HONDA

Power

**Equipment** 

# Owner's Manual Power Carrier HP400





Thank you for purchasing a Honda power carrier. We want to help you get the best results from your new power carrier and to operate it safely. This manual contains the information on how to do that; please read it carefully.

This owner's manual describes the operation and maintenance of the HP400 power carrier. All information in this publication is based on the latest product information available at the time of printing.

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

### Safety Messages

Your safety and the safety of others is very important. We have provided important safety messages in this manual and on the power carrier. 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  $\triangle$  and one of three words: DANGER, WARNING, or CAUTION.

These mean

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

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

A 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 power carrier or other property could be damaged if you don't follow instructions.

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

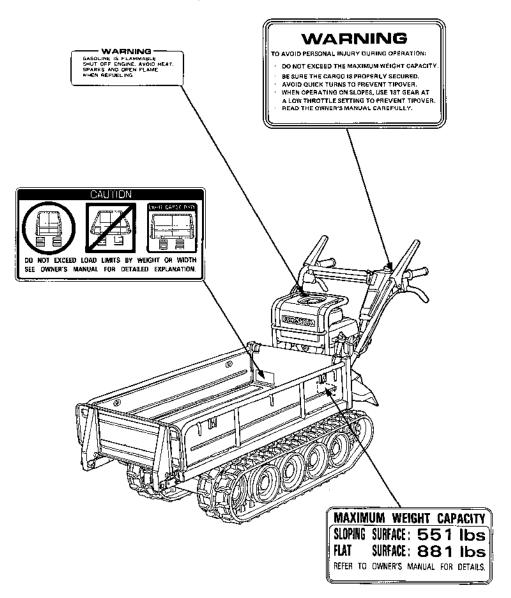
It is illegal in some areas to operate an engine without a U.S.D.A. qualified spark arrester: Check local laws and regulations. An optional spark arrester for this power carrier is available from your authorized Honda power carrier dealer.

## **CONTENTS**

1. SAFETY	
Safety label locations	
Safety Information	
2. COMPONENT IDENTIFICATION	
3. CONTROLS	
Fuel valve	
Engine switch	
Throttie lever	
Starter grip	
Gear shift lever	
Drive clutch levers	
Steering clutch levers	
Carrier bed release lever	
4. PRE-OPERATION CHECKS	
Fuel recommendation	
Engine oil	
Air cleaner	
5. STARTING THE ENGINE	
6. OPERATION	
High altitude operation	10
7. STOPPING THE ENGINE	
8. CARRYING LOADS	
Load carrying safety	
Tie-down hooks	
Side rails and side plates	
Using the front stopper plate	۲
Dumping loads	20
9. MAINTENANCE	
Maintenance schedule	20
Tool kit	ar
Engine oil change	
Spark plug service	31
Servicing the air cleaner	
Adjusting the track tautness	بري
Track adjustment	3
Adjusting the drive clutch cable	عن عن
Adjusting the brake cable	
Checking brake wear	oc
Adjusting the steering clutch cable	20
Adjusting the dumping lock cable	oc
Checking the transmission oil	
Checking the clutch oil	41 A1
Checking the clutch oil	41
Spark arrester maintenance (Optional part)	
Lubrication	46
Temporary installation of a disengaged track	41
10. TRANSPORTING/STORAGE	4:
11. TROUBLESHOOTING	، 4
12. SPECIFICATIONS	40 A
14. INDEX	F.(
14. INUEA	

#### SAFETY LABEL LOCATIONS

The labels shown here contain important safety information. Please read them carefully. These labels are considered permanent parts of your power carrier, so if a label comes off or becomes hard to read, contact your authorized Honda power carrier dealer for a replacement.

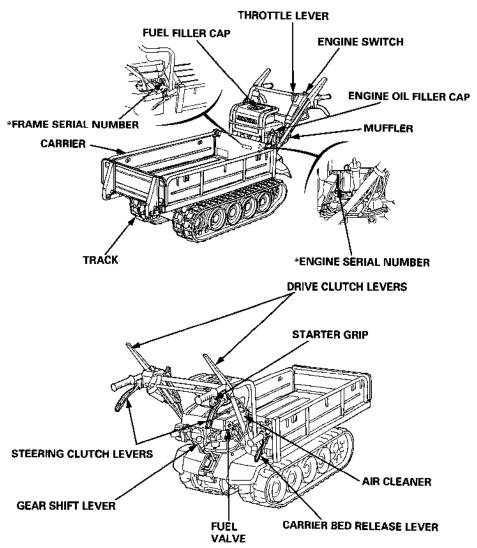


#### SAFETY INFORMATION

### **A** WARNING

- Honda power carriers are designed to give safe and dependable service if operated according to instructions. Read and understand the Owner's Manual before operating the power carrier. Failure to do so could result in personal injury or equipment damage.
- Keep children and pets away from the area of operation to avoid possible injury from contact with the power carrier.
- To avoid accidents or loss of control, do no ride on the power carrier; walk behind, and hold both handlebars firmly. Do not allow others to ride on the power carrier as passengers.
- Watch for obstacles while operating the power carrier. Do not use the power carrier when visibility is poor. Under conditions of poor visibility, there is a greater risk of striking an obstacle.
- To avoid accidents or overturning, observe the load limits described on page 27. Be sure the load is secure and does not protrude from the power carrier or block visibility.
- To avoid overturning, be careful when changing the direction of the power carrier while operating it on slopes, and do not operate the power carrier on upward slopes greater than 25° or downward slopes greater than 15°.
- When operating the power carrier in reverse gear and walking backward, there is greater risk of slipping or tripping. Be especially careful when backing up.
- Know how to stop the power carrier quickly, and understand the operation
  of all controls. Never permit anyone to operate the power carrier without
  proper instruction.
- Gasoline is extremely flammable and is explosive under certain conditions.
   Allow the engine to cool before refueling. Refueling well ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the refueling area or where gasoline is stored.
- Do not overfill the fuel tank. After refueling, make sure the fuel tank cap is closed properly and securely.
- Be careful not to spill fuel when refueling. Fuel vapor or spilled fuel may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.
- Never run the engine in an enclosed or confined area. Exhaust contains
  poisonous carbon monoxide gas; exposure may 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.
  To avoid severe burns or fire hazards, let the engine cool before transporting
  the power carrier or starting it indoors.

### 2. COMPONENT IDENTIFICATION



<sup>\*</sup>Record the frame and engine serial numbers for your reference. Refer to the serial numbers when ordering parts, and when making technical or warranty inquiries (see page 49).

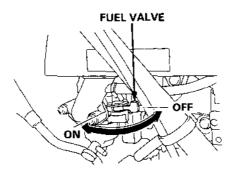
Frame serial number:	 				
Engine serial number:	 		 		

### 3. CONTROLS

#### **Fuel valve**

The fuel valve opens and closes the fuel passage to the carburetor. Turn the fuel valve to the ON position before starting the engine and to the OFF position when the engine is stopped.

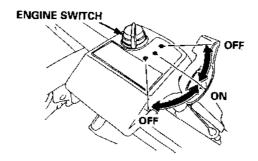
WARNING When the power carrier is not in use, always leave the fuel valve in the OFF position to reduce the possibility of fuel leakage. Gasoline is extremely flammable and is explosive under certain conditions. Fuel vapor or spilled fuel may ignite.



### Engine switch

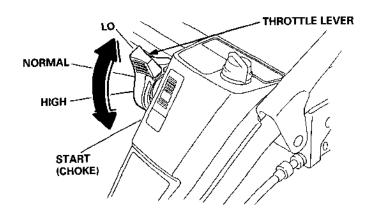
The engine switch controls the electrical circuit for the spark plug ignition system and must be turned to the ON position to enable the engine to start and run. The engine will stop when the engine switch is turned to the OFF position.

A WARNING When the power carrier is not in use always leave the engine switch in the OFF position to prevent accidental starting.



#### Throttle lever

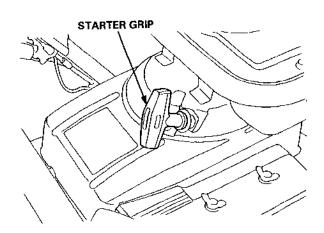
The throttle lever controls engine speed. When the throttle lever is moved to the START (CHOKE) position, it also closes the choke for cold starting. The choke is open when the throttle lever is in the HI, NORMAL, or LO position.



### Starter grip

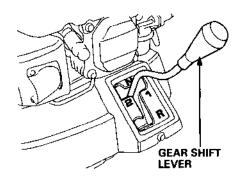
Pull the starter grip to operate the recoil starter.

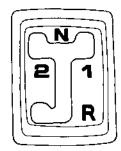
NOTICE Return the starter grip slowly back to the engine to prevent damage.



#### Gear shift lever

Use the gear shift lever to select drive speed or to back up. Shift gears with the engine running and the drive clutch levers released.

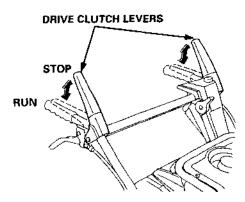




N: NEUTRAL 1: LOW SPEED 2: HIGH SPEED R: REVERSE

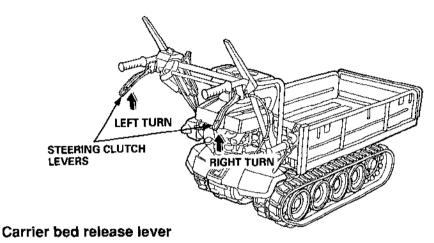
### Drive clutch levers

Use the drive clutch levers to propel or stop the power carrier. The two levers are connected and move simultaneously. When the levers are held down against, the handlebars, this releases the brake and engages the drive; the power carrier will move if the transmission is in gear. When the levers are released, this disengages the drive and applies the brake; the power carrier will stop.



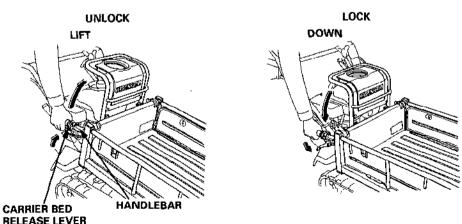
### Steering clutch levers

Use the steering clutch levers to steer the power carrier. Pull up the right lever to steer right. Pull up the left lever to steer left.



Pull the release lever to unlock the carrier bed when you wish to tilt the bed for dumping a load. With the carrier bed unlocked, tilt it by lifting the handlebar. To lock the carrier bed again, push down firmly on the handlebar.

A WARNING Before operating the power carrier check that the carrier bed is locked. If the carrier bed is not locked, it may tilt while going downhill and accidentally dump the load, which may cause personal injury and property or equipment damage.



### 4. PRE-OPERATION CHECKS

#### Fuel Recommendation

Check the power carrier on level ground with the engine stopped.
Unscrew the fuel tank cap, and check the fuel level. Refill the tank if the fuel level is low. Do not fill above the UPPER LEVEL.

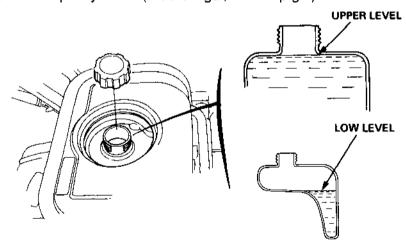
### **A** WARNING

- 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.

Fuel tank capacity: 1.6 ℓ (1.68 US gal, 1.41 Imp gal)



Use gasoline with a pump octane rating of 86 or higher

We recommend unleaded gasoline because it produces fewer engine and spark plug deposits and extends exhaust system life.

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

Occasionally you may hear light "spark knock" or "pinging" (metallic rapping noise) while operating under heavy loads, This is no cause for concern. If spark knock or pinging occurs at a steady engine speed, under normal load, change brands of gasoline. If spark knock or pinging persists, see an authorized Honda power carrier dealer.

NOTICE Running the engine with persistent spark knock or pinging can cause engine damage.

Running the engine with persistent spark knock or pinging is misuse, and the Distributor's Limited Warranty does not cover parts damaged by misuse.

### 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 an oxygenated fuel, be sure it is unleaded and meets the minimum octane rating requirement.

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)

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)

You may use gasoline containing up to 15% MTBE by volume.

### METHANOL (methyl or wood alcohol)

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 given above are not covered under warranty.

#### **ENGINE OIL**

#### NOTICE

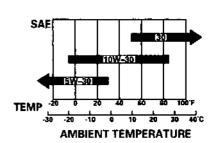
- Engine oil is a major factor affecting engine performance and service life. Nondetergent oils and 2-stroke oils are not recommended because they have inadequate lubricating characteristics.
- Check the oil level with the power carrier on a level surface and the engine stopped.

Use Honda 4-stroke oil, or an equivalent high detergent, premium quality motor oil certified to meet or exceed U.S. automobile manufacturer's requirements for Service Classification SG, SF/CC, CD.

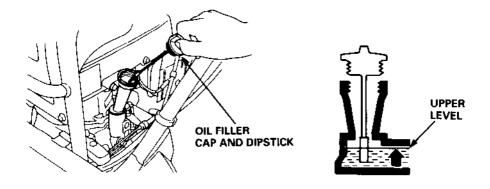
Motor oils classified SG, SF/CC, CD will show this designation on the container.

SAE 10W/30 is recommended for general, all-temperature use.

Other viscosities shown in the chart may be used when the average temperature in your area is within the indicated range.



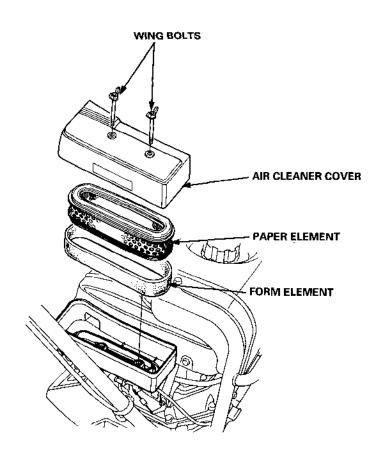
- 1. Remove the oil filler cap, and wipe the dipstick clean.
- 2. Insert the dipstick into the filler neck, but do not screw it in.
- Remove the dipstick and check the oil level. If the oil level is near or below the end of the dipstick, fill to the upper level mark with the recommended oil.



#### **AIR CLEANER**

- 1. Remove the two wing bolts to remove the air cleaner cover.
- 2. Remove and inspect the air cleaner elements. If the elements are dirty, follow the cleaning procedure described on page 33.
- 3. Reinstall the air cleaner elements, cover and wing bolts. Securely tighten the wing bolts.

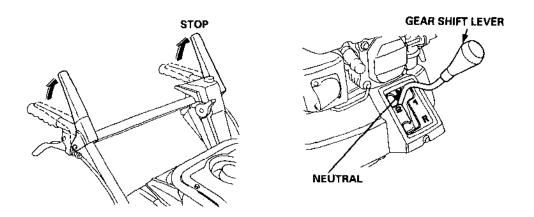
NOTICE Never run engine without the air cleaner. Rapid engine wear will result from contaminants, such as dust and dirt, being drawn through the carburetor, into the engine.



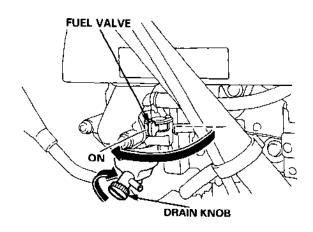
## 5. STARTING THE ENGINE

### Starting the engine

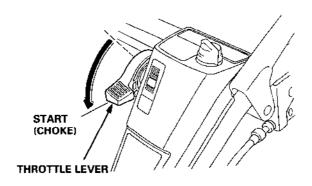
 Check that the gear shift lever is in the NEUTRAL position. Allow the drive clutch levers to remain in the STOP position.



2. Turn the fuel valve to the ON position. Check for tighteness of drain knob.

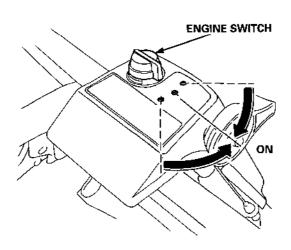


### 3. Move the throttle lever to the START (CHOKE) position.

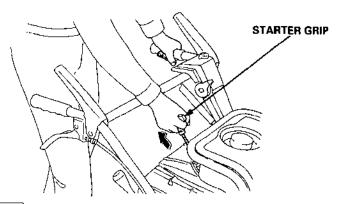


NOTE: If restarting a warm engine, the choke will not be needed. Restart a warm engine with the throttle lever in the LO position.

4. Turn the engine switch to the ON position.

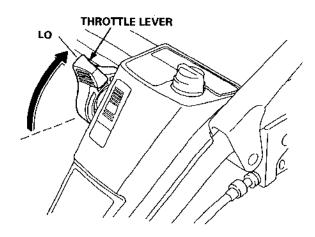


5. Pull the starter grip lightly until you feel resistance, then pull briskly.

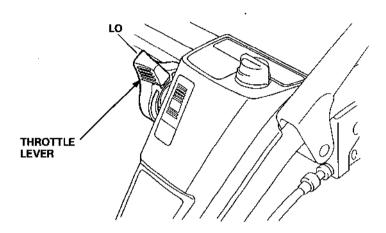


### NOTICE

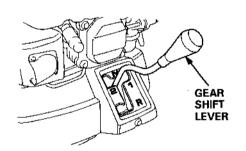
- Do not allow the starter grip to snap back against the engine.
   Return it gently to prevent damage to the starter.
- Do not pull the starter grip while the engine is running, as that may damage the starter.
- 6. Allow the engine to warm up for 2 or 3 minutes. Move the throttle lever to the LO position when the engine is warm enough to idle smoothly.

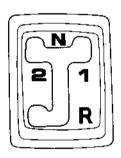


1. Move the throttle lever to the LO position.



2. Move the gear shift lever to the desired position.





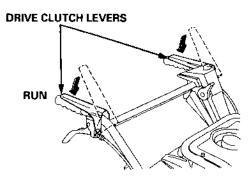
N: NEUTRAL 1: LOW SPEED 2: HIGH SPEED R: REVERSE

#### A WARNING

- To avoid loss of control, descend steep slopes in low (1) gear, using LO throttle position.
- Do not shift gears while the power carrier is moving.

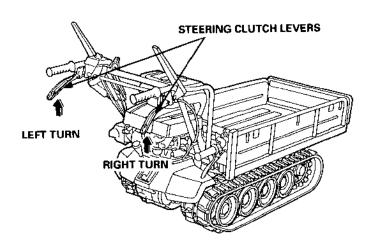
NOTICE Always shift gears with the engine running and the drive clutch levers released.

Squeeze the drive clutch levers down against the handlebars smoothly and quickly. After the power carrier starts to move, adjust the throttle lever to maintain the desired speed.



▲ WARNING If the engine stalls on a slope, release the drive clutch levers immediately to stop the power carrier and avoid loss of control.

4. Use the steering clutch levers to steer the power carrier. Pull up the right lever to steer right. Pull up the left lever to steer left.



\*\*WARNING\*\* The turning action is abrupt. Be sure that loads are properly secured. Exercise special care when steering on a slope.

### 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, cause hard starting and contribute to air pollution.

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 engine at altitudes higher than 1,800 meters (6,000 feet) above sea level, have an anthorized Honda power carrier dealer perform this carburetor modification.

Even with suitable carburetor jetting, engine horsepower will decrease approximately 3.5% for each 300 meter (1,000 foot) increase in altitude. The effect of altitude on horsepower will be greater than this if no carburetor modification is made. A reduction in engine horsepower will reduce carrier performance.

### NOTICE

When the carburetor is modified for high altitude operation, the air-fuel mixture will be too lean for low altitude use. Operation at altitudes below 1,800 meters (6,000 feet), with high altitude carburetor modifications, may cause the engine to overheat and result in serious engine damage. For low altitude use, reinstall the standard main fuel jet, and readjust the pilot screw.

### 7. STOPPING THE ENGINE

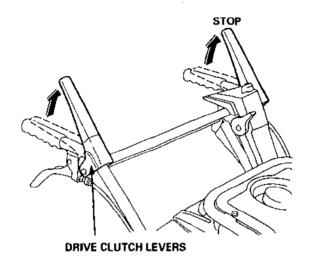
#### **EMERGENCY STOP**

### In an emergency:

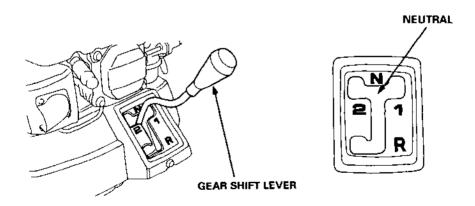
1. To stop the engine in an emergency, turn the engine switch to the OFF position.

#### **NORMAL STOP**

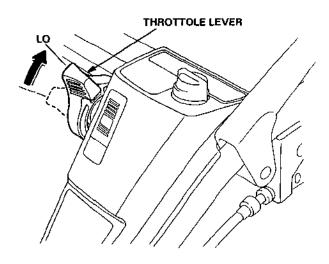
1. Release the drive clutch levers to disengage the drive and apply the brake.



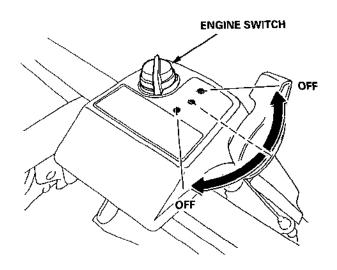
2. Move the gear shift lever to the NEUTRAL position.



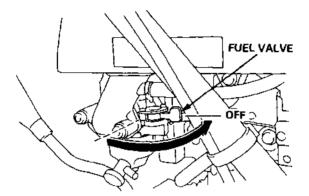
3. Move the throttle lever to the LO position.



4. Turn the engine switch to either OFF position.



## 5. Turn the fuel valve to the OFF position.



### Load carrying safety

### **A** WARNING

To avoid accidents or overturning:

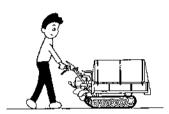
- Observe the load limits described on page 27.
- Do not stack the load so that the power carrier becomes top-heavy and unstable.
- · Carry only lightweight loads when the carrier side rails are extended.
- Do not allow the load to protrude from the power carrier or block visibility.
- Secure the load to the tie-down hooks with strong ropes or straps.
- Before operating the power carrier, check that the carrier bed is locked.
- When operating the power carrier on ground that is soft or uneven, reduce speed and exercise extra care.
- Use low (1) gear and LO throttle position when descending steep slopes. Never descend slopes in reverse gear.
- Exercise extra care when starting, stopping, or changing the direction of the power carrier while operating it on slopes.
- Do not carry loads on upward slopes greater than 25° or downward slopes greater than 15°.

#### Tie-down hooks

Secure the load in the carrier bed with strong ropes or straps attached to the tie-down hooks.

NOTICE Do not attach ropes or straps to locations other than the tie-down hooks.



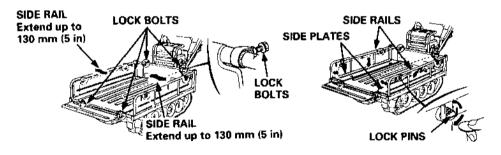


### Side rails and side plates

The side rails may be extended up to 130 mm (5 inches) at each side for carrying bulky, lightweight loads.

To extend the side rails, loosen the four lock bolts, pull both side rails out an equal amount, then tighten the lock bolts securely.

To lower the side plates completely, extend the side rails then turn the lock pins 90 degress to right or left while pushing them down by hand.



Return the side rails fully to the inner position for normal use.

### **A** CAUTION

- Extend the side rails for use with lightweight loads only. A heavy load, extended on the sides of the power carrier will increase the hazard of overturning.
- Extend left and right side rails an equal amount, and center the load.
   Do not extend the side rails more than is necessary to hold the load and never more than 130 mm (5 inches) at each side.

### Using the front stopper plate

To open the front stopper plate, observe the following:

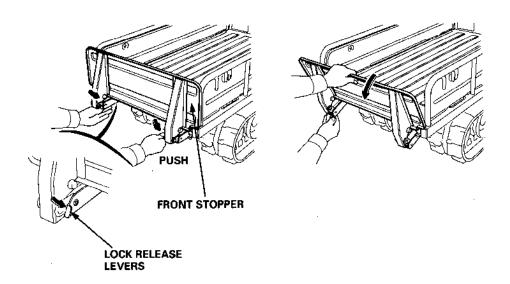
1. Slowly press down on the right and left lock release levers.

# A CAUTION Do not push the release levers quickly, or the stopper plate will swing open suddenly.

- 2. Pull the top of the stopper plate down slowly until it is horizontal and is locked securely.
- 3. Check that the plate is locked securely by lifting it upward.

To close the stopper plate, observe the following:

- 1. Release the loscks by pushing the release levers down, then raise the plate upright until locked.
- 2. Make sure that the plate is locked securely by pulling it downward.

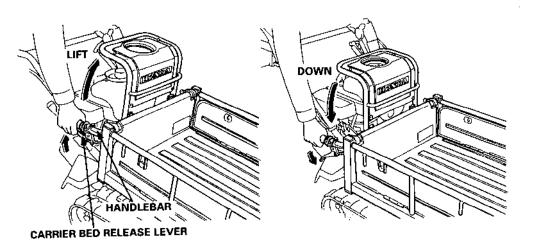


A CAUTION Do not use the power carrier with the front stopper plate opened on slopes in excess of 15 degrees.

### **Dumping loads**

Dump loads with the power carrier stopped and the drive clutch levers released.

- Pull the carrier bed release lever, and tilt the carrier bed by lifting the handlebar.
- 2. After dumping the load, push down firmly on the handlebar to lock the carrier bed in the normal position.



MARNING Before operating the power carrier, check that the carrier bed is locked. If the carrier bed is not locked, it may tilt while going downhill and accidentally dump the load, which may cause personal injury and property or equipment damage.

### Load carrying capacity

 For operation on level ground— Maximum load: 400 kg (881 lb) Maximum load height: 900 mm (35.4 in)

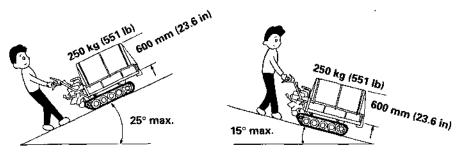


For operation on slopes—

Maximum load: 250 kg (551 lb)

Maximum load height: 600 mm (23.6 in)

Maximum slope: 25° upward/15° downwardLoad carrying capacity



NOTE: To carry sand, gravel or dirt, extend the side rails with the front and side plates raised.

### 9. MAINTENANCE

Periodic maintenance and adjustment is necessary to keep the power carrier in good operating condition. Inspect or service as scheduled in the table below.

A WARNING Shut off the engine before performing any maintenance. If the engine must be run, make sure the area is well ventilated. Exhaust contains poisonous carbon monoxide gas that may cause loss of consciousness and lead to death.

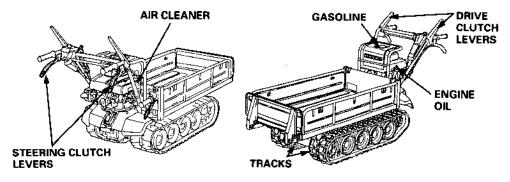
#### NOTICE

 Use only genuine HONDA parts or their equivalent for maintenance or repair. Replacement parts which are not of equivalent quality may damage the power carrier.

### Pre-operation checks

Pre-operation inspection and maintenance work should be conducted to assure proper operation and maximum service life. Do not neglect this work.

- Cleaning of parts ...... Check that dirt and debris have not collected on the muffler, carburetor, control parts and tracks.
- · Tightening of parts ..... Check for looseness and play.
- Engine oil ...... Check for low oil level or leakage.
- Air cleaner ......Check for dirt.
- Gasoline ......Check for insufficient or contaminated fuel.
- Drive clutch lever ...... Check its operation.
- Steering clutch levers . Check their operation.
- Tracks ...... Check for slack or damage.
- If any other problem or malfunction is detected, contact your authorized Honda power carrier dealer.



#### Maintenance schedule

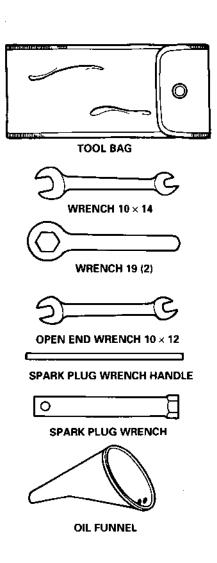
Your power carrier should be serviced regularly to assure maximum service life.

REGULAR SERVICE PERIOD  ITEM Performat everyindicated month or operating hour interval, whichever comes first.		EACH USE	FIRST MONTH OR 50 HRS	EVERY 3 MONTHS OR 50 HRS	EVERY 6 MONTHS OR 100 HRS	EVERY YEAR OR 300 HRS
	Change		0		0	
Air cleaner	Check	0				
	Clean			O (1)		
Tracks	Check	0				
	Adjust		0			0
Drive clutch cable	Check-Adjust		0		0	
Steering clutch cable	Check-Adjust		0		0	
Brake cable	Check-Adjust		0		0	
Spark plug	Check-Clean				0	
Spark arrester (optional part)	Clean				0	
Carrier bed release cable Check-Adjust					0	
Throttle control cable	Check-Adjust					O(2)
Brake shoe	Check				0	
	Change					O(2)
Clutch shoe	Change					<b>(2)</b>
Clutch oil	Check				I	0
Transmission oil	Check					0
Grease application						0
Valve clearance	Check-Adjust					O(2)
Fuel tank and strainer	Clean					<b>(2)</b>
Fuel line	Check (Replace if necessary)	Every 2 years (2)				

NOTE: (1) Service more frequently when used in dusty areas.
(2) These items should be serviced by an anthorized Honda dealer, unless the owner has the proper tools and is mechanically proficient. See the Honda Shop Manual.

### **Tool Kit**

The tools supplied with the carrier are necessary for performing some periodic maintenance, simple adjustments and repairs. Always keep the tool kit with the carrier.



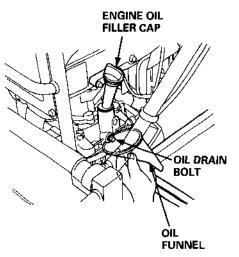
### Engine oil change

NOTE: Drain the oil while the engine is still warm to assure rapid and complete draining.

### Changing the oil

- 1. Remove the engine oil filler cap and loosen the oil drain bolt.
- Set the oil funnel as shown, remove the oil drain bolt and drain the oil into a suitable container.
- Once the oil has been drained, tighten the oil drain bolt securely.
- Fill with new engine oil unit it reaches the upper level on the filler cap dipstick.
- 5. After replenishment, tighten the cap securely.

Oil capacity: 0.6 & (0.64 US qt)





A CAUTION Used motor oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to throughly wash your hands with soap and water as soon as possible 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 on the ground.

### Spark plug service

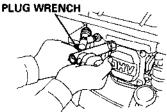
### Recommended spark plug: BPR4ES (NGK) W14EPR-U (NIPPONDENSO)

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

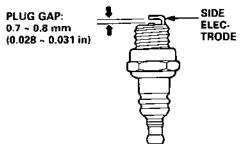
1. Remove the spark plug cap.

<u>A WARNING</u> 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.

- 2. Clean any dirt from around the spark plug base.
- 3. Use a spark plug wrench to remove the spark plug.



- Visually inspect the spark plug. Discard it if there is apparent wear or it the insulator is cracked or chipped. Clean the spark plug with a wire brush if it is to be reused.
- Measure the plug gap with a feeler gauge.
   The gap should be 0.7~0.8 mm (0.028~0.031 in). Correct as necessary by carefully bending the side electrode.



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

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.

### NOTICE

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

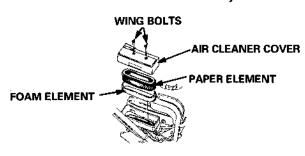
### Servicing the air cleaner

A dirty air cleaner will restrict air flow to the carburetor. To prevent carburetor malfunction, service the air cleaner regularly. Service more frequently when operating the power carrier in extremely dusty areas.

<u>A WARNING</u> Never use gasoline or low flash point solvents for cleaning the air cleaner element. A fire or explosion could result.

NOTICE Never run the engine without the air cleaner. Rapid engine wear will result from contaminants, such as dust and dirt, being drawn through the carburetor, into the engine.

- Remove the wing bolts and the air cleaner cover. Remove the elements and separate them. Carefully check both elements for holes or tears and replace if damaged.
- Foam element: Clean in warm soapy water, rinse and allow to dry thoroughly. Or clean in high flash-point solvent and allow to dry. Dip the element in clean engine oil and squeeze out all the excess. The engine will smoke during initial start-up if too much oil is left in the foam.
- Paper element: Tap the element lightly several times on a hard surface to remove excess dirt, or blow compressed air through the filter from the inside out. Never try to brush the dirt off; brushing will force dirt into the fibers.
- 4. Reinstall all parts in reverse order of disassembly.

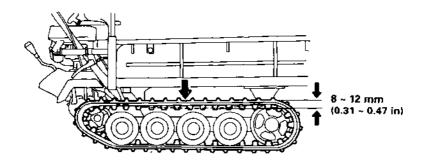


### Adjusting the track tautness

If the tracks are not properly taut, they may slip off the wheels or their service life may be markedly reduced.

### Inspection

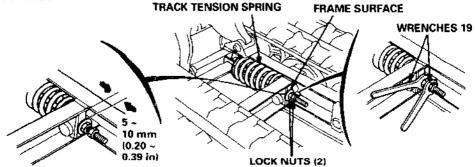
Check that the slackness is between 8~12 mm (0.31 $\sim$ 0.47 in) when a force (about 10 kg, 22.1 lb) is applied to the middle of the tracks.



### Track adjustment

- Tip up the carrier.
   Loosen the two lock nuts until there is space between the nuts and the frame.
- 2. Tighten the inner lock nut by hand until clearance between the lock nut and frame is 5~10 mm. (0.20~0.39 in)
- 3. Hold the inner lock nut and tighten the other lock nut against it securely.

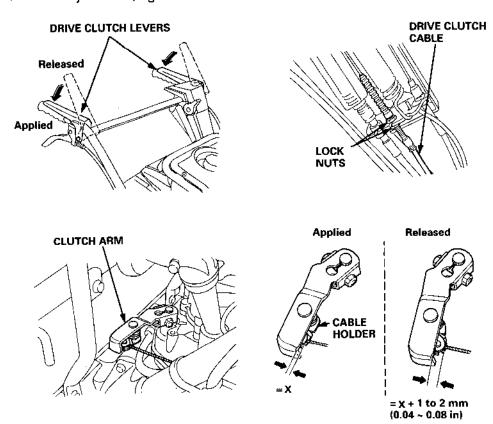
NOTE: Use the two 19 mm wrenches furnished with the power carrier as illustrated.



#### Adjusting the drive clutch cable

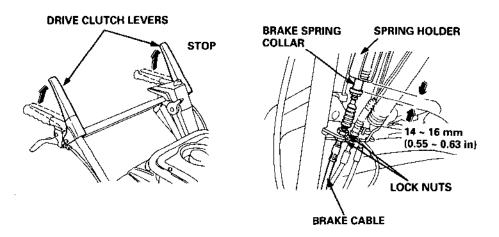
The clutch will slip and the power carrier may not move unless the drive clutch cable is adjusted properly.

- Measure and record the clearance between the clutch arm and cable holder with the drive clutch levers at their applied position (DRIVE). Next, measure the same clearance again with the levers at their released position (STOP).
  - The clearance in the released position should be 1 to 2 mm (0.04~0.08 in) more than in the applied position.
- 2. To adjust, loosen the lock nuts and while repeatedly applying and releasing the drive clutch levers, adjust so the change in clearance of the cable holder to the clutch arm is 1~2 mm (0.04~0.08 in).
- 3. After adjustment, tighten the lock nuts.



#### Adjusting the brake cable

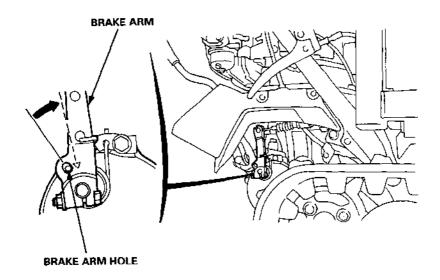
- Check whether the brake spring collar is 14 ~ 16 mm (0.55~0.63 in) from the spring holder when the drive clutch levers are at their released (STOP) position.
- 2. To adjust, loosen the lock nuts with the levers still at the stop position and set the distance to the prescribed value.
- 3. After adjustment, tighten the lock nuts.



## Checking brake wear

Check the brake shoe wear indication only after the brake cable has been properly adjusted.

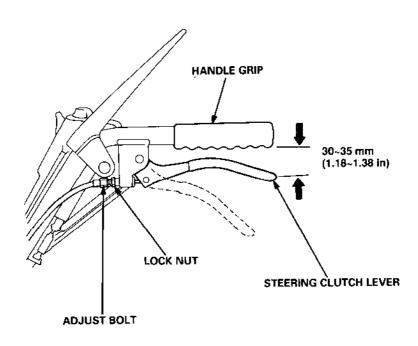
Brake shoe wear is OK if you cannot see the " $\Delta$ " mark through the brake arm hole, when the drive clutch lever is in its released position (STOP). However, if you can see any part of the (" $\Delta$ ") mark, the brake has worn past its service limit; contact your authorized Honda dealer.



#### Adjusting the steering clutch cable

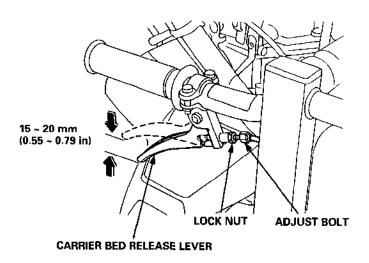
Steering control will be impaired unless both steering clutch cables are adjusted properly.

- With the engine off, rock the power carrier forward and backward to find the position at which each lever can be pulled closest to the handle grip.
- 2. With each steering clutch lever fully gripped, check whether the clearance between the tip of the lever and the handle grip is 30~35 mm (1.18~1.38 in).
- To adjust, loosen the lock nut with the lever gripped, and turn the adjust nut to get the prescribed clearance.
- 4. After the adjustment, tighten the lock nut.



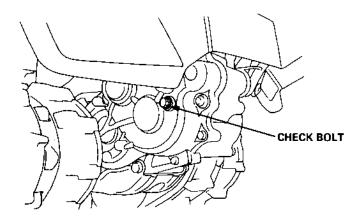
#### Adjusting the dumping lock cable

- 1. With the carrier locked, check whether the play at the end of the carrier bed release lever is 15~20 mm (0.55~0.79 in).
- 2. To adjust, loosen the lock nut and turn the adjust bolt to set the prescribed distance.
- 3. After adjustment, tighten the lock nut.



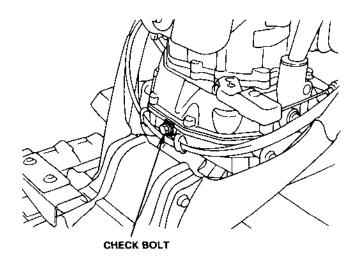
## Checking the transmission oil

Remove the check bolt and check that the oil is up to the lower edge of the check bolt hole. If it is low, refill with engine oil of the classification recommended on page 12.



# Checking the clutch oil

Remove the check bolt and check that the oil is up to the lower edge of the check bolt hole. If it is low, refill with engine oil of the classification recommended on page 12.



#### Spark arrester maintenance (Optional part)

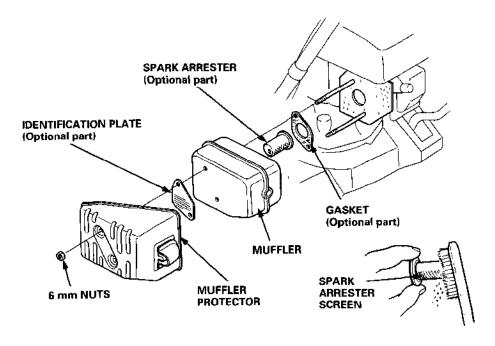
A WARNING The muffler becomes very hot during operation and remains hot for a while after stopping the engine. Be careful not to touch the muffler while it is hot. Allow it to cool before proceeding.

NOTICE The spark arrester must be serviced every 100 hours to maintain its efficiency.

- 1. Remove the two 6 mm nuts and remove the muffler protector, identification plate, muffler and gasket.
- Remove the spark arrester from the muffler.

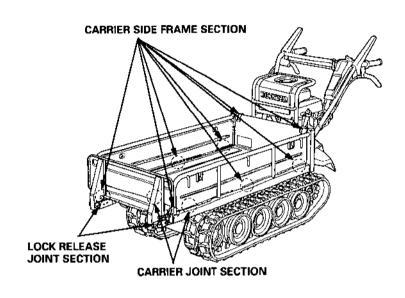
NOTICE Be careful not to damage the spark arrester screen.

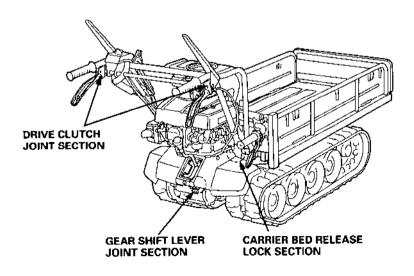
- 3. Check for carbon deposits around the exhaust port and the spark arrester, and clean if necessary.
- 4. Install the spark arrester in the muffler.
- 5. Install the gasket, muffler, identification plate and muffler protector, then tighten the two 6 mm nuts securely.



#### Lubrication

Grease the points noted below, at least once a year or after any time you have washed the carrier. Recommended grease: SAE multipurpose grease.





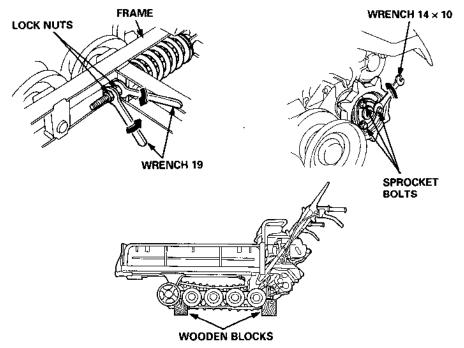
## Temporary installation of a disengaged track

In the unlikely event that a track slips off the sprockets during operation, proceed with the following:

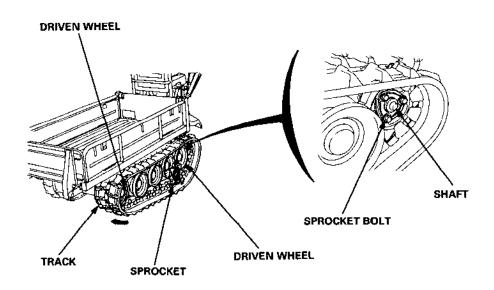
- 1. Stop the engine (refer to page 20).
- Remove any load in the carrier, by hand. Do not empty it by dumping the carrier.
- 3. Move the power carrier to a flat surface and support on wood blocks in two locations (so the wheels are off the ground). Dump the carrier.

NOTICE A carrier with a disengaged track will fall over if the carrier is dumped, unless first secured with wood blocks.

- Loosen the track tension lock nuts and tighten up the inner nut as far as it will go. (This is done in order to facilitate the mounting of the track.)
- Remove the sprocket bolts.



- 6. Remove the sprocket.
- Place the track over the driven wheel, and engage the sprocket with the track teeth.
- 8. Push the sprocket and track toward the rear, then slide the sprocket onto the sprocket shaft.
- 9. Instal and tighten the sprocket bolts securely.



10. Remove the wooden blocks and make sure the power carrier is level. Then adjust the track tautness.

#### A CAUTION

- Special care should be exercised when mounting the tracks.
- Do not tip the carrier onto its side; oil and gasoline may spill out. Tip
  it only enough to ease track installation.
- After following the above temporary procedure, have the power carrier inspected by your authorized Honda dealer as soon as possible.

# 10. TRANSPORTING/STORAGE

When transporting or storing the power carrier, make sure the engine switch is in the STOP position and the spark plug cap is disconnected to prevent accidental engine start up.

#### **A WARNING**

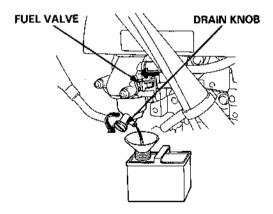
- To avoid, severe burns or fire hazards, let the engine cool before transporting the power carrier or storing it indoors.
- When transporting the power carrier, turn the fuel valve to the OFF position, and keep the engine level to prevent fuel spillage. spilled fuel or fuel vapor may ignite.

Before storing the unit for an extended period;

- 1. Be sure the storage area is free of excessive humidity and dust.
- 2. Drain the fuel ...

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

- To drain the gasoline from the carburetor, first set the fuel valve to ON, loosen the drain knob and drain off the gasoline into a suitable container.
- 4. Replace the drain knob and set the fuel valve to the OFF position.



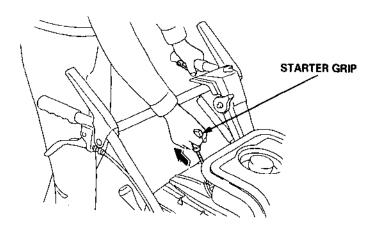
#### **A** WARNING

- · Keep all sparks and open flames away when draining the fuel.
- · Perform the operation in a well-ventilated location.
- · Dispose of the drained fuel properly.

- 5. Change the engine oil (see page 31 for details).
- 6. Clean the air cleaner (see page 33 for details).
- 7. Clean the power carrier and inspect all parts to make sure they are securely tightened. Lubricate the points noted on page 42.

NOTE: If the carrier will be stored for more than three months, remove the spark plug, pour one tablespoon of clean engine oil into the plug hole and reinstall the spark plug securely.

8. Pull the starter grip until you feel slight resistance.



Place a cover over the power carrier or store it in a well-ventilated enclosed location.

A CAUTION When storing the power carrier, first allow the engine exhaust system to cool off completely and then place the power carrier far from any combustible products.

To assure maximum service life from your carrier, don't disassemble it unnecessarily. If the following basic troubleshooting does not get you and your carrier back to work, it is time to consult your authorized Honda dealer.

Check the following points if the engine does not start.

- Is there sufficient fuel?
- · Is there sufficient engine oil?
- Is there a spark at the spark plug?
  - a. Remove the spark plug cap. Clean any dust from around the spark plug base, then remove the spark plug.
  - b. Install the spark plug in the plug cap.
  - c. Turn the engine switch on.
  - d. Grounding the side electrode to any engine ground, pull the recoil starter to see if sparks jump across the gap.

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

Have you followed the starting method as described on page14?

Check the following if the engine runs but the carrier does not operate properly:

- Is the drive clutch cable adjusted (page 35)?
- Are the steering clutch cables adjusted (page 38)?
- Is the brake cable properly adjusted (page 36)?
- Are the tracks adjusted to proper tautness (page 34)?

# 12. SPECIFICATIONS

Туре	Honda power carrier HP400 (BA)		
Power product discription code	NAA		

Engine	GXV120		
Engine type	4-stroke, overhead valve, 1 cylinder		
Displacement	118 cm³ (7.2 cu in)		
Bore and stroke	60 × 42 mm (2.4 × 1.7 in)		
Ignition timing	25° BTDC		
Ignition system	Transistorized magneto ignition		
Engine oil capacity	0.6 ℓ (0.63 US gal, 0.53 Imp gal)		
Fuel tank capacity	1.6 ℓ (1.68 US gal, 1.41 Imp gal)		
Spark plug	BPR4ES (NGK) W14ERR-U (NIPPONDENSO)		

#### **FRAME**

Overall length Overall width Overall height		1900 mm (74.8 in)		
		635 mm (24.9 in) 1055 mm (41.5 in)		
Fully supplied weight		163 kg (359.4 lb)		
No. of gears		2 forward gears, 1 reverse gear		
Traveling speed		1.4 km/h (0.9 mile/h) in 1st gear, 3.5 km/h (2.2 mile/h) in 2nd gear, 1.3 km/h (0.8 mile/h) in reverse		
Maximum weight	Level ground	400 kg (881 lb)		
	Sloping ground	250 kg (551 lb)		
Clutch oil capacity		0.8 ℓ (0.84 US qt, 0.71 Imp qt)		
Transmission oil capacity		2.0 ℓ (0.21 US qt, 1.76 imp qt)		
Track width × length		180 mm × 2220 mm (7.1 × 87.4 in)		

NOTE: Specifications are subject to change without notice due to improvements.

# 13. CUSTOMER SERVICE INFORMATION

Honda power equipment dealership personnel are trained professionals. They should be able to answer any question you may have. If you encounter a problem that your dealer does not solve to your satisfaction, please discuss it with the dealership's management. The Service Manager or General Manager can halp. Almost all problems are solved in this way.

If you are dissatisfied with the decision made by the dealership's management, contact the Honda Power Equipment Customer Service Office. You can write to:

American Honda Motor Co., Inc. Honda Power Equipment Division Customer Service Office 4475 River Green Parkway Duluth, Georgia 30136-9420

Or telephone:

(404)497-6400

When you write or call, please give us this information:

- Model and serial unmber (see page 5)
- Name of dealer who sold the power carrier to you.
- Name and address of dealer who services your power carrier.
- Date of purchase
- Your name, address, and telephone number
- · A detailed description of the problem

#### **Current customer service contact information:**

#### United States, Puerto Rico, and U.S. Virgin Islands:

Honda Power Equipment dealership personnel are trained professionals. They should be able to answer any question you may have. If you encounter a problem that your dealer does not solve to your satisfaction, please discuss it with the dealership's management. The Service Manager or General Manager can help. Almost all problems are solved in this way.

If you are dissatisfied with the decision made by the dealership's management, contact the Honda Power Equipment Customer Relations Office. You can write:

American Honda Motor Co., Inc. Power Equipment Division Customer Relations Office 4900 Marconi Drive Alpharetta, GA 30005-8847

Or telephone: (770) 497-6400 M-F, 8:30 am - 7:00 pm EST

When you write or call, please provide the following information:

- Model and serial numbers
- Name of the dealer who sold the Honda power equipment to you
- Name and address of the dealer who services your equipment
- Date of purchase
- Your name, address, and telephone number
- A detailed description of the problem

# 14. INDEX

CARRYING LOADS	.23
Dumping loads	. 26
Load carrying capacity	.27
Load carrying safety	.23
Side rails and side plates	.24
Tie-down hooks	.24
Using the front stopper plate	.25
COMPONENT IDENTIFICATION	5
CONTROLS	6
Carrier bed release lever	
Drive clutch levers	8
Engine switch	6
Fuel valve	
Gear shift lever	
Starter grip	7
Steering clutch levers	9
Throttle lever	7
CUSTOMER SERVICE INFORMATION	49
INDEX	50
MAINTENANCE	28
Adjusting the brake cable	36
Adjusting the drive clutch cable	35
Adjusting the dumping lock cable	39
Adjusting the steering clutch cable	38
Adjusting the track tautness	34
Checking brake wear	37
Checking the clutch oil	40
Checking the transmission oil	40
Engine oil change	31
Lubrication	42
Maintenance schedule	29
Servicing the air cleaner	33
Spark arrester maintenance (Optional part)	41
Spark plug service	32
Temporary installation of a disengaged track	43
Tool kit	30
Track adjustment	34
OPERATION	17
High altitude operation	19
PRE-OPERATION CHECKS	10
Air cleaner	13
Engine oil	., 12
Fuel recommendation	10
SAFETY	3
Safety label locations	ن د
Safety Information	4
SPECIFICATIONS	48
STARTING THE ENGINE	14
STOPPING THE ENGINE	2U
TRANSPORTING/STORAGE	40
THOUBLESHOOTING	/

# **MEMO**

# **MEMO**

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