

HONDA 250

MODEL XL250

OWNER'S MANUAL



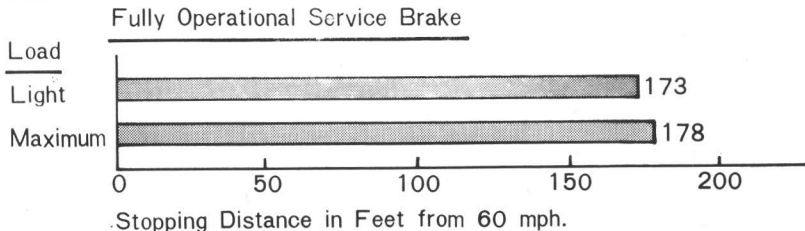
CONSUMER INFORMATION

VEHICLE STOPPING DISTANCE

This figure indicates braking performance that can be met or exceeded by the vehicles to which it applies, without locking the wheels under different conditions of loading.

The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the information may not be correct under other conditions.

Description of vehicles to which this table applies: HONDA XL 250



ACCELERATION AND PASSING ABILITY

This figure indicates passing times and distances that can be met or exceeded by the vehicles to which it applies, in the situations diagrammed on the next page.

The low-speed pass assumes an initial speed of 20 MPH and a limiting speed of 35 MPH. The high-speed pass assumes an initial speed of 50 MPH and a limiting speed of 80 MPH.

NOTICE: The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the information may not be correct under other conditions.

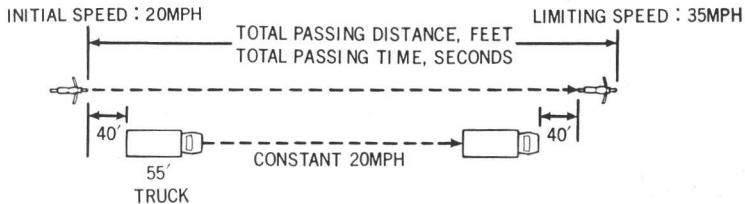
Description of vehicles to which this table applies: HONDA XL 250

SUMMARY TABLE:

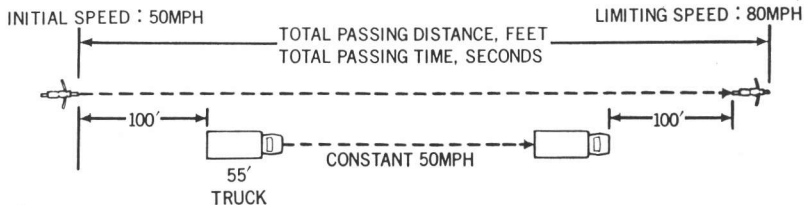
Low-speed pass 347 Feet; 7.1 Seconds

High-speed pass 1,360 Feet; 14.9 Seconds

LOW- SPEED



HIGH- SPEED





PREFACE

The XL-250 Motosport incorporates many special features for outstanding performance under off-the-road conditions.

- Adjustable front fork height and two position rear shock absorber mounts allow the rider to vary the ground clearance of the machine to suit riding conditions.
- Headlight and battery are easily removed to reduce weight.
- Optional sprockets are available to provide the best ratios for optimum performance under any riding conditions.
- Rear shock absorbers have 5 settings for precise adjustment of the rear suspension.
- Primary kick starting enables the rider to restart quickly without first shifting to neutral.

- Muffler incorporates a USDA approved spark arrester.

This booklet is your guide to the basic operation and maintenance of your new Honda XL-250. Please take the time to read the Owner's Manual carefully, then store it in the special compartment under the seat for future reference.

As with any fine machine, proper care and maintenance are essential for trouble free operation and optimum performance. Your authorized Honda dealer will be glad to provide further information or assistance and is fully equipped to handle your future service needs.

Thank you for selecting a Honda. We wish you Many miles of continued riding pleasure in the years ahead.

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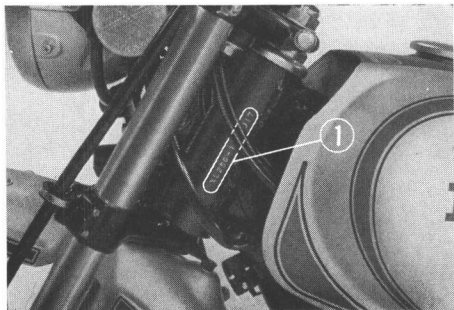
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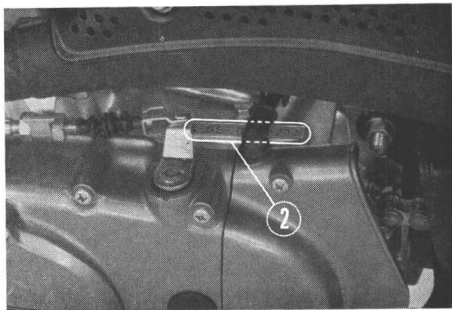
SERIAL NUMBER LOCATION

The frame serial number ① is stamped on the left of the steering head. The engine serial number ② is located on top of the upper crankcase left side. These numbers are required when registering

the motorcycle. Refer to the frame or engine serial number when ordering replacement parts to ensure that you will obtain the correct parts for your model series.



① Frame serial number



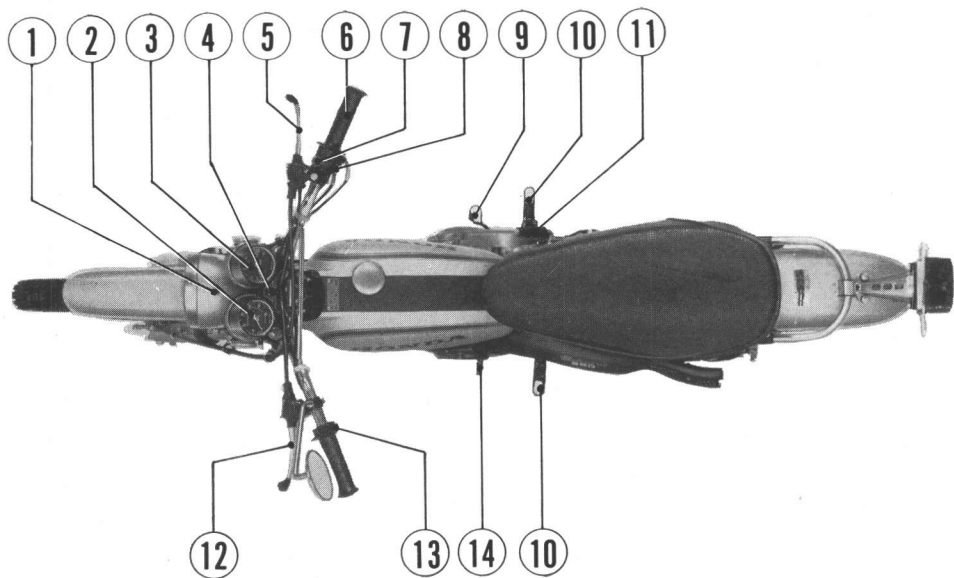
② Engine serial number

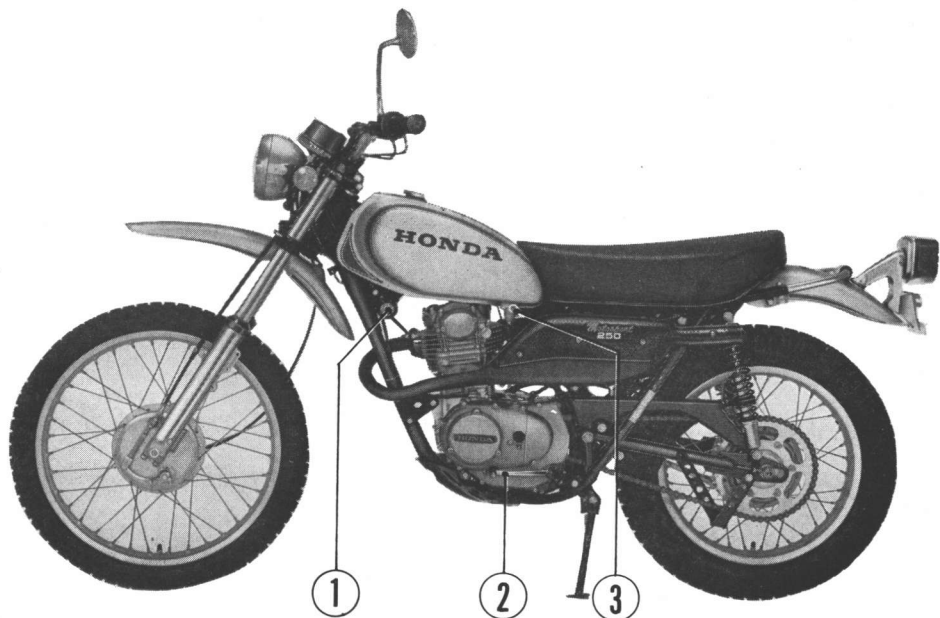
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CONTROL LOCATION

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- ① High beam indicator light
- ② Speedometer
- ③ Tachometer
- ④ Choke knob
- ⑤ Front brake lever
- ⑥ Throttle grip
- ⑦ Emergency switch
- ⑧ Headlight control switch
- ⑨ Rear brake pedal
- ⑩ Foot rest
- ⑪ Kick starter pedal
- ⑫ Clutch lever
- ⑬ Horn button
- ⑭ Gear change pedal

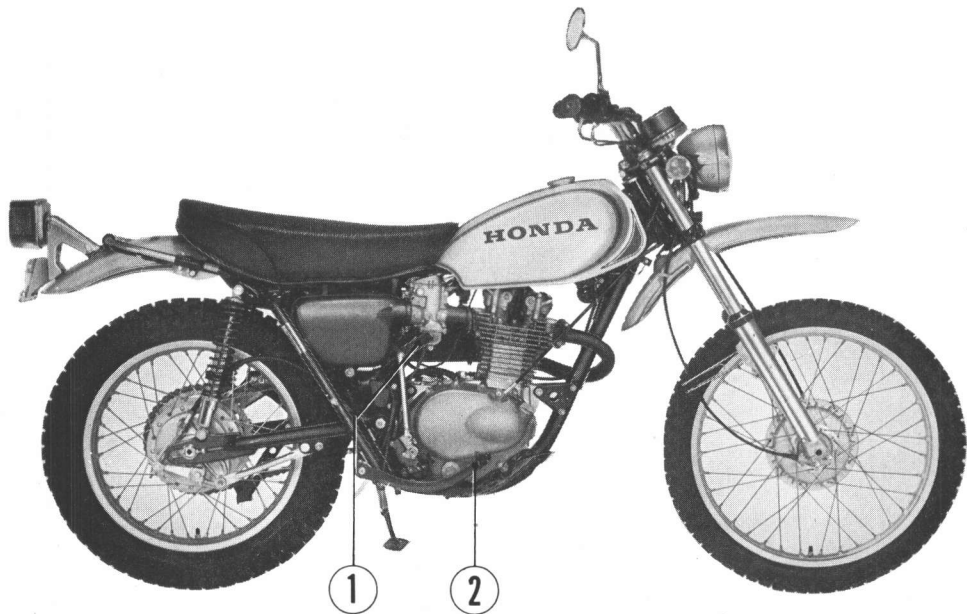




① Main switch

② Gear change pedal

③ Fuel valve



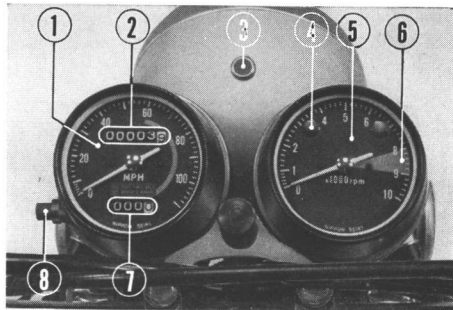
① Kick starter pedal

② Rear brake pedal

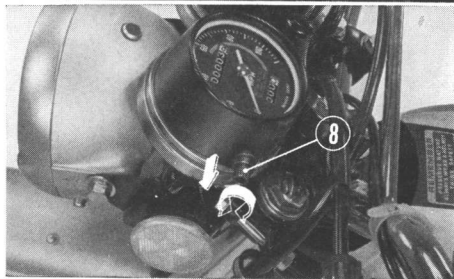
OPERATING INSTRUCTIONS

Speedometer/Tachometer

Speedometer and tachometer are mounted above the headlight case. Their respective functions are shown in the table on the next page.



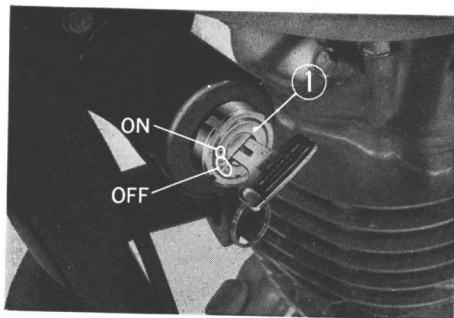
- ① Speedometer
- ② Odometer
- ③ High beam indicator light
- ④ Neutral indicator light
- ⑤ Tachometer
- ⑥ Tachometer red zone
- ⑦ Tripmeter
- ⑧ Tripmeter reset knob



Ref. No.	Description	Function
①	Speedometer	Indicates driving speed.
②	Odometer	Indicates total accumulated distance traveled.
③	High beam indicator light (red)	Light will be on when headlight is on high beam.
④	Neutral indicator light (green)	Light will be on when the transmission is in neutral.
⑤	Tachometer	Indicates engine rpm.
⑥	Tachometer red zone	Do not allow indicated engine rpm to enter or exceed the red zone. Operation at excessive rpm will shorten engine life and may cause serious damage.
⑦	Tripmeter	Indicates distance traveled. (meter can be reset for each trip)
⑧	Tripmeter reset knob	Reset knob for "zeroing" the trip meter.

Main Switch

The main switch ① is located on the left side below the front end of the fuel tank. Functions of the respective switch positions are shown in the chart below.



① Main switch

Key Position	Function	Key Removal
OFF	All electrical circuits are open ; engine can not be started.	Key can be removed.
ON (red dot)	Electrical circuits are closed ; engine can be started ; headlight and tail/stoplight can be operated ; neutral indicator light is on when the transmission is in neutral.	Key cannot be removed.

Emergency Switch

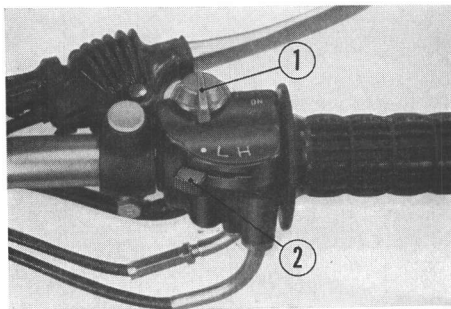
The three position emergency switch ① is located on top of the right handle grip switch housing. In the "ON" position (center) the ignition circuit is complete and the engine operates. In the "OFF" position (either side of center) the ignition circuit is open and the engine will not operate.

This switch is intended primarily as a safety or emergency switch and normally remains in the "ON" position. The ignition will not operate unless the main switch is also in the "ON" position.

Headlight Control Switch

The headlight control switch ② is located on the right handle grip switch housing. It can be operated without taking the hand off the handle grip. The red dot is the "OFF" position (headlight and taillight off). "L" is the low beam position

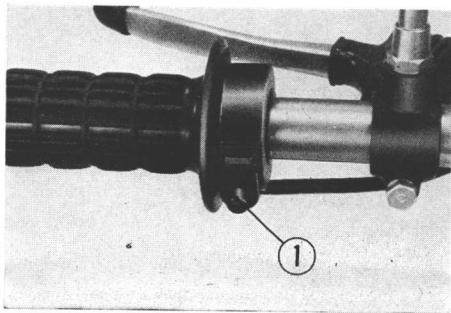
(low beam light and taillight on). "H" is the high beam position (high beam light and taillight on). The headlight will only operate when the main switch is in the "ON" position.



- ① Emergency switch
- ② Headlight control switch

Horn Button

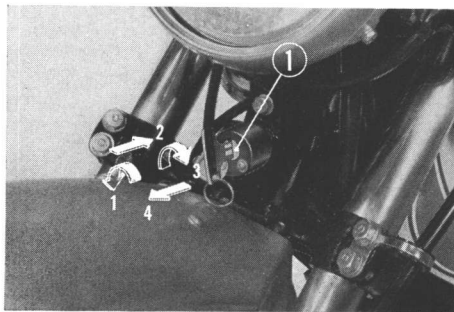
The horn button ① is located on the left handle grip switch housing. Press this button to operate the horn.



① Horn button

Steering Lock

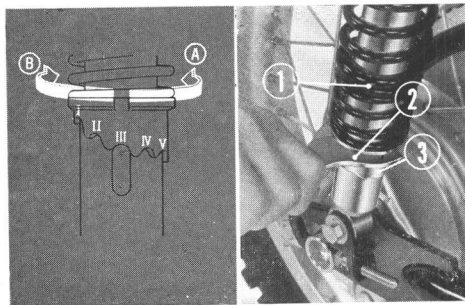
The steering lock ① is located on the steering stem directly below the headlight case. Turn the handle bar all the way to the steering stop, either to the left or right, insert the key into the lock, turn the key counterclockwise 60° and press in, turn the key back to the original position and remove the key. This locks the steering to prevent theft.



① Steering lock

Rear Shock Absorber

The rear shock absorber ① has five settings for different riding conditions. Position (III) is standard setting. Adjustment is performed by using the pin wrench ② contained in the tool kit. Turning the adjuster ③ in direction A softens the rear suspension, turning it in direction B stiffens the rear suspension.

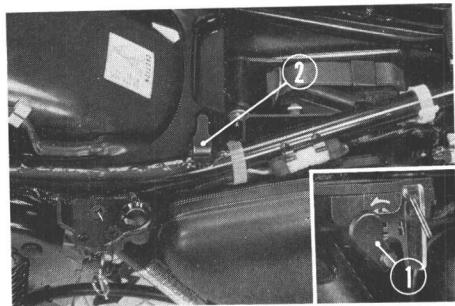


- ① Rear shock absorber
- ② Pin wrench ③ Adjuster

Seat Lock and Helmet Holder

The seat lock ① is located on the lower right side of the seat. Insert the main switch key and turn it counterclockwise 90° to unlock and raise the seat.

The helmet holder ② is located under the seat. Hang the helmet on the hook and lock the seat.



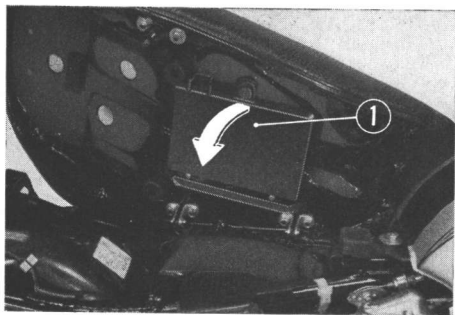
- ① Seat lock ② Helmet holder

Document Compartment

The document compartment ① is located under the seat.

Put this owner's manual and other documents in vinyl sack and place them in the document compartment.

When washing your motorcycle, be careful not to direct a blast of water at the bottom of the seat.



① Document compartment

FUEL AND OIL

Fuel Tank

Fuel tank capacity is **2.1 U.S. gal. (8 ℓ)** including **0.5 U.S. gal. (2 ℓ)** in the reserve supply.

Use of low-lead gasoline with a 91 octane rating or higher is recommended. If such gasoline is not available, you may use a leaded regular grade gasoline.

When refueling, take care to exclude dirt, water, or other contaminants from the fuel tank.

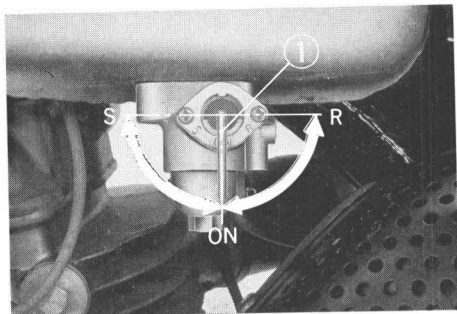
WARNING: Gasoline is flammable, and explosive under certain conditions. Always stop the engine and do not smoke or allow open flames or sparks near the motorcycle when refueling.

Fuel Valve

The fuel valve ① is mounted under the left side of the fuel tank.

“S” position :

When the fuel valve is turned to the “S” position, fuel cannot flow from the fuel tank to the carburetor. Set the valve in this position whenever the motorcycle is not in use.



① Fuel valve

“ON” position :

When the fuel valve is turned to the “ON” position, fuel will flow from the main fuel supply to the carburetor.

Set the valve in this position when the engine is to be operated from the main fuel supply.

“R” position :

When the fuel valve is turned to the “R” position, fuel will flow from the reserve fuel supply to the carburetor.

The fuel valve should be set in this position only after the main fuel supply has been consumed. The reserve fuel supply is 0.5 U.S. gal. (2 ℓ).

When it becomes necessary to switch to the reserve fuel supply, this serves as a warning to the rider that it is time to refill the fuel tank.

Engine Oil Recommendation

Use only high detergent, premium quality motor oil certified to meet or exceed US automobile manufacturer's requirements for Service Classification SE. Motor oils intended for Service SE will show this designation on the container.

The regular use of special oil additives is unnecessary and will only increase operating expenses.

Engine oil should be changed at the intervals prescribed in the maintenance schedule on page 32.

NOTE: Engine oil is a major factor affecting the performance and service life of the engine. Non-detergent and low quality oils are specifically not recommended.

Viscosity

Viscosity selection should be based on the average atmospheric temperature in your riding area. Change to the proper viscosity oil whenever the average atmospheric temperature changes substantially.

Recommended oil viscosity:

General, all temperatures

SAE 10W-40

Temperatures above 59°F

SAE 20W-50

Alternate:

Above 59°F	SAE 30 or 30W
32° to 59°F	SAE 20 or 20W
Below 32°F	SAE 10W

PRE-RIDING INSPECTION

At the start of each riding day, perform a general inspection to be certain the motorcycle is in good, safe operating condition. This inspection will require only a few minutes and can save you much time and expense in the long run. Check the following items and adjust or service if necessary. Refer to the appropriate section of the Owner's Manual for detailed maintenance instructions.

1. ENGINE OIL LEVEL—Measure oil level and add oil if necessary (page 34).
2. FUEL—Check fuel level and fill tank if low (page 16).
3. BRAKES—Check operation of front and rear brakes. Adjust free play if necessary (page 54~56).
4. TIRE AIR PRESSURE—Check with a tire air pressure gauge; normal inflation pressure for both front and rear tires is 21 psi (page 20).
5. DRIVE CHAIN—Check condition of chain and measure chain slack. Adjust if drive chain slack is incorrect. Lubricate if drive chain appears dry. Replace if drive chain is badly worn or damaged (page 49~53).
6. THROTTLE—Check throttle operation in all steering positions. Adjust if free play is incorrect. Replace or correct cable routing if throttle does not operate freely in all steering positions (page 44~45).
7. LIGHTING EQUIPMENT—Check headlight and tail/stoplight. Replace any bulb which fails to light (page 63~65).

TIRE RECOMMENDATION

- Off-the-road tires are standard on this model. Select the right tires in accordance with the following specifications :

Tire Brand	Bridge-stone	Front : TRAIL WING 5A Rear : TRAIL WING 5A
	Nitto	Front : NT-102B Rear : NT-102B
Tire size		Front : 2.75-21 Rear : 4.00-18
Tire inflation pressure (cold)		Front : 21 psi (1.5 kg/cm ²) Rear : 21 psi (1.5 kg/cm ²)
Vehicle load limit		220 lbs (100 kg) operator only

When riding at any speed higher than **60 mph**, use the tires specified below :

Tire Brand	Bridge-stone	Front : TRAIL WING Rear : TRAIL WING
	Nitto	Front : NT-116 Rear : NT-116

- Over or under inflation of the tires causes abnormal tread wear or other defects which may result in serious accidents. Riding with under inflated tires will cause the tires to slip out of place in the rims, damaging the inner-tube valves. When running with a low air pressure below 14 psi (1kg/cm²), be sure to install rim locks (option) on the rear wheel.
- From time to time check tire pressure and correct it, if necessary.
- Replace the tires when the center block height of the tread is less than 0.15 in. (4 mm).

PRECAUTIONS BEFORE RIDING.....

Observe the following precautions:

- When crossing a stream or when riding in a deep puddle, have the ends of the breather pipe and the carburetor flow pipe raised up to the level of seat. At the end of riding, water should be drained from the carburetor float chamber.
- Take care not to block air cleaner suction port in tool tray with a tool bag or rags, this will result in poor engine performance.

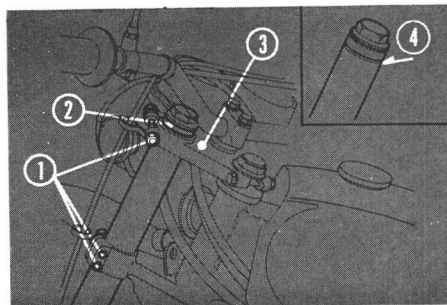
Optional alterations for off-the-road use

Consult your Honda dealer for recommended adjustments and optional alterations best suited to your riding conditions.

- Increasing minimum ground clearance
 1. Loosen the three front fork attach-

ing bolts ① and lower the front fork pipe ② until its upper surface becomes flush with the fork top bridge ③.

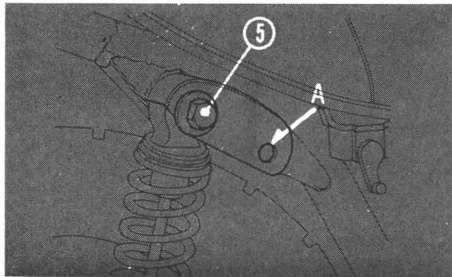
2. Retighten the front fork attaching bolts firmly.



- ① Front fork attaching bolts
- ② Front fork pipe
- ③ Fork top bridge
- ④ Alignment mark

3. Remove the attaching bolt ⑤ at top of the each rear shock absorber, and rebolt the absorber through hole A. Tighten the bolt firmly.

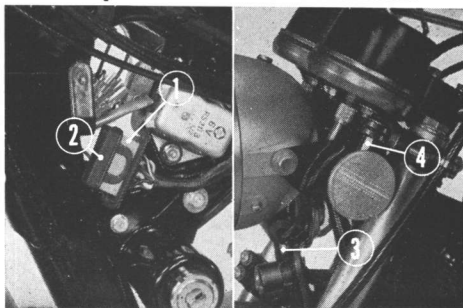
NOTE: When returning the front fork legs to the normal position, align the alignment marks ④ (page 21) even with the upper surface of the fork top bridge.



⑤ Attaching bolt

● Removing headlight

1. Raise the front side of the fuel tank, and disconnect the wire leads at the lead coupler ① and attach the rubber cap ② to the coupler.
2. Disconnect the wire leads running to the instruments.
3. Remove one headlight bracket attaching bolt ③ and two nuts ④.
4. Reinstall the two nuts if not removing the speedometer and tachometer.

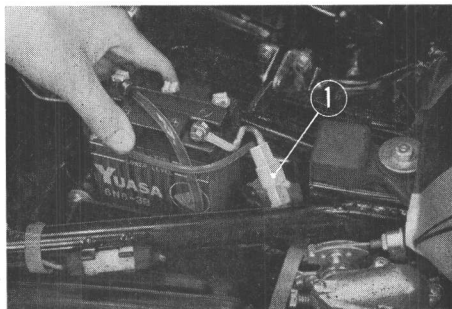


① Lead coupler
② Rubber cap

③ Attaching bolt
④ Nuts

● Removing battery

1. Raise the seat and remove the tool tray.
2. Loosen the battery holding band.
3. Disconnect the battery cable connector ① and remove the battery.



① Battery cable connector

● Replacing final drive and driven sprockets:

When replacing the drive sprocket and the driven sprocket, the drive chain and the rear brake anchor arm (page 24) ① and the rear axle ⑦ (page 25) should be installed in the combination shown on the table below:

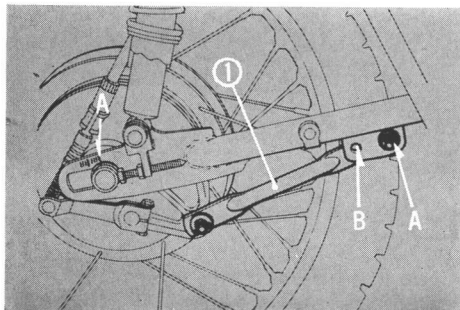
	No. of drive sprocket teeth	No. of driven sprocket teeth	No. of drive chain links	Brake anchor & axle position
Standard	15	48	98	A
Option I	15	51 (option)	100 (opt on)	A
Option II	14 (option)	48	98	A
Option III	14 (option)	51 (option)	100 (opt on)	A

NOTE: To increase the clearance between the rear wheel and rear fender, move the rear brake anchor arm and

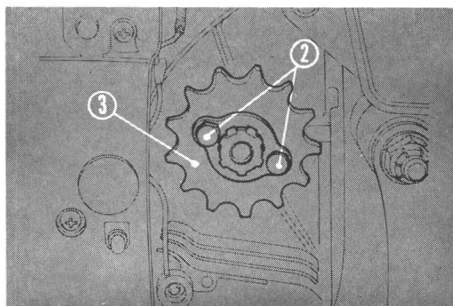
the rear axle to position B by using the following combinations:

No. of drive sprocket teeth	No. of driven sprocket teeth	No. of drive chain links	Brake anchor & axle position
15	48	100	B
14	48	100	B

1. Take off the drive chain clip and master link, and remove the drive chain from the sprockets.
2. Remove the crankcase rear left cover and the two 6 mm bolts ②, so that the drive sprocket ③ can be removed.

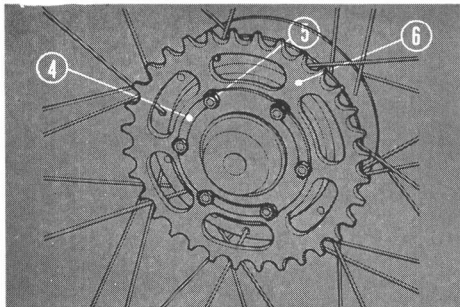


① Rear brake anchor arm



② 6 mm bolts ③ Drive sprocket

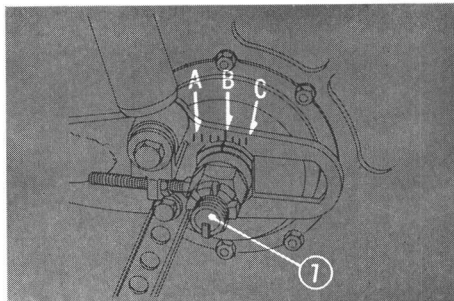
3. Remove the rear wheel from the frame according to instructions on page 60~61. Straighten the tab of the lock nut washers ④ and unscrew the six lock nuts ⑤ securing the driven sprocket ⑥ and remove the driven sprocket.
4. The drive sprocket and driven sprocket should be installed in the reverse order of 1. to 3. Make sure that each tab of the lock washers is bent toward nut head after tightening.



④ Lock nut washers ⑤ Lock nuts
⑥ Driven sprocket

5. Rear axle ⑦ position varies with the number of the drive chain links. Install rear axle in position A when using a 98- or 100-link chain. Install it in position B when extending wheelbase and using a 100-link chain.

NOTE: If it becomes necessary to move the rear axle farther back than the applicable position indicated in the tables on pages 23 and 24, then the drive chain is excessively worn and should be replaced.

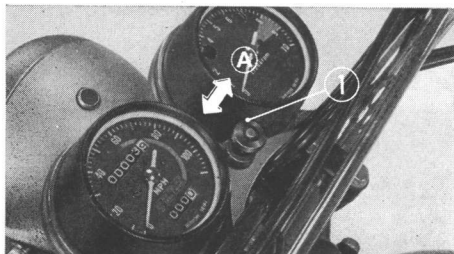


⑦ Rear axle

STARTING THE ENGINE

Starting a Cold Engine

1. Turn the fuel valve to the "ON" position (page 17).
2. Insert the key into the main switch and turn to the "ON" position. At this time observe the neutral indicator light on the left side of the tachometer. The light will be lit when the transmission is in the neutral position (page 10).
3. Pull the choke knob out to the full closed position ①.



① Choke knob

4. Twist the throttle grip inward slightly (do not twist it too much, but approx. $\frac{1}{8}$ turn.) and operate the kick starter with the right foot, starting from the top of the stroke and following through to the bottom with a rapid and continuous kick. Operate several times until engine starts. The engine can be kick-started with the clutch lever pulled in regardless of the gear selected.

If the engine fails to start after several repeated attempts, it may have become flooded with excess fuel. To deflood the engine, turn off the main switch and push the choke knob in to the full open position, twist the throttle grip inward fully and crank the engine using the kick starter pedal.

This is then followed by turning the main switch to the "ON" position and

following the starting procedure outlined in steps 1 through 4, however, at this time the use of the choke is not necessary.

5. After starting, warm up the engine at approximately 1,500 rpm until the engine properly responds to the throttle with the choke fully open (pushed in).

Starting in Extremely Cold Weather

Prime the engine before starting by cranking several times with the kick starter pedal. The main switch should be "OFF", the choke fully closed (pulled out) and the throttle opened. Follow by the starting procedure for a cold engine.

Starting a Warm Engine

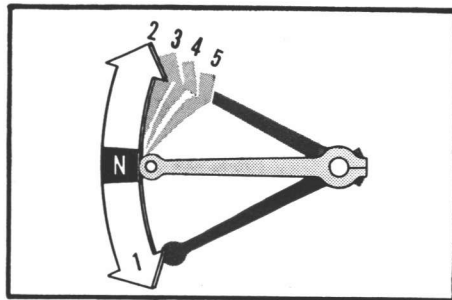
When the engine is to be re-started while still warm, proceed as for cold engine starting, however, do not use the choke.

BREAK-IN PROCEDURE

During the first 600 miles (1,000 km), operate your new XL 250 so the engine neither pulls laboriously nor exceeds 80% of the maximum rpm in the respective gear. Avoid full throttle operation, and select your gear changes to spare the engine undue stress. Careful break-in procedure during the initial mileage will measurably extend the service life of the engine.

RIDING THE MOTORCYCLE

1. After the engine has been warmed up, the motorcycle is ready for riding.
2. While the engine is idling, pull in the clutch lever and depress the gear change pedal to shift into low (1st) gear.
3. Slowly release the clutch lever and at the same time gradually increase engine speed by twisting the throttle grip inward; coordination of the throttle and clutch lever will assure a smooth positive start.
4. When the motorcycle attains a moderate speed, close the throttle, pull in the clutch lever and shift to 2nd gear by raising the gear change pedal.
5. This sequence is repeated to progressively shift to 3rd, 4th and 5th (top) gear.
6. When decelerating the motorcycle, coordination of the throttle and the



Shifting pattern

front and rear brakes is important.

- 1) The smooth gradual application of both the front and rear brakes together with the required throttle coordination will, under most conditions, assure good control and stability during deceleration. As the motorcycle speed is reduced, it

is common practice to shift the transmission progressively into the gear appropriate for the speed of the motorcycle. This assures maximum control through better braking effectiveness and better acceleration when necessary.

- 2) For maximum deceleration and stopping, close the throttle, apply both the front and rear brakes simultaneously, and as the motorcycle comes to a stop, disengage the clutch. This maneuver requires smooth coordination of the controls.

Both front and rear brakes should be applied equally. Independent use of only the front or rear brake reduces stopping performance. Excessive brake application may cause either wheel to lock, reducing control of the motorcycle. Avoid locking the wheels. If ex-

cessive brake application causes either wheel to lock, reduce applied pressure on the brake pedal or lever.

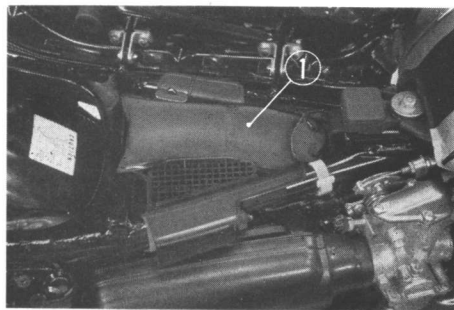
WARNING: The exhaust pipe and muffler become very hot during operation. Wear clothing which will completely cover the legs while riding, and avoid any contact with unshielded portions of the exhaust system.

PARKING

When parking the motorcycle, turn the main switch to the "OFF" position and remove the key. Also, the steering should be locked and the fuel valve turned to the "S" position.

TOOL KIT.....

The tool kit ① is mounted under the seat. Minor adjustment and parts replacement can be performed with the tools contained in the kit. Adjustments or repairs which cannot be performed with these tools should be referred to your Honda dealer.



① Tool kit

● Listed below are the items included in the tool kit.

- 10×12 mm open end wrench
- 14×17 mm open end wrench
- Pliers
- No. 2 screw driver
- No. 2 cross point screw driver
- No. 3 cross point screw driver
- Screw driver grip
- Screw driver handle
- 26 mm wrench and handle lever
- Spark plug wrench
- Pin wrench
- Tool bag

● Items provided with the motorcycle in a separate package

- A can of touch-up paint
- Spare battery fuse

MAINTENANCE SCHEDULE.....

The mileage intervals shown in the maintenance schedule are intended as a guide for establishing regular maintenance and lubrication periods for your Honda. Sustained severe or high speed operation under adverse conditions may necessitate more frequent servicing. To determine specific recommendations for conditions under which you use your motorcycle, consult your authorized Honda dealer. If your Honda XL-250 is ever overturned or involved in a collision, have your Honda dealer carefully inspect the major components, eg. frame, suspension and steering parts, for misalignment or damage to insure further safe operation.

Service Required		Months or Miles, whichever occurs first					Page Reference
		First	Sec- ond	Third	Thereafter Repeat Every		
					6	12	
Mile	200	3,000	6,000	3,000	6,000		
Km	300	5,000	10,000	5,000	10,000		
Engine Oil-change		○	Every 1,000 Miles (1,600 Km)			34	
Oil Filter-clean		○		○		36	
Spark Plugs-clean and adjust or replace			○	○	○	37	
*Contact Breaker Points-check or service			○	○	○	38	
*Ignition Timing-check or adjust		○	○	○	○	39	
*Valve Tappet Clearance-check or adjust		○	○	○	○	40	
*Cam Chain-adjust		○	○	○	○	42	
Air Cleaner-clean and			○		○	43	
replace				○	○	43	
Throttle Operation-check			○	○	○	44	
*Carburetor-check or adjust			○	○	○	45	
Fuel Valve Strainer-clean			○	○	○	46	
Fuel Tank and Fuel Lines-check			○	○	○	—	
Clutch-check or adjust		○	○	○	○	47	

Items marked * should be serviced by an authorized Honda dealer, unless the owner has proper tools and is mechanically proficient. All other maintenance items are simple to perform and may be serviced by any owner.

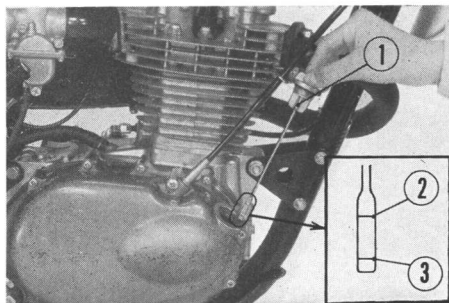
Service Required		Months or Miles, whichever occurs first					Page Reference
		First	Sec- ond	Third	Thereafter Repeat Every		
					6	12	
Mile	—	6	12	6	12		
Km	200	3,000	6,000	3,000	6,000		
	300	5,000	10,000	5,000	10,000		
Drive Chain and Sprockets-adjust and lubricate or replace		○	Every 500 miles (800 km)			49	
*Front and Rear Brake-adjust		○	○	○	○	54	
Front and Rear Brake Shoes-check or replace				○	○	—	
Front and Rear Brake Linkage-check			○	○	○	—	
Wheel Rims and Spokes-check		○	○	○	○	54	
Tires-check or replace			○	○	○	—	
Front Fork Oil-change			○		○	57	
Steering Head Bearings-check or adjust				○	○	—	
Side Stand Springs-check			○	○	○	58	
Rear Fork Bushing-grease			○	○	○	59	
*Battery Electrolyte Level-check and replenish if necessary		○	○	○	○	61	
*Lights, Horn, Speedometer and Tachometer-check for operation or adjust			○	○	○	63 10	

MAINTENANCE OPERATIONS

Engine Oil Level

Check engine oil level at the start of each day the motorcycle is to be operated. The oil filler cap ① is located on the right crankcase cover and contains a dipstick for measuring oil level. Oil level must be maintained between the upper ② and

lower ③ oil level marks on the dipstick. Oil level must be checked with the motorcycle standing upright on level ground and the oil filler cap touching the surface of the filler orifice but not screwed in.

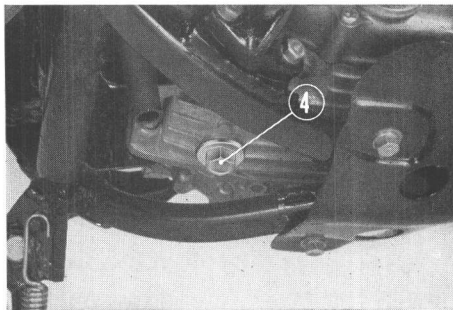


- ① Oil filler cap ② Upper level mark
③ Lower level mark

Engine Oil Change

Engine oil should be changed in accordance with the maintenance schedule on page 32. Use only motor oil of the grade and viscosity recommended on page 18. When changing oil, drain the used oil from the crankcase while the engine is warm. This will ensure complete and rapid draining.

1. Remove the oil filler cap ① from the right crankcase cover.
2. Place a drip pan under the engine to catch the oil, and then remove the drain plug ④ with a 17 mm wrench.
3. After the oil stops draining from the crankcase, operate the kick starter several times to drain any oil which may be left in the engine.



④ Drain plug

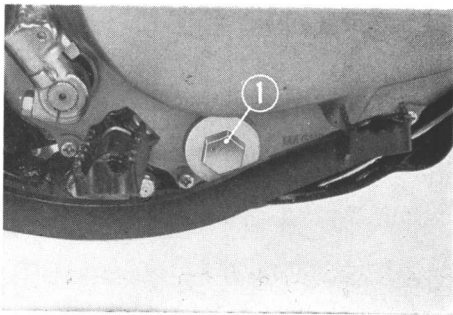
4. When the oil has been completely drained, reinstall the drain plug making sure that the sealing washer used on the plug is in good condition.
5. Fill the crankcase through the oil filler orifice with approximately **1.6 US qt. (1.5 ℓ)** of recommended grade oil. Make sure that the oil level is between the upper ② and lower ③ level marks (page 34).

NOTE: When operating the motorcycle under unusually dusty conditions, it is recommended that the oil changes be performed at more frequent intervals than that specified in the maintenance schedule.

Oil Filter Maintenance

To clean the oil filter, proceed as follows :

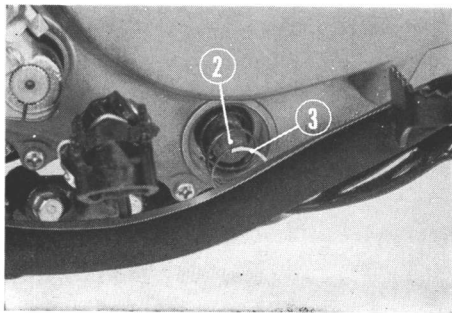
1. Remove the oil filter cap ①.
2. Remove the spring ③ and oil filter screen ②, and wash them with solvent.
3. Reinstall the screen, spring, and cap as illustrated below.



① Oil filter cap

NOTE : Unless the motorcycle is tilted more than 25 degrees to the left side, crankcase oil will drain through the oil filter opening when the cap is removed.

To avoid oil spillage, it is best to clean the oil filter after draining the crankcase, during periodic oil changes.



② Oil filter screen ③ Spring

Spark Plug Replacement and Adjustment

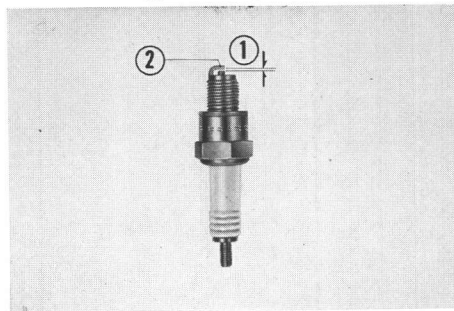
The standard spark plug for this model is **NGK D8ES-L**.

For most riding conditions this spark plug heat range number is satisfactory. However, if the motorcycle is going to be operated for extended periods at high speeds or near maximum power in hot climates, the spark plug should be changed to a colder heat range number, such as the **NGK D8ES** or its equivalent. Be sure to clean mud and sand from around the spark plug before removing it. The use of the optional plug cap is recommended if the motorcycle is subject to frequent off-the-road riding.

1. Detach the high tension cord cap and remove the spark plug with the spark plug wrench provided in the tool kit.
2. Inspect the electrodes and center porcelain of the spark plug for deposits, eroded electrodes, or carbon fouling. If the spark plug deposits are

heavy, or the electrodes appear to be eroded excessively, replace the spark plug with a new one. If the spark plug is carbon or wet fouled, the plug can sometimes be cleaned with a stiff wire such as a pin.

3. Adjust the spark plug gap ① to **0.024–0.028 in. (0.6–0.7 mm)**. The gap can be measured with a feeler gauge. The adjustment is made by bending the side (grounded) electrode ②.



① Spark plug gap ② Side electrode

Before installing the spark plug, clean any oil or dirt from the spark plug seat in the cylinder head.

Install the spark plug by hand until finger tight. Then use the spark plug wrench to tighten the plug an addition $1/2$ to $3/4$ turn or until the sealing gasket is compressed.

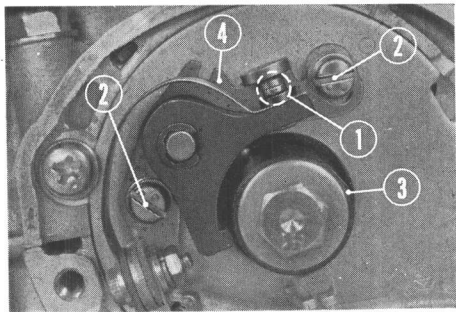
Contact Breaker Point Gap and Ignition Timing Adjustment

Adjustment of the point gap and ignition timing should be made at one time. To adjust, proceed as follows:

Contact Breaker Point Gap:

1. Place a block under the engine and stand the motorcycle upright. Remove the generator cover and the point cover.
2. Wipe the contact breaker point surfaces with clean rag if dirty.
3. Turn the generator rotor counter-clockwise by using a 17mm box wrench and check the point gap when it is at its maximum. The correct gap is **0.012–0.016 in. (0.3–0.4 mm)**. To adjust the point gap, loosen the contact breaker plate locking screws ② (page 39) and move the contact breaker point plate ④ to obtain the correct gap.

Tighten the locking screws when the correct gap is obtained. Recheck the gap after tightening the locking screws.

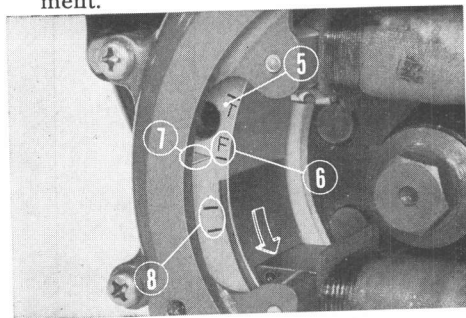


- ① Contact breaker point
- ② Contact breaker plate locking screws
- ③ Point Cam
- ④ Contact breaker point plate

Ignition Timing ·

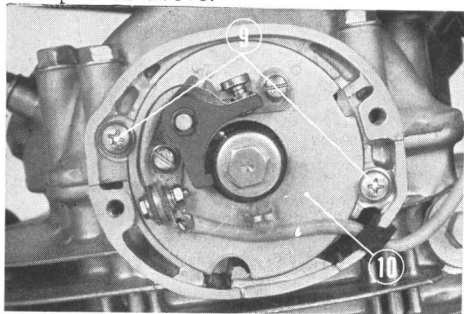
Adjust the ignition timing upon completing the adjustment of the contact breaker point gap.

1. Turn the generator rotor ⑤ counter-clockwise and align the "F" mark ⑥ with the index mark ⑦. The ignition timing is correct if the contact breaker points ① start opening at this moment.



- ⑤ Generator rotor
- ⑦ Index mark
- ⑥ "F" mark
- ⑧ Advance marks

2. If ignition timing is incorrect loosen the two base plate locking screws ⑨ and turn the base plate ⑩ slowly in either direction. Turning it clockwise will advance timing, and vice versa. Use of a stroboscopic timing light is recommended to obtain accurate setting. After adjustment, make sure that the "F" mark is aligned with index mark at an idle speed of 1,200 rpm, and also that index mark stays within advance marks ⑧ (page 39) at 4,000 rpm. or above.

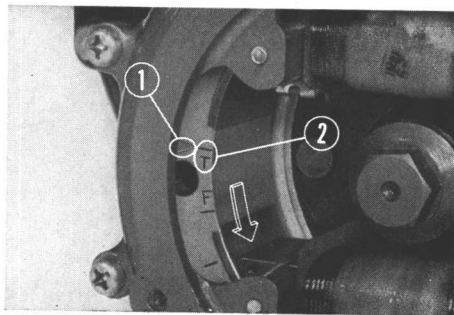


⑨ Base plate locking screws ⑩ Base plate

Valve Tappet Adjustment

Excessive valve tappet clearance will cause tappet noise, and little or no clearance will cause valve damage and loss of power. Therefore, valve tappet clearance should be maintained properly.

1. Raise the seat and remove the fuel tank.
2. Remove the intake and exhaust tappet covers.
3. Remove the generator cover.



① Index mark ② "T" mark

4. While slowly rotating the generator rotor counterclockwise watch the intake valve tappet.

When this tappet goes down all the way and then starts to lift, you must then watch for the alignment of the index mark ① and "T" mark ②. In this position, the piston will be at T.D.C. (top dead center) of the compression stroke and the intake and exhaust valves should be fully closed.

5. Check the clearance of both valves by inserting the feeler gauge ③ between the valve stem and the tappet adjusting screw ④. If the clearance is correct there will be slight drag or resistance as the gauge is inserted.

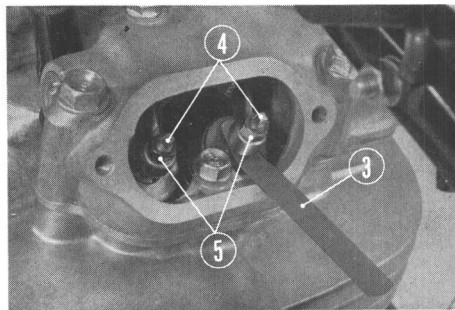
The standard tappet clearance is :

In 0.002 in. (0.05 mm)

Ex 0.003 in. (0.08 mm)

Adjust tappet clearance by loosening the lock nuts ⑤ and turning the tappet adjusting screws ④. Tighten the lock nuts after adjusting the tappets.

NOTE : Make sure that the adjustment has not been disturbed while tightening the lock nut.

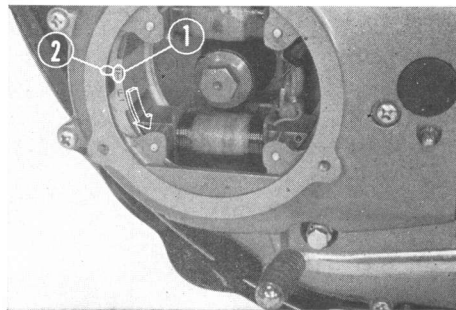


③ Feeler gauge ④ Tappet adjusting screws
⑤ Lock nuts

Cam Chain Adjustment

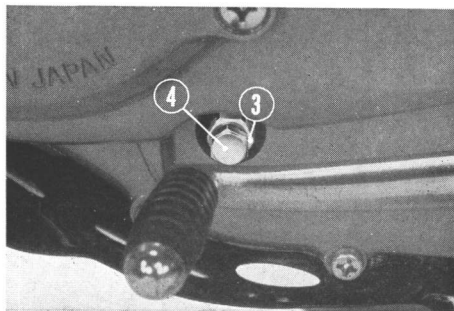
When cam chain is noisy, adjust its tension in the following manner :

1. Stop the engine.
2. Remove the generator cover.
3. Align the "T" mark ① with the index mark ② when the piston is at top dead center on the compression stroke. See valve tappet adjustment (page 40 ~ 41).



① "T" mark ② Index mark

4. Loosen the cam chain adjuster lock nut ③.
5. Hold the generator rotor and loosen the cam chain adjuster ④. Tension is automatically applied to the cam chain.
6. Tighten the cam chain adjuster and the lock nut.

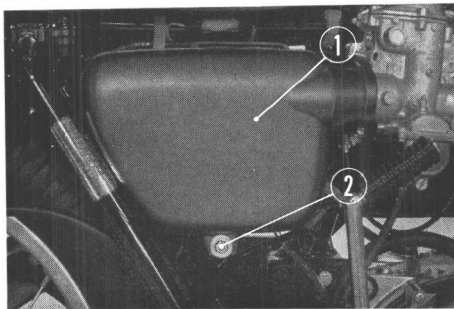


③ Cam chain adjuster lock nut
④ Cam chain adjuster

Air Cleaner Maintenance

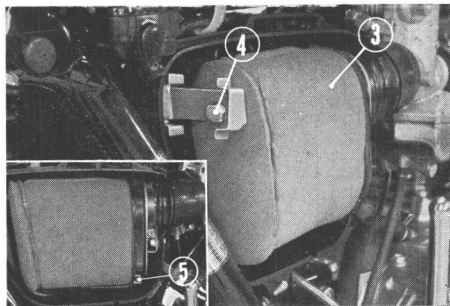
The air cleaner element must be cleaned and oiled at least once every 3000 miles. If your motorcycle is operated in dusty areas, more frequent servicing will be required. Your Honda dealer can help you to determine the correct service interval for your particular riding conditions.

1. Remove the air cleaner cover ①.
2. Remove the air cleaner element ③.



- ① Air cleaner cover
- ② Air cleaner cover attaching nut

3. Wash the air cleaner element in clean stoddard solvent and allow to dry thoroughly.
4. Soak the air cleaner element in clean gear oil (#80~#90) until saturated, then squeeze out excess oil.
5. Reinstall the air cleaner element.
6. Reinstall the air cleaner cover.



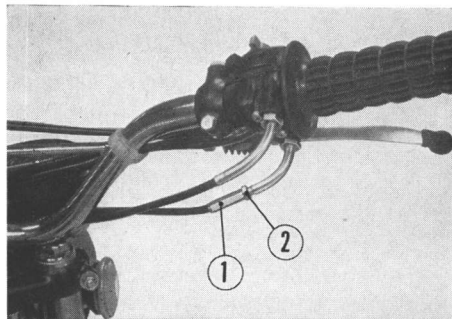
- ③ Air cleaner element
- ④ Air cleaner element attaching bolt
- ⑤ Air cleaner band screw

WARNING :

Gasoline or low flash point solvents are highly flammable and must not be used to clean the air cleaner elements.

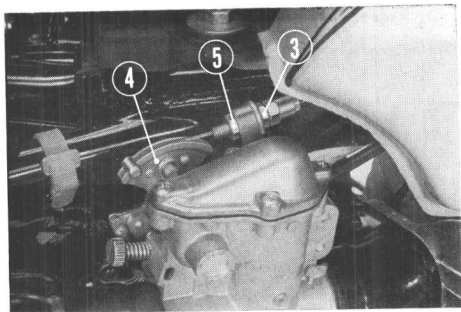
Throttle Cable Adjustment

Two control cables connect the throttle grip to a throttle crank on the carburetor operating bar. One cable opens the throttle valve, while the other cable ensures positive closure. Standard throttle grip free play is approximately 10–15° of grip rotation. This play can be adjusted at the grip play upper adjuster ① and also with the grip play lower adjuster ③.



① Grip play upper adjuster ② Lock nut

Major free play adjustments are made with the lower adjuster ③ (such as after replacing a throttle cable or removing the carburetor). Minor free play adjustments are made with the upper adjuster ①. To adjust free play, loosen the lock nut and turn the adjuster. When performing the adjustment, both the opening and closing sides of the adjusters should be adjusted by equal amounts. Tighten the



- ③ Grip play lower adjuster
④ Throttle crank ⑤ Lock nut

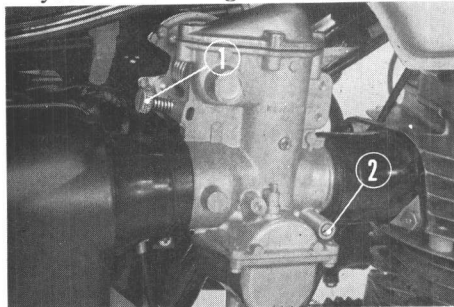
lock nut after adjustment. Check for smooth rotation and snap back tension of the throttle grip from the full open to the full closed positions with the steering to the full right and left as well as straight ahead.

Inspect the condition of the throttle cable housings and the cables for kinks, chafing and improper routing.

Carburetor Adjustment

The carburetor should be adjusted only after the engine has attained operating temperature.

1. Adjust the idle speed screw ① until the engine idles at approximately 1,200 R.P.M. Turn the idle speed screw clockwise to increase idle speed or counterclockwise to decrease idle speed.
2. Turn the air screw ② clockwise until you hear the engine miss or decrease



- ① Idle speed screw ② Air screw

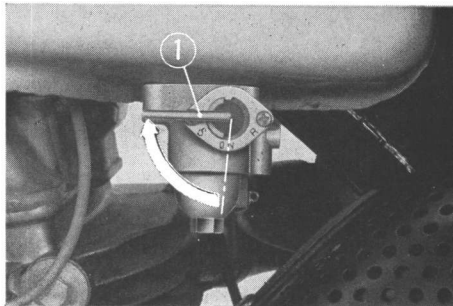
in speed, then counterclockwise until the engine again misses or decreases in speed. Set the air screw exactly between these two extreme positions. Usually the correct setting (between extremes of rich and lean) will be found to be $7/8 \sim 15/8$ turns open from a fully closed position.

3. If idle speed changes after adjusting fuel mixture, readjust the idle speed screw.

Fuel Filter Maintenance

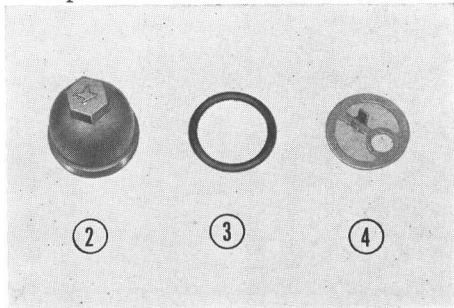
The fuel filter is incorporated in the fuel valve ① which is mounted on the bottom of the fuel tank at the left side. Accumulation of dirt in the filter will restrict the flow of the fuel and cause the carburetor to malfunction, therefore, the fuel filter should be serviced periodically.

1. Turn the fuel valve ① to the "S" position.



① Fuel valve

2. Unscrew the fuel filter cap ②. Wipe all sediment from the inside of the cap.
3. Remove the "O" ring seal ③ and the filter screen ④. Clean the filter screen.
4. Reinstall the filter screen, "O" ring, and cap.
5. Turn the fuel valve to the "ON" position and check for leakage at the filter cap.



② Fuel filter cap ③ "O" ring seal
④ Filter screen

Clutch Adjustment

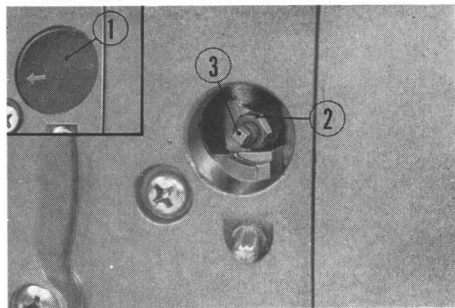
The clutch should be adjusted so that pulling in the clutch lever will completely disengage the transmission. If the clutch does not completely disengage, the engine will stall when shifting into gear or else the motorcycle will have the tendency to creep even with the clutch lever disengaged.

If the clutch does not fully engage, the clutch will slip and the motorcycle will not accelerate in response to the acceleration of the engine. In order for the full engine output to be delivered to the rear wheel, it is necessary to have the clutch properly adjusted.

The normal clutch lever free play is **0.4-0.8 in. (10-20 mm)** at the lever end before the clutch starts to disengage.

To adjust, perform the following steps.

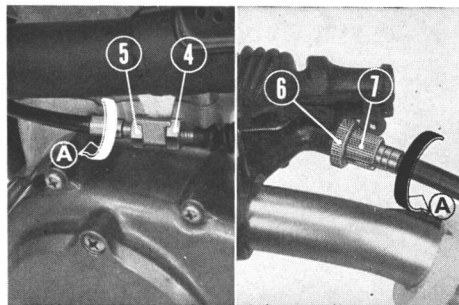
1. Remove the clutch adjuster rubber cap ①.
2. Loosen the clutch adjuster lock nut ②, and turn the clutch adjuster ③ clockwise until it stops. Then turn it counterclockwise $1/2 \sim 1$ turn, and lock it in place by tightening the lock nut. After adjustment, install the rubber cap with its arrow mark aligned with the dot on the crankcase.



- ① Clutch adjuster rubber cap
- ② Clutch adjuster lock nut
- ③ Clutch adjuster

3. Clutch lever free play can be adjusted at either end of the clutch cable. Major adjustments (such as after replacing the clutch cable) should be made at the lower adjuster ⑤. Minor adjustments should be made at the upper adjuster ⑦.

The adjustment procedure is similar for using either the upper or lower adjuster.



- ④ Lock nut ⑤ Clutch cable lower adjuster
- ⑥ Lock nut ⑦ Clutch cable upper adjuster

Loosen the lock nut (④ lower or ⑥ upper), turn the adjuster (⑤ lower or ⑦ upper) to provide the correct clutch lever free play, then retighten the adjuster. Turning the adjuster in direction A will decrease free play and vice versa.

4. After the adjustment has been made, check to see that the clutch is not slipping or that the clutch is properly disengaging according to the following procedure. After the engine starts, pull in the clutch lever and shift into gear, and make sure that the engine does not stall, nor the motorcycle start to creep. Gradually release the clutch lever and open the throttle, the motorcycle should start smoothly and accelerate gradually.

Drive Chain Maintenance

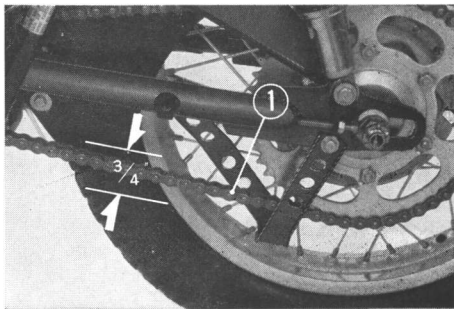
Proper tensioning and lubrication will help to extend the service life of the drive chain and ensure smooth power transmission to the rear wheel. Under severe usage, or when the motorcycle is ridden in unusually dusty areas, more frequent maintenance is necessary.

Tension Adjustment:

1. Place the motorcycle on a support block to raise the rear wheel off the ground. Shift the transmission into neutral.
2. Check vertical movement of the lower length of the drive chain at a point midway between the sprockets. Move the chain up and down with your fingers and observe the amount of slack. Drive chain tension should be adjusted to allow approximately $\frac{3}{4}$ " vertical movement at this point. Rotate the rear wheel and check drive chain tension throughout its length.

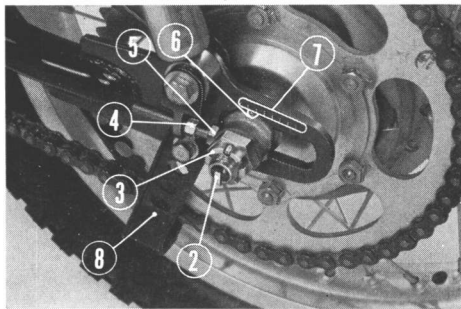
Drive chain tension should remain constant as the wheel is rotated.

If the chain is found to be slack in one segment of its length and taut in another, this indicates that some of the links are either worn or kinked and binding. Kinking and binding can frequently be eliminated by lubrication.



① Drive chain

3. If the drive chain is found to require adjustment, the procedure is as follows:
 - a. Remove the rear axle nut cotter pin ② and loosen the rear axle nut ③.
 - b. Loosen the lock nuts ④ and turn the adjusting bolts ⑤ to increase or decrease chain tension. Align the chain adjuster index marks ⑥



- | | |
|-------------------|-------------------|
| ② Cotter pin | ③ Rear axle nut |
| ④ Lock nut | ⑤ Adjusting bolt |
| ⑥ Index mark | ⑦ Reference marks |
| ⑧ Chain protector | |

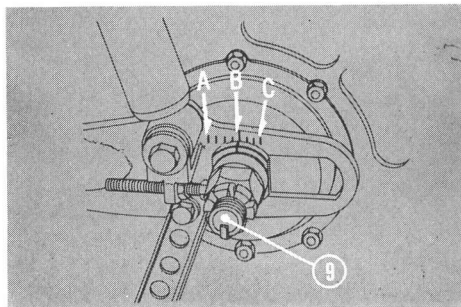
to the reference marks ⑦ on both sides of the rear fork.

- c. Tighten the rear axle nut and secure the nut with the cotter pin (replace the cotter pin if it has become broken or damaged). And then tighten the lock nuts ④.
- d. Recheck drive chain tension.
- e. Rear brake pedal free travel is affected when repositioning the rear wheel to adjust drive chain tension. Check rear brake pedal free travel and adjust as necessary (page 56).

CAUTION: Check alignment of the chain protector ⑧. If the chain protector should become bent, it may rub against the drive chain and cause rapid wear.

NOTE: If correct drive chain adjustment requires the rear axle to be moved back farther than the applicable positions indicated in the tables on pages 23 and 24, then the drive chain is excessively worn and should be replaced.

For example, if the table specifies axle position A for your sprocket and drive chain combination, then the chain should be considered excessively worn



⑨ Rear axle

when it becomes necessary to move the rear axle to position B.

Similarly, if the table specifies axle position B, then the chain should be considered excessively worn when it becomes necessary to move the rear axle to position C.

Lubrication :

Lubricate the drive chain every 500 miles. Commercially prepared drive chain lubricants may be purchased at most motorcycle shops and should be used in preference to motor oil or other lubricants.

Saturate each chain joint so that the lubricant will penetrate the space between adjacent surfaces of link plates and rollers.

Removal and Cleaning :

When the drive chain becomes extremely dirty, it should be removed and cleaned prior to lubrication.

1. Carefully remove the master link retaining clip with pliers. Do not bend or twist the clip. Remove the master link. Remove the drive chain from the motorcycle.
2. Clean the drive chain in solvent and allow to dry. Inspect the drive chain for possible wear or damage. Replace any chain that has damaged rollers, loose fitting links, or otherwise appears

unserviceable.

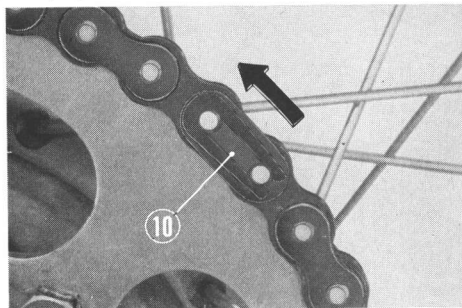
3. Inspect the sprocket teeth for possible wear or damage. Replace if necessary. Never use a new drive chain on badly worn sprockets. Both chain and sprockets must be in good condition, or the new replacement chain or sprocket will wear rapidly.
4. Lubricate the drive chain.
5. Pass the chain over the sprockets and join the ends of the chain with the master link. For ease of assembly, hold the chain ends against adjacent rear sprocket teeth while inserting the master link.

Install the master link retaining clip ⑩ so that the closed end of the clip will face the direction of forward wheel rotation.

The master link is the most critical part affecting the security of the drive chain. Master links are reusable, if they remain in excellent condition,

but it is recommended that a new master link retaining clip be installed whenever the drive chain is reassembled.

6. Adjust the drive chain to the proper tension, following the instructions on page 49~51.



⑩ Retaining clip

Wheel Spoke Retighening

Retighten the wheel spokes after the first 600 miles (1,000 Km) and every 3,000 miles (5,000 Km) thereafter.

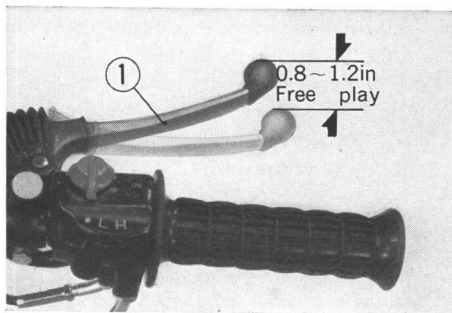
Torque specification :
20~45 kg. mm.

Front Brake Adjustment

Free play, measured at the tip of the front brake lever ①, should be maintained at **0.8–1.2 in. (20–30 mm)**. Free play is the distance the brake lever moves before the brake starts to engage.

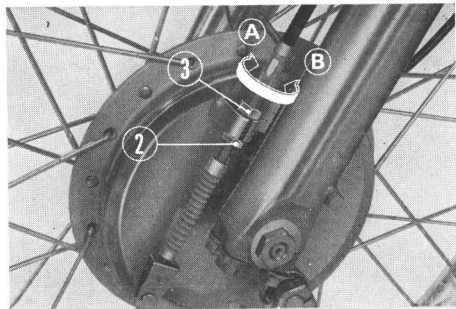
Major adjustments should be made using the adjuster located at the front wheel.

1. Loosen the lock nut ② and then turn the front brake adjusting nut ③.



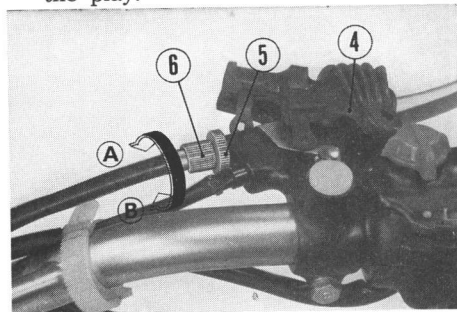
① Front brake lever

Turning the nut in the direction ① will decrease the brake lever free play and turning the nut in the direction ② will increase the play.



- ② Lock nut
- ③ Front brake adjusting nut

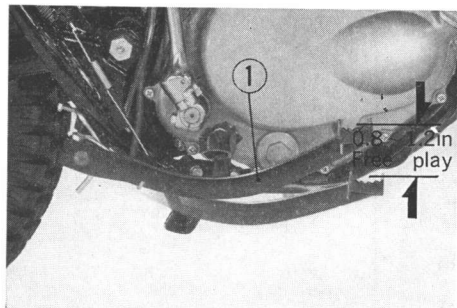
2. Minor adjustments can be made with the front brake cable adjuster on the front brake lever. Remove the dust cover ④, loosen the lock nut ⑤ and turn the front brake cable adjuster ⑥. Turning the adjuster in direction ① will decrease the brake lever free play and turning the adjuster in direction ② will increase the play.



- ④ Dust cover
- ⑤ Lock nut
- ⑥ Front brake cable adjuster

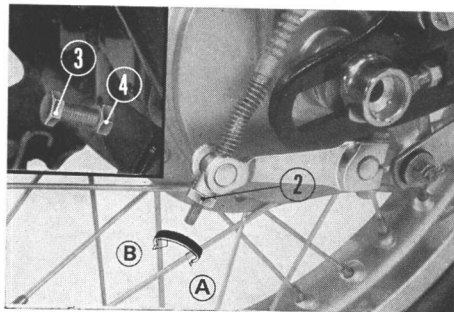
Rear Brake Adjustment

Rear brake pedal free play, measured at the tip of the rear brake pedal ①, should be maintained at **0.8–1.2 in. (20–30 mm)**. Free play is the distance the brake pedal moves before the brake starts to engage.



① Rear brake pedal

1. Adjust the static position of the brake pedal to suit the rider by adjusting the pedal stopper bolt ③.
2. Adjust the pedal free play by turning the rear brake adjusting nut ②. Turning the adjusting nut in direction A will decrease the brake pedal free play and turning the nut in direction B will increase the play.

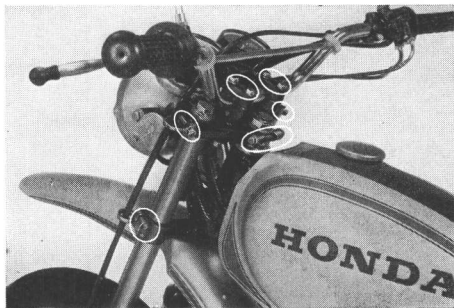


② Rear brake adjusting nut

③ Pedal stopper bolt ④ Lock nut

Front Suspension Inspection

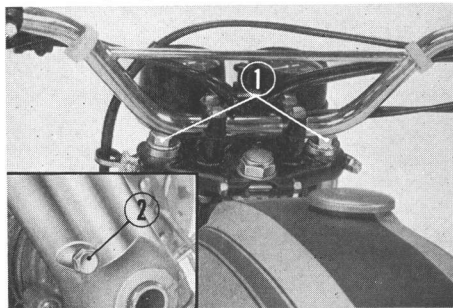
Check front fork action by locking the front brake and pumping the forks up and down several times. The suspension should function smoothly, with no oil leakage from the fork legs. Damaged, binding, or leaking front forks should be repaired before the motorcycle is operated. Check security of all front forks and handlebar mounting bolts illustrated below.



Front Fork Oil Change

Oil in both front fork legs should be changed at least once a year.

1. Remove drain plugs ② from each fork leg and pump the forks several times to ensure complete draining.
2. Reinstall drain plugs and block up the front of the motorcycle.
3. Remove the handlebars and the oil filler plugs ①.



① Oil filler plugs

② Drain plug

4. Refill each fork leg with 4.9 oz. (145 cc) of premium quality automatic transmission fluid (ATF).
5. Install filler plugs, handlebars, and remove block from under motorcycle.

Rear Suspension Inspection

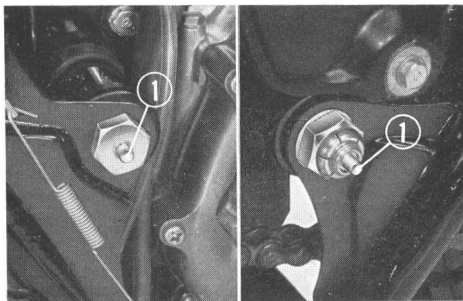
Check the rear suspension periodically by careful visual examination. Note the following items.

1. Rear fork bushing—this can be checked by pushing hard against the side of the rear wheel while the motorcycle is on a support block and feeling for looseness of the fork bushings.
2. Check side stand spring for damage.
3. Check all suspension components attachment points for security of their respective fasteners.

NOTE : If any of the above components appear damaged or worn, consult your Honda dealer for further inspection.

Rear Suspension Lubrication

There are grease fittings at each end of the rear fork pivot. The rear fork pivot should be lubricated every 3000 miles (5000 km) with multipurpose grease, type NLGI No. 2.



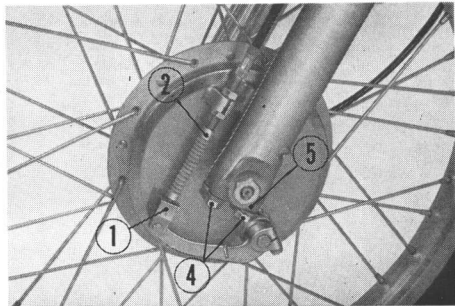
① Grease nipples

Front Wheel Removal

To remove the front wheel, proceed as follows:

1. Place a wood block under the engine and raise the front wheel off the ground.

2. Remove the cotter pin ① and disconnected the front brake cable ② from the brake arm.
3. Remove the speedometer cable set screw ⑥ and disconnect the speedometer cable ③ (page 60).
4. Remove the front axle holder nuts ④ (four on each side), and remove the front axle holders (one on each side),

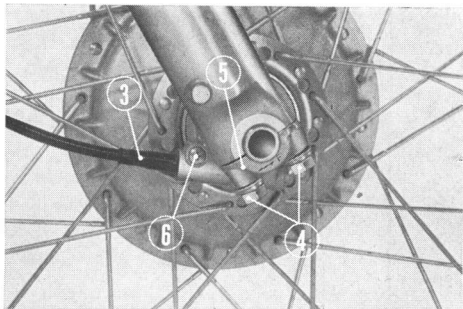


① Cotter pin ② Front brake cable
④ Front axle holder nuts
⑤ Front axle holder

and then the front wheel can be removed.

5. To install the front wheel, follow the reverse of removal procedure outlined in steps 1 through 4.

NOTE: When installing the front axle holders, make sure the "F" mark is forward.

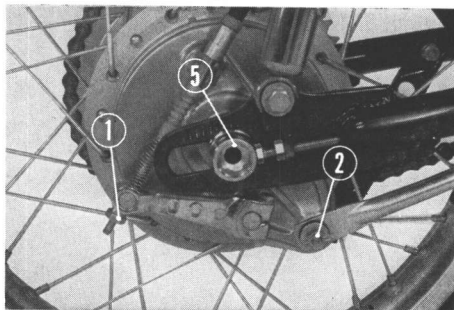


- ③ Speedometer cable
- ④ Front axle holder nuts
- ⑤ Front axle holder
- ⑥ Speedometer cable set screw

Rear Wheel Removal

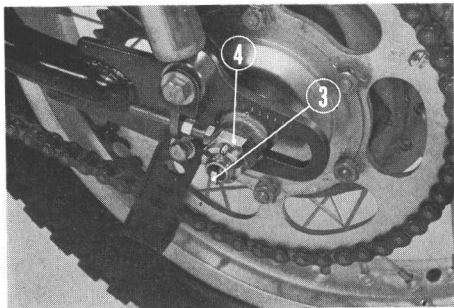
To remove the rear wheel, proceed as follows:

1. Place a wood block under the engine and raise the rear wheel off the ground.
2. Remove the rear brake adjusting nut ①.
3. Remove the brake panel stopper arm attaching bolt ②.



- ① Rear brake adjusting nut
- ② Brake panel stopper arm attaching bolt
- ⑤ Rear axle

4. Remove the cotter pin ③ from rear axle nut.
5. Remove the rear axle nut ④, and pull out the rear axle ⑤, and then the rear wheel can be removed.
6. To install the rear wheel, follow the reverse of removal procedure outlined in steps 1 through 5.



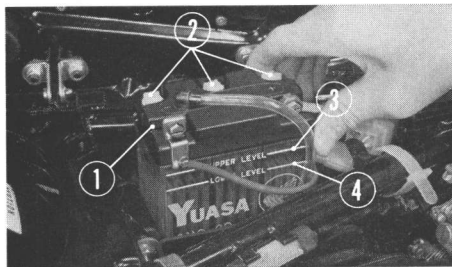
- ③ Cotter pin
④ Rear axle nut

Battery Maintenance

Battery Electrolyte Replenishment:

The battery is mounted under the seat, and is accessible by releasing the seat lock and raising the seat. Remove the tool tray and battery holding band. Raise the battery slightly to check the battery electrolyte.

The electrolyte level must be maintained between the upper ③ and lower level ④ marks on the side of the battery.



- ① Battery ② Filler caps
③ Upper level mark ④ Lower level mark

If the electrolyte level is found to be low, remove the battery filler caps and carefully add distilled water until the electrolyte level in each cell is between the upper and lower level marks. Use a small syringe or plastic funnel to add water. Only distilled water should be added, to avoid contaminating the electrolyte.

Battery Removal and Installation :

The battery should be removed for prolonged storage, or for recharging if electrolyte specific gravity falls below 1.200. Refer to page 23 for this procedure.

CAUTION: When installing the battery, be careful not to bend or twist the vent tube.

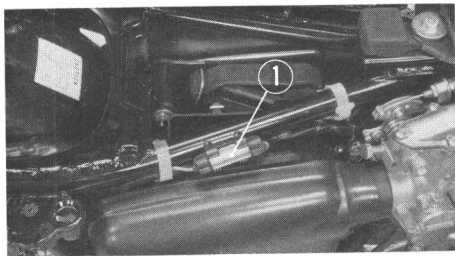
Battery Charging :

During the use of the motorcycle, should battery electrolyte specific gravity reading (measured with a hydrometer) drop below 1.200 @ 68°F (20°C), the battery should be charged at a rate not to exceed 0.6 amps until the specific gravity reading is between 1.260 and 1.280 @ 68°F (20°C). Frequent discharging or a partially discharged battery condition, is the result of electrical system problems. To locate and correct the cause of this condition, we suggest you contact your Honda dealer.

When storing the motorcycle, or if it is not being used for an extended period, the battery should be removed and stored in a cool place. The battery should be charged at least once a month during the storage period to preserve battery life.

Fuse :

The fuse holder ① is located on the frame pipe shown below. The recommended fuse for the XL-250 is 10A. When frequent failure of the fuse occurs, it usually indicates a short circuit or an overload in the electrical system. In this case the electrical system should be checked visually for shorts or other possible malfunctions. If the problem cannot be located visually, the motorcycle should be examined by an authorized Honda dealer.



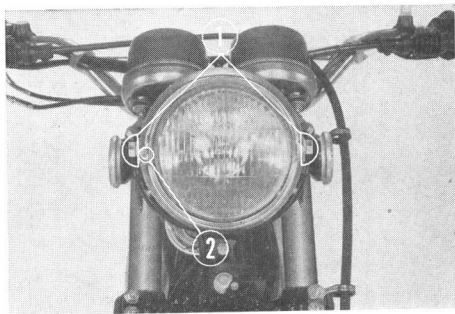
① Fuse holder

Headlight Beam Adjustment

The headlight must be kept properly adjusted for safe nighttime riding.

Vertical adjustment is made by pivoting the headlight case on its mounting bolts ①.

Horizontal adjustment is made by turning the adjusting screw ② located on the headlight rim.

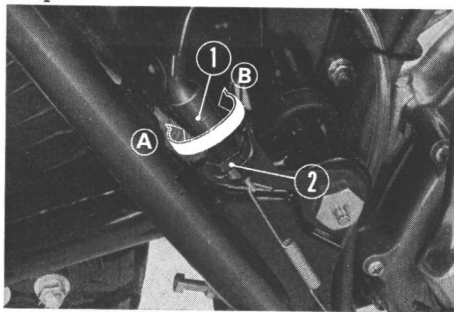


- ① Headlight mounting bolts
- ② Adjusting screw

Stoplight Switch Adjustment

The stoplight switch ① must be adjusted so that the stoplight will come on when the rear brake is applied. Rear brake free play (page 54) should be adjusted before performing the stoplight switch adjustment. The procedure for adjusting the stoplight switch is as follows:

1. Turn the main switch to the "ON" position.



① Stoplight switch

② Adjusting nut

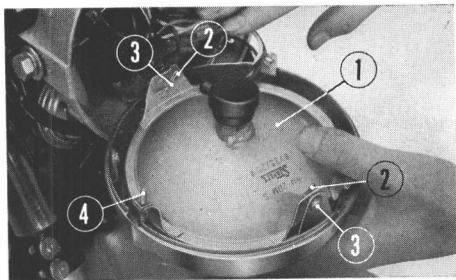
2. Turn the adjusting nut ② to position the stoplight switch at a point where the stoplight will come on when the brake pedal is depressed.

Turn the adjusting nut in direction ④ to advance switch timing or in the opposite direction ⑤ to retard switch timing.

Headlight Replacement

Replace the sealed beam unit as follows :

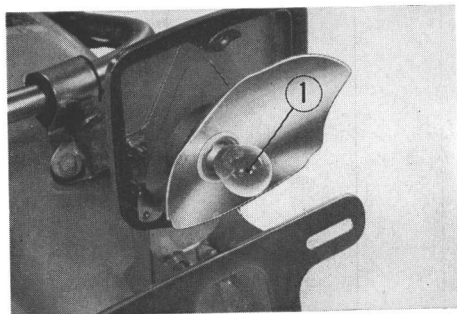
1. Remove the two headlight attaching screws and remove the headlight from the headlight case.
2. Remove the two retaining lock pins ② and lock screws ③ from the headlight rim.
3. Remove the beam adjusting screw ④.
4. Remove the sealed beam unit.
5. Install new sealed beam unit in the reverse order of removal.



- ① Headlight ② Lock pins
③ Lock screws ④ Beam adjusting screw

Tail/stoplight Bulb Replacement

1. Remove the two screws retaining the tail/stoplight lens.
2. Press the bulb ① inward and twist to the left and the bulb can be removed.
3. Replace with a good bulb.
4. Reinstall tail/stoplight lens.



- ① Tail/stoplight bulb

SPECIFICATIONS

ITEM	
DIMENSIONS Overall length Overall width Overall height Wheel base	2,120 mm (83.5 in.) 840 mm (33.1 in.) 1,125 mm (44.3 in.) 1,385 mm (54.5 in.)
WEIGHT Dry weight	126 kg (278 lbs)
CAPACITIES Engine oil Fuel tank Fuel reserve tank Front fork	1.5 l (1.6 US qt.) 8 l (2.1 US gal., 1.7 Imp. gal.) 2 l (0.5 US gal., 0.4 Imp. gal.) 145 cc (4.9 ozs.)

ENGINE

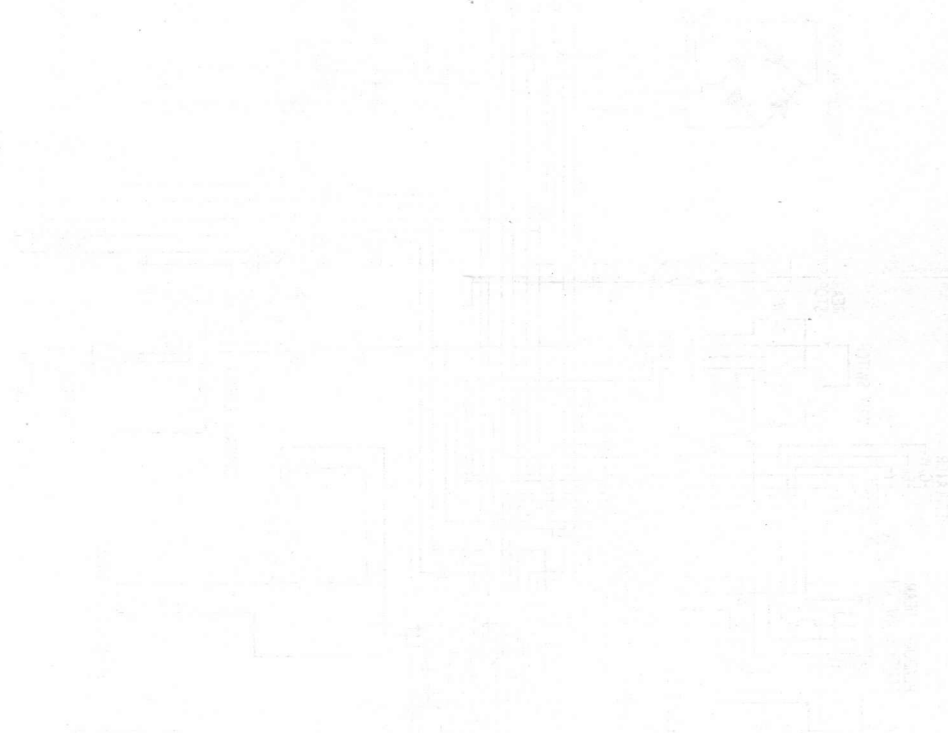
Bore and stroke	74.0×57.8 mm (2.913×2.276 in.)
Compression ratio	9.1 : 1
Displacement	248 cc (15.1 cu-in.)
Contact breaker point gap	0.3~0.4 mm (0.012~0.016 in.)
Spark plug gap	0.6~0.7 mm (0.024~0.028 in.)
Valve tappet clearance	IN 0.05 mm (0.002 in.) EX 0.08 mm (0.003 in.)

CHASSIS AND SUSPENSION

Caster	59.5°
Trail	140 mm (5.5 in.)
Tire size, front	2.75-21 (4 PR), 21 psi
Tire size, rear	4.00-18 (4 PR), 21 psi

POWER TRANSMISSION Primary reduction Final reduction Gear ratio, 1st. 2nd. 3rd. 4th. 5th.	3.125 3.200 2.352 1.666 1.280 1.000 0.806
ELECTRICAL Battery Generator Fuse	6V-6AH A.C. Generator 10 amp.
LIGHTS Headlight Tail/Stoplight Meter lights Neutral indicator light High beam indicator light	6V-35/25W 6V-3/32 cp 6V-1.5W 6V-1.5W 6V-1.5W

WIRING DIAGRAM



WIRING DIAGRAM

