

HONDA HS1136/HS1390Z

OWNER'S MANUAL

Thank you for purchasing a Honda snowblower.

This manual covers the operation and maintenance of HONDA snowblower: HS1136/HS1390Z.

All information in this publication is based on the latest product information available at the time of approval for printing.

Honda Motor Co., Ltd. reserves the right to make changes at any time without notice and without incurring any obligation.

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

Pay special attention to statements preceded by the following words:

▲WARNING Indicates a strong possibility of severe personal injury or death if instructions are not followed.

CAUTION: Indicates a possibility of personal injury or equipment damage if instructions are not followed.

NOTE: Gives helpful information.

If a problem should arise, or if you have any questions about your snowblower, consult an authorized Honda dealer.

▲WARNING Operating this equipment requires special effort to ensure the safety of the operator and the safety of others. Read and understand this Owner's Manual before operating this equipment; failure to do so could result in personal injury or equipment damage.

Illustrations herein are mainly based on: HS1136

- The illustration may vary according to the type.

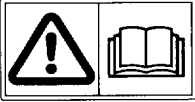
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1. SAFETY INSTRUCTIONS

⚠ WARNING

To ensure safe operation –



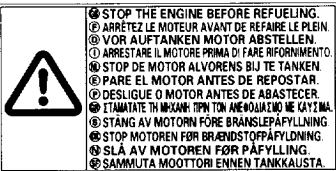
- Honda snowblower is designed to give safe and dependable service if operated according to instructions. Read and understand the Owner's Manual before operating the snowblower. Failure to do so could result in personal injury or equipment damage.



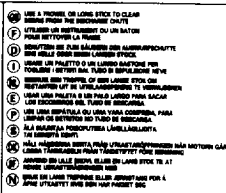
- Never put your hand into the snow discharge chute while the engine is running; serious personal injury could result.



- Never stand or work around or near the auger while the engine is running. Your feet may be caught on the auger when the auger is accidentally started, increasing the risk of serious personal injury.



- If the snow discharge chute becomes clogged, stop the engine and use a snow drop bar or a wooden stick to unclog it.
- Never put your hand into the snow discharge chute while the engine is running; serious personal injury could result.



- **Gasoline is extremely flammable and is explosive under certain conditions.**
- **Do not smoke or allow flames or sparks where the snowblower is refueled or where gasoline is stored.**
- **Do not overfill the fuel tank, and make sure the filler cap is closed securely after refueling.**
- **Refuel in a well-ventilated area with the engine stopped.**

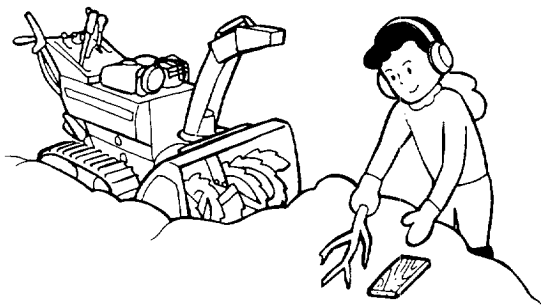
Operator Responsibility

- **Know how to stop the snowblower quickly, and understand the operation of all controls.**
- **Never permit anyone to operate the snowblower without proper instruction. If people or pets suddenly appear in front of the snowblower while it is in operation, immediately release the auger and drive clutch levers to stop the snowblower and avoid possible injury from rotating auger blades.**

⚠ WARNING

To ensure safe operation —

- Always make a pre-operation check (pages 22 thru 28) before you start the engine. You may prevent an accident or equipment damage.
- Honda snowblowers are designed to give safe and dependable service if operated according to instructions. Read and understand this Owner's Manual before operating the snowblower. Failure to do so could result in personal injury or equipment damage.
- Before operating the snowblower, inspect the area in which you are going to clear snow. Remove debris and other obstacles the snowblower might strike or throw, as that may cause injury or damage to the snowblower.
- Inspect the snowblower before operating it. Repair any damage and correct any malfunction before operation. If you hit an obstacle while operating the snowblower, stop the engine immediately, and check for damage. Damaged equipment may increase the possibility of injury during operation.
- Do not use the snowblower when visibility is poor. Under conditions of poor visibility, there is a greater risk of striking an obstacle or causing injury.
- Never use the snowblower to clear snow from a gravel road or driveway, as rocks may be picked up and thrown. They may cause injury to bystanders.
- Do not store or leave tools, rags etc. in or behind the covers as they may cause personal injury or damage to the snowblower.
Always keep the tools in the designated location.

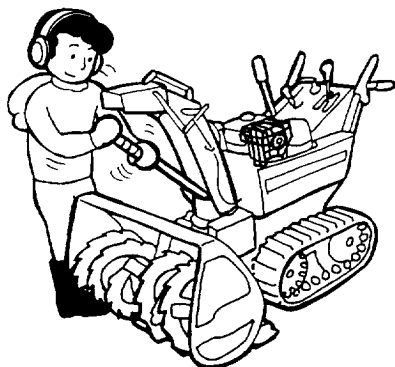


⚠ WARNING

- Adjust the snow discharge chute to avoid hitting the operator, bystanders, windows, and other objects with thrown snow. Stay clear of the snow discharge chute while the engine is running.
- Children and pets must be kept away from the area of operation to avoid injury from flying debris and contact with the snowblower.
- Do not use the snowblower to remove snow from roofs.
- To avoid overturning, be careful when changing the direction of the snowblower while operating it on a slope.

The snowblower may overturn on steep slopes if left unattended, causing injury to the operator or bystanders.

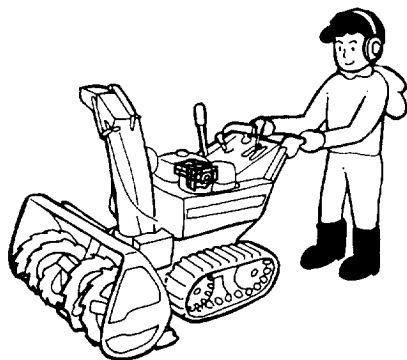
- Do not use the snowblower on a slope of more than 10°.
- The maximum safe grade angle shown is for reference purpose only. To avoid tipping the snow blower over, stay off slopes too steep for safe operation. The risk of snow blower upset is even higher when the surface is loose, wet or uneven.
- Before starting the engine, check that the snowblower is not damaged and in good condition. For your safety and safety of others, exercise extreme care when using the snowblower on up or down hill.
- If the snow discharge chute becomes clogged, stop the engine and use a snow drop bar or a wooden stick to unclog it. Never put your hand into the snow discharge chute while the engine is running; serious personal injury could result.



▲ WARNING

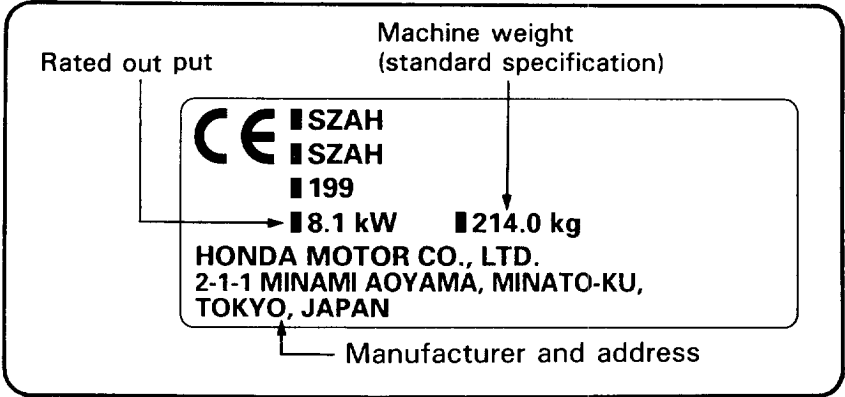
- **Never run the engine in an enclosed or confined area. Exhaust contains poisonous carbon monoxide gas; exposure can cause loss of consciousness and may lead to death.**
- **The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Let the engine cool before storing the snowblower indoors.**
- **Stop the engine and let it cool before operating covers for inspection and other services.**
- **Carefully check the area before backing the snowblower up or while working in reverse.**
- **To protect your ears, use earplugs while operating the snowblower.**

NOTE: While operating the snowblower, hold the handle firmly, and walk, don't run. Wear suitable winter boots that resist slipping.

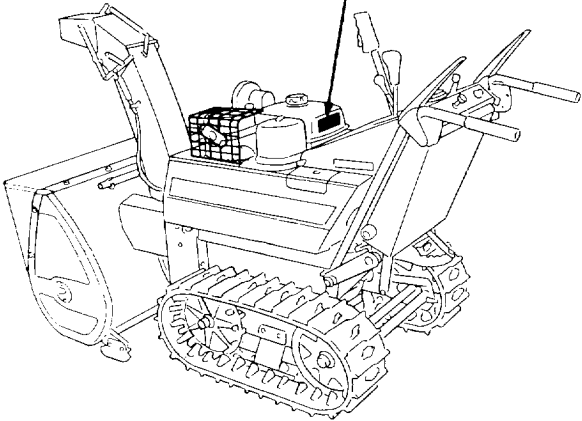


CE mark location

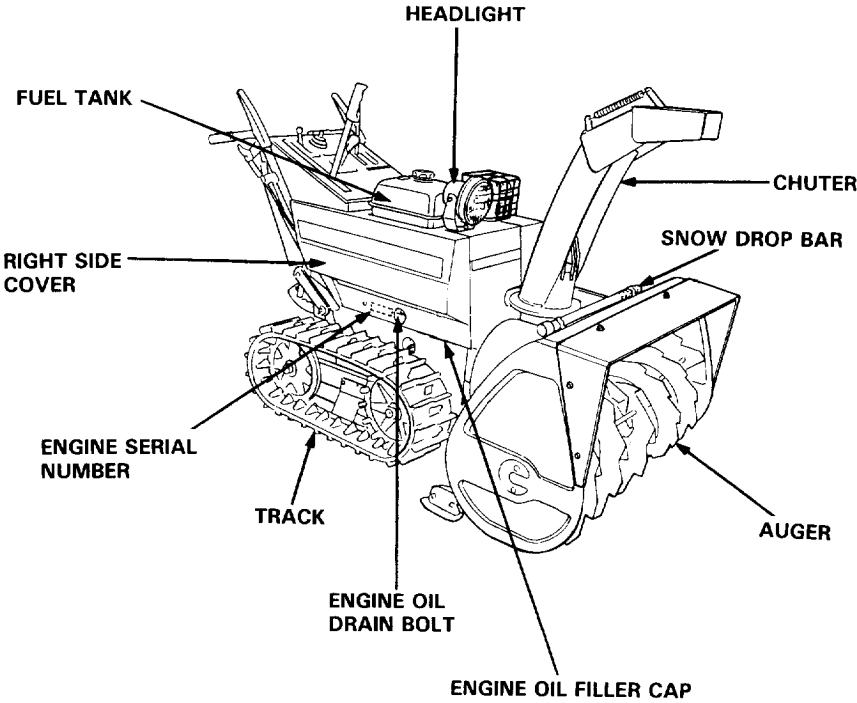
CE MARK

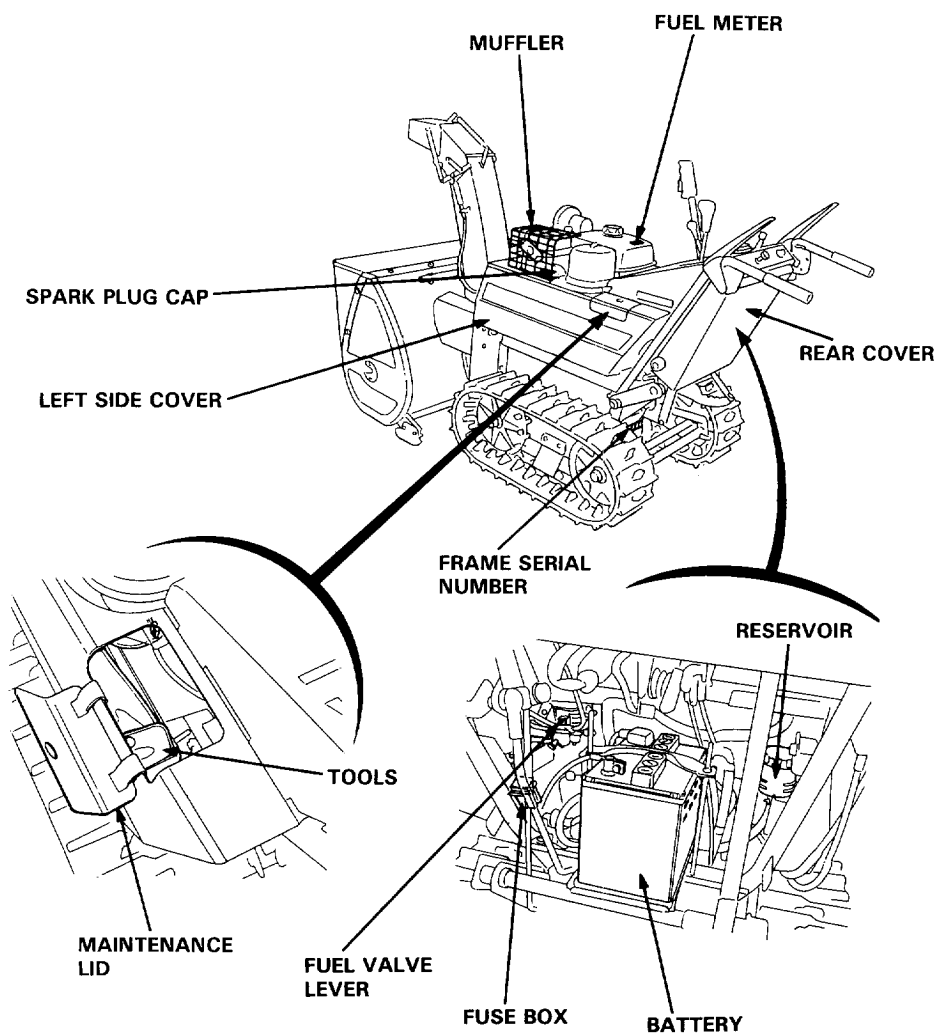


[Example: HS1136 CE MARK]

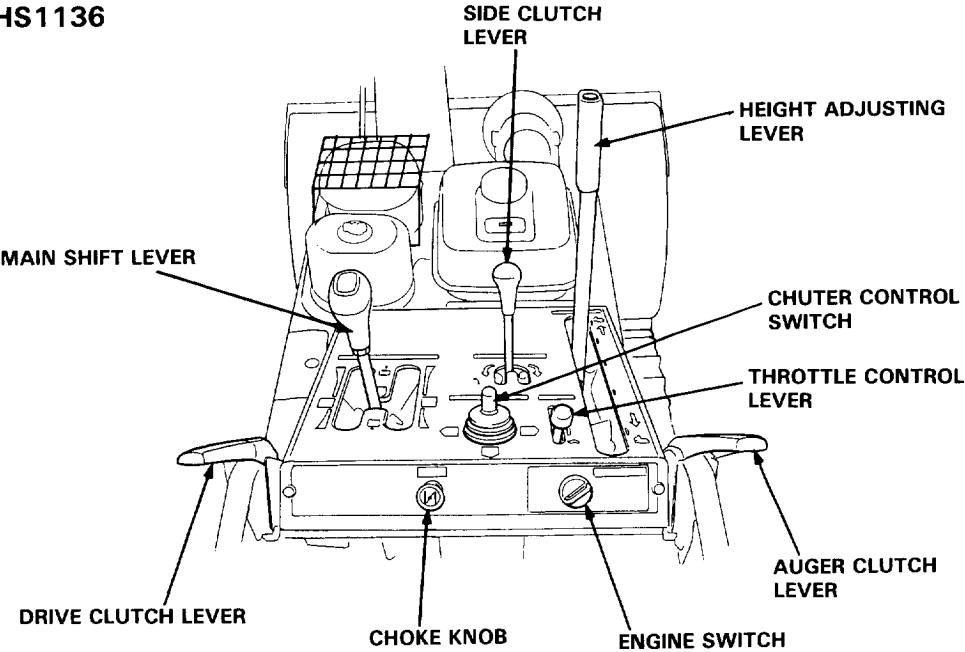


3. COMPONENT IDENTIFICATION

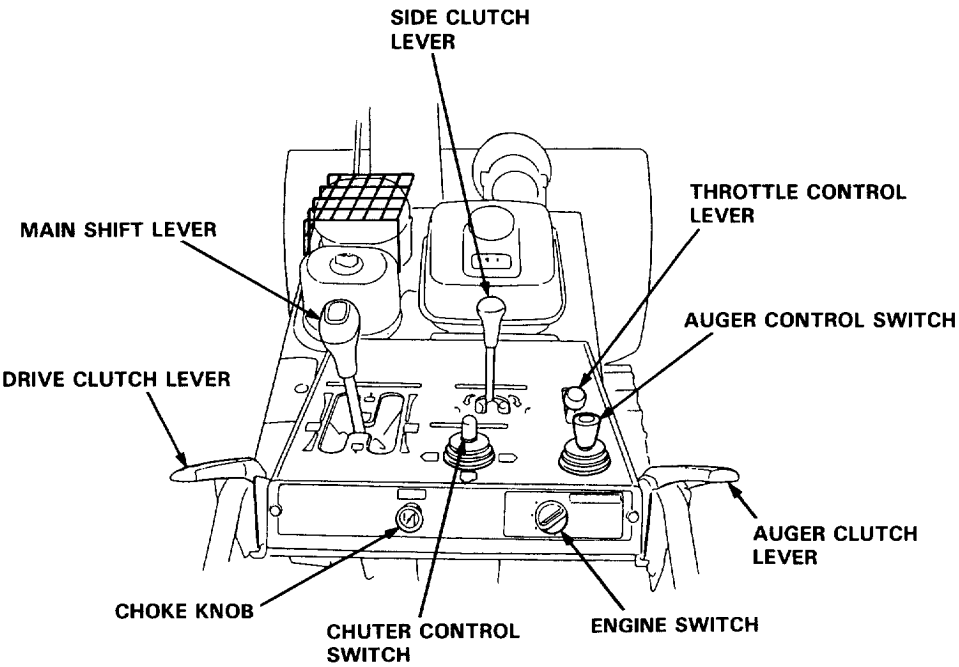




HS1136

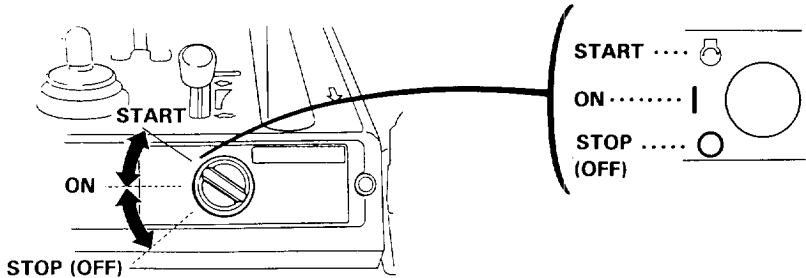


HS1390Z



ENGINE SWITCH

Use the engine switch to START and STOP the engine.



FUEL VALVE LEVER

The fuel valve opens and closes the fuel line from the fuel tank to the carburetor.

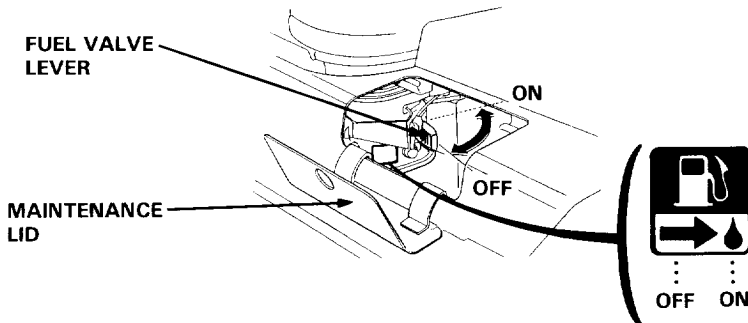
Turn the fuel valve lever to ON to open the line and turn it to OFF to close. Do not turn the fuel valve lever halfway; it should always be at either ON or OFF position exactly.

The fuel valve lever is located under the maintenance lid on the left side cover.

To operate the lever, open the maintenance lid.

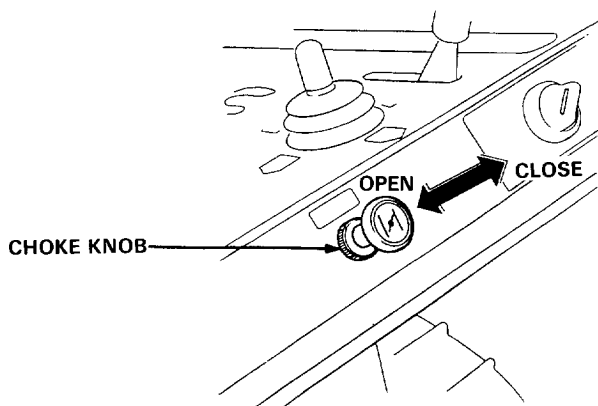
Before opening the maintenance lid, be sure to turn the engine switch to the OFF position.

⚠ WARNING Before transporting the snowblower or tilting it for service, be sure to turn the fuel valve lever to OFF to prevent possible fuel leaks; spilled fuel or fuel vapor may ignite.



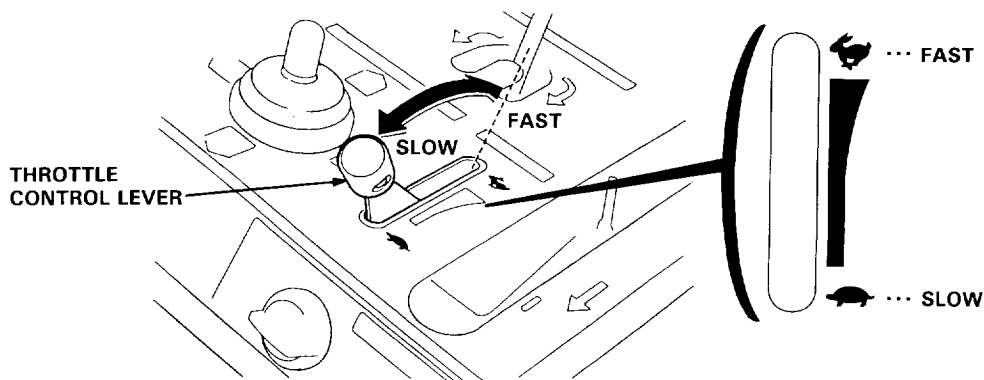
CHOKE KNOB

Close the choke when the engine is cold or difficult to start.



THROTTLE CONTROL LEVER (ENGINE SPEED)

Use the throttle control lever to select the engine speed. In normal operation, use the "FAST" position.



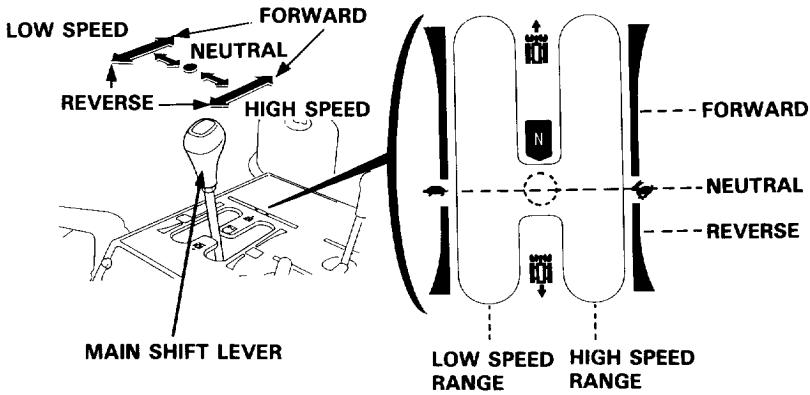
MAIN SHIFT LEVER

Operate the main shift lever to drive the snowblower in forward or in reverse direction.

The lever has two ranges, Low Speed (work) range and High Speed (transportation) range.

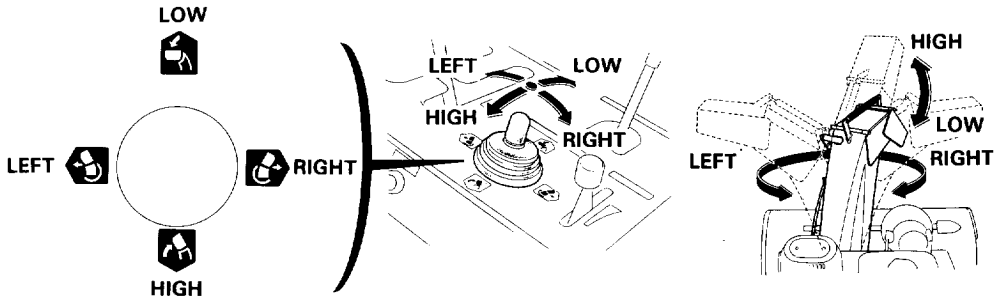
The speed of the snowblower can be increased and decreased steplessly in any of these two speed ranges.

Set the main shift lever in "NEUTRAL" while it is not in operation.



CHUTER CONTROL SWITCH

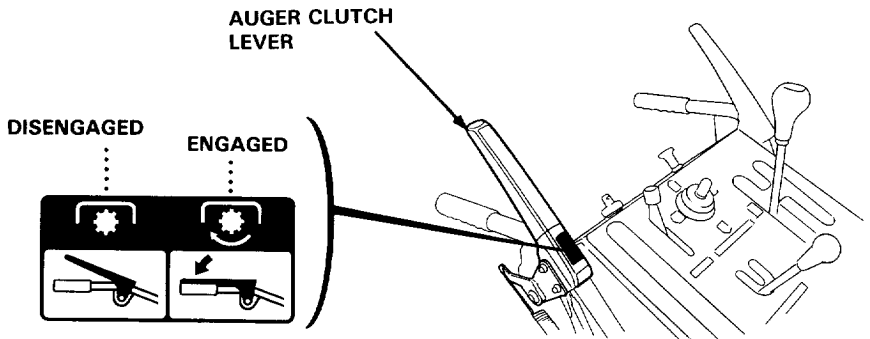
The snow discharge direction and angle can be adjusted steplessly by operating this switch.



⚠ WARNING Adjust the snow discharge direction and angle with care not to hit the bystanders, windows, and other objects with thrown snow.

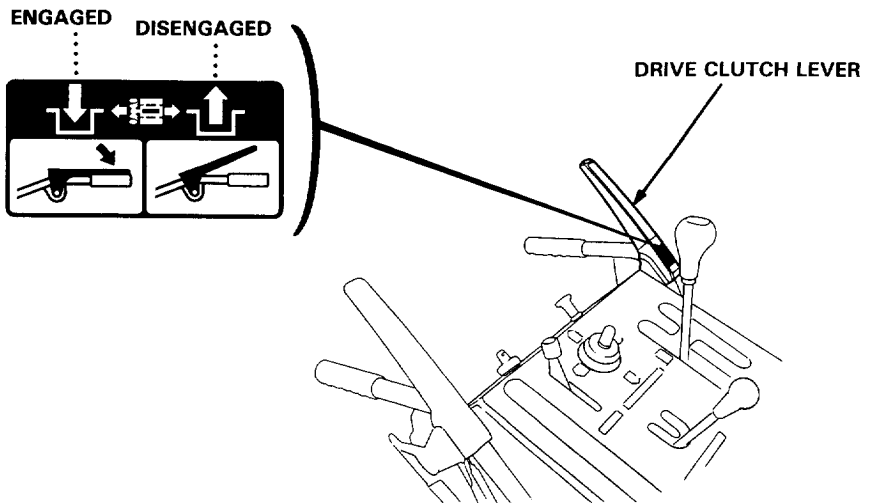
AUGER CLUTCH LEVER

Squeezing the auger clutch lever, the snow throwing mechanism starts. If the drive clutch lever is squeezed, the auger clutch lever will be fixed by squeezing it once. Both of the operations are stopped when releasing the drive clutch lever.

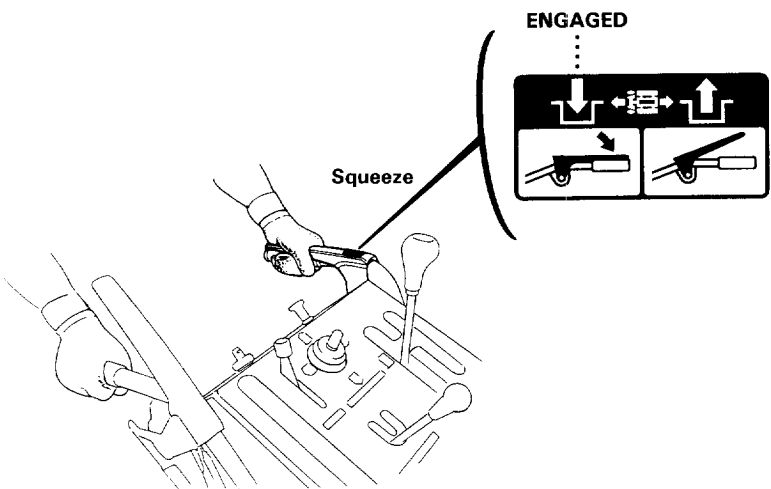


DRIVE CLUTCH LEVER

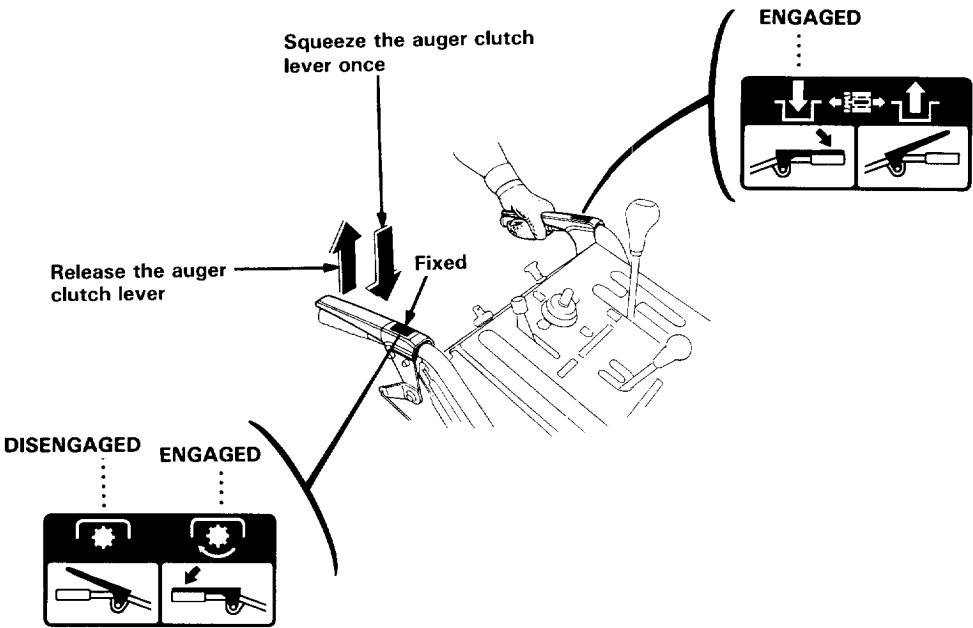
Squeezing the drive clutch lever, the snowblower moves forward or backward, if blower is transferred, squeeze the drive clutch lever only.



Moving only

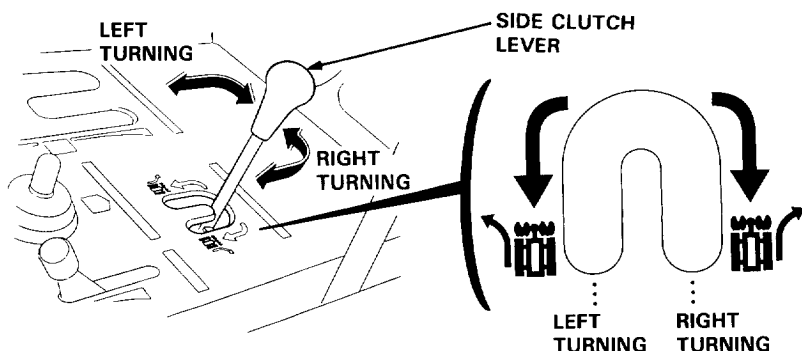


Moving and clearing snow



SIDE CLUTCH LEVER

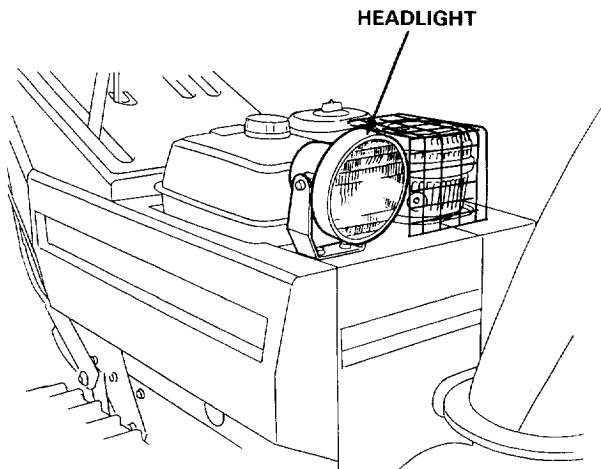
Use the side clutch lever to turn the snowblower to the right or left. Pulling the clutch lever to the right turns the snowblower to the right while pulling the lever to the left turns it to the left.



⚠ WARNING Be sure to reduce speed when making turns. Use extra care when making turns as the location of the handle and panels relative to the operator will be changed suddenly and can cause injury.

HEADLIGHT

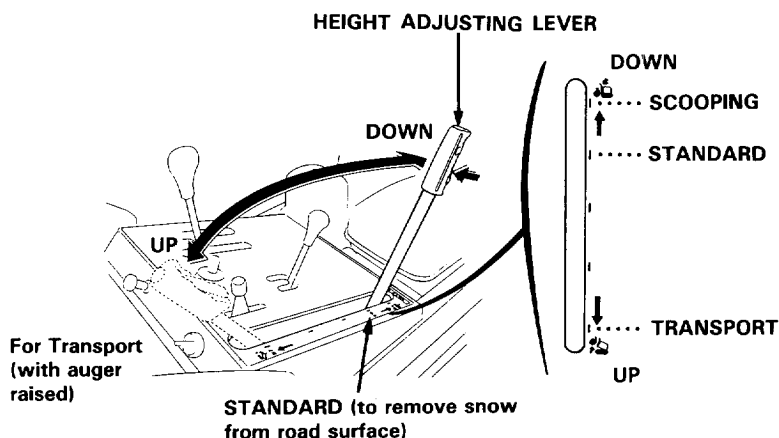
The headlight will be turned ON when the engine is started. The headlight will remain OFF with the engine switch alone set in the ON position.



HEIGHT ADJUSTING LEVER (HS1136)

Operate the height adjusting lever to adjust the scooping height of the auger of the snowblower.

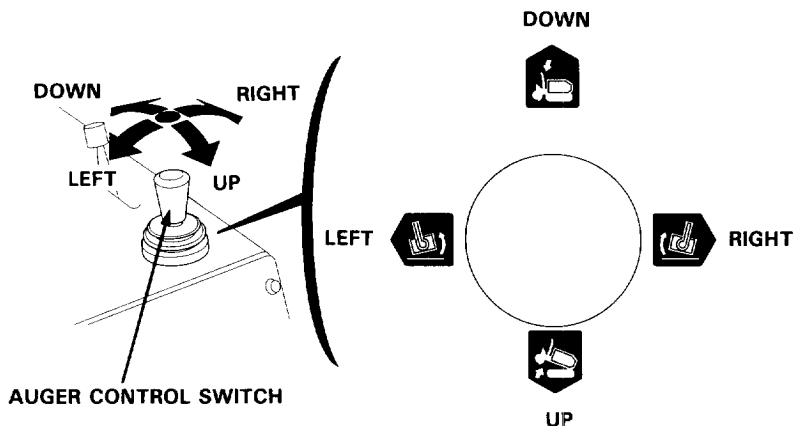
The auger height can be adjusted in the 5 position.



AUGER CONTROL SWITCH (HS1390Z)

Operate the auger control switch to adjust the auger height and tilt angle. The auger height and tilt angle can be adjusted stagelessly (see pages 38 and 39 for adjustment).

Operate the auger control switch while the engine is running. Operating the auger control switch while the engine is OFF will cause dead battery.

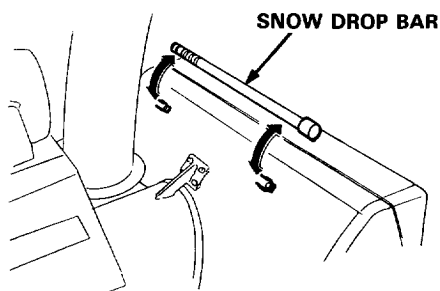


SNOW DROP BAR

If the snow discharge chute or snow throwing mechanism becomes clogged, stop the engine and use this drop bar to unclog them.

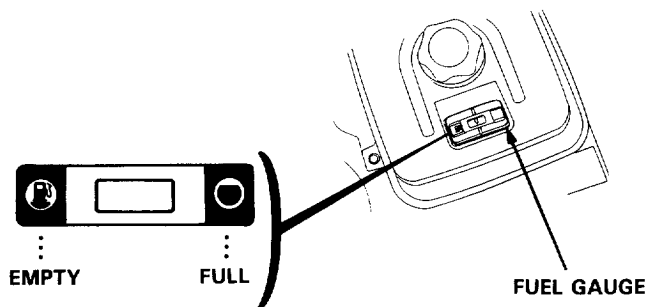
After unclogging, wipe the drop bar clean, and store it in the holders.

⚠ WARNING Before removing clogged snow, be sure to stop the engine, remove the spark plug cap from the spark plug, and make sure that all rotating parts have come to a complete stop.



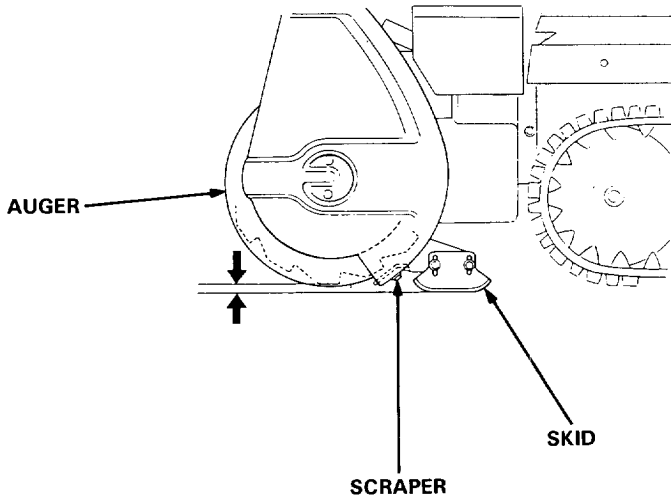
FUEL GAUGE

The fuel gauge indicates the amount of fuel in the tank. When the fuel gauge needle enters the "E" range, refill the tank as soon as possible.



SKID, SCRAPER

Adjust the skid and the scraper according to the road surface condition where you are to clear the snow. Use the skid to determine the height from the ground to the auger, and use the scraper to make the snow surface even (see page 35).



5. PRE-OPERATION CHECK

Check the snowblower on level ground with the engine stopped.

⚠ WARNING

To prevent accidental start-up, remove the engine switch key, and disconnect the spark plug cap before performing the pre-operation inspection.

FUEL LEVEL

Inspection:

Check whether the fuel gauge needle is in the "FULL" position. If the needle is not in the position, fill the fuel tank.

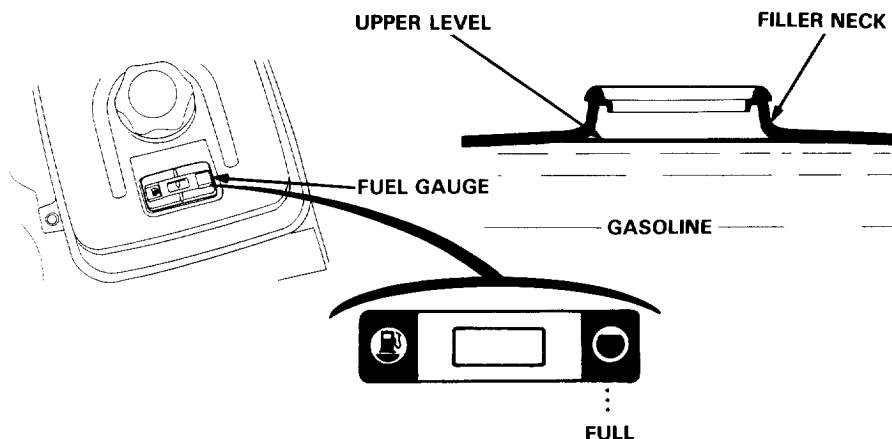
Refilling:

FUEL TANK CAPACITY: 6.5 ℓ (1.72 US gal, 1.43 Imp gal)

Remove the fuel cap and fill the tank with the recommended gasoline up to the upper level. Do not fill beyond the upper level.

Tighten the fuel cap securely.

Do not overfill the fuel tank (there should be no fuel in the filler neck).



Use automotive gasoline (Unleaded or lowleaded is preferred to minimize combustion chamber deposits).

FOR NEW SOUTH WALES ONLY

Use unleaded fuel with a research octane number of 91 or higher. Never use an oil/gasoline mixture or dirty gasoline. Avoid getting dirt, dust or water in the fuel tank.

After refueling, be sure to tighten the fuel tank cap firmly.

⚠ WARNING

- Gasoline is extremely flammable and is explosive under certain conditions.
- Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where the engine is refueled or where gasoline is stored.
- Do not overfill the fuel tank (there should be no fuel in the filler neck). After refueling, make sure the tank cap is closed properly and securely.
- Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.
- Avoid repeated or prolonged contact with skin or breathing of vapor. **KEEP OUT OF REACH OF CHILDREN.**

CAUTION: Gasoline substitutes are not recommended; they may be harmful to fuel system components.

GASOLINES CONTAINING ALOCOHOL

If you decide to use a gasoline containing alcohol (gasohol), be sure it's octane rating is at least as high as that recommended by Honda. There are two types of "gasohol": one containing ethanol, and the other containing methanol. Do not use gasohol that contains more than 10% ethanol. Do not use gasoline containing methanol (methyl or wood alcohol) that does not also contain cosolvents and corrosion inhibitors for methanol. Never use gasoline containing more than 5% methanol, even if it has cosolvents and corrosion inhibitors.

NOTE:

- Fuel system damage or engine performance problems resulting from the use of fuels that contain alcohol is not covered under the warranty. Honda cannot endorse the use of fuels containing methanol since evidence of their suitability is as yet incomplete.
- Before buying fuel from an unfamiliar station, try to find out if the fuel contains alcohol, if it does, confirm the type and percentage of alcohol used. If you notice any undesirable operating symptoms while using a gasoline that contains alcohol, or one that you think contains alcohol, switch to a gasoline that you know does not contain alcohol.

ENGINE OIL LEVEL

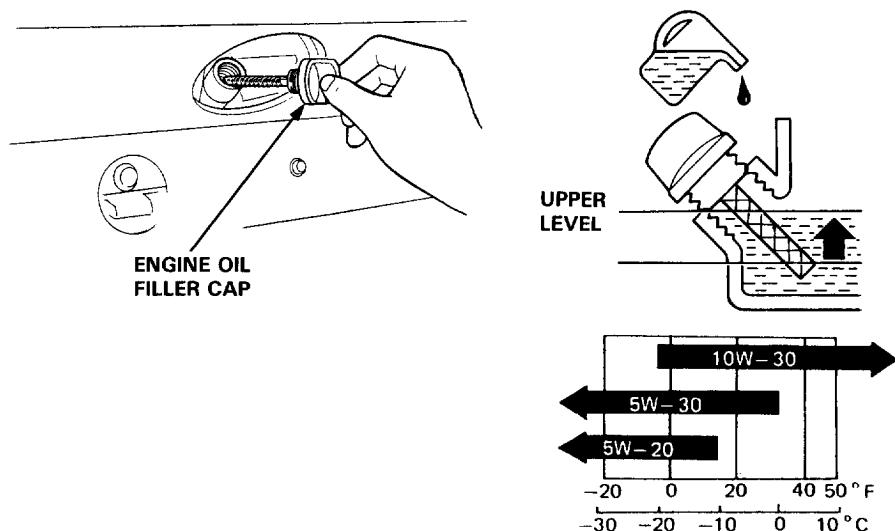
Inspection:

Place the snowblower on level ground with the engine stopped. Remove the engine oil filler cap and check whether the oil is up to the top of the oil filler neck.

Refilling:

If the level is low, fill the new oil up to the upper level. Replace the oil if it is excessively contaminated or discolored. (Refer to page 58 for the engine oil replacement interval and procedure.)

QUANTITY SPECIFIED: 1.1 l (1.16 US qt, 0.97 Imp qt)



RECOMMENDED OIL:

Use high detergent, premium quality motor oil certified to meet or exceed U.S. automobile manufacturers' requirements for API service classification SG or SF (Motor oils classified SG or SF will show this designation on the container.) Select the appropriate oil viscosity for the average temperature in your area, as shown in the chart above. SAE 5W-30 is recommended for general, all-temperature use.

CAUTION:

- Engine oil is a major factor affecting engine performance and service life. Nondetergent oils and 2-stroke engine oils are not recommended because they have inadequate lubricating properties.
- Running the engine with insufficient oil can cause serious engine damage.

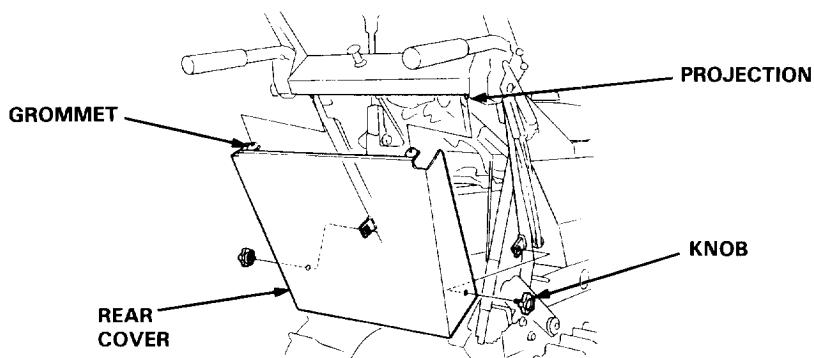
Tighten the oil filler cap securely.

HST (Hydrostatic Transmission) OIL LEVEL

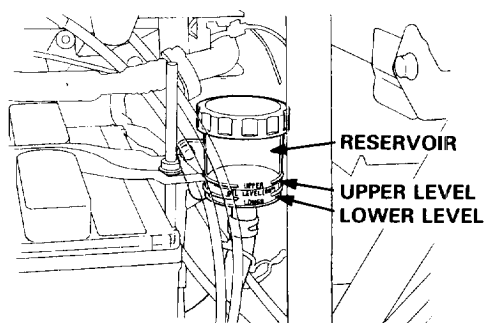
Inspection:

Check the HST oil level while the transmission is cold.

1. Remove the right and left knobs and remove the rear cover by pulling it down.



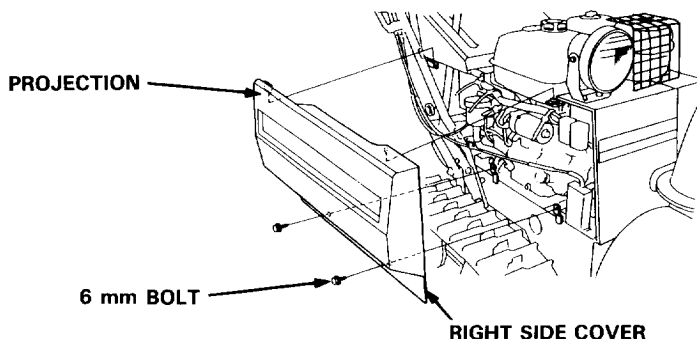
2. Check that the oil level is anywhere between the "UPPER" and "LOWER" level marks on the reservoir. If the level is low, fill to the upper level mark (see page 26).



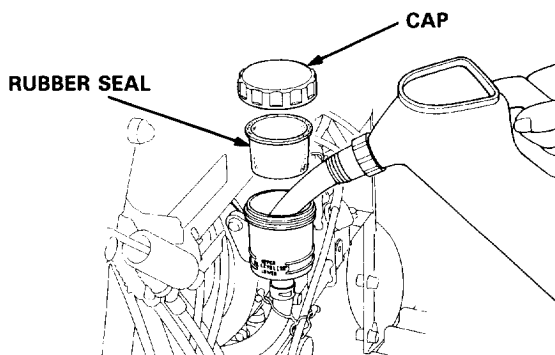
3. After inspection the oil level, install the rear cover by aligning the rear cover grommets with the projections of the body panel, and tighten the knobs securely.

Refilling:

1. If the oil level is low, remove the two 6 mm bolts from the right side cover, and then remove the right side cover by lifting it.



2. Remove the reservoir cap and rubber seal, and pour fresh recommended oil up to the UPPER level mark.



RECOMMENDED OIL:

The same as the recommended engine oil (See page 24).

CAUTION: Never remove the cover unless it is necessary to replenish the reservoir with oil. Be careful not to allow foreign particles to enter the reservoir when replenishing the oil. Consult your authorized Honda dealer immediately if the oil level is abnormally low.

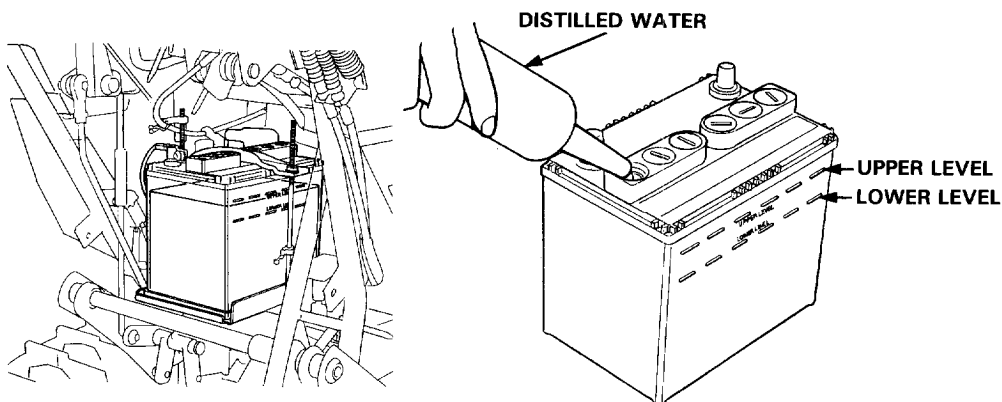
3. After replenishing, install the right side cover by setting the projections on the side cover against the hooks of the body panel, and tighten the 6 mm bolts securely.

BATTERY ELECTROLYTE LEVEL

Open the rear cover and check the electrolyte level in each battery cell. Fill the battery with distilled water to the upper level line. Never overfill the battery. Any corrosion around the positive and negative terminals should be washed off with a solution of baking soda and warm water. Dry the terminals and retighten the terminal bolts if necessary, then coat the terminals with grease.

CAUTION:

- Use only distilled water in the battery. Tap water will shorten the service life of the battery.
- Do not fill the battery beyond the UPPER level. If overfilled, electrolyte may overflow and corrode snowblower components. Immediately wash off any spilled electrolyte.



⚠ WARNING

- The battery contains sulfuric acid. Avoid contact with skin, eyes or clothing.

ANTIDOTE: EXTERNAL—Flush with water.

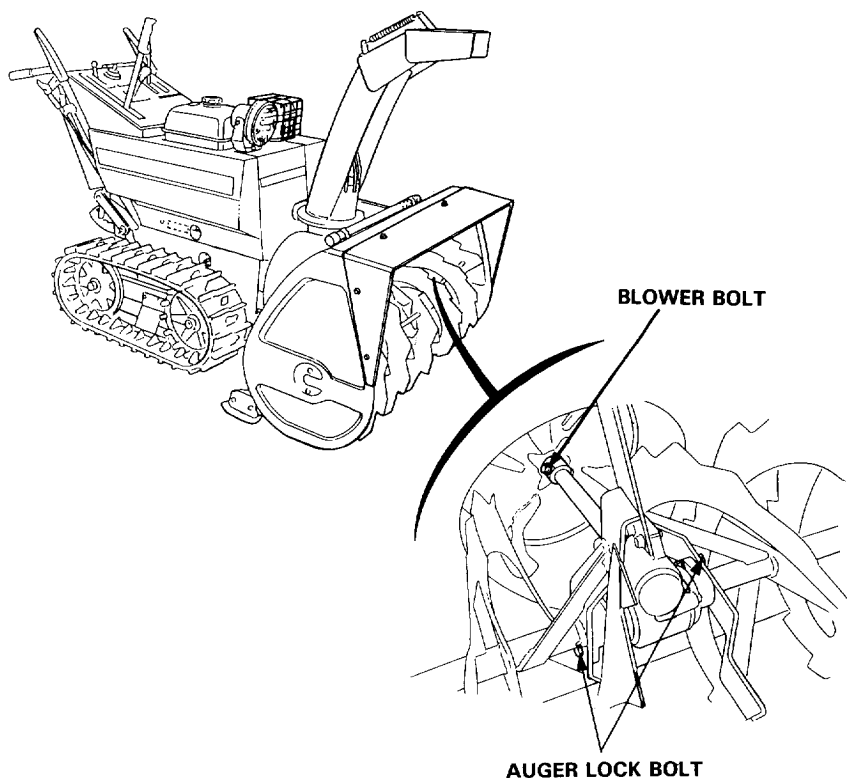
INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Call a physician immediately.

EYES—Flush with water and get prompt medical attention.

- Batteries produce explosive gases. Keep sparks, flames and cigarettes away. Always shield the eyes when working near batteries.

AUGER AND BLOWER BOLTS

Check the auger and blower for loose or broken bolts, if broken, replace them with new ones (see page 64).



OTHER CHECK

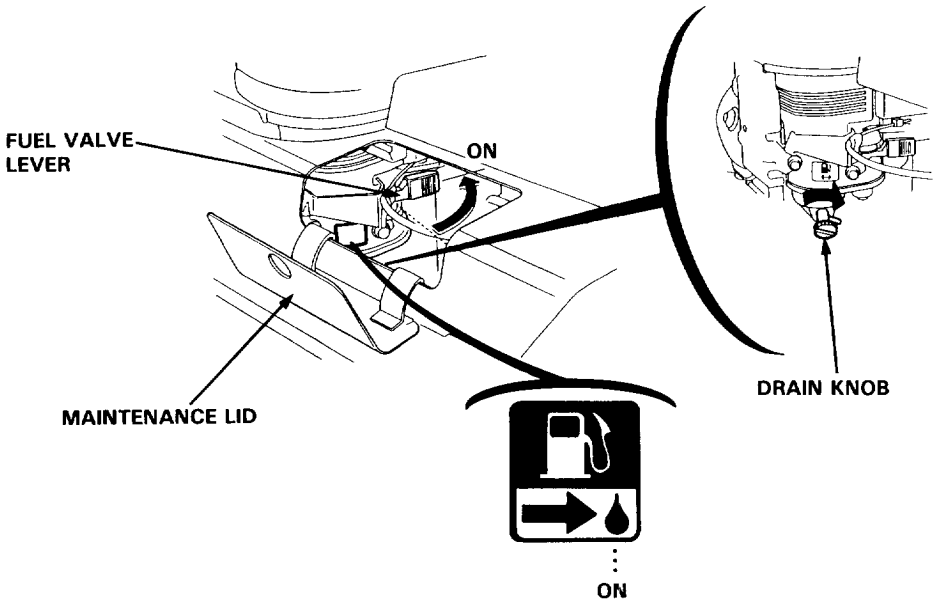
1. Check all bolts, nuts and other fasteners for security.
2. Check each part for operation.
3. Check the entire machine for any other faults which might have been caused in the previous run or work.

6. STARTING THE ENGINE

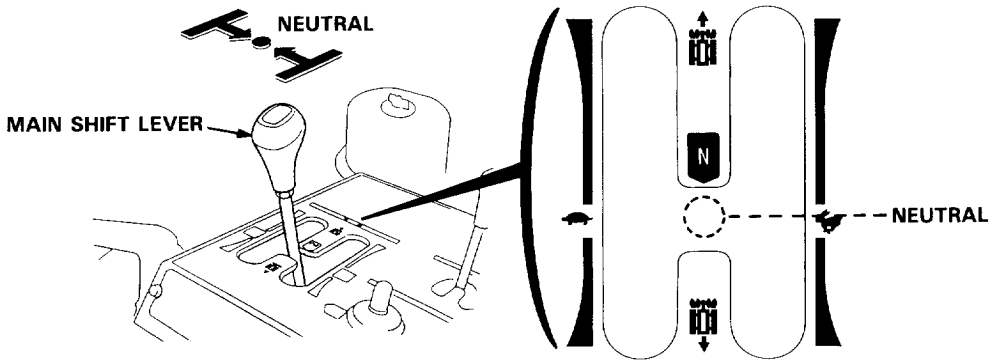
⚠ WARNING Never run the engine in an enclosed or confined area. Exhaust contains poisonous carbon monoxide gas; exposure can cause loss of consciousness and may lead to death.

CAUTION:

- Never squeeze the auger and drive clutch levers when cranking the engine with the electric starter.
 - Never set the main shift lever in the **NEUTRAL** on sloping surfaces. The snowblower will coast down the slope, and endanger men or equipment.
 - To start and stop the engine and snowblower on a sloping surface, be sure to set the main shift lever in **NEUTRAL** in the Low Speed range with the drive clutch lever released.
1. Turn the fuel valve lever to "ON".
Be sure that the drain knob is tightened securely.

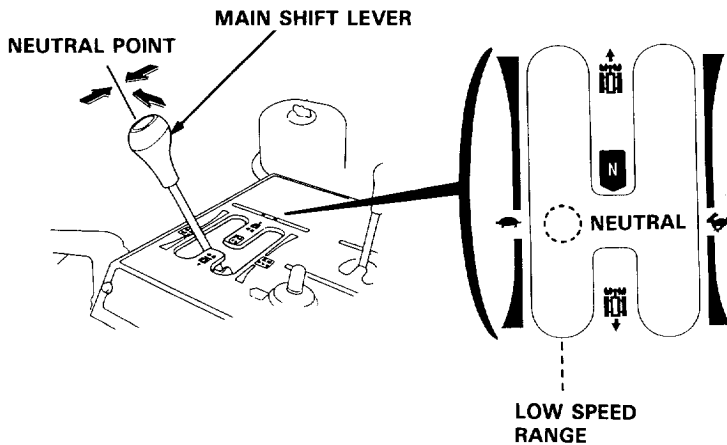


2. Set the main shift lever in "NEUTRAL".

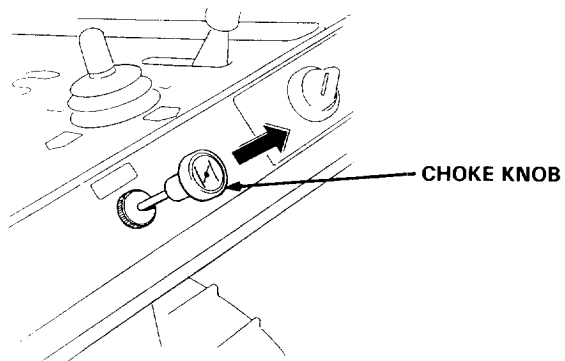


Engine start on slope:

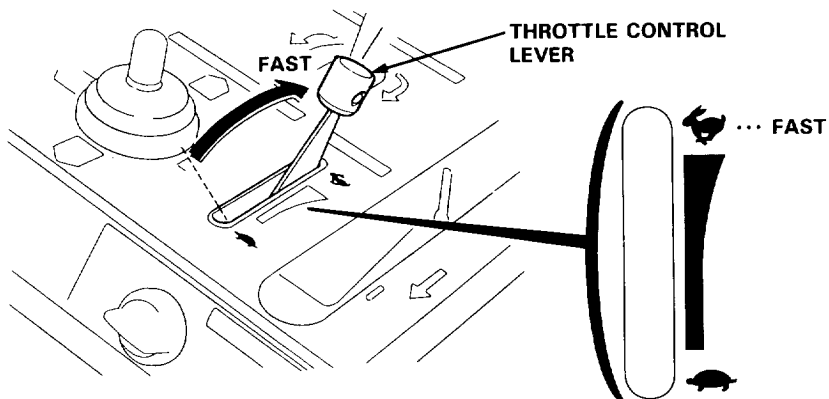
Set the main shift lever in the neutral point of the low speed range (i.e. where the snowblower does not move by squeezing the drive clutch lever) and start the engine. The snowblower can run idle when the main shift lever is set in the "NEUTRAL" position.



3. Pull the choke knob fully toward you.

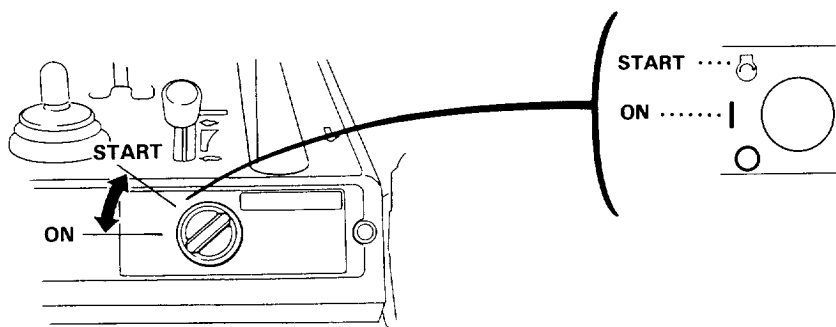


4. Move the throttle control lever to "FAST".

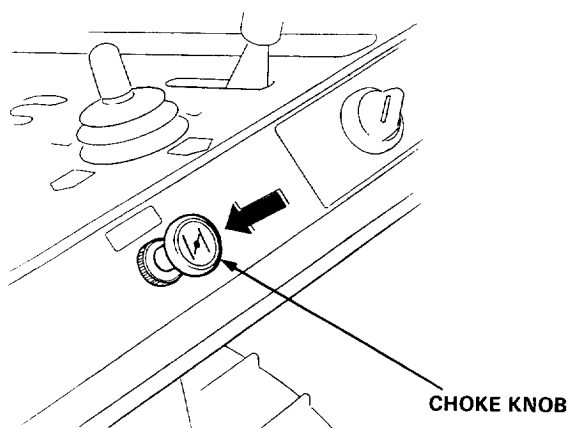


-
5. Turn the engine switch to "START" and release the switch after the engine is started. The switch automatically returns to "ON" position.

CAUTION: If the engine does not start within 5 seconds after cranking the starter, wait for about 10 seconds and restart the engine.



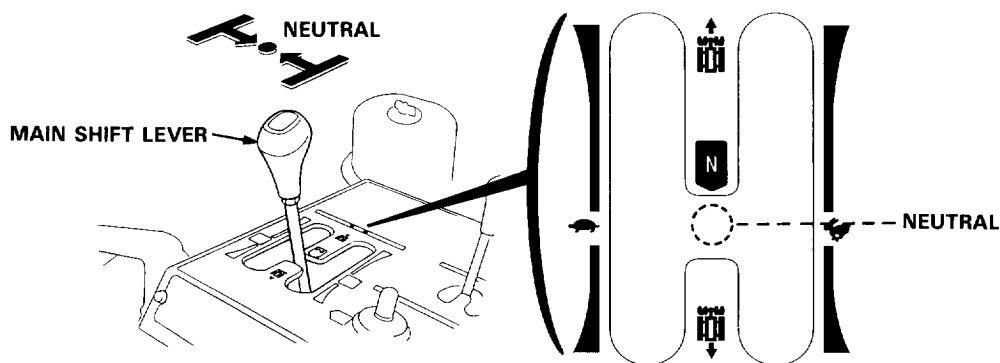
6. After starting the engine, check that the engine speed is stabilizing and release the choke knob back slowly. Move the throttle control lever to the "LOW" position gradually and warm up the engine to the normal operating temperature.



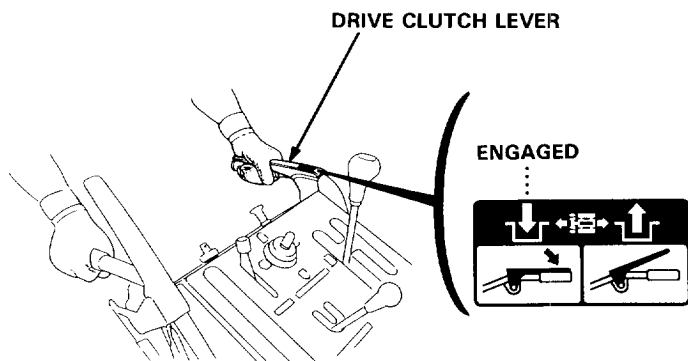
7. While warming the engine up, also warm up the transmission as follows:

CAUTION: Operating the snowblower without warming up the transmission cause damage to the HST (Hydrostatic Transmission).

a. Check that the main shift lever is in the "NEUTRAL" position.



b. Squeeze the drive clutch lever for about 30 seconds.



HIGH ALTITUDE OPERATION

At high altitude, the standard carburetor air fuel mixture will be excessively rich. Performance will decrease, and fuel consumption will increase.

High altitude performance can be improved by installing a smaller diameter main fuel jet in the carburetor and readjusting the pilot screw. If you always operate the snowblower at altitudes higher than 1,830 m (6,000 ft) above sea level, have your authorized Honda dealer perform these carburetor modification.

Even with suitable carburetor jetting, engine horsepower will decrease approximately 3.5% for each 305 m (1,000 foot) increase in altitude. The affect of altitude on horse-power will be greater than this if no carburetor modification is made.

CAUTION: Operation of the rotary mower at an altitude lower than the carburetor is jetted for may result in reduced performance, overheating, and serious engine damage caused by an excessively lean air/fuel mixture.

7. SNOWBLOWER OPERATION

⚠ WARNING Before operating the snowblower, read and understand the **SAFETY INSTRUCTIONS** on pages 3 thru 7.

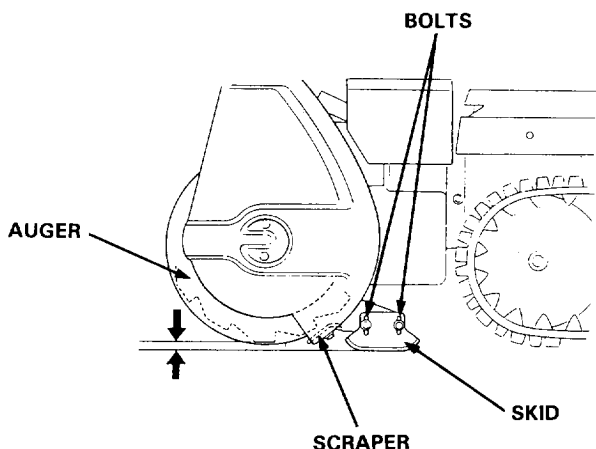
Efficiency of the snow removal work significantly affected by the snow condition (e.g. snow type, etc.). Adjust the skid position and the auger housing height as needed for the optimum snow removal.

SKID

Adjust the skid for the auger housing ground clearance best suited to your snow removal conditions.

⚠ WARNING To prevent accidental starting, turn the engine switch to the **OFF** position and disconnect the spark plug cap.

1. HS1136: Place the auger on the level surface of the ground and set the height adjusting lever at the "STANDARD" position.
HS1390Z: Hold the auger housing horizontally and lower the auger on the ground by operating the auger control switch. Turn the engine switch to OFF and disconnect the spark plug cap.
2. Loosen the bolts and adjust the skid and scraper height according to the road surface condition.



For use on uneven surfaces, lower the skid up to the bottom to obtain the maximum scraper ground clearance.

FACTORY PRE-SET CLEARANCE:

At the scraper: 3 – 7 mm (0.12 – 0.28 in)

At the auger: 8 – 12 mm (0.31 – 0.47 in)

NOTE:

- Adjust the skid equally on both sides.
- Be sure to tighten the skid and scraper bolts securely after making adjustment.

CAUTION:

Do not use the snowblower on rouge or uneven surfaces with the auger ground clearance set for hard snow or surfaces.

This may cause serious damage to the snow throwing mechanism.

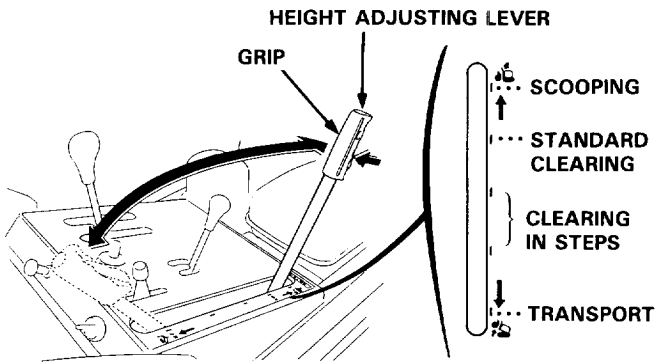
AUGER HEIGHT

HS1136

The auger height can be adjusted in the five position.

Adjust the auger height according to the snow type and snow removal work.

1. Release the height adjusting lever by squeezing the knob on the lever grip and pushing the lever forward with your right hand slightly.
2. Move the height adjusting lever to the desired position and release the knob on the lever grip.
3. Prior to throwing snow, make sure that the lever is locked firmly (the lever will click into position).



CAUTION:

- To operate the height adjusting lever while blowing snow, release the drive and auger clutches and operate the adjusting lever by holding the grip firmly with your right hand. To raise the snow throwing mechanism away from the snow, be sure to lock the lever in each lock position to prevent it from being pulled back suddenly.
- Do not ride on the frame or track tension adjuster pipe while operating the height adjusting lever; serious personal injury could result.

HS1390Z

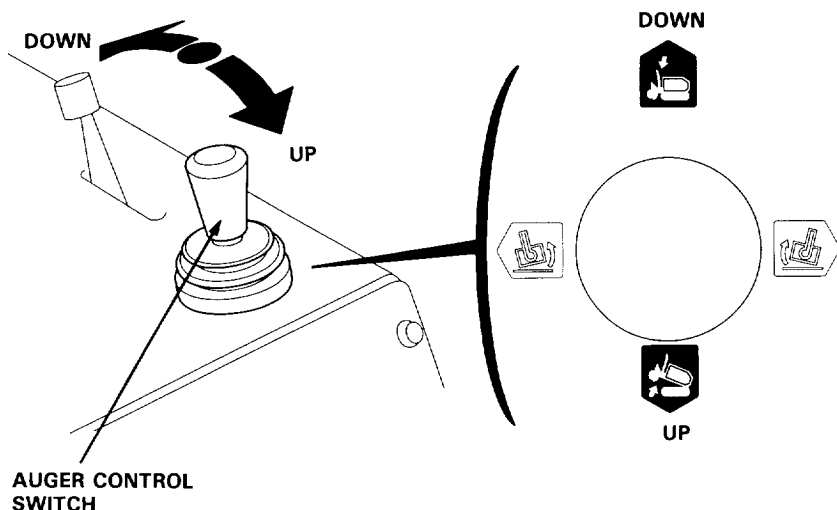
The auger height can be adjusted stagelessly.

Determine whether the auger is set on the ground, or dug into the snow or whether it is raised off the ground slightly according to the road surface condition, and adjust the auger height with the auger control switch.

Turning the switch rod toward "DOWN" lowers the auger.

Turning the switch rod toward "UP" raises the auger.

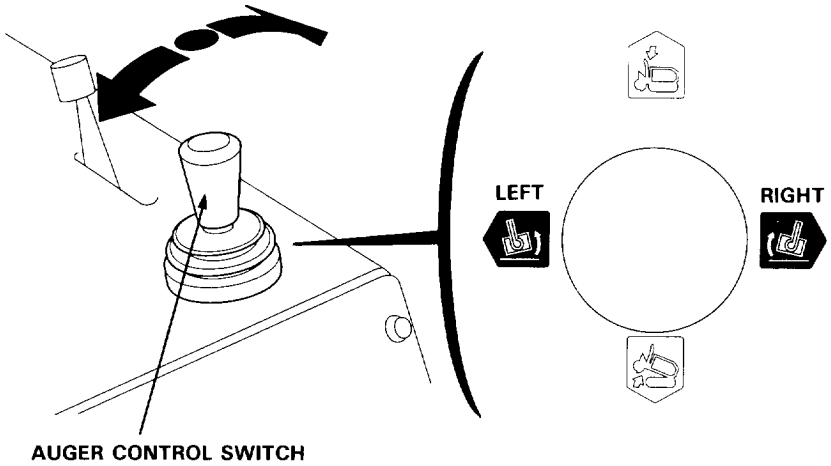
The auger stops in the position when the switch is released.



AUGER ANGLE (HS1390Z)

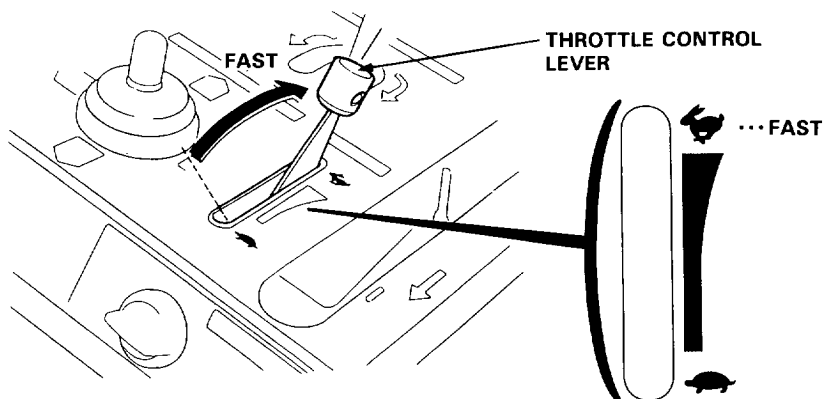
When the auger tilted during the snow removal, adjust the tilt by operating the auger control switch.

When the auger tilted toward right: Move the switch rod toward left.
When the auger tilted toward left: Move the switch rod toward right.

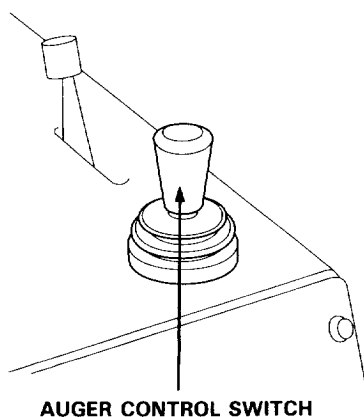
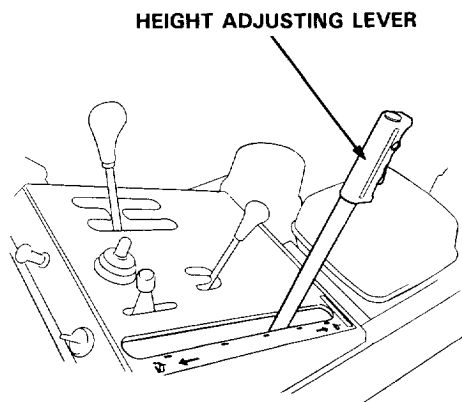


OPERATION

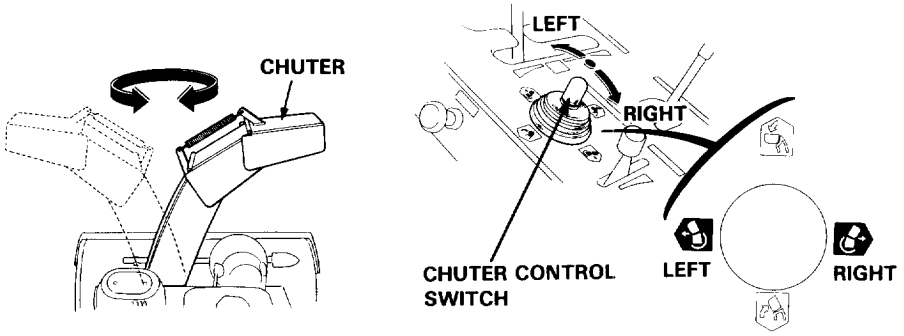
1. Start the engine (See page 29 through 33).
2. Move the throttle control lever to "FAST".



3. Adjust the auger height with the height adjusting lever (HS1136) or auger control switch (HS1390Z) according to your snow removal conditions (see pages 37 thru 39).

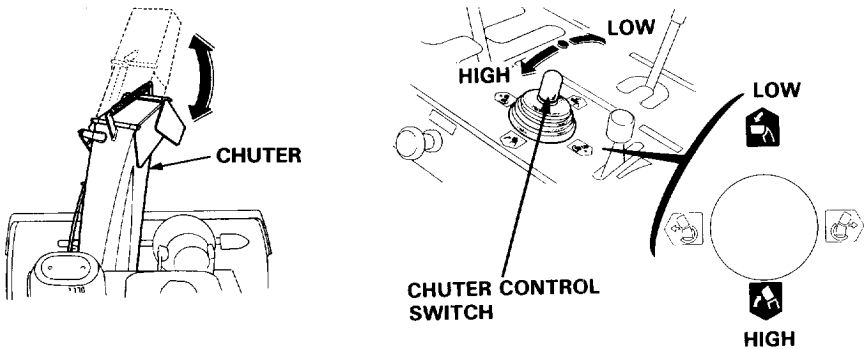


4. Adjust the snow discharge angle with a chuter control switch.

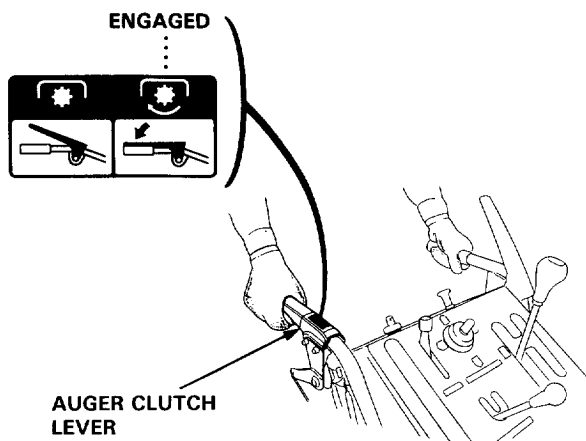


5. Adjust the snow discharge direction with a chuter control switch.

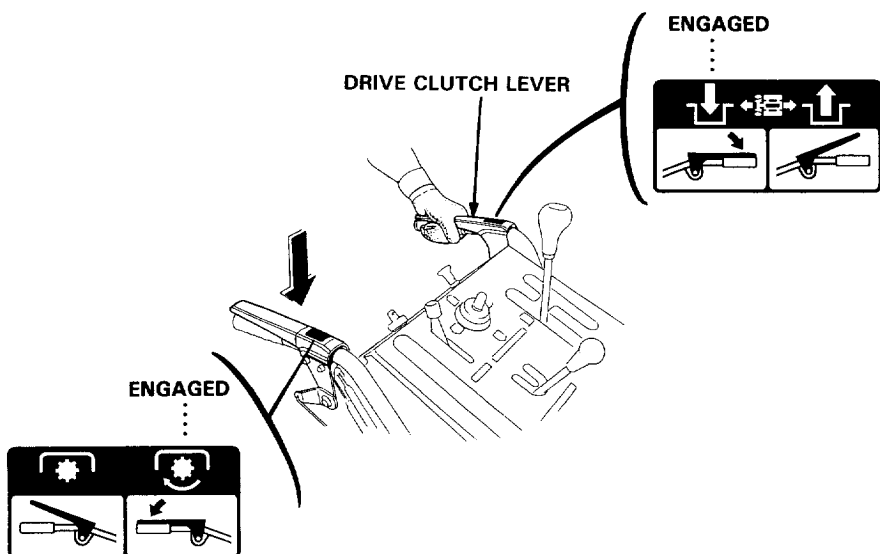
CAUTION: Adjust the snow discharge angle and direction with care not to hit the bystanders, windows, and others with thrown snow.



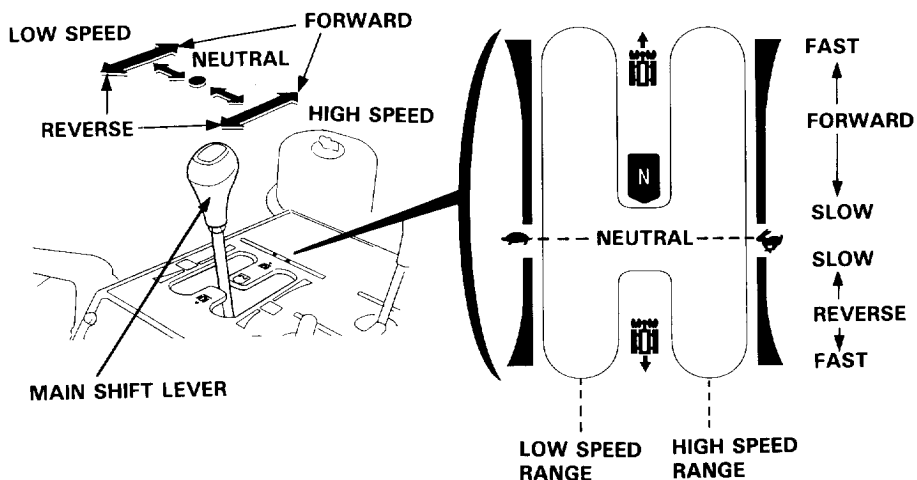
-
6. Squeeze the auger clutch lever.
The machine will clear snow when you squeeze the auger clutch lever.



7. Squeeze the drive clutch lever.
Before squeezing, make sure that the main shift lever is in Neutral.
By squeezing the drive clutch lever, the auger clutch lever will be fixed and you can operate without holding the auger clutch lever with your right hand.

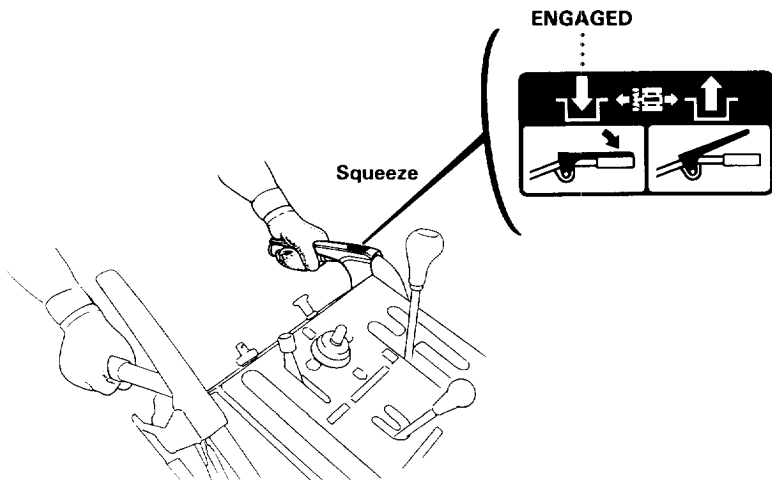


8. Operate the main shift lever to the appropriate positions in accordance with the type and quantity of snow.

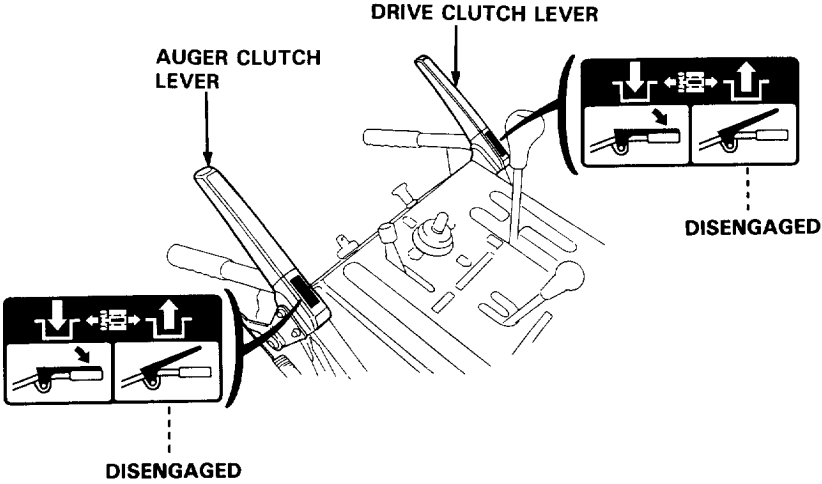


CAUTION: Always ensure the area in front of and behind the snowblower is clear of people, pets and obstructions before squeezing the drive and auger clutch levers.

To move from one place to another, or to change direction, use the drive clutch lever only. Release both the drive clutch lever and auger clutch lever once, then squeeze the drive clutch lever.



9. Release the clutch lever to stop clearing or moving.

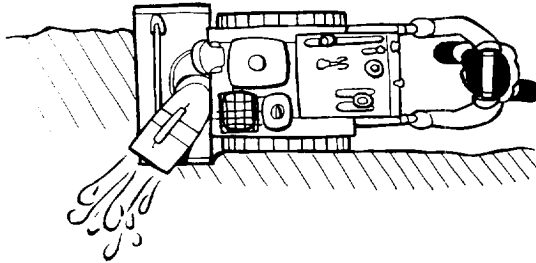


CLEARING SNOW

For best efficiency, clear snow before it melts, freezes and hardens. Select appropriate speed with the main shift lever, and do not reduce engine speed while throwing snow. Observe the following if engine speed is reduced with the main shift lever set in LOW.

- Clearing in narrow width

Clear snow in LOW and in narrow width by using part of the snow throwing mechanism when the snow is deep or hard.

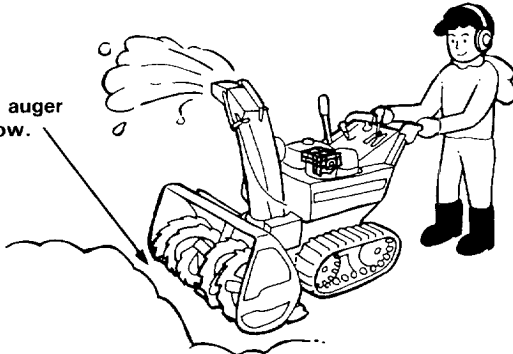


INTERMITTENT CLEARING

Follow the steps below when the engine lugs against deep or heavy snow.

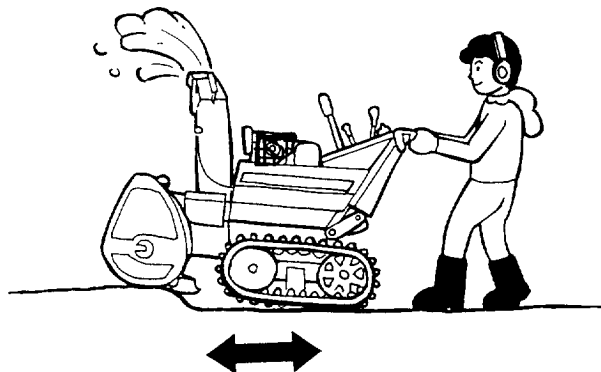
1. Release the drive clutch lever and wait until the auger is clear of snow and engine picks up speed with the auger clutch lever squeezed and the main shift lever in LOW.
2. When engine picks up speed, squeeze the drive clutch lever.
3. Repeat the above steps if engine speed is still reduced.

Wait until the auger
is clear of snow.



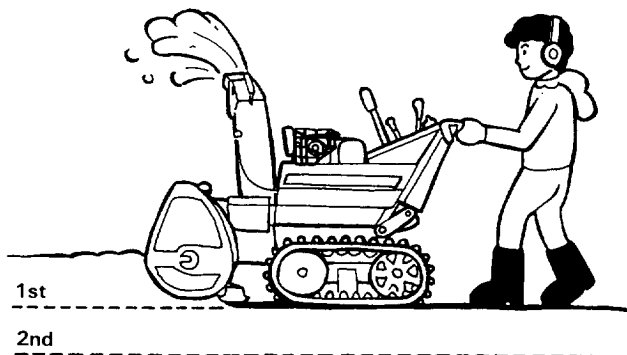
- Clearing with back and forth motions

If the snow is too hard that the snowblower tends to ride over the surface, push it back and force to remove snow gradually.



- Clearing in steps

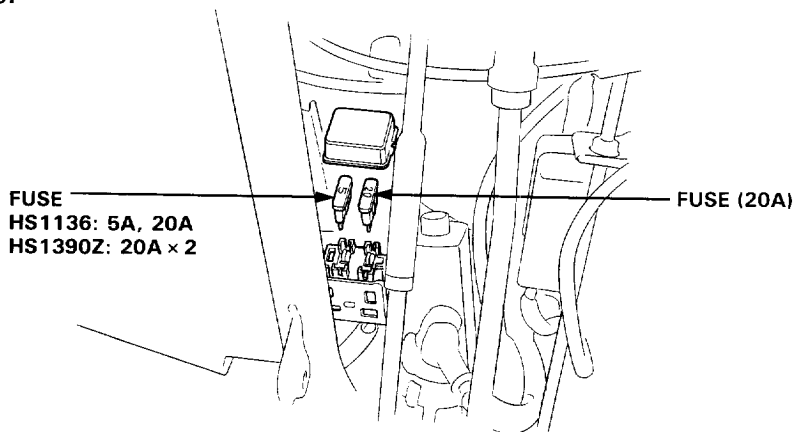
If the height of the snow is greater than the height of the snow-throwing mechanism, remove it in several steps as shown.



EMERGENT CHUTER ADJUSTEMENT

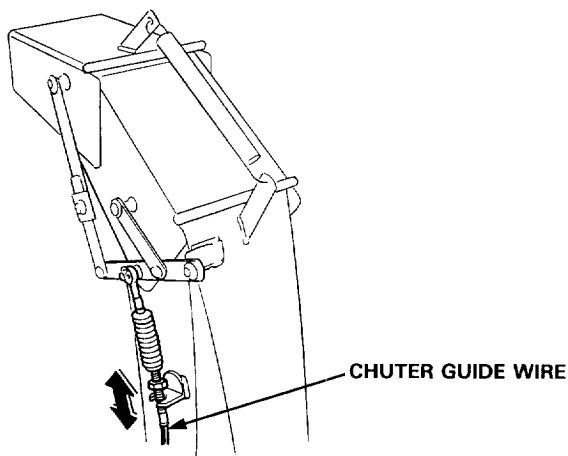
⚠ WARNING Before removing the clogged snow, be sure to stop the engine, remove the spark plug cap from the spark plug, and make sure that all rotating parts have come to a complete stop.

- Check that the fuses in the fuse box are not blown. If they are normal, set the chuter in the desired direction and at the appropriate angle as follows.



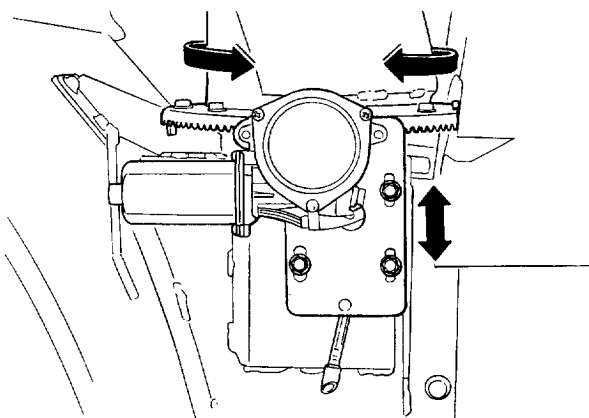
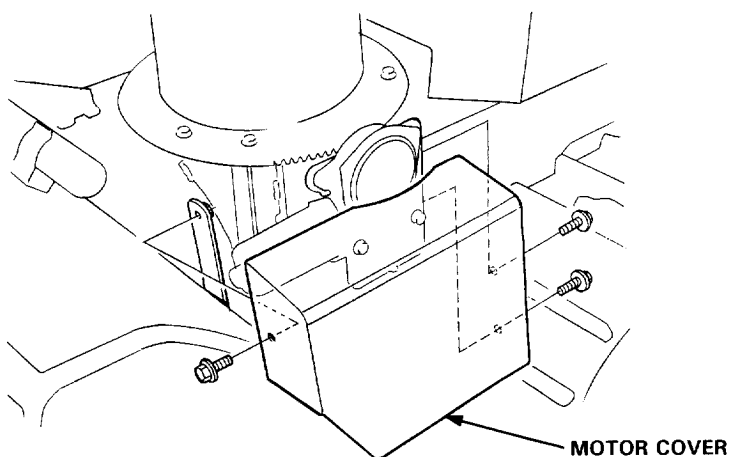
(To set at desired discharge angle)

- Using the tools provided, loosen the chuter link lock nut and adjust the chuter guide wire as required.



(To set at desired discharge direction)

- Remove the motor cover from the chuter motor and loosen the bolts fastening the chuter motor so that the chuter can be rotated by hand. Set the chuter in the desired direction, engage the gears by lifting the motor by hand, and retighten the motor mounting bolts securely. Install the motor cover.



NOTE: Have the snowblower repaired by your authorized Honda dealer at the earliest possible opportunity.

⚠ WARNING

- Adjust the snow discharge chute to avoid hitting the operator, bystanders, windows, and other objects with thrown snow. Stay clear of the snow discharge chute while the engine is running.
- If the snow discharge chute becomes clogged, stop the engine and use a snow drop bar to unclog it.

Never put your hand into the snow discharge chute while the engine is running; serious personal injury could result.

- To move from one place to another, or to change direction, use the drive clutch lever. Using the auger clutch lever will cause the snow-browning mechanism to rotate, possibly resulting in equipment damage or personal injury.

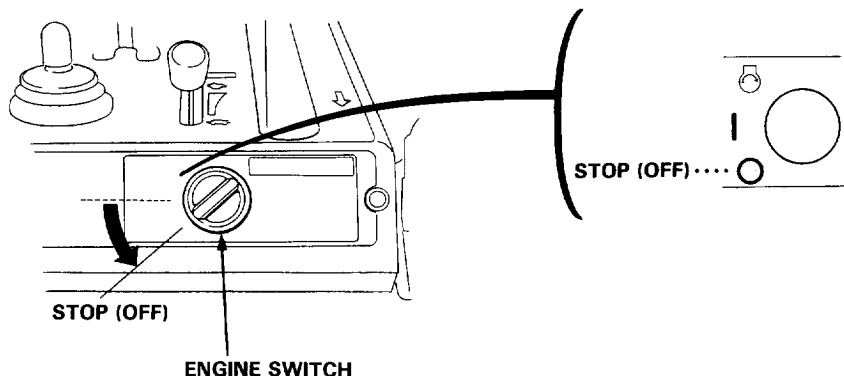
CAUTION: Be sure to set the main shift lever in **LOW** when removing the snow. Operating the snowblower with the main shift lever in **HIGH** will give rise to the temperature of the HST (Hydrostatic Transmission), resulting in damage to it.

8. STOPPING THE ENGINE

EMERGENT STOP

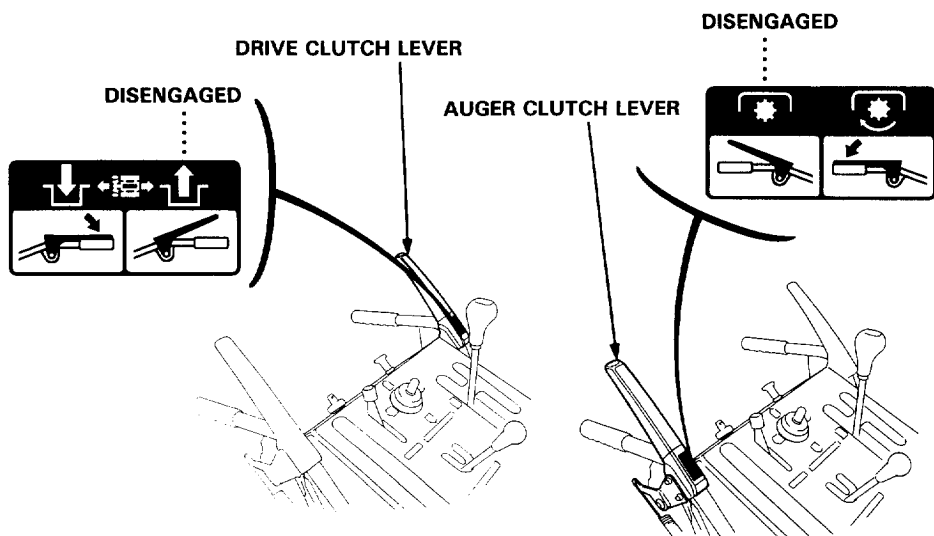
Turn the engine switch OFF.

Be sure to move the drive clutch lever and auger clutch lever to "OFF" and main shift lever to "NEUTRAL" positions before restart the engine.

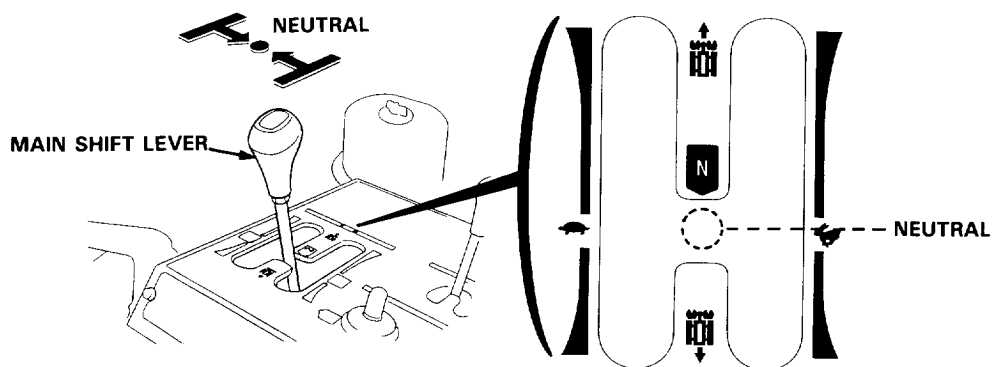


NORMAL STOP

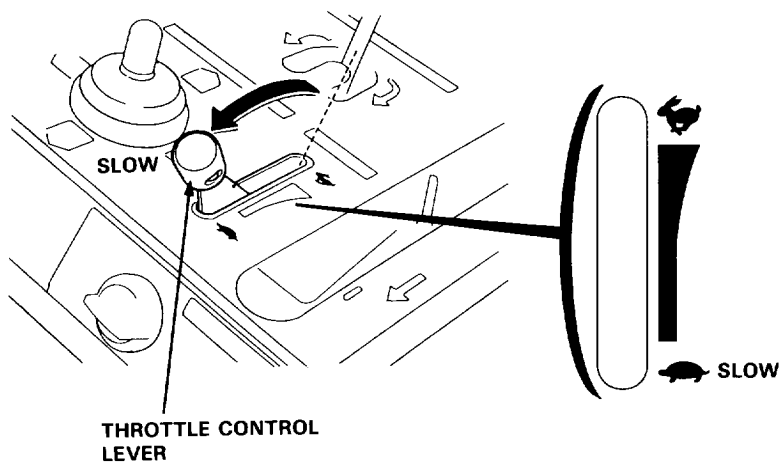
1. Release the drive and auger clutch levers.



2. Set the main shift lever in "NEUTRAL".

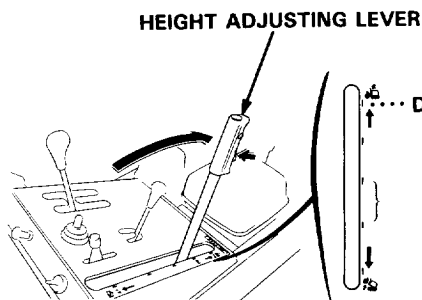


3. Move the throttle control lever to "SLOW".

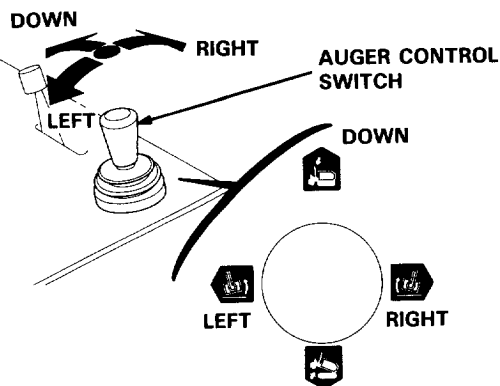


4. Operate the height adjusting lever (HS1136) or auger control switch (HS1390Z) until the snow throwing mechanism is rested on the ground firmly.

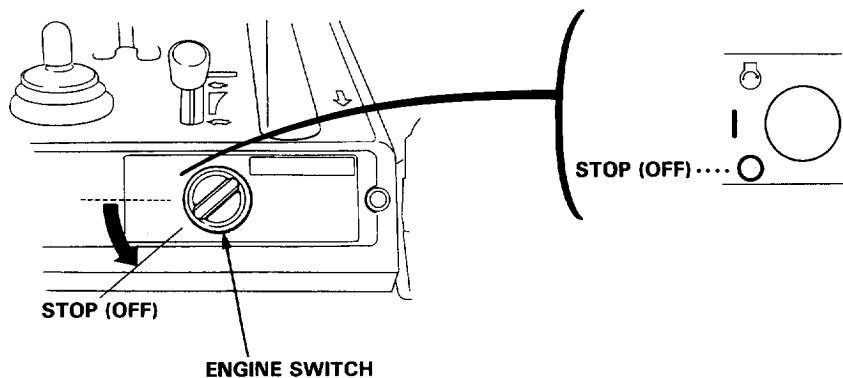
(HS1136)



(HS1390Z)



5. Turn the engine switch STOP and remove the key.

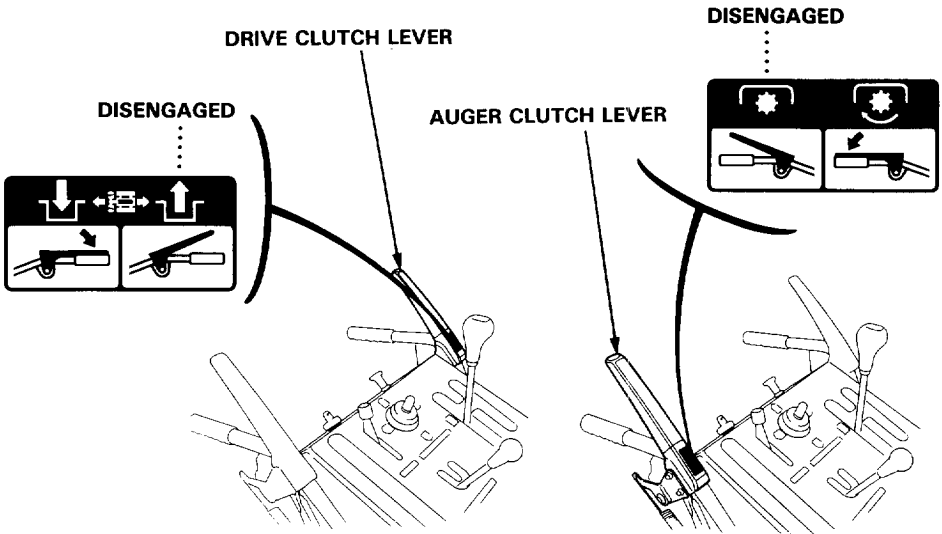


6. Open the maintenance lid and turn the fuel valve lever to "OFF".

TEMPORARY WORK STOP

- Release the drive and auger clutch levers to stop the snowblower and auger.

NOTE: Avoid sudden start when restarting the snowblower.



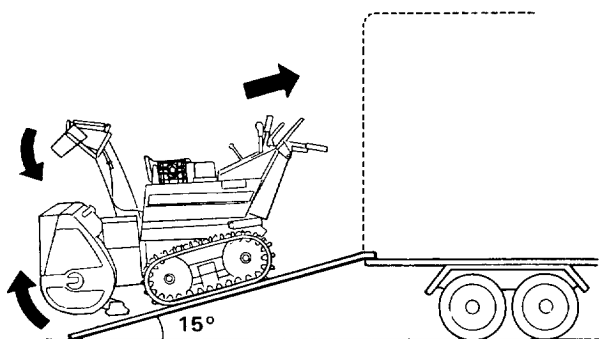
9. TRANSPORTING

⚠ WARNING Spilled fuel may ignite. To avoid fuel and oil spillage, keep the snowblower level when transporting.

Transport the snowblower on a flat, level heavy duty trailer.

1. Use a loading ramp that is strong enough to support the combined weight of the snowblower, its attachments and the operator. The loading ramp must be long enough so that its slope is 15° or less.
2. Start the engine and raise the auger fully by operating the height adjusting lever (HS1136) or auger control switch (HS1390Z).
3. Set the main shift lever in LOW, and back the snowblower up the loading ramp at low speed.

CAUTION: Do not operate the side clutch lever, or move the main shift lever to NEUTRAL while backing the snowblower up the loading ramp; serious personal injury or damage to the snowblower could result.



4. Unload the snowblower in the reverse order of unloading.

10. MAINTENANCE

Periodic inspection and maintenance will help extend the service life of your snowblower while keeping it in the best operating condition. Inspect or service as described in the table below.

⚠ WARNING

- **Shut off the engine before performing inspection and maintenance, and disconnect the spark plug wire from the plug so the engine cannot be started.**
- **If the engine must be run, make sure the area is well-ventilated. Exhaust gas contains poisonous carbon monoxide; exposure can cause loss of consciousness and may lead to death.**

CAUTION:

- **To avoid overturning, place the snowblower on a level surface before performing inspection and maintenance.**
- **Use only genuine HONDA parts or their equivalent. Replacement parts which are not of equivalent quality may damage the snowblower.**

MAINTENANCE SCHEDULE

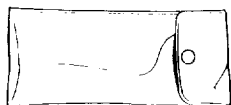
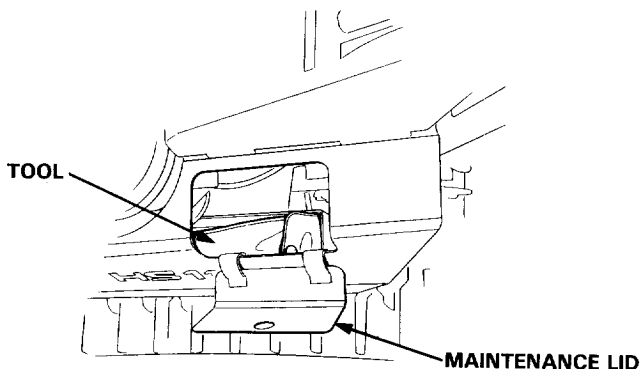
ITEM	REGULAR SERVICE PERIOD	EACH USE	FIRST 20 HRS	EVERY YEAR	
				BEFORE OPERATION	BEFORE STORAGE
Engine oil	Check level	○			
	Change		○	○ (1)	
HST oil	Check	○			
Drive transmission oil	Change	Every 2 years (1) (2)			
Auger transmission oil	Change	Every 2 years (1) (2)			
Battery electrolyte	Check level	○		○	
	Check gravity			○ (1) (2)	
Spark plug	Check			○ (1)	
Track	Check-Adjust			○ (1)	
Auger and blower lock bolt	Check	○ (1)			
Bolts, nuts, fasteners	Check				○
Fuel strainer cup	Clean				○
Fuel tank and carburetor	Drain				○
Anti-corrosion oil	Apply oil				○
Auger/drive clutch cable, side clutch cable, chute guide control cable, throttle/choke cable	Check			○ (1), (2)	
Drive belt	Check-Adjust			○ (1), (2)	
Auger brake	Check			○ (1), (2)	
Auger belt	Check-Adjust			○ (1), (2)	
Valve clearance	Check-Adjust	Every 4 years (2)			
Fuel tank and strainer	Clean	Every 4 years (2)			
Fuel line	Check (Replace if necessary)	Every 2 years (2)			

NOTE: (1) These parts may require more frequent inspection and replacement under heavy use.

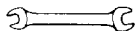
(2) These items should be serviced by an authorized Honda dealer, unless the owner has the proper tools and is mechanically proficient. See the Honda Shop Manual for service information.

TOOLS

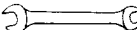
A spark plug wrench and handle are supplied with the snowblower. Some of the maintenance procedures described in this manual will require a set of metric wrenches (not supplied).



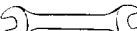
TOOL BAG



10 x 12 mm WRENCH

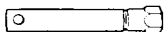


10 x 14 mm WRENCH



12 x 14 mm WRENCH

PLUG WRENCH HANDLE



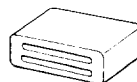
SPARK PLUG WRENCH



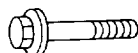
FUSE

HS1136: 5A, 20A

HS1390Z: 20A x 2



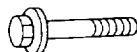
SPARE FUSE RUBBER



BLOWER SHEAR BOLT



8 mm FLANGE NUT



AUGER SHEAR BOLT (2)



8 mm HEX NUT (2)

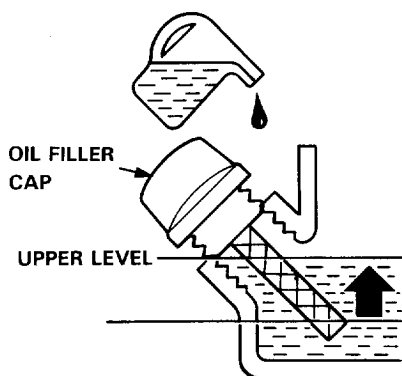
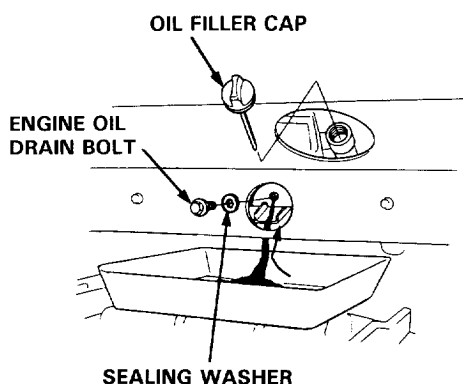
ENGINE OIL

If the engine oil is dirty, engine wear will occur more rapidly. Change the oil at designated intervals, Maintain the oil at the proper level.

OIL CAPACITY: 1.1 ℓ (1.16 US qt, 1.94 Imp qt)

How to change the oil

1. Remove the oil filler cap and the drain bolt. Drain the oil while the engine is still warm, to assure rapid and complete draining.
2. Install the drain plug securely using a new sealing washer.



CAUTION: If you drain the oil immediately after stopping the engine, its temperature will be high and may cause burns.

3. Fill with new oil up to the upper level.
4. After replacing the oil, securely tighten the oil filler cap.

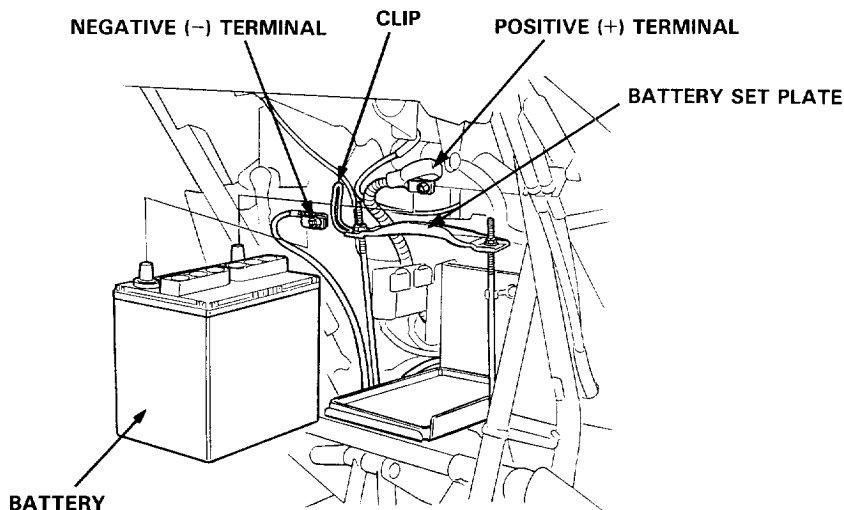
Wash your hands with soap and water after handling used oil.

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

BATTERY

If the battery terminals are contaminated or corroded, remove the battery and clean the terminals.

1. Remove the rear cover (see page 25).
2. Straighten the clip on the battery set plate to set the throttle cable free from the clip.
3. Loosen the nuts and remove the battery set plate.
4. Disconnect the battery negative cable at the battery negative (–) terminal, then positive cable at the battery positive (+) terminal.

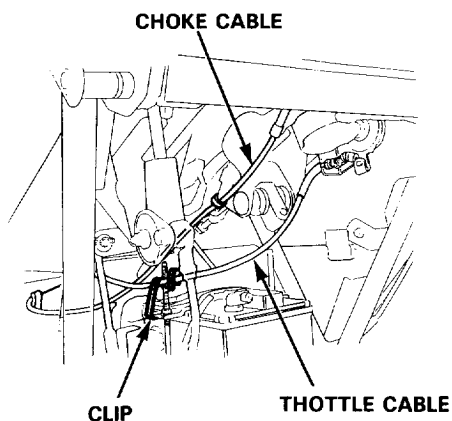


5. Remove the battery and clean the battery terminals and battery cable terminals with a wire brush or sand paper.
Clean the battery with a solution of baking soda and warm water with care not to get the solution or water in the battery cells. Dry the battery thoroughly.
6. Connect the battery positive (+) cable to the battery positive (+) terminal, then the battery negative (–) cable to the battery negative (–) terminal.
Tighten the bolts and nuts securely.
7. Coat the battery terminals with grease.

8. Reinstall the battery set plate and tighten the nuts.

NOTE:

Clamp the throttle cable with the clip as shown.



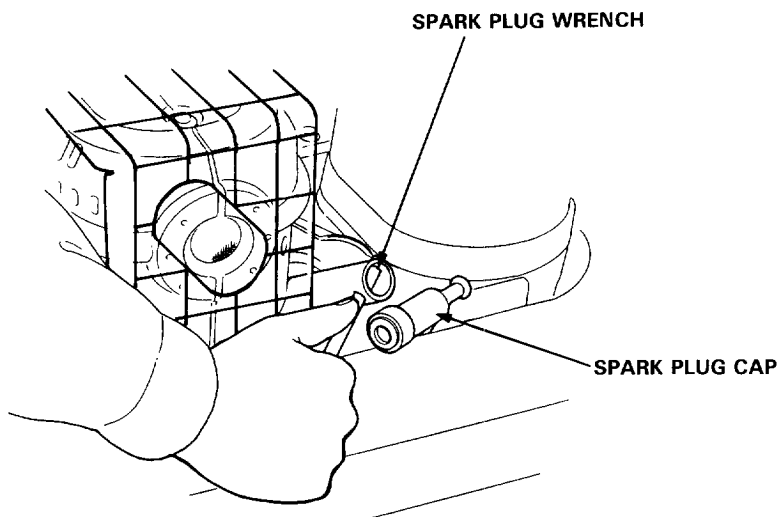
9. Reinstall the rear cover (see page 25).

SPARK PLUG

The spark plug must be periodically cleaned and adjusted to provide reliable ignition.

To ensure proper operation, the spark plug must be properly gapped and free of deposits.

1. Remove the spark plug cap.
2. Remove the spark plug with the plug wrench.
3. Clean the spark plug with the plug cleaner. If the plug cleaner is not available at your authorized Honda dealer, clean the plug with a wire brush.



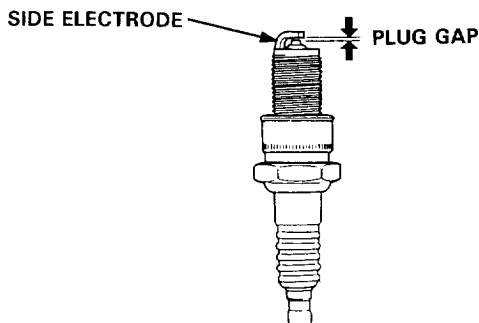
-
4. Measure the plug gap with a feeler gauge.

SPARK PLUG GAP: 0.7 – 0.8 mm (0.028 – 0.031 in)

RECOMMENDED SPARK PLUG: BPR5ES (NGK)

W16EPR-U (DENSO)

Correct as necessary by bending the side electrode.



5. Make sure that the spark plug washer is in good condition and thread the spark plug in by hand to prevent cross-threading.
6. After the spark plug is seated, tighten with a spark plug wrench to compress the washer.

NOTE: If installing a new spark plug, tighten 1/2 turn after the spark plug seats to compress the washer. If reinstalling a used spark plug, tighten 1/8 to 1/4 turn after the spark plug seats.

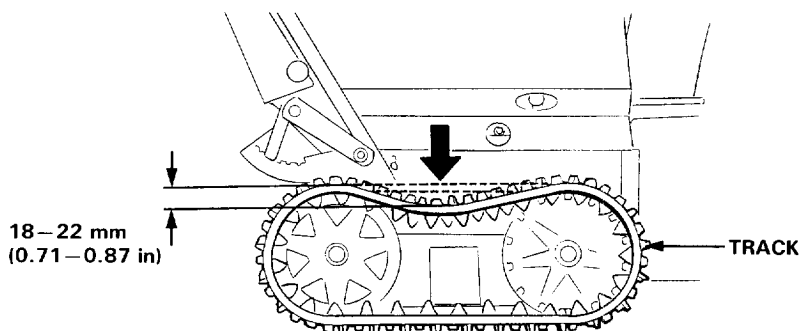
CAUTION:

- Use only the recommended spark plug or equivalent. Spark plug which has an improper heat range may cause engine damage.
- The spark plug must be securely tightened. An improperly tightened spark plug can become very hot and may damage the engine.

TRACK

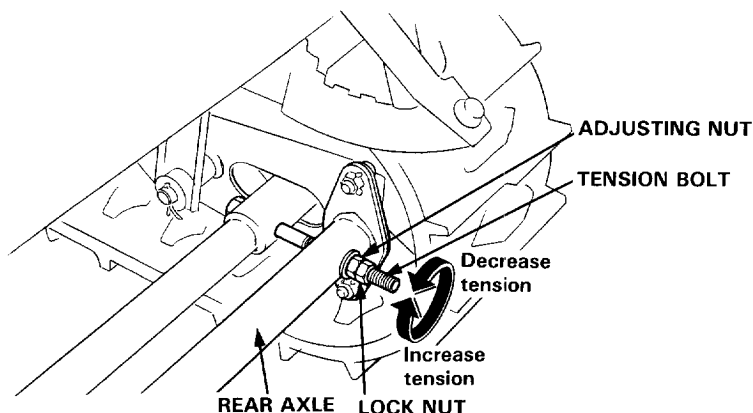
Adjustment interval: Every year before operation.

Make sure the tracks are clean and dry before adjustment. The tracks cannot be correctly adjusted if clogged with snow or debris, or coated with ice. Check track deflection by pressing down midway between the wheels. When correctly adjusted, the track will deflect 18–22 mm (0.71–0.87 in) when pressed with a force of 10 kg (22 lb).



Adjusting procedure:

1. Loosen the left and right tension bolt lock nuts at the rear axle, and turn the adjusting nuts to correctly tension both tracks.
2. After adjustment, tighten the lock nuts securely.



AUGER/BLOWER

Check the auger, auger housing, blower and shear bolts for signs of damages or other faults. If any of the shear bolts is broken, replace them with the one furnished with the snowblower. Additional shear bolts and nuts are available from authorized Honda snowblower dealers.

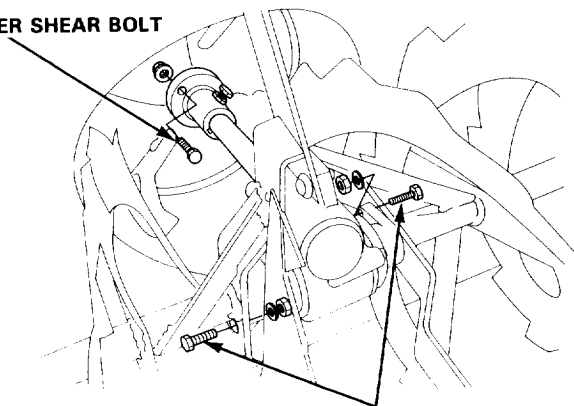
CAUTION:

Shear bolts are designed to break under force that would otherwise damage auger and blower parts. Do not replace shear bolts with ordinary hardware bolts.

Shear bolt replacement procedure

1. Place the snowblower on level ground.
2. Turn the auger clutch lever to "OFF".
3. Turn the drive clutch lever to "OFF".
4. Lower the auger to the lowest position with the auger adjusting lever (HS1136) or auger control switch (HS1390Z).
5. Turn the engine switch OFF, remove the ignition plug caps, and be sure that each rotating part come to a complete stop.
6. Clear the auger blower of ice, stone, stick, wires, and other foreign materials.
7. Check the entire snow clearing mechanism.
8. Replace any broken shear bolt, and tighten it securely.

BLOWER SHEAR BOLT



AUGER SHEAR BOLTS

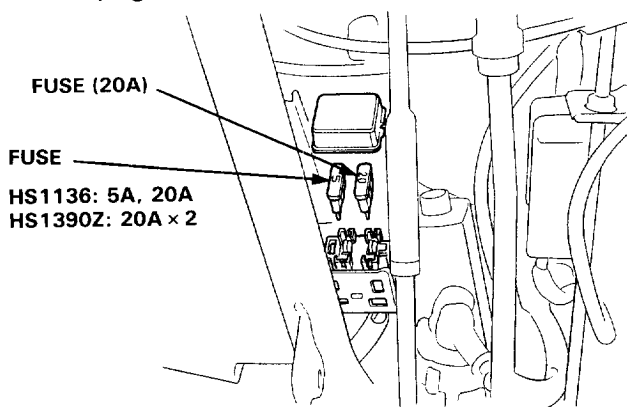
FUSE

In the event of a burned out fuse, replace it with another fuse of the rated capacity only after investigating the cause for the failure. If the fuse is replaced without correcting the reason for the failure, the new fuse may burn out quickly again.

CAUTION: Never replace a burned out fuse with any object other than another fuse of the rated capacity. Using any other object such as wire or aluminum foil may cause fires in wiring or other parts.

Main fuse replacement

1. Remove the rear cover (see page 25).
2. Replace the fuse as shown.
3. Reinstall the rear cover (see page 25).



11. STORAGE

Remove the engine switch key and store the snowblower in the area free of humidity, dust, and direct sunlight.

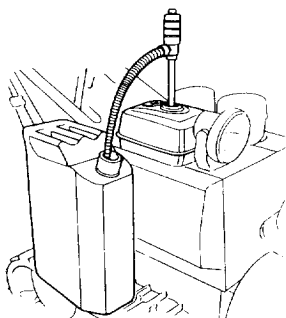
Before storing;

1. Drain the fuel tank and carburetor.

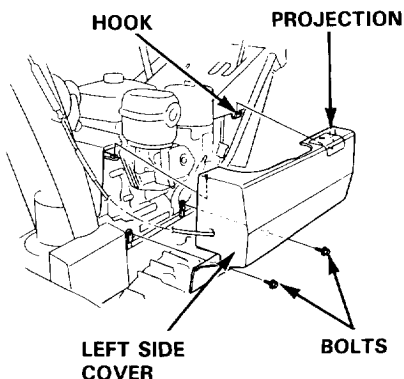
⚠ WARNING

- **Gasoline is extremely flammable and explosive under certain conditions. Do not smoke or allow flames or sparks in the area.**
- **Do not drain the fuel tank when the exhaust system is hot.**

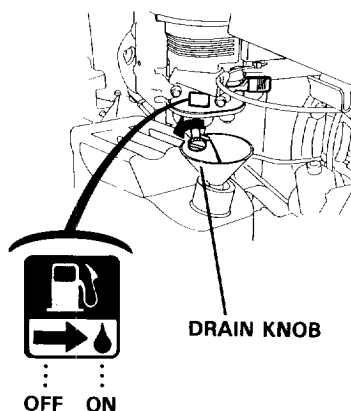
- a. Draw out the gasoline from the fuel tank.



- b. Remove the two bolts and remove the left side cover by lifting it and place it on the track.



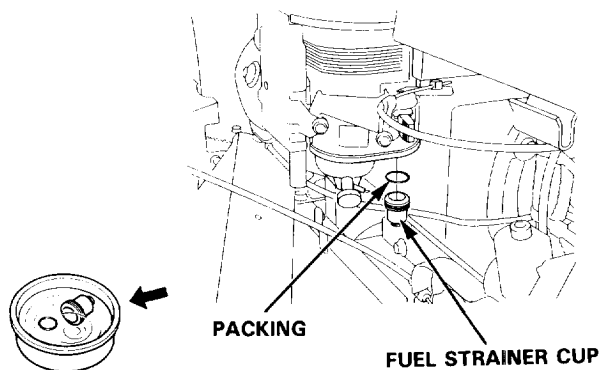
- c. Turn the fuel valve to "ON".
- d. Loosen the carburetor drain knob and drain the gasoline into a suitable container.
- e. Tighten the drain knob securely.
- f. Turn the fuel valve to "OFF".
- g. Reinstall the left side cover by aligning the projections on the left side cover with the hooks on the body panel. Tighten the bolts securely.



2. Clean the fuel strainer cup.

- a. Remove the left side cover (see page 66).
- b. Turn the fuel valve lever to "OFF", remove the fuel strainer cup, and clean it in clean solvent.
- c. Reinstall the packing and fuel strainer cup and tighten securely.
- d. Reinstall the left side cover.

⚠ WARNING Gasoline is extremely flammable and explosive under certain conditions. Do not smoke or allow flames or sparks in the area.



3. Service the battery.

If the snowblower will be stored for an extended period, remove the battery and store in a cool, dry place with the negative terminal disconnected from the battery. Recharge it every 6 months.

3. Apply oil or grease to the following parts for lubrication and rust prevention.

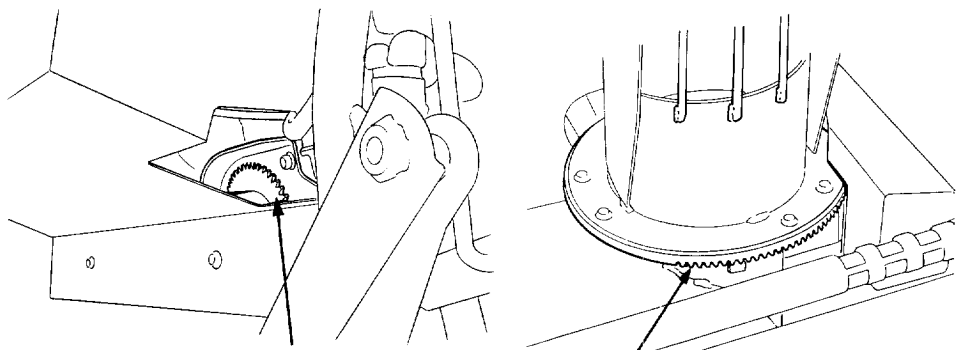
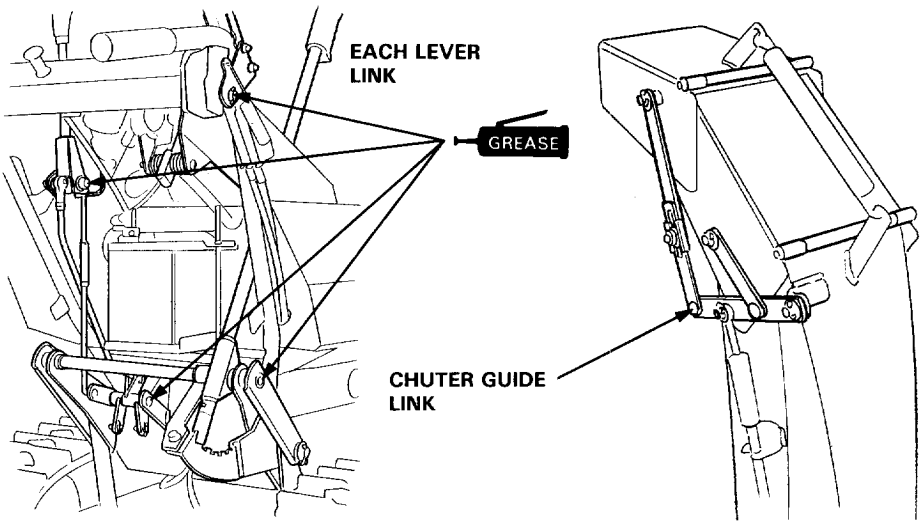


: Anti-corrosion oil



: GREASE

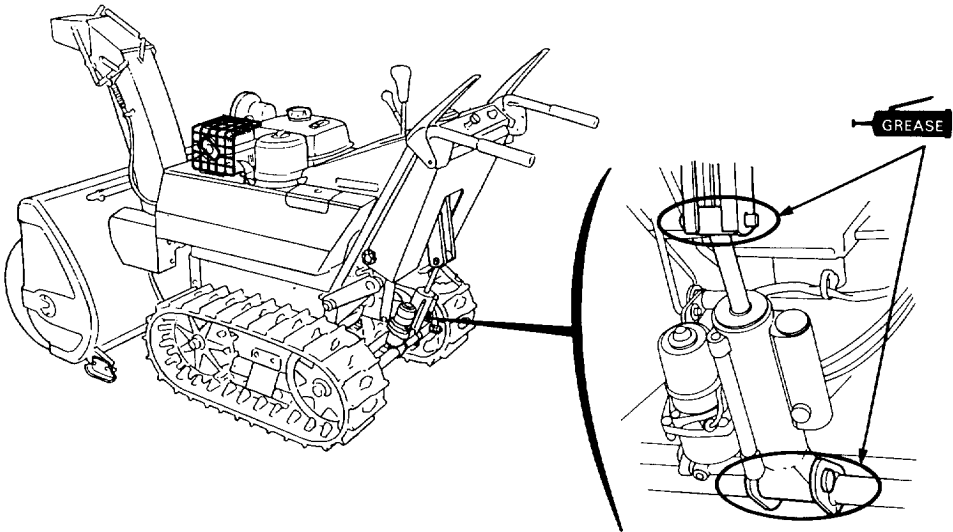
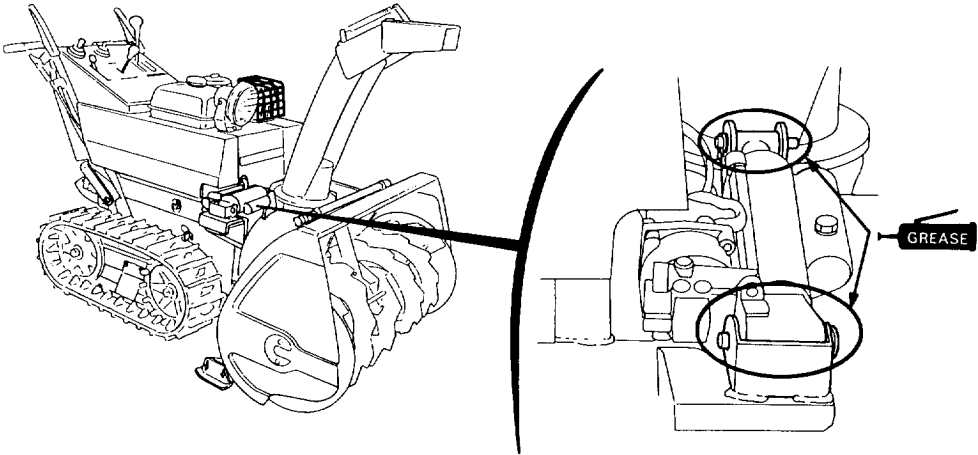
HS1136



or



HS1390Z only



12. TROUBLESHOOTING

When the engine does not start, check the following.

CAUTION: Be sure to perform the following checks in a well ventilated area.

1. Is there enough fuel?
2. Is the fuel valve lever turned to "ON"?
3. Is gasoline reaching the carburetor?

To check, loosen the drain knob with the fuel valve lever turned to "ON".

Fuel should flow freely.

⚠ WARNING If any fuel is spilled, make sure the area is dry before testing the spark plug or starting the engine. Fuel vapor or spilled fuel may ignite.

4. Is the drive clutch lever and auger clutch lever in "OFF" position.
5. Is the engine switch ON?
6. Is there spark at plug?
 - a. Remove the spark plug cap. Clean any dirt from around the spark plug base, then remove the spark plug.
 - b. Install the spark plug on the plug cap and ground the spark plug to the engine.

⚠ WARNING Be sure not to touch the spark plug but the plug cap to avoid getting an electrical shock.

- c. Turn the engine switch ON and check to see that the spark jump across the electrodes.
- d. If there is no spark, replace the spark plug.

If the spark jump across the electrodes, start the engine according to the starting procedure.

If the engine still does not operate, take the snowblower to your authorized Honda dealer.

13. SPECIFICATIONS

Model	HS1136
Power products description code	SZAH

ENGINE

Model	HONDA GX340 K1
Maximum output	11.0 HP/3,600 r.p.m.
Displacement	337 cm ³ (20.6 cu.in)
Bore x stroke	82 x 64 mm (3.2 x 2.5 in)
Starting method	Electric starter
Ignition system	Transistorized magneto
Oil capacity	1.1 ℓ (1.16 US qt, 1.94 Imp qt)
Fuel tank capacity	6.5 ℓ (1.72 US gal, 1.43 Imp gal)
Spark plug	BPR5ES (NGK) W16EPR-U (DENSO)

FRAME

Overall length		1,710 mm (67.3 in)
Overall width		935 mm (36.8 in)
Overall height		1,340 mm (52.8 in)
Dry weight		207 kg (456.4 lb)
Width of snow clearance		920 mm (36.2 in)
Height of snow clearance		580 mm (22.8 in)
Snow-throwing distance (differs according to type of snow and discharge direction)		Max. 18 m (59.1 ft)
Noise level at the ear	Noise pressure	92.1 dB(A)/3800 rpm
	Noise output level	104.5 dB(A)/3800 rpm
Handle vibrations (ISO-5349)		15.5 m/S ² /3600 rpm

NOTE: Specifications are subject to change without notice.

Model	HS1390Z
Power products description code	SZAV

ENGINE

Model	HONDA GX390
Maximum output	13.0 HP/3,600 r.p.m.
Displacement	389 cm ³ (23.8 cu.in)
Bore x stroke	88 x 64 mm (3.5 x 2.5 in)
Starting method	Electric starter
Ignition system	Transistorized magneto
Oil capacity	1.1 ℓ (1.16 US qt, 1.94 Imp qt)
Fuel tank capacity	6.5 ℓ (1.72 US gal, 1.43 Imp gal)
Spark plug	BPR5ES (NGK) W16EPR-U (DENSO)

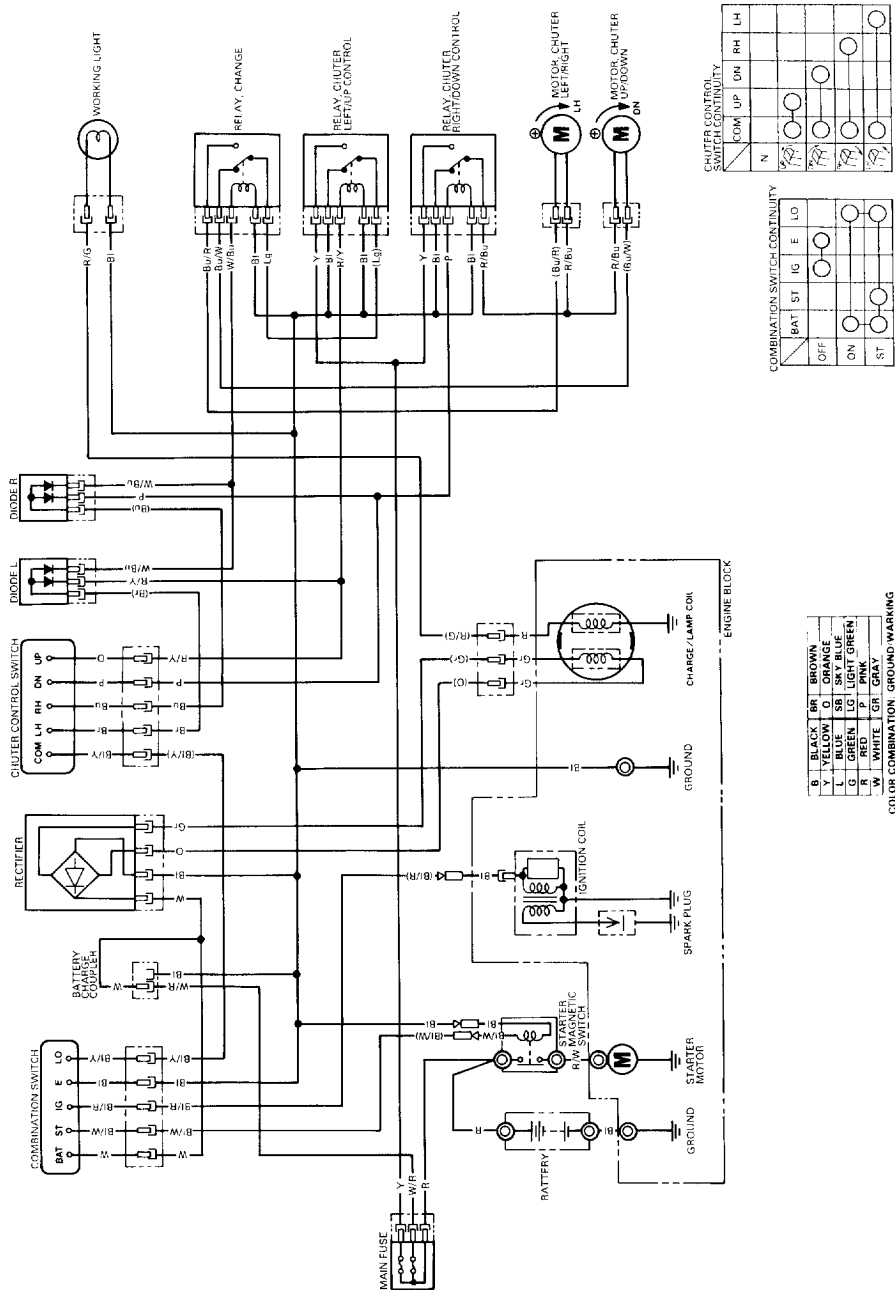
FRAME

Overall length		1,710 mm (67.3 in)
Overall width		900 mm (35.4 in)
Overall height		1,340 mm (52.8 in)
Dry weight		227 kg (500.5 lb)
Width of snow clearance		900 mm (35.4 in)
Height of snow clearance		580 mm (22.8 in)
Snow-throwing distance (differs according to type of snow and discharge direction)		Max. 18 m (59.1 ft)
Noise level at the ear	Noise pressure	97.4 dB(A)/3800 rpm
	Noise output level	109.4 dB(A)/3800 rpm
Handle vibrations (ISO-5349)		15.6 m/S ² /3600 rpm

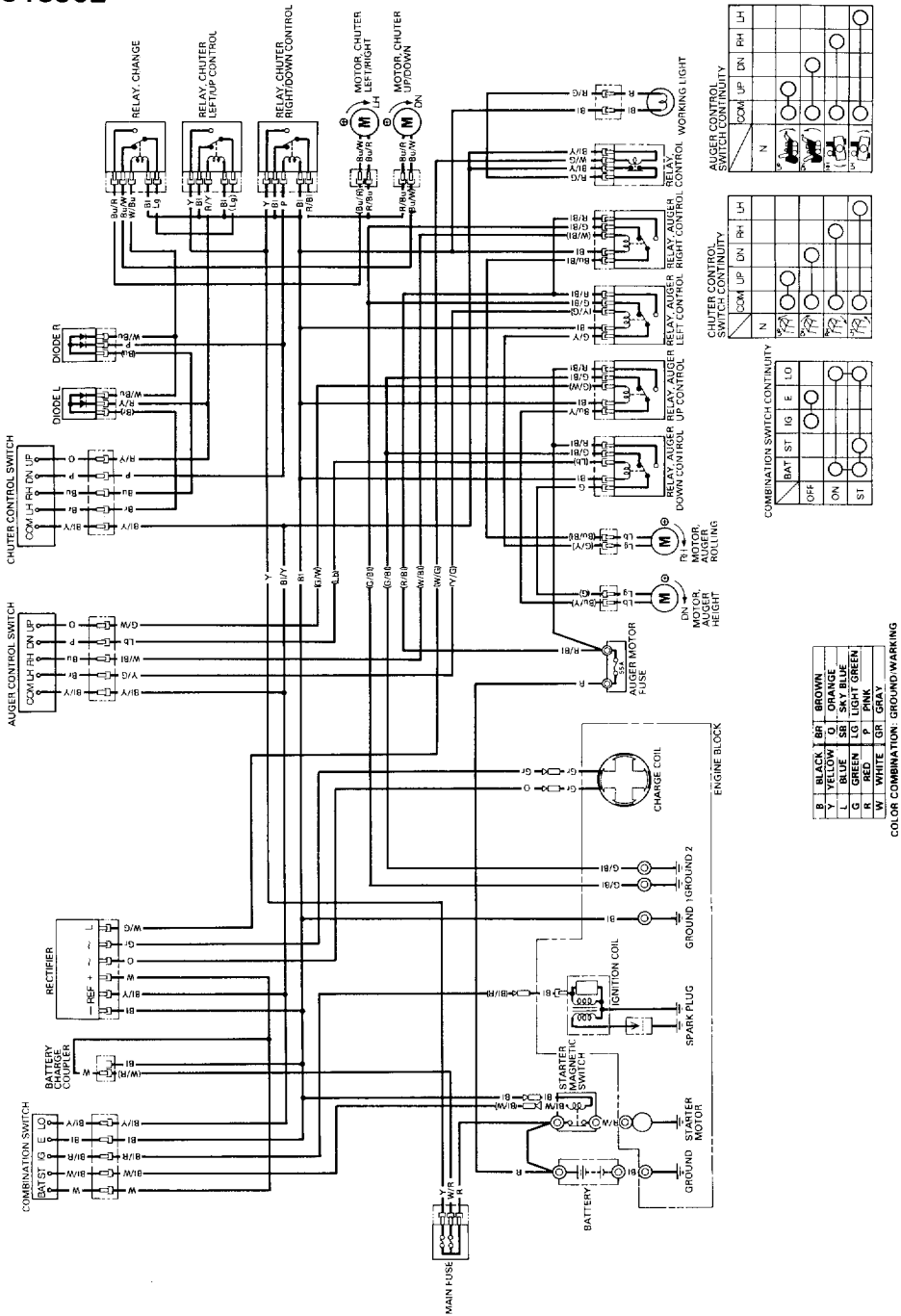
NOTE: Specifications are subject to change without notice.

14. WIRING DIAGRAM

HS1136

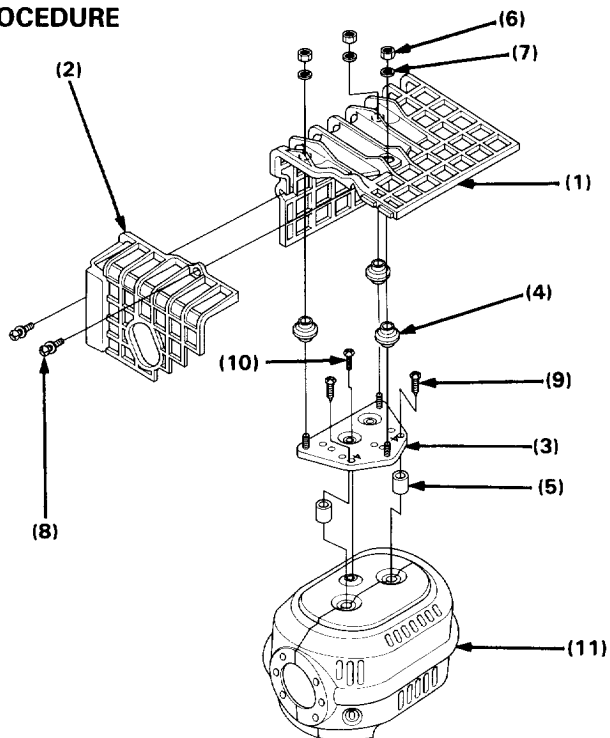


HS1390Z



15. MUFFLER PROTECTOR

INSTALLATION PROCEDURE



NO.	NAME	QTY	REMARKS
1	MUFFLER PROTECTOR	1	
2	REAR MUFFLER PROTECTOR	1	
3	MUFFLER PROTECTOR BASE	1	
4	MUFFLER PROTECTOR SPACER	3	
5	AIR CLEANER CASE COLLAR	2	
6	HEX NUT, 5mm	3	0.35-0.5 kg·m (3.5-5 N·m)
7	PLAIN WASHER, 5mm	3	
8	SCREW WASHER, 6 × 20	3	0.2-0.3 kg·m (2-3 N·m)
9	TAPPING SCREW, 5 × 25	2	
10	TAPPING SCREW	1	
11	MUFFLER ASSY	1	

16. MAJOR HONDA DISTRIBUTOR ADDRESSES IN EUROPE

NAME OF FIRM (COMPANY)	ADDRESS	TEL: FAX:
Honda (U.K.) Limited	Power Road, Chiswick, London W.4 United Kingdom	Tel: 081-747-1400 Fax: 081-747-3594
Honda France S.A.	Parc d'activités de Pariest B.P. 46, 77312 Marne la Vallée Cedex France	Tel: 1-60-37-30-00 Fax: 1-60-37-33-33
Honda Deutschland GmbH.	Sprendlinger, Landstraße 166 D-63069 Offenbach/Main Germany	Tel: 069-83-09-0 Fax: 069-83-09-519
Honda Belgium H.V.	Wijngaardveld 1, 9300 Aalst Belgium	Tel: 053-725-111 Fax: 053-725-100
Honda Italia Industriale S.P.A.	Via Kenia 72 00144 Roma EUR Italy	Tel: 06-54-7941 Fax: 06-59-20214
Honda (Suisse) S.A.	Route des Moulières 10 Case Postale Ch 1214 Vernier-Geneve, Switzerland	Tel: 022-341-22-00 Fax: 022-341-09-72
Honda Nederland B.V.	Nikkelstraat 17 2984 Ridderkerk Netherlands	Tel: 018-04-57-333 Fax: 018-04-91-888
Honda Austria G.M.B.H.	Honda Strasse 1 A-2351 Wiener Neudorf Austria	Tel: 223-66-900 Fax: 223-66-4130
Honda Power Equipment Sweden A.B.	Ostmästargränd 8 Stockholm-Årsta Sweden	Tel: 08-602-24-60 Fax: 08-722-36-27
Honda Produtos De Força, Portugal, S.A.	Lugar da Abrunheira S. Pedro de Penaferrim 2710 Sintra, Portugal	Tel: 351-1-9150374 Fax: 351-1-9111021
Berema A/S	Berghagan 5, Langhus Box 454, 1401 Ski Norway	Tel: 64-86-05-00 Fax: 64-86-05-49
OY Brandt AB	Tuupakantie 4 SF-01740, Vantaa Finland	Tel: 90-895-501 Fax: 90-878-5276

NAME OF FIRM (COMPANY)	ADDRESS	TEL: FAX:
Tingleff & Mathiasen A/S	Tårnfalkevej 16, Postboks 511 DK 2650 Hvidovre Denmark	Tel: 31-49-17-00 Fax: 36-77-16-30
Greens	Polig. Industrial Congost 08530, La Garriga (Barcelona), Spain	Tel: 93-871-84-50 Fax: 93-871-81-80
Automocion Canarias S.A. (AUCASA)	Apartado de Correos, num 206 Santa Cruz de Tenerife Canary Island	Tel: 922-61-13-50 Fax: 922-61-13-44
Alcorde, S.A.	Juan Rejon 67 Puerto De La Luz, Las Palmas Canary Islands	Tel: 928-27-32-00 Fax: 928-46-62-96
Su. Co. Na. S.A.	Muelle Dique Poniente P.O. Box 118, 11701 Ceuta Spain	Tel: 956-50-29-83 Fax: 956-50-47-04
The Associated Motors Company Ltd.	148, Rue D'Argens, Msida Malta	Tel: 356-333001 Fax: 356-340473
Two Wheels Ltd.	25/27 Great Ship Street Dublin 8 Ireland	Tel: (01) 782888 Fax: (01) 782807
General Automotive Co., S.A.	P.O. Box 1200, 101 73 Athens Greece	Tel: 346-5321 Fax: 346-7329