

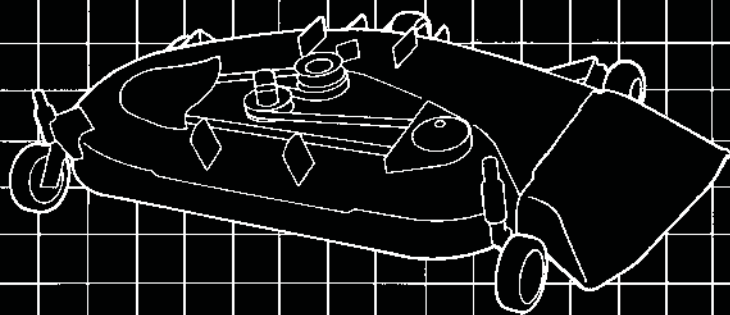
**HONDA**

**Power**

**Equipment**

# Operator's Manual

MID-MOUNT ROTARY MOWER  
for  
HONDA H5013 TRACTOR





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Thank you for purchasing a Honda attachment for your tractor.

This manual covers the assembly, operation and maintenance of the Honda mid-mount rotary mower for the H5013 tractor, type A2 (Two Wheel Drive Model) and A4 (Four Wheel Drive Model).

Read this manual and the Owner's Manual for the Honda H5013 Tractor before you operate the rotary mower.

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This manual should be considered a permanent part of the rotary mower and should remain with the rotary mower when sold.

**READ THIS OWNER'S MANUAL CAREFULLY.** Pay special attention to these symbols and any instructions that follow:

**▲ DANGER**

—Indicates serious injury or death **WILL** result if instructions are not followed.

**▲ WARNING**

—Indicates a strong possibility that serious injury or death could result if instructions are not followed.

**▲ CAUTION**

—Indicates a possibility that minor injury can result if instructions are not followed.

**IMPORTANT NOTICE**

—Indicates that equipment or property damage can result if instructions are not followed.

**NOTE:** Gives helpful information.

Honda tractors are designed to give safe and dependable service if operated according to instructions. Operating this tractor requires special effort on your part to ensure your safety and the safety of others.

**▲ WARNING**

**Using this product for a purpose not intended may cause injury or property damage. Read and understand this Owner's Manual before operating this tractor.**

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

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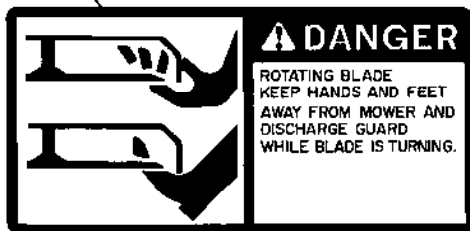
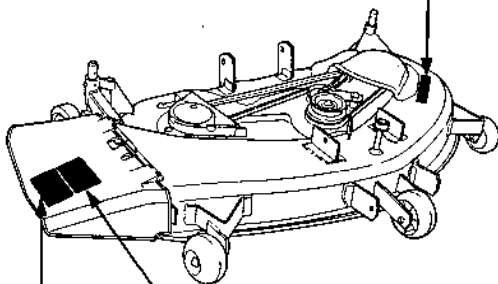
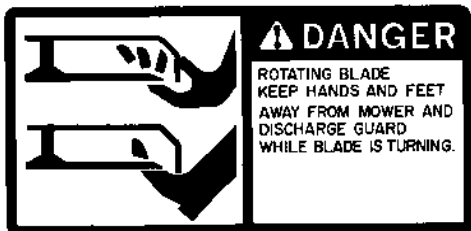
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# 1. SAFETY INFORMATION

Read all safety instructions before operating.



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## **SAFETY INFORMATION**

For your safety and the safety of others, pay special attention to these precautions:

### **Operator Responsibility**

- Keep the tractor in good operating condition. Operating a tractor in poor, or questionable condition could result in serious injury.
- Be sure all safety devices are in working order and warning labels are in place, these items are installed for your safety.
- Know how to stop the engine and attachments quickly in case of emergency. Understand the use of all controls.
- Allowing anyone to operate this tractor without proper instruction may result in injury.
- Allowing passengers to ride on the tractor or any of its attachments may cause the tractor to tip over.
- Wear sturdy, full coverage footwear. Operating this tractor barefoot, or with open toe shoes or sandals increases your risk of injury.
- Dress sensibly. Loose clothing may get caught in moving parts, increasing your risk of injury.
- Be alert. Operating this tractor when you are tired, ill or under the influence of alcohol or drugs may result in serious injury.
- Keep all persons and pets away from the operating area.

### **Child Safety**

Serious injury or death can occur if a child falls off the tractor or runs into the tractor's path and is run over by the machine.

- Allowing children to ride as passengers on the tractor can be dangerous.
- Keep children indoors and supervised at all times when any outdoor power equipment is being used nearby. Young children move quickly and are attracted to the tractor and the operating activity especially if they have been given rides before.
- Never assume that children will remain where you last saw them. Be alert, and turn the machine off if children enter the area. Use extreme care when backing up, and when approaching corners, shrubs, trees, and other obstructions that might hide children from sight.
- Children should never be allowed to operate the tractor, even under adult supervision.

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## Fire and Burn Hazard

Gasoline is extremely flammable, and gasoline vapor can explode. Use extreme care when handling gasoline. Keep gasoline out of reach of children.

- Refuel in a well ventilated area with the engine stopped.
- Allowed the engine to cool before refueling. Fuel vapor or spilled fuel may ignite.
- The accumulation of dry grass and leaves around the engine, the exhaust system, or on top of the cutter deck (especially around the pulleys) may ignite.
- It is illegal in some areas to operate an engine without a USDA qualified spark arrester. Periodic maintenance is required to keep it functioning as designed.

The engine and exhaust system become very hot during operation and remain hot for a while after stopping. Contact with hot engine components can cause burn injuries and can ignite some materials.

- Avoid touching a hot engine or exhaust system.
- Allow the engine to cool before performing maintenance or storing the tractor indoors.

## Carbon Monoxide Poisoning Hazard

Exhaust contains poisonous carbon monoxide, a colorless and odorless gas. Breathing exhaust can cause loss of consciousness and may lead to death.

- If you run the engine in an area that is confined, or even partially enclosed, the air you breathe could contain a dangerous amount of exhaust gas. To keep exhaust gas from building up, provide adequate ventilation.

## Blade Hazard

The cutting blades are sharp, and they turn at high speed. Accidental contact can cause serious injury.

- Keep your hands and feet away from the mower deck while the engine is running.
- Stop the engine, disengage the Power Take Off (P.T.O.) clutch and remove the key before inspection or maintenance of the deck or blades.
- Disconnect the spark plug cap to prevent any possibility of accidental starting. Wear heavy gloves to protect your hands from the blades when cleaning out the mower deck, or when inspecting or replacing the blades.

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## Thrown Object Hazard

Objects hit by the blades can be thrown from the tractor with great force, and may cause serious injury.

- Before mowing, clear the mowing area of sticks, stones, dog bones, and other litter and loose objects. Mow only in daylight, or in well-lit areas at night, so you can see and avoid objects in the grass.
- Before operating the tractor, be sure the side discharge guard is down, or that the optional grass catcher bags and discharge chute are in place.
- Disengage the Power Take Off (P.T.O.) lever to stop the blades before crossing a gravel driveway or any other area with loose stones.
- Always inspect the mower for damage after striking a foreign object. Repair or replace any damaged parts before continued use.
- Broken pieces thrown from a worn or damaged blade can cause serious injury. Always inspect the blades before using the tractor.

## Operation

- Be sure to fasten the seat belt whenever driving the tractor with the Rollover Protective Structure (ROPS) attached. Use of either device (seat belt or ROPS) without the other will increase the chance of injury in a rollover.
- Adjust the seat belt so that it is not slack.
- Be sure that the main Transmission lever is in "Neutral" the front and rear P.T.O. levers are in the "OFF" position before starting the engine.
- Operate the tractor and its attachments at low speed until you become familiar with all of its operating characteristics and controls.
- Do not operate the tractor or its attachments without ensuring the area in front and behind is clear of people and pets.
- Sudden stops of the tractor while driving at high speed or sudden start-up with the steering wheels turned fully in one direction, could cause the tractor to overturn.
- This tractor utilizes Four Wheel Steering (4WS) for a tighter turning circle and greater mobility than tractors with conventional steering. However, the feel of 4WS is slightly different from other tractors. Practice driving in a wide, safe area.
- Never operate the tractor or its attachments when visibility is diminished by darkness or bad weather; your ability to see obstacles will become impaired.
- Watch out for rocks, roots, holes and other obstacles that may cause the Tractor to overturn.
- It is illegal to operate this tractor on public streets, roads, or highways.



- 
- To avoid injury to yourself and others, before leaving the Tractor unattended, ALWAYS,
    - park on level ground.
    - disengage the power take-off.
    - lower the attachment(s).
    - Lock the parking brake.
    - stop the engine.
    - and remove the key.
  - Be sure to follow the instructions below whenever applying the differential lock.
    - Be sure that the main transmission lever is set in 4th gear or lower, and reduce engine speed before applying the differential lock.
    - Do not apply while turning the tractor.  
Use the lock only when driving straight ahead.
    - Do not rest your foot on the lock pedal while the lock is not in use.
    - Never apply while driving on a paved surface.

### **Operation on Slopes**

- This tractor and its attachments are intended for use on relatively flat terrain.
- When operating the tractor on a slope, always drive up and down the face of the grade. Turning or driving across the face of a slope may cause the tractor to overturn.
- If you find it necessary to park on a grade, be sure to lock the parking brake and securely block the wheels.
- To avoid loss of control or overturning, always reduce speed and exercise extreme caution when operating on sloping or uneven surfaces.
- Attempting to change gears while operating the tractor on a slope may adversely affect vehicle stability and control and severe personal injury could result.
- Avoid rapidly backing down, or rapidly accelerating up a sloping surface.
- To avoid loss of control or overturning, do not turn or stop on sloping surfaces.
- When descending a slope, disengaging the clutch or shifting to neutral can cause a loss of control that may result in severe personal injury.
- Do not operate the tractor near the edge of a ditch or an embankment, slipping off the edge could lead to severe personal injury and equipment damage.

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## **MAINTENANCE SAFETY**

- Before performing maintenance/inspection, read the instructions thoroughly.
- Before cleaning, inspecting or servicing the tractor, be sure to
  - Turn off and lower any attachments.
  - Stop the engine and remove the key.
  - Remove the spark plug cap.
- If you hit an object, stop the engine and inspect the Tractor and its attachments. Fix any damage before you resume operation.
- Operating the tractor with damaged, worn or broken parts may result in severe personal injury.
- Leaves, grass clippings, oil and other combustible materials can become a fire hazard. Be sure the body, engine and drive mechanism areas are kept clean.
- All nuts, bolts and fasteners must be tight.
- Do not change the engine governor settings or the engine may be damaged.

## **STORAGE SAFETY**

- To avoid the possibility of fire, allow the engine and exhaust system to cool before storing the tractor in an enclosed space or near combustible materials.
- When storing the tractor, be sure to apply the parking brake and remove the ignition switch key.
- Drain all gasoline from the carburetor and fuel tank, and disconnect the battery ground cable.

## 2. SERIAL NUMBER

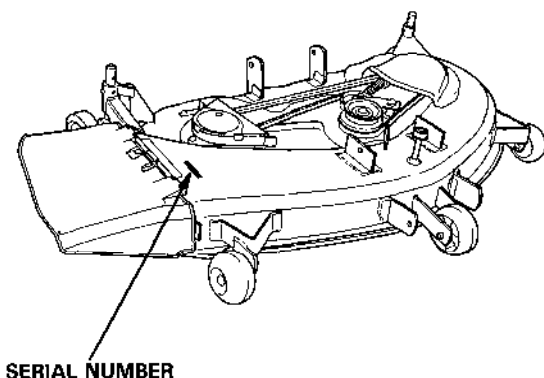
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The serial number is used to identify your rotary mower and may be required by the dealer when ordering replacement parts.

The serial number is located on the right side of the deck.

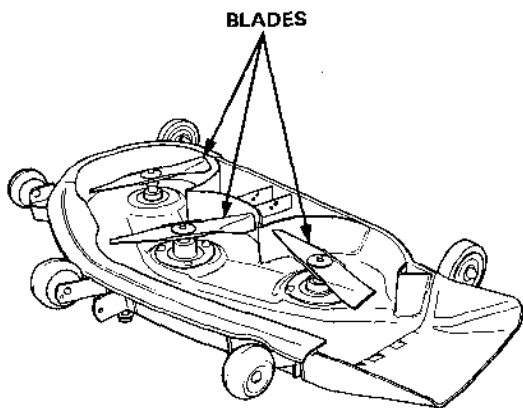
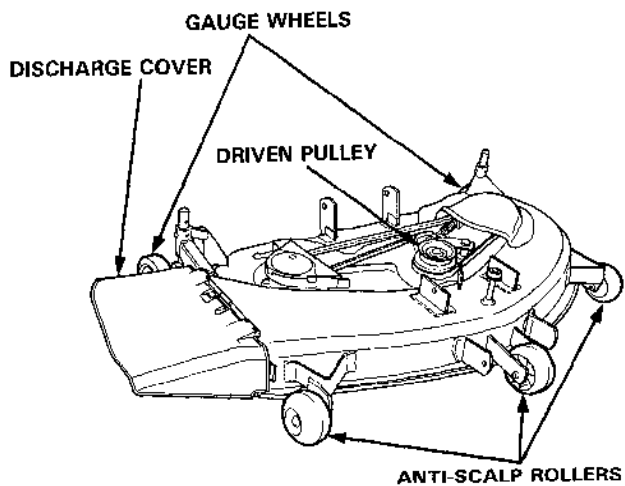
Record the number here for your reference.

NO. \_\_\_\_\_



### 3. COMPONENT IDENTIFICATION

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## 4. INSTALLING MOWER

### ⚠ WARNING

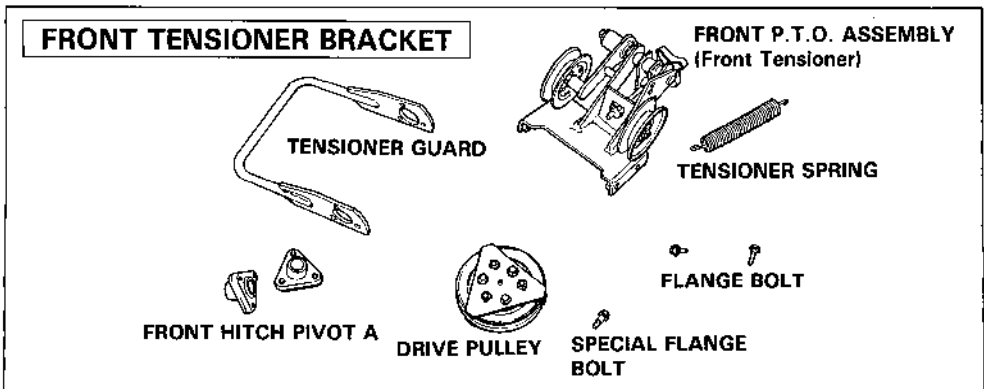
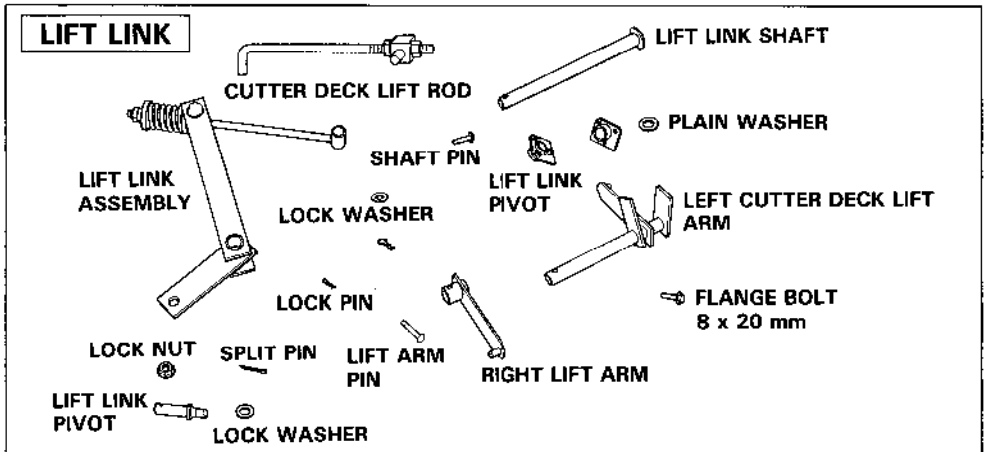
- The rotary mower should be installed by an authorized Honda dealer unless the owner has proper tools and feels he is mechanically qualified.
- To prevent accidental start-up, remove the ignition switch key, and disconnect the spark plug cap before installing the mower.

Install with the tractor on level ground.

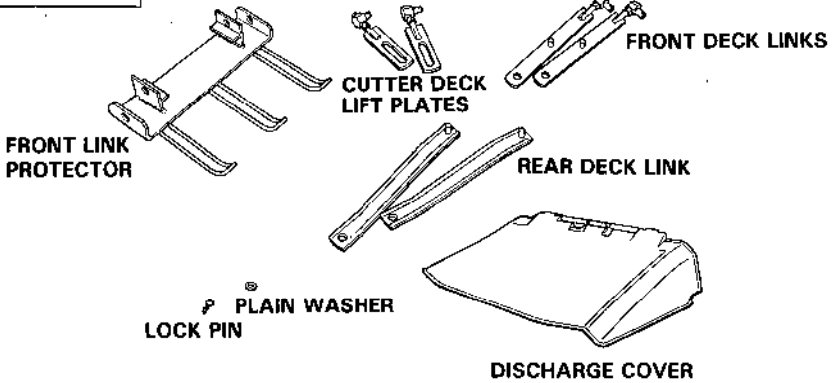
Lock the parking brake, set the transmission lever in "N" (Neutral) and the front and rear P.T.O. levers in the "OFF" positions.

### 1. Loose parts

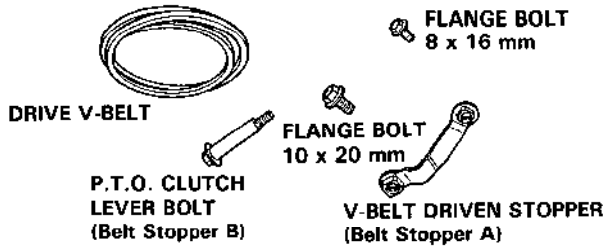
The parts carton contains the following loose parts. Before assembling the rotary mower, check for any missing or damaged parts.



## CUTTER DECK

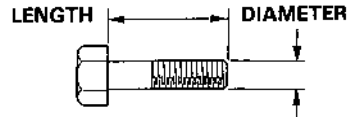
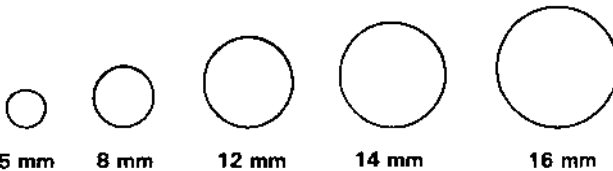
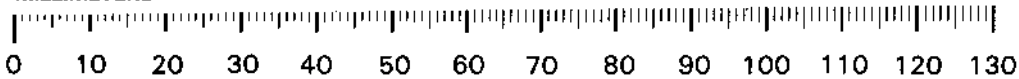


## DRIVE BELT



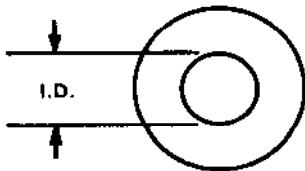
## 2. How to measure hardware and components:

### MILLIMETERS

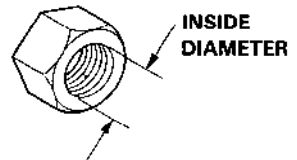


### PLAIN WASHERS

Washers are specified by inside diameter in this manual.

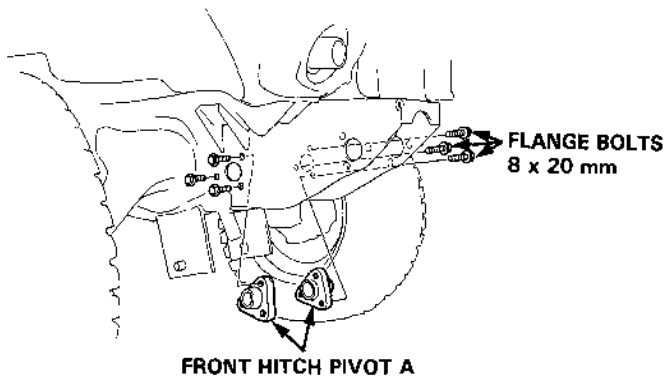


NUTS ARE SPECIFIED BY INSIDE DIAMETER (AT THREAD DEPTH)

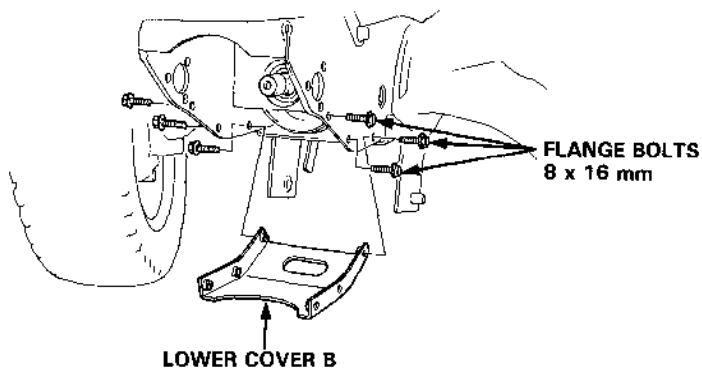


### 3. Installation of front tensioner bracket

- 1 Remove and retain the six 8 x 20 mm flange bolts, three on each side, from the tractor frame, front hitch pivots.

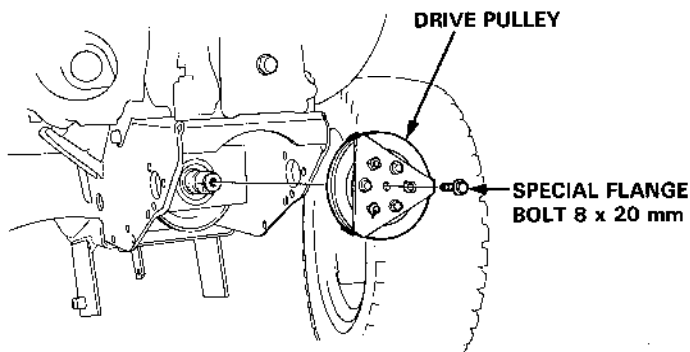


- 2. Remove and retain the lower cover B by removing the 8 x 16 mm flange bolts.



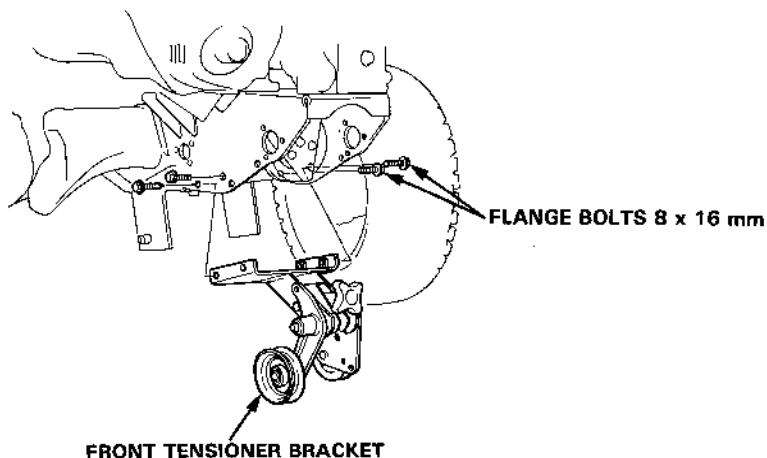
- 
- 3. Install the drive pulley on the front P.T.O. shaft using an 8 x 20 mm special flange (shouldered) bolt. Tighten the bolt to the specified torque.

**Torque specification: 2.2 kg-m (16 ft-lb)**



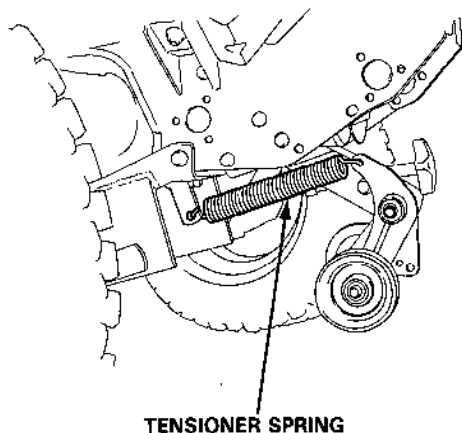
- 4. Position the front tensioner bracket on the frame and install using four of the bolts removed in Step 2. Tighten the bolts to the specified torque. Retain the remaining two bolts.

**Torque specification: 2.2 kg-m (16 ft-lb)**



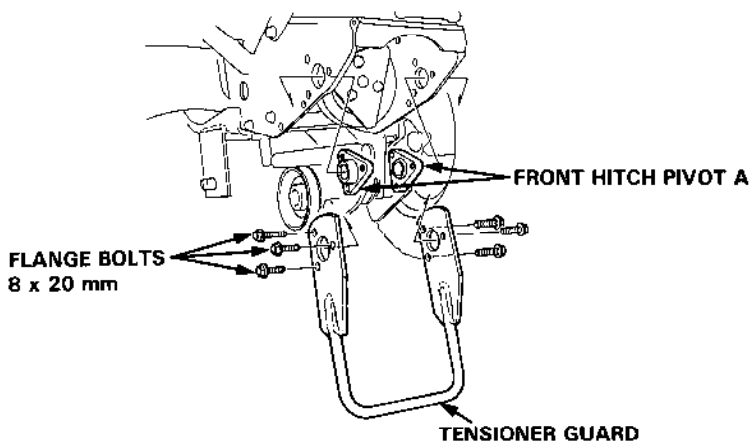


- 
- 5. Insert the end of the tensioner spring into the hole in the tensioner arm. Hook the another end against the frame.



- 6. Install the front hitch pivot A removed in Step 1 on the frame from the inside. Install the tensioner guard on the frame from the outside as shown, using the six 8 x 20 mm flange bolts removed in Step 1, and tighten to the specified torque.

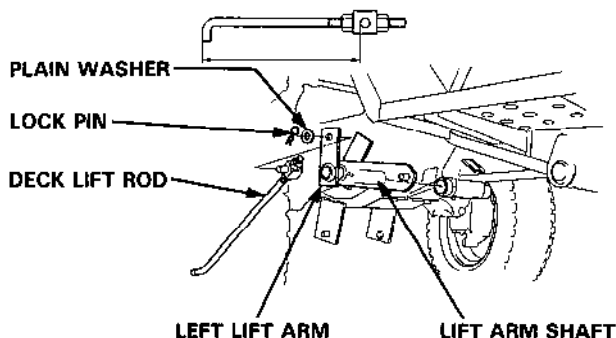
**Torque specification: 2.2 kg-m (16 ft-lb)**



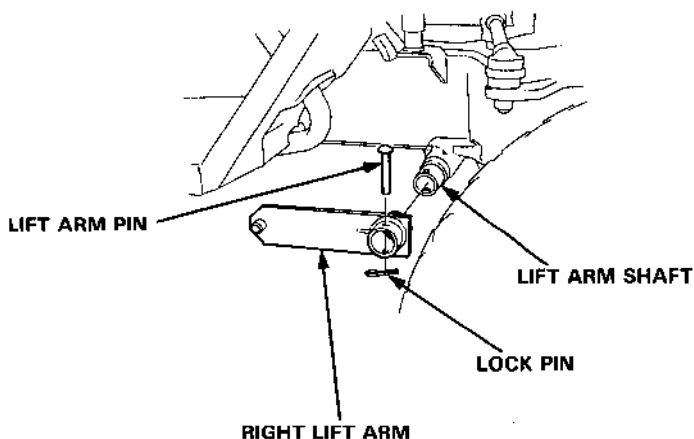
#### 4. Installation of lift link

- 1 Pump grease through the grease fitting to lubricate the lift arm shaft. Insert the lift arm shaft through the bracket on the main frame from the left side. Adjust the length of the deck lift rod to 370–372 mm (14.6–14.6 in), then tighten the nut securely. Install the deck lift rod in the hole in the lift arm bracket. Place the plain washer over the end of the deck lift rod and insert the lock in through the end.

Recommended Grease: Multipurpose Grease

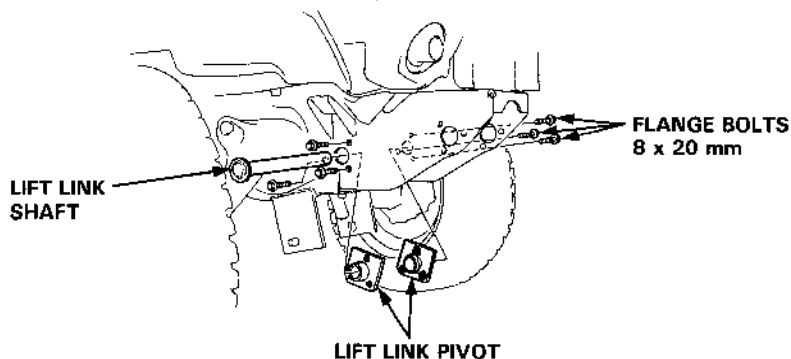


- 2. Slide the right lift arm onto the end of the lift arm shaft. Install the lift arm pin through the lift arm shaft and secure with the lock pin.



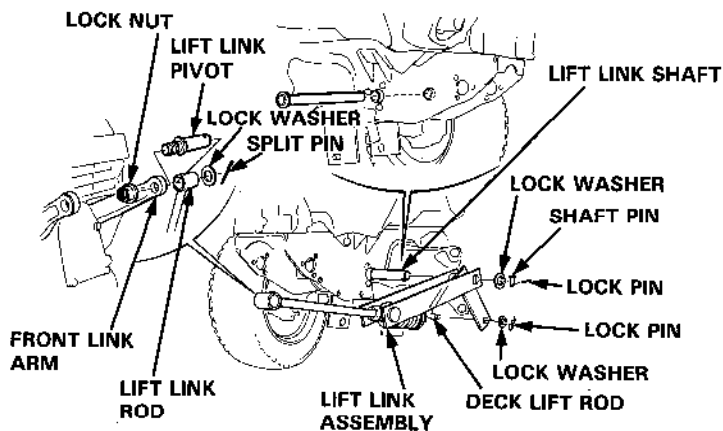
- 3. Slide the right and left link pivots in the holes in the frame from the inside, and install using three 8 x 20 mm flange bolts for each pivot. Slide the lift link shaft through the holes in the pivots as shown.

Recommended Grease: Multipurpose Grease



- 4. Slide the lift link assembly onto the lift link shaft on the main frame, and install the lock washer over the end of the lift link shaft. Insert the pin through the end of the lift link shaft and secure with the lock pin. Insert the end of the deck lift rod through the hole in the lift link. Install the lock washer over the end of the deck lift rod and insert the lock pin through the end.

Slide the lift link pivot through the lift link rod and install the lock washer over the end of the lift link pivot. Insert the split pin through the end and bend the legs away from each other. Lubricate the lift link pivot with grease, then insert the threaded end of the lift link pivot through the front link arm and install the lock nut on the end of the pivot. Tighten the lock nut securely.

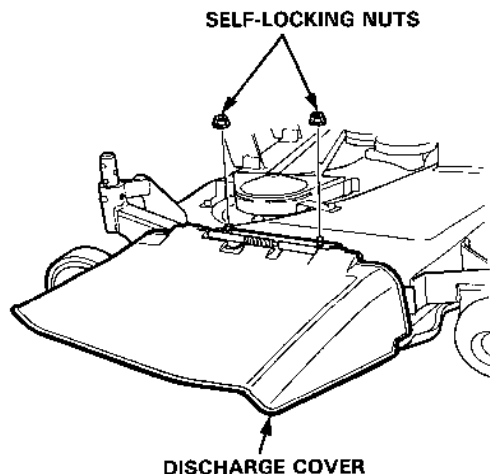


## 5. Installation of cutter deck

### ■ Cutter deck assembly

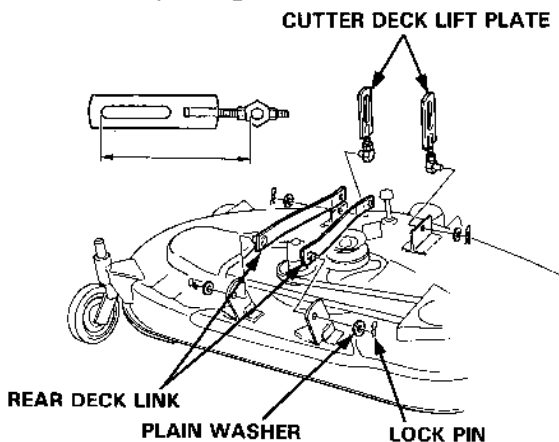
1. Install the discharge cover using two self-locking nuts; tighten nuts to specified torque:

**Torque specification: 2.2 kg-m (16 ft-lb)**



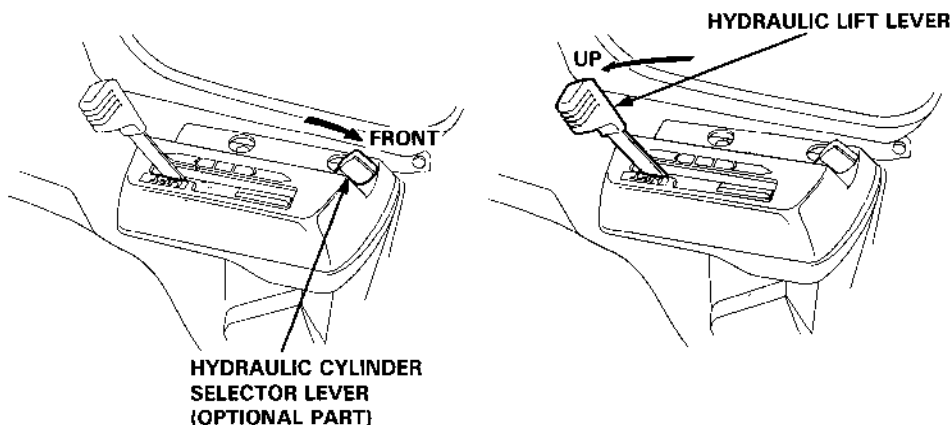
2. Adjust the length of the cutter deck lift plates to 150–152 mm (5.9–6.0 in.), then tighten the nuts securely. Install the cutter deck lift plates on the cutter deck with 14 mm plain washers and lock pins (gold).

Install the rear deck links on the cutter deck with 14 mm plain washers and lock pins (gold).



## ■ Cutter deck installation

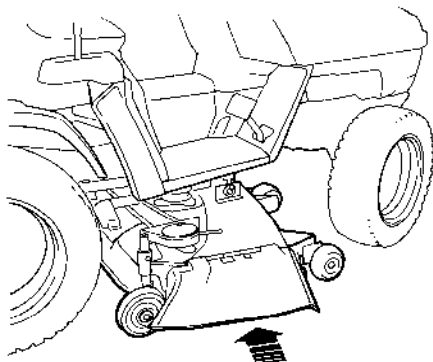
1. Connect the spark plug cap to the spark plug and insert the ignition key in the ignition switch. Check that the hydraulic lift lever is in NEUTRAL. Start the engine and move the hydraulic cylinder selector lever (optional part) to the "FRONT" position. Raise the lift arm fully with the hydraulic lift lever.



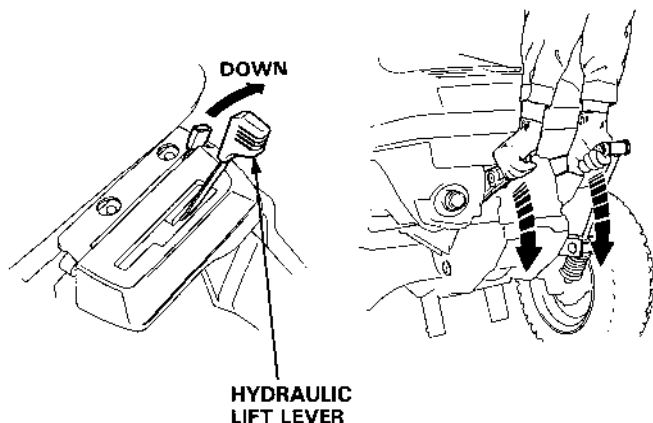
Turn the descent speed adjust knob fully clockwise.

Stop the engine and remove the key from the engine switch and disconnect the spark plug cap.

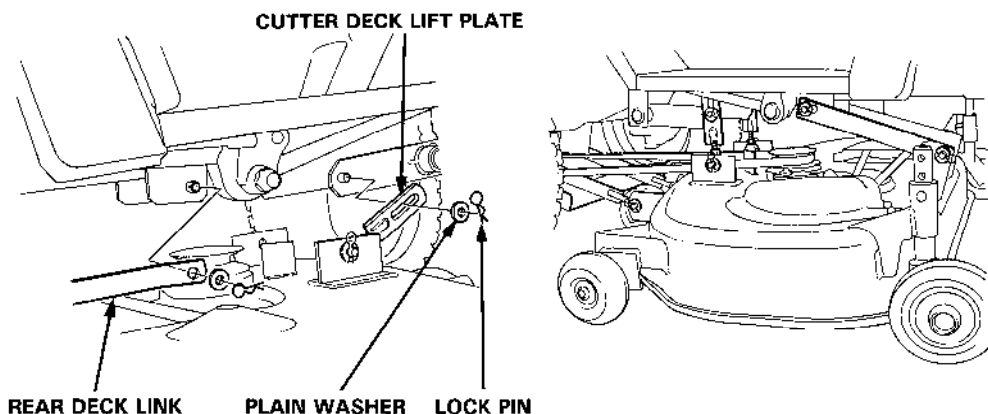
2. Turn the steering wheel to the extreme left. Position the cutter deck under the tractor from the right side; return the steering wheel to straight-ahead position.



- 3. Release the hydraulic lock by turning the hydraulic lift speed adjust knob counterclockwise (FAST direction). Move the hydraulic lift lever to "DOWN", and push the front lift arm down fully by hand.  
NOTE: Adjustment of the descent speed maybe necessary, see page 31.



- 4 Connect the right cutter deck lift plate and rear deck link to the bracket on the tractor, and secure with 14 mm plain washers and 14 mm lock pins (gold). Install the left cutter deck lift plate and rear deck link the same way.

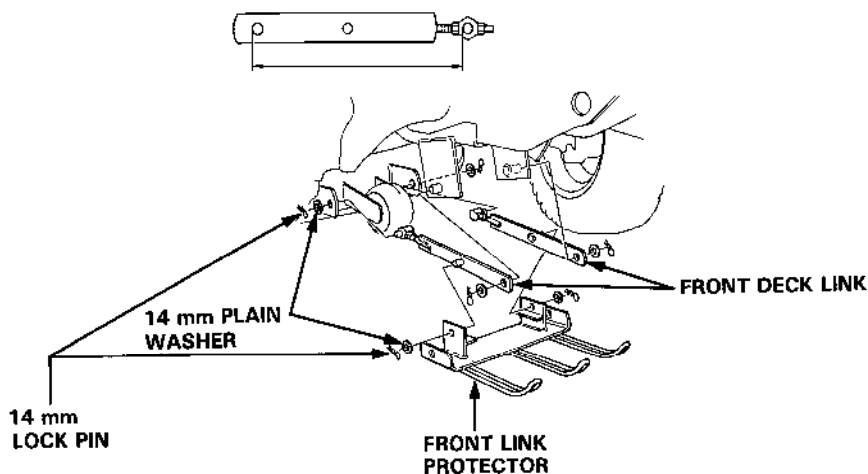


- 
- 5. Adjust the length of the front deck link to 300–302 mm (11.8–11.9 in.), then tighten the lock nut securely. Connect a front cutter deck link to the right side of the cutter deck and to the right bracket on the tractor. Secure with 14 mm plain washers and 14 mm lock pins.

**NOTE:** To ease installation of the front deck link on the tractor bracket, raise the front of the deck slightly with your hand.

Align the hole in the right bracket of the front link protector with the pin at the center of the right front deck link, and secure with the 12 mm lock pin (black). Attach the bracket in the front link protector the same way.

Connect the left front deck link to the left side of the tractor, then to the cutter deck. Secure in place with two 14 mm plain washers and two 14 mm lock pins.



## 6. Installation/Adjustment of deck belt

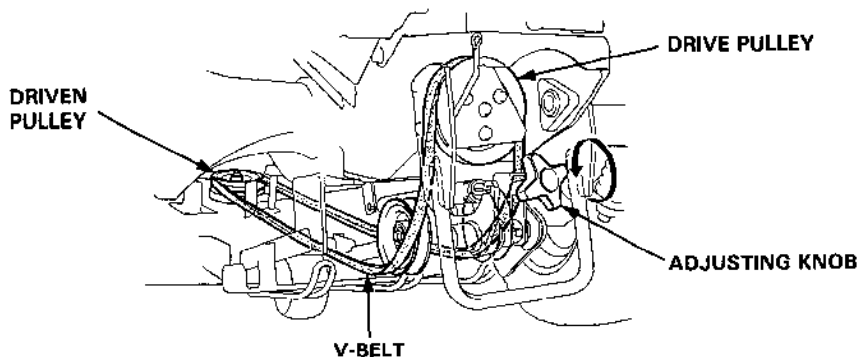
**⚠ WARNING** Never attempt to change drive belts while the engine is running. Remove the ignition switch key from the ignition and disconnect the spark plug caps to prevent accidental start up.

**⚠ CAUTION**

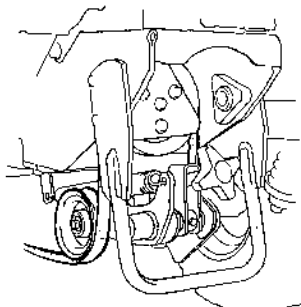
- Wear heavy gloves to protect your hands when replacing belts or when working with the cutter blades.
- If the tractor has been running, the engine, muffler will be very hot. Allow them to cool before proceeding.

**IMPORTANT NOTICE** To assure proper belt tension and prevent pulley wear. Use only Honda specified drive belts.

- 1. Loosen the belt tension adjust knob fully. Place the V-belt on the drive pulley, then on the driven pulley as illustrated.



- 2. Place the belt on the pulley on the tensioner side (right); then place it on the pulley on the left side.





- 
- 3. Position the V belt driven stopper (belt stopper A) on the frame and install using 10 x 20 mm flange bolt and 8 x 16 mm flange bolt. Tighten the bolt to the specified torque.

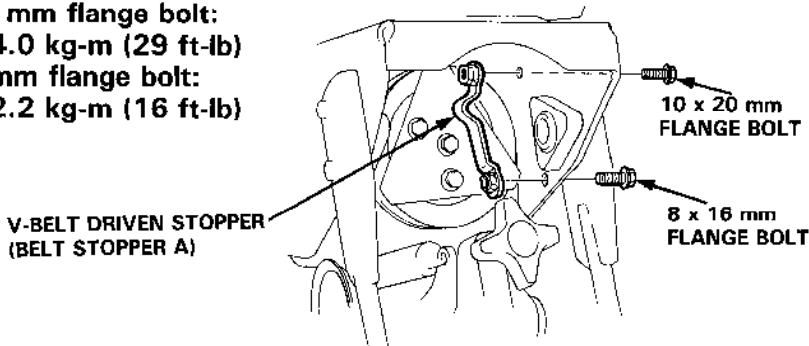
**Torque specifications:**

**10 mm flange bolt:**

**4.0 kg-m (29 ft-lb)**

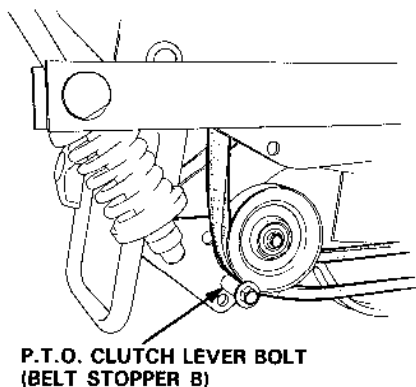
**8 mm flange bolt:**

**2.2 kg-m (16 ft-lb)**



- 4. Install the P.T.O. clutch lever (belt stopper B) bolt on the frame. Tighten the bolt to the specified torque.

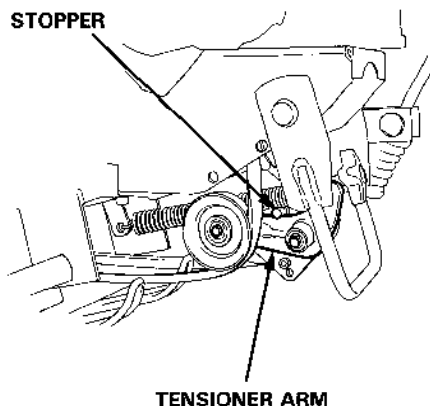
**Torque specification: 2.2 kg-m (16 ft-lb)**



---

Check that the belt is properly installed on the pulley with a 90° twist between the drive pulley and the idler pulley. Be sure the "V" of the belt goes in the "V" of the pulley.

- 5. Start the engine, move the hydraulic cylinder selector lever (optional part) to "FRONT", and raise the cutter deck fully with the hydraulic lift lever.
- 6. Turn the descent speed adjust knob fully clockwise to prevent descent.
- 7. Stop the engine and remove the key from the engine switch.
- 8. Screw in the belt tension adjust knob until the tensioner arm contacts the stopper on the frame.



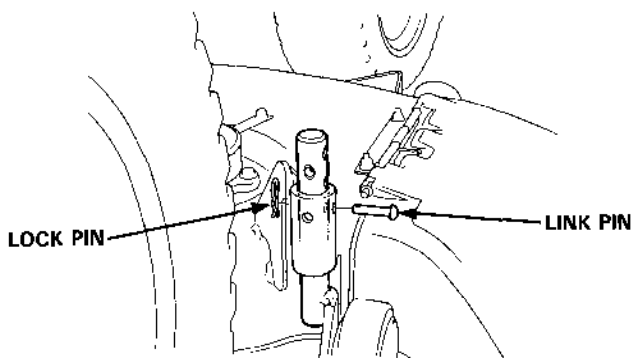
- 9. Return the descent speed adjust knob to the original position.

**CAUTION** The cutter deck will automatically lower to the ground as the descent speed adjust knob is turned counterclockwise. Keep clear of the deck.

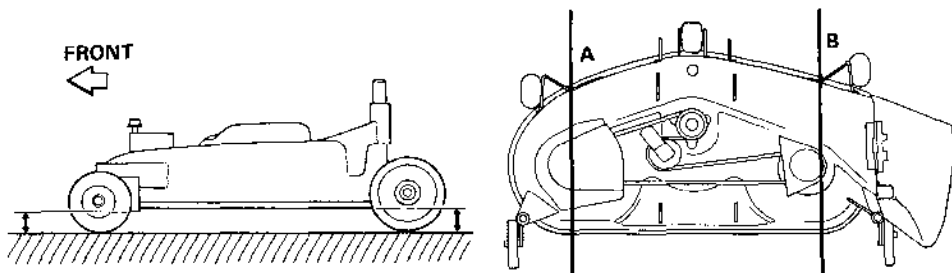
## 7. Leveling the cutter deck

- 1. Place the tractor on a firm, level surface and lock the parking brake.
- 2. Check that the gauge rollers are at the 2" position. If not, raise the cutter deck with the hydraulic lift lever; turn the descent speed adjust knob fully clockwise; stop the engine and remove the key; remove and relocate the pin to the 2" position; return the descent speed adjust knob to its original position; lower the cutter deck fully.

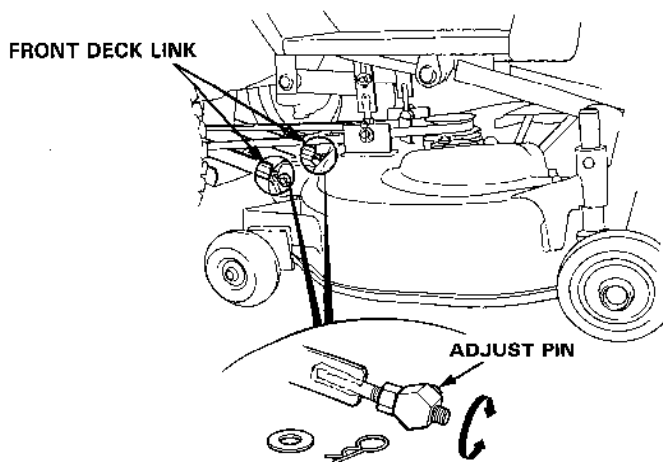
**CAUTION** The cutter deck will automatically lower to the ground as the descent speed adjust knob is turned counterclockwise. Keep clear of the deck.



- 3. Front-to-back leveling:  
Measure the distance from the bottom of the cutter deck housing to the ground at the points A and B.  
L (Point A and B): 59.5–63.5 mm (2.3–2.5 in)



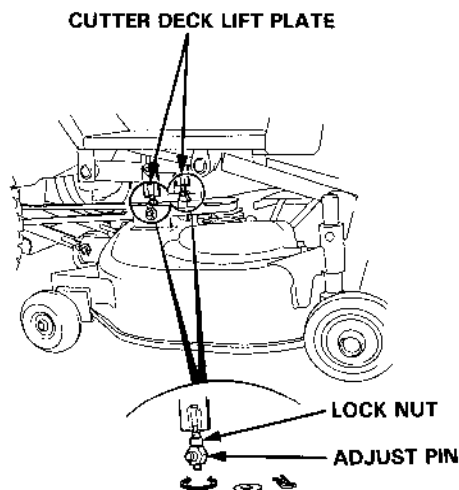
- 
- 4. To adjust, remove the lock pin and washer from the right and left link adjust pins. Loosen the adjust pin lock nuts and turn the pins an equal number of full turns: out lowers the front clearance; in raises the clearance.



## 8. Adjustment of cutter deck lift link

### ■ Cutter deck lift plate

- 1. Place the tractor on a firm, level surface. Apply and lock the parking brake.
- 2. Start the engine, move the hydraulic cylinder selector lever (optional part) to "FRONT", and raise the cutter deck fully with the hydraulic lift lever.
- 3. Turn the descent speed adjust knob fully clockwise.
- 4. Stop the engine, and remove the key from the ignition switch.
- 5. Adjust the deck lift plates until the height of the cutter deck is equal on both sides by loosening the lock nuts and turning the adjust pins as required.
  - Turn the cutter deck lift speed adjust knob counterclockwise to adjust the cutter deck lift plates.
  - Use the hydraulic lift lever to lower the cutter deck.
- 6. After the height of the cutter deck becomes equal on both sides. Raise the cutter deck and turn the cutter deck lift speed adjust knob clockwise.
- 7. If the height of the cutter deck is less than 115 mm (4.5 in.), adjust with the cutter deck lift rod adjust pins until the height is from 115 to 118 mm (4.5 to 4.7 in.).

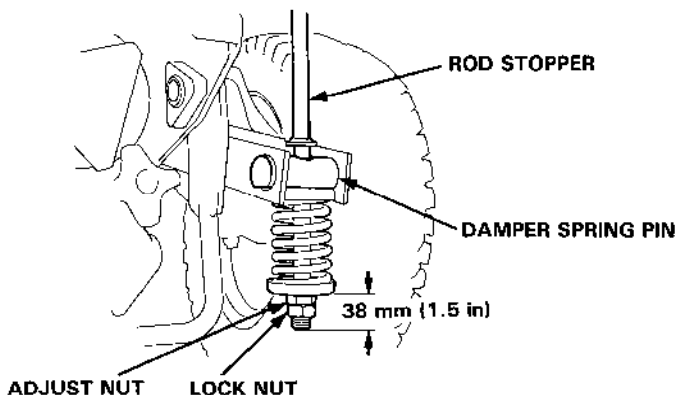


### ■ Cutter deck lift rod

- 1. The cutter deck lift rod can be adjusted in the same manner as for the cutter deck plate (step-5). After adjustment, tighten the lock nuts and lock the adjust pins securely.
- 2. Do not adjust the cutter deck lift rod less than 367 mm (14.5 in.) for the first time. If the height of the cutter deck is below 115 mm (4.5 in.) with the cutter deck lift rod being 367 mm (14.5 in.), then adjust the height with the cutter deck lift plates.
- 3. Adjust the cutter deck lift plates if the cutter deck fails to reach the desired height. If it still fails to reach the desired height, then adjust the length of the cutter deck lift rod.

### ■ Lift link rod

Check that the distance between the end of the rod and the bottom washer is 38 mm (1.5 in.). To adjust, loosen the lock nut and turn the adjust nut. After adjustment, retighten the lock nut securely.



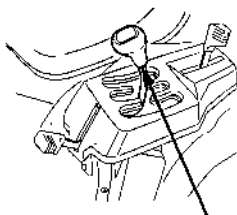
## 5. PRE-OPERATION CHECKS

For safe and efficient mowing, always make a pre-operation inspection before starting:

**⚠ WARNING** Never run the engine in an enclosed area. Be sure to provide adequate ventilation. Exhaust contains poisonous carbon monoxide gas that may cause loss of consciousness and lead to death.

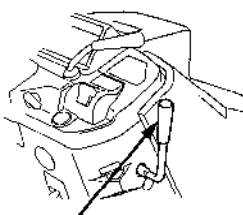
Inspect with the tractor on level ground.  
Lock the parking brake, set the transmission lever in "N" (Neutral) and the front and rear P.T.O. levers in the "OFF" positions.

NEUTRAL



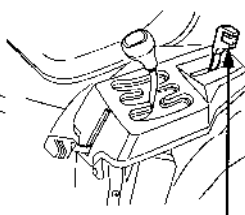
MAIN TRANSMSSION  
LEVER

OFF



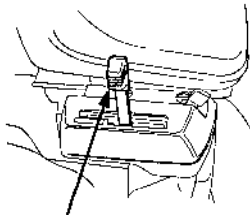
FRONT P.T.O.  
CLUTCH LEVER

OFF



REAR P.T.O. LEVER

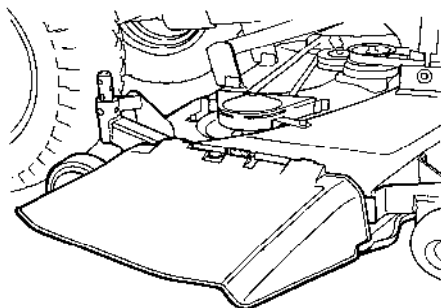
NEUTRAL



HYDRAULIC LIFT  
LEVER

### 1. Cutter deck cleaning (exterior)

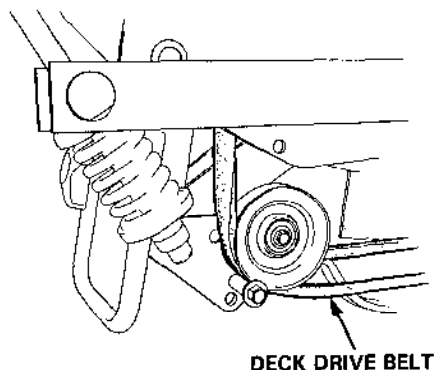
Check that the cutter deck is lowered fully.  
Remove grass and other foreign matter from the cutter deck.



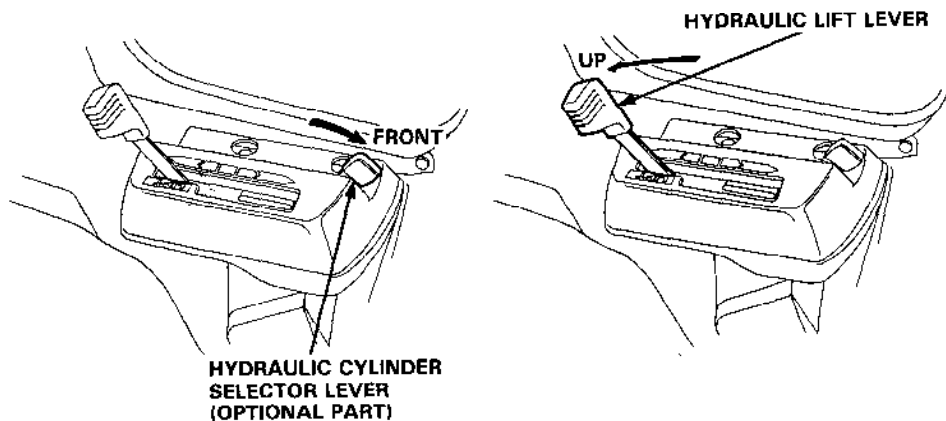
## 2. Deck drive belt

**▲WARNING** To avoid severe personal injury remove the ignition key and disconnect the spark plug lead to prevent accidental starting.

- 1. Lower the cutter deck fully, remove the ignition key and disconnect the spark plug lead. Visually inspect the drive belt for wear, cracks or other faults. If the drive belt is faulty, follow the replacement procedure described on page 46.

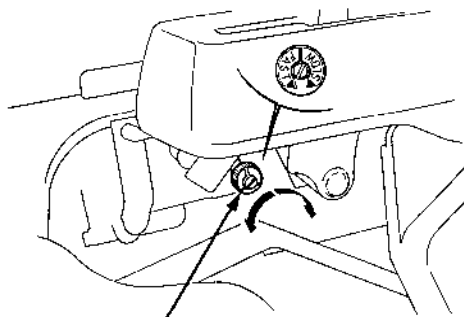


- 2. Reconnect the spark plug, start the engine, move the hydraulic cylinder selector lever (optional part) to "FRONT", and raise the cutter deck fully with the hydraulic lift lever.



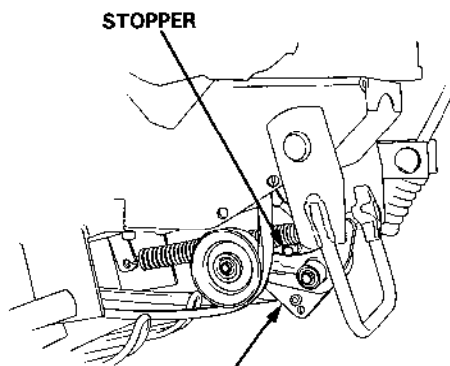


- 3. Turn the descent speed adjust knob fully clockwise.

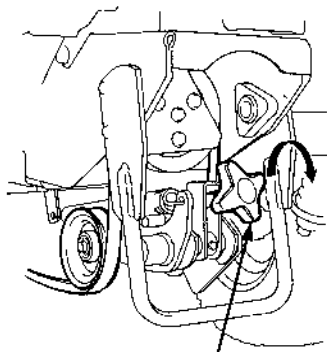


DESCENT SPEED ADJUST KNOB

- 4. Push the hydraulic lift lever toward "DOWN" to be sure that the cutter deck is locked in the fully raised position. Return the lift lever to "NEUTRAL" and then stop the engine and remove the ignition key.
- 5. With the cutter deck raised fully, check that the tensioner arm contacts the stopper on the frame. If the arm does not contact the stopper, turn the tensioner knob clockwise until contact is reached.



TENSIONER ARM



TENSIONER KNOB

- 6. Return the descent speed adjust knob to its original position.

**▲CAUTION** The cutter deck will automatically lower to the ground as the descent speed adjust knob is turned counterclockwise. Keep clear of the deck.

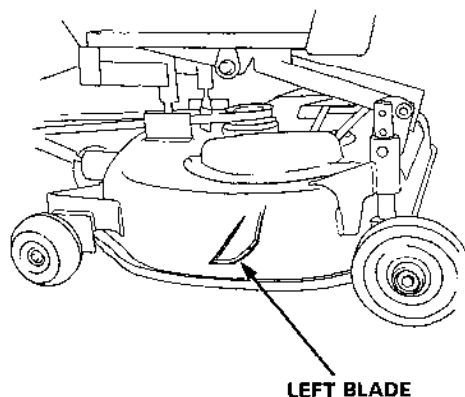
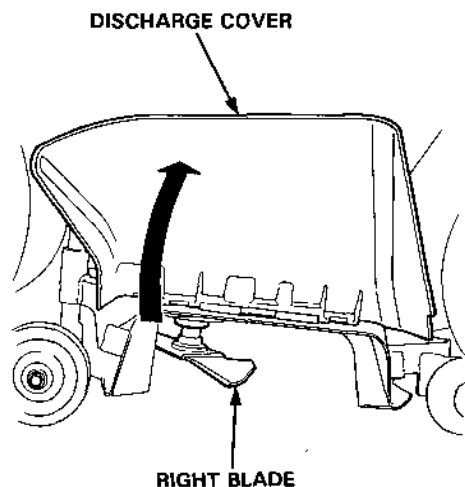
### 3. Blade condition

Before each use, check each cutter blade, for damage or abnormal wear.

- 1. Start the engine and move the hydraulic cylinder selector lever (optional part) to "FRONT", and raise the cutter deck fully with the hydraulic lift lever. Turn the descent speed adjust knob fully clockwise to prevent descent. Do not overtighten the knob.
- 2. Push the hydraulic lift lever toward "DOWN" to be sure that the cutter deck is locked in the fully raised position. Return the lift lever to "NEUTRAL" and then stop the engine, remove the ignition key and disconnect the spark plug.

**▲ WARNING** To avoid severe personal injury:

- Remove the ignition key and disconnect the spark plug caps to prevent accidental starting.
  - Wear heavy gloves to protect your hands from the cutter blades.
  - Place a block under the cutter deck to prevent it from lowering unexpectedly.
- 3. Inspect each of the blades for cracks, bending or signs of wear. The right and center blades can be seen through the discharge opening on the right side of the cutter deck. The left blade can be seen from under the left front edge of the cutter deck. Turn the blades 180° to inspect opposite side.



If any of the blades shows signs of damage or excessive wear, a more thorough inspection is necessary (see page 36 for cutter deck removal). A dull blade can be sharpened, but a blade that is worn out, bent, cracked or otherwise damaged must be replaced. If a blade needs sharpening or replacement, take the cutter deck to your authorized Honda tractor dealer. Or if you have the proper tools, you can remove and install the blade yourself.



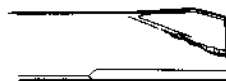
NORMAL



EXCESSIVELY  
WORN



BENT



CRACKED

**▲ WARNING**

Severe personal injury can result if a piece of blade breaks off and is thrown from under the cutter deck.

- Never operate the lawn tractor with a worn or damaged blade.
- Never operate the lawn tractor with a blade that is cracked or notched at the base of its upturned rear edge.

**IMPORTANT NOTICE**

- Use a genuine Honda replacement blade, or equivalent.
- To reduce the possibility of weakening the blade, or causing imbalance or poor cutting performance, sharpening should be performed by an authorized Honda tractor dealer.

- 4. When you have completed the blade inspection, return the descent speed adjust knob to its original position.

**▲ CAUTION**

The cutter deck will automatically lower to the ground as the descent speed adjust knob is turned counterclockwise. Keep clear of the deck.

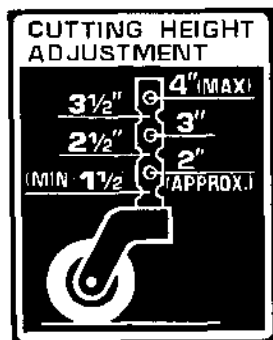
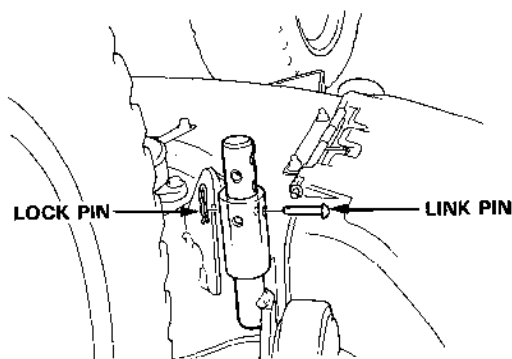
## 6. OPERATION

**⚠ WARNING** Never run the engine in an enclosed area. Be sure to provide adequate ventilation. Exhaust contains poisonous carbon monoxide gas that may cause loss of consciousness and lead to death.

### 1. Adjusting cutting height

**⚠ WARNING** Be sure all moving parts have stopped before adjusting cutting height. Contacting moving parts can cause injury.

- 1. Park the tractor on a level surface and set the parking brake.
- 2. Make sure the main transmission lever is in "NEUTRAL", both the front and rear P.T.O. levers are "OFF" and the lift lever is in the center (Neutral) position.
- 3. Start the engine, move the hydraulic cylinder selector lever (optional part) to "FRONT" and raise the cutter deck fully with the hydraulic lift lever.
- 4. Turn the descent speed adjust knob fully clockwise.
- 5. Push the hydraulic lift lever toward "DOWN" to be sure that the cutter deck is locked in the fully raised position. Return the lift lever to "NEUTRAL" and then stop the engine and remove the ignition key.
- 6. Remove the lock pin and the link pin from the gauge wheel and set the wheel for the desired cutting height.



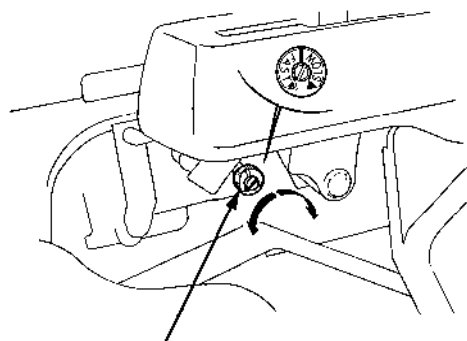
- 7. Insert the link pin in the gauge wheel shaft and secure it with the lock pin.
- 8. Repeat the adjustment procedure for the other gauge wheel.

NOTE: Both gauge wheels must be set to the same height.

## 2. Descent speed adjustment

Adjust the descent speed of the cutter deck by turning the descent speed adjust knob. Adjustment is normal if it takes 1 – 2 seconds for the cutter deck to lower from the highest position to the ground.

Turning the knob clockwise toward "SLOW" will decrease the speed, and turning it counterclockwise toward FAST will increase the speed.

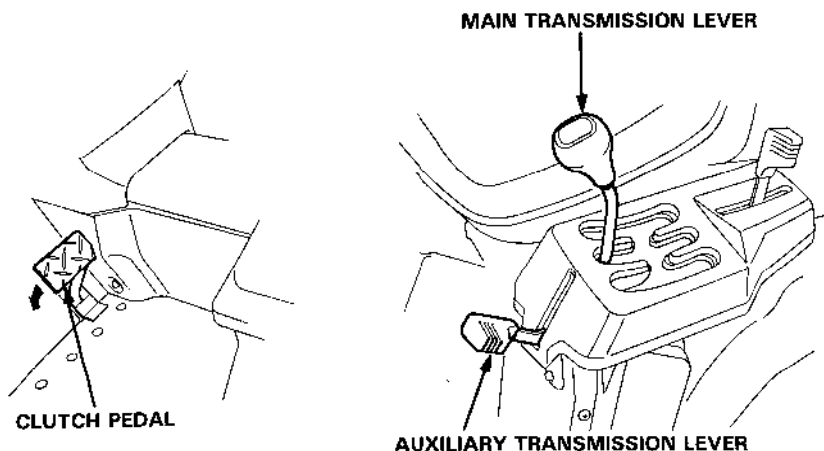


**DESCENT SPEED ADJUST KNOB**

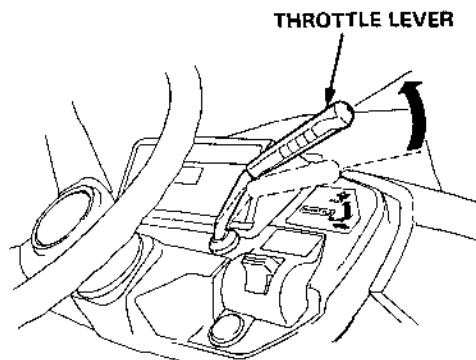
**NOTE:** Uneven mowing may result if the descent speed is too slow.

## 3. Starting

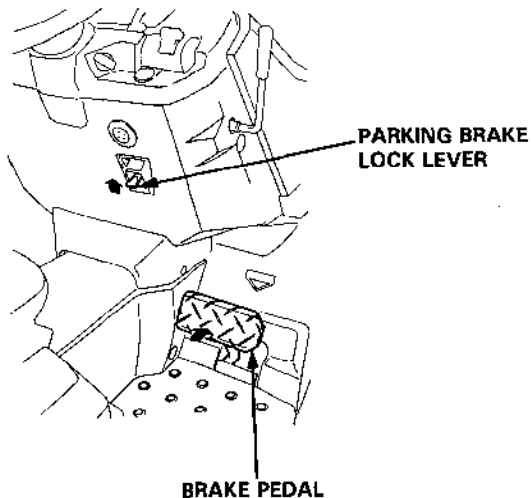
- 1. Start the engine. Depress the clutch pedal and place the main and auxiliary transmission levers in the desired gear range for mowing.



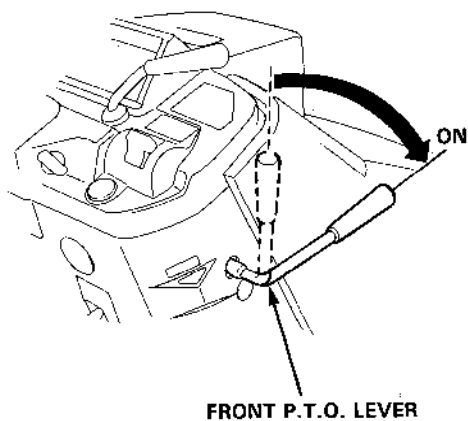
- 
- 2. Lower the cutter deck and increase engine speed. Always mow at full throttle.



- 3. Depress the brake pedal and release the parking brake lock lever.



- 
- 4. Move the front P.T.O. lever to "ON". The cutter blades will start to rotate.



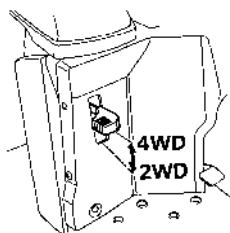
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#### 4. Two and Four Wheel Drive (A4 Type only)

Two and four wheel drive can be selected by operating the two-and four-wheel drive select lever.

Prior to shifting, set the steering wheel in the straight-ahead position, bringing the tractor to a complete stop and depress the clutch pedal fully.

**NOTE:** If difficulty is encountered in shifting the lever, re-engage the gears by driving the tractor a short distance in FORWARD with the clutch engaged. In 4-wheel drive, the front wheels will operate with a greater traction when rounding corners, causing the lawn to be stripped off the ground by the wheels.



We recommend that you select the two wheel drive and the four wheel drive according to the terrain and conditions.

**2-WHEEL DRIVE** ..... Mowing and transport (when extra traction is not required).

**4-WHEEL DRIVE** ..... Towing, Operation on slope or soft ground, Operation with attachment installed (Especially when powerful driving force and braking force are required).

#### **IMPORTANT NOTICE**

- To prevent damage to the transmission mechanism, bring the tractor to a full stop before operating the shift lever.
- Driving in 4-WHEEL DRIVE range or with the differential locked on paved surface could cause premature wear on the tires, it could also impair fuel economy.
- When driving in four wheel drive, you have 4-wheel braking. When shifted into two wheel drive you have 2-wheel braking (rear only).



---

## 5. Mowing

Before operating this tractor you should read and understand the SAFETY INFORMATION on pages 3–8.

### **▲ WARNING**

- Rotating blades and thrown objects can cause severe personal injury. Always stop the engine before clearing the discharge cover.
- Unseen hazards may cause loss of control or damage to the tractor. Look for and avoid rocks, roots, holes, and hidden hazards in the terrain.
- Operating the tractor near the edge of a ditch or an embankment could cause it to tip or roll over.
- Certain maneuvers can cause the tractor to tip or roll over on sloping surfaces; avoid sharp turns, rapid acceleration, and sudden stops. Also, avoid backing down slopes.
- Decomposing grass creates heat, and may become a fire hazard. Always empty the grass bags before storing the tractor.

When mowing tall grass, make a first pass with the deck fully raised (4 inch position) this will help to expose any hidden obstacles. When you are sure that the area is completely cleared, mow again at the desired height.

### **IMPORTANT NOTICE**

**If the tractor should accidentally get caught on an unseen object (rock, root, hole, etc.), do not attempt to ride over the obstruction or turn the steering wheel to free the mower. These actions can damage the steering mechanism or the deck.**

### **MOWING TIPS**

1. Mow at full throttle to give a neat appearance to the lawn. The lawn may not be trimmed uniformly at medium or low engine speeds.
2. Observe the following when mowing:
  - 4th gear \_\_\_\_\_ Heavy cutting or trimming
  - 5/6th gear \_\_\_\_\_ Normal cutting
  - 7th gear \_\_\_\_\_ Light cutting or transportation
  - 8th gear \_\_\_\_\_ Use only for transportation
3. Do not allow the grass to grow too long before cutting or trimming. Also allow the lawn to dry thoroughly before you use the mower. To cut a thick or lush lawn, mow at low speed or cut twice.
4. Always turn counterclockwise at low ground speed when cutting close to trees, posts, sprinklers, walls, etc.
5. You may cut the lawn too short when the lawn is thick or wet, and/or the ground is soft, due to sinking of the gauge wheels.
6. Increase the cutting height if the lawn is spindly, and the surface uneven.

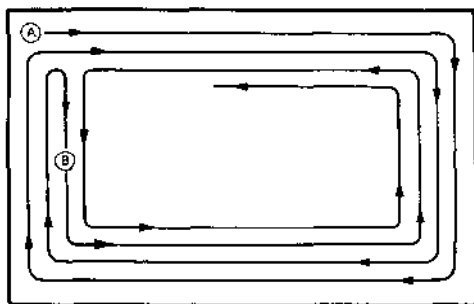
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## 6. Cutting patterns

These cutting patterns are only recommended for a flat, level lawn surface.

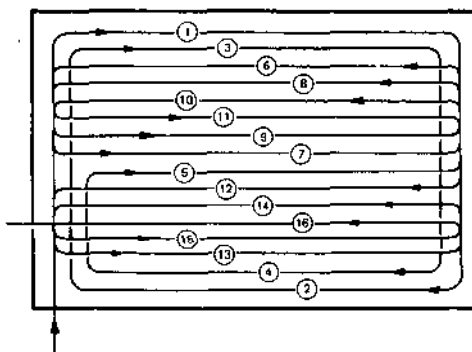
- In a small area

First make 2 or 3 turns in a clockwise direction; then turn around and continue cutting in the reverse direction.



- In a large area

The first round of cuts is the key to making a neat finish. First, make 2 or 3 turns in a clockwise direction. As you reach the center of the area, turn to the right and continue cutting in the reverse direction until you have finished the upper half of the area. Cut the grass in the remaining half in a counterclockwise direction.

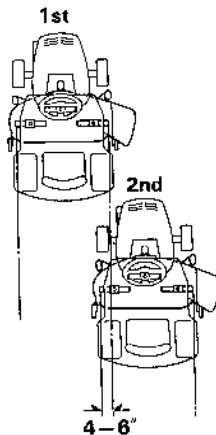


- **Mowing unsquare areas**

If your mowing area is not square or four-sided, divide the area into several blocks so you can mow in a neat mowing pattern.

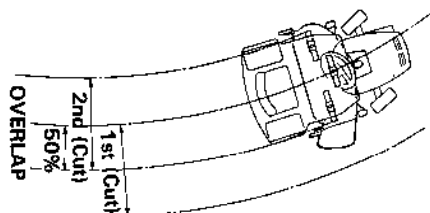
- **Overlapping on straightaways.**

Be sure that each mowing lane overlaps sufficiently. The recommended overlap width is between 4–6 in., or approximately the width of one of the mower's front tires.



- **Overlapping in curves and turns**

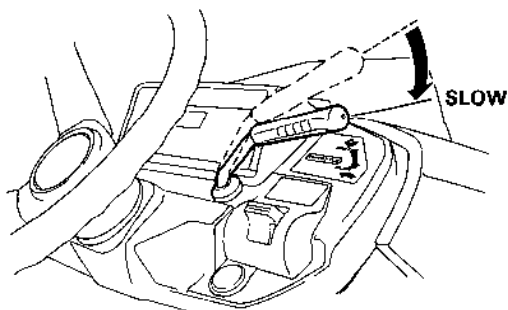
When cutting in curves and turns, shift to a slower speed and be sure to overlap the previous cut by 50%, or approximately half the width of the mower.



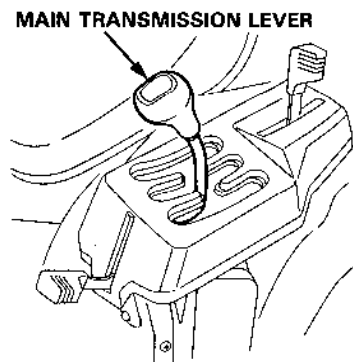
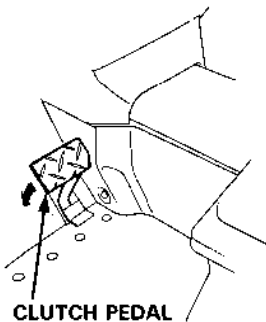
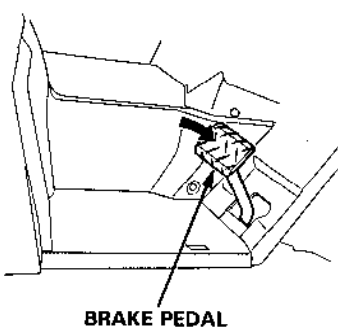
## 7. Stopping

**⚠ WARNING** To avoid injury to yourself and others, before leaving the tractor unattended, **ALWAYS**: park on level ground, disengage the power take-off (P.T.O.), lower the cutter deck, shift into neutral, set the parking brake, stop the engine and remove the key.

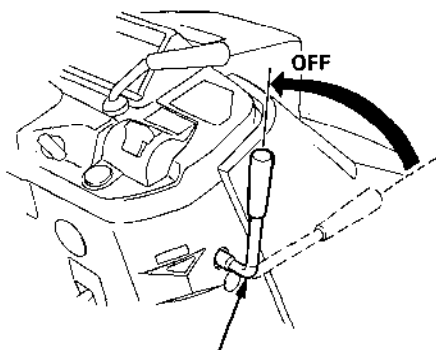
- In an emergency:  
Turn the engine switch OFF.
- In normal use:
  - 1. Move the throttle lever to "SLOW".



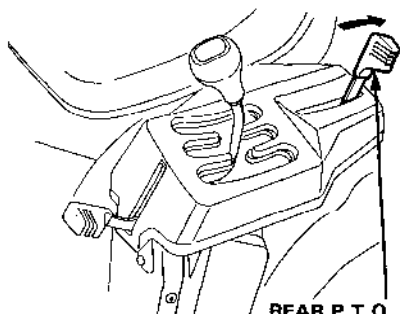
- 2. Depress the clutch and brake pedals simultaneously.  
Move the main transmission lever to "NEUTRAL".



- 
- 3. Shift the front and rear P.T.O. levers to the "OFF" position.

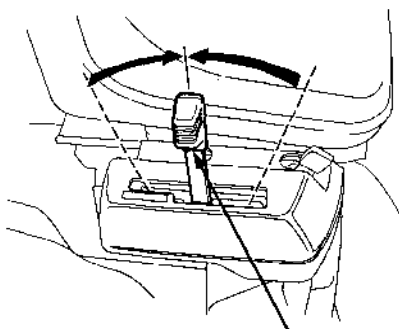


**FRONT P.T.O. CLUTCH LEVER**



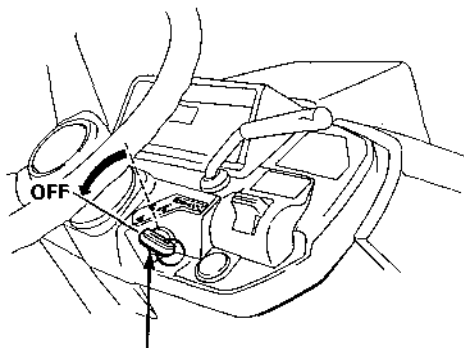
**REAR P.T.O. LEVER**

- 4. Lower any attachment to the ground with the hydraulic lift lever.



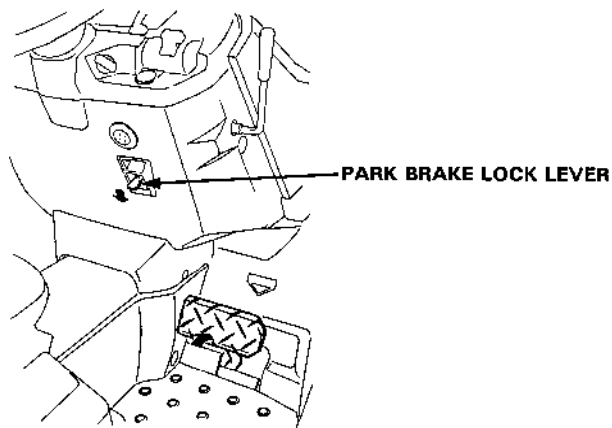
**HYDRAULIC LIFT LEVER**

- 5. Turn the engine switch to "OFF" and remove the key.



**IGNITION SWITCH KEY**

- 
- 6. Push down the park brake lock lever while depressing the brake pedal.



**⚠ WARNING** To avoid injury to yourself and others, before leaving the tractor unattended, **ALWAYS:** park on level ground, disengage the power take-off (P.T.O.), lower the attachment, set the parking brake, stop the engine and remove the key.

# 7. MAINTENANCE

Periodic maintenance and adjustment are necessary to keep the tractor in good operating condition. Service and inspect according to the MAINTENANCE SHCEDULE.

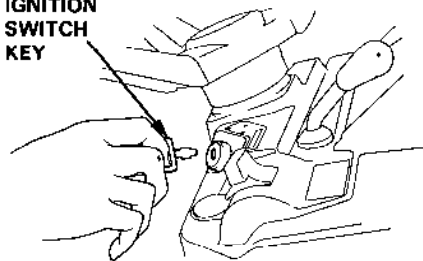
## ⚠ WARNING

- To avoid carbon monoxide poisoning, shut off the engine before performing any maintenance. If you run the engine in an area that is confined, or even partially enclosed, the air you breathe will contain a dangerous amount of exhaust gas. If the engine must be run for any reason, be sure the area is well-ventilated.
- To avoid serious burns, allow the engine to cool before performing maintenance.
- Shut the engine off and set the parking brake before performing any maintenance.
- To prevent accidental start-up, remove the ignition switch key and disconnect the spark plug cap.
- The tractor should be serviced by an authorized HONDA tractor dealer unless the owner has proper tools and service data and is mechanically qualified.

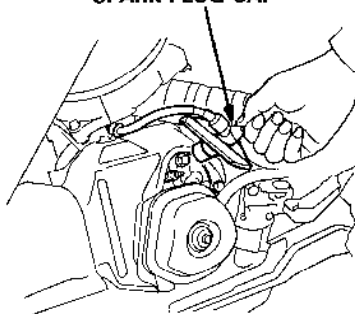
## IMPORTANT NOTICE

Use only genuine Honda parts or their equivalent for maintenance or repair. Replacement parts which are not of equivalent quality may damage your tractor.

IGNITION  
SWITCH  
KEY



SPARK PLUG CAP



## 1. Maintenance schedule

REGULAR SERVICE PERIOD		EACH USE	FIRST 20 HRS	EVERY 50 HRS	REFER TO PAGE
ITEM	Perform at every indicated month or operating hour interval, whichever comes first.				
Cutter deck (Exterior)	Clean	○			29
Deck drive belt	Check-Adjust	○			30
Blade condition	Check	○			32
Blade bolt tightness	Check		○(1)	○(1)	52
Blade belt	Check			○	48
Cutter deck (Inside)	Clean			○	49

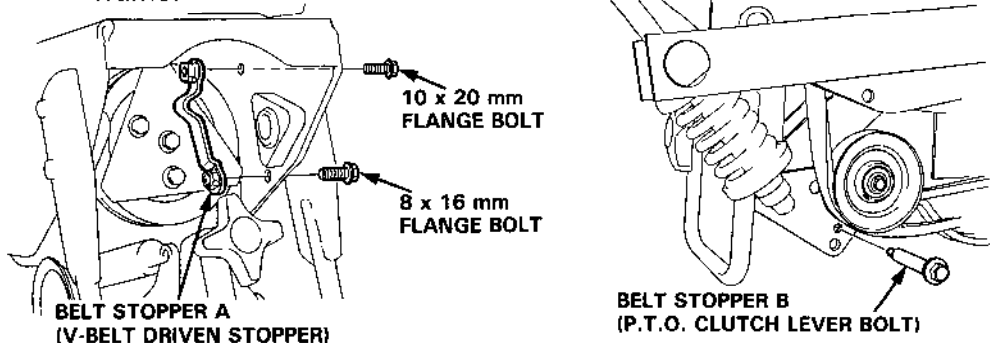
(1) These items should be serviced by an authorized Honda tractor dealer, unless the owner has proper tools and is mechanically proficient.

## 2. Deck drive belt replacement

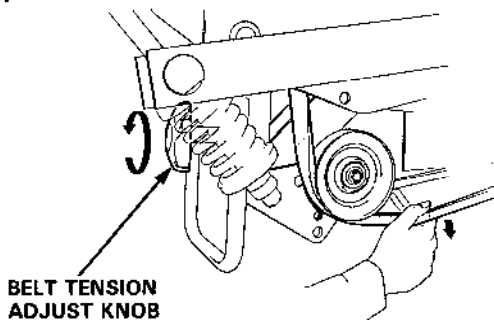
Set the gauge wheel to the 1 1/2 position (See page 34).

To replace the drive belt, observe the following.

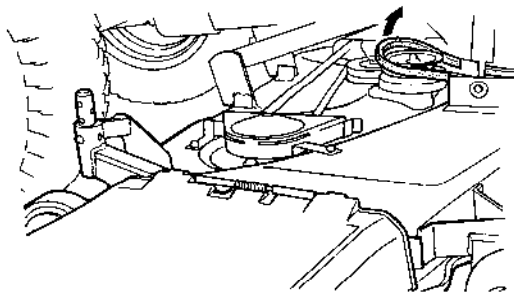
- 1. Lower the cutter deck and remove belt stoppers A and B from the frame.



- 2. Loosen the belt tension adjust knob fully. Pull the belt at the left side pulley and remove it from the pulleys starting with the one on the opposite side.



- 3. Remove the belt from the cutter deck driven pulley.



- 4. Installation sequence is essentially the reverse order of removal. Check that the belt is fully seated in the pulleys. After installing the cutter deck belt, check the belt slack as described in page 31.

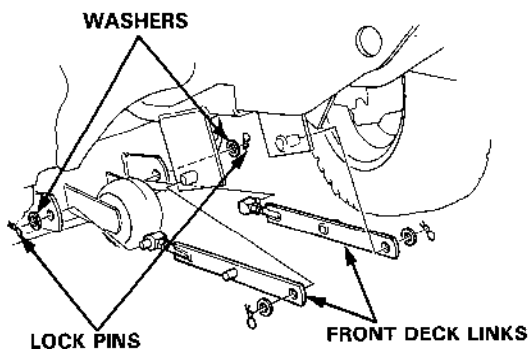


### 3. Cutter deck removal

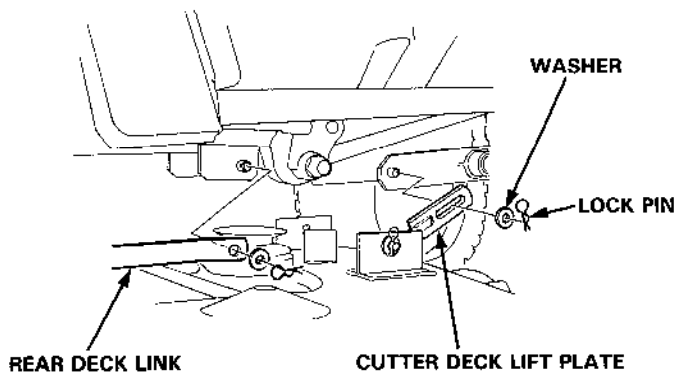
- 1. Start the engine and move the hydraulic cylinder selector lever (optional part) to the "FRONT" position. Raise the cutter deck by using hydraulic lift lever.
- 2. Stop the engine and remove the engine switch key.
- 3. Set the gauge wheel to the 1 1/2 position (See page 34).
- 4. Lower the cutter deck; turn off the engine, remove the ignition key and disconnect the spark plug.

**▲ WARNING** To avoid severe personal injury remove the ignition key and disconnect the spark plug cap to prevent accidental starting.

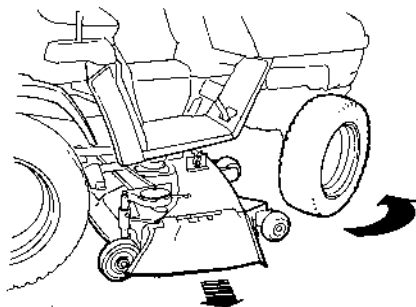
- 5. Remove the cutter deck drive belt from the pulleys. (See page 46).
- 6. Disconnect the front deck links by removing 14 mm lock pins and washers on each side of the cutter deck.



- 7. Disconnect the cutter deck lift plates and rear deck links by removing the 14 mm lock pins and washers (two on each side) from the cutter deck.

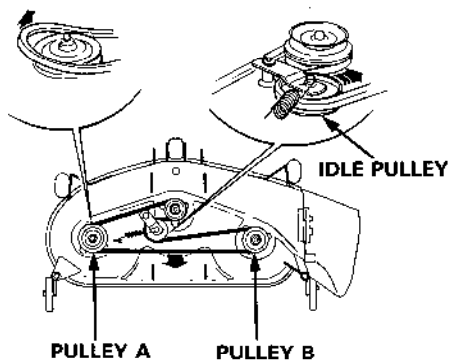
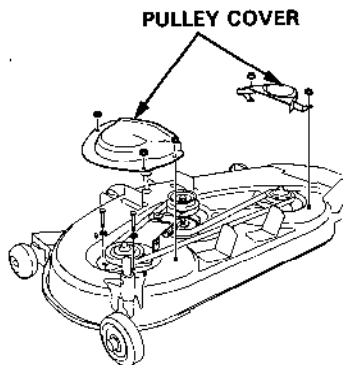


- 8. Turn the steering wheel to the extreme left. Remove the cutter deck from right side of tractor.



#### 4. Blade belt inspection and replacement

- 1. Remove the cutter deck from the tractor (see page 47).
- 2. Remove the five 8 mm nuts, remove the right and left pulley covers, and clean any grass and other foreign matter from the inside of the covers.
- 3. Check the belt for signs of wear or cracks.
- 4. Replace the belt with a new one if the belt is worn or damaged, replace it in the following manner: Grasp the belt midway between pulleys A and B, pull it toward you and to your left. Remove the belt from the pulleys starting with pulley A. Remove the belt from the other pulleys.

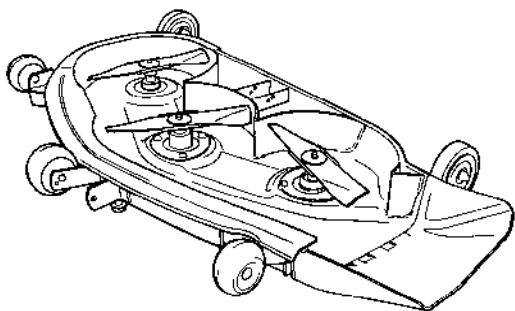


**CAUTION** If the belt is not released slowly, the idle pulley will move suddenly and could injure your hand. Be sure to install the right and left pulley covers securely. Failure to install the pulley covers can cause serious personal injury.

## 5. Cutter deck cleaning

**⚠ WARNING** To prevent injuries, be sure to wear heavy gloves when cleaning the cutter deck.

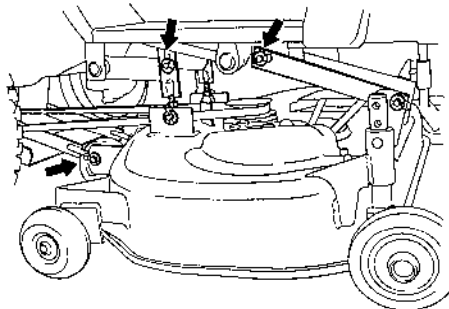
- 1. Remove the cutter deck from the tractor (see page 47).
- 2. Remove the five 8 mm nuts, and remove the right and left pulley covers.
- 3. Remove grass and other foreign matter from inside the covers.
- 4. Turn the cutter deck upside down, and clean off accumulated grass and other debris.



- 5. Reinstall the belt covers, and install the cutter deck on the tractor.

## 6. Cutter deck installation

To install, reverse the removal procedure.



**NOTE:** Before attempting to install the cutter deck, lower the lift arm and then push it with your hand to be sure it is all the way down.

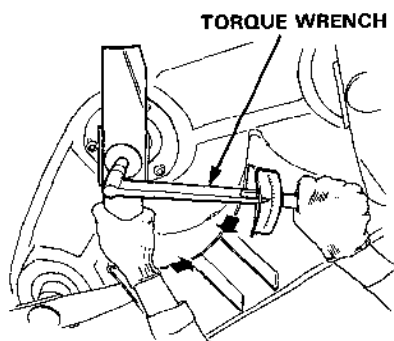
## 7. Blade bolt tightness/Blade replacement.

**⚠ WARNING** To avoid severe personal injury, remove the ignition key and disconnect the spark plug cap to prevent accidental starting, and wear heavy gloves to protect your hands from the cutter blade.

### ■ Blade bolt tightness

- 1. Remove the cutter deck from the tractor (see page 47).
- 2. Turn the cutter deck upside down.
- 3. Clean dirt and grass from the blade and the inside of the cutter deck.
- 4. Hold the blade firmly, check that the blade bolt is properly tightened.

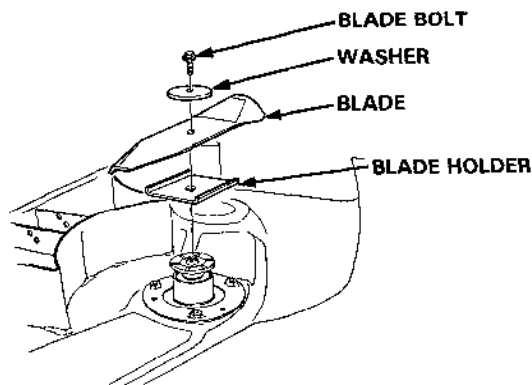
Blade bolt torque: 6.0 kg-m (43 ft-lb)



### ■ Blade removal

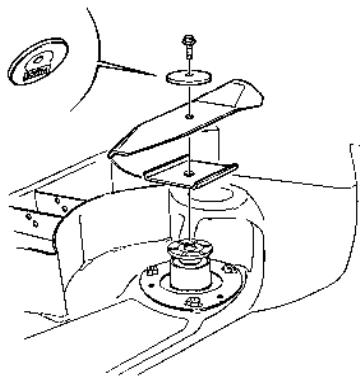
**IMPORTANT NOTICE** Use genuine Honda replacement blades or equivalent.

- 1. Hold the blade firmly, and remove the blade bolt and the washer.
- 2. Remove the blade and blade holder.



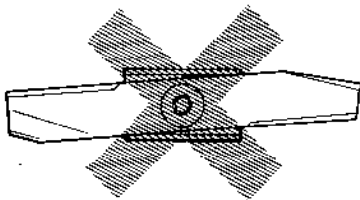
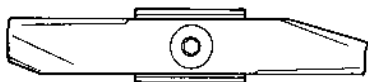
## ■ Blade installation

- 1. Clean dirt and grass from the blade, blade holder, and the inside of the cutter deck.
- 2. Install the blade holder, blade, washer, and blade bolt.



### IMPORTANT NOTICE

- Be sure the blade is properly aligned with the blade holder before tightening the blade bolt. Do not allow the blade to overlap the edge of the holder.

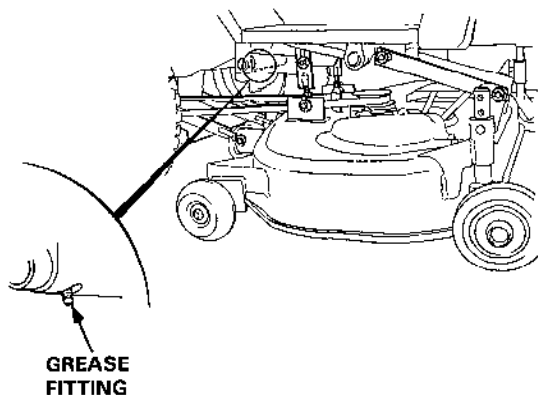


- Install the washer with the side marked "INSIDE" facing the blade.
  - The blade bolt and washer are specially designed for this application and must not be replaced with any other bolt or washer.
- 3. Hold the blade firmly, and tighten the blade bolt to a torque value of 6.0 kg-m (43 ft-lb).

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## 8. Fasteners tightness/Lubrication points

- Check all nuts, bolts and fasteners and tighten securely if necessary.
  - Check and apply grease where noted.
- Recommended Grease: SAE Multipurpose Grease



1. Remove the cutter deck from the tractor.
2. Turn the cutter deck upside down. Clean the underside of the deck with water, and dry thoroughly.
3. For longer service and greater efficiency, keep the underside of the mower housing clean and free of accumulated grass clippings by washing it down with a hose after use and/or cleaning it with a wire brush and scraper. Remove any rust and apply a rust-resistant paint. Cleaning and rust prevention are especially important before seasonal storage.

**IMPORTANT NOTICE** Washing the deck directly after use can cause premature bearing wear. Allow the deck to cool before washing, then run the deck to remove any excess moisture.

## 9. TROUBLESHOOTING

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### Poor finishing/appearance.

1. Tractor speed too fast → Shift to lower speed.
2. Grass accumulation inside deck → Clean deck underside (see p.49)
3. Dull blade → Have the blade sharpened or replace it.
4. Tires improperly inflated → Check tire inflation.
5. Mower not level → Check cutter deck mounting.
6. Wrong cutter deck height → Change to proper height.
7. Engine speed too low → Run at full throttle.

### Blades do not rotate or stop.

1. Blade drive belt worn or broken → Replace with new belt (see p.48)
2. P.T.O. lever cable faulty or out of adjustment → See your authorized HONDA tractor dealer.
3. Faulty P.T.O. clutch or worn disk → See your authorized HONDA tractor dealer.

### Clogged cutter deck discharge chute.

1. Wrong blade → Use genuine Honda blade or equivalent.
2. Deck too low → Raise deck and adjust deck height properly.
3. Engine overloaded → Operate at full throttle. Use lower speed range. Set cutter deck higher than desired height for first pass, then cut to desired height on second pass.
4. Lawn wet or watered. → Allow to dry before cutting.
5. Lawn too tall → Set cutter deck higher than desired height for first pass, then cut to desired height on second pass.
6. Engine speed too low → Run at Full throttle.



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### Deep cut

1. Cutting height too low —————> Increase to proper height.
2. Tractor speed too high —————> Lower to proper speed.
3. Uneven surface —————> Change cutting pattern.
4. Rough and uneven surface —————> Adjust with height adjuster (see page 34).

### Excessive vibration

1. Unbalanced blades —————> Adjust balance.
2. Drive/blade belt damaged —————> Replace.
3. Pulley (s) damaged or out of alignment —————> See your authorized Honda tractor dealer.

### Engine speed drops excessively under loads.

1. Engine speed too low —————> Run at full throttle.
2. Tractor speed too fast —————> Lower to proper speed range.
3. Pebbles or other foreign matter are stuck in cutter deck. —————> Remove.

## 10. SPECIFICATIONS

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MODEL	MID-MOUNT ROTARY MOWER
Power products description code	RAB
Overall length	880 mm (34.6 in)
Overall width	1,520 mm (59.8 in)
Cutting width	1,168 mm (46 in)
Weight	60 kg (132 lb)
Cutting height	1-1/2 to 4 in
Number of blades	3
Blade length	393 mm (15.5 in)
Blade spindle speed	Left and center 3,815 rpm
	Right 4,200 rpm
Gauge wheel	(2) 150 mm (5.9 in) Diameter
Deck lifting/lowering	Hydraulic
Deck mounting	4-point linkage

# 11. WARRANTY SERVICE

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## Owner Satisfaction

Your satisfaction and goodwill are important to your dealer and to us. All Honda warranty details are explained in the Distributor's Limited Warranty. Normally, any problems concerning the product will be handled by your dealer's service department. If you have a warranty problem that has not been handled to your satisfaction, we suggest you take the following action:

- Discuss your problem with a member of dealership management. Often complaints can be quickly resolved at that level. If the problem has already been reviewed with the Service Manager, contact the owner of the dealership or the General Manager.
- If your problem still has not been resolved to your satisfaction, contact the Power Equipment Customer Relations Department of American Honda Motor Co., Inc.

American Honda Motor Co., Inc.  
Power Equipment Customer Relations Department  
P.O. Box 50  
Gardena, California 90247-0805  
Telephone: (213) 604-2400

We will need the following information in order to assist you:

- Your name, address, and telephone number
- Product model and serial number
- Date of Purchase
- Dealer name and address
- Nature of problem

After reviewing all the facts involved, you will be advised of what action can be taken. Please bear in mind that your problem will likely be resolved at the dealership, using the dealer's facilities, equipment, and personnel, so it is very important that your initial contact be with the dealer.

Your purchase of a Honda product is greatly appreciated by both your dealer and American Honda Motor Co., Inc. We want to assist you in every way possible to assure your complete satisfaction with your purchase.

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**MEMO**

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**MEMO**

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