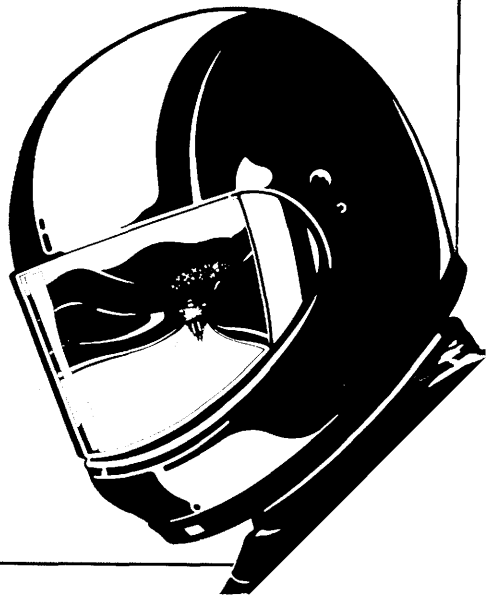


HONDA

OWNER'S MANUAL
MANUEL DU CONDUCTEUR
FAHRER-HANDBUCH

CBR900RR
FIRE BLADE



HONDA

**CBR900RR
FIRE BLADE**

OWNER'S MANUAL

MANUEL DU CONDUCTEUR

FAHRER-HANDBUCH

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-ROAD USE**

This motorcycle is designed to be used only on the road.

- **READ THIS OWNER'S MANUAL CAREFULLY**

Pay special attention to statements preceded by the following words:

▲ WARNING

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

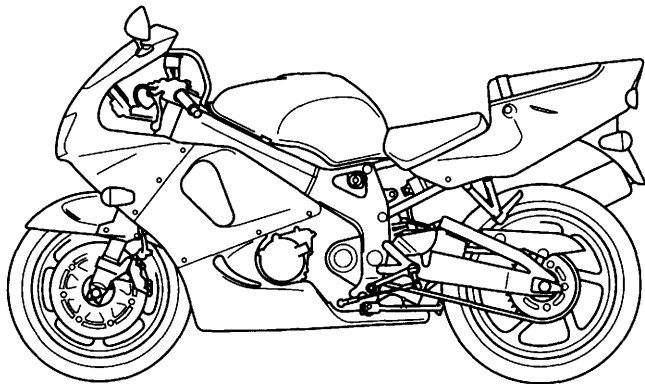
CAUTION:

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.

**HONDA CBR900RR
FIRE BLADE
OWNER'S MANUAL**



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 !

- Following codes in this manual indicate each country.

E	UK	ED	European direct sales	SD	Sweden
G	Germany			AR	Austria
F	France			ND	Northern Europe
U	Australia				Norway
SW	Switzerland				Finland
MX	Mexico				Denmark
				BR	Brazil

- The specifications may vary with each locale.

OPERATION

page

1	MOTORCYCLE SAFETY
1	Safe Riding Rules
2	Protective Apparel
2	Modifications
3	Loading and Accessories
6	PARTS LOCATION
9	Instruments and Indicators
14	MAJOR COMPONENTS (Information you need to operate this motorcycle)
14	Suspension
20	Brakes
24	Clutch
26	Coolant
28	Fuel
32	Engine Oil
33	Tubeless Tyres
36	ESSENTIAL INDIVIDUAL COMPONENTS
36	Ignition Switch
37	Right Handlebar Controls
38	Left Handlebar Controls

page

40	FEATURES (Not required for operation)
40	Steering Lock
41	Seat
43	Helmet Holder
44	Luggage Tie-down Hook
45	Document Bag
45	Storage Compartment
46	Storage Compartment for U-shaped Anti-theft Lock
47	Side Cover
48	Middle Fairing
49	Lower Fairing
50	Headlight Aim Vertical Adjustment
51	OPERATION
51	Pre-ride Inspection
52	Starting the Engine
56	Running-in
57	Riding
58	Low Altitude Riding
59	Braking
60	Parking
61	Anti-theft Tips

MAINTENANCE

page	
62	MAINTENANCE
63	Maintenance Schedule
66	Tool Kit
67	Serial Numbers
68	Colour Label
69	Maintenance Precautions
70	Engine Oil
74	Spark Plugs
76	Throttle Operation
77	Idle Speed
78	Drive Chain
84	Drive Chain slider
85	Front and Rear Suspension Inspection
86	Side Stand
87	Wheel Removal
94	Brake Pad Wear
96	Battery
98	Fuse Replacement
101	Bulb Replacement

page	
106	CLEANING
109	STORAGE GUIDE
109	Storage
111	Removal from Storage
112	SPECIFICATIONS
116	NOISE CONTROL SYSTEM (AUSTRALIA ONLY)

MOTORCYCLE SAFETY

▲WARNING

***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 51) before you start the engine. You may prevent an accident or equipment damage.
2. 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.
5. 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.
2. 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

▲WARNING

- * **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

▲ WARNING

*** 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:

189 kg (417 lbs) ...Except SW,AR,MX

188 kg (414 lbs) ...SW,AR

160 kg (353 lbs) ...MX,

Cargo weight alone should not exceed:

14 kg (30 lbs)

1. Keep cargo and accessory 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. Adjust tyre pressure (page 33), front suspension (page 14) and rear suspension (page 17) to suit load weight and riding conditions.

3. Vehicle handling and stability can be adversely affected by loose cargo. Recheck cargo security and accessory mounts frequently.
4. The Honda fairing is designed for this motorcycle only. Do not install it on any other motorcycle.
5. 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.

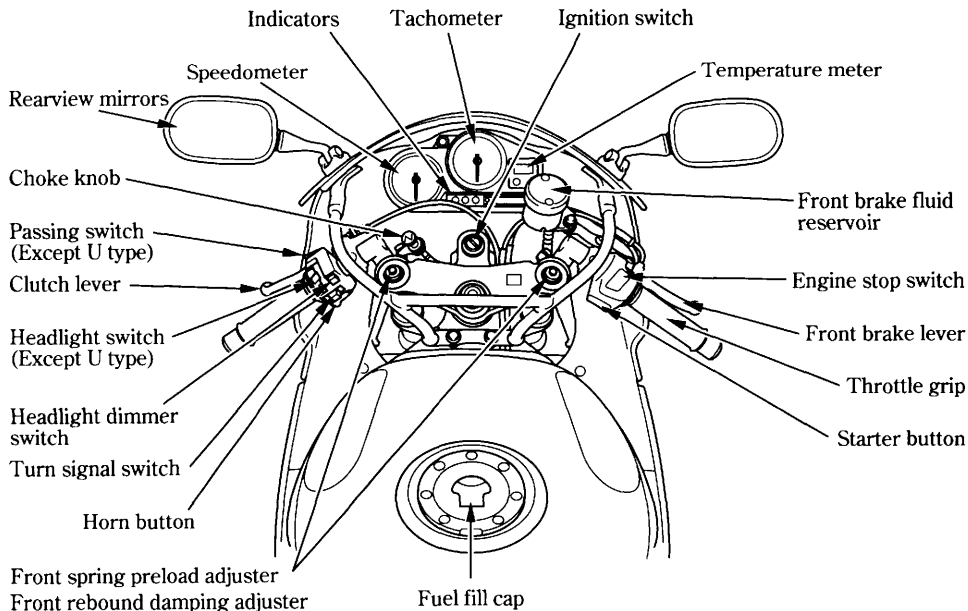
Accessories

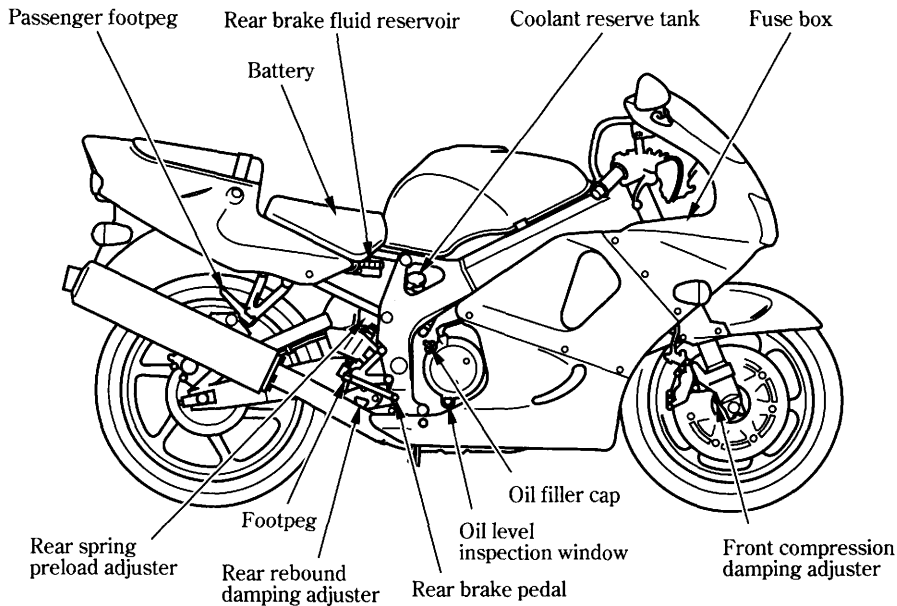
Genuine Honda accessories have been specifically designed for and tested on this motorcycle. Because the factory cannot test all other accessories, you are personally responsible for proper selection, installation, and use of non-Honda accessories. Always follow the guidelines under Loading, and these:

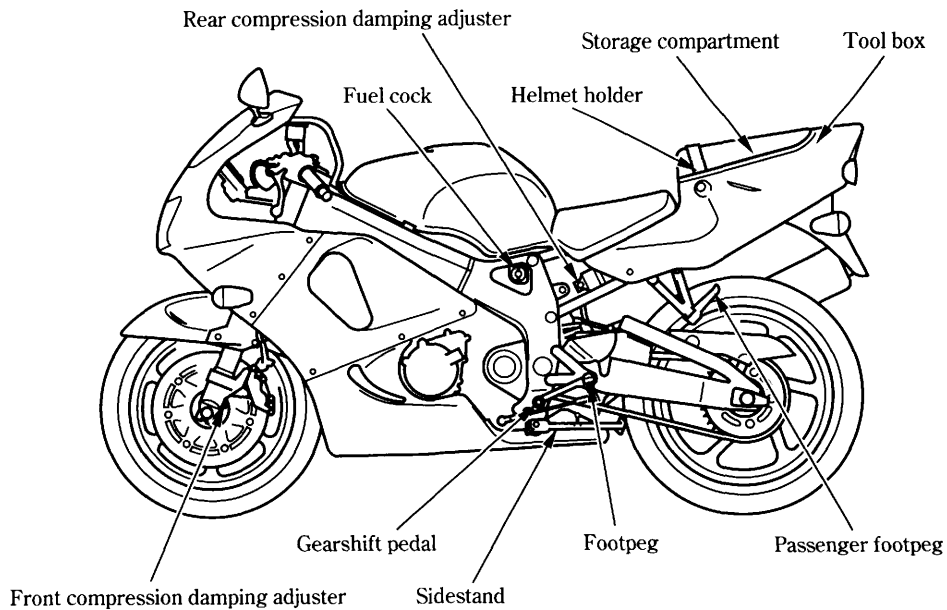
1. Carefully inspect the accessory to make sure it does not obscure any lights, reduce ground clearance and banking angle, or limit suspension travel, steering travel or control operation.
2. Large fork-mounted fairings or windshields, or poorly designed or improperly mounted fairings can produce aerodynamic forces that cause unstable handling. Do not install fairings that decrease cooling air flow to the engine.

3. Accessories which alter your riding position by moving hands or feet away from controls may increase reaction time in an emergency.
4. Do not add electrical equipment that will exceed the motorcycle's electrical system capacity. A blown fuse could cause a dangerous loss of lights or engine power.
5. This motorcycle was not designed to pull a sidecar or trailer. Handling may be seriously impaired if so equipped.
6. Any modification of the cooling system may cause overheating and serious engine damage. Do not modify the radiator shrouds or install accessories which block or deflect air away from the radiator.

PARTS LOCATION



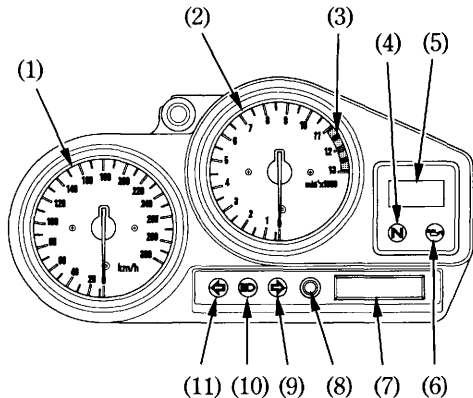




INSTRUMENTS AND INDICATORS

The indicators are contained in the instrument panel. Their functions are described in the tables on the following pages.

- (1) Speedometer
- (2) Tachometer
- (3) Tachometer red zone
- (4) Neutral indicator
- (5) Coolant temperature meter
- (6) Low oil pressure indicator
- (7) Odometer/tripmeter display
- (8) Odometer/tripmeter select and reset button
- (9) Right Turn signal indicator
- (10) High beam indicator
- (11) Left Turn signal indicator



(Ref. No.) Description	Function
(1) Speedometer	Shows riding speed.
(2) Tachometer	Shows engine rpm.
(3) Tachometer red zone	Never allow the tachometer needle to enter the red zone, even after the engine has been broken in. CAUTION: * Running the engine beyond recommended maximum engine speed (the beginning of the tachometer red zone) can damage the engine.
(4) Neutral indicator	Lights when the transmission is in neutral.
(5) Coolant temperature meter	Shows coolant temperature (page 12).
(6) Low oil pressure indicator (red)	Lights when engine oil pressure is below normal operating range. Should light when ignition switch is ON and engine is not running. Should go out when engine starts, except for occasional flickering at or near idling speed when engine is warm. CAUTION: * Running the engine with insufficient oil pressure may cause serious engine damage.

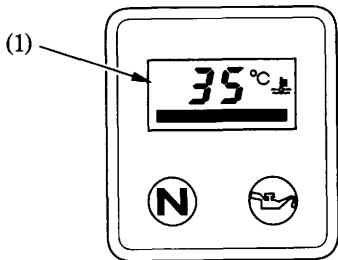
(Ref. No.) Description	Function
(7) Odometer/tripmeter display	Shows odometer and tripmeter (page 13).
Odometer	Shows accumulated mileage.
Tripmeter	Shows mileage per trip.
(8) Odometer/tripmeter select and reset button	Resets the tripmeter or select the operation mode: tripmeter or odometer (page 13).
(9) Right turn signal indicator (green)	Flashes when the right turn signal operates.
(10) High beam indicator (blue)	Lights when the headlight is on high beam.
(11) Left turn signal indicator (green)	Flashes when the left turn signal operates.

Coolant Temperature Meter

Coolant temperature meter (1) shows coolant temperature digitally.

Temperature display

Below 35°C	“— —” is displayed.
Between 35°C and 132°C	Actual coolant temperature is indicated.
Above 132°C	The display will remain “132°C”



(1) Coolant temperature meter

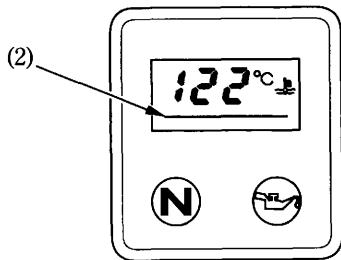
Overheating message

When the coolant temperature reaches 122°C, the display begins to flash and “red line” (2) appears on the display.

If this occurs, stop the engine and check the reserve tank coolant level. Read pages 26 – 27 and do not ride the motorcycle until the problem has been corrected.

CAUTION:

*** Exceeding maximum running temperature may cause serious engine damage.**



(2) Red line

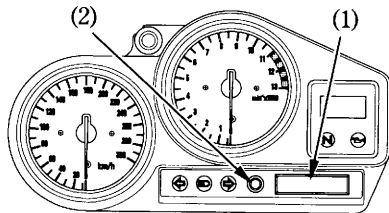
Odometer/Tripmeter

The display (1) has two functions: odometer and tripmeter.

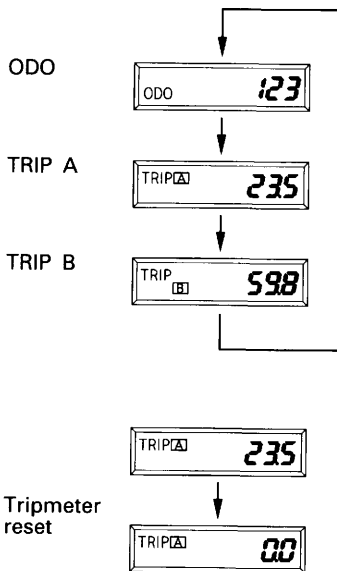
The tripmeter will show mileage as in two sub modes, "TRIP A" and "TRIP B".

Push the button (2) to select "ODO", "TRIP A" and "TRIP B" mode.

To reset the tripmeter, push and hold the button when the display is in the "TRIP A" and "TRIP B" mode.



- (1) Odometer/tripmeter display
- (2) Odometer/tripmeter select and reset button



MAJOR COMPONENTS (Information you need to operate this motorcycle)

▲WARNING

*** If the Pre-ride Inspection (page 51) is not performed, severe personal injury or vehicle damage may result.**

SUSPENSION

Front Suspension

Spring preload:

Adjust the spring preload by turning the preload adjuster (1) with the 10x14 mm wrench provided in the tool kit.

To reduce (SOFT) :

Turn the adjuster counterclockwise toward SOFT for a light load and smooth road condition.

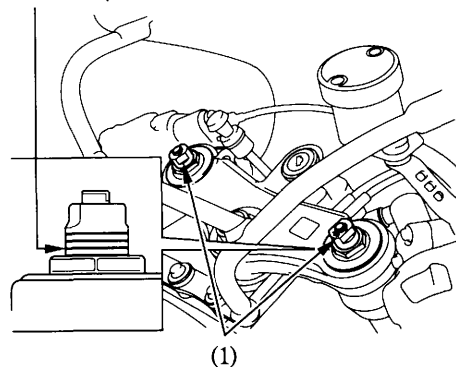
To increase (HARD) :

Turn the adjuster clockwise toward HARD for a firmer ride and rough road condition.

Standard position:

To return to the standard position, turn the adjusters until the third groove from the top aligns with the top surface of the fork caps.

Standard position



(1) Preload adjuster

Rebound damping:

To reduce (SOFT) :

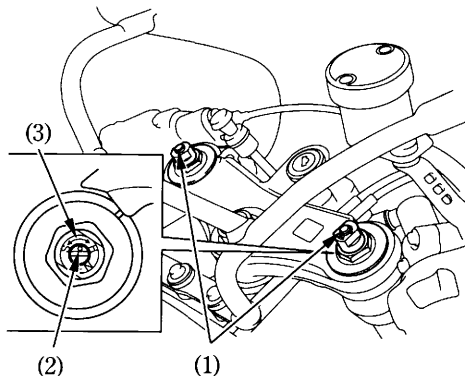
Turn the adjuster counterclockwise toward SOFT for a light load and smooth road condition.

To increase (HARD) :

Turn the adjuster clockwise toward HARD for a firmer ride and rough road condition.

To adjust the adjuster to the standard position, proceed as follows :

1. Turn the damping adjuster (1) clockwise until it will no longer turn. This is the full hard setting.
2. The adjuster is set in the standard position when the adjuster is turned counterclockwise approximately 1 turn so that its punch mark (2) aligns with the reference mark (3).



- (1) Damping adjuster (3) Reference mark
(2) Punch mark

Compression damping:

To reduce (SOFT) :

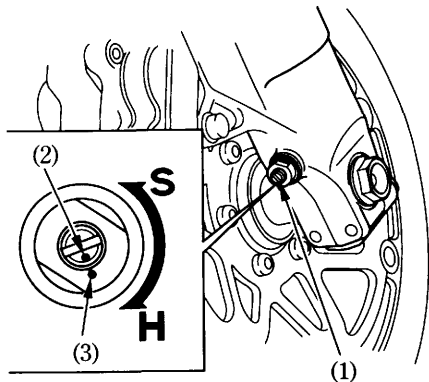
Turn the adjuster counterclockwise toward SOFT for a light load and smooth road condition.

To increase (HARD) :

Turn the adjuster clockwise toward HARD for a firmer ride and rough road condition.

To adjust the adjuster to the standard position, proceed as follows :

1. Turn the damping adjuster (1) clockwise until it will no longer turn. This is the full hard setting.
2. The adjuster is set in the standard position when the adjuster is turned counterclockwise approximately 1.5 turn so that its punch mark (2) aligns with the reference punch mark (3).



- (1) Damping adjuster
(2) Punch mark
(3) Reference punch mark

Rear Suspension

Compression damping:

To reduce (SOFT) :

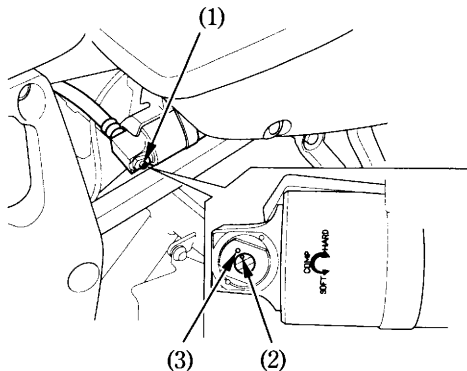
Turn the adjuster counterclockwise toward SOFT for a light load and smooth road condition.

To increase (HARD) :

Turn the adjuster clockwise toward HARD for a firmer ride and rough road condition.

To adjust the adjuster to the standard position, proceed as follows :

1. Turn the damping adjuster (1) clockwise until it will no longer turn. This is the full hard setting.
2. The adjuster is set in the standard position when the adjuster is turned counterclockwise approximately 1 turn so that its punch mark (2) aligns with the reference punch mark (3).



- (1) Damping adjuster
(2) Punch mark
(3) Reference punch mark

Rebound damping:

To reduce (SOFT) :

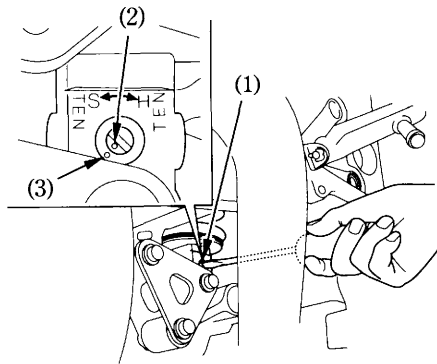
Turn the adjuster counterclockwise toward SOFT for a light load and smooth road condition.

To increase (HARD) :

Turn the adjuster clockwise toward HARD for a firmer ride and rough road condition.

To adjust the adjuster to the standard position, proceed as follows :

1. Turn the damping adjuster (1) clockwise until it will no longer turn. This is the full hard setting.
2. The adjuster is set in the standard position when the adjuster is turned counterclockwise approximately 1 turn so that its punch mark (2) aligns with the reference punch mark (3).

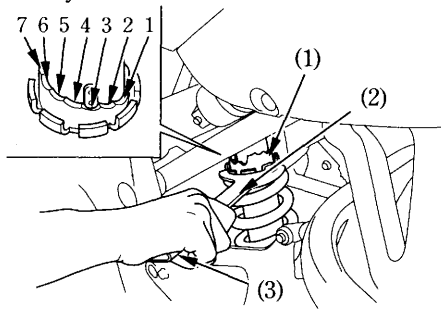


- (1) Damping adjuster
- (2) Punch mark
- (3) Reference punch mark

Spring preload:

The spring preload adjuster (1) has 7 spring preload positions for different load or riding conditions.

Use the pin spanner (2) and extension bar (3) to adjust the rear shock. Positions 1 and 2 are for a light load and smooth road conditions. Position 3 is the standard position. Positions 4 to 7 increase spring preload for a stiffer rear suspension and can be used when the motorcycle is more heavily loaded.



(1) Spring adjuster

(2) Pin spanner

(3) Extension bar

▲WARNING

- * The rear shock absorber assembly includes a damper unit that contains high pressure nitrogen gas. The instructions found in this owner's manual are limited to adjustment of the shock assembly only. Do not attempt to disassemble, disconnect or service the damper unit; an explosion causing serious injury may result.
- * Puncture or exposure to flame may also result in an explosion, causing serious injury.
- * Service or disposal should only be done by your Honda dealer or a qualified mechanic, equipped with the proper tools, safety equipment and the official Honda Shop Manual.

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 94), there is probably air in the brake system and it must be bled. See your Honda dealer for this service.

Front Brake

Front Brake Fluid Level:

▲WARNING

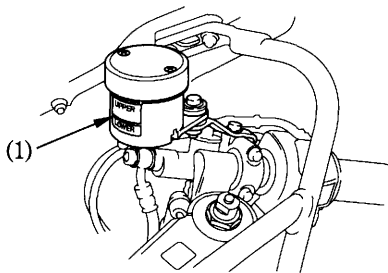
- * **Brake fluid may cause irritation. Avoid contact with skin or eyes. In case of contact, flush thoroughly with water and call a doctor if your eyes were exposed.**
- * **KEEP OUT OF REACH OF CHILDREN.**

CAUTION:

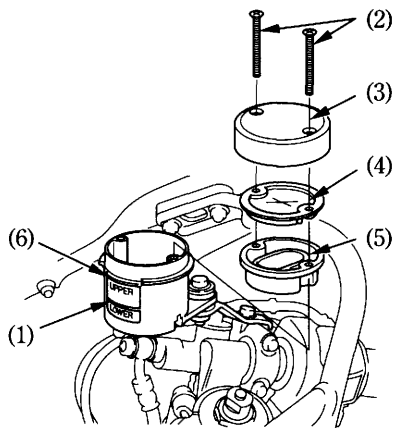
- * **Handle brake fluid with care because it can damage plastic and painted surfaces.**
- * **When adding brake fluid, be sure the reservoir is horizontal before the cap is removed or brake fluid may spill out.**
- * **Use only DOT 4 brake fluid from a sealed container.**
- * **Never allow contaminants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



(1) LOWER level mark



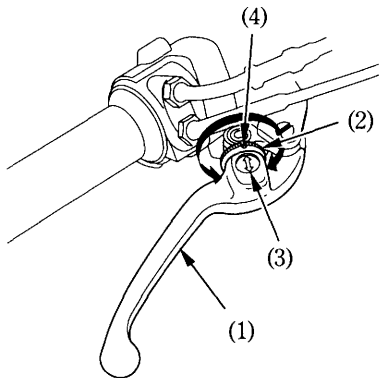
- | | |
|---------------------|----------------------|
| (2) Screws | (5) Diaphragm |
| (3) Reservoir cover | (6) Upper level mark |
| (4) Diaphragm plate | |

Front Brake Lever:

The distance between the tip of the brake lever (1) and the grip can be adjusted by turning the adjuster (2).

CAUTION:

- * Align the arrow (3) on the brake lever with index mark (4) on the adjuster.



(1) Brake lever

(2) Adjuster

(3) Arrow

(4) Index mark

Rear Brake

Rear brake fluid level:

▲WARNING

- * 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 CHILDREN.**

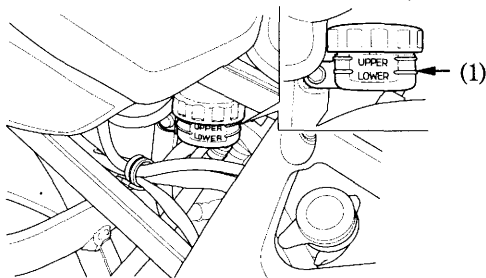
CAUTION:

- * 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.

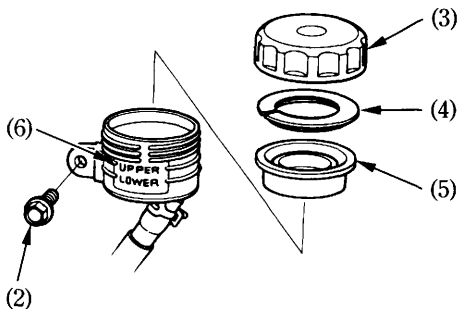
Check that the fluid level is above the LOWER level mark (1) with the motorcycle in an upright position.

Brake fluid must be added to the reservoir whenever the fluid level begins to reach the LOWER level mark (1). Remove the bolt (2).

Remove the reservoir cap (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, cap and bolt securely.



(1) LOWER level mark



(2) Bolt

(3) Reservoir cap

(4) Diaphragm plate

(5) Diaphragm

(6) UPPER level mark

Other Checks:

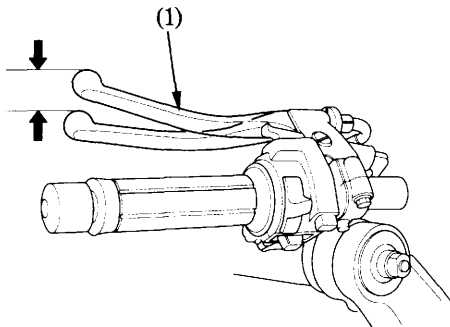
Make sure there are no fluid leaks. Check for deterioration or cracks in the hoses and fittings.

CLUTCH

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 (3) at the lever (1).

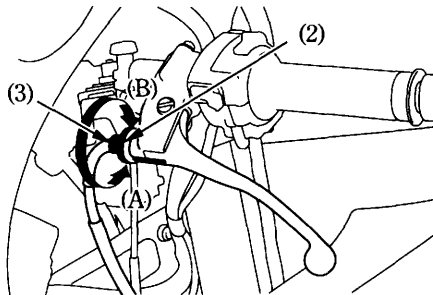
Normal clutch lever free play is:

10–20 mm (0.4–0.8 in)



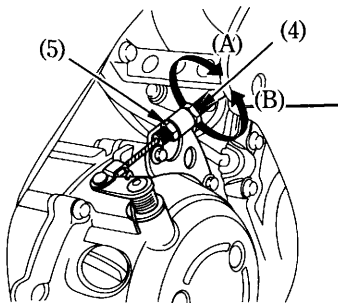
(1) Clutch lever

1. Loosen the lock nut (2) and turn the adjuster (3). Tighten the lock nut (2) and check the adjustment.
2. If the adjuster is threaded out near its limit or if the correct free play cannot be obtained, loosen the lock nut (2) and turn in the cable adjuster (3) completely. Tighten the lock nut (2).



- | | |
|---------------------------|------------------------|
| (2) Lock nut | (A) Increase free play |
| (3) Clutch cable adjuster | (B) Decrease free play |

3. Loosen the lock nut (5) at the lower end of the cable. Turn the adjusting nut (4) 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.



- | | |
|-------------------|------------------------|
| (4) Adjusting nut | (A) Increase free play |
| (5) Lock nut | (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.

COOLANT

Coolant Recommendation

The owner must properly maintain the coolant to prevent freezing, overheating, and corrosion. Use only high quality ethylene glycol antifreeze containing corrosion protection inhibitors specifically recommended for use in aluminum engines. (SEE ANTIFREEZE CONTAINER LABEL).

CAUTION:

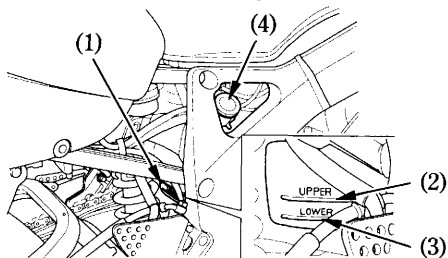
- * Use only low-mineral drinking water or distilled water as a part of the antifreeze solution. Water that is high in mineral content or salt may be harmful to the aluminum engine.**

The factory provides a 50/50 solution of antifreeze and distilled water in this motorcycle. This coolant solution is recommended for most operating temperatures and provides good corrosion protection. A higher concentration of antifreeze decreases the cooling system performance and is recommended only when additional protection against freezing is needed. A concentration of less than 40/60 (40 % antifreeze) will not provide proper corrosion protection. During freezing temperatures, check the cooling system frequently and add higher concentrations of antifreeze (up to a maximum of 60 % antifreeze) if required.

Inspection

The reserve tank is behind the frame.

Check the coolant level in the reserve tank (1) while the engine is at the normal operating temperature with the motorcycle in an upright position. If the coolant level is below the LOWER level mark (3), remove the reserve tank cap (4) and add coolant mixture until it reaches the UPPER level mark (2). Always add coolant to the reserve tank. Do not attempt to add coolant by removing the radiator cap.



- | | |
|----------------------|----------------------|
| (1) Reserve tank | (3) LOWER level mark |
| (2) UPPER level mark | (4) Reserve tank cap |

▲WARNING

- * **Do not remove the radiator cap when the engine is hot. The coolant is under pressure and could scald you.**
- * **Keep hands and clothing away from the cooling fan, as it starts automatically.**

If the reserve tank is empty, or if coolant loss is excessive, check for leaks and see your Honda dealer for repair.

FUEL

Manual Fuel Cock

The manual fuel cock (1) is under the left side of the fuel tank. Set it to ON for normal operation or RES when you start to run out of the main fuel supply. The OFF setting is for parking, long term storage or servicing of fuel system components.

Automatic Fuel ON-OFF

With the fuel cock set to ON (or RES) fuel flows to the carburetors only when the engine is being started or is running. A diaphragm shuts off fuel flow when the engine is turned off.

Reserve Fuel

When the main fuel supply is gone, turn the fuel cock to RES. Refill the tank as soon as possible after switching to RES, then switch the cock back to ON.

The reserve fuel supply is:

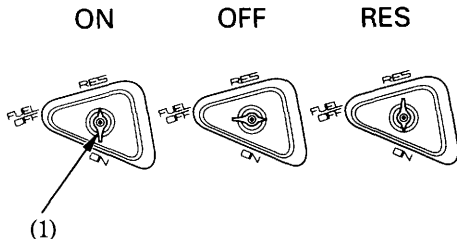
3.5 l (0.92 US gal , 0.77 Imp gal)

⚠ WARNING

- * 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:

18.0 l (4.76 US gal, 3.96 Imp gal)

To open the fuel fill cap (1), insert the ignition key (2) and turn it clockwise. The fuel fill cap is hinged and will lift up.

After refueling, to close the fuel fill cap, push the fuel fill cap into the filler neck until it snaps closed and locks. Remove the key.

Except MX, U, BR type

Use unleaded or low-lead petrol with a research octane number of 91 or higher. We recommend that you use unleaded petrol because it produces fewer engine and spark plug deposits and extends the life of exhaust system components.

For MX type only

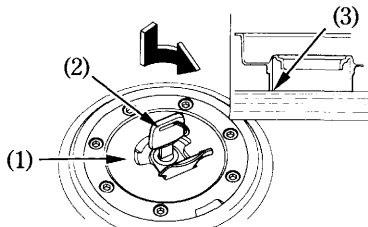
Use unleaded or low-lead petrol with a research octane number of 88 or higher. Recommend – Extra petrol.

For U, BR type

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

CAUTION:

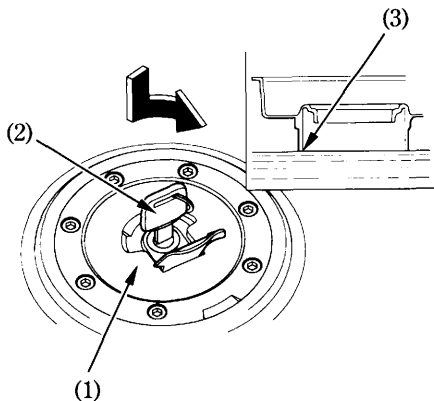
*** If “spark knock” or “pinking” occurs at a steady engine speed under normal load, change brands of petrol. If spark knock or pinking persists, consult your Honda dealer. Failure to do so is considered misuse, and damage caused by misuse is not covered by Honda’s Limited Warranty.**



(1) Fuel fill cap

(2) Ignition key

(3) Filler neck



- (1) Fuel fill cap
- (2) Ignition key
- (3) Filler neck

⚠ WARNING

- * **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 (3)). 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.**

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.

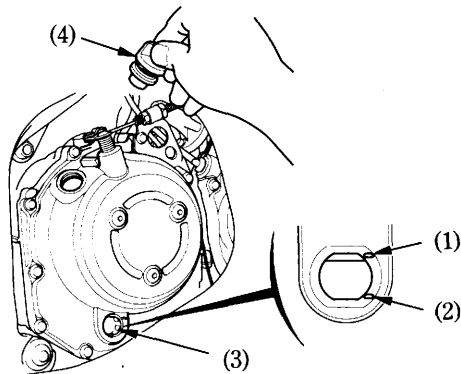
The level must be maintained between the upper (1) and lower (2) level marks in the inspection window (3).

1. Start the engine and let it idle for a few minutes. Make sure the red low oil pressure indicator goes off. If the light remains on, stop the engine immediately.
2. Stop the engine and hold the motorcycle in an upright position on firm, level ground.
3. After a few minutes, check that the oil level is between the upper (1) and lower (2) level marks in the inspection window (3).
4. If required, remove the oil filler cap (4) and add the specified oil (see page 70) up to the upper level mark. Do not overfill.

5. Reinstall the oil filler cap. Check for oil leaks.

CAUTION:

*** Running the engine with insufficient oil pressure may cause serious engine damage.**



- (1) Upper level mark
(2) Lower level mark
(3) Inspection window

(4) Filler cap

TUBELESS TYRES

This motorcycle is equipped with tubeless tyres, valves, and wheel rims. 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 necessary.

NOTE:

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

Tyre size	
Front	130/70 ZR16 (61W)
Rear	180/55 ZR17 (73W)
Cold tyre pressures kPa (kgf/cm ² , psi)	Driver only
	Front 250 (2.50 , 36)
	Rear 290 (2.90 , 42)
	Driver and one passenger
Tyre brand TUBELESS ONLY	Front 250 (2.50 , 36)
	Rear 290 (2.90 , 42)
	BRIDGESTONE
	Front BT56F RADIAL
	Rear BT56R RADIAL G
	MICHELIN
	Front TX15
	Rear TX25

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, and balancing.

⚠ WARNING

- * **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.**

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

Minimum tread depth	
Front :	1.5 mm (0.06 in)
Rear :	2.0 mm (0.08 in)

NOTE: < For Germany >

- * German law prohibits use of tyres whose tread depth is less than 1.6 mm.

Tyre Repair/Replacement:

See your Honda Dealer.

⚠ WARNING

- * The use of tyres other than those listed on the tyre information label may adversely affect handling.
- * 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.

⚠ WARNING

- * 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.

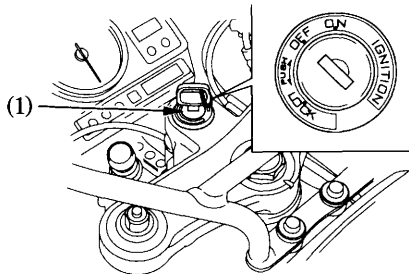
CAUTION:

- * 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

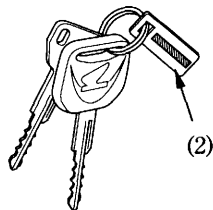
The ignition switch (1) is below the indicator panel.



(1) Ignition switch

You should received a key number plate (2) with your key.

You will need this key number if you ever have to replace a lost key. Store this plate in a safe place.



(2) Key number plate

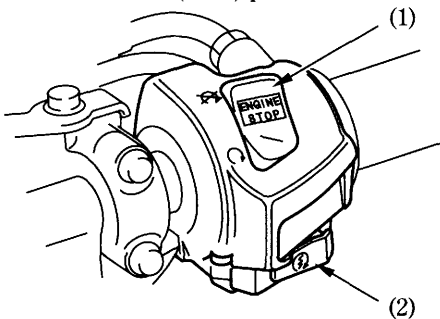
Key Position	Function	Key Removal
LOCK (steering lock)	Steering is locked. Engine and lights cannot be operated.	Key can be removed
OFF	Engine and lights cannot be operated.	Key can be removed
ON	Engine and lights can be operated.	Key cannot be removed

RIGHT HANDLEBAR CONTROLS

Engine Stop Switch

The engine stop switch (1) is next to the throttle grip. When the switch is in the

○ (RUN) position, the engine will operate. When the switch is in the ☒ (OFF) position, the engine will not operate. This switch is intended primarily as a safety or emergency switch and should normally remain in the ○ (RUN) position.



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

Starter Button

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

When the starter button is pressed, the starter motor cranks the engine. If the engine stop switch is in the ☒ (OFF) position, the starter motor will not operate. See page 53 for the starting procedure.

LEFT HANDLEBAR CONTROLS

〈 Except U type 〉

Headlight Switch (1)

The headlight switch (1) has three positions: ,  and OFF, marked by a white dot under .

 : Headlight, taillight, position light and meter lights on.

 : Position light, taillight and meter lights on.

OFF(dot): Headlight, taillight, position light and meter lights off.

Headlight Dimmer Switch (2)

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

Passing Light Control Switch (3)

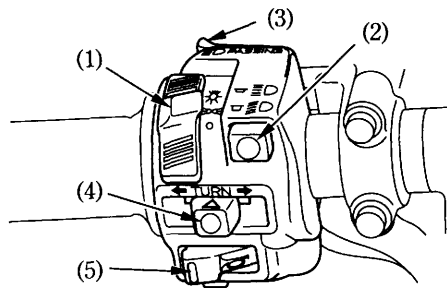
When this switch is pressed, the headlight flashes on to signal approaching cars or when passing.

Turn Signal Switch (4)

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

Horn Button (5)

Press the button to sound the horn.



- (1) Headlight switch
- (2) Headlight dimmer switch
- (3) Passing light control switch
- (4) Turn signal switch
- (5) Horn button

LEFT HANDLEBAR CONTROLS

< U type only >

Headlight Dimmer Switch (1)

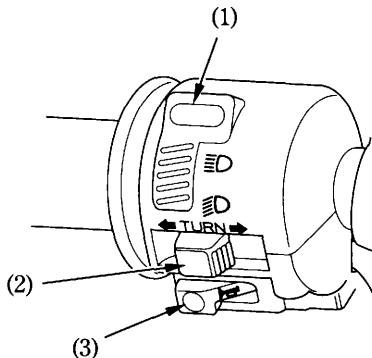
Push the dimmer switch to  (HI) to select high beam or to  (LO) to select low beam.

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

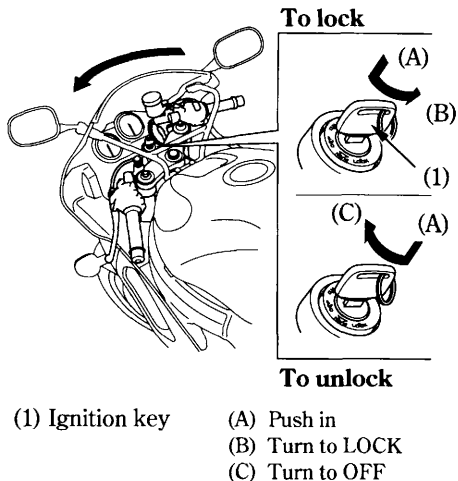
FEATURES (Not required for operation)

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. To unlock the steering, turn the key to OFF while pushing in.

⚠ WARNING

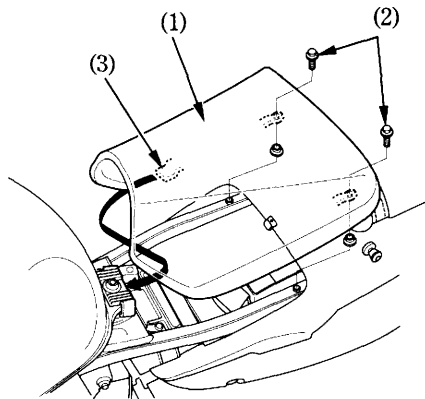
*** Do not turn the key to LOCK while riding the motorcycle; loss of vehicle control will result.**



SEAT

Front seat

To remove the front seat (1), pull up the seat end and remove the two mounting bolts (2), and then pull the seat back and up. To install the front seat, insert the tab (3) into the recess under the frame and tighten the mount bolts securely.



- (1) Front seat
- (2) Mounting bolts

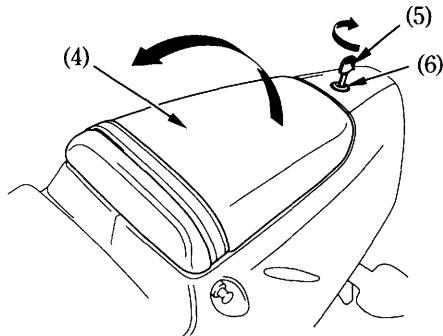
- (3) Tab

Rear seat

To open the rear seat (4) , insert the ignition key (5) into the seat lock (6) and turn it clockwise.

Pull the seat back and up.

To close the rear seat , push down on the rear of the seat.



(4) Rear seat

(5) Ignition key

(6) Seat lock

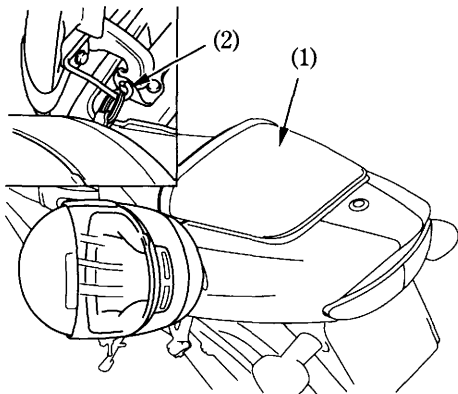
HELMET HOLDER

The helmet holder is on the back side of the rear seat.

Open the rear seat (1). (see page 42).
Hang the helmets on the holder hook (2).
Close the rear seat and lock it securely.

▲WARNING

***The helmet holder is designed for helmet security while parked. Do not ride with a helmet attached to the holder; the helmet may interfere with safe operation and result in loss of control.**



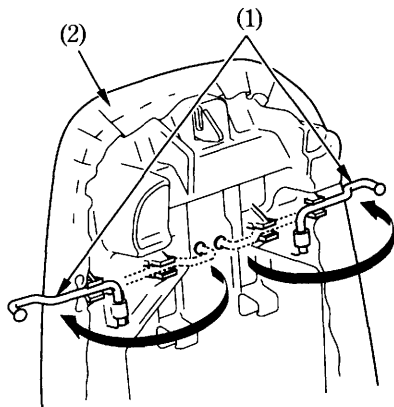
- (1) Rear seat
- (2) Holder hook

LUGGAGE TIE-DOWN HOOKS

This motorcycle is equipped with the retractable luggage tie-down hook (1) on the back side of the rear seat (2). Use this hook to secure the luggage.

CAUTION:

- * Never use the tie-down hooks to tow or lift the motorcycle.

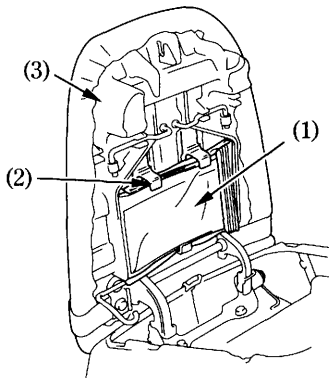


- (1) Luggage tie-down hooks
- (2) Rear seat

DOCUMENT BAG

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

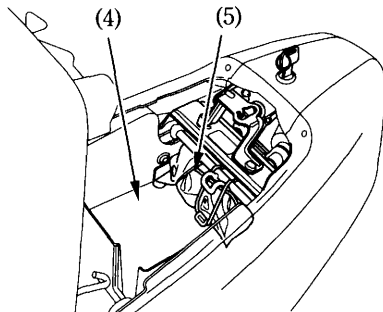
STORAGE COMPARTMENT

The storage compartment (4) is under the rear seat.

This compartment is for light weight items. Do not carry more than 2.0 kg (4.4 lbs) in this compartment.

The tool kit (5) should be stored in the compartment.

When washing your motorcycle, be careful not to flood this area with water.



- (4) Storage compartment

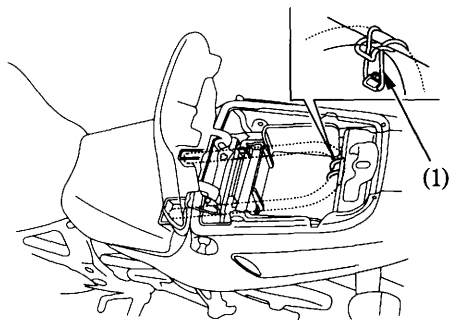
- (5) Tool kit

STORAGE COMPARTMENT FOR U-SHAPED ANTI-THEFT LOCK

The rear fender has a storage compartment to store a U-shaped anti-theft lock under the seat. After storing, be sure to fasten the lock with the rubber band (1) securely.

NOTE:

- * Some U-shaped locks may not be stored in the compartment due to their size or design.



(1) Rubber band

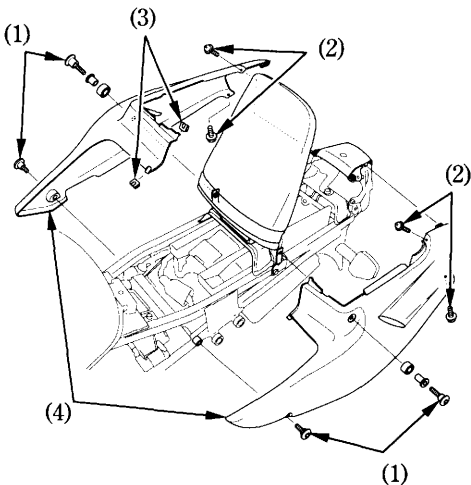
SIDE COVER

Removal:

1. Remove the front seat. (see page 41)
2. Open the rear seat. (see page 42)
3. Remove the bolts (1).
4. Remove the screws (2).
5. Remove the clips (3).
6. Remove the side covers (4) by pulling them toward you.

Installation:

1. Installation can be done in the reverse order of removal.



- (1) Bolts
(2) Screws

- (3) Clips
(4) Side cover

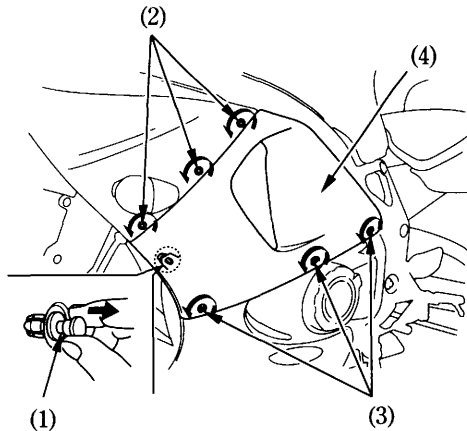
MIDDLE FAIRING

Removal:

1. Pull the tab (1).
2. Turn the lower clips (3) 90° counterclockwise, then turn the upper clip (2).
3. Pull down the middle fairing (4) and remove it.

Installation:

1. Install the middle fairing (4) from the up side.
2. Turn the upper clips (2) 90° clockwise, then turn the lower clips (3).
3. Push the tab (1).



- (1) Tab
(2) Upper clips

- (3) Lower clips
(4) Middle fairing

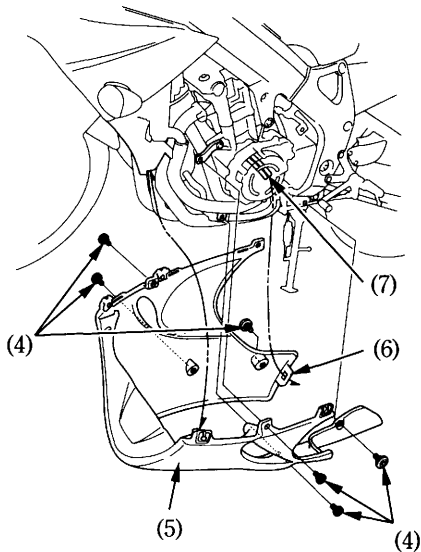
LOWER FAIRING

Removal:

1. Remove the middle fairing. (page 48)
2. Remove the bolts (4).
3. Remove the lower fairing (5).

Installation:

1. Installation can be done in the reverse order of removal.
- Run the tubes through the clip of the lower fairing.



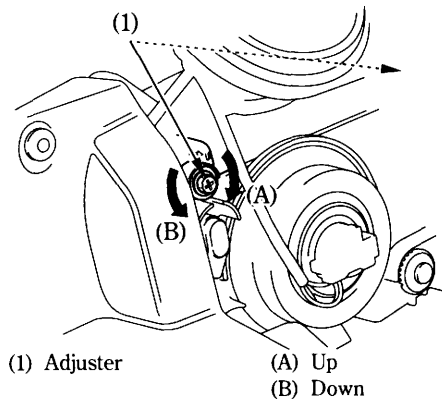
(4) Bolts
(5) Lower fairing

(6) Clip
(7) Tube

HEADLIGHT AIM VERTICAL ADJUSTMENT

Vertical adjustment can be made by turning the adjuster (1) in or out as necessary.

Obey local laws and regulations.



OPERATION

PRE-RIDE INSPECTION

▲WARNING

*** 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 32). Check for leaks.
2. Fuel level—fill fuel tank when necessary (page 29). Check for leaks.
3. Coolant level—add coolant if required. Check for leaks (pages 26 – 27).
4. Front and rear brakes—check operation; make sure there is no brake fluid leakage (pages 20 – 23).

5. Tyres—check condition and pressure (pages 33 – 35).
6. Drive chain—check condition and slack (page 78). Adjust and lubricate if necessary.
7. Throttle—check for smooth opening and full closing in all steering positions.
8. Lights and horn—check that headlight, tail/brake light, turn signals, indicators and horn function properly.
9. Engine stop switch—check for proper function (page 37).
10. Side stand ignition cut-off system—check for proper function (page 86).

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.

▲WARNING

*** 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  (RUN).
- The red low oil pressure indicator is ON.
- The fuel cock is ON.

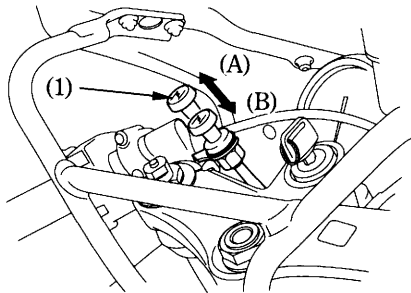
Starting Procedure

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

Normal Air Temperature

10° – 35° C (50° – 95° F)

1. Pull the choke knob (1) up all the way to Fully ON (A), if the engine is cold.
2. Start the engine, leaving the throttle closed.



(1) Choke knob

(A) Fully ON

(B) Fully OFF

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 knob (1) to keep fast idle at :
2,000 – 3,000 min⁻¹ (rpm)
 4. About a quarter minute after the engine starts, push the choke knob (1) down all the way to Fully OFF (B).
 5. If idling is unstable, open the throttle slightly.

CAUTION:

- * The red low oil pressure indicator should go off a few seconds after the engine starts. If the light stays on, stop the engine immediately and check engine oil level. Operating the engine with insufficient oil pressure can cause serious engine damage.

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 knob to keep fast idle at:
2,000 – 3,000 min⁻¹ (rpm)
3. Continue warming up the engine until it runs smoothly and responds to the throttle, when the choke knob (1) is at Fully OFF (B).

CAUTION:

- * **Snapping the throttle or fast idling for more than about 5 minutes at normal air temperature may cause exhaust pipe discoloration.**
- * **Extended use of the choke may impair piston and cylinder wall lubrication and damage the engine.**

Flooded Engine

If the engine fails to start after repeated attempts, it may be flooded with excess fuel. To clear a flooded engine, leave the engine stop switch on ○ (RUN) and push the choke knob down to Fully OFF (B). Open the throttle fully and crank the engine for 5 seconds. If the engine starts, quickly close the throttle, then open it slightly if idling is unstable. If the engine does not start, wait 10 seconds, then 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.

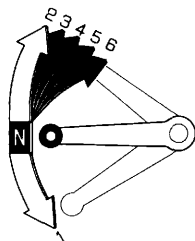
RIDING

▲ WARNING

- **Review Motorcycle Safety (pages 1 – 5) before you ride.**

NOTE:

- Make sure you understand the function of the side stand mechanism. (See MAINTENANCE SCHEDULE on page 64 and explanation for SIDE STAND on page 86)
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.



LOW ALTITUDE RIDING

〈 **MX type only** 〉

When operating this motorcycle at low altitude, the air-fuel mixture becomes overly lean. Below 1,000 m (3,300 feet), driveability and performance may be reduced. The carburetor can be modified to compensate for this low altitude leanness. However, the carburetor must be returned to standard factory specifications when higher altitude riding is desired. See your Honda dealer for low altitude adjustments.

CAUTION:

- * Sustained operation at altitudes above 1,500 m (5,000 feet) with low altitude carburetor modifications may cause flooded engine.**

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.

▲WARNING

- * 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.

▲WARNING

- * 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

1. 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 40).

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 51) at each scheduled maintenance period.

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

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

ITEMS	FREQUENCY	WHICHEVER → COMES FIRST ↓ NOTE	ODOMETER READING [NOTE (1)]										Refer to pages	
			×1,000 km	1	6	12	18	24	30	36				
			×1,000 mi	0.6	4	8	12	16	20	24				
* FUEL LINE			MONTHS		6	12	18	24	30	36			—	
* THROTTLE OPERATION						I		I		I			76	
* CARBURETOR CHOKE						I		I		I			—	
* AIR CLEANER		NOTE (2)					R			R			—	
SPARK PLUG						I		R		I			74	
* VALVE CLEARANCE								I					—	
ENGINE OIL				R		R		R		R			70	
ENGINE OIL FILTER				R		R		R		R			71	
* CARBURETOR SYNCHRONIZATION						I		I		I			—	
* ENGINE IDLE SPEED				I	I	I	I	I	I	I			77	
RADIATOR COOLANT		NOTE (3)				I		I		R			26	
* COOLING SYSTEM						I		I		I			—	
* SECONDARY AIR SUPPLY SYSTEM		NOTE (4)				I		I		I			—	

ITEMS	FREQUENCY	WHICHEVER COMES FIRST ↓ NOTE	ODOMETER READING [NOTE (1)]										Refer to pages	
			× 1,000 km	1	6	12	18	24	30	36				
			× 1,000 mi	0.6	4	8	12	16	20	24				
			MONTH		6	12	18	24	30	36				
	DRIVE CHAIN			EVERY 1,000 km (600 mi) I, L										78
	DRIVE CHAIN SLIDER					I		I		I				84
	BRAKE FLUID	NOTE (3)			I	I	R	I	I	R				20
	BRAKE PAD WEAR				I	I	I	I	I	I				94
	BRAKE SYSTEM			I		I		I		I				20, 94
*	BRAKE LIGHT SWITCH					I		I		I				—
*	HEADLIGHT AIM					I		I		I				—
	CLUTCH SYSTEM			I	I	I	I	I	I	I				24
	SIDE STAND					I		I		I				86
*	SUSPENSION					I		I		I				85
*	NUTS, BOLTS, FASTENERS			I		I		I		I				—
**	WHEELS/ TYRES					I		I		I				—
**	STEERING HEAD BEARINGS			I		I		I		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.

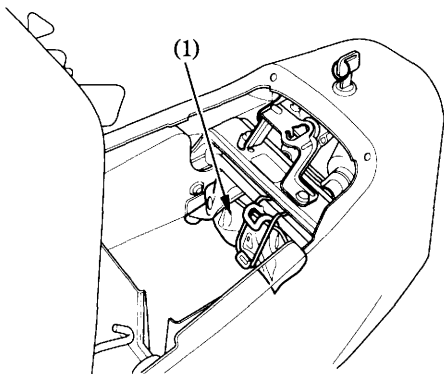
Honda recommends that your Honda dealer should road test your motorcycle after each periodic maintenance is carried out.

- 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. Replace every 2 years, or at indicated odometer interval, whichever comes first. Replacement requires mechanical skill.
 4. Switzerland and Austria type only.

TOOL KIT

The tool kit (1) is under the rear seat. Some roadside repairs, minor adjustments and parts replacement can be performed with the tools contained in the kit.

- Pin spanner
- Spark plug wrench
- 10 × 12 mm box end wrench
- 8 × 12 mm open end wrench
- 10 × 14 mm open end wrench
- Pliers
- No.2 Phillips screwdriver
- No.2 screwdriver
- Screwdriver grip
- Extension bar
- 5 mm hex wrench
- 22 mm box end wrench
- 27 mm box end wrench
- Feeler gauge 0.7 mm
- Tool bag

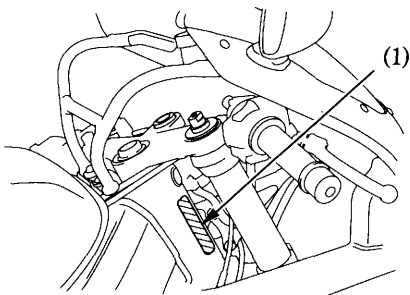


(1) Tool kit

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.

FRAME NO. _____

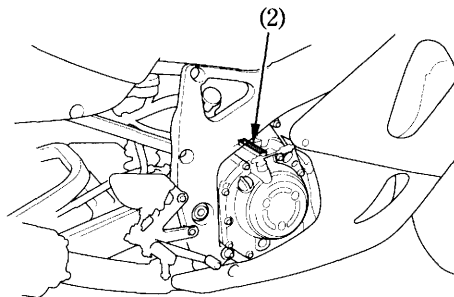


(1) Frame number

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

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

ENGINE NO. _____



(2) Engine number

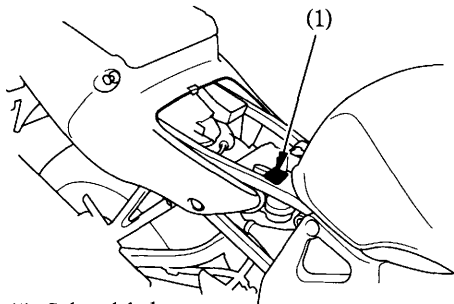
COLOUR LABEL

The colour label (1) is attached to the frame below the front seat (See page 41).

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

COLOUR _____

CODE _____



(1) Colour label

MAINTENANCE PRECAUTIONS

⚠ WARNING

- * 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.**

⚠ WARNING

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

ENGINE OIL

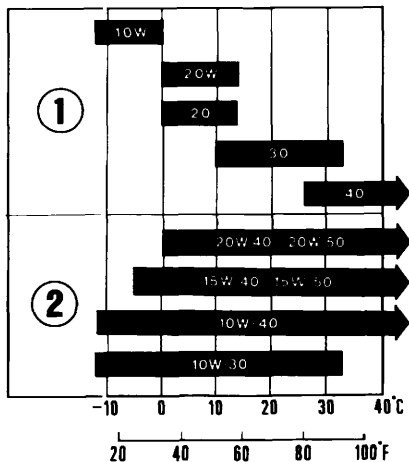
(Refer to the maintenance precautions on page 69).

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.



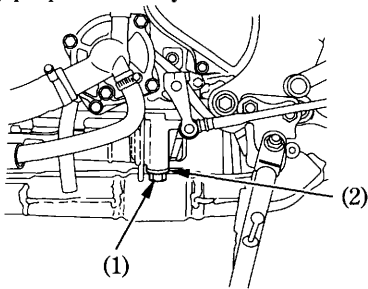
(1) Single grade

(2) Multi grade

Engine Oil and Filter

Engine oil quality is the chief factor affecting engine service life. Change the engine oil as specified in the maintenance schedule (page 63).

Changing the oil filter requires a special oil filter tool and a torque wrench. If you do not have these tools and the necessary skill, we recommend that you have your Honda dealer perform this service. If a torque wrench is not used for this installation, see your Honda dealer as soon as possible to verify proper assembly.



(1) Oil drain plug

(2) Sealing washer

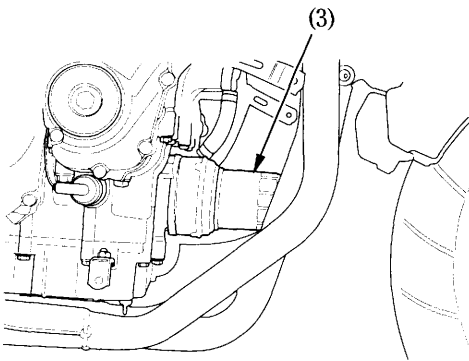
NOTE:

- * Change the engine oil with the engine at normal operating temperature and the motorcycle on its side stand to assure complete and rapid draining.

CAUTION:

- * **To prevent oil leaks and filter damage, never support the engine on the oil filter.**

1. Remove the middle fairing (page 48) and the lower fairing (page 49).
2. To drain the oil, remove the oil filler cap and oil drain plug (1) and sealing washer (2).

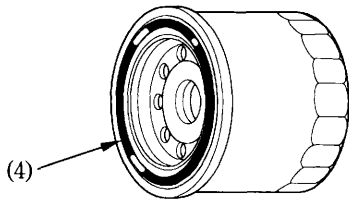


(3) Oil filter

⚠ WARNING

*** A warmed-up engine and the oil in it are hot; be careful not to burn yourself.**

3. Remove the oil filter (3) with a filter wrench and let the remaining oil drain out.
4. Apply a thin coat of engine oil to the new oil filter rubber seal (4).
5. Using a special tool and a torque wrench, install the new oil filter and tighten to a torque of:
10 N·m (1.0 kgf·m , 7 lbf·ft)



(4) Oil filter rubber seal

6. Use only the Honda genuine oil filter or a filter of equivalent quality specified for your model. Using the wrong Honda filter or a non-Honda filter which is not of equivalent quality may cause engine damage.
7. Check that the sealing washer on the drain plug is in good condition and install the plug. Replace the sealing washer every other time the oil is changed, or each time if necessary.
Oil Drain Plug Torque:
30 N·m (3.1 kgf·m , 22 lbf·ft)
8. Fill the crankcase with the recommended grade oil; approximately:
3.6 ℓ (3.8 US qt , 3.2 Imp qt)
9. Install the oil filler cap.
10. Start the engine and let it idle for 2–3 minutes.
11. Several minutes after stopping the engine, check that the oil level is at the upper level mark in the inspection window with the motorcycle upright on firm, level ground. Make sure there are no oil leaks.

NOTE:

- * When running in very dusty conditions, oil changes should be performed more frequently than specified in the maintenance schedule.
- * 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 PLUGS

(Refer to the maintenance precautions on page 69).

Recommended plugs:

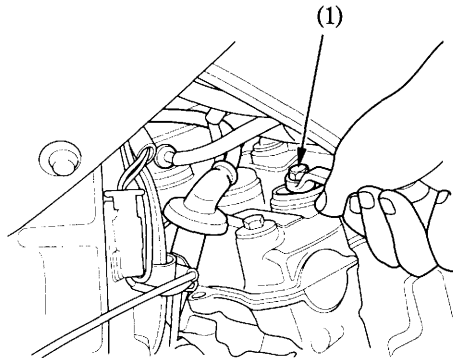
Standard:

CR9EH-9 (NGK) or
U27FER 9 (DENSO)

For cold climate: (Below 5 °C, 41 °F)

CR8EH-9 (NGK) or
U24FER 9 (DENSO)

1. Remove the right and left middle fairing (page 48) to remove the spark plugs.
2. Disconnect the spark plug caps from the spark plugs.
3. Clean any dirt from around the spark plug base. Remove the spark plug using the plug wrench (1) furnished in the tool kit.

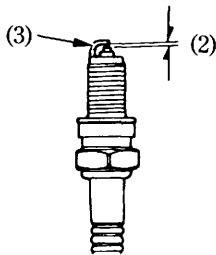


(1) Spark plug wrench

4. Inspect the electrodes and center porcelain for deposits, erosion or carbon fouling. If the erosion or deposit is heavy, replace the plug. Clean a carbon or wet-fouled plug with a plug cleaner, otherwise use a wire brush.
5. Check the spark plug gap (2) using a wire-type feeler gauge. If adjustment is necessary, bend the side electrode (3) carefully.

The gap should be:

0.80–0.90 mm (0.031–0.035 in)



(2) Spark plug gap

(3) Side electrode

6. With the plug washer attached, thread the spark plug in by hand to prevent cross-threading.
7. 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.
8. Reinstall the spark plug caps.

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.**

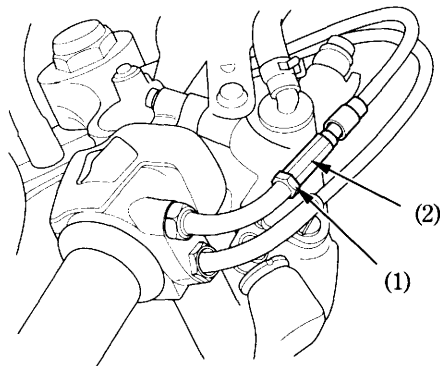
THROTTLE OPERATION

(Refer to the maintenance precautions on page 69).

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:
2–6 mm (0.08–0.24 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 69).

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

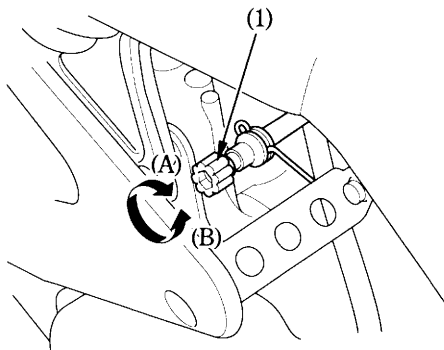
NOTE:

- * Do not attempt to compensate for faults in other systems by adjusting idle speed. See your Honda dealer for regularly scheduled carburetor adjustments, including individual carburetor adjustment and synchronization.

1. Warm up the engine, shift to neutral and place the motorcycle on its stand.
2. Adjust idle speed with the throttle stop screw (1).

Idle speed (In neutral):

$1,100 \pm 100 \text{ min}^{-1} (\text{rpm})$...Except SW
 $1,100 \pm 50 \text{ min}^{-1} (\text{rpm})$...SW



(1) Throttle stop screw

(A) Increase

(B) Decrease

DRIVE CHAIN

(Refer to the maintenance precautions on page 69).

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.

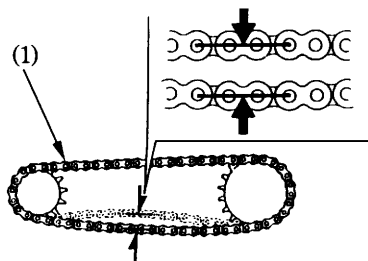
The drive chain should be checked and lubricated as part of the Pre-ride Inspection (page 51). Under severe usage, or when the motorcycle is ridden in unusually dusty or muddy areas, more frequent maintenance will be necessary.

Inspection:

1. Turn the engine off, place the motorcycle on its side stand and shift the transmission into neutral.
2. 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:

30—40 mm (1.2—1.6 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. Rotate the rear wheel slowly and 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

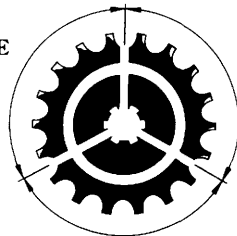
A drive chain with damaged rollers, loose pins, or missing O-rings must be replaced. A chain which appears dry, or shows signs of rust, requires supplementary lubrication. Kinked or binding links should be thoroughly lubricated and worked free. If links cannot be freed, the chain must be replaced.

Damaged Sprocket
Teeth

REPLACE

Worn Sprocket
Teeth

REPLACE

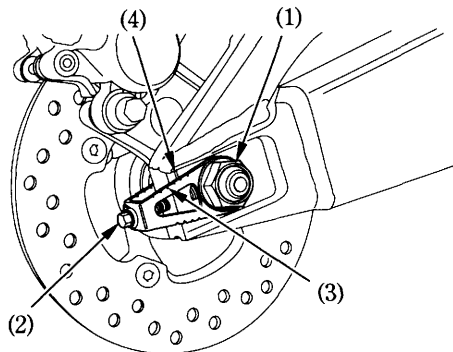


Normal Sprocket Teeth

GOOD

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.



- | | |
|--------------------|-----------------|
| (1) Axle nut | (3) Index marks |
| (2) Adjusting bolt | (4) Index mark |

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

1. Place the motorcycle on its side stand with the transmission in neutral and the ignition switch off.
2. Loosen the axle nut (1).
3. Turn both adjusting bolts (2) an equal number of turns until the correct drive chain slack is obtained. Turn the adjusting bolts counterclockwise to tighten the chain, or clockwise to provide more slack. Adjust the chain slack at a point midway between the drive sprocket and the rear wheel sprocket. Rotate the rear wheel and recheck slack at other sections of the chain.

Chain slack should be:

30–40 mm (1.2–1.6 in)

4. Check rear axle alignment by making sure the chain adjuster index marks (3) align with the index mark (4) on the swingarm.

Both left and right marks should correspond. If the axle is misaligned, turn the left or right adjusting nut until the marks correspond on the rear edge of the adjusting slots and recheck chain slack.

5. Tighten the axle nut to specified torque.

Axle nut torque:

93 N·m (9.5 kgf·m , 69 lbf·ft)

6. Tighten the adjusting bolts lightly.

▲WARNING

- * 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:
50 mm (2.0 in)

Wear inspection:

Check the chain wear label when adjusting the chain. If the red zone (5) on the label aligns with the long index mark (4) on the chain adjuster plates after the chain has been adjusted to the proper slack, the chain is excessively worn and must be replaced.

The proper slack is:

30 – 40 mm (1.2 – 1.6 in)

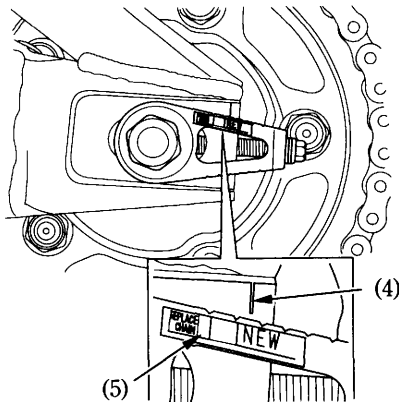
Replacement chain:

DID 525HVGC&B

or

RK GB525ROZ1

This motorcycle has a staked master link drive chain which requires a special tool for cutting and staking. Do not use an ordinary master link with this chain. See your Honda dealer.



(4) Index mark

(5) Red zone

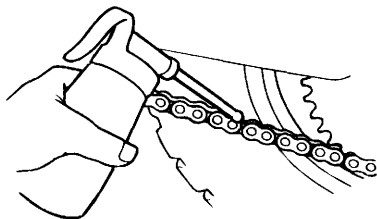
Lubrication and cleaning:

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.**

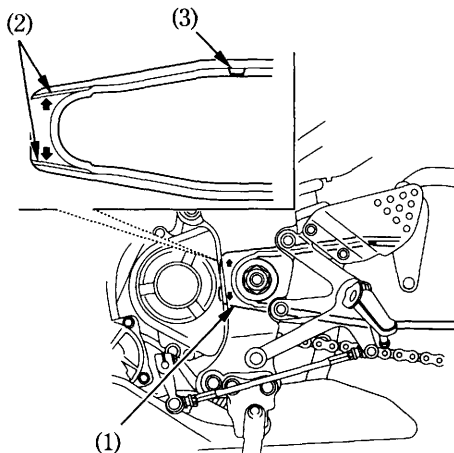


DRIVE CHAIN SLIDER

(Refer to the maintenance precautions on page 69).

Check the chain slider (1) for wear.

The chain slider must be replaced if it is worn to the wear limit line (2) or bottom of the groove (3). For replacement, see your Honda dealer.



- (1) Chain slider
- (2) Wear limit line
- (3) Wear indicator groove

FRONT AND REAR SUSPENSION INSPECTION

(Refer to the maintenance precautions on page 69).

1. 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.
2. 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

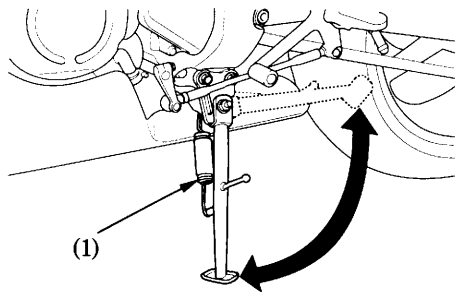
(Refer to the maintenance precautions on page 69).

Perform the following maintenance in accordance with the maintenance schedule.

Functional Check:

- 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:
 1. 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.



(1) Side stand spring

WHEEL REMOVAL

(Refer to the maintenance precautions on page 69).

NOTE:

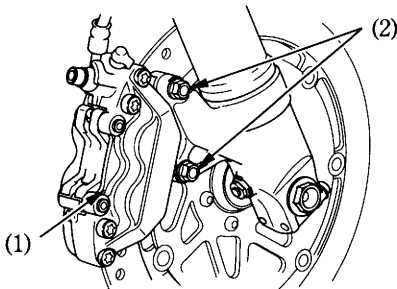
- * This motorcycle is equipped with a side stand only. Therefore, if front or rear wheel removal is required, it will be necessary to raise the center of the motorcycle with a jack or other firm support. If none is available, see your Honda dealer for this service.

Front Wheel Removal

1. Raise the front wheel off the ground by placing a support block under the engine.
2. Remove the right and left caliper assembly (1) from the fork leg by removing the fixing bolts (2).

CAUTION:

- * To avoid damage to the brake hose, support the caliper assembly so that it doesn't hang from the hose. Do not twist the brake hose.

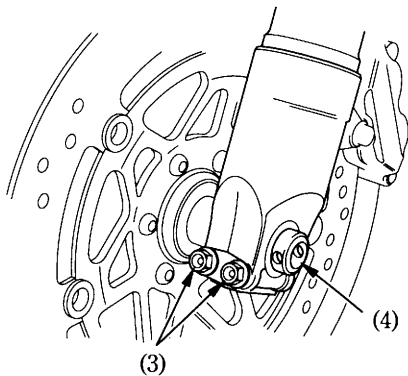


- (1) Brake caliper assembly
(2) Fixing bolts

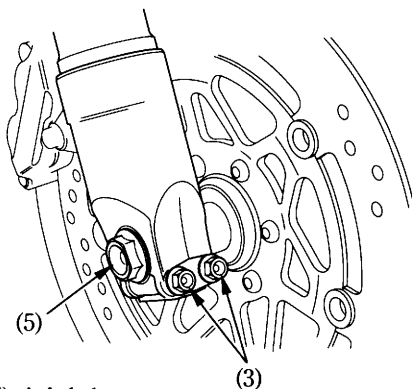
NOTE:

* 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.

3. Loosen the right and left axle pinch bolts (3), and remove the axle bolt (5).
4. Withdraw the front axle (4) and remove the front wheel.



- (3) Axle pinch bolts
(4) Front axle



- (5) Axle bolt

Installation Notes:

Position the front wheel between the fork legs and insert the axle from the left side, through the left fork leg and when hub.

Tighten the axle bolt to the specified torque .

Front axle torque :

59 N·m (6.0 kgf·m , 43 lbf·ft)

Fit the caliper over the disc, taking care not to damage the brake pads. Install the caliper fixing bolts and tighten to a torque of:

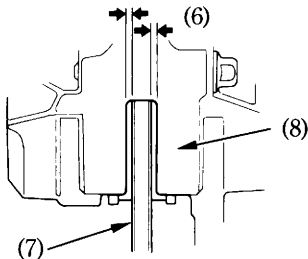
30 N·m (3.1 kgf·m , 22 lbf·ft)

Measure the clearance (6) between each surface of the brake disc (7) and the caliper holder (8) with a 0.7 mm (0.028 in) feeler gauge (9) (see illustration).

If the gauge inserts easily, tighten the right and left axle pinch bolts (3) to the specified torque.

Axle pinch bolt torque :

22 N·m (2.2 kgf·m , 16 lbf·ft)

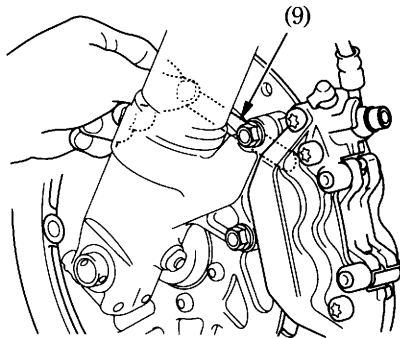


(6) Clearance
(7) Brake disc

(8) Caliper holder

⚠ WARNING

*** 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.**



(9) Feeler gauge

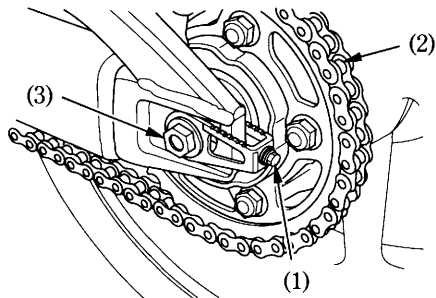
If the feeler gauge cannot be inserted easily, pull the fork outward or push inward until the gauge can be inserted and tighten the axle pinch bolts with the gauge inserted. After tightening, remove the gauge. After installing the wheel, apply the brakes several times, then recheck both discs for caliper holder to disc clearance. Do not operate the motorcycle without adequate clearance.

▲WARNING

- * **Failure to provide adequate disc to caliper holder clearance may damage the brake discs and impair braking efficiency.**

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.
3. Loosen the drive chain adjusting bolts (1).
4. Remove the rear axle nut.
5. Remove the drive chain (2) from the driven sprocket by pushing the rear wheel forward.



- (1) Adjusting bolt
(2) Drive chain

- (3) Axle shaft

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

NOTE:

- * Do not depress the brake pedal while the wheel is off the motorcycle. The caliper pistons will be forced out of the cylinders 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:

To install the rear wheel, reverse the removal procedure. Torque the axle nut to the specified torque.

Axle nut torque:

93 N·m (9.5 kgf·m , 69 lbf·ft)

CAUTION:

- * **When installing the wheel, carefully fit the brake disc between the brake pads to avoid damaging the pads.**

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.

▲ WARNING

- * **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 69).

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.)

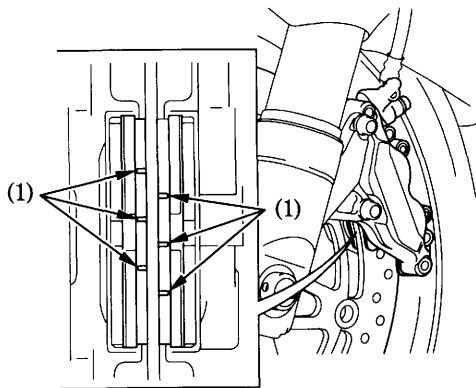
Inspect the pads at each regular maintenance interval (page 64).

Front Brake

Check the grooves (1) in each pad.

If either pad is worn to the bottom of the grooves, replace both pads as a set. See your Honda dealer for this service.

〈FRONT BRAKE〉



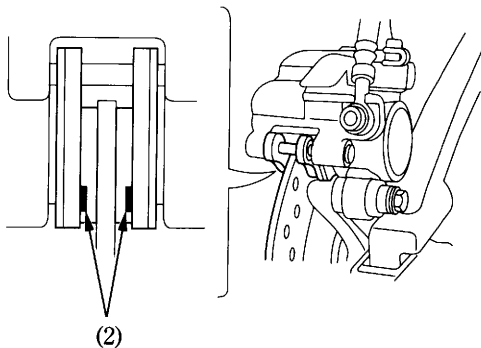
(1) Wear indicator grooves

Rear Brake

Check the cutout (2) in each pad.

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

〈 REAR BRAKE 〉



(2) Cutouts

BATTERY

(Refer to the maintenance precautions on page 69).

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.

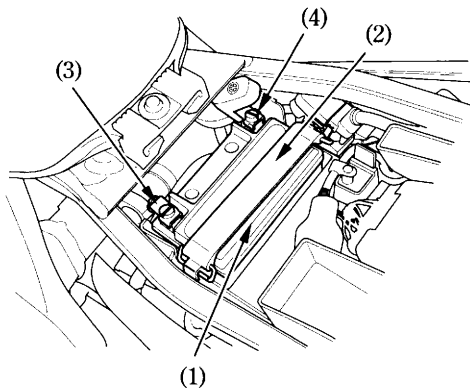
▲WARNING

- * 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 CHILDREN.**

Battery Removal

The battery (1) is in the battery box below the front seat.

1. Remove the front seat (page 41).
2. Unhook the strap (2).
3. Disconnect the negative (–) terminal lead (3) from the battery first, then disconnect the positive (+) terminal lead (4).
4. Pull out the battery from the battery box.



- (1) Battery
- (2) Strap
- (3) Negative (–) terminal lead
- (4) Positive (+) terminal lead

FUSE REPLACEMENT

(Refer to the maintenance precautions on page 69).

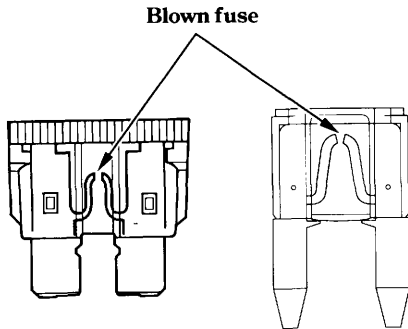
When frequent fuse failure occurs, it usually indicates a short circuit or an overload in the electrical system. See your Honda dealer for repair.

CAUTION:

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

⚠ WARNING

- * 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.



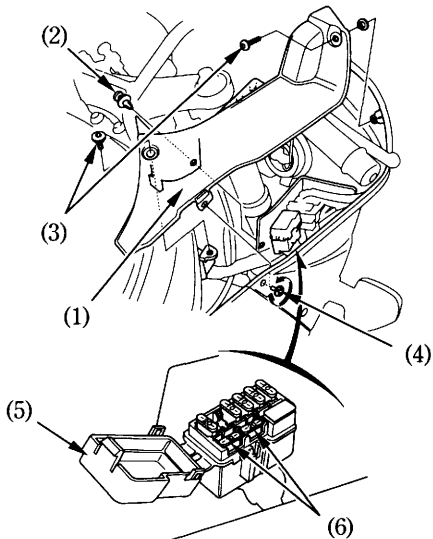
Fuse box:

The fuse box is located under the right upper shroud (1) on the upper fairing.

The specified fuses are:

10A , 20A

1. Pull the tab (2) and remove the screws (3).
2. Turn the clip (4) and remove the right upper shroud.
3. Open the fuse box cover (5).
4. Pull out the old fuse and install a new fuse.
The spare fuses (6) are located in the fuse box.
5. Close the fuse box cover and install the right upper shroud.



(1) Right upper shroud

(2) Tab

(3) Screws

(4) Clip

(5) Fuse box cover

(6) Spare fuses

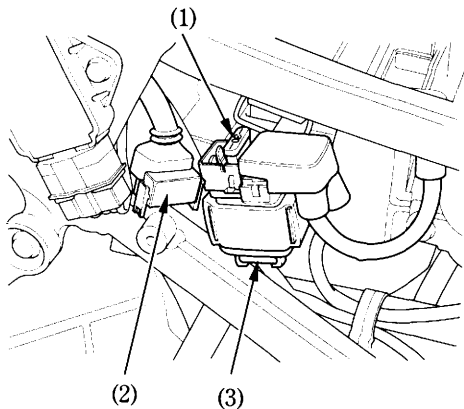
Main fuse:

The main fuse (1) is located behind the right side cover.

The specified fuse is:

30A

1. Remove the front seat (page 41) and remove the right side cover (page 47).
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 right side cover and front seat.



(1) Main fuse

(2) Wire connector

(3) Spare fuse

BULB REPLACEMENT

(Refer to the maintenance precautions on page 69).

▲WARNING

- * 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.

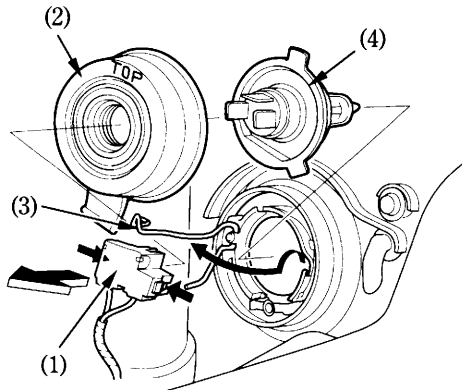
If you touch the bulb with your bare hands, clean it with a cloth moistened with alcohol to prevent its early failure.

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. Pull off the socket (1) without turning.
2. Remove the seat rubber (2).
3. Remove the bulb (4) while pressing down on the pin (3).
4. Pull out the bulb (4) without turning.
5. Install a new bulb in the reverse order of removal.

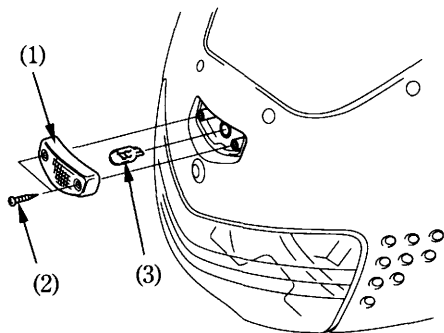


- (1) Socket
(2) Seat rubber

- (3) Pin
(4) Bulb

Position Light Bulb

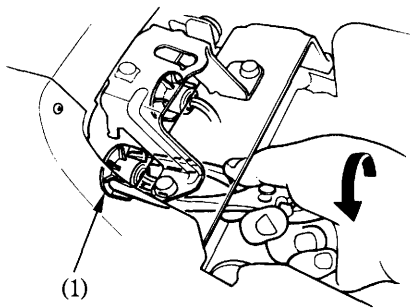
1. Remove the position light lens (1) by removing screws (2).
2. Pull out the bulb (3) without turning.
3. Install a new bulb in the reverse order of removal.



- (1) Position light lens
(2) Screw
(3) Bulb

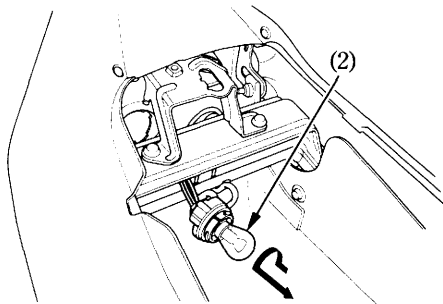
Stop/Taillight Bulb

1. Open the rear seat (page 42).
2. Turn the socket (1) 90° counterclockwise, then pull it out toward you.



(1) Socket

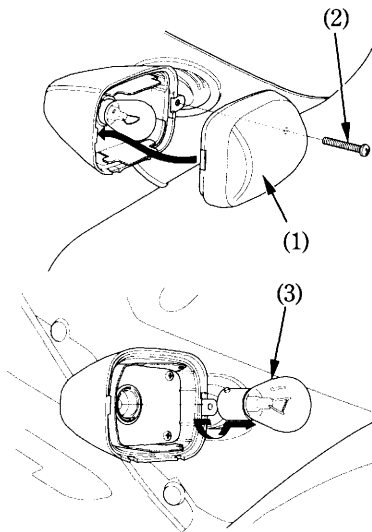
3. Slightly press down on the bulb (2) and turn it counterclockwise.
4. Install a new bulb in the reverse order of removal.



(2) Bulb

Front/Rear Turn Signal Bulb

1. Remove the turn signal lens (1) from the turn signal by removing the screw (2).
2. Slightly press in on the bulb (3) and turn in 90° counterclockwise. Remove the bulb.
3. Install a new bulb in the reverse order of removal.



(1) Lens
(2) Screw

(3) Bulb

CLEANING

Clean your motorcycle regularly to protect the surface finishes and inspect for damage, wear, and oil, coolant 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:

- Wheel Hubs
- Ignition Switch
- Carburetors
- Brake Master Cylinders
- Instruments
- Handlebar Switches
- Muffler Outlet
- Under Fuel Tank
- Drive Chain
- Under Seat
- Headlight

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

NOTE:

- * Clean the fairing, headlight lens, meter lens and other 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.
- * The inside of the headlight lens may be clouded immediately after washing the motorcycle. Moisture condensation inside the headlight lens will disappear gradually by lighting the headlight in high beam. Run the engine while keeping the headlight on.

2. Dry the motorcycle, start the engine, and let it run for several minutes.

⚠ WARNING

- * **Braking efficiency may be temporarily impaired immediately after washing the motorcycle. Anticipate longer stopping distance to avoid a possible accident.**
3. 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.

Painted Aluminum Wheel Maintenance

Aluminum may corrode from contact with dirt, mud, or road salt. Clean the wheels after riding through any of these substances. Use a wet sponge and mild detergent. Avoid stiff brushes, steel wool, or cleaners containing abrasives or chemical compounds.

After washing, rinse with plenty of water and dry with a clean cloth.

Apply touch-up paint to the wheels where damage has resulted.

Exhaust Pipe Maintenance (Except AR, SW)

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

Aluminum Muffler Maintenance

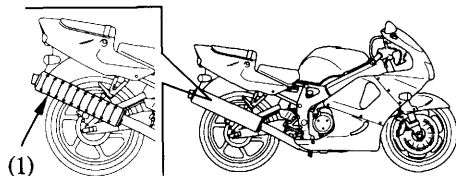
Aluminum corrodes when it comes in contact with dust, mud and road salt.

To remove stains, use Scotch Brite Hand Pad # 7447 (maroon) or equivalent.

Wet the pad and polish using strokes following the surface finish around the muffler.

Clean the muffler using a wet sponge and a mild detergent, then rinse well with clean water.

Dry the muffler with a soft clean cloth, using strokes following the surface finish around the muffler.



(1) Surface finish

CAUTION:

- * Avoid using steel wool, polishing compounds, or wax on an aluminum muffler. Steel wool may damage or discolour the surface. A polishing compound or wax may discolour the surface after its heated by engine operation.
- * Muffler Stain Remover (Scotch Brite Hand Pad # 7447) is for removing stains on the aluminum mufflers only.
- * Protect the muffler before you apply any chemical detergent to clean your rear wheel. Chemical products accidentally applied to the muffler may damage the surface of it.

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 filter.
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.

▲WARNING

- * **Petrol is extremely flammable and is explosive under certain conditions. Perform this operation in a well-ventilated 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 cylinders, perform the following:
 - Remove the spark plug caps from the spark plugs. Using tape or string, secure the caps to any convenient plastic body part so that they are positioned away from the spark plugs.
 - Remove the spark plugs from the engine and store them in a safe place. Do not connect the spark plugs to the spark plug caps.
 - Pour a tablespoon (15–20 cm³) of clean engine oil into each cylinder and cover the spark plug holes with a piece of cloth.
 - Crank the engine several times to distribute the oil.
 - Reinstall the spark plugs and spark plug caps.
5. Remove the battery. Store in an area protected from freezing temperatures and direct sunlight.
Slow charge the battery once a month.
6. Wash and dry the motorcycle. Wax all painted surfaces. Coat chrome with rustinhibiting oil.
7. Lubricate the drive chain (page 83).
8. Inflate the tyres to their recommended pressures. Place the motorcycle on blocks to raise both tyres off the ground.
9. 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.
Change the engine oil if more than 4 months have passed since the start of storage.
2. Charge the battery as required. Install the battery.
3. Drain any excess aerosol rust-inhibiting oil from the fuel tank. Fill the fuel tank with fresh petrol.
4. Perform all Pre-ride Inspection checks (page 51).
Test ride the motorcycle at low speeds in a safe riding area away from traffic.

SPECIFICATIONS

DIMENSIONS

Overall length

2,135 mm (84.1 in) ... G, AR, SW, ND, SD

2,040 mm (80.3 in) ... E, F, ED, U

2,055 mm (80.9 in) ... MX, BR

Overall width

685 mm (27.0 in)

Overall height

1,135 mm (44.7 in)

Wheelbase

1,405 mm (55.3 in) ... Except MX

1,400 mm (55.1 in) ... MX

WEIGHT

Dry weight

180 kg (397 lbs) ... Except AR, SW

181 kg (399 lbs) ... AR, SW

CAPACITIES

Engine oil

After draining

3.5 l (3.7 US qt, 3.1 Imp qt)

After draining and

oil filter change

3.6 l (3.8 US qt, 3.2 Imp qt)

After disassembly

4.4 l (4.6 US qt, 3.9 Imp qt)

Fuel tank

18.0 l (4.76 US gal, 3.96 Imp gal)

Fuel reserve

3.5 l (0.92 US gal, 0.77 Imp gal)

Cooling system capacity

2.64 l (0.697 US gal, 0.581 Imp gal)

Passenger capacity

Operator and one passenger

Maximum weight capacity

189 kg (417 lbs) ... Except AR, SW, MX

188 kg (414 lbs) ... AR, SW

160 kg (353 lbs) ... MX

ENGINE

Bore and stroke
Compression ratio
Displacement
Spark plug
Standard

71.0 × 58.0 mm (2.80 × 2.28 in)

11.1 : 1

919 cm³ (56.1 cu-in)

CR9EH-9 (NGK) or
U27FER 9 (DENSO)

For cold climate
(Below 5° C, 41° F)

CR8EH-9 (NGK) or
U24FER 9 (DENSO)

Spark plug gap
Idle speed

0.80–0.90 mm (0.031–0.035 in)

1,100 ± 100 min⁻¹ (rpm) ... Except SW

1,100 ± 50 min⁻¹ (rpm) ... SW

Valve clearance (Cold)

Intake 0.16 mm (0.006 in)

Exhaust 0.25 mm (0.010 in)

CHASSIS AND SUSPENSION

Caster	24°
Trail	95 mm (3.7 in)
Tyre size, front	130/70 ZR16 (61W)
Tyre size, rear	180/55 ZR17 (73W)

POWER TRANSMISSION

Primary reduction	1.520
Gear ratio, 1st	2.769
2nd	2.000
3rd	1.600
4th	1.368
5th	1.227
6th	1.130
Final reduction	2.625... Except MX
	2.687... MX

ELECTRICAL

Battery	12V – 8AH
Generator	0.384 kw

LIGHTS

Headlight	12V – 60/55W ... Except U
	12V – 45/45W ... U
Tail/brake light	12V – 21/5W ... Except BR
	12V – 32/3CP ...BR
Turn signal light Front	12V – 21W ... Except BR
	12V – 32/3CP ...BR
Rear	12V – 21W ... Except BR
	12V – 32CP ...BR
Instrument lights	12V – 1.1W
Neutral indicator	12V – 1.1W
Turn signal indicator	12V – 1.1W
High beam indicator	12V – 1.1W
Low oil pressure indicator	12V – 1.1W
Position light	12V – 5W

FUSE

Main fuse	30A
Other fuses	10A , 20A

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.

