

Thank You for Purchasing the Honda Tiller F42

RH C 2521

LH C 2522

4 yrs. for set of 6 ear.

PREFACE

This owner's manual contains all necessary information about the Honda Tiller Model F42 to permit the operator to use it correctly.

This owner's manual should be carefully read to become familiar with the operation of the F42 Tiller before use.

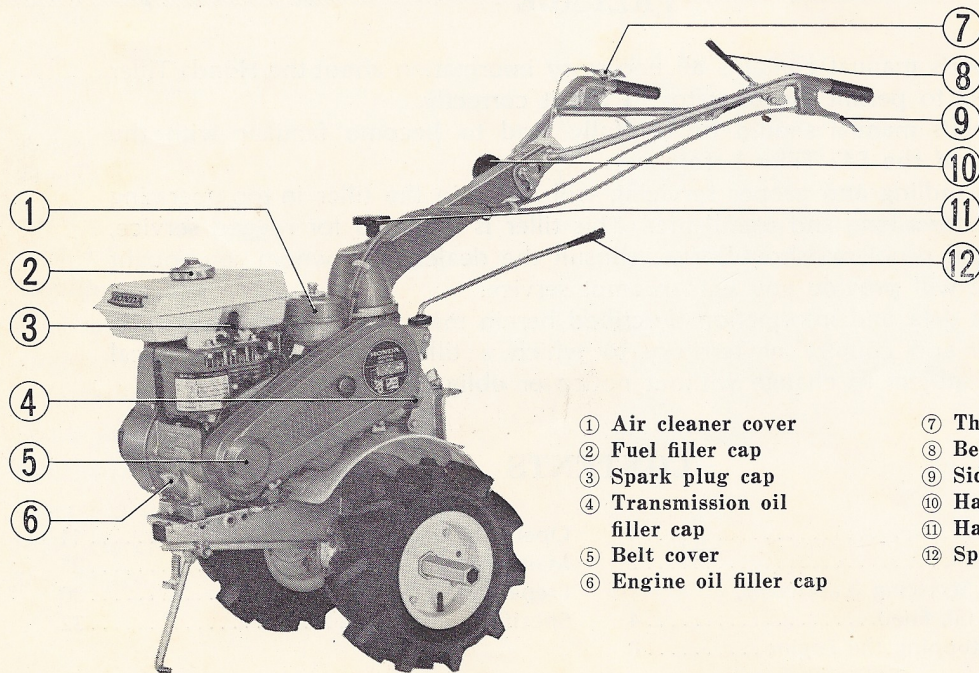
Correct handling and proper servicing will maintain the tiller in top operating condition for a long and useful life. This tiller is designed for rugged service, however, if problems should arise, consult the dealer from whom you bought it and he will provide you with prompt service.

Technical data and information described herein may vary according to type of a tiller and country or territory to which a tiller is shipped. Technical data are subject to change without notice or obligation.

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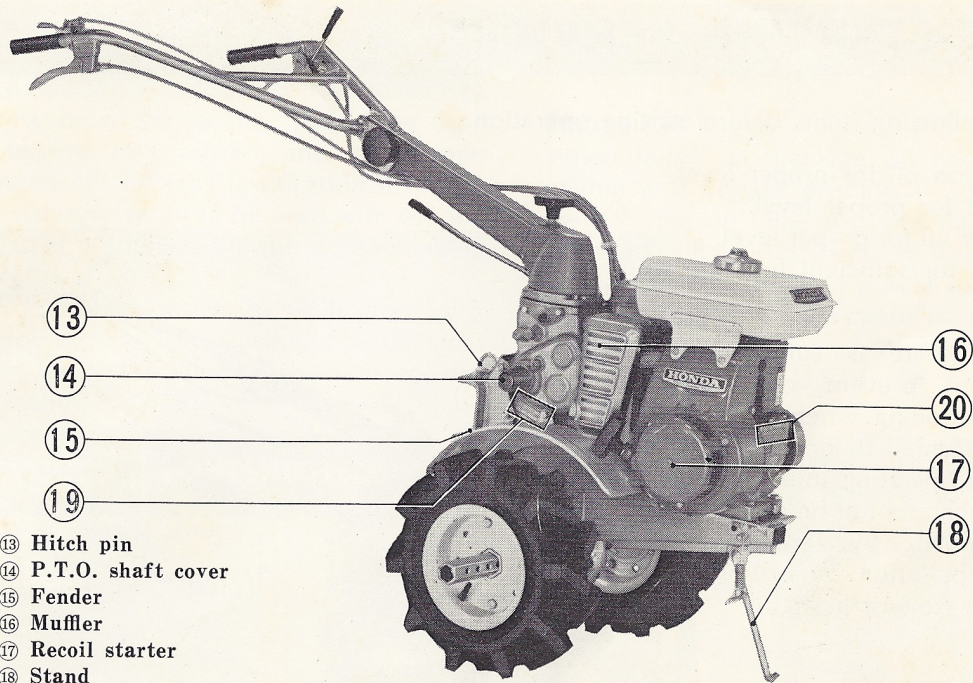
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CONTROL LOCATION



- ① Air cleaner cover
- ② Fuel filler cap
- ③ Spark plug cap
- ④ Transmission oil filler cap
- ⑤ Belt cover
- ⑥ Engine oil filler cap

- ⑦ Throttle lever
- ⑧ Belt clutch lever
- ⑨ Side clutch lever
- ⑩ Handle height adjuster
- ⑪ Handle angle adjuster
- ⑫ Speed change lever



- 13 Hitch pin
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- 15 Fender
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- 17 Recoil starter
- 18 Stand
- 19 Frame number location
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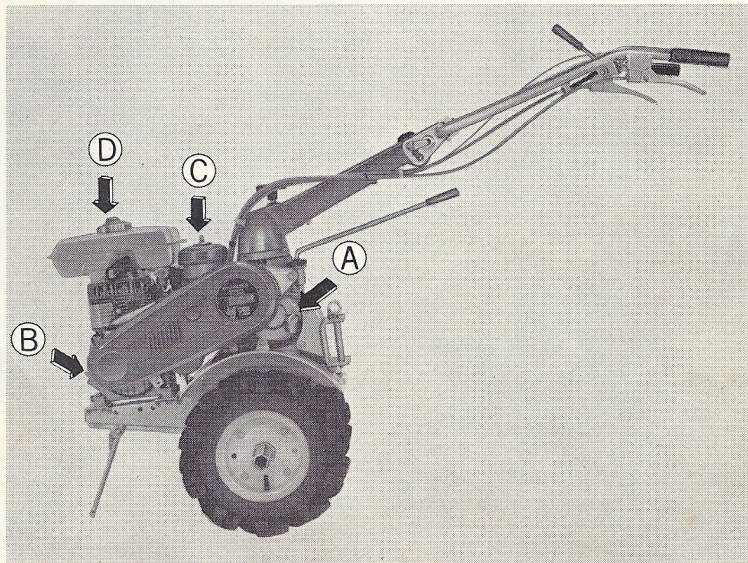
PRE-STARTING SERVICING

Check the following items before starting operation.

- A. Transmission oil for proper level.
- B. Engine oil for proper level.
- C. Air cleaner oil for proper level.
- D. Fuel tank for sufficient fuel.

Caution:

Assure that there is sufficient ventilation to prevent carbon monoxide poisoning when work is to be performed in a confined area. When operating in a confined area such as a hot house, be sure to ventilate the area to prevent air pollution by carbon monoxide in exhaust gases.



LUBRICANTS

Lubricating oil of top quality should be used in the engine, transmission, and air cleaner. Recommend API Service Classification SE engine oil. The viscosity of oil to be used with varying temperatures is indicated in the accompanying chart.

Oil will deteriorate if left in an engine for a long period of time. The oil should be changed in the engine if the tiller has been stored for several months or more.

S.A.E. GROUPS	OUTSIDE TEMP	
	°C	°F
#40	30°	86°
#30	15°	59°
#20 #20W	0°	32°
#10W		

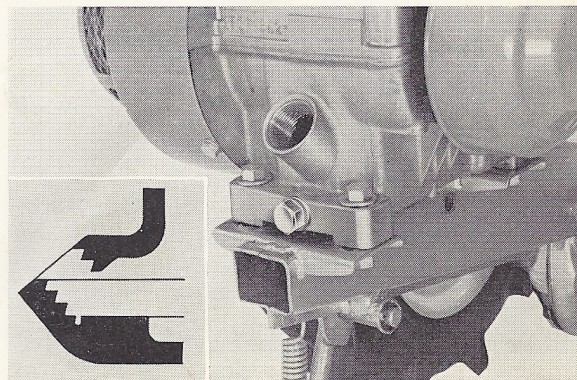
Engine Oil Level

When filling or checking oil level, keep the engine in a upright position.

Remove the oil filler cap and fill with a proper grade oil to the specified level.

Overfilling will result in power loss and smoking. Insufficient oil will cause overheating and consequent wear.

Capacity: 0.6 l (1.2 U.S. pt./1.0 Imp. pt.)

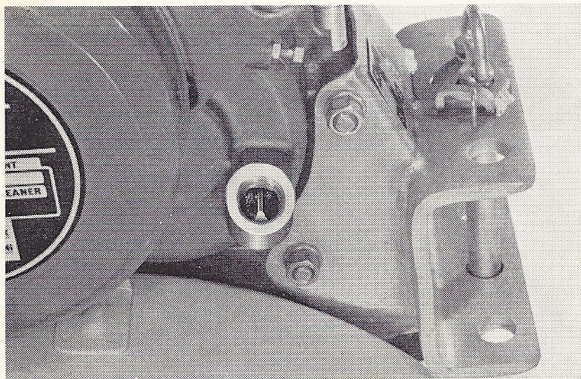


Transmission Oil Level

Remove the filler cap, and fill with a proper grade oil.

Loosen the oil filler cap, and fill the oil up to the specified level. After filling install the cap securely.

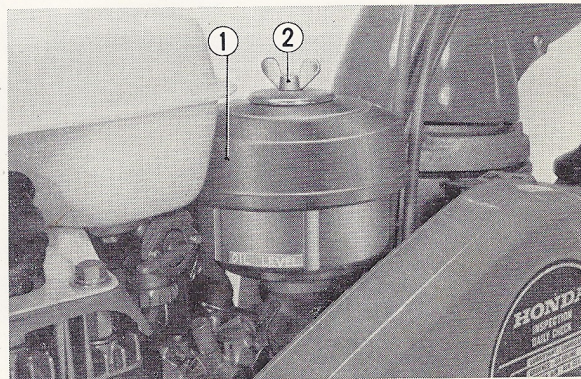
Capacity: 2.1ℓ (4.3 U.S. pt./3.7 Imp. pt.)



Air Cleaner Oil Level

Remove the air cleaner cover and fill the case with oil to the oil level marking on the case. Use the same oil as for the engine.

Capacity: 180 cc (11 cu. in.)



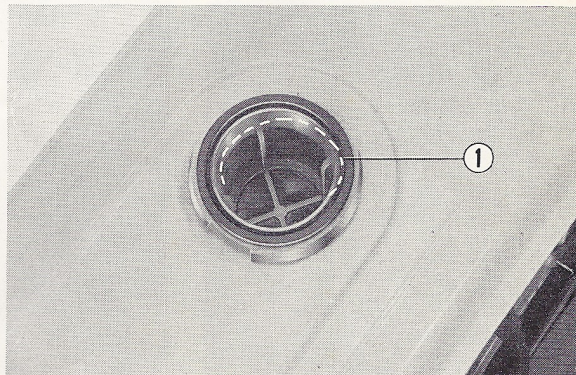
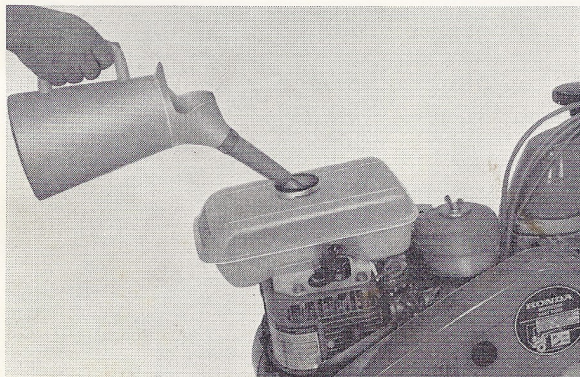
① Air cleaner cover ② Wing bolt

Fuel

Use only good quality automobile gasoline as fuel. When filling the engine should be stopped when refueling to prevent accidental fire. Also, exercise care that dust, dirt or water does not contaminate the fuel.

NOTE: Be sure to the engine when refueling to prevent fire hazards. Also be careful to prevent any dirt or water from getting inside the fuel tank.

Capacity: 4.0 l (1.0 U.S. gal./0.8 Imp. gal.)

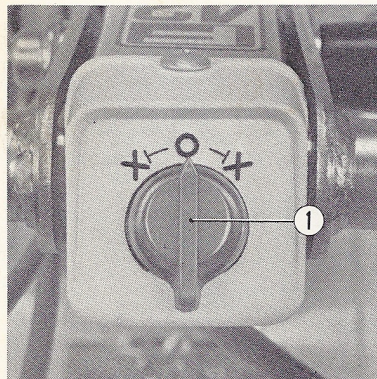


① Fuel Level

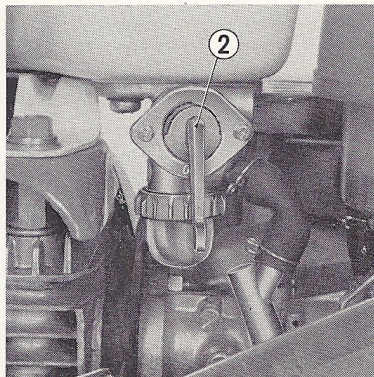
STARTING AND STOPPING THE ENGINE

Starting the Engine

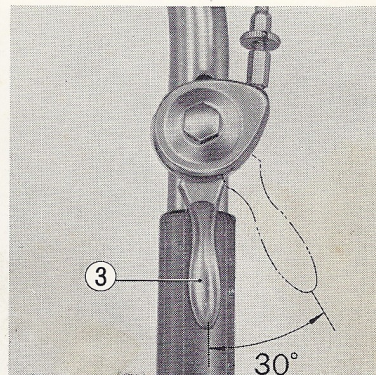
1. Set the switch knob to "O" position.
2. Set the fuel cock lever to "O" position.
3. Move the throttle lever 30° from the extreme right.



① Switch knob

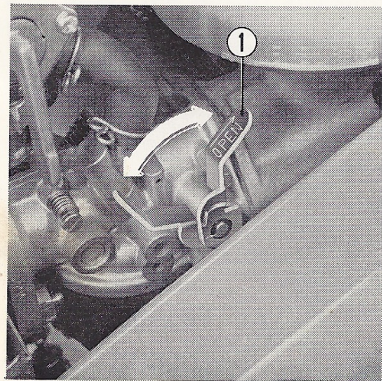


② Fuel cock lever



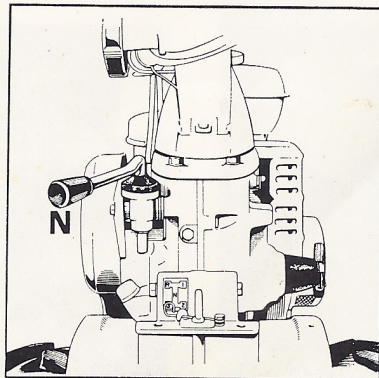
③ Throttle lever

4. Move the choke lever to "CLOSE" position. After the engine starts move the choke lever to "OPEN" position, and warm up the engine for two or three minutes.



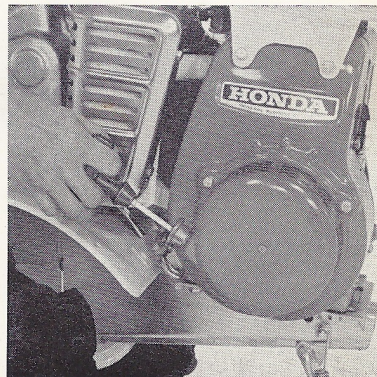
① Choke lever

5. Place the speed change lever in "NEUTRAL" position.



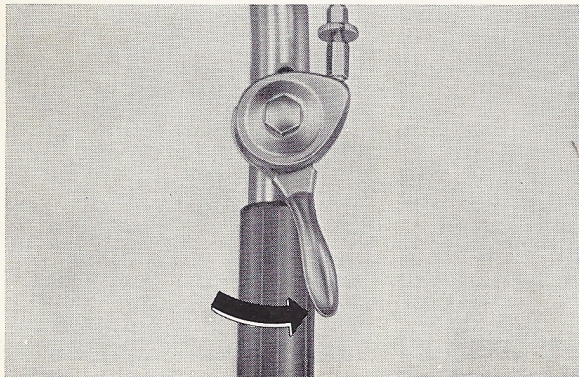
6. First pull the starter rope slowly until resistance (engine compression) is felt on your hand. Then pull the rope with a full arm stroke.

NOTE: Do not allow the rope to spring back. Hold the grip so that the rope recoils slowly.



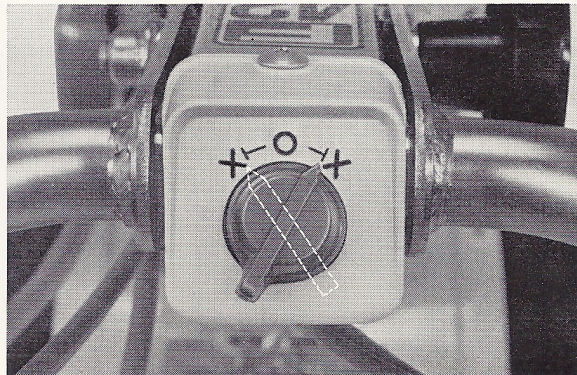
Stopping the Engine

1. Return the throttle lever to the extreme right to bring the engine speed to an idle RPM. Shift the speed change lever to the "NEUTRAL" position with the belt clutch disengaged.



2. The engine will stop when the switch knob is turned to the "X" position.

NOTE: In case of an emergency, align the switch knob with either of "X" positions to stop the engine.



OPERATING INSTRUCTION

Handle Angle Adjustment

The handle can be adjusted at two different angles in either direction. To adjust, loosen the handle angle adjuster.

Handle angle adjusting ranges

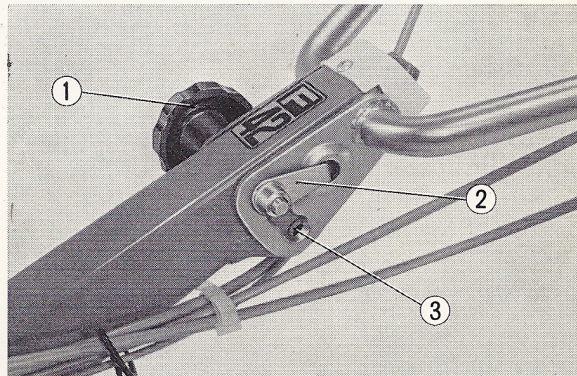
To both side: $22\ 1/2^\circ$, 45°

When changing the handle angle, also change the speed change lever angle. To change, lift the pivoted portion of the speed change lever and insert the pin to any desired hole.

NOTE: When installing the remote control device (optional) on the tiller F 42, remove the adjuster and use the lever instead.

Handle Height Adjustment

The handle can be adjusted for six different heights to meet any working condition. To adjust, loosen the handle height adjuster, select the appropriate holes in the handle column and handle plate and secure the handle to the handle column by tightening the handle height adjuster.



① Handle height adjuster

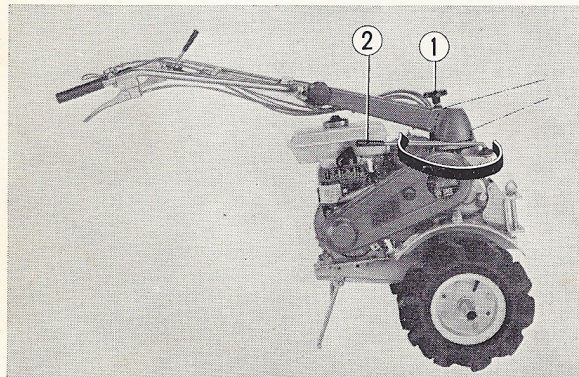
② Lock nut

③ Hole in handle column

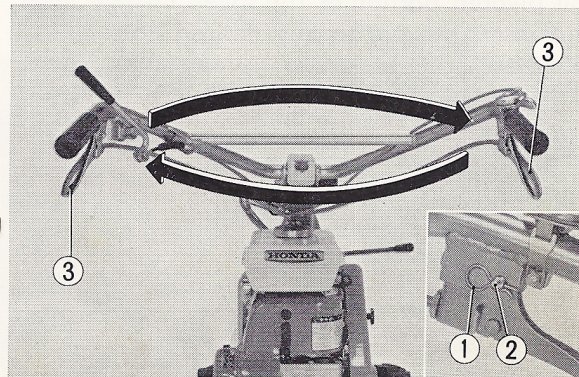
Reversing the handle

When operating the tiller installed with an attachment on the front side, the position of the steering handle can be reversed by the following procedure.

1. Loosen the handle angle adjuster and reverse the handle.
 - On a remote control device (optional) installed type, squeeze the lever for reversing.
 - After reversing, tighten the adjuster properly.
2. Remove the lock pins and lever hinge pins, and reinstall the right and left side clutch levers by exchanging their positions. If not exchanged, the tiller will make a turn to the opposite direction when the side clutch lever is squeezed.

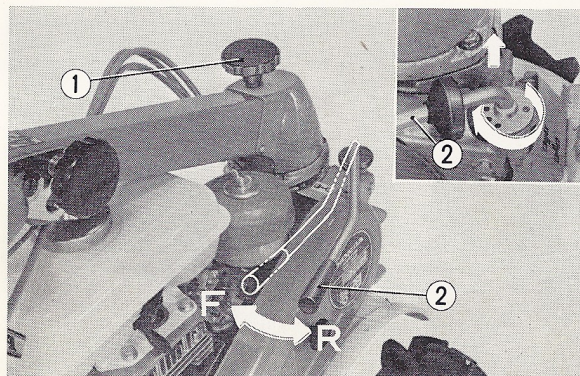


① Handle angle adjuster
② Speed change lever



① Lock pin
② Hinge pin
③ Side clutch lever

3. Lift the pivoted portion of the speed change lever and reverse the lever as in the handle. When the handle position is installed reversely, the positions of the speed change lever is restricted to two positions, that is, forward one position and reverse one. Select a speed change lever position following the picture given below.



- ① Handle angle adjuster
- ② Speed change lever

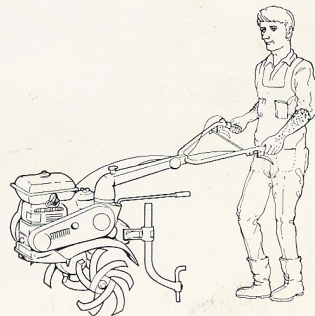
Handling Tips

Adjust steering handle height to comfortable position (waist high for normal tilling). Should machine jerk toward when tilling, press down on steering handle.

If the machine will not move forward, shake the steering handle from side to side.

Turn: The proper method of negotiating a turn during tilling operation is to first centrally line up the drag bar, lower the handle to bring the weight toward the rear and then make the turn.

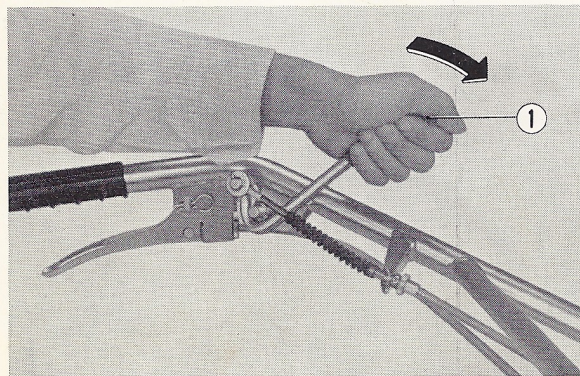
This will permit turn to be made with relative ease.



Clutch Operation

1. Belt Tension Clutch:

When the belt tension clutch lever is moved forward the clutch is engaged and the engine power is transmitted to the transmission. This clutch can best be used when the tiller has to be stopped quickly.



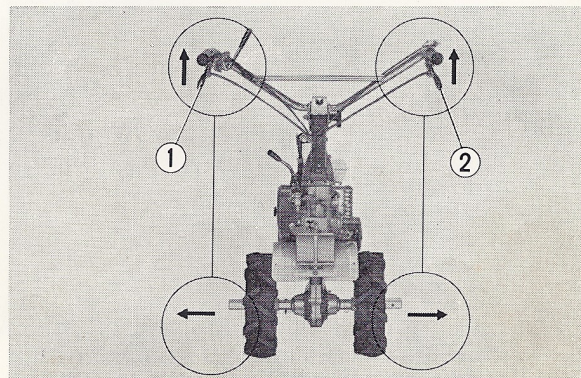
① Belt tension clutch lever

2. Side Clutch (Optional for Model F 42 D)

The side clutches are used for making a turn. To turn to the left squeeze the left side clutch lever. To turn to the right, squeeze the right side clutch lever.

NOTE:

- Reduce the tiller speed when making a turn.
- Do not use the side clutches when pulling a trailer.
- Do not disengage any side clutch when going up or down hill with the tiller.



① Left side clutch lever ② Right side clutch lever

Speed Change Lever Operation

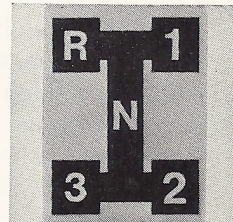
The speed change lever has four operating positions, three forward and one reverse. See the right chart.

When shifting the lever be sure to move it through "NEUTRAL"

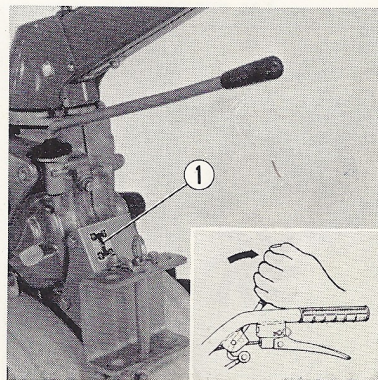
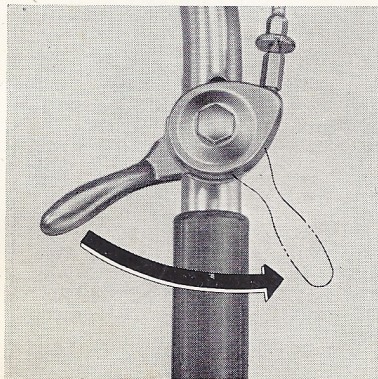
When operating the machine in reverse, reduce the tiller speed and watch your step.

*Changing the speed

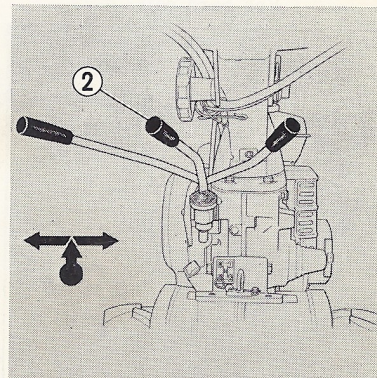
1. Return the throttle lever to the extreme right.
2. Squeeze the clutch lever to disengage the clutch.
3. When the handle angle is changed, the speed change lever angles should also be changed. To change, lift



the pivoted portion of the lever and insert the pin to any desired hole.



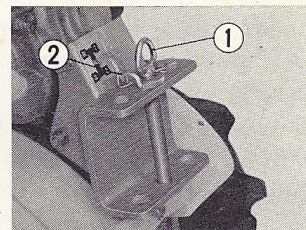
① Shift pattern



② Speed change lever

Use of the Hitch Box

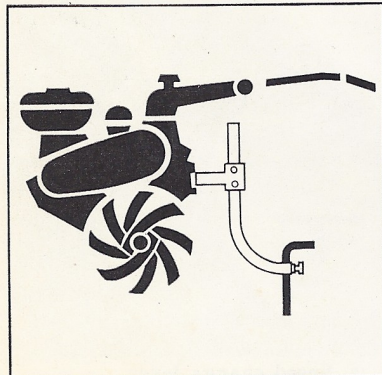
1. Install the hitch attachment in the hitch box with a hitch pin. (Hitch pin clip snaps into relief in hitch pin to retain pin.)
2. Adjust the hitch bolts so that the clearance between the hitch box and the tips of the bolts is 4~6 mm (3/16—1/4 in.) on either side when the hitch bar is aligned with the steering handle.



- ① Hitch pin
② Hitch pin clip

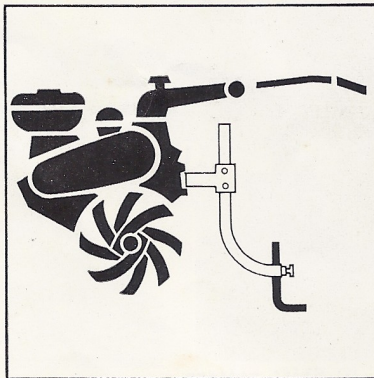
A. For hard soil, use the straight end of drag bar tip as stabilizer.

For hard soil



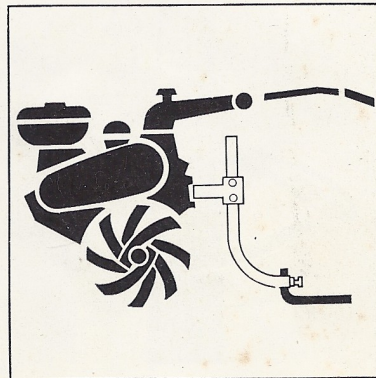
B. For normal soil, use the shorter bent end of the drag bar tip as stabilizer.

For normal soil



C. For very soft soil, use the longer bend end of the drag bar tip as stabilizer.

For very soft



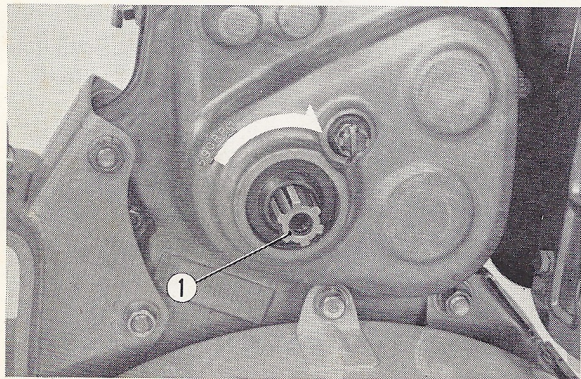
P. T. O. (Power Take Off) Operation

The P. T. O. shaft is used for stationary work such as hulling, spraying and mowing, etc.

P. T. O. shaft speed: 590 rpm

(Engine speed: 3700 rpm)

Direction of the P.T.O. shaft: Clockwise



① P.T.O. Shaft

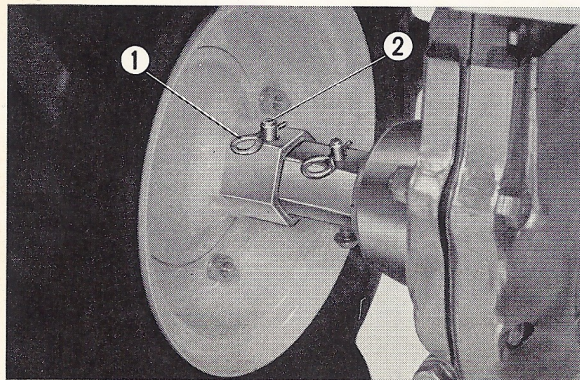
NOTE:

- When using P.T.O. shaft be sure to place speed change lever in neutral position.
- Be careful not to lose the P.T.O. shaft cover.
- Snap on the P.T.O. cover above the belt cover latch.

Wheel Tread Adjustment

The wheel tread can be adjusted by sliding the wheels outward or inward on the wheel shaft.

To adjust, raise one wheel off ground by using the stand and the other wheel, and pull out the lock pin and round head pin.



① Lock pin ② Round head pin

NOTE:

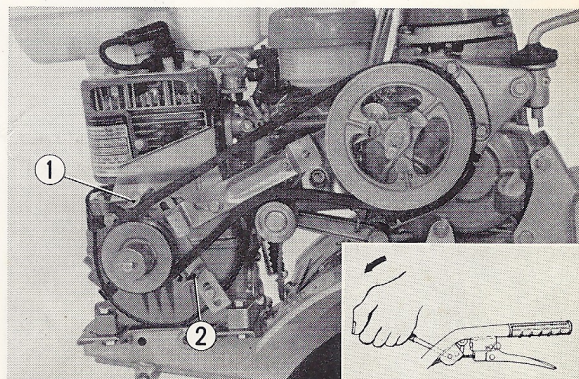
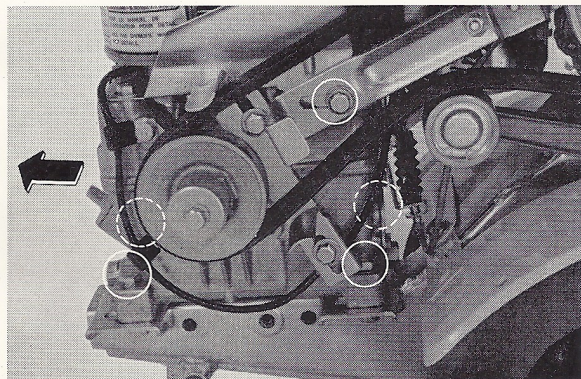
After adjusting the tread, make sure the lock pin and round head pin are properly installed in places.

Belt Tension Adjustment

Improper belt tension often results in damage to pulley bearings or power loss.

To adjust the belt tension proceed as follows:
Remove the belt cover. Loosen the five bolts

marked with a circle and move the engine in the direction of arrow. After adjusting, check to see if the belt tension clutch is disengaged when the clutch lever is pulled.

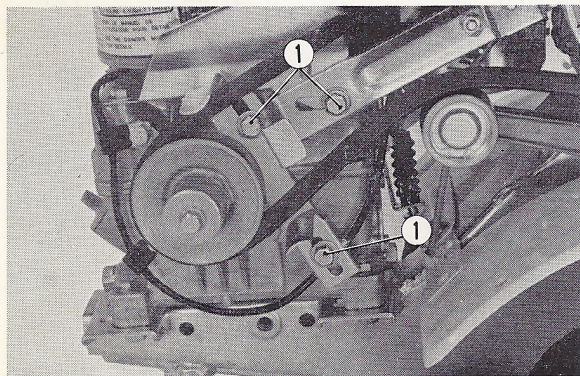


- ① Upper belt stopper
- ② Lower belt stopper

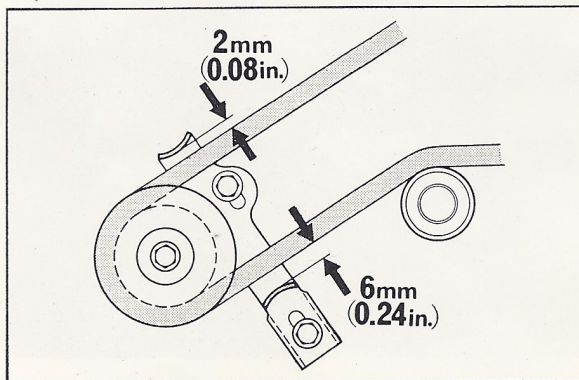
If the clutch is not disengaged, proceed as follows:

Move the belt tension clutch lever forward and loosen the upper and lower belt stopper bolts. Then move the stoppers toward the belt along the long hole in the stopper so that the

clearance between the upper stopper and the belt be 2 mm (0.08 in.) and between the lower stopper and the belt, 6 mm (0.24 in.). After adjusting, tighten the stopper bolts to a proper torque.



① Stopper bolt

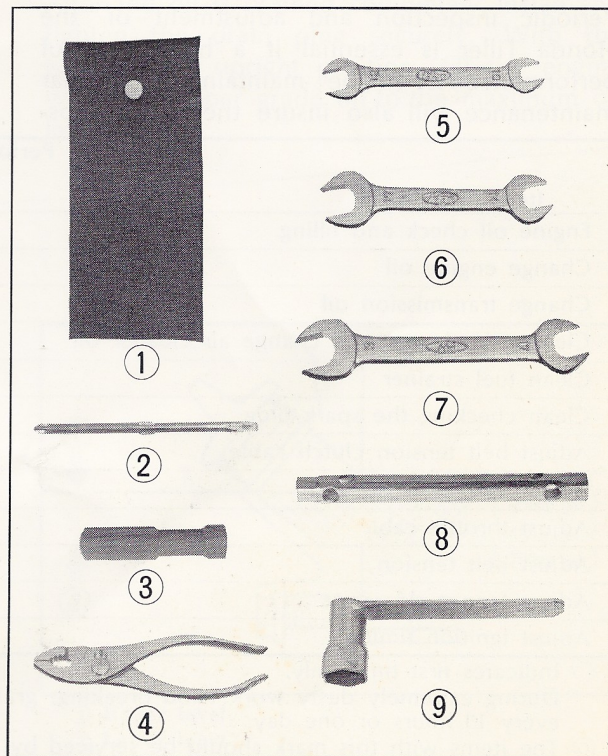


MAINTENANCE

Tool Kit

The tool kit furnished with the F 42 Tiller is showed in the picture. This tool kit is adequate for routine maintenance of the Honda Tiller. It should be kept in a convenient place so as to be available at all times.

- ① Tool bag
- ② Screw driver
- ③ Screw driver grip
- ④ Pliers
- ⑤ Wrench, 10×12 mm
- ⑥ Wrench, 14×17 mm
- ⑦ Wrench, 17×19 mm
- ⑧ Box wrench
- ⑨ Plug wrench



Maintenance Schedule

Periodic inspection and adjustment of the Honda Tiller is essential if a high level of performance is to be maintained. Regular maintenance will also insure the longest pos-

sible life of your Honda Tiller.

Provided below is a maintenance chart describing proper intervals and types of maintenance to be performed.

Item	Initial 20 Hours	Every 50 Hours	Every 100 Hours	Every 300 Hrs or once a year
Engine oil check and filling	After every 20 hours of running			
Change engine oil	○		●	
Change transmission oil	○			●
Clean air cleaner and change air cleaner oil		●		
Clean fuel strainer			●	
Clean checking the spark plug			●	
Adjust belt tension clutch cable				●
Adjust side clutch cables				●
Adjust throttle cable				●
Adjust belt tension			●	
Adjust tappet clearance				◎
Adjust ignition timing				◎

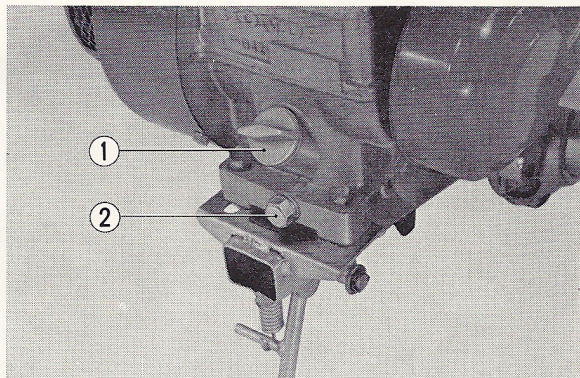
○ Indicates first time only.

During extremely dusty work (clod breaking, grass cutting), clean the air filter and change the oil every 10 hours or one day.

◎ The items with this mark should be serviced by an uthorized Honda dealer.

Engine Oil Change

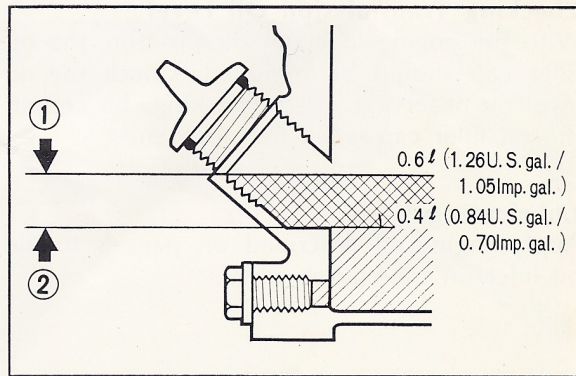
The drain plug on the front side of the engine (picture below) is used to drain the engine oil. While removing the engine oil, be sure the engine is in a upright position.



- ① Engine oil filler cap
- ② Drain plug

Oil Level

After the oil is drained completely, install and tighten the drain plug securely. With the engine in a upright position, fill the engine with the proper grade oil to the maximum oil level.



- ① Upper level
- ② Lower level

Changing and Checking the Transmission Oil

How to Drain the Transmission Oil

Remove the drain plug and drain oil. The transmission integral with the engine should be in a upright position.

How to Fill Transmission With Oil

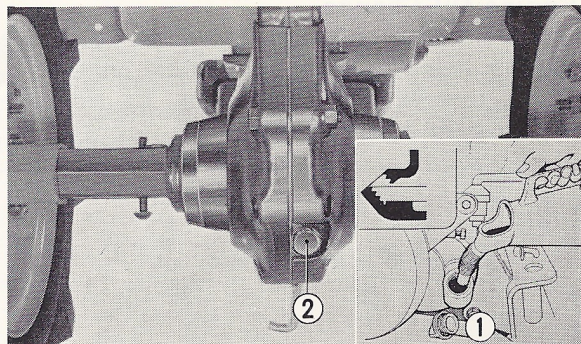
Install and securely tighten the drain plug. Fill the transmission with proper grade oil up to the level. Install and tighten the oil filler cap.

Checking Transmission Oil Level

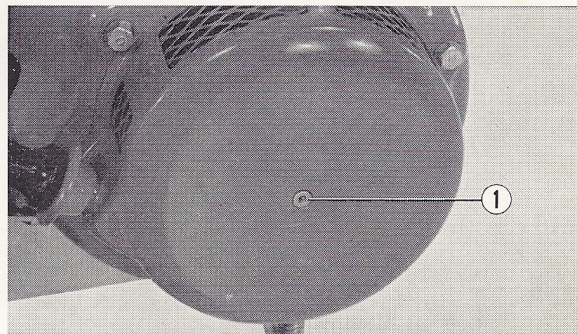
With the engine in a upright position, the oil filler cap should be removed. Check the oil level by observing. After checking, be certain the oil filler cap is securely tightened.

Lubricating Recoil Starter

Apply engine oil described on page 5 to the oil inlet on the starter cover.



- ① Oil filler cap
- ② Drain plug

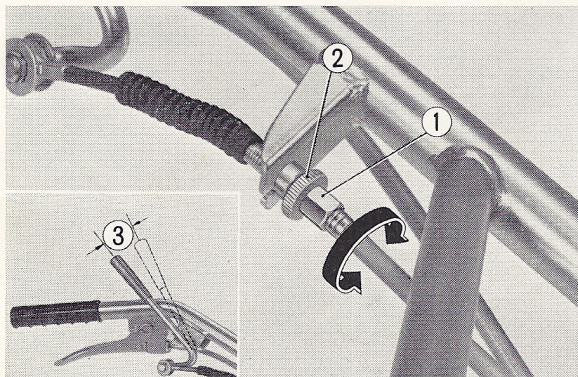


- ① Oil inlet

Adjusting the Belt Tension Clutch Cable

Using the adjusting bolt shown in picture below, adjust the cable so that the belt is completely separated from the engine pulley. After adjustment, the lock nut should be tightened securely. If play in the clutch lever is excessive the clutch will not completely disengage.

Pull the belt tension clutch lever forward and when the clutch is open, adjust for 5~7 mm (0.2~0.27 in.) play at the lever end.

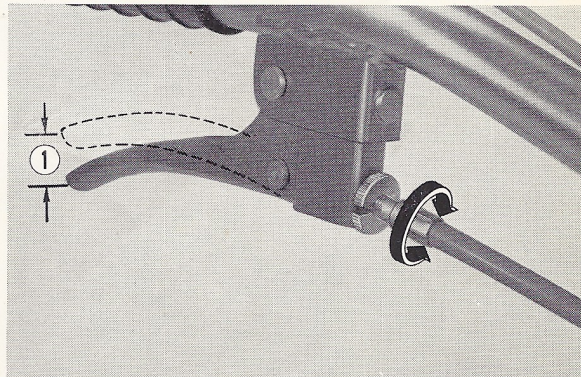


- ① Adjusting bolt
- ② Lock nut
- ③ 5~7 mm (0.2~0.27 in.)

Adjusting the Side Clutch Cable

Improper adjustment of the side clutch cables may cause the clutches to slip. Squeeze the both side clutch levers and rotate the wheels slightly.

The play between the tip of the lever and handle grip should be 5 mm~10 mm (0.2~0.4 in.) with the levers squeezed completely. To adjust clearance, turn the adjusting nut in or out.



- ① 5~10 mm (0.2~0.4 in.)

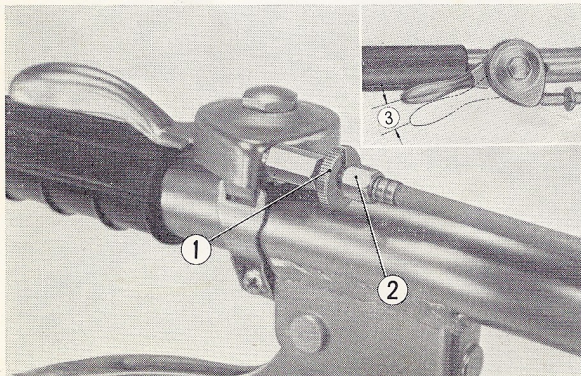
Adjustment of the Throttle Cable

Loosen the lock nuts on the transmission housing and adjust the adjusting bolt until the play in the throttle lever is from 5~10 mm (0.2~0.4 in.) as shown in the picture below. After adjusting securely tighten the throttle cable adjustment lock nut.

Adjusting the Ignition Timing

Improper ignition timing will cause a reduction in power output of the tiller.

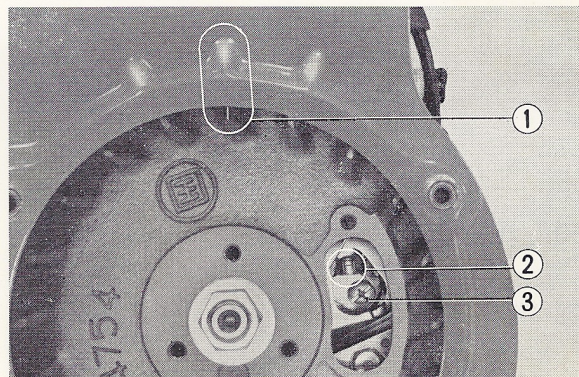
1. Remove the starter case, starter pulley and point cover, this will expose the contact breaker points.



- ① Adjusting bolt
② Lock nut

③ 5~10 mm (0.2~0.4 in.)

2. The ignition timing is correct when the points start to open when the mark on the cooling fin just passes the rib at the center on the fan cover.
3. If the ignition timing requires adjustment, loosen the contact breaker points mounting screw and adjust the ignition timing with a screw driver inserted in the provided notches. If the contact breaker points are pitted, they should be cleaned with fine emery paper or point file and cleaned in solvent.

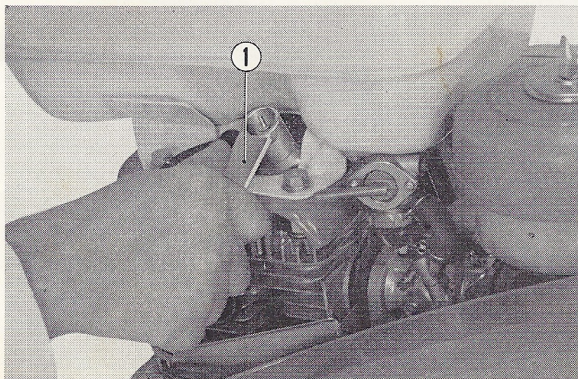


- ① Marked fin
② Contact points

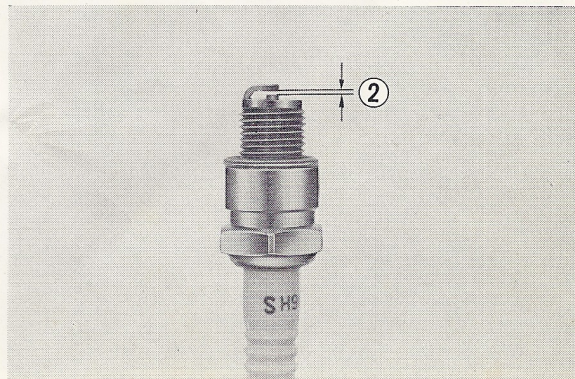
③ Adjusting screw

Cleaning and Checking Spark Plug

1. Remove the spark plug cap and, using the spark plug wrench provided in the tool kit, remove the spark plug.
2. Use a wire brush or wire pick to remove the carbon deposits from the spark plug. Adjust the spark plug gap to 0.6~0.7 mm (0.024~0.028 in.). Recommended spark plug: B-6 HS (NGK).



① Spark plug wrench



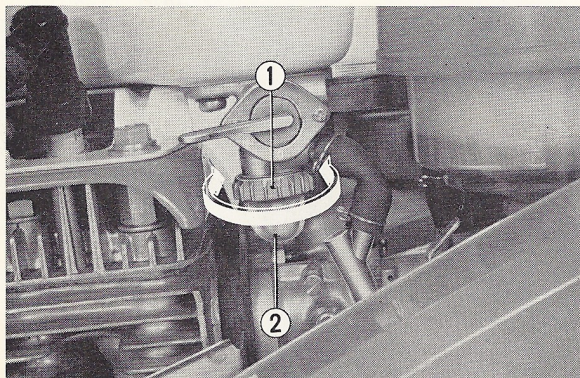
② 0.6~0.7 mm (0.024~0.028 in.)

Cleaning the Fuel Strainer

Water and sediment in the fuel strainer may result in rough engine operation.

To clean the strainer, proceed as follows:

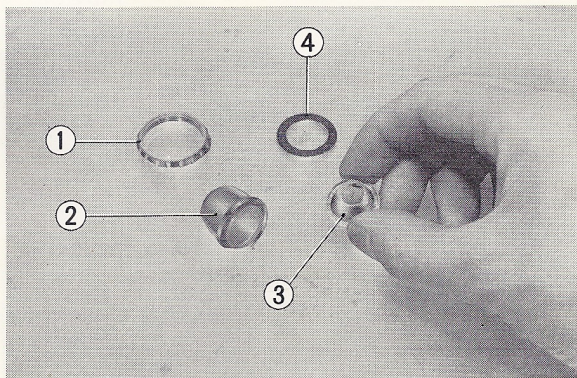
1. Loosen the ring nut, and remove the strainer cup and element.
2. Wash the strainer cup and element in clean solvent.



- ① Ring nut
② Strainer cup

NOTE:

- After cleaning, retighten the ring nut properly.
- When filling fuel take adequate precaution against fire.

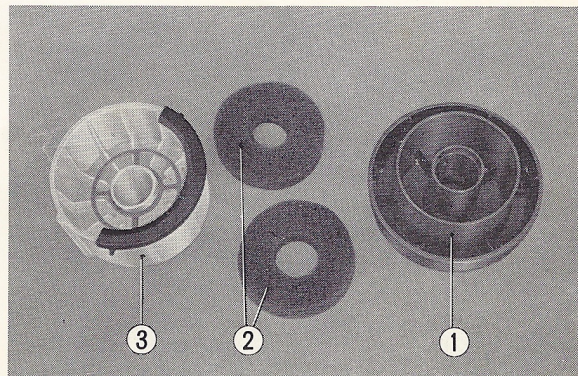


- ① Ring nut ③ Element
② Strainer cup ④ Strainer gasket

Cleaning the Air Cleaner and Changing the Air Filter Oil

If the air cleaner element becomes clogged with dust, the output of the engine is reduced significantly. Also excess dust may begin to enter the engine and shorten the life of the piston and cylinder.

1. Remove the cleaner cover and clean the cleaner element in solvent.
2. Change the oil in the oil pan.
3. Fill the oil to the oil level indicated in the picture below.



① Air cleaner cover

② Air cleaner element

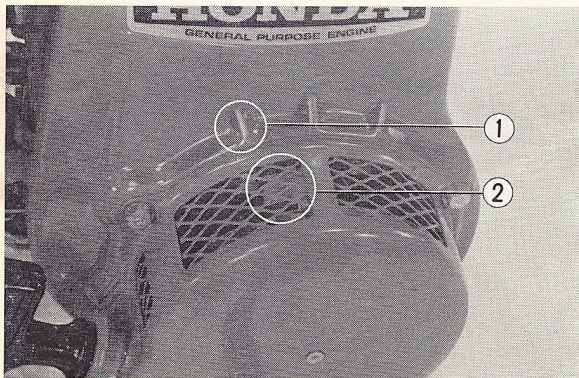
③ Air cleaner case

PREPARING FOR STORAGE

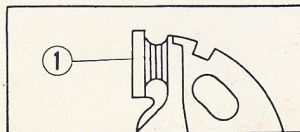
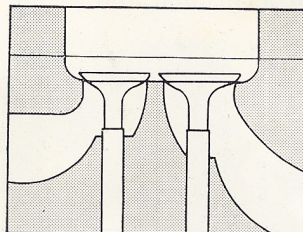
Crankshaft Position

Rotate the starter pulley until it becomes hard to turn (the piston is coming up on the compression stroke) and then align the mark

on the starter pulley to the left rib at the center on the fan cover; in this position both valves and the contact breaker points will be closed.



- ① Left rib
- ② Mark of starter pulley

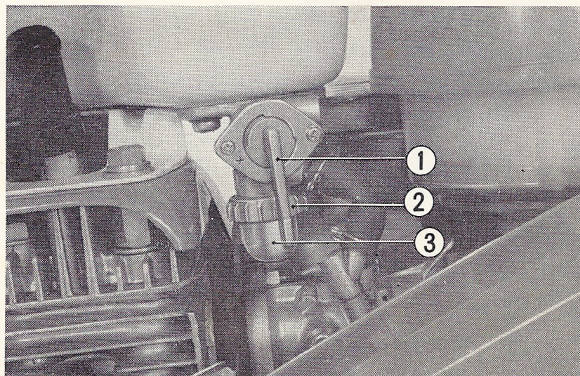


- ① Contact breaker point

Gasoline Drainage

Turn the fuel cock to the "X" position, remove the fuel strainer cup ③ on the bottom of the carburetor and drain the gasoline thoroughly

from the carburetor and the fuel tank. For a long storage, the tiller should be thoroughly cleaned and stored in an area where there is a minimum of fumidity and dust.



① Fuel cock lever

③ Strainer cup

② Ring nut



HONDA
GENUINE PARTS

17403-841-000

QTY 1

M2C16



SPECIFICATIONS

Model	F42F
Dry weight	66.5 kg (147 lbs)
Overall length	1,580 mm (62.2 in.)
width	800 mm (31.5 in.)
height	1,065 mm (41.9 in.)
Engine	HONDA G42F
Type	One cylinder, 4 stroke cycle
Displacement	171cc (10.4 cu. in.)
Cooling system	Forced air cooled
Fuel tank capacity	4 liter (1.0 U. S. gal./0.8 Imp. gal.)
Engine oil capacity	0.6 liter (1.2 U. S. pt./1.0 Imp. pt.)
Transmission oil capacity	2.1 liter (4.3 U. S. pt./3.7 Imp. pt.)
Spark plug	B-6 HS (NGK)
PTO shaft diameter	20 mm
Direction of the P.T.O. shaft rotation	Clockwise
Main clutch	Belt type
Side clutch	Axle lock type