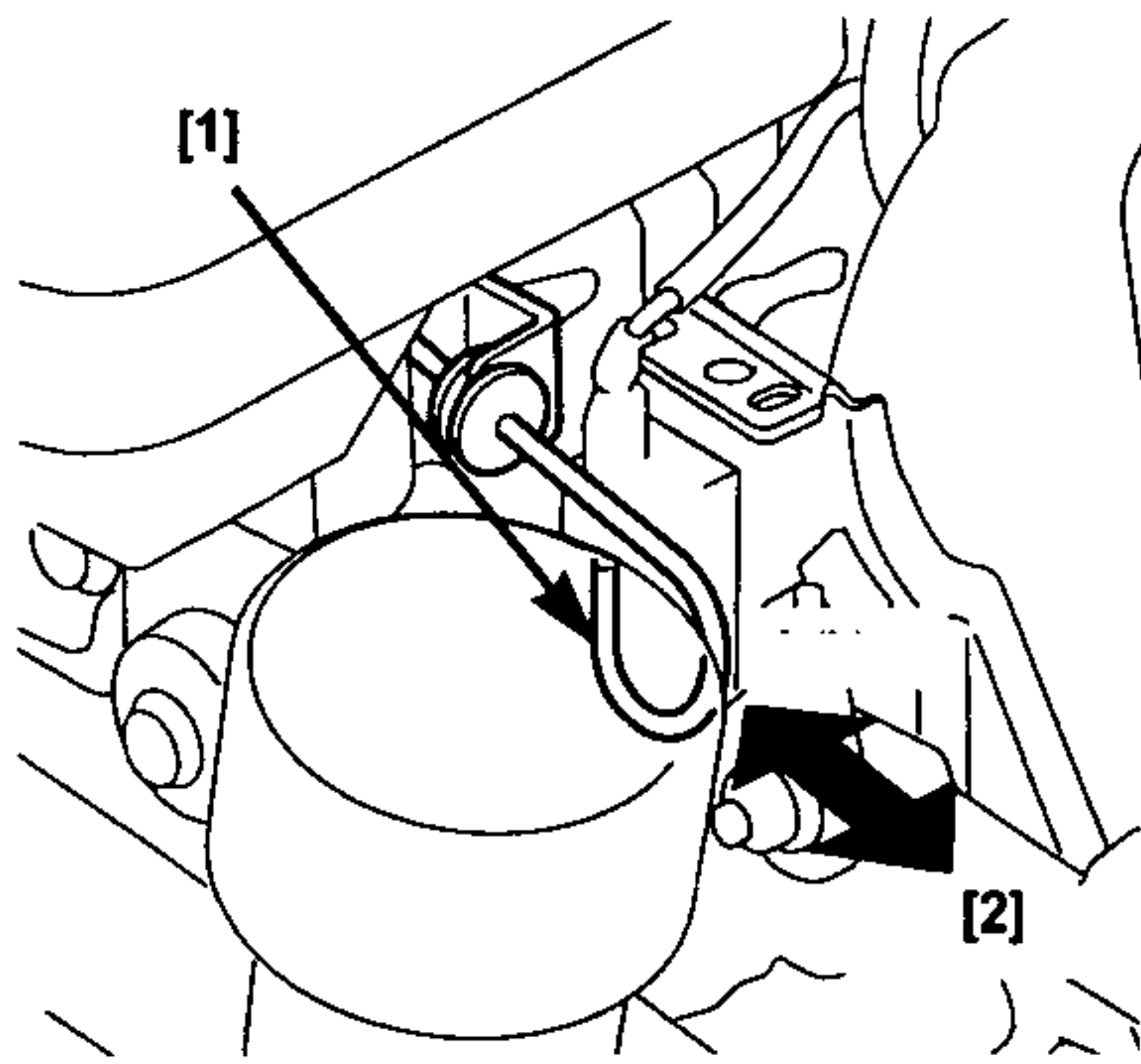
Avoid any areas or actions that expose you to carbon monoxide.

Review the instructions provided with the equipment powered by this engine for any safety precautions that should be observed with engine startup, shutdown or operation.

TYPE 1: MANUAL THROTTLE / MANUAL CHOKE

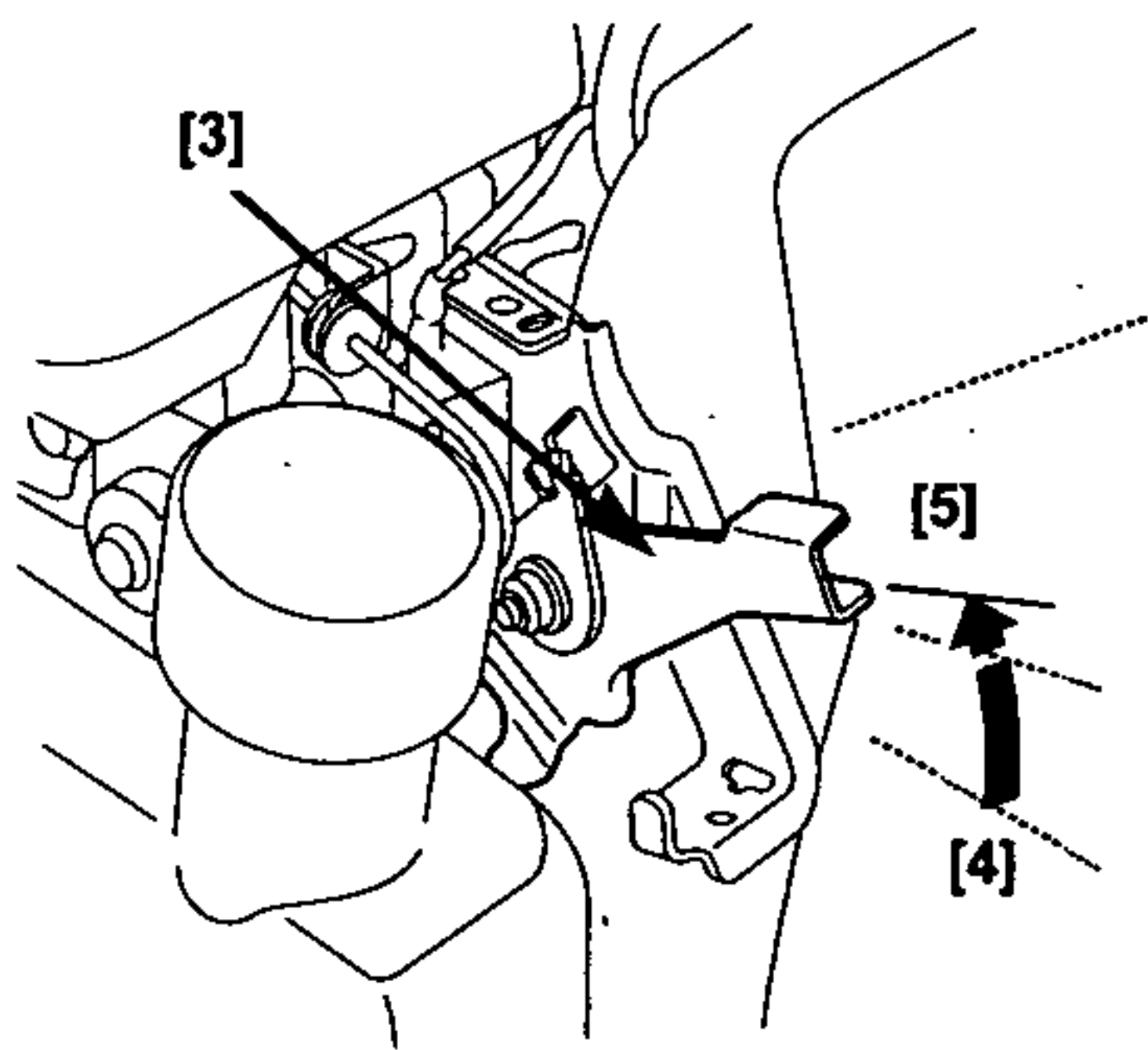
Starting a Cold Engine

1. Pull the choke rod [1] to the CLOSED [2] position.



2. Move the throttle lever (gray) [3] away from the SLOW [4] position, about 1/3 of the way toward the FAST [5] position.

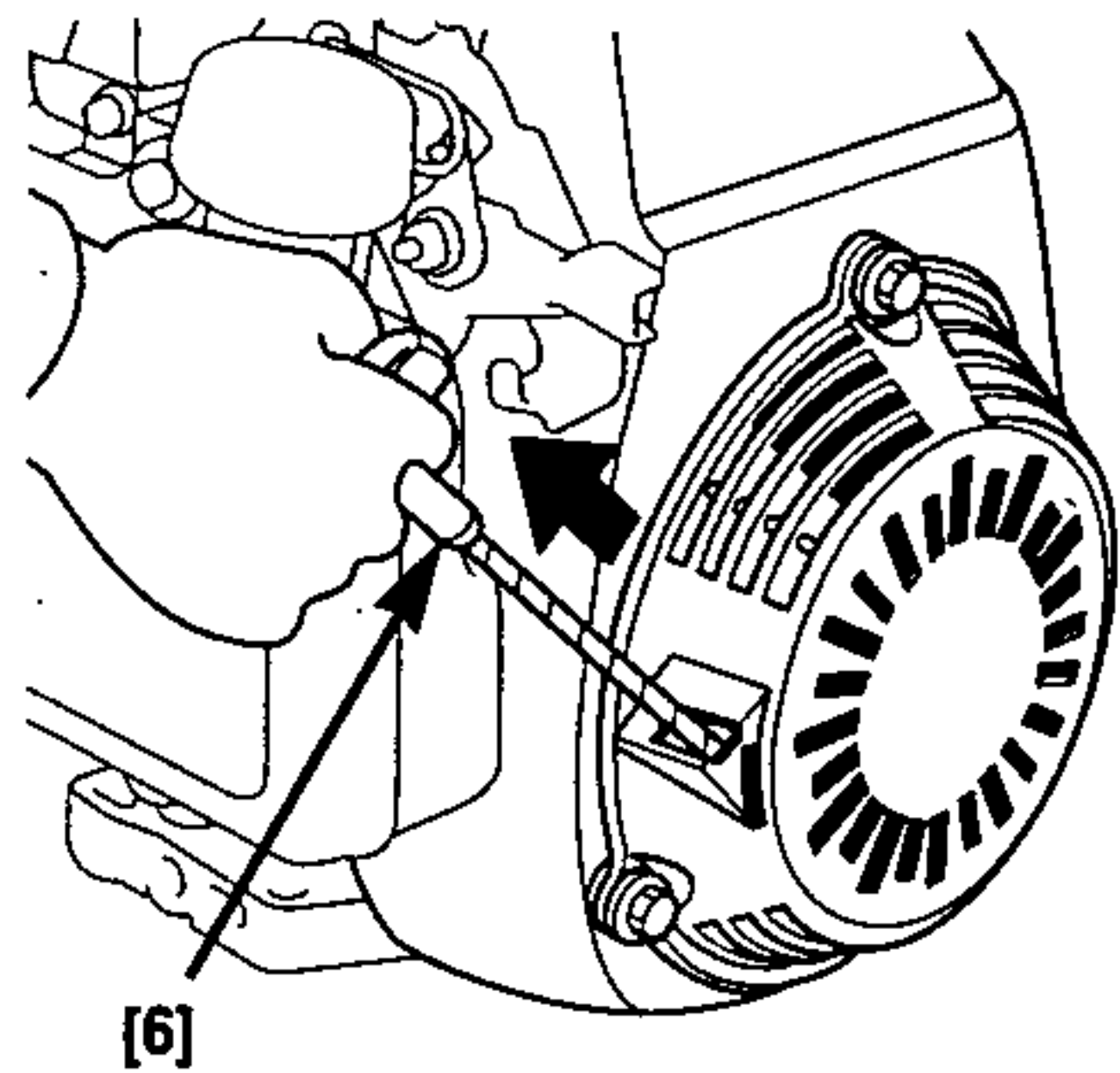
Some engine applications use a remotely-mounted throttle control rather than the engine-mounted throttle lever shown here.



3. Pull the starter grip [6] lightly until resistance is felt, then pull briskly.

NOTICE

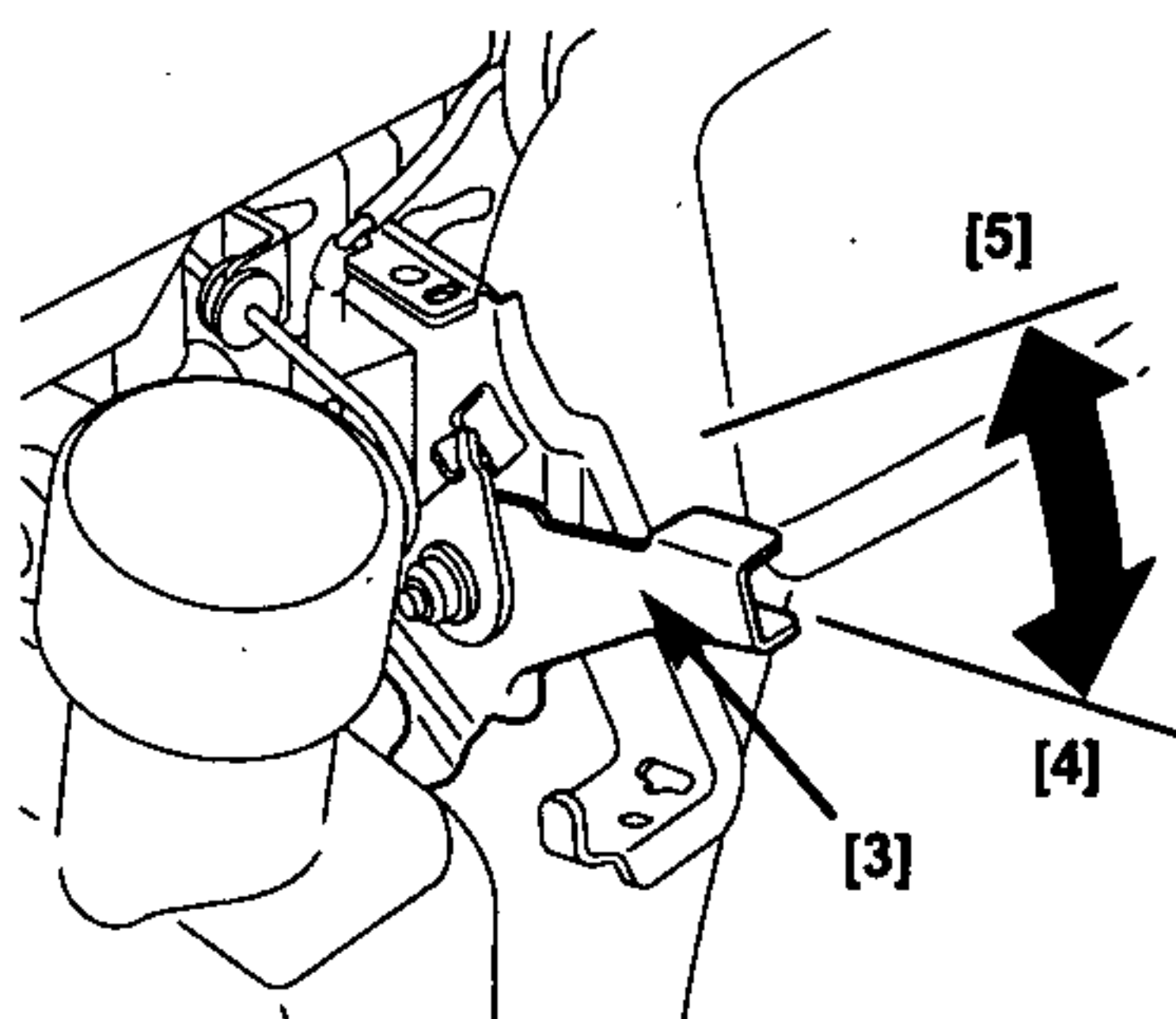
Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.



4. If the choke rod was pulled to the CLOSED position to start the engine, push it to the OPEN position as soon as the engine warms up enough to run smoothly.

Throttle Setting

Position the throttle control lever (gray) [3] for the desired engine speed. For best engine performance, it is recommended the engine be operated with the throttle in the FAST [5] (or high) position.



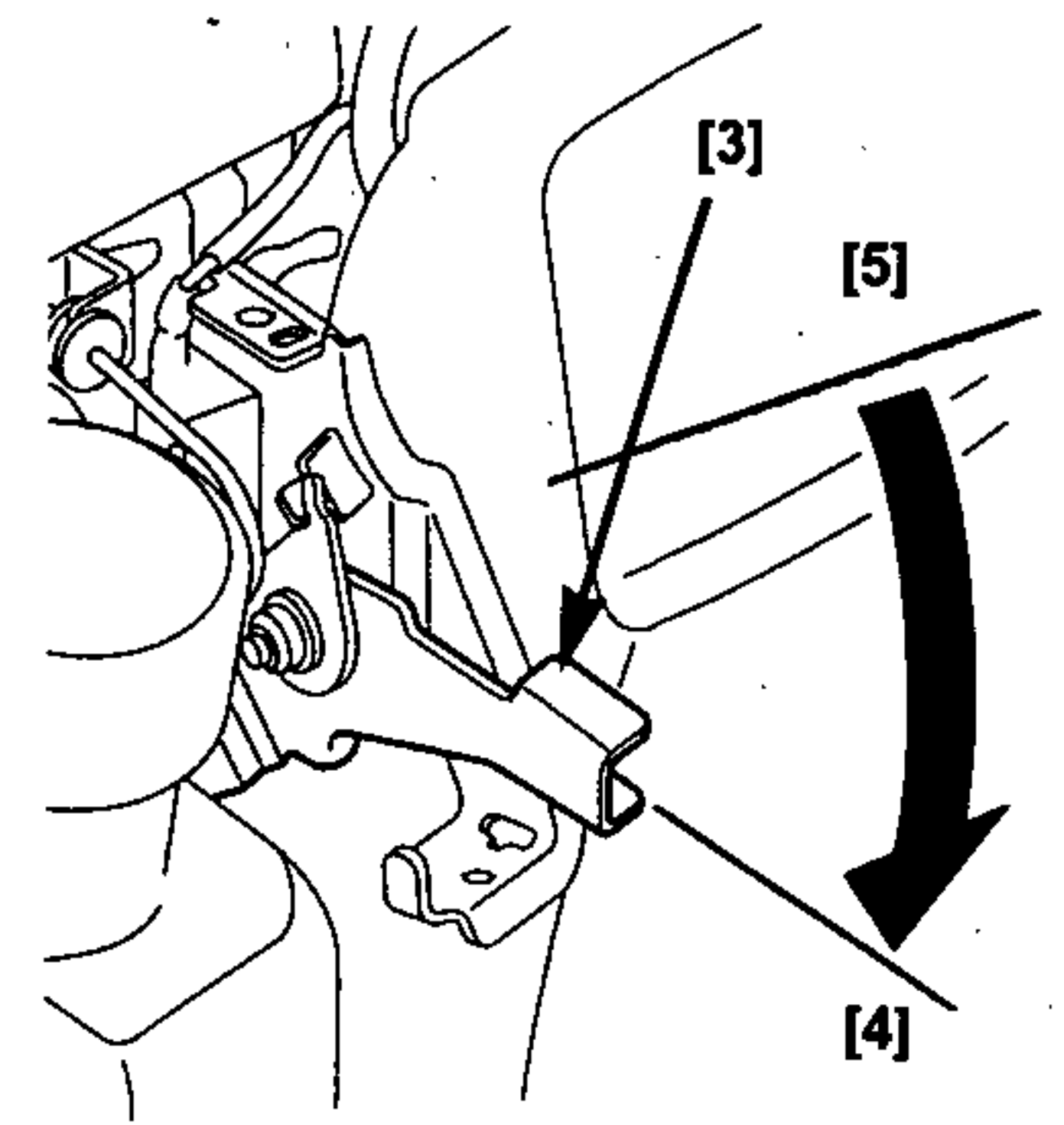
Starting a Warm Engine

If the engine has run out of fuel, pull the choke rod to the CLOSED position after refueling. If the engine has not run out of fuel, leave the choke rod in the OPEN position.

1. Place the throttle lever in the FAST [5] position.
2. Pull the starter grip lightly until you feel resistance, then pull briskly.

Stopping the Engine

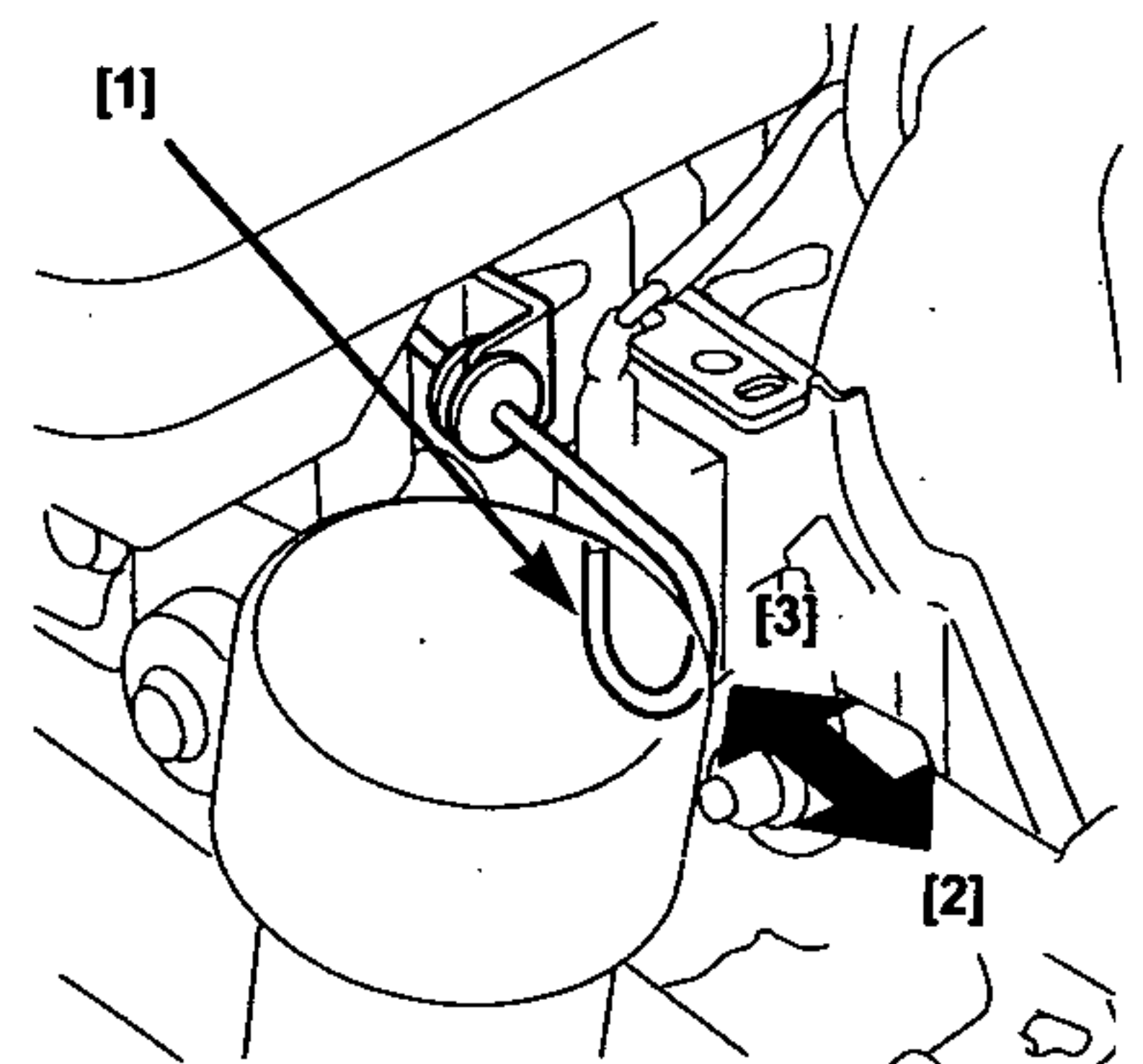
1. Move the throttle lever (gray) to the SLOW [4] position.
2. Allow the engine to idle for a few seconds, then move the throttle lever to the STOP position.



TYPE 2: FIXED THROTTLE / IGNITION SWITCH LEVER / MANUAL CHOKE

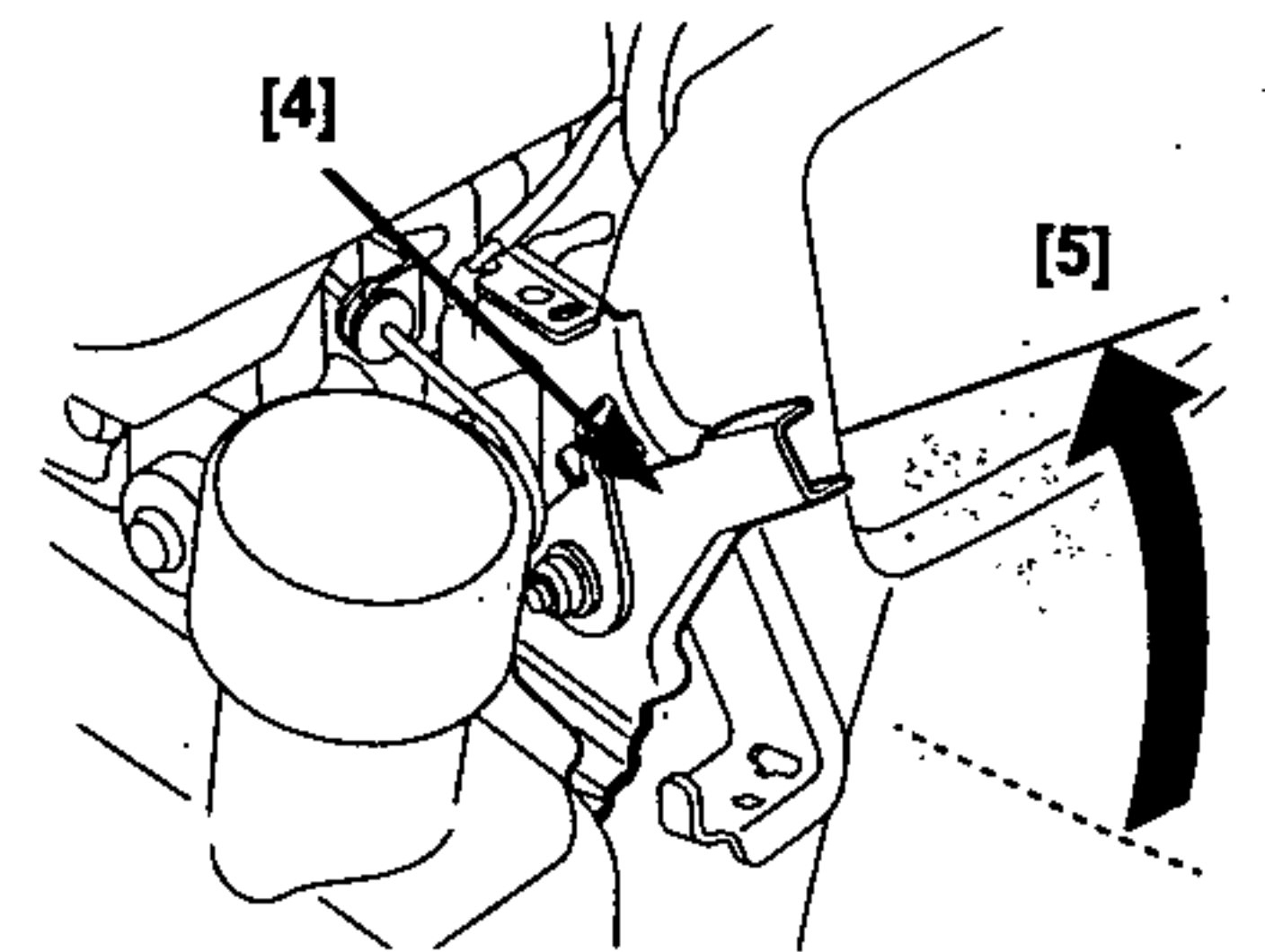
Starting a Cold Engine

1. Pull the choke rod [1] to the CLOSED [2] position.



2. Move the ignition switch lever (red) [4] to the ON [5] position.

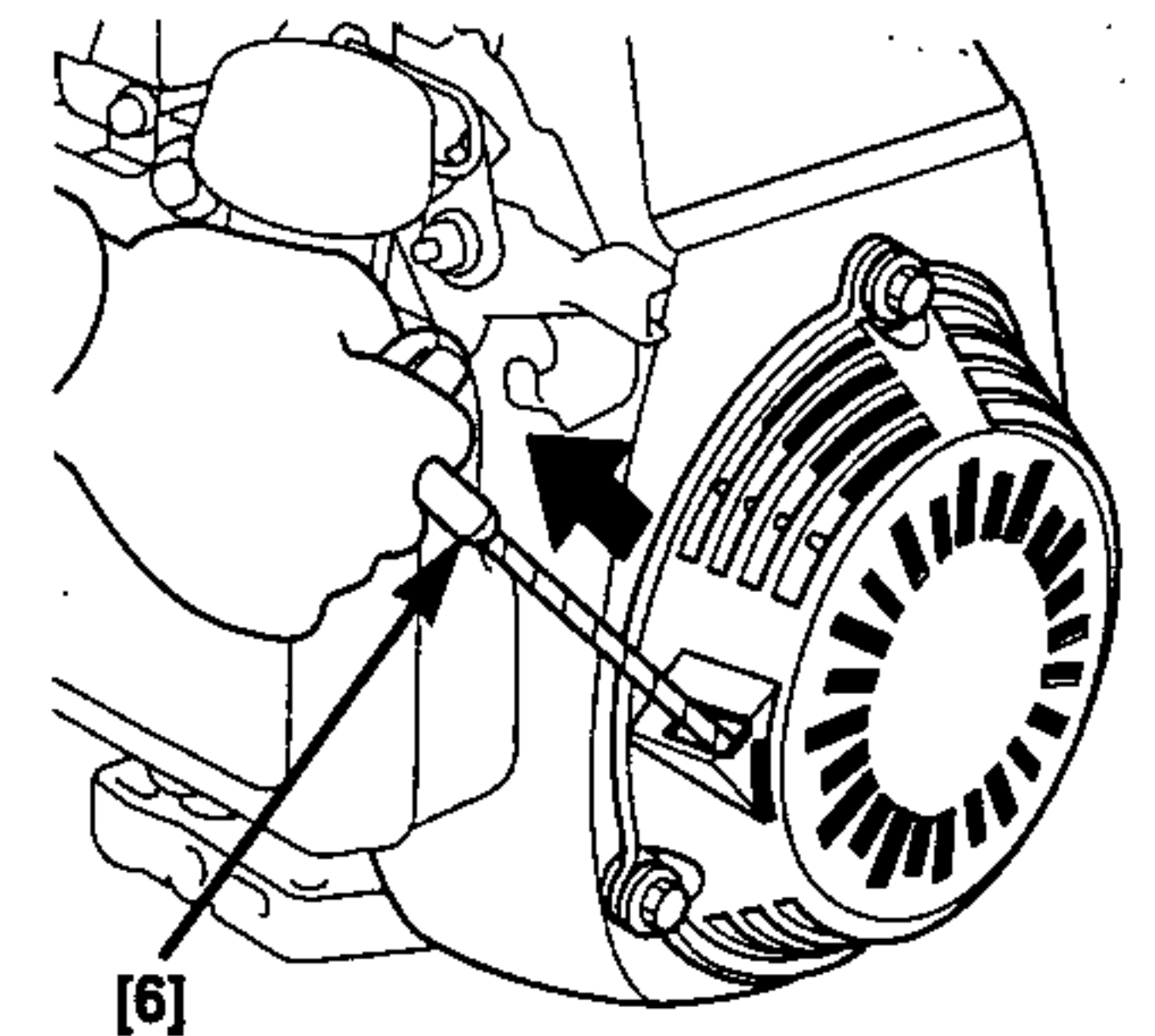
Some engine applications use a remotely-mounted ignition switch rather than the engine-mounted ignition switch lever shown here.



3. Pull the starter grip [6] lightly until resistance is felt, then pull briskly.

NOTICE

Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.



4. If the choke rod was pulled to the CLOSED [2] position to start the engine, push it to the OPEN [3] position as soon as the engine warms up enough to run smoothly.
5. The engine speed is preset on this type.

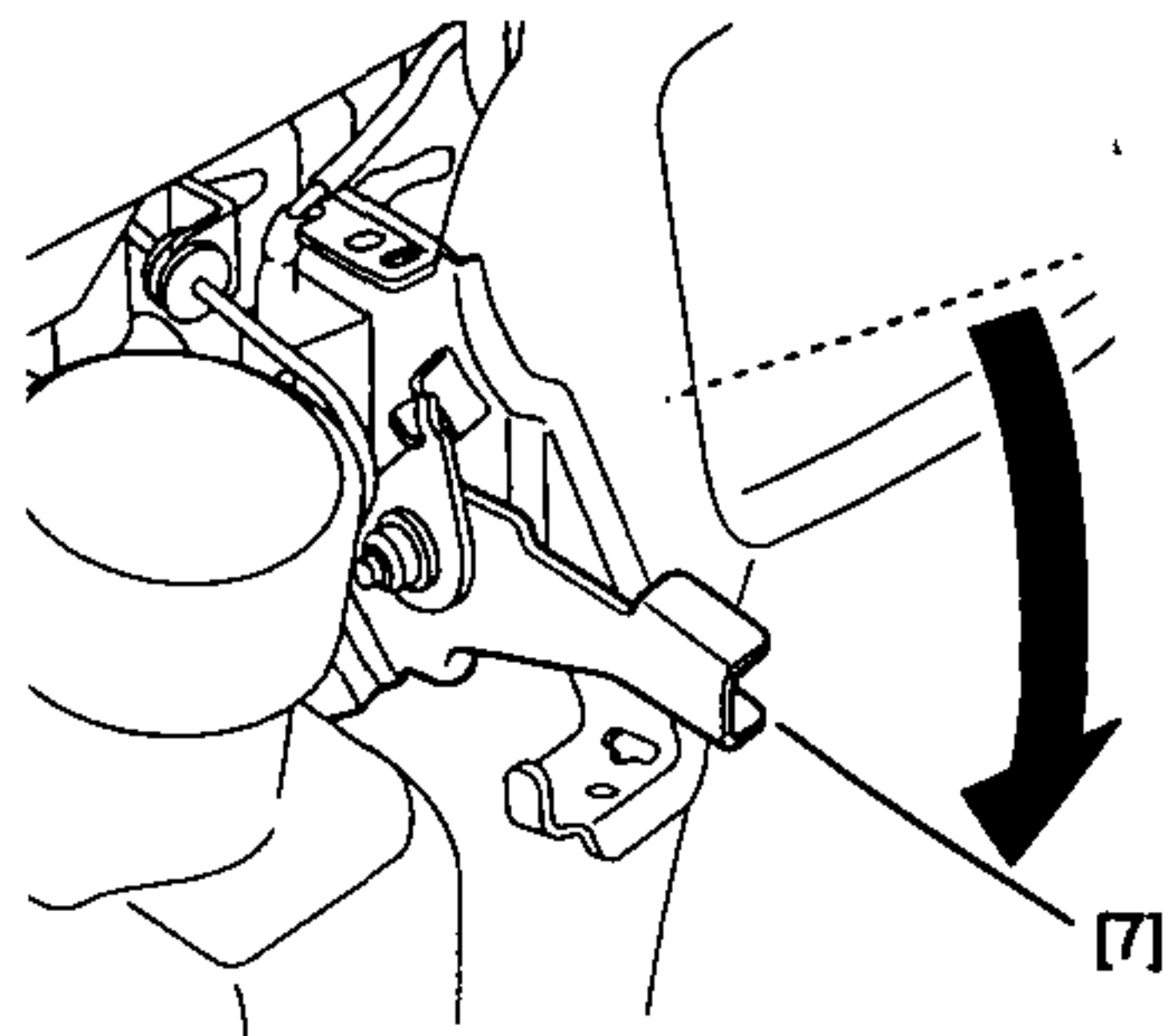
Starting a Warm Engine

If the engine has run out of fuel, pull the choke rod to the CLOSED [2] position after refueling. If the engine has not run out of fuel, leave the choke rod in the OPEN [3] position.

1. Pull the starter grip lightly until you feel resistance, then pull briskly.
2. If the choke was pulled to the CLOSED [2] position to start, push it to the OPEN [3] position as soon as the engine starts.

Stopping the Engine

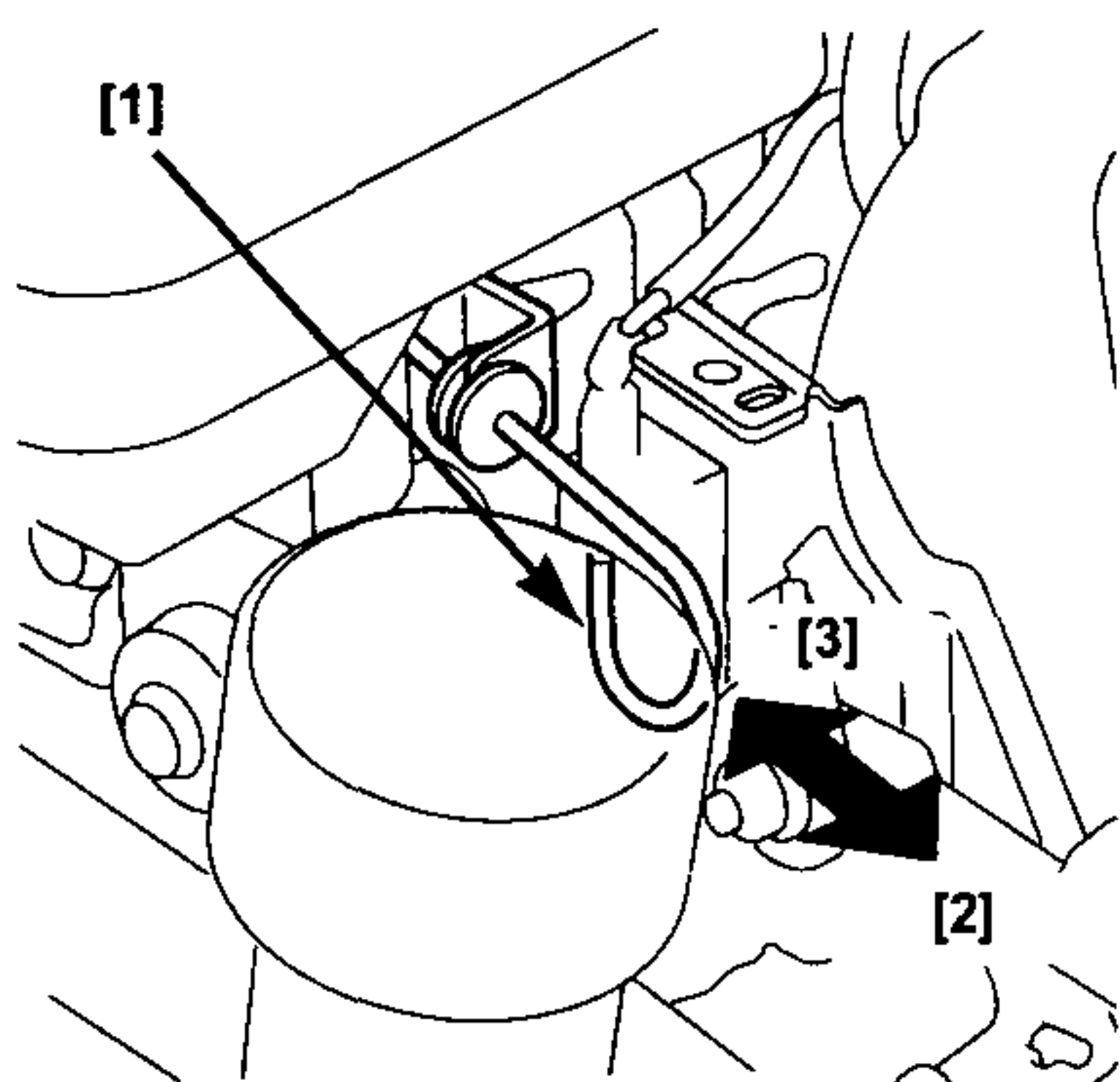
Move the ignition switch lever (red) to the OFF [7] position.



TYPE 3: FIXED THROTTLE / ENGINE STOP SWITCH / MANUAL CHOKE

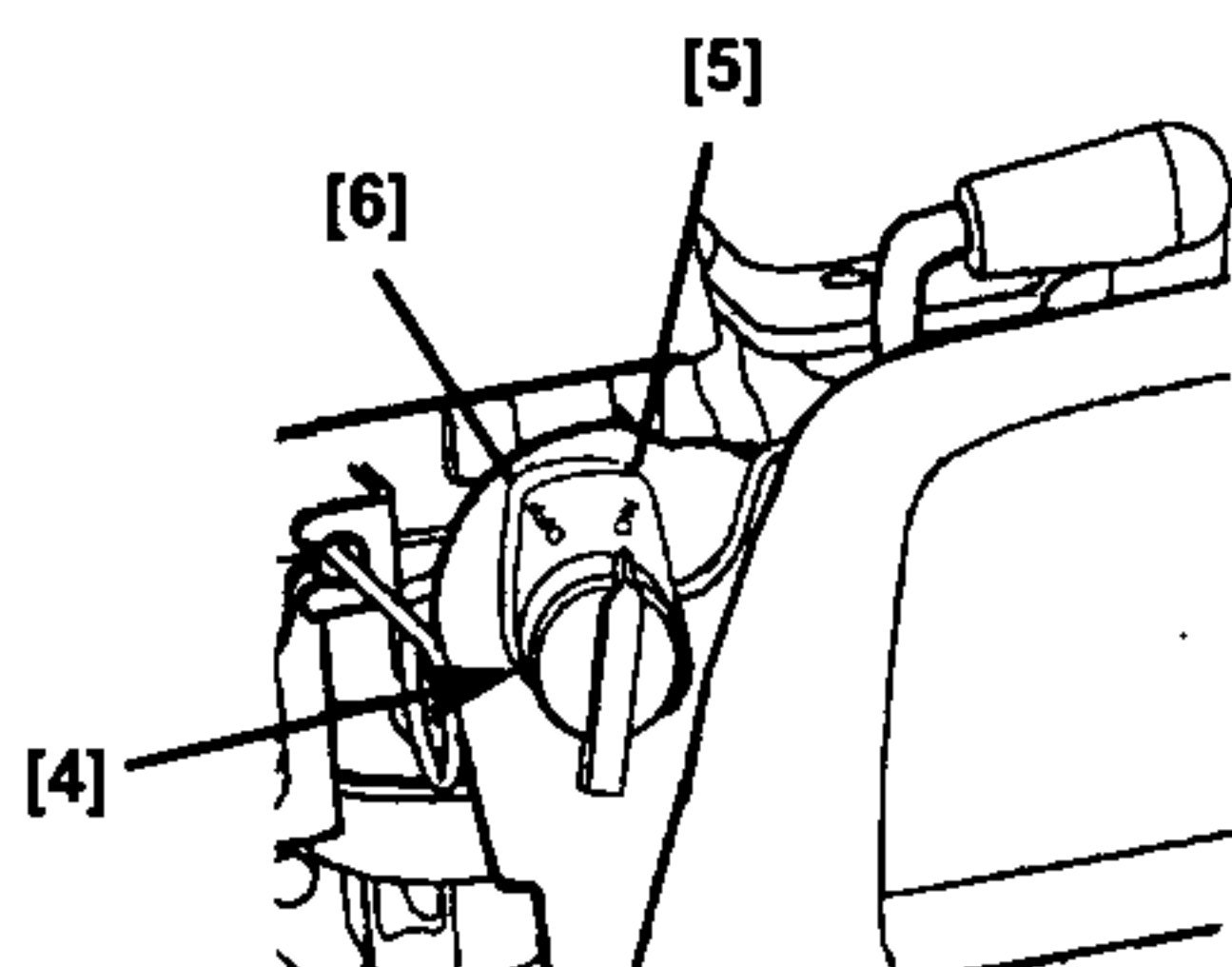
Starting a Cold Engine

1. Pull the choke rod [1] to the CLOSED [2] position.



2. Move the engine stop switch [4] to the ON [5] position.

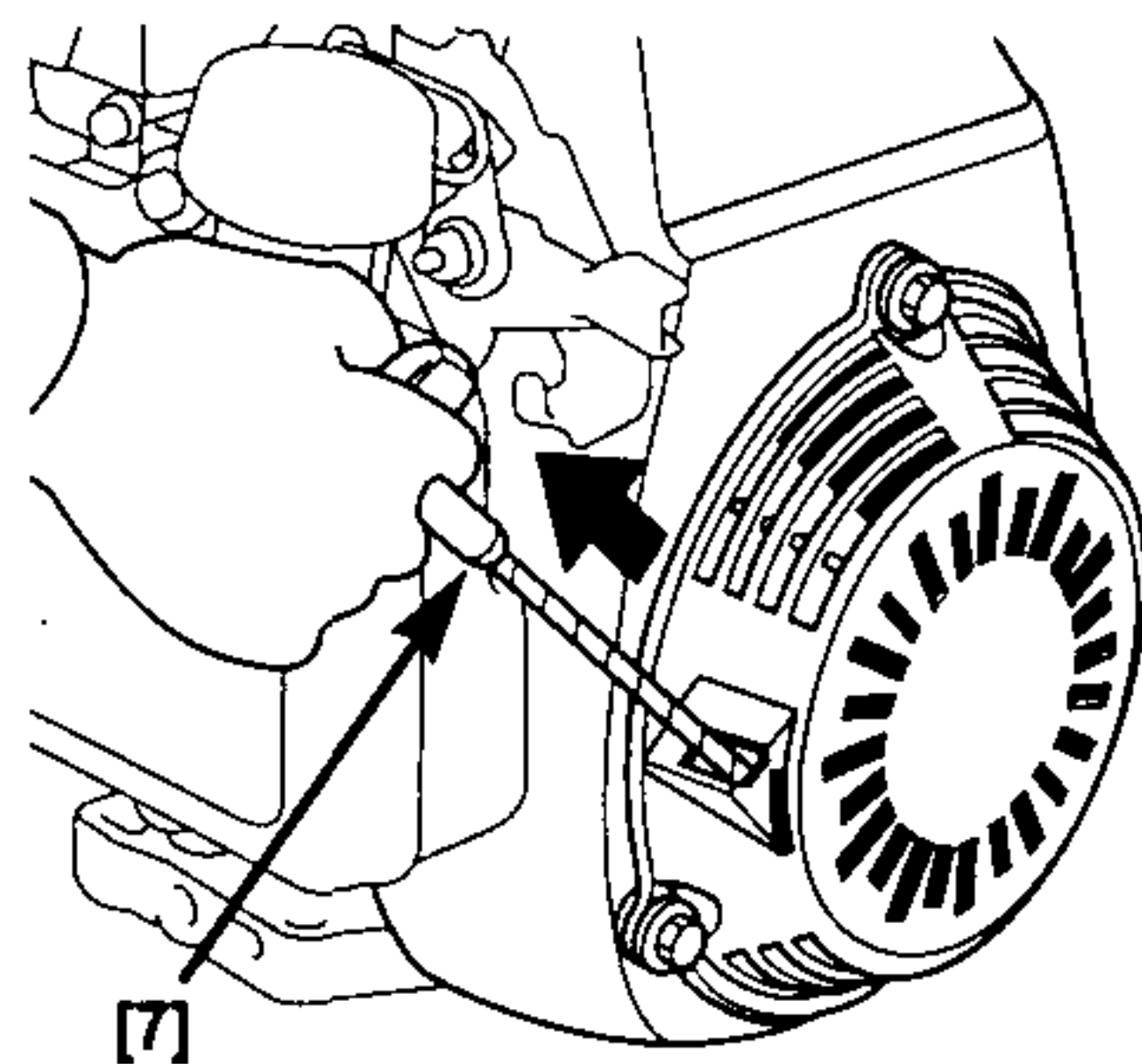
Some engine applications use a remotely-mounted ignition switch rather than the engine-mounted engine stop switch shown here.



3. Pull the starter grip [7] lightly until resistance is felt, then pull briskly.

NOTICE

Do not allow the starter grip to snap back against the engine. Return it gently to prevent damage to the starter.



4. If the choke rod [1] was pulled to the CLOSED [2] position to start the engine, push it to the OPEN [3] position as soon as the engine warms up enough to run smoothly.

5. The engine speed is preset on this type.

Starting a Warm Engine

If the engine has run out of fuel, pull the choke rod to the CLOSED [2] position after refueling. If the engine has not run out of fuel, leave the choke rod in the OPEN [3] position.

1. Pull the starter grip [7] lightly until you feel resistance, then pull briskly.
2. If the choke rod [1] was pulled to the CLOSED [2] position to start, push it to the OPEN [3] position as soon as the engine starts.

Stopping the Engine

Move the engine stop switch to the OFF [6] position.

OIL ALERT® SYSTEM

The Oil Alert system is designed to prevent engine damage caused by an insufficient amount of oil in the crankcase. Before the oil level in the crankcase can fall below a safe limit, the Oil Alert system will automatically stop the engine [the throttle lever (ignition switch lever) will remain in a run position].

If the engine stops and will not restart, check the engine oil level (page 5) before troubleshooting in other areas.

SERVICING YOUR ENGINE

THE IMPORTANCE OF MAINTENANCE

Good maintenance is essential for safe, economical and trouble-free operation. It will also help reduce pollution.

⚠ WARNING

Improper maintenance, or failure to correct a problem before operation, can cause a malfunction in which you can be seriously hurt or killed.

Always follow the inspection and maintenance recommendations and schedules in this owner's manual.

To help you properly care for your engine, the following pages include a maintenance schedule, routine inspection procedures, and simple maintenance procedures using basic hand tools. Other service tasks that are more difficult, or require special tools, are best handled by professionals and are normally performed by a Honda technician or other qualified mechanic.

The maintenance schedule applies to normal operating conditions. If you operate your engine under severe conditions, such as sustained high-load or high-temperature operation, or use in unusually wet or dusty conditions, consult your servicing dealer for recommendations applicable to your individual needs and use.

MAINTENANCE SAFETY

Some of the most important safety precautions follow. However, we cannot warn you of every conceivable hazard that can arise in performing maintenance. Only you can decide whether or not you should perform a given task.

⚠ WARNING

Failure to properly follow maintenance instructions and precautions can cause you to be seriously hurt or killed.

Always follow the procedures and precautions in this owner's manual.

SAFETY PRECAUTIONS

- Make sure the engine is off before you begin any maintenance or repairs. This will eliminate several potential hazards:
 - **Carbon monoxide poisoning from engine exhaust.**
Be sure there is adequate ventilation whenever you operate the engine.
 - **Burns from hot parts.**
Let the engine and exhaust system cool before touching.
 - **Injury from moving parts.**
Do not run the engine unless instructed to do so.
- Read the instructions before you begin, and make sure you have the tools and skills required.
- To reduce the possibility of fire or explosion, be careful when working around gasoline. Use only a nonflammable solvent, not gasoline, to clean parts. Keep cigarettes, sparks and flames away from all fuel related parts.

Remember that an authorized Honda servicing dealer knows your engine best and is fully equipped to maintain and repair it.

To ensure the best quality and reliability, use only new genuine Honda parts or their equivalents for repair and replacement.

MAINTENANCE SCHEDULE

ITEM (4)	ACTION	Before Each Use	First Month or 5 Hrs	Every 3 Months or 25 Hrs	Every 6 Months or 50 Hrs	Every Year or 100 Hrs	Every Two Years or 250	Page
Engine oil	Check	○						5
	Change		○		○ (2)			6
Air filter	Check	○						6
	Clean			○ (1)				
	Replace						○	
Spark plug	Check-adjust					○		6
	Replace						○	
Spark arrester	Clean					○		6
Idle speed	Check-adjust					○ (3)		Shop manual
Fuel tank and filter	Clean					○ (3)		Shop manual
Fuel tube	Check			Every 2 years (Replace if necessary) (3)				Shop manual
Valve clearance	Check-adjust					○ (3)		Shop manual
Combustion chamber	Clean		After every 250 hours (3)					Shop manual

- (1) Service more frequently when used in dusty areas.
- (2) Change engine oil every 25 hours when used under heavy load or in high ambient temperatures.
- (3) These items should be serviced by an authorized Honda servicing dealer, unless you have the proper tools and are mechanically proficient. Refer to the Honda shop manual for service procedures.
- (4) For commercial use, log hours of operation to determine proper maintenance intervals.

REFUELING

Use unleaded gasoline with a pump octane rating of 86 or higher. This engine is certified to operate on unleaded gasoline. Unleaded gasoline produces fewer engine and spark plug deposits and extends exhaust system life.

⚠ WARNING

Gasoline is highly flammable and explosive, and you can be burned or seriously injured when refueling.

- Stop engine and keep heat, sparks, and flame away.
- Refuel only outdoors.
- Wipe up spills immediately.

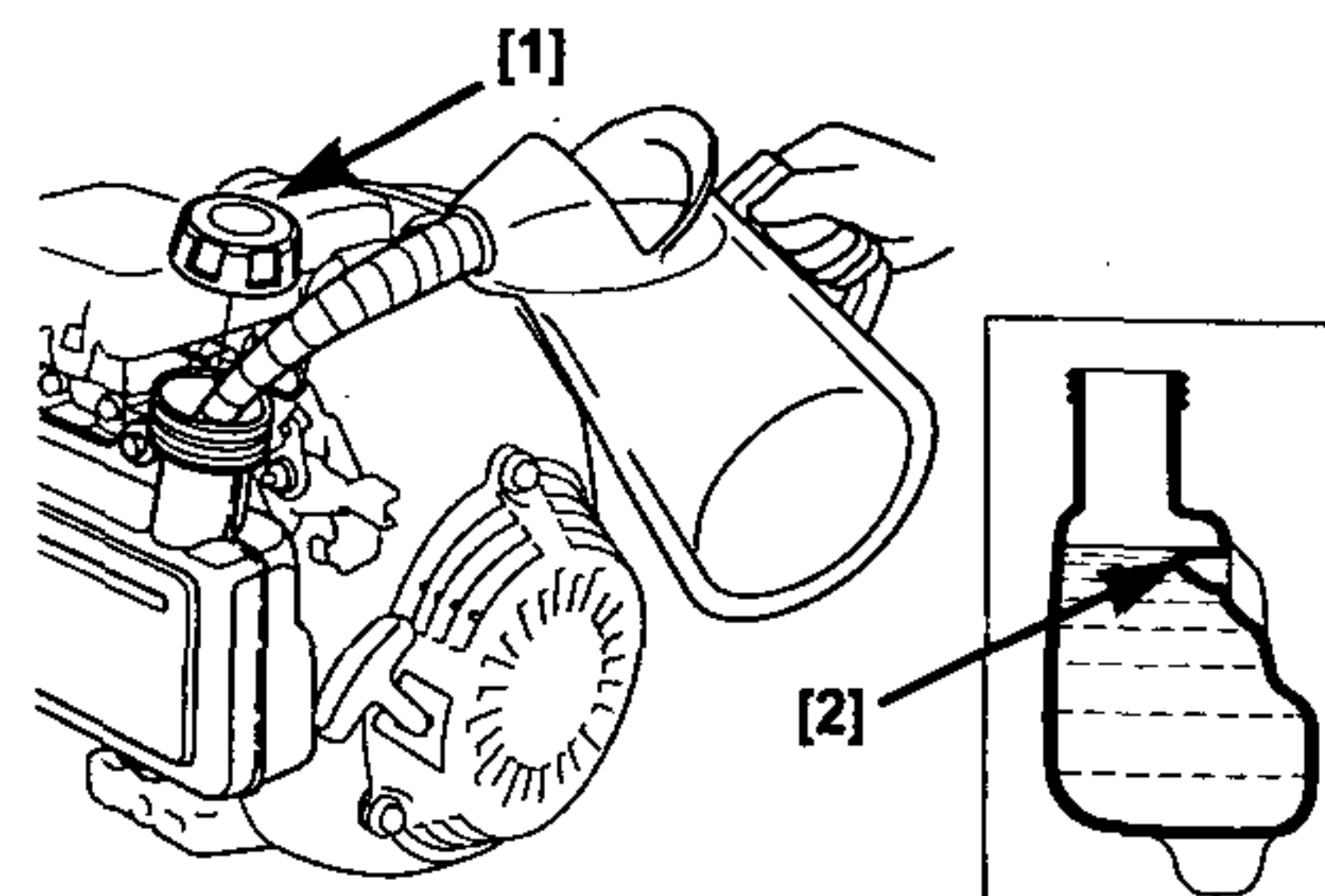
NOTICE

Fuel can damage paint and some types of plastic. Be careful not to spill fuel when filling your fuel tank. Damage caused by spilled fuel is not covered under the Distributor's Limited Warranty.

Never use stale or contaminated gasoline or oil/gasoline mixture. Avoid getting dirt or water in the fuel tank.

Adding Fuel

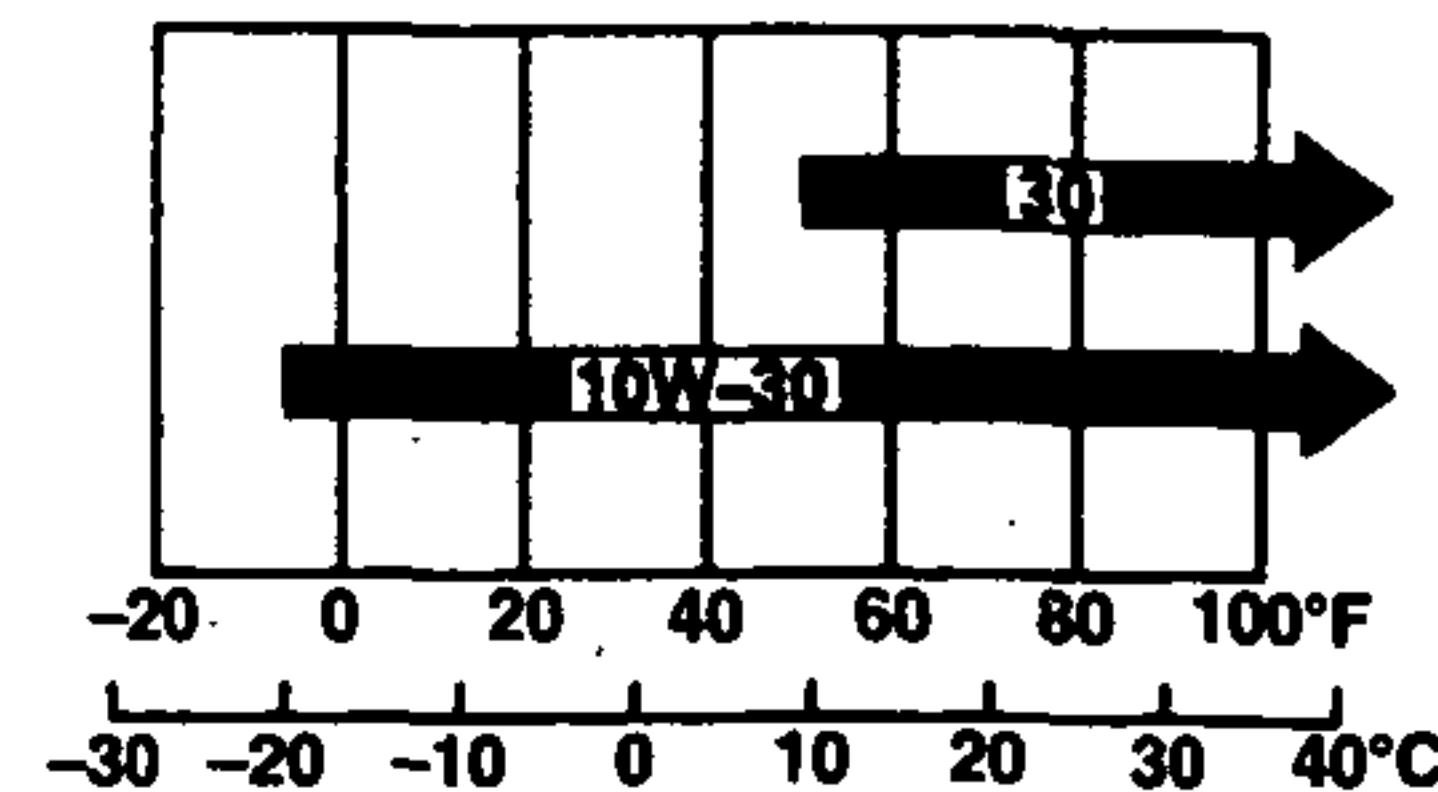
1. Remove the fuel tank cap [1].
2. Add fuel to the bottom of the fuel level limit [2] in the neck of the fuel tank. Do not overfill. Wipe up spilled fuel before starting the engine.



ENGINE OIL

Recommended Oil

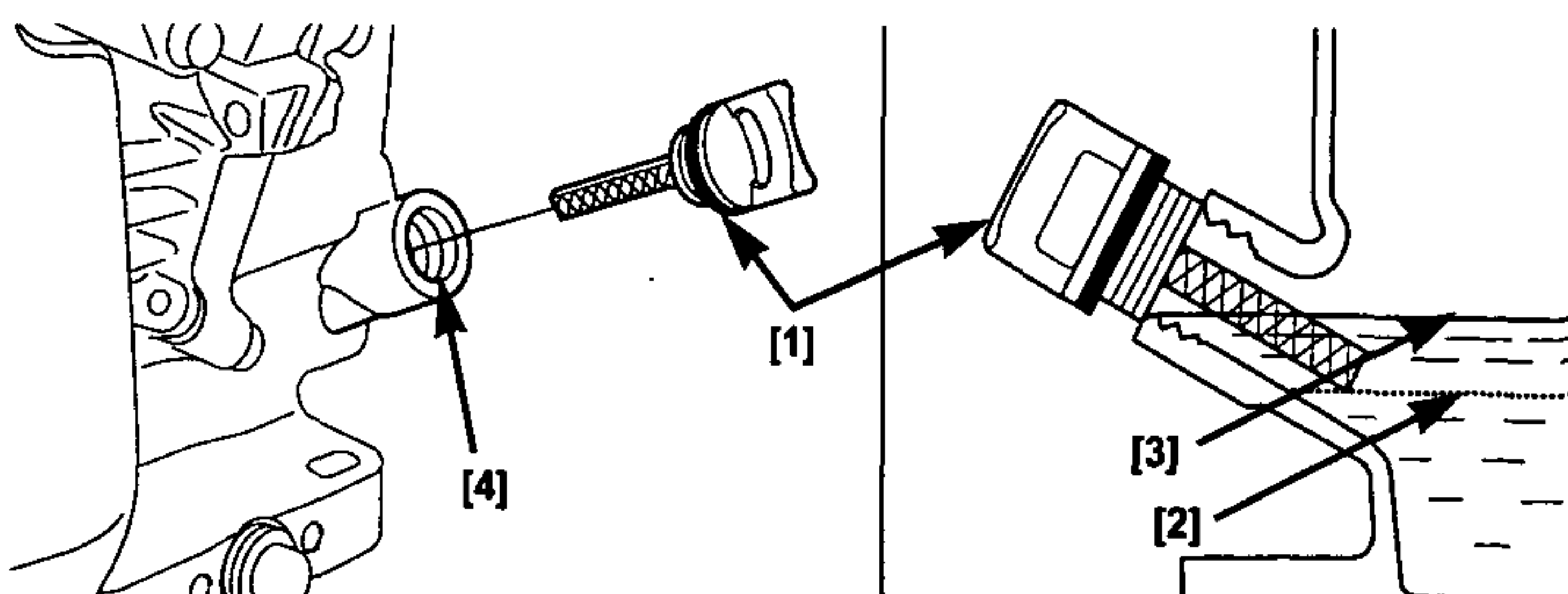
Use 4-stroke motor oil that meets or exceeds the requirements for API service classification SH, SJ, or equivalent. Always check the API service label on the oil container to be sure it includes the letters SH, SJ, or equivalent.



SAE 10W-30 is recommended for general use. Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range.

Oil Level Check

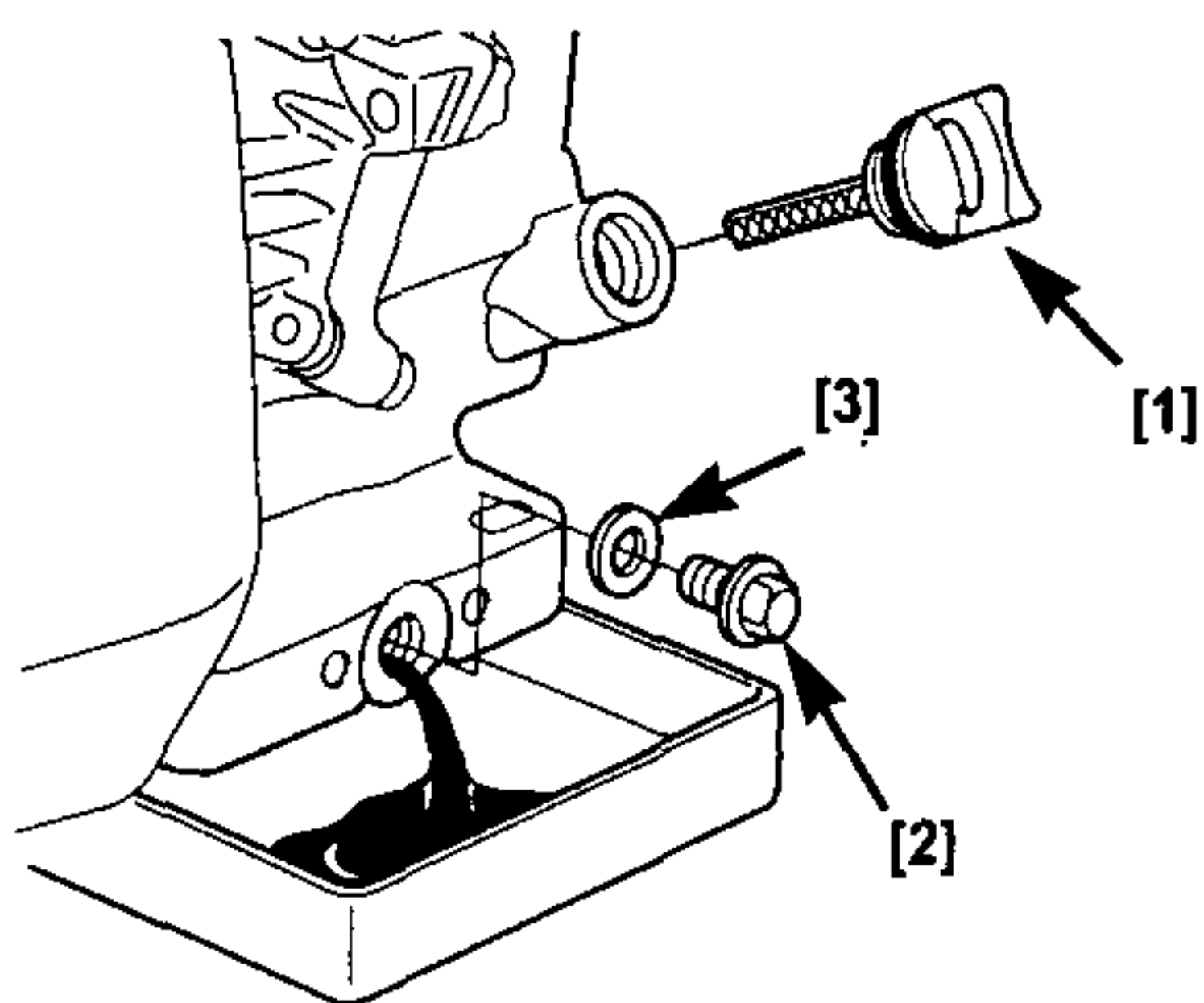
1. Check the oil with the engine stopped and level.
2. Remove the oil filler cap/dipstick [1] and wipe it clean.
3. Insert the oil filler cap/dipstick [1] into the oil filler neck as shown, but do not screw it in, then remove it to check the oil level.
4. If the oil level is near or below the lower limit mark [2] on the dipstick, remove the oil filler cap/dipstick, and fill with the recommended oil to the upper limit mark [3] (bottom edge of the oil fill hole). Do not overfill.
5. Reinstall the oil filler cap/dipstick [1].



Oil Change

Drain the engine oil when the engine is warm. Warm oil drains quickly and completely.

1. Place a suitable container next to the engine to catch the used oil.
2. Remove the oil filler cap/dipstick [1] and the oil drain plug [2].
3. Allow the used oil to drain completely, then reinstall the drain plug [2] and washer [3]. Tighten the drain plug securely.



Please dispose of used motor oil in a manner that is compatible with the environment. We suggest you take used oil in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the trash or pour it on the ground or down a drain.

4. With the engine in a level position, fill to the upper limit mark (bottom edge of the oil fill hole [4]) on the oil filler cap/dipstick [1] with the recommended oil (see page 5).

Engine Oil Capacity: 0.58 qt (0.55 l)

NOTICE

Running the engine with a low oil level can cause engine damage.

5. Reinstall the oil filler cap/dipstick [1] securely.

AIR CLEANER

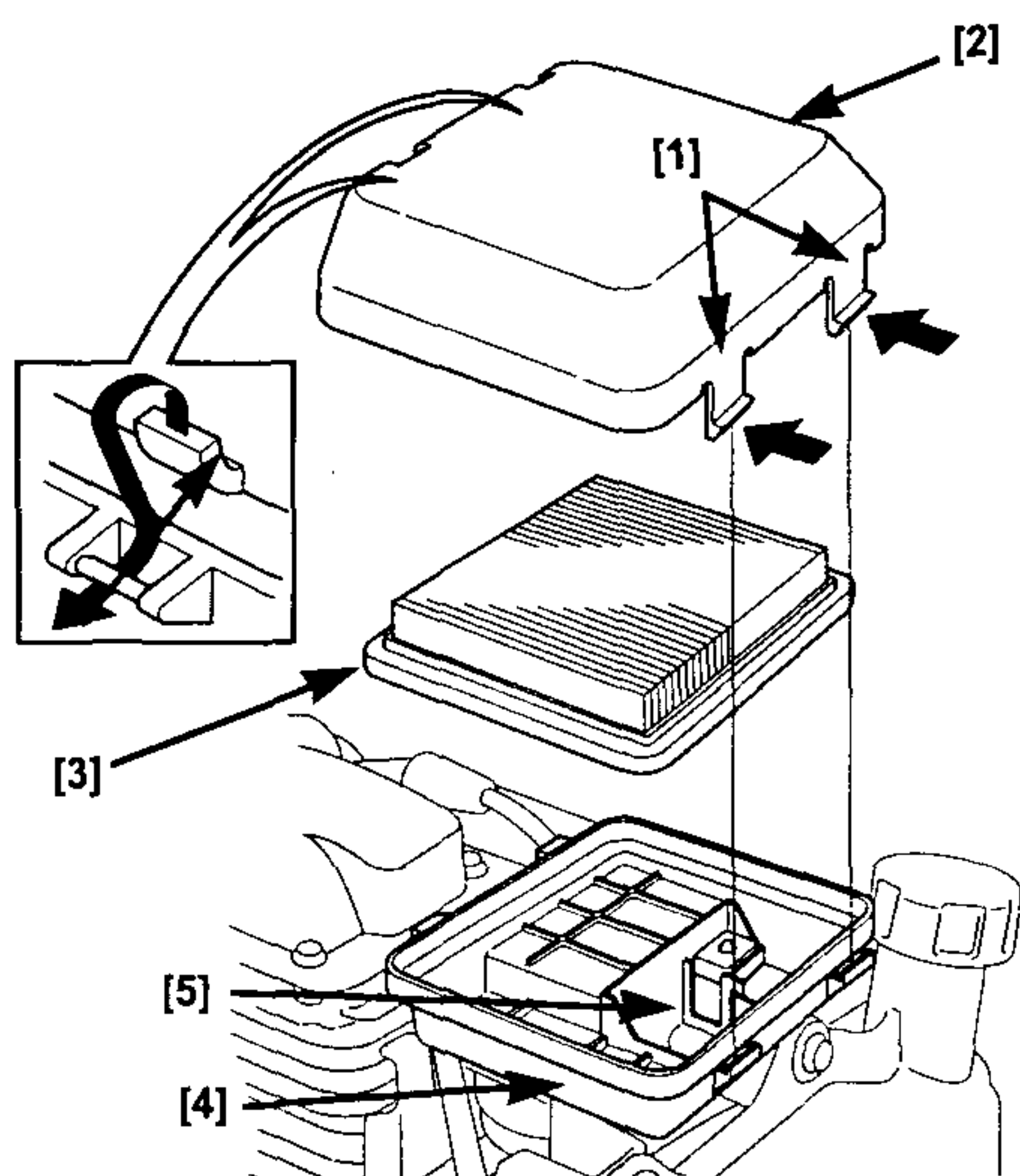
A dirty air cleaner will restrict air flow to the carburetor and cause poor engine performance. Inspect the filter each time the engine is operated. You will need to clean the filter more frequently if you operate the engine in very dusty areas.

NOTICE

Operating the engine without an air filter, or with a damaged filter, will allow dirt to enter the engine, causing rapid engine wear. This type of damage is not covered under the Distributor's Limited Warranty.

Inspection

1. Press the latch tabs [1] on the top of the air cleaner cover [2], and remove the cover. Check the filter to be sure it is clean and in good condition.
2. Reinstall the filter [3] and air cleaner cover [2].



Cleaning

1. Tap the filter [3] several times on a hard surface to remove dirt, or blow compressed air [not exceeding 30 psi (207 kPa, 2.1 kg/cm²)] through the filter from the clean side that faces the engine. Never try to brush off dirt. Brushing will force dirt into the fibers.
2. Wipe dirt from the air cleaner body [4] and cover using a moist rag. Be careful to prevent dirt from entering the air duct [5] that leads to the carburetor.

SPARK PLUG

Recommended Spark Plug: NGK BPR6ES

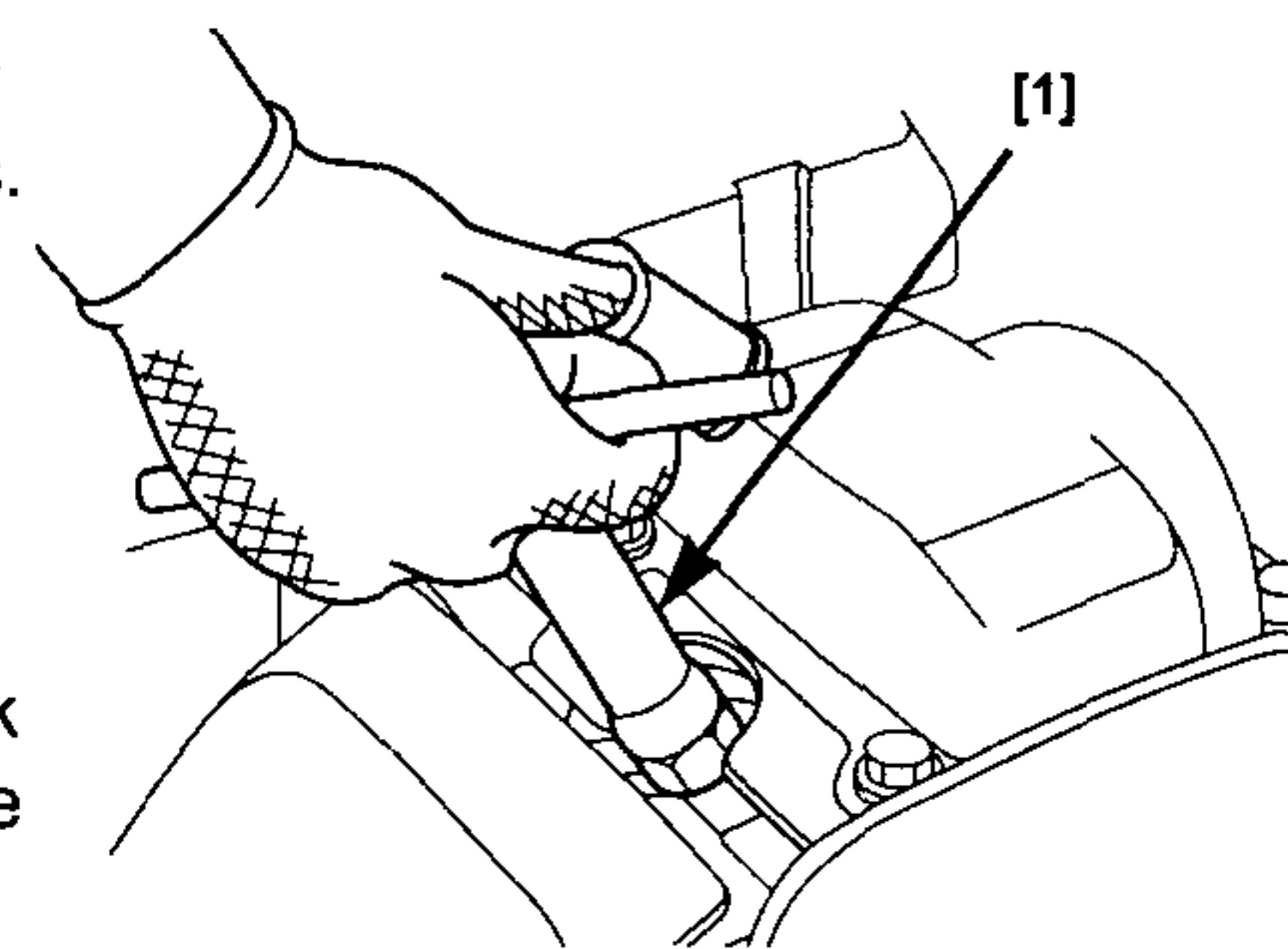
The recommended spark plug is the correct heat range for normal engine operating temperatures.

NOTICE

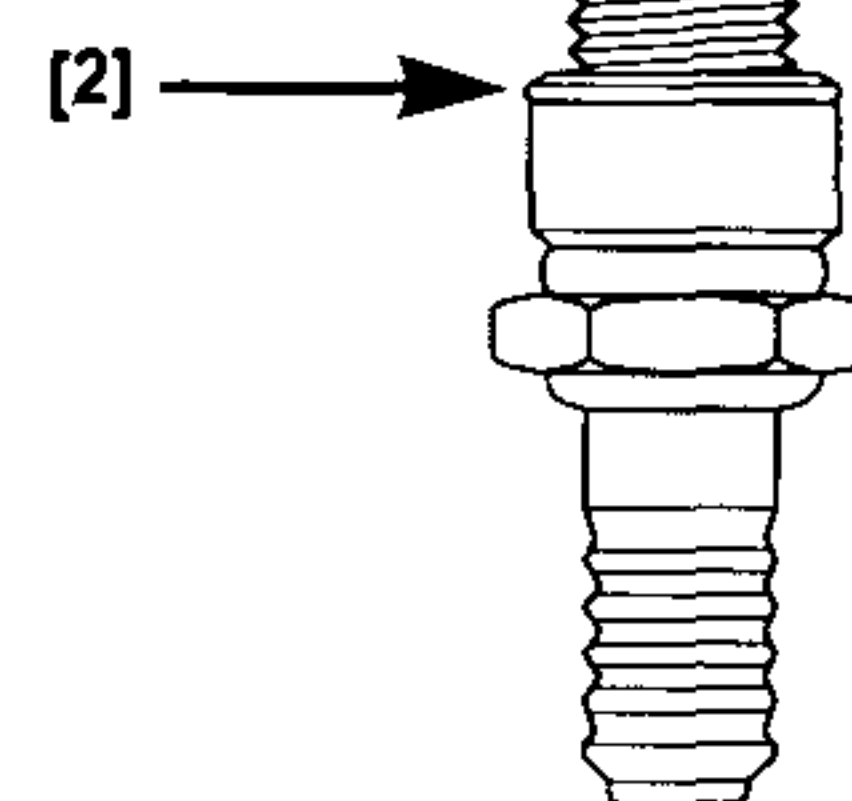
Incorrect spark plugs can cause engine damage.

For good performance, the spark plug must be properly gapped and free of deposits.

1. Disconnect the cap from the spark plug, and remove any dirt from the spark plug area.
2. Use the proper size spark plug wrench [1] to remove the spark plug.
3. Inspect the spark plug. Replace it if damaged, badly fouled, if the sealing washer is in poor condition, or if the electrode is worn.
4. Measure the electrode gap with a suitable gauge. The correct gap is 0.028 – 0.031 in (0.70 – 0.80 mm). If adjustment is needed, correct the gap by carefully bending the side electrode.
5. Install the spark plug carefully, by hand, to avoid cross-threading.
6. After the spark plug is seated, tighten with the proper size spark plug wrench [1] to compress the washer [2].
7. When installing a new spark plug, tighten 1/2 turn after the spark plug seats to compress the washer.
8. When reinstalling the original spark plug, tighten 1/8 – 1/4 turn after the spark plug seats to compress the washer.



0.028 ~ 0.031 in
(0.70 ~ 0.80 mm)



NOTICE

A loose spark plug can become very hot and can damage the engine. Overtightening the spark plug can damage the threads in the cylinder head.

9. Attach the spark plug cap to the spark plug.

SPARK ARRESTER (optional equipment)

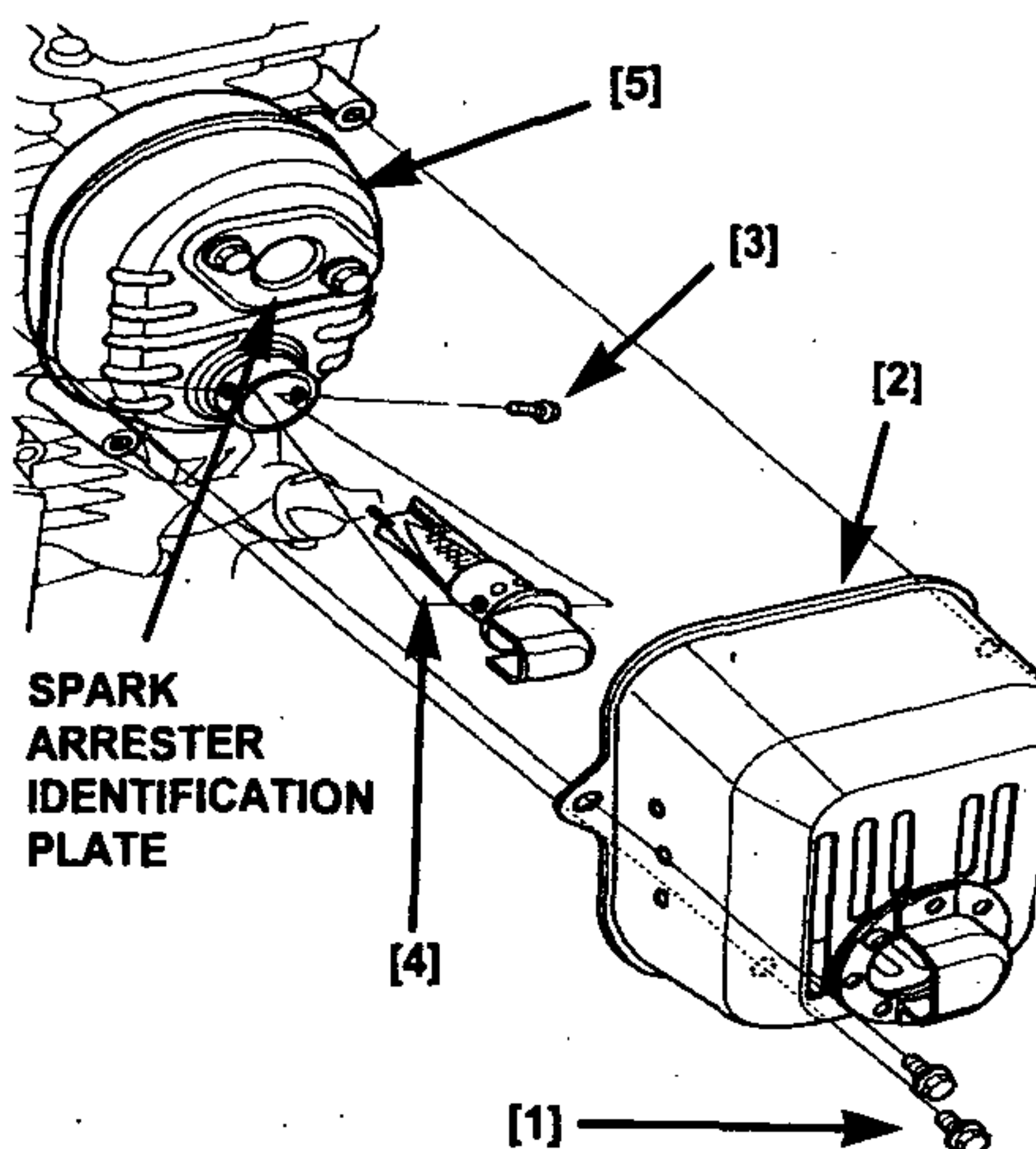
In some areas, it is illegal to operate an engine without a spark arrester. Check local laws and regulations. A spark arrester is available from an authorized Honda servicing dealer.

The spark arrester must be serviced every 100 hours to keep it functioning as designed.

If the engine has been running, the muffler will be hot. Allow it to cool before servicing the spark arrester.

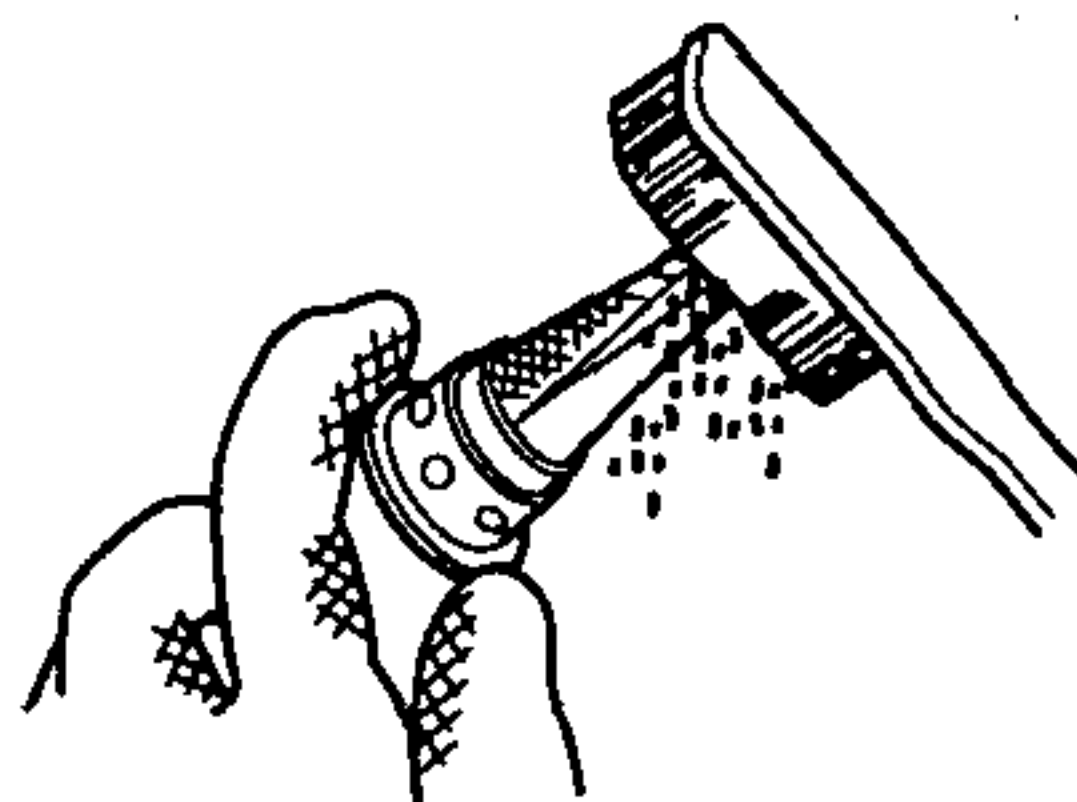
Spark Arrester Removal

1. Remove the three 6 mm bolts [1] from the muffler protector [2], and remove the muffler protector.
2. Remove the two special screws [3] from the spark arrester [4], and remove the spark arrester from the muffler [5].



Spark Arrester Cleaning & Inspection

1. Use a brush to remove carbon deposits from the spark arrester screen. Be careful not to damage the screen. Replace the spark arrester if it has breaks or holes.
2. Install the spark arrester in the reverse order of removal.



HELPFUL TIPS & SUGGESTIONS

STORING YOUR ENGINE

Storage Preparation

Proper storage preparation is essential for keeping your engine trouble-free and looking good. The following steps will help to keep rust and corrosion from impairing your engine's function and appearance, and will make the engine easier to start when you use it again.

Cleaning

If the engine has been running, allow it to cool for at least half an hour before cleaning. Clean all exterior surfaces, touch up any damaged paint, and coat other areas that may rust with a light film of oil.

NOTICE

Using a garden hose or pressure washing equipment can force water into the air cleaner or muffler opening. Water in the air cleaner will soak the air filter, and water that passes through the air filter or muffler can enter the cylinder, causing damage.

Fuel

Gasoline will oxidize and deteriorate in storage. Deteriorated gasoline will cause hard starting, and it leaves gum deposits that clog the fuel system. If the gasoline in your engine deteriorates during storage, you may need to have the carburetor, and other fuel system components, serviced or replaced.

The length of time that gasoline can be left in your fuel tank and carburetor without causing functional problems will vary with such factors as gasoline blend, your storage temperatures, and whether the fuel tank is partially or completely filled. The air in a partially filled fuel tank promotes fuel deterioration. Very warm storage temperatures accelerate fuel deterioration. Fuel problems may occur within a few months, or even less if the gasoline was not fresh when you filled the fuel tank.

Fuel system damage or engine performance problems resulting from neglected storage preparation are not covered under the *Distributor's Limited Warranty*.

You can extend fuel storage life by adding a gasoline stabilizer that is formulated for that purpose, or you can avoid fuel deterioration problems by draining the fuel tank and carburetor.

ADDING A GASOLINE STABILIZER TO EXTEND FUEL STORAGE LIFE

When adding a gasoline stabilizer, fill the fuel tank with fresh gasoline. If only partially filled, air in the tank will promote fuel deterioration during storage. If you keep a container of gasoline for refueling, be sure that it contains only fresh gasoline.

1. Add gasoline stabilizer following the manufacturer's instructions.
2. After adding a gasoline stabilizer, run the engine outdoors for 10 minutes to be sure that treated gasoline has replaced the untreated gasoline in the carburetor.
3. Stop the engine.

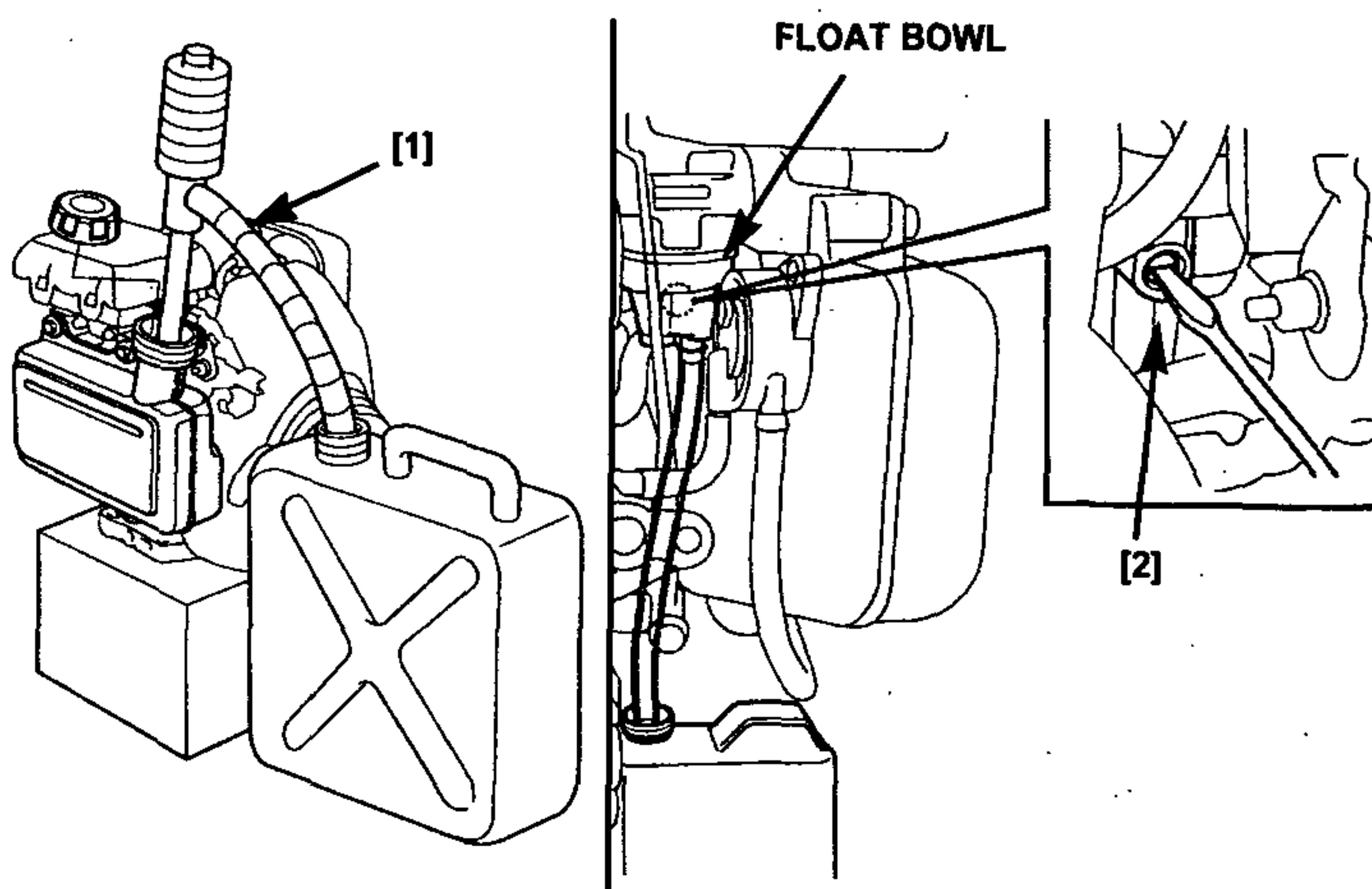
DRAINING THE FUEL TANK AND CARBURETOR

! WARNING

Gasoline is highly flammable and explosive, and you can be burned or seriously injured when handling fuel.

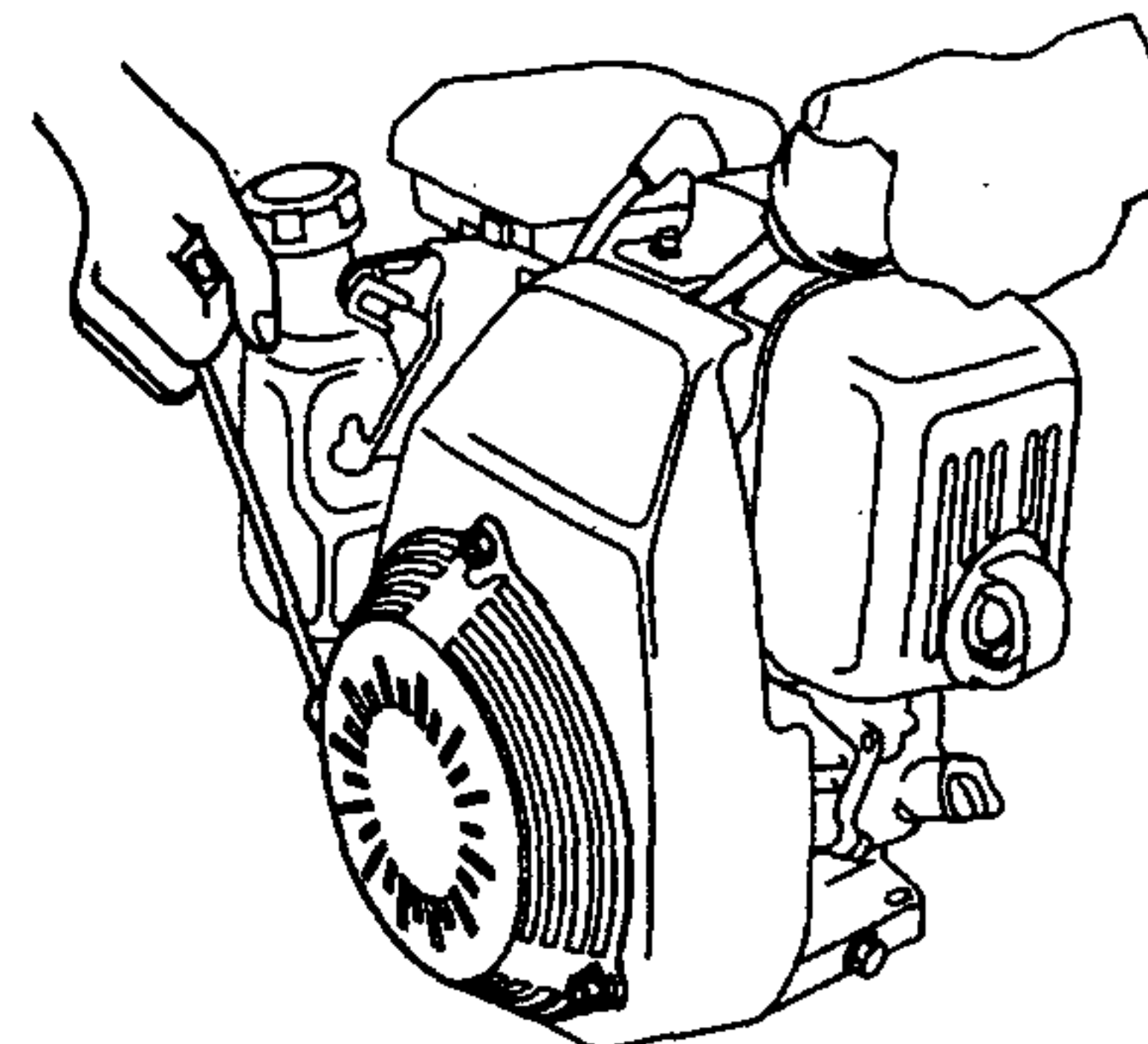
- Stop engine and keep heat, sparks, and flame away.
- Refuel only outdoors.
- Wipe up spills immediately.

1. Use a siphon pump [1] (commercially available) and siphon the fuel out of the fuel tank into an approved gasoline container.
2. Place an approved gasoline container below the carburetor, and use a funnel to avoid spilling fuel.
3. Loosen the carburetor drain screw [2] and drain the carburetor into an approved gasoline container. After draining is completed, tighten the carburetor drain screw.



Engine Oil

1. Change the engine oil (see page 6).
2. Remove the spark plug (see page 6).
3. Pour a tablespoon (5 – 10 cc) of clean engine oil into the cylinder.
4. Pull the recoil starter several times to distribute the oil.
5. Reinstall the spark plug.



Storage Precautions

If your engine will be stored with gasoline in the fuel tank and carburetor, it is important to reduce the hazard of gasoline vapor ignition. Select a well-ventilated storage area away from any appliance that operates with a flame, such as a furnace, water heater, or clothes dryer. Also avoid any area with a spark-producing electric motor, or where power tools are operated.

If possible, avoid storage areas with high humidity, because that promotes rust and corrosion.

Keep the engine level in storage. Tilting can cause fuel or oil leakage.

With the engine and exhaust system cool, cover the engine to keep out dust. A hot engine and exhaust system can ignite or melt some materials. Do not use sheet plastic as a dust cover. A nonporous cover will trap moisture around the engine, promoting rust and corrosion.

Removal from Storage

Check your engine as described in the *BEFORE OPERATION CHECKS* section of this manual (see page 2).

If the fuel was drained during storage preparation, fill the tank with fresh gasoline. If you keep a container of gasoline for refueling, be sure it contains only fresh gasoline. Gasoline oxidizes and deteriorates over time, causing hard starting.

If the cylinder was coated with oil during storage preparation, the engine will smoke briefly at startup. This is normal.

TRANSPORTING

Keep the engine level when transporting to reduce the possibility of fuel leakage.

TAKING CARE OF UNEXPECTED PROBLEMS

ENGINE WILL NOT START	Possible Cause	Correction
1. Check control positions.	Choke open.	Pull the choke to the CLOSED position unless the engine is warm.
	Ignition switch OFF.	<ul style="list-style-type: none"> • Move the throttle lever to the SLOW or FAST position (p. 3). • Move the ignition switch lever to the ON position (p. 3). • Move the engine stop switch to the ON position (p. 4).
2. Check engine oil level.	Engine oil level low (Oil Alert models).	Fill with the recommended oil to the proper level (p. 5).
3. Check fuel.	Out of fuel.	Refuel.
	Bad fuel; engine stored without treating or draining gasoline, or refueled with bad gasoline.	Drain the fuel tank and carburetor (p. 7). Refuel with fresh gasoline.
4. Remove and inspect spark plug.	Spark plug faulty, fouled, or improperly gapped.	Replace the spark plug (p. 6).
	Spark plug wet with fuel (flooded engine).	Dry and reinstall spark plug. Start engine with throttle lever in FAST position (choke in OPEN position).
5. Take engine to an authorized Honda servicing dealer, or refer to shop manual.	Fuel filter clogged, carburetor malfunction, ignition malfunction, valves stuck, etc.	Replace or repair faulty components as necessary.

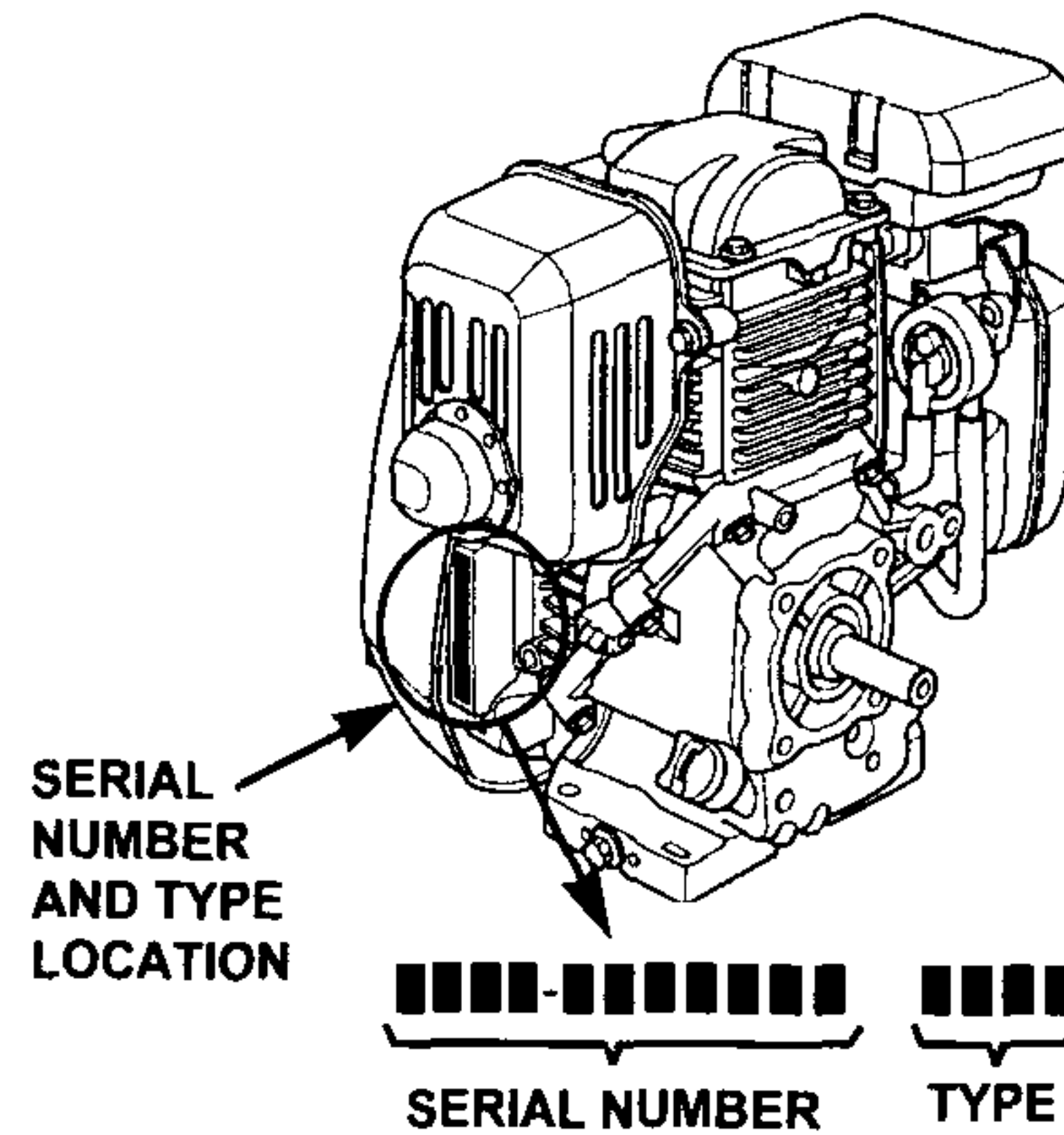
ENGINE LACKS POWER	Possible Cause	Correction
1. Check air filter.	Filter clogged.	Clean or replace the filter (p. 6).
2. Check fuel.	Bad fuel; engine stored without treating or draining gasoline, or refueled with bad gasoline.	Drain the fuel tank and carburetor (p. 7). Refuel with fresh gasoline.
3. Take engine to an authorized Honda servicing dealer, or refer to shop manual.	Fuel filter clogged, carburetor malfunction, ignition malfunction, valves stuck, etc.	Replace or repair faulty components as necessary.

TECHNICAL & CONSUMER INFORMATION

TECHNICAL INFORMATION

Serial Number Location

Record the engine serial number in the space below. You will need this information when ordering parts and when making technical or warranty inquiries.



Engine serial number: _____

Engine type: _____

Carburetor Modifications for High Altitude Operation

At high altitude, the standard carburetor air-fuel mixture will be too rich. Performance will decrease, and fuel consumption will increase. A very rich mixture will also foul the spark plug and cause hard starting. Operation at an altitude that differs from that at which this engine was certified, for extended periods of time, may increase emissions.

High altitude performance can be improved by specific modifications to the carburetor. If you always operate your trimmer at altitudes above 5,000 feet (1,500 meters), have your servicing dealer perform this carburetor modification. This engine, when operated at high altitude with the carburetor modifications for high altitude use, will meet each emission standard throughout its useful life.

Even with carburetor modification, engine horsepower will decrease about 3.5% for each 1,000-foot (300-meter) increase in altitude. The effect of altitude on horsepower will be greater than this if no carburetor modification is made.

NOTICE

When the carburetor has been modified for high altitude operation, the air-fuel mixture will be too lean for low altitude use. Operation at altitudes below 5,000 feet (1,500 meters) with a modified carburetor may cause the engine to overheat and result in serious engine damage. For use at low altitudes, have your servicing dealer return the carburetor to original factory specifications.

Oxygenated Fuels

Some conventional gasolines are being blended with alcohol or an ether compound. These gasolines are collectively referred to as oxygenated fuels. To meet clean air standards, some areas of the United States and Canada use oxygenated fuels to help reduce emissions.

If you use oxygenated fuel, be sure it is unleaded and meets the minimum octane rating requirements.

Before using an oxygenated fuel, try to confirm the fuel's contents. Some states/provinces require this information to be posted on the pump.

The following are the EPA approved percentages of oxygenates:

ETHANOL — (ethyl or grain alcohol) 10% by volume
You may use gasoline containing up to 10% ethanol by volume. Gasoline containing ethanol may be marketed under the name Gasohol.

MTBE — (methyl tertiary butyl ether) 15% by volume
You may use gasoline containing up to 15% MTBE by volume.

METHANOL — (methyl or wood alcohol) 5% by volume
You may use gasoline containing up to 5% methanol by volume as long as it also contains cosolvents and corrosion inhibitors to protect the fuel system. Gasoline containing more than 5% methanol by volume may cause starting and/or performance problems. It may also damage metal, rubber, and plastic parts of your fuel system.

If you notice any undesirable operating symptoms, try another service station or switch to another brand of gasoline.

Fuel system damage or performance problems resulting from the use of an oxygenated fuel containing more than the percentages of oxygenates mentioned above are not covered under the *Engine warranty*.

Specifications – GC160

Length x Width x Height	13.3 x 14.5 x 13.0 in (337 x 369 x 331 mm)
Dry weight	25 lb (11.5 kg)
Engine type	4-stroke, overhead cam, single cylinder
Displacement [Bore x Stroke]	9.8 cu-in (160 cm ³) [2.5 x 2.0 in (64 x 50 mm)]
Max. output	4.9 bhp (3.7 kW, 5.0 PS) at 3,600 rpm
Max. torque	7.6 ft-lb (10.3 N·m, 1.05 kg/m) at 2,500 rpm
Fuel tank capacity	0.53 gal (2.0 ℓ)
Fuel consumption	0.51 lb/hph (313 g/kWh, 230 g/PSh)
Cooling system	Forced air
Ignition system	Transistorized magneto
PTO shaft rotation	Counterclockwise

Specifications – GC190

Length x Width x Height	13.6 x 14.5 x 13.0 in (345 x 369 x 331 mm)
Dry weight	29 lb (13.2 kg)
Engine type	4-stroke, overhead cam, single cylinder
Displacement [Bore x Stroke]	11.4 cu-in (187 cm ³) [2.7 x 2.0 in (69 x 50 mm)]
Max. output	6.0 bhp (4.4 kW, 6.0 PS) at 3,600 rpm
Max. torque	8.9 ft-lb (12.1 N·m, 1.23 kg/m) at 2,500 rpm
Fuel tank capacity	0.53 gal (2.0 ℓ)
Fuel consumption	0.51 lb/hph (313 g/kWh, 230 g/PSh)
Cooling system	Forced air
Ignition system	Transistorized magneto
PTO shaft rotation	Counterclockwise

Tuneup Specifications

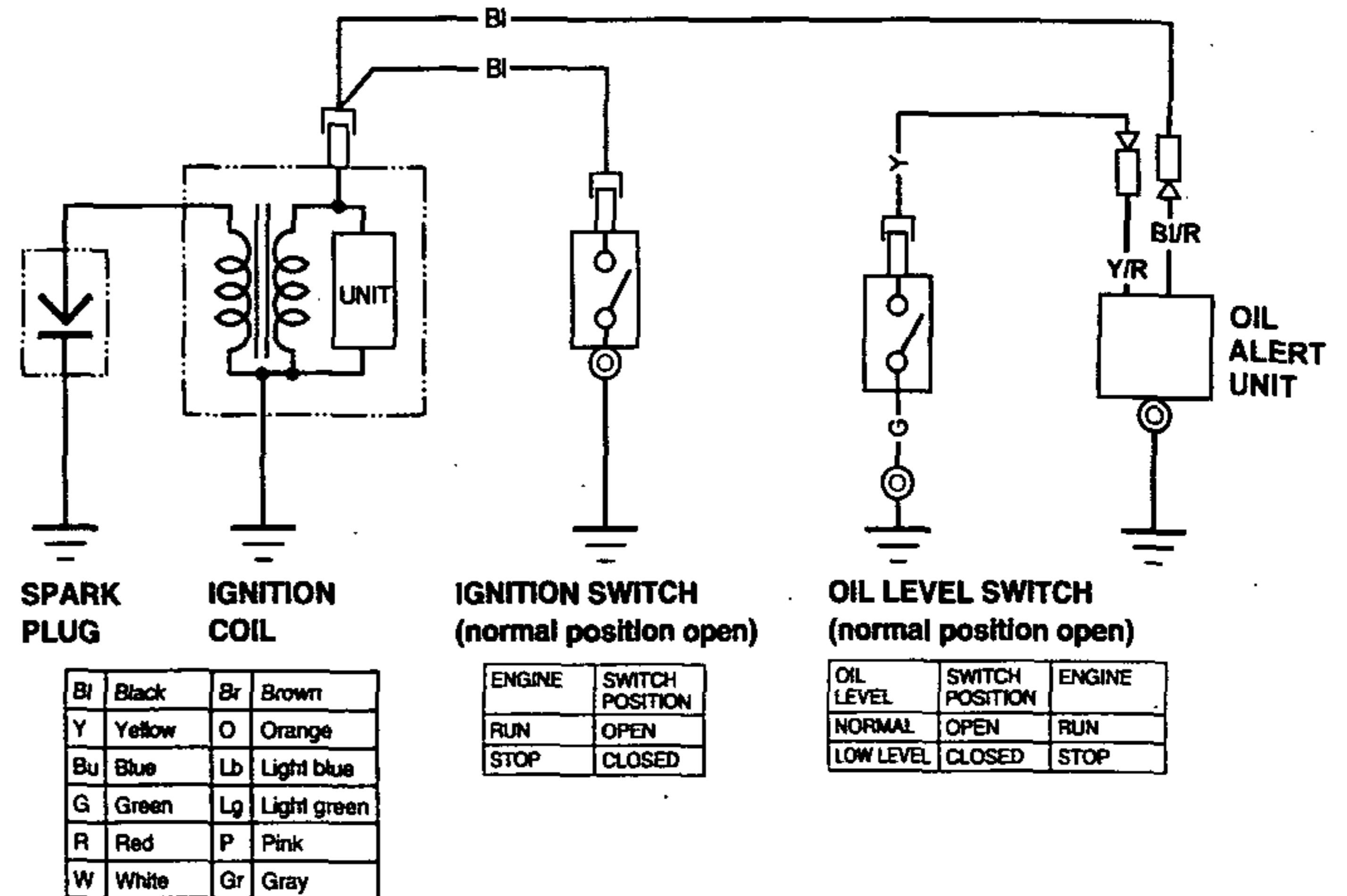
ITEM	SPECIFICATION	MAINTENANCE
Valve clearance (cold)	IN: 0.15 ± 0.04 mm EX: 0.20 ± 0.04 mm	See your authorized Honda dealer
Other specifications	No other adjustments needed.	

Quick Reference Information

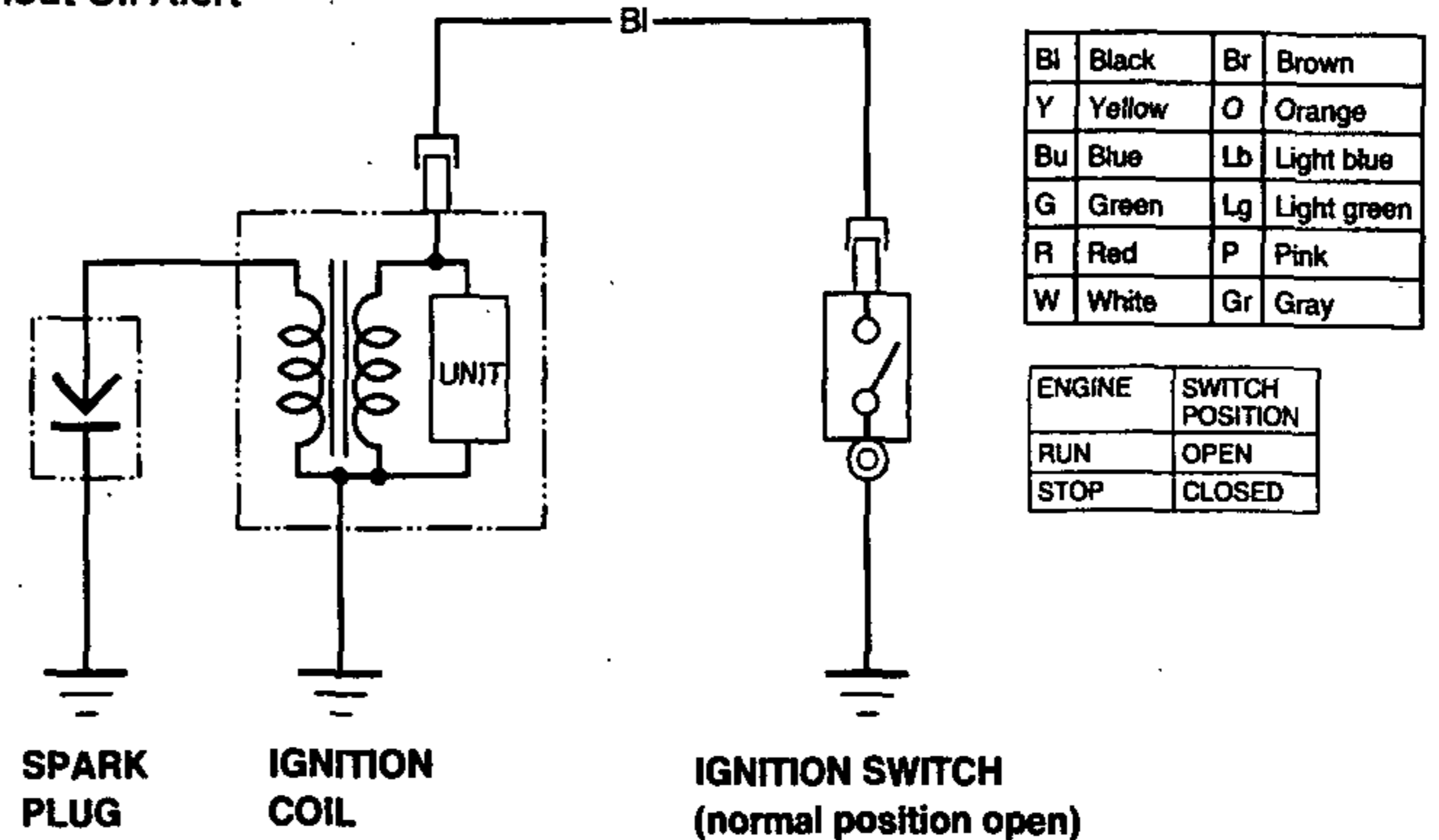
Fuel	Type	Unleaded gasoline with a pump octane rating of 86 or higher (page 5).
	Capacity	0.53 US gal (2.0 ℓ)
Engine oil	Type	SAE 10W-30, API'SH or SJ, for general use. Refer to page 5.
	Capacity	0.58 US qt (0.55 ℓ)
Carburetor	Idle speed	1,400 ± 150 rpm
Spark plug	Type	BPR6ES (NGK)
	Gap	0.028 – 0.031 in (0.7 – 0.8 mm) Refer to page 6.
Maintenance	Before each use	Check engine oil level. Refer to page 5. Check air filter. Refer to page 6.
	First 5 hours	Change engine oil. Refer to page 6.
	Subsequent	Refer to the maintenance schedule on page 5.

Wiring Diagram

With Oil Alert



Without Oil Alert



CONSUMER INFORMATION

Honda Publications

These publications will give you additional information for maintaining and repairing your engine. You may order them from an authorized Honda engine servicing dealer.

Shop Manual	This manual covers complete maintenance and overhaul procedures. It is intended to be used by a skilled technician.
Parts Catalog	This manual provides complete, illustrated parts lists.

INFORMASI GARANSI INTERNASIONAL UNTUK MESIN SERBA GUNA Honda

Mesin Serba Guna Honda yang dipasang pada produk buatan manufaktur lain (OEM) ini dijamin oleh garansi Honda, berdasarkan persyaratan berikut:

- Syarat garansi ini berlaku bagi mesin serba guna yang ditetapkan Honda untuk masing-masing negara.
- Garansi ini berlaku untuk kerusakan mesin yang disebabkan oleh masalah produksi atau spesifikasi.
- Garansi ini tidak berlaku bagi negara-negara yang tidak memiliki distributor Honda.

Cara mereparasi produk yang memiliki garansi:

Bawalah produk Anda ke dealer yang berkaitan dengan produk-produk mesin Honda atau dealer tempat Anda membeli produk tersebut, dengan membawa nota pembelian yang Anda terima saat Anda membeli produk tersebut sebagai bukti bahwa produk Anda masih memiliki garansi. Apabila dealer tersebut menilai bahwa mesin Anda perlu diperbaiki, maka perbaikan akan diberikan.

KETERANGAN JAMINAN ANTARABANGSA UNTUK Honda GENERAL PURPOSE ENGINES

The Honda General Purpose Engine yang diinstal dalam produk OEM dilindungi oleh jaminan Honda, dalam penerimaan berikut:

- Syarat jaminan menurut kepada general-purpose engine yang dikeluarkan oleh Honda di setiap negara.
- Syarat jaminan berlaku untuk kerusakan mesin yang disebabkan sebarang pembuatan atau spesifikasi tertentu.
- Jaminan ini tidak berlaku untuk negara dimana yang tidak ada pengedar Honda.

Bagaimana hendak membetulkan/membbaiki produk anda dibawah jaminan:

Hantarkan produk OEM anda kepada pengedar yang mengedar produk Honda Power atau pengedar yang anda beli produk anda daripadanya, dengan resit dimasa pembelian sebagai bukti yang produk anda masih dibawah jaminan kerosakan. Sekiranya pengedar mengutarakan supaya produk anda perlu dibbaiki, jaminan pembetulan akan di jalankan.

INTERNATIONAL WARRANTY INFORMATION FOR Honda GENERAL PURPOSE ENGINES

The Honda General Purpose Engine installed on this OEM product is covered by a Honda warranty, on the following assumptions.

- The warranty conditions conform to those for the general purpose engine established by Honda for each country.
- The warranty conditions apply to engine failures caused by any manufacturing or specification problem.
- The warranty does not apply to countries where there is no Honda distributor.

How to have your product repaired under warranty:

Bring your OEM product to the dealer who deals with Honda power products or the dealer who you purchased your product from, with the receipt you received at the time of purchase as evidence that your product is still under warranty. If the dealer judges that the engine needs to be repaired, warranty repair will be performed.

معلومات عن الضمانة الدولية لمحركات هوندا للأغراض العامة

محركات هوندا للأغراض العامة التي تم تركيبها على المنتجات التي تم صنعها بواسطة شركات أخرى تكون مشمولة بضمانة هوندا، وتخضع الضمانة الأساسية لما يلي:

- حالات الضمانة المطابقة لهذه المحركات للأغراض العامة تم وضعها من قبل هوندا لكل بلد.
- يتم تطبيق شروط الضمانة الى أعطال المحرك التي سببها من أي خلل بالتصنيع أو مشاكل المواصفات.
- لا يتم تطبيق الضمانة على البلدان التي لا يوجد فيها موزع هوندا.

كيفية إصلاح جهازك تحت هذه الضمانة

خذ جهازك الى الوكيل الذي يتعامل بمنتجات الطاقة من هوندا أو الوكيل الذي أشتريته منه مع مستند الشراء الذي أستمته عند وقت الشراء كبرهان على أن جهازك لازال مشمول بالضمانة. إذا قرر الوكيل أن المحرك، في حاجة الي إصلاح، يتم تنفيذ التصليح حسب الضمانة.

Honda 汎用エンジン 保証のご案内

このOEM製品（相手先ブランド製品）に搭載されたHonda汎用エンジンにはHondaの保証が適用されます。基本的な考え方は、以下の通りです。

- 保証条件は、その国においてHondaが定めている汎用エンジンの保証条件に従います。
- エンジン修理の原因が製造上、仕様上のトラブルによるものである場合に保証が適用されません。
- その国にHondaディストリビューターが無い場合は、保証は受けられません。

保証修理の受け方

保証期間内であることの確認のため、製品購入時の領収書と共に、Honda汎用製品を扱っているディーラー又はOEM製品をお買い上げになったディーラーに製品をお持ちください。Hondaエンジンを修理する必要があるとそのディーラーが判断した場合は、保証修理が行われます。

INFORMATIONS SUR LA GARANTIE INTERNATIONALE DES MOTEURS A USAGE GENERAL Honda

Le moteur à usage général Honda installé sur ce matériel OEM est couvert par une garantie Honda dans les conditions suivantes:

- Les conditions de garantie sont conformes à celles pour le moteur à usage général établies par Honda pour chaque pays.
- Les conditions de garantie s'appliquent aux pannes de moteur causées par un problème de fabrication ou de spécification.
- La garantie ne s'applique pas aux pays où il n'existe pas de distributeur Honda.

Comment faire réparer votre matériel sous la garantie:

Amenez votre matériel OEM chez le revendeur s'occupant de matériels de puissance Honda ou chez le revendeur où vous avez acheté votre matériel, avec le reçu d'achat en main comme preuve que votre matériel est encore sous garantie. Si le revendeur estime que le moteur a besoin d'être réparé, la réparation aura lieu sous garantie.

INFORMATIONEN ZUR INTERNATIONALEN GARANTIE FÜR Honda-INDUSTRIEMOTOREN

Der in diesem Erstausrüster-Produkt installierte Honda-Industriemotor ist unter den nachfolgend aufgeführten Voraussetzungen von der Honda-Garantie abgedeckt.

- Die für Industriemotoren geltenden Garantiebestimmungen wurden von Honda für jedes Land festgelegt.
- Die Garantie gilt für Motordefekte, die durch einen Fabrikationsfehler oder inkorrekte Spezifikationen verursacht wurden.
- Die Garantie gilt nicht in Ländern, in denen kein Honda-Großhändler vorhanden ist.

Vorgehensweise bei einem Garantiefall:

Bringen Sie Ihr Erstausrüster-Produkt zu einem Honda-Händler für motorgetriebene Geräte oder zu ihrem Verkaufshändler. Zum Beweis, daß das Produkt noch durch die Garantie abgedeckt ist, muß zu dieser Zeit der Verkaufsbeleg vorgelegt werden. Nachdem der Händler bestätigt, daß eine Reparatur des Motors erforderlich ist, werden die nötigen Garantiarbeiten ausgeführt.

INTERNATIONALE GARANTIE INFORMATIE VOOR Honda ALGEMEEN-GEBRUIK MOTOREN

De Honda algemeen-gebruik motor die op dit EOM product is gemonteerd, is gedekt door een Honda garantie, waarbij het volgende in acht moet worden genomen:

- De garantievoorwaarden voldoen aan die voor de algemeen-gebruik motoren opgesteld door Honda voor ieder land.
- De garantievoorwaarden zijn van toepassing op motordefecten die veroorzaakt zijn door fabricage- of specificatiefouten.
- De garantie geldt niet in landen waar geen Honda distributeur is.

Repareren van het product onder de garantie:

Breng uw OEM product naar een dealer die Honda elektrische producten verkoopt of naar de dealer waarvan u het product heeft gekocht, tezamen met het bewijs van aankoop zodat de dealer kan zien dat het product nog onder de garantie is. Indien de dealer van oordeel is dat de motor gerepareerd moet worden, zal deze onder de garantie worden gerepareerd.

INFORMAZIONI SULLA GARANZIA INTERNAZIONALE PER I MOTORI Honda PER USO GENERICO

La garanzia Honda è applicabile sui motori Honda per uso generico che equipaggiano macchine prodotte da altri costruttori ed è assoggettata alle seguenti regole:

- Le condizioni di garanzia sono conformi a quelle per i motori per uso generico stabilite da Honda per ogni nazione.
- Le condizioni di garanzia si applicano da problemi del motore causati da qualsiasi problema di produzione o specifico.
- La garanzia non si applica alle nazioni nelle quali non è presente nessun rivenditore Honda.

Procedure per ottenere interventi in garanzia:

Portare il prodotto di altro costruttore dal rivenditore che tratta prodotti motorizzati Honda o dal rivenditore dal quale si è acquistato il prodotto, con la ricevuta fornita nel momento dell'acquisto, come prova che il prodotto è ancora in garanzia. Se il rivenditore ritiene che il motore necessita di riparazioni, verranno eseguite le riparazioni in garanzia.

INFORMACIÓN SOBRE LA GARANTÍA INTERNACIONAL DE LOS MOTORES Honda DE USO GENERAL

El motor Honda de uso general instalado en este producto de fabricante de equipo original (OEM) está cubierto por una garantía de Honda, bajo las condiciones siguientes.

- Las condiciones de garantía conforman las de los motores de uso general establecidas por Honda para cada país.
- Las condiciones de garantía se aplican a las averías de motores causadas por un problema de fabricación o de especificaciones.
- La garantía no se aplica en los países en los que no haya ningún distribuidor de Honda.

Cómo hacer para que le reparen su producto en garantía:

Lleve su producto OEM al concesionario que comercializa productos motorizados Honda o al concesionario donde usted compró su producto, llevando el recibo que le entregaron en el momento de la compra como prueba de que su producto está todavía en garantía. Si el concesionario cree que hay que reparar el motor, se le realizará la reparación aplicando la garantía.

INFORMAÇÃO SOBRE A GARANTIA INTERNACIONAL PARA MOTORES Honda PARA USO GERAL

O motor Honda para uso geral neste produto OEM é coberto pela garantia Honda de acordo com os seguintes princípios.

- As condições da garantia conformam com as condições de garantia para motores de uso geral estabelecidas pela Honda no país em questão.
- As condições da garantia são para falhas do motor causadas por qualquer problema de fabricação ou especificação.
- A garantia não é válida em países onde não há um distribuidor Honda.

Para obter o serviço sob a garantia:

Leve o seu produto OEM para um revendedor que venda produtos montados com motor Honda ou ao revendedor onde comprou o produto, com o recibo que recebeu no ato da compra como uma evidência que o produto ainda está na garantia. Se o revendedor julgar que o motor precisa ser reparado, o reparo será realizado através da garantia.

本田通用发动机国际保修通知

该OEM产品中安装的本田通用发动机包含有下列前提下的本田保修承诺。

- 保修条件应符合本田针对各国制定的通用发动机的保修条件。
- 保修条件适用于因任何制造或规格问题所造成的发动机故障。
- 该保修不适用于无本田经销商的国家。

如何使您的产品得到保修修理:

将您的OEM产品送到办理本田动力产品的经销商或您购买该产品的经销商, 出示购买时所得到的发票, 以证明您的产品仍在保修期内。若经销商断定该发动机需要修理时, 就会得到保修修理。

ข้อมูลเกี่ยวกับการรับประกันสินค้าระหว่างประเทศ สำหรับเครื่องยนต์เบนคอกประสมคอก Honda

เครื่องยนต์เบนคอกประสมคอก Honda ที่ได้รับการติดตั้งอยู่ในผลิตภัณฑ์ OEM นี้ ได้ถูกครอบคลุมอยู่ในการรับประกันของ Honda ตามเงื่อนไขดังต่อไปนี้

- เงื่อนไขในการรับประกันนี้ใช้สำหรับเครื่องยนต์เบนคอกประสมคอกที่ถูกผลิตโดย Honda ในแต่ละประเทศ
- เงื่อนไขในการรับประกันนี้จะรับประกันถึงการเสียหายของเครื่องยนต์ที่มีสาเหตุใดๆที่เกิดจากการผลิตหรือเกิดจากปัญหาที่มีการระบุเฉพาะ
- การรับประกันนี้จะไม่ครอบคลุมถึงประเทศที่ไม่มีตัวแทนจำหน่ายของ Honda

การเข้ารับการซ่อมภายใต้เงื่อนไขการรับประกัน

นำผลิตภัณฑ์ OEM ของท่านไปยังผู้จำหน่ายปลีกที่มีการตกลงกับทาง Honda มลคอก Honda เครื่องยนต์หรือผู้จำหน่ายที่ท่านได้ทำการซื้อผลิตภัณฑ์นั้นพร้อมด้วยใบเสร็จรับเงินที่ท่านได้รับในตอนซื้อเพื่อเป็นหลักฐานว่าผลิตภัณฑ์ของท่านยังอยู่ในช่วงระยะเวลาของการรับประกันถ้าทางผู้จำหน่ายลงความเห็นว่าเครื่องยนต์ต้องได้รับการซ่อมเครื่องยนต์จะได้รับการซ่อมภายใต้เงื่อนไขการรับประกัน