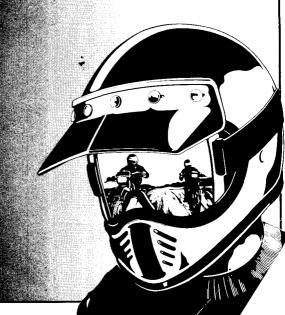
# HONDA

OWNER'S MANUAL



**SL230** 

# HONDA SL230

# **OWNER'S MANUAL**



#### IMPORTANT NOTICE

#### OPERATOR AND PASSENGER

This motorcycle is designed to carry the operator and one passenger. Never exceed the maximum weight capacity as shown on the loading and accessories label.

#### • ON/OFF-ROAD USE

This motorcycle is designed for "dual purpose" use.

#### READ THIS OWNER'S MANUAL CAREFULLY

Pay special attention to statements preceded by the following words:

### **AWARNING**

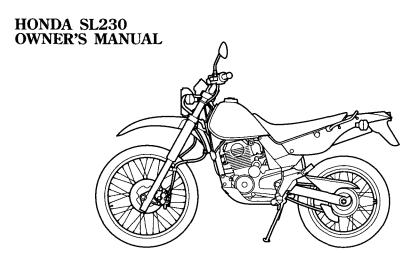
Indicates a strong possibility of severe personal injury or death if instructions are not followed.

#### CAUTION:

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

**NOTE**: Gives helpful information.

This manual should be considered a permanent part of the motorcycle and should remain with the motorcycle when resold.



All information in this publication is based on the latest production information available at the time of approval for printing. HONDA MOTOR CO.,LTD. reserves the right to make changes at any time without notice and without incurring any obligation.

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#### WELCOME

The motorcycle presents you a challenge to master the machine, a challenge to adventure. You ride through the wind, linked to the road by a vehicle that responds to your commands as no other does. Unlike an automobile, there is no metal cage around you. Like an airplane, a pre-ride inspection and regular maintenance are essential to your safety. Your reward is freedom.

To meet the challenges safely, and to enjoy the adventure fully, you should become thoroughly familiar with this owner's manual BEFORE YOU RIDE THE MOTORCYCLE.

When service is required, remember that your Honda dealer knows your motorcycle best. If you have the required mechanical "know-how" and tools, your dealer can supply you with an official Honda Service Manual to help you perform many maintenance and repair tasks.

Pleasant riding, and thank you for choosing a Honda!

# **OPERATION**

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# **MAINTENANCE**

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#### MOTORCYCLE SAFETY

#### **AWARNING**

\* Motorcycle riding requires special efforts on your part to ensure your safety. Know these requirements before you ride:

#### SAFE RIDING RULES

- 1. Always make a pre-ride inspection (page 35) before you start the engine. You may prevent an accident or equipment damage.
- Many accidents involve inexperienced riders. Most countries require a special motorcycle riding test or license. Make sure you are qualified before you ride. NEVER lend your motorcycle to an inexperienced rider.

- 3. Many automobile/motorcycle accidents happen because the automobile driver does not "see" the motorcyclist. Make yourself conspicuous to help avoid the accident that wasn't your fault:
  - Wear bright or reflective clothing.
  - Don't ride in another motorist's "blind spot."
- 4. Obey all national and local laws and regulations.
  - Excessive speed is a factor in many accidents. Obey the speed limits, and NEVER travel faster than conditions warrant.
  - Signal before you make a turn or lane change. Your size and maneuverability can surprise other motorists.

- Don't let other motorists surprise you.
   Use extra caution at intersections, parking lot entrances and exits, and driveways.
- 6. Keep both hands on the handlebars and both feet on the footpegs while riding. A passenger should hold on to the motorcycle or the operator with both hands and keep both feet on the passenger footpegs.

#### PROTECTIVE APPAREL

- 1. Most motorcycle accident fatalities are due to head injuries: ALWAYS wear a helmet. You should also wear a face shield or goggles as well as boots, gloves and protective clothing. A passenger needs the same protection.
- The exhaust system becomes hot during operation, and it remains hot for a while after stopping the engine. Be careful not to touch the exhaust system while it is hot. Wear clothing that fully covers your legs.
- 3. Do not wear loose clothing which could catch on the control levers, footpegs, drive chain or wheels.

#### **MODIFICATIONS**

# AWARNING

\* Modification of the motorcycle, or removal of original equipment, may render the vehicle unsafe or illegal. Obey all national and local equipment regulations.

#### LOADING AND ACCESSORIES

#### **AWARNING**

\*To prevent an accident, use extreme care when adding and riding with accessories and cargo. Addition of accessories and cargo can reduce a motorcycle's stability, performance and safe operating speed. Never ride an accessory-equipped motorcycle at speeds above 130 km/h (80 mph). And remember that this 130 km/h (80mph) limit may be reduced by installation of non-Honda accessories, improper loading, worn tyres and overall motorcycle condition, poor road or weather conditions. These general guidelines may help you decide whether or how to equip your motorcycle and how to load it safely.

Loading

The combined weight of the rider, passenger, cargo and all accessories must not exceed the maximum weight capacity:

158 kg (348 lbs)

Do not exceed the following cargo weight limit for the rear carrier:

3 kg (6 lbs)

Overloading the rear carrier will adversely affect stability and handling.

1. Keep cargo weight low and close to the center of the motorcycle. Load weight equally on both sides to minimize imbalance. As weight is located further from the motorcycle's center of gravity, handling is proportionally affected.

2. All cargo must be secure for stable handling. Recheck cargo security

frequently.

3. Do not attach large or heavy items (such as a sleeping bag or tent) to the handlebars, fork, or fender. Unstable handling or slow steering response may result.

#### Accessories

You are personally responsible for proper selection, installation, and use of non-Honda accessories. Always follow the guidelines under Loading, and these:

 Carefully inspect the accessory to make sure it does not obscure any lights, reduce ground clearance and banking angle, or limit suspension travel, steering travel or control operation.

Luggage racks are for lightweight items. Bulky items may snag on a tree or other nearby object causing loss of control.

3. Do not add electrical equipment that will exceed the motorcycle's electrical system capacity. An electrical failure could cause a dangerous loss of lights or engine power at night, far from help.

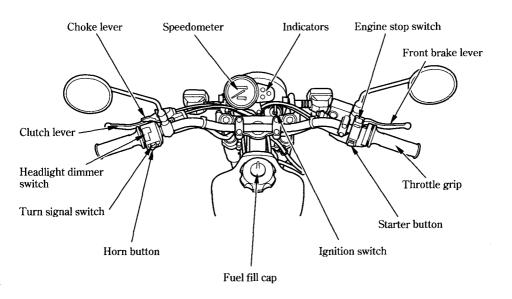
#### OFF-ROAD SAFETY

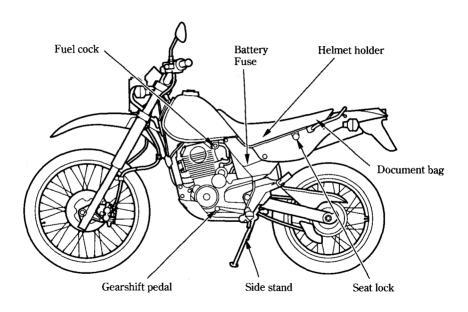
Learn to ride in an uncongested off-road area free of obstacles before venturing onto unfamiliar terrain.

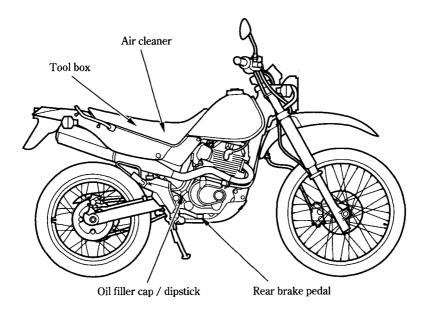
- Always obey local off-road riding laws and regulations.
- Obtain permission to ride on private property. Avoid posted areas and obey "NO Trespassing" signs.
- 3. Ride with a friend on another motorcycle so that you can assist each other in case of trouble.
- 4. Familiarity with your motorcycle is critically important should a problem occur far from help.
- Never ride beyond your ability and experience or faster than conditions warrant.
- If you are not familiar with the terrain, ride cautiously. Hidden rocks, holes, or ravines could spell disaster.

7. Spark arresters and mufflers are required in most off-road areas. Don't modify your exhaust system. Remember that excessive noise bothers everyone and creates a bad image for motorcycling.

# **PARTS LOCATION**





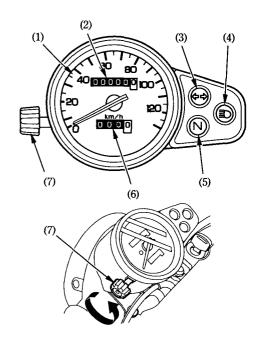


# INSTRUMENTS AND INDICATORS

The instruments are grouped together above the headlight case.

Their functions are described in the table on the following page.

- (1) Speedometer
- (2) Odometer
- (3) Turn signal indicator
- (4) High beam indicator
- (5) Neutral indicator
- (6) Tripmeter
- (7) Tripmeter reset knob



(Ref. No.) Description	Function
(1) Speedometer	Shows riding speed.
(2) Odometer	Shows accumulated mileage.
(3) Turn signal indicator (amber)	Flashes when either turn signal is operated.
(4) High beam indicator (blue	e) Lights when the headlight is on high beam.
(5) Neutral indicator (green)	Lights when the transmission is in neutral.
(6) Tripmeter	Shows mileage per trip.
(7) Tripmeter reset knob	Resets tripmeter to zero (0) . Turn knob in direction shown.

# MAJOR COMPONENTS (Information you need to operate this motorcycle)

# **AW**ARNING

\* If the Pre-ride Inspection (page 35) is not performed, severe personal injury or vehicle damage may result.

#### **BRAKES**

Both the front and rear brakes are the hydraulic disc types.

As the brake pads wear, the brake fluid level drops.

There are no adjustments to perform, but fluid level and pad wear must be inspected periodically. The system must be inspected frequently to ensure there are no fluid leaks. If the control lever or pedal free travel becomes excessive and the brake pads are not worn beyond the recommended limit (page 76), there is probably air in the brake system and it must be bled. See your Honda dealer for this service.

#### Front Brake Brake Fluid Level:

#### **AWARNING**

- \* Brake fluid may cause irritation. Avoid contact with skin or eyes. In case of contact, flush thoroughly with water and call a doctor if your eyes were exposed.
- \* KEEP OUT OF REACH OF CHIL-DREN.

#### **CAUTION:**

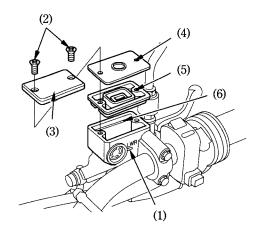
- \* Handle brake fluid with care because it can damage plastic and painted surfaces.
- \* When adding brake fluid, be sure the reservoir is horizontal before the cap is removed or brake fluid may spill out.
- \* Use only DOT 4 brake fluid from a sealed container.
- \* Never allow contaminants such as dirt or water to enter the brake fluid reservoir.

Check that the fluid level is above the LOWER level mark (1) with the motorcycle in an upright position.

Brake fluid must be added to the reservoir whenever the fluid level begins to reach the LOWER level mark (1). Remove the screws (2), reservoir cover (3), diaphragm plate (4), and diaphragm (5). Fill the reservoir with DOT 4 BRAKE FLUID from a sealed container up to the UPPER level mark (6). Reinstall the diaphragm, diaphragm plate, and cover. Tighten the screws securely.

#### Other Checks:

Make sure there are no fluid leaks. Check for deterioration or cracks in the hoses and fittings.



- (1) LOWER level mark
- (2) Screws
- (3) Reservoir cover
- (4) Diaphragm plate
- (5) Diaphragm
- (6) UPPER level mark

Rear Brake Rear Brake Fluid Level:

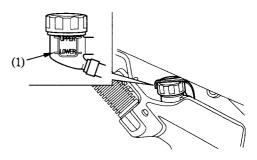
#### **AWARNING**

- \* Brake fluid may cause irritation. Avoid contact with skin or eyes. In case of contact, flush thoroughly with water and call a doctor if your eyes were exposed.
- \* KEEP OUT OF REACH OF CHIL-DREN.

#### **CAUTION:**

- Handle brake fluid with care because it can damage plastic and painted surfaces.
- When adding brake fluid, be sure the reservoir is horizontal before the cap is removed or brake fluid may spill out.
- \* Use only DOT 4 brake fluid from a sealed container.
- Never allow contaminants such as dirt or water to enter the brake fluid reservoir.

Check that the fluid level is above the LOWER level mark (1) with the motorcycle in an upright position.

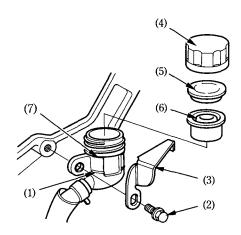


(1) Lower level mark

Brake fluid must be added to the reservoir whenever the fluid level begins to reach the LOWER level mark (1). Remove the bolt (2) and cap holder (3). Remove the reservoir cap (4), diaphragm plate (5) and the diaphragm (6). Fill the reservoir with DOT 4 BRAKE FLUID from a sealed container up to the UPPER level mark (7). Reinstall the diaphragm, diaphragm plate, cap, cap holder and bolt securely.

#### Other Checks:

Make sure there are no fluid leaks. Check for deterioration or cracks in the hoses and fittings.



- (1) LOWER level mark
- (2) Bolt
- (3) Cap holder
- (4) Reservoir cap
- (5) Diaphragm plate
- (6) Diaphragm
- (7) UPPER level mark

#### CLUTCH

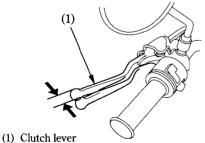
Adjustment:

Clutch adjustment may be required if the motorcycle stalls when shifting into gear or tends to creep; or if the clutch slips, causing acceleration to lag behind engine speed. Minor adjustments can be made with the clutch cable adjuster (4) at the lever (1).

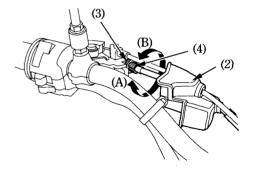
Normal clutch lever free play is:

10-20 mm (0.4-0.8 in)

1. Pull back the rubber dust cover (2). Loosen the lock nut (3) and turn the adjuster (4). Tighten the lock nut (3) and check the adjustment.



2. If the cable adjuster is threaded out near its limit or the correct free play cannot be obtained using the cable adjuster (4), a major adjustment must be made. Loosen the lock nut (3) and turn in the cable adjuster (4) completely. Tighten the lock nut (3) and install the rubber dust cover (2).



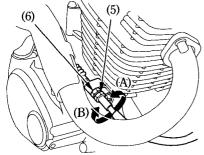
(2) Dust cover

(A) Increase free play

(3) Lock nut

- (B) Decrease free play
- (4) Clutch cable adjuster

- 3. Loosen the lock nut (5) at the lower end of the cable. Turn the adjusting nut (6) to obtain the specified free play. Tighten the lock nut (5) and check the adjustment.
- 4. Start the engine, pull in the clutch lever and shift into gear. Make sure the engine does not stall and the motorcycle does not creep. Gradually release the clutch lever and open the throttle. The motorcycle should begin to move smoothly and accelerate gradually.



- (5) Lock nut(6) Adjusting nut
- (A) Increase free play
- (B) Decrease free play

#### NOTE:

\* If proper adjustment cannot be obtained or the clutch does not work correctly, see your Honda dealer.

#### Other Checks:

Check the clutch cable for kinks or signs of wear that could cause sticking or failure. Lubricate the clutch cable with a commercially available cable lubricant to prevent premature wear and corrosion.

#### FUEL OFF

With the fuel cock in the OFF position, fuel cannot flow from the tank to the carburetor. Turn the cock OFF whenever the motorcycle is not in use.

#### ON

With the fuel cock in the ON position, fuel will flow from the main fuel supply to the carburetor.

#### RES

With the fuel cock in the RES position, fuel will flow from the reserve fuel supply to the carburetor. Use the reserve fuel only when the main supply is gone. Refill the tank as soon as possible after switching to RES. The reserve fuel supply is:

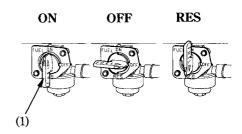
3.0 £ (0.79 US gal, 0.66 Imp gal)

#### **AWARNING**

\*To avoid running out of fuel that may result in a sudden stop, learn how to operate the fuel cock when riding the motorcycle.

#### NOTE:

\* Remember to check that the fuel cock is in the ON position each time you refuel. If the cock is left in the RES position, you may run out of fuel with no reserve.



(1) Fuel cock

#### **Fuel Tank**

The fuel tank capacity including the reserve supply is:

10.0 ℓ (2.64 US gal , 2.20 Imp gal)

To open the fuel fill cap (1) insert the ignition key (2) and turn the key clockwise until it stops and rotate the fuel fill cap counterclockwise until it clicks. Lift off the fuel fill cap.

After refueling, to close the fuel fill cap, align the tabs of the fuel fill cap to the slots of the filler neck with the arrow (3) mark on the cap pointing towards the rear of the

motorcycle.

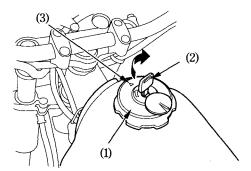
Turn the fuel fill cap clockwise until it clicks. The arrow should be pointing towards the front.

Turn the key counterclockwise until it stops and remove the key.

Use unleaded petrol with a research octane number of 91 or higher.

#### CAUTION:

\* If "spark knock" or "pinking" occurs at a steady engine speed under normal load, change brands of petrol. If spark knock or pinking persists, consult your Honda dealer. Failure to do so is considered misuse, and damage caused by misuse is not covered by Honda's Limited Warranty.

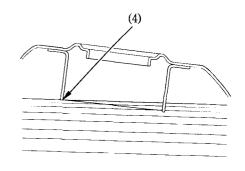


- (1) Fuel fill cap
- (2) Ignition key

(3) Arrow

# **AW**ARNING

- \* Petrol is extremely flammable and is explosive under certain conditions. Refuel in a well-ventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where petrol is stored or where the fuel tank is refueled.
- \* Do not overfill the tank (there should be no fuel in the filler neck (4)). After refueling, make sure the fuel fill cap is closed securely.
- \* Be careful not to spill fuel when refueling. Spilled fuel or fuel vapor may ignite. If any fuel is spilled, make sure the area is dry before starting the engine.
- \*Avoid repeated or prolonged contact with skin or breathing of vapor. KEEP OUT OF REACH OF CHILDREN.



(4) Filler neck

#### **Petrol Containing Alcohol**

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

#### NOTE:

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

#### ENGINE OIL

#### **Engine Oil Level Check**

Check the engine oil level each day before riding the motorcycle.

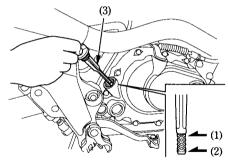
The level must be maintained between the upper (1) and lower (2) level marks on the dipstick (3).

- 1. Start the engine and let it idle for a few minutes.
- Stop the engine and hold the motorcycle in an upright position on firm, level ground.
- 3. After a few minutes, remove the oil filler cap/dipstick (3), wipe it clean, and reinsert the dipstick without screwing it in. Remove the dipstick. The oil level should be between the upper (1) and lower (2) level marks on the dipstick.

- 4. If required, add the specified oil (see page 55) up to the upper level mark. Do not overfill.
- 5. Reinstall the oil filler cap/dipstick. Check for oil leaks.

#### **CAUTION:**

\* Running the engine with insufficient oil can cause serious engine damage.



- (1) Upper level mark
- (2) Lower level mark
- (3) Oil filler cap/dipstick

#### **TYRES**

This motorcycle is equipped with a tyre with tube on the front wheel, and a tubeless tyre on the rear wheel. For rear wheel, use only tyres marked "TUBELESS" and tubeless valves on rims marked "TUBELESS TYRE APPLICABLE".

Proper air pressure will provide maximum stability, riding comfort and tyre life.

Check tyre pressure frequently and adjust if neccessary.

#### NOTE:

\* Tyre pressure should be checked before you ride while the tyres are "cold".

#### \* For rear tyre:

Tubeless tyres have some degree of selfsealing ability if they are punctured, and leakage is often very slow. Inspect very closely for punctures, especially if the tyre is not fully inflated.

On/off-road tyres are standard on this model. Select the right replacement tyres in accordance with the following specifications.

#### For front wheel

Check the tyres for cuts, embedded nails, or other sharp objects. See your Honda dealer for replacement of damaged tyres or punctured inner tubes.

#### For rear wheel

Check the tyres for cuts, embedded nails, or other sharp objects. Check the rims for dents or deformation. If there is any damage, see your Honda dealer for repair, replacement.

		Front	Rear
Tyre	size	2.75-21 45P	120/80 18 62P
Cold tyre pressures kPa (kgf/cm², psi)	Rider only	125 (1.25 , 18)	150 (1.50 , 22)
	Rider and passenger	125 (1.25 , 18)	150 (1.50 , 22)
Tyre brand BRIDGES	STONE	TW27G (with tube)	TW30G (tubeless)

#### **AWARNING**

- \* Do not attempt to patch a damaged tyre or inner tube. Wheel balance and tyre reliability may be impaired. (For front tyre only)
- \* Improper tyre inflation will cause abnormal tread wear and create a safety hazard. Underinflation may result in the tyre slipping on, or coming off of the rim causing tyre deflation that may result in a loss of vehicle control.
- Operation with excessively worn tyres is hazardous and will adversely affect traction and handling.
- \*The use of tyres other than those listed on the tyre information label may adversely affect handling.

### **AWARNING**

Maintenance of spoke tension and wheel trueness are critical to safe motorcycle operation. During the first 1,000 km (600 miles) spokes will loosen more rapidly due to initial seating of parts. Excessively loose spokes may result in high speed instability and possible loss of control.

Replace tyres before tread depth at the center of the tyre reaches the following limit:

Minimum tread depth			
Front:	3 mm (0.12 in)		
Rear:	3 mm (0.12 in)		

# Tubeless Tyre Repair/Replacement: (Rear wheel only) See your Honda Dealer

## **AWARNING**

- \* Do not install tube-type tyres on tubeless rims. The beads may not seat and the tyres could slip on the rims, causing tyre deflation that may result in a loss of vehicle control.
- \* Do not install a tube inside a tubeless tyre. Excessive heat build-up may cause the tube to burst resulting in rapid tyre deflation that may result in a loss of vehicle control.
- \* Replace the tyre if the sidewall is punctured or damaged. Sidewall flexing may cause repair failure and tyre deflation that may result in a loss of vehicle control.

# **▲W**ARNING

- \*To avoid possible repair failure and tyre deflation that may result in a loss of vehicle control, do not exceed 80 km/h (50 mph) for the first 24 hours, or 130 km/h (80 mph) at any time, after tyre repair.
- \* Proper wheel balance is necessary for safe, stable handling of the motorcycle. Do not remove or change any wheel balance weights. When wheel balancing is required, see your Honda dealer. Wheel balancing is required after tyre repair or replacement.

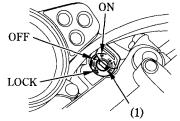
#### CAUTION:

\* Do not try to remove tubeless tyres without special tools and rim protectors. You may damage the rim sealing surface or disfigure the rim.

# **ESSENTIAL INDIVIDUAL COMPONENTS**

### **IGNITION SWITCH**

The ignition switch (1) is below the indicator panel.



(1) Ignition switch

Key Position	Function	Key Removal
LOCK (steering lock)	Steering is locked. Engine and lights cannot be operated.	Key can be removed
OFF	Engine and lights cannot be operated.	Key can be removed
ON	Engine and lights can be operated.	Key cannot be removed

#### RIGHT HANDLEBAR CONTROLS

## **Engine Stop Switch**

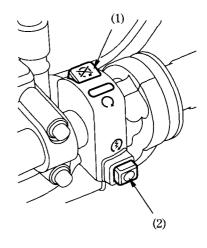
The engine stop switch (1) is next to the throttle grip. When the switch is in the  $\Omega$  (RUN) position, the engine will operate. When the switch is in the  $\Omega$  (OFF) position, the engine will not operate. This switch is intended primarily as a safety or emergency switch and should normally remain in the  $\Omega$  (RUN) position.

#### **Starter Button**

The starter button (2) is below the engine stop switch (1).

When the starter button is pressed the starter motor will crank the engine, and the headlight will automatically go out, but the taillight will stay on.

See pages 37 - 38 for "Starting Procedure".



- (1) Engine stop switch
- (2) Starter button

#### LEFT HANDLEBAR CONTROLS

#### **Headlight Dimmer Switch (1)**

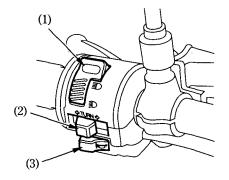
Push the dimmer switch to ≣○ (HI) to select high beam or to ≣○ (LO) to select low beam.

## Turn Signal Switch (2)

Move to ⇔ (L) to signal a left turn, ⇒ (R) to signal a right turn. Press to turn signal off.

#### Horn Button (3)

Press the button to sound the horn.



- (1) Headlight dimmer switch
- (2) Turn signal switch
- (3) Horn button

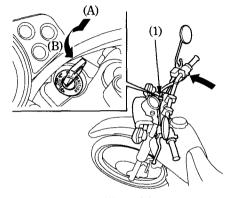
# **FEATURES** (Not required for operation)

## STEERING LOCK

To lock the steering, turn the handlebars all the way to the left or right, turn the key (1) to LOCK while pushing in. Remove the key.

# **AWARNING**

\* Do not turn the key to LOCK while riding the motorcycle; loss of vehicle control will result.



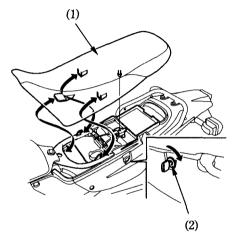
- (1) Ignition key
- (A) Push in
- (B) Turn to LOCK

## **SEAT**

To remove the seat (1), insert the ignition key into the seat lock (2) and turn it clockwise. Pull the seat back and up. To install the seat, insert the prong into the recess under the frame cross member and then push down on the rear of the seat.

#### CAUTION:

\* Be sure the seat is locked securely in position after installation.



(1) Seat

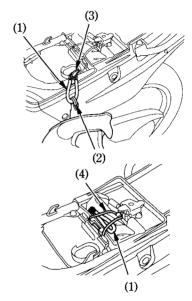
(2) Seat lock

## HELMET HOLDER

The helmet holder is located under the seat. To use the helmet holder, remove the seat (page 30).

Route the helmet holder cable (1) through the helmet D-ring (2) and hook the loops of the holder cable onto the helmet holder (3). Install the seat.

When the helmet holder is not used, fasten the holder cable to the rubber band (4) with the tool kit.



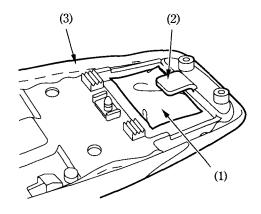
- (1) Helmet holder cable
- (2) D-ring

- (3) Helmet holder
- (4) Rubber band

### **DOCUMENT BAG**

The document bag (1) is in the document compartment (2) on the reverse side of the seat (3).

This owner's manual and other documents should be stored in the document bag. When washing your motorcycle, be careful not to flood this area with water.

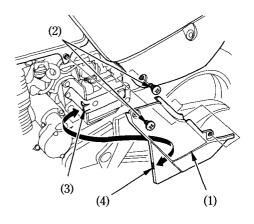


- (1) Document bag
- (2) Document compartment
- (3) Seat

## SIDE COVER

To remove the left side cover (1), remove the two screws (2) and release the left side cover from the tab (3).

To install the left side cover, insert the tab into the slit (4) of the side cover and tighten two screws.



- (1) Left side cover
- (2) Screws

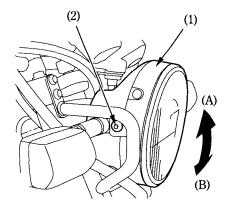
- (3) Tab
- (4) Slit

# HEADLIGHT AIM VERTICAL ADJUSTMENT

Vertical adjustment can be made by moving the headlight case (1) as necessary.

To move the headlight case (1), loosen the bolts (2).

Tighten the bolts (2) after adjustment. Obey local laws and regulations.



- (1) Headlight case(2) Bolt
- (A) Up (B) Down

# OPERATION PRE-RIDE INSPECTION

# **AWARNING**

\* If the Pre-ride Inspection is not performed, severe personal injury or vehicle damage may result.

Inspect your motorcycle every day before you ride it. The items listed here will only take a few minutes to inspect, and in the long run they can save time, expense, and possibly your life.

- 1. Engine oil level—add engine oil if required (page 22). Check for leaks.
- 2. Fuel level—fill fuel tank when necessary (page 18). Check for leaks.
- 3. Front and rear brakes—check operation; make sure there is no brake fluid leakage (pages 12 15).

- 4. Tyres—check condition and pressure (pages 23 25).
- Lights and horn—check that headlight, tail/brake light, turn signals, indicators and horn function properly.
- 6. Throttle—check for smooth opening and full closing in all steering positions.
- 7. Engine stop switch—check for proper function (page 27).
- 8. Side stand ignition cut-off system—check for proper function (page 70).

Correct any discrepancy before you ride. Contact your Honda dealer for assistance if you cannot correct the problem.

#### STARTING THE ENGINE

Always follow the proper starting procedure described below.

This motorcycle is equipped with a side stand ignition cut-off system. The engine cannot be started if the side stand is down, unless the transmission is in neutral. If the side stand is up, the engine can be started in neutral or in gear with the clutch lever pulled in. After starting with the side stand down, the engine will shut off if the transmission is put in gear before raising the side stand.

# **AWARNING**

\* Never run the engine in an enclosed area. The exhaust contains poisonous carbon monoxide gas that can cause loss of consciousness and lead to death.

## NOTE:

\* Do not use the electric starter for more than 5 seconds at a time. Release the starter button for approximately 10 seconds before pressing it again.

## Preparation

Before starting, insert the key, turn the ignition switch ON and confirm the following:

- The transmission is in NEUTRAL (neutral indicator light ON).
- The engine stop switch is at \( \text{(RUN)}.
- The fuel cock is ON.

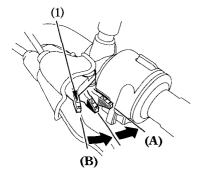
# **Starting Procedure**

To restart a warm engine, follow the procedure for "High Air Temperature."

# Normal Air Temperature

 $10^{\circ} - 35^{\circ} \text{C} (50^{\circ} - 95^{\circ} \text{F})$ 

1. Pull the choke lever (1) back all the way to Fully ON (A), if the engine is cold.



(1) Choke lever

- (A) Fully ON
- (B) Fully OFF

2. Start the engine, leaving the throttle closed.

#### NOTE:

- \* Do not open the throttle when starting the engine with the choke ON. This will lean the mixture, resulting in hard starting.
- 3. Immediately after the engine starts, operate the choke lever (1) to keep fast idle.
- 4. About a half minute after the engine starts, push the choke lever (1) forward all the way to Fully OFF (B).
- 5. If idling is unstable, open the throttle slightly.

# High Air Temperature

# 35 °C (95 °F) or above

- 1. Do not use the choke.
- 2. Open the throttle slightly.
- 3. Start the engine.

# Low Air Temperature

# 10°C (50°F) or below

- 1. Follow steps 1 − 2 under "Normal Air Temperature."
- 2. When engine speed begins to pick up, operate the choke lever to keep fast idle.
- 3. Continue warming up the engine until it runs smoothly and responds to the throttle when the choke lever (1) is at Fully OFF (B).

# **Flooded Engine**

If the engine fails to start after repeated attempts, it may be flooded with excess fuel. To clear a flooded engine, turn the engine stop switch "  $\Re$  " (OFF) and push the choke lever forward to Fully OFF (B). Open the throttle fully and crank the engine several times. Wait 10 seconds, then turn the engine stop switch to "  $\bigcap$  " (RUN) and follow the Starting Procedure.

## **RUNNING-IN**

Help assure your motorcycle's future reliability and performance by paying extra attention to how you ride during the first 500 km (300 miles).

During this period, avoid full-throttle starts and rapid acceleration.

## RIDING

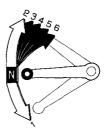
## **AWARNING**

Review Motorcycle Safety (pages 1 –
 6) before you ride.

## NOTE:

- Make sure you understand the function of the side stand mechanism. (See MAIN-TENANCE SCHEDULE on page 47 and explanation for SIDE STAND on page 70
- 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 gearshift pedal to shift into 1st (low) gear.
- 3. Slowly release the clutch lever and at the same time gradually increase engine speed by opening the throttle. 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 gearshift pedal.
  - This sequence is repeated to progressively shift to 3rd, 4th, 5th and 6th(top) gear.
- 5. Coordinate the throttle and brakes for smooth deceleration.
- 6. Both front and rear brakes should be used at the same time and should not be applied strongly enough to lock the wheel, or braking effectiveness will be reduced and control of the motorcycle be difficult.



### BRAKING

- 1. For normal braking, gradually apply both the front and rear brakes while downshifting to suit your road speed.
- 2. For maximum deceleration, close the throttle and apply the front and rear brakes firmly. Pull in the clutch lever before coming to a complete stop to prevent stalling the engine.

# **AWARNING**

- \*Independent use of only the front or rear brake reduces stopping performance. Extreme braking may cause either wheel to lock, reducing control of the motorcycle.
- \*When possible, reduce speed or brake before entering a turn; closing the throttle or braking in mid-turn may cause wheel slip. Wheel slip will reduce control of the motorcycle.

# AWARNING

- \*When riding in wet or rainy conditions, or on loose surfaces, the ability to maneuver and stop will be reduced. All of your actions should be smooth under these conditions. Rapid acceleration, braking or turning may cause loss of control. For your safety, exercise extreme caution when braking, accelerating or turning.
- \* When descending a long, steep grade, use engine compression braking by downshifting, with intermittent use of both brakes. Continuous brake application can overheat the brakes and reduce their effectiveness.
- \* Riding with your foot resting on the brake pedal or your hands on the brake lever may actuate the brakelight, giving a false indication to other drivers. It may also overheat the brake, reducing effectiveness.

#### **PARKING**

- After stopping the motorcycle, shift the transmission into neutral, turn the fuel cock OFF, turn the handlebar fully to the left, turn the ignition switch OFF and remove the key.
- 2. Use the side stand to support the motorcycle while parked.

# CAUTION:

- \* Park the motorcycle on firm, level ground to prevent it from falling over.
- \* If you must park on a slight incline, aim the front of the motorcycle uphill to reduce the possibility of rolling off the side stand or overturning.
- 3. Lock the steering to help prevent theft (page 29).

## ANTI-THEFT TIPS

- 1. Always lock the steering and never leave the key in the ignition switch. This sounds simple but people do forget.
- 2. Be sure the registration information for your motorcycle is accurate and current.

3. Park your motorcycle in a locked garage whenever possible.

- 4. Use an additional anti-theft device of good quality.
- 5. Put your name, address, and phone number in this Owner's Manual and keep it on your motorcycles at all times.

  Many times stolen motorcycles are

identified by information in the Owner's Manuals that are still with them.

NAME:	 	 
ADDRESS:	 	 
PHONE NO:		

## **MAINTENANCE**

- The Required Maintenance Schedule specifies how often you should have your motorcycle served, and what things need attention. It is essential that your motorcycle be served as scheduled to retain its high level of safety, dependability, and emission control performance.
- These instructions are based on the assumption that the motorcycle will be used exclusively for its designed purpose. Sustained high speed operation, or operation in unusually wet or dusty conditions, will require more frequent service than specified in the MAINTENANCE SCHEDULE. Consult your Honda dealer for recommendations applicable to your individual needs and use.

### MAINTENANCE SCHEDULE

The following Maintenance Schedule specifies all maintenance required to keep your motorcycle in peak operating condition. Maintenance work should be performed in accordance with standards and specifications of Honda by properly trained and equipped technicians. Your Honda dealer meets all of these requirements.

Perform the Pre-ride Inspection (page 35) at each scheduled maintenance period.

I: INSPECT AND CLEAN, ADJUST, LUBRICATE OR REPLACE IF NECESSARY

C: CLEAN R: REPLACE A: ADJUST L: LUBRICATE

FREQUENCY	WHICHEY COMES	ODOMETER READING [NOTE(1)]								
	FIRST	×1,000km	1	6	12	18	24	30	36	REFER
	<b></b>		0.6	4	8	12	16	20	24	TO PAGE
ITEM	NOTE	MONTH		6	12	18	24	30	36	TOTAGE
* FUEL LINE					I		I	<u> </u>	I_	
* FUEL STRAINER SCREEN	<u></u>			C	C	C	C	С	С	_
* THROTTLE OPERATION					I		I		I	60
* CARBURETOR CHOKE					I		I		I	
AIR CLEANER	NOTE(2)					R			R	53
CRANKCASE BREATHER	NOTE(3)			С	C	C	C	C	C	54
SPARK PLUG				I	R	I	R	_1_	R	58
* VALVE CLEARANCE			I	I	I	I	I	_I_	I	
ENGINE OIL			R	2 2111 0,000 1111					55	
			(2,000 mi) R							
** ENGINE OIL STRAINER SCREEN					C		C		C	56
** ENGINE OIL CENTRIFUGAL FILTER					C		С		C	
* ENGINE IDLE SPEED			I	I	I	I	I	<u> </u>	I	61

FREQUENCY	WHICHEVER → COMES		C	ODOMETER READING [NOTE(1)]						
	FIRST	×1,000km	1	6	12	18	24	30	36	REFER
	↓	×1,000mi	0.6	4	8	12	16	20	24	TO PAGE
ITEM	NOTE	MONTH		6	12	18	24	30	36	
DRIVE CHAIN	NOTE(4)		I, L, EVERY 1,000km (600mi)					)	62	
DRIVE CHAIN SLIDER				I	I	I	I_	I	I	
BRAKE FLUID	NOTE(5)			I	I	R	I_	I	R	12
BRAKE PAD WEAR				I	I	I	I	I	Ī	76
BRAKE SYSTEM			I		I		I		I	12, 76
* BRAKE LIGHT SWITCH					I		I		I	83
*   HEADLIGHT AIM					_I		I		I	_
CLUTCH SYSTEM			I	I	I	I	I	I	I	16
SIDE STAND_					I		I		I	70
* SUSPENSION					I		I		I	69
* NUTS, BOLTS, FASTENERS	NOTE(4)		I		I		I		I	
** WHEELS/TYRES	NOTE(4)		I	I	Ī	I	I	I	I	_
** STEERING HEAD BEARINGS			I		I		I	į	I	

- \* SHOULD BE SERVICED BY YOUR HONDA DEALER, UNLESS THE OWNER HAS THE PROPER TOOLS AND SERVICE DATA AND IS MECHANICALLY QUALIFIED. REFER TO THE OFFICIAL HONDA SHOP MANUAL.
- \* \* IN THE INTEREST OF SAFETY, WE RECOMMEND THESE ITEMS BE SERVICED ONLY BY YOUR HONDA DEALER.

Honda recommends that your Honda dealer should road test your motorcycle after each periodic maintenance is carried out.

NOTES: (1) At higher odometer readings, repeat at the frequency interval established here.

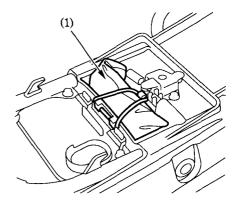
- (2) Service more frequently when riding in unusually wet or dusty areas.
- (3) Service more frequently when riding in rain or at full throttle.
- (4) Service more frequently when riding OFF-ROAD.
- (5) Replace every 2 years, or at indicated odometer interval, whichever comes first. Replacement requires mechanical skill.

### TOOL KIT

The tool kit (1) is under the seat. Some roadside repairs, minor adjustments

and parts replacement can be performed with the tools contained in the kit.

- 8 × 12 mm open end wrench
- $10 \times 14$  mm open end wrench
- 5 mm hex wrench
- Pliers
- No. 2 Phillips screwdriver
- No. 2 Screwdriver
- Screwdriver handle
- 17 mm box end wrench
- 24 mm box end wrench
- Extension bar
- Spark plug wrench
- Tool bag



(1) Tool kit

## SERIAL NUMBERS

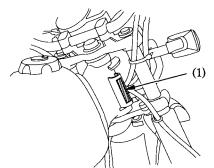
The frame and engine serial numbers are required when registering your motorcycle. They may also be required by your dealer when ordering replacement parts.

Record the numbers here for your reference.

The frame number (1) is stamped on the right side of the steering head.

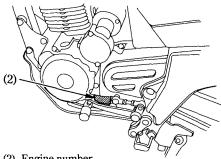
The engine number (2) is stamped on the left side of the crankcase.

FRAME NO.



(1) Frame number **50** 

ENGINE NO.



(2) Engine number

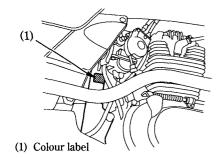
## **COLOUR LABEL**

The colour label (1) is attached to the right frame rail near the carburetor.

It is helpful when ordering replacement parts. Record the colour and code here for your reference.

COLOUR

CODE



## MAINTENANCE PRECAUTIONS

## **AWARNING**

- \* If your motorcycle is overturned or involved in a collision, inspect control levers, cables, brake hoses, calipers, accessories, and other vital parts for damage. Do not ride the motorcycle if damage impairs safe operation. Have your Honda dealer inspect the major components, including frame, suspension and steering parts, for misalignment and damage that you may not be able to detect.
- \* Use new, genuine Honda parts or their equivalent for maintenance and repair. Parts which are not of equivalent quality may impair the safety of your motorcycle and the effective operation of the emission control systems.

# **AWARNING**

\* Stop the engine and support the motorcycle securely on a firm, level surface before performing any maintenance.

#### AIR CLEANER

(Refer to the maintenance precautions on

page 52).

The air cleaner should be serviced at regular intervals (page 46). Service more frequently when riding in unusually wet or dusty areas.

## Air cleaner replacement:

1. Remove the seat. (page 30)

2. Release the hooks (1) and remove the air cleaner housing cover (2).

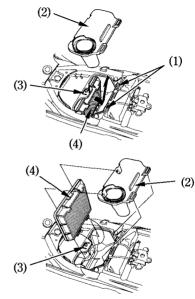
3. Lift the tab (3) and unhook the air cleaner (4).

4. Take out and discard the air cleaner.

5. Install the new air cleaner.

Use the Honda genuine air cleaner or an equivalent air cleaner specified for your model. Using the wrong Honda air cleaner or a non-Honda air cleaner which is not of equivalent quality may cause premature engine wear or performance problems.

Install the parts in the reverse order of removal.



(1) Hooks

(2) Air cleaner housing cover (3) Tab

(4) Air cleaner

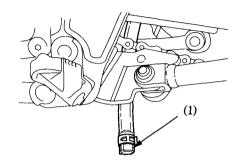
#### CRANKCASE BREATHER

(Refer to the maintenance precautions on page 52).

- 1. Remove the crankcase breather tube plug (1) from the tube and drain deposits into a suitable container.
- 2. Reinstall the crankcase breather tube plug.

## NOTE:

\* Service more frequently when riding in rain, at full throttle, or after the motorcycle is washed or overturned. Service if the deposit level can be seen in the transparent section of the drain tube.



(1) Crankcase breather tube plug

#### ENGINE OIL

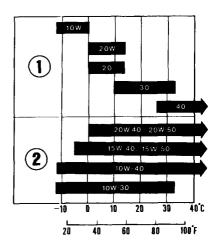
(Refer to the maintenance precautions on page 52).

**Engine Oil** 

Good engine oil has many desirable qualities. Use only high detergent, quality motor oil certified on the container to meet or exceed requirements for API Service Classification SE, SF or SG.

## Viscosity:

Viscosity grade of engine oil should be based on average atmospheric temperature in your riding area. The following provides a guide to the selection of the proper grade or viscosity of oil to be used at various atmospheric temperatures.



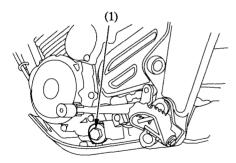
- (1) Single grade
- (2) Multigrade

## **Engine Oil/Oil Strainer Screen**

Engine oil quality is the chief factor affecting engine service life. Change the engine oil as specified in the maintenance schedule (page 46).

## NOTE:

\* Change the engine oil with the engine at normal operating temperature and the scooter on its center stand to assure complete and rapid draining.

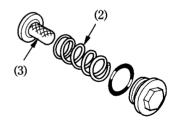


(1) Drain plug

- 1. Remove the oil filler cap from the right crankcase cover.
- 2. Place an oil drain pan under the crankcase and remove the oil drain plug (1).

#### NOTE:

- \*The spring (2) and oil strainer screen (3) will come out when the drain plug is removed.
- 3. Clean the oil strainer screen.
- Check that the oil strainer screen, sealing rubber and drain plug O-ring are in good condition.



(2) Spring

(3) Oil strainer screen

- 5. Install the oil strainer screen, spring and drain plug.
- 6. Fill the crankcase with the recommended grade oil; approximately:

1.0 l (1.1 US qt, 0.9 Imp qt)

- 7. Install the filler cap.
- 8. Start the engine and let it idle for 2-3 minutes.
- Stop the engine and check that the oil level is at the upper level mark on the dipstick with the motorcycle upright on firm, level ground. Make sure there are no oil leaks.

## NOTE:

\* Please dispose of used engine oil in a manner that is compatible with the environment. We suggest you take it in a sealed container to your local recycling center or service station for reclamation. Do not throw it in the rubbish or pour it on the ground or down a drain.

## **CAUTION:**

\* Used engine oil may cause skin cancer if repeatedly left in contact with the skin for prolonged periods. Although this is unlikely unless you handle used oil on a daily basis, it is still advisable to thoroughly wash your hands with soap and water as soon as possible after handling used oil.

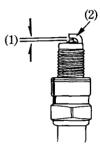
#### SPARK PLUG

(Refer to the maintenance precautions on page 52).

Specified spark plug: DPR8EA-9 (NGK) or

X24EPR-U9 (DENSO)

- 1. Clean any dirt from around the spark plug base.
- 2. Disconnect the spark plug cap and remove the spark plug with the spark plug wrench provided in the tool kit.



- (1) Spark plug gap
- (2) Side electrode

3. Visually inspect the spark plug electrodes for wear. The center electrode should have square edges and the side electrode should not be eroded.

Discard the spark plug if there is apparent wear or if the insulator is cracked or chipped.

4. Check the spark plug gap (1) using a wire-type feeler gauge. If adjustment is necessary, bend the side electrode (2) carefully.

The gap should be:

0.8 - 0.9 mm (0.03 - 0.04 in)

Make sure the plug washer is in good condition.

5. With the plug washer attached, thread the spark plug in by hand to prevent cross-threading.

6. Tighten a new spark plug 1/2 turn with a spark plug wrench to compress the washer. If you are reusing a plug, it should only take 1/8-1/4 turn after the plug seats.

#### CAUTION:

\*The spark plug must be securely tightened. An improperly tightened plug can become very hot and possibly damage the engine.

\* Never use a spark plug with an improper heat range. Severe engine

damage could result.

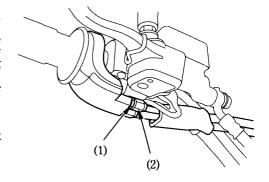
## THROTTLE OPERATION

(Refer to the maintenance precautions on page 52).

- 1. Check for smooth rotation of the throttle grip from the fully open to the fully closed position at both full steering positions.
- 2. Measure the throttle grip free play at the throttle grip flange.

The standard free play should be approx: 8-10 mm (0.3-0.4 in)

To adjust the free play, loosen the lock nut (1) and turn the adjuster (2).



(1) Lock nut

(2) Adjuster

#### **IDLE SPEED**

(Refer to the maintenance precautions on

page 52).

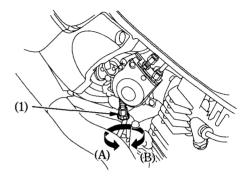
The engine must be at normal operating temperature for accurate idle speed adjustment. Ten minutes of stop-and-go riding is sufficient.

# NOTE:

- \* Do not attempt to compensate for faults in other systems by adjusting idle speed. See your Honda dealer for regularly scheduled carburetor adjustments.
- 1. Warm up the engine, shift to neutral and place the motorcycle on its side stand.
- 2. Connect a tachometer to the engine.
- 3. Adjust idle speed with the throttle stop screw (1).

Idle speed (In neutral):

 $1,400 \pm 100 \, \text{min}^{-1} \, (\text{rpm})$ 



- (1) Throttle stop screw
- (A) Increase
- (B) Decrease

#### DRIVE CHAIN

(Refer to the maintenance precautions on page 52).

The service life of the drive chain is dependent upon proper lubrication and adjustment. Poor maintenance can cause premature wear or damage to the drive chain and sprockets.

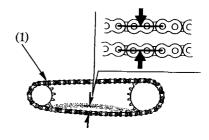
The drive chain should be checked and lubricated as part of the Pre-ride Inspection (page 35). Under severe usage, or when the motorcycle is ridden in unusually dusty or muddy areas, more frequent maintenance will be necessary.

Inspection:

- 1. Turn the engine off, place the motorcycle on its side stand and shift the transmission into neutral.
- Check slack in the lower drive chain run midway between the sprockets.Drive chain slack should be adjusted to allow the following vertical movement by hand:

25-35 mm (1.0-1.4 in)

3. Roll the motorcycle forward. Stop. Check drive chain slack. Repeat this procedure several times. Drive chain slack should remain constant. If the chain is slack only in certain sections, some links are kinked and binding. Binding and kinking can frequently be eliminated by lubrication.



(1) Drive chain

4. Roll the motorcycle forward. Stop and place it on its side stand. Inspect the drive chain and sprockets for any of the following conditions:

DRIVE CHAIN

\*Damaged Rollers

\*Loose Pins

\*Dry or Rusted Links

\*Kinked or Binding Links

\*Excessive Wear

\*Improper Adjustment

\*Damaged or Missing O-rings SPROCKETS

\*Excessively Worn Teeth

\*Broken or Damaged Teeth

A drive chain with damaged rollers, loose pins, or missing O-rings must be replaced. A chain which appears dry, or shows signs of rust, requires supplementary lubrication. Kinked or binding links should be thoroughly lubricated and worked free. If links cannot be freed, the chain must be replaced.

Damaged Sprocket Teeth Worn Sprocket Teeth

REPLACE

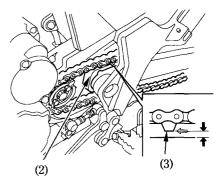
REPLACE



Normal Sprocket Teeth

**GOOD** 

5. The chain slider must be replaced if it is worn to the bottom of wear limit cutout (3). For replacement, see your Honda dealer.



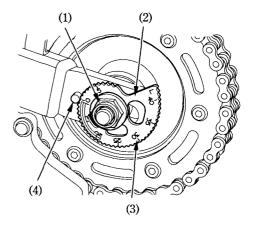
- (2) Chain slider
- (3) Cutout

## Adjustment:

Drive chain slack should be checked and adjusted, if necessary, every 1,000 km (600 miles). When operated at sustained high speeds or under conditions of frequent rapid acceleration, the chain may require more frequent adjustment.

If the drive chain requires adjustment, the procedure is as follows:

- 1. Loosen the axle nut (1).
- 2. Turn both the right and left adjusters(2) equally to increase or decrease chain slack.
- 3. After adjusting, be sure the same adjuster index marks (3) align with the stopper pins (4) on both sides of the swingarm.



- (1) Axle nut
- (2) Chain adjuster

- (3) Index mark
- (4) Stopper pin

- 4. Tighten the axle nut to specified torque.Axle nut torque:93 N·m (9.5 kgf·m, 69 lbf·ft)
- 5. Recheck chain slack.

## **AWARNING**

\* If a torque wrench is not used for this installation, see your Honda dealer as soon as possible to verify proper assembly.

#### **CAUTION:**

\* Damage to the bottom part of the frame may be caused by excessive drive chain slack of more than: 60 mm (2.4 in) Wear inspection:

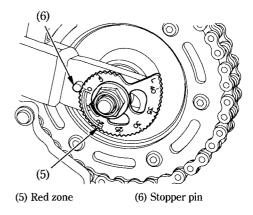
Check the chain wear label when adjusting the chain. If the red zone (5) on the chain adjuster label aligns with the center of the stopper pin (6) after the chain has been adjusted to the proper slack, the chain is excessively worn and must be replaced. The proper slack is:

25-35 mm (1.0-1.4 in)

Replacement chain: DID 520VC5

or

RK 520MO9



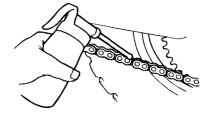
Lubrication and cleaning:

Lubricate every 1,000 km (600 miles) or sooner if chain appears dry.

The O-rings in this chain can be damaged by steam cleaning, high pressure washers, and certain solvents. Clean the side surfaces of the chain with a dry cloth. Do not brush the rubber O-rings. Brushing will damage them. Wipe dry and lubricate only with SAE 80 or 90 gear oil. Commercial chain lubricants may contain solvents which could damage the rubber O-rings.

#### **CAUTION:**

\* The drive chain on this motorcycle is equipped with small O-rings between the link plates. These O-rings retain grease inside the chain to improve its service life. However, special precautions must be taken when adjusting, lubricating, washing, and replacing the chain.



# FRONT AND REAR SUSPENSION INSPECTION

(Refer to the maintenance precautions on

page 52).

 Check the fork assembly by locking the front brake and pumping the fork up and down vigorously. Suspension action should be smooth and there must be no oil leakage.

 Swingarm bearings should be checked by pushing hard against the side of the rear wheel while the motorcycle is on a support block. Free play indicates worn bearings.

3. Carefully inspect all front and rear suspension fasteners for tightness.

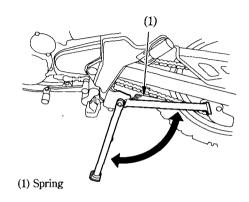
#### SIDE STAND

(Refer to the maintenance precautions on page 52).

Check the side stand system for proper function.

- Check the spring (1) for damage or loss of tension and the side stand assembly for freedom of movement.
- Check the side stand ignition cut-off system:
  - Sit astride the motorcycle; put the side stand up and the transmission in neutral.
  - 2. Start the engine and with the clutch lever pulled in, shift the transmission into gear.
  - 3. Lower the side stand. The engine should stop as you put the side stand down.

If the side stand system does not operate as described, see your Honda dealer for service



#### WHEEL REMOVAL

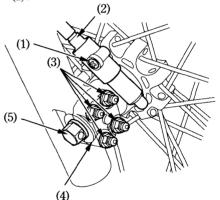
(Refer to the maintenance precautions on page 52).

### NOTE:

\* This motorcycle is equipped with a side stand only. Therefore, if front or rear wheel removal is required, it will be necessary to raise the center of the motorcycle with a jack or other firm support. If none is available, see your Honda dealer for this service.

### Front Wheel Removal

- 1. Raise the front wheel off the ground by placing a support block under the engine.
- 2. Remove the speedometer cable set screw (1) and disconnect the speedometer cable (2).



- (1) Screw
- (2) Speedometer cable
- (3) Axle holder nuts
- (4) Axle holder
- (5) Axle

- 3. Remove the front axle holder nuts (3) and the front axle holder (4).
- 4. Unscrew the axle (5). Remove the wheel. NOTE:
- \* Do not depress the brake lever when the wheel is off the motorcycle. The caliper piston will be forced out of the cylinder with subsequent loss of brake fluid. If this occurs, servicing of the brake system will be necessary. See your Honda dealer for this service.

## **Installation Notes:**

• Reverse the removal procedure.

• Insert the axle through the wheel hub and left fork leg.

• Make sure that the lug (6) on the speedometer gearbox is located behind the lug (7) on the right fork leg (8).

• Tighten the axle to the specified torque. Front axle torque:

74 N·m (7.5 kgf·m, 54 lbf·ft)

• Install the axle holder with the UP mark (9) upward and tighten the upper holder nuts to the specified torque first, then tighten the lower holder nuts to the same torque.

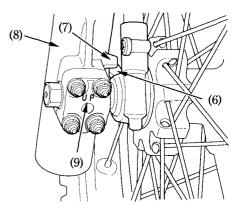
Axle holder nut torque:

12 N·m (1.2 kgf·m, 9 lbf·ft)

 After installing the wheel, apply the brake several times and then check if the wheel rotates freely. Recheck the wheel if the brake drags or if the wheel does not rotate freely.

## **AWARNING**

\* If a torque wrench was not used for installation, see your Honda dealer as soon as possible to verify proper assembly. Improper assembly may lead to loss of braking capacity.

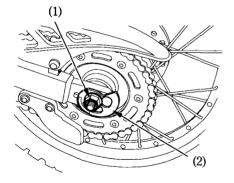


(6) lug (7) lug

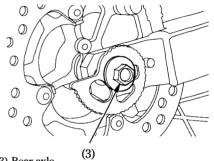
- (8) Right front fork
- (9) UP mark

#### Rear Wheel Removal

- 1. Raise the rear wheel off the ground by placing a support block under the engine.
- 2. Loosen the rear axle nut (1).
- 3. Turn both adjusters (2) so the rear wheel can be moved all the way forward for maximum drive chain slack.
- 4. Move the rear wheel forward. Derail the drive chain from the driven sprocket.



- 5. Remove the axle nut (1).
- 6. Remove the axle shaft (3), side collar and rear wheel from the swing arm.



(3) Rear axle

(1) Rear axle nut

(2) Adjuster

## **Installation Notes:**

- To install the rear wheel, reverse the removal procedure.
- Make sure the tang (4) on the swingarm is located in the slot (5) in the brake panel (6).
- Tighten the axle nut to the specified torque.

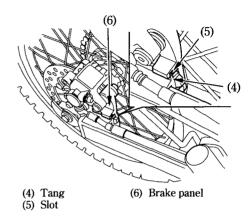
Axle nut torque:

93 N·m (9.5 kgf·m , 69 lbf·ft)

- Adjust the drive chain (page 65).
- After installing the wheel, apply the brake several times and then check if the wheel rotates freely. Recheck the wheel if the brake drags or if the wheel does not rotate freely.

## **AWARNING**

\* If a torque wrench was not used for installation, see your Honda dealer as soon as possible to verify proper assembly. Improper assembly may lead to loss of braking capacity.



#### BRAKE PAD WEAR

(Refer to the maintenance precautions on

page 52).

Brake pad wear depends upon the severity of usage, the type of riding, and road conditions. (Generally, the pads will wear faster on wet and dirty roads.)

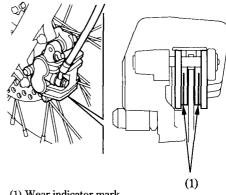
Inspect the pads at each regular maintenance interval (page 47).

#### Front Brake

Check the wear indicator mark (1) on each pad.

If either pad is worn to the wear indicator mark, replace both pads as a set. See your Honda dealer for this service.

#### (FRONT BRAKE)



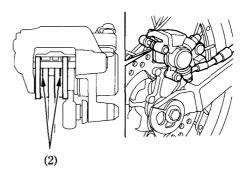
(1) Wear indicator mark

## Rear Brake

Check the wear indicator mark (2) on each pad.

If either pad is worn to the wear indicator mark, replace both pads as a set. See your Honda dealer for this service.

#### (REAR BRAKE)



(2) Wear indicator mark

#### **BATTERY**

(Refer to the maintenance precautions on

page 52).

It is not necessary to check the battery electrolyte level or add distilled water as the battery is a maintenance-free (sealed) type. If your battery seems weak and/or is leaking electrolyte (causing hard starting or other electrical troubles), contact your Honda dealer.

CAUTION:

\*Removing the battery cap strip can damage the cap strip and result in leaks and eventual battery damage.

\*When the motorcycle is to be stored for an extended period of time, remove the battery from the motorcycle and charge it fully. Then store it in a cool, dry place. If the battery is to be left in the motorcycle, disconnect the negative cable from the battery terminal.

## **AW**ARNING

\*The battery gives off explosive gases; keep sparks, flames, and cigarettes away. Provide adequate ventilation when charging or using the battery in an enclosed space.

\*The battery contains sulfuric acid (electrolyte). Contact with skin or eyes may cause severe burns. Wear protective clothing and a face shield.

-If electrolyte gets on your skin,

flush with water.

-If electrolyte gets in your eyes, flush with water for at least 15 minutes and call a physician immediately.

\* Electrolyte is poisonous.

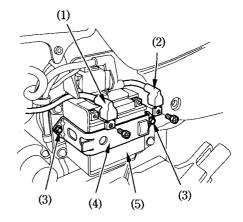
—If swallowed, drink large quantities of water or milk and follow with milk of magnesia or vegetable oil and call a physician.

\* KEEP OUT OF REACH OF CHIL-

DREN.

## Battery removal:

- 1. Remove the left side cover (page 33).
- 2. Disconnect the negative (-) terminal lead (1) from the battery first, then disconnect the positive (+) terminal lead (2).
- 3. Remove the bolts (3) and remove the battery holder (4).
- 4. Pull out the battery (5) from the battery box.



- (1) Negative (-) terminal lead
- (2) Positive (+) terminal lead
- (3) Bolt
- (4) Battery holder
- (5) Battery

#### FUSE REPLACEMENT

(Refer to the maintenance precautions on page 52).

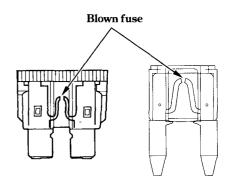
When frequent fuse failure occurs, it usually indicates a short circuit or an overload in the electrical system. See your Honda dealer for repair.

#### **CAUTION:**

\*Turn the ignition switch OFF before checking or replacing fuses to prevent accidental short-circuiting.

## AWARNING

\* Never use a fuse with a different rating from that specified. Serious damage to the electrical system or a fire may result, causing a dangerous loss of lights or engine power.



## Sub fuse:

The sub fuse (1) is located near the battery. The specified fuse is:

15A

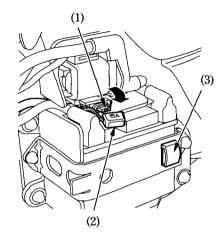
1. Remove the left side cover (page 33).

2. Open the fuse cover (2).

3. Pull out the old fuse and install a new fuse. The spare fuse (3) is attached to the fuse holder on the battery holder.

4. Close the fuse cover and install the left

side cover.



- (1) Sub fuse
- (2) Fuse cover
- (3) Spare fuse

## Main fuse:

The main fuse (1) is located near the battery.

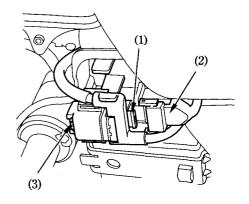
The specified fuse is: 20A

1. Remove the left side cover (page 33).

2. Disconnect the wire connector (2) of the starter magnetic switch.

3. Pull out the old fuse and install a new fuse. The spare fuse (3) is located under the starter magnetic switch.

4. Reconnect the connector and install the left side cover.



(1) Main fuse

(3) Spare fuse

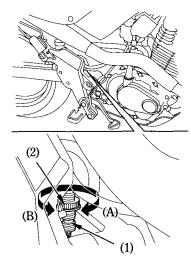
(2) Wire connector

## STOPLIGHT SWITCH ADJUSTMENT

(Refer to the maintenance precautions on page 52).

Check the operation of the stoplight switch (1) at the right side behind the engine from time to time.

Adjustment is done by turning the adjusting nut (2). Turn the nut in the direction (A) if the switch operates too late and in direction (B) if the switch operates too soon.



- (1) Stoplight switch
- (2) Adjusting nut

#### BULB REPLACEMENT

(Refer to the maintenance precautions on page 52).

## AWARNING

\* The light bulb becomes very hot while the light is ON, and remain hot for a while after it is turned OFF. Be sure to let it cool down before servicing.

#### CAUTION: -

\* Do not put finger prints on the headlight bulb, as they may create hot spots on the bulb and cause it to break.

Wear clean gloves while replacing the bulb.

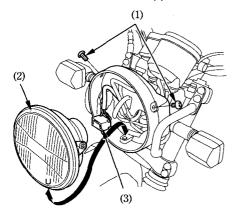
If you touch the bulb with your bare hands, clean it with a cloth moistened with alcohol to prevent its early failure.

## NOTE:

- \* Be sure to turn the ignition switch OFF when replacing the bulb.
- \* Do not use bulbs other than that specified.
- \* After installing a new bulb, check that the light operates properly.

## **Headlight Bulb**

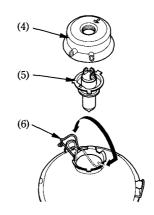
- 1. Remove the two screws (1) from the headlight case.
- 2. Gently pull the upper end of the headlight (2) forward and remove the headlight.
- 3. Disconnect the connector (3).



- (1) Screw
- (2) Headlight

(3) Connector

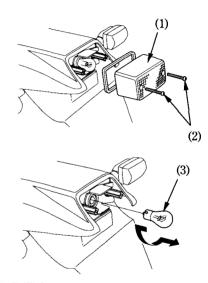
- 4. Remove the seat rubber (4).
- 5. Remove the headlight bulb (5) while pressing down on the pin (6).
- 6. Install a new bulb in the reverse order of removal.



- (4) Seat rubber
- (5) Headlight bulb
- (6) Pin

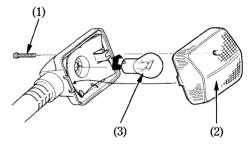
## Stop/Taillight Bulb

- 1. Remove the taillight lens (1) by removing the two screws (2).
- 2. Slightly press the bulb (3) and turn it counterclockwise.
- 3. Install a new bulb in the reverse order of removal.



- (1) Taillight lens
- (2) Screws
- (3) Bulb

- Front/Rear Turn Signal Bulb
  1. Remove the screw (1) and remove the turn signal lens (2).
- 2. Slightly press the bulb (3) and turn it counterclockwise.
- 3. Install a new bulb in the reverse order of removal.



- (1) Screw
- (2) Turn signal lens
- (3) Bulb

## **CLEANING**

Clean your motorcycle regularly to protect the surface finishes and inspect for damage, wear, and oil or brake fluid leakage.

## **CAUTION:**

\* High pressure water (or air) can damage certain parts of the motorcycle.

Avoid spraying high pressure water (typical in coin-operated car washes) at the following areas:

Ignition Switch
Carburetors
Drive Chain
Under Seat
Handlebar Switches
Brake Master Cylinder

Instruments
Wheel Hubs
Muffler Outlets
Under Fuel Tank
Handlebar Switches

1. After cleaning, rinse the motorcycle thoroughly with plenty of clean water. Strong detergent residue can corrode alloy parts.

#### NOTE:

- \* Clean the plastic parts using a cloth or sponge dampened with a solution of mild detergent and water. Rub the soiled area gently rinsing it frequently with fresh water.
- 2. Dry the motorcycle, start the engine, and let it run for several minutes.
- Test the brakes before riding the motorcycle. Several applications may be necessary to restore normal braking performance.
- 4. Lubricate the drive chain immediately after washing and drying the motorcycle.

## **AWARNING**

\* Braking efficiency may be temporarily impaired immediately after washing the motorcycle. Anticipate longer stopping distance to avoid a possible accident.

## **Aluminum Wheel Maintenance**

Aluminum corrodes when it comes in contact with dust, mud, road salt, etc. After riding, clean the wheels with a wet sponge and mild detergent, then rinse well with water and wipe dry with a clean cloth.

#### **CAUTION:**

- \* Do not use steel wool or a cleaner containing abrasives or compounds to clean the wheels, as they can cause damage.
- \* Do not ride over a curb or rub the wheel against an obstacle, as wheel damage may result.

## **Aluminum Handlebar Maintenance**

The handlebar is made of an aluminum alloy. For your safety of others, be sure to replace the handlebar with a new one when it is bent or damaged due to toppling, etc.. Remember that a damaged aluminum handlebar can be broken off, resulting in serious accident or injury. For replacement, see your Honda dealer.

## **Exhaust Pipe Maintenance**

The exhaust pipe is stainless steel but may become stained by oil or mud. If necessary, remove heat stains with a liquid kitchen abrasive.

## STORAGE GUIDE

Extended storage, such as for winter, requires that you take certain steps to reduce the effects of deterioration from non-use of the motorcycle. In addition, necessary repairs should be made BEFORE storing the motorcycle; otherwise, these repairs may be forgotten by the time the motorcycle is removed from storage.

#### STORAGE

- 1. Change the engine oil and clear the oil strainer screen.
- 2. Make sure the cooling system is filled with a 50/50% antifreeze solution.
- 3. Empty the fuel tank into an approved petrol container using a commercially available hand siphon or an equivalent method. Spray the inside of the tank with an aerosol rust-inhibiting oil.

Reinstall the fuel fill cap on the tank.

### NOTE:

 If storage will last more than one month, carburetor draining is very important, to assure proper performance after storage.

## **AW**ARNING

 Petrol is extremely flammable and is explosive under certain conditions. Perform this operation in a wellventilated area with the engine stopped. Do not smoke or allow flames or sparks in the area where petrol is drained or stored and where the fuel tank is refueled. 4. To prevent rusting in the cylinder, perform the following:

• Remove the spark plug cap from the spark plug. Using tape or string, secure the cap to any convenient plastic body part so it is are positioned away from the spark plug.

 Remove the spark plug from the engine and store it in a safe place. Do not connect the spark plug to the spark plug cap.

- Pour a tablespoon (15-20 cm³) of clean engine oil into the cylinder and cover the spark plug hole with a piece of cloth.
- Crank the engine several times to distribute the oil.
- Reinstall the spark plug and spark plug cap.

- 5. Remove the battery. Store in an area protected from freezing temperatures and direct sunlight.

  Slow charge the battery once a month.
- Wash and dry the motorcycle. Wax all painted surfaces. Coat chrome with rustinhibiting oil.
- 7. Lubricate the drive chain (page 68).
- 8. Inflate the tyres to their recommended pressures. Place the motorcycle on blocks to raise both tyres off the ground.
- Cover the motorcycle (don't use plastic or other coated materials) and store in an unheated area, free of dampness with a minimum of daily temperature variation.
   Do not store the motorcycle in direct sunlight.

## REMOVAL FROM STORAGE

- 1. Uncover and clean the motorcycle.
- 2. Change the engine oil if more than 4 months have passed since the start of storage.
- 3. Charge the battery as required. Install the battery.
- 4. Drain any excess aerosol rust-inhibiting oil from the fuel tank. Fill the fuel tank with fresh petrol.
- 5. Perform all Pre-ride Inspection checks (page 35).
  - Test ride the motorcycle at low speeds in a safe riding area away from traffic.

## **SPECIFICATIONS**

## **DIMENSIONS**

Overall length Overall width Overall height Wheelbase Ground clearance 2,070 mm (81.5 in) 825 mm (32.5 in) 1,135 mm (44.7 in) 1,345 mm (53.0 in) 260 mm (10.2 in)

## WEIGHT

Dry weight 111 kg (245 lbs)

## **CAPACITIES**

Engine oil (After draining)
(After disassembly)
Fuel tank
Passenger capacity
Maximum weight capacity

1.0 \( (1.1 US qt , 0.9 Imp qt) \)
1.2 \( (1.3 US qt , 1.1 Imp qt) \)
10.0 \( (2.64 US gal , 2.20 Imp gal) \)
Operator and one passenger \)
158 \( kg \) (348 \( lbs \)

## **ENGINE**

Bore and stroke Compression ratio Displacement

Spark plug

Standard

Spark plug gap Idle speed 65.5 imes 66.2 mm (2.58 imes 2.61 in)

9.0:1

223 cm3 (13.6 cu-in)

DPR8EA-9 (NGK) or X24EPR-U9 (DENSO)

0.8-0.9 mm (0.03-0.04 in)1,400 ± 100 min<sup>-1</sup> (rpm)

## CHASSIS AND SUSPENSION

Caster Trail

Tyre size, front Tyre size, rear 27°20′

107 mm (4.2 in) 2.75-21 45P

120/80 - 18 62P

## POWER TRANSMISSION

Primary reduction	3.090
Gear ratio, 1st	3.083
2nd	2.062
3rd	1.450
4th	1.130
5th	0.960
6th	0.814
Final reduction	3.076

## **ELECTRICAL**

Battery	12V – 4AH
Generator	0.188 kW/5,000 min <sup>-1</sup> (rpm)

## LIGHTS

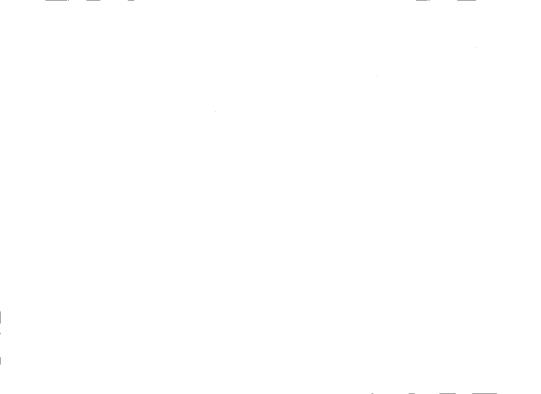
Headlight		12V 60/55W
Tail/brake light		12V 21/5W
Turn signal light	Front	12V 21W
0 0	Rear	12V 21W
Instrument lights		12V 1.7W
Neutral indicator light		12V 1.7W
Turn signal indicator lig	ght	12V 1.7W
High beam indicator lig		12V 1.7W

## **FUSE**

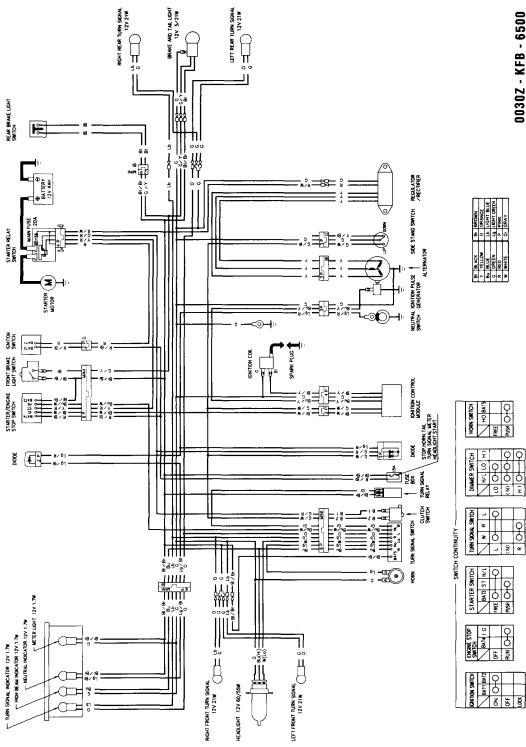
Main fuse	20A
Sub fuse	15A

## NOISE CONTROL SYSTEM (AUSTRALIA ONLY)

TAMPERING WITH THE NOISE CONTROL SYSTEM IS PROHIBITED: Owners are warned that the law may prohibit: (a) The removal or rendering inoperative by any person other than for purposes of maintenance, repair, or replacement, of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use; and (b) the use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.







SL230