

# HONDA



## CB500

# HONDA



## CB500

## CONSUMER INFORMATION

### VEHICLE STOPPING DISTANCE

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

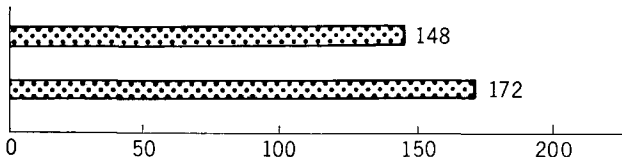
The information presented represents results obtainable by skilled drivers under controlled road and vehicle conditions, and the information may not be correct under other conditions.

Description of vehicles to which this table applies: **HONDA CB 500**

#### Fully Operational Service Brake

##### Load

Light



Maximum

Stopping Distance in Feet from 60 mph.

## ACCELERATION AND PASSING ABILITY

This figure indicates passing times and distances that can be met or exceeded by the vehicles to which it applies, in the situations diagrammed on the next page. The low-speed pass assumes an initial speed of 20 MPH and a limiting speed of 35 MPH. The high-speed pass assumes an initial speed of 50 MPH and a limiting speed of 80 MPH.

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

---

Description of vehicles to which this table applies: **HONDA CB 500**

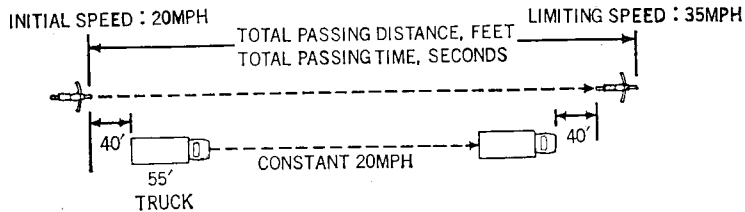
---

### SUMMARY TABLE :

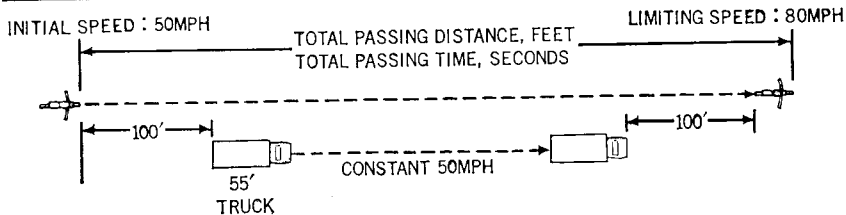
Low-speed pass ..... 344 Feet; 7.1 Seconds

High-speed pass ..... 975 Feet; 9.8 Seconds

## LOW- SPEED



## HIGH- SPEED





## **PREFACE**

It is with great pleasure that we welcome you to THE HONDA CB 500 FOUR. You have selected the finest high speed touring sport motorcycle available. The CB500 has been designed, engineered and tested to meet the demands and requirements of the most discriminating motorcyclist.

The manual is provided so that you can operate and maintain your HONDA CB 500 at the highest level of performance. Therefore, for your satisfaction it is IMPORTANT that you read and observe the information contained herein.

When service is necessary, consult the HONDA dealer from whom you purchased the motorcycle or any authorized HONDA dealer and you will receive prompt and satisfying service.

We take this opportunity to thank you for selecting a HONDA and to assure your continuing interest in safe and pleasant motorcycling.

## **CONTENTS**

Serial Number Location .....	5
Control Location .....	6
OPERATING INSTRUCTIONS .....	10
Instruments and Indicator Lamps.....	10
Electrical Controls .....	13
Main switch .....	13
Ignition switch .....	14
Starter switch .....	14
Headlight switch .....	14
Stop light switches .....	15
Horn button .....	15
Turn signal switch .....	16
Mechanical Controls .....	16
Steering lock .....	16
Seat lock .....	17
Helmet holder .....	18
Front brake lever.....	18
Throttle grip .....	18
Rear brake pedal .....	19
Gear change pedal .....	20
Clutch lever .....	21
Kick starter pedal .....	21

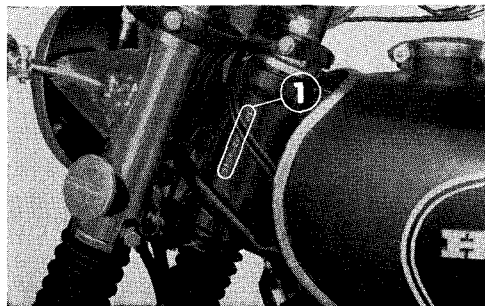
Choke lever .....	22
Fuel and Oil .....	23
Fuel tank .....	23
Fuel control valve .....	23
Oil reservoir .....	25
Engine oil recommendations .....	26
Pre-Riding Inspection .....	27
Starting the Engine .....	28
Cold engine starting procedure .....	28
Starting in extreme cold weather .....	29
Warm engine starting procedure .....	29
Break-in Procedure .....	30
Riding the Motorcycle .....	31
Parking .....	33
Safe Riding Suggestions .....	33
MAINTENANCE .....	34
Maintenance Schedule .....	34
Maintenance Operations .....	37
Engine oil .....	37
Spark plugs .....	40
Ignition timing adjustment .....	42
Valve tappet clearance adjustment .....	45

Fuel valve strainer.....	47
Cam chain adjustment .....	48
Air cleaner .....	49
Throttle cable adjustment .....	50
Carburetor adjustment.....	51
Clutch adjustment.....	52
Drive chain adjustment and lubrication .....	54
Brake inspection and adjustment.....	58
Wheel removal and inspection .....	65
Tires .....	67
Front suspension .....	72
Rear suspension .....	73
Battery .....	76
Fuse replacement .....	78
Head light beam adjustment.....	79
Stop light switch adjustment .....	80
Replacing light bulbs .....	82
TOOL KIT .....	84
SPECIFICATIONS .....	85
INDEX (Alphabetical listing).....	88
WIRING DIAGRAM	

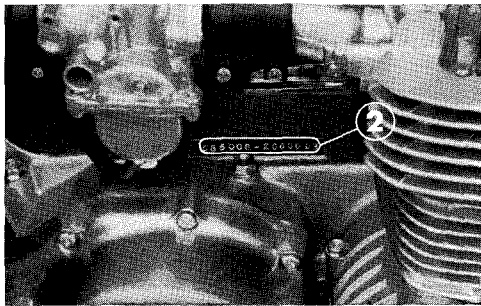
## **SERIAL NUMBER LOCATION**

The frame serial number ① is stamped on the left of the steering head pipe, and the engine serial number ② is located on top of the crankcase left side. These numbers are required when registering the motorcycle and also for processing

warranty claims. Applicable frame or engine serial numbers should be given when ordering replacement parts.



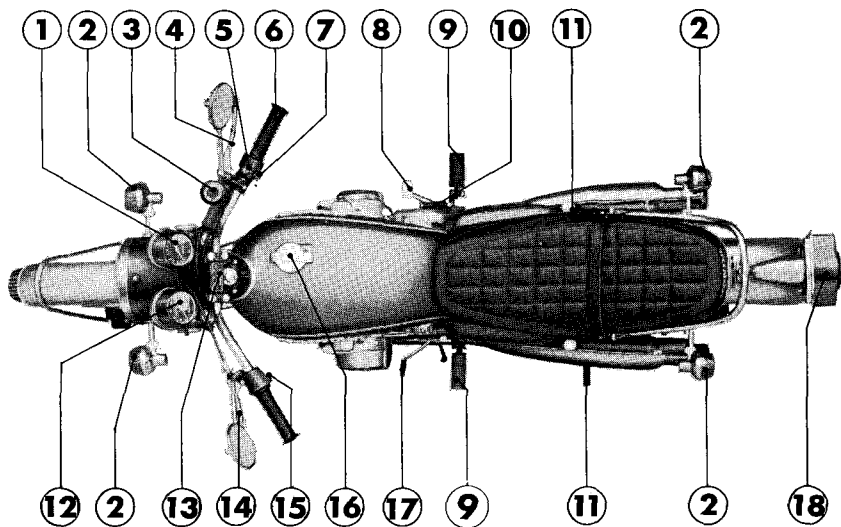
① Frame serial number

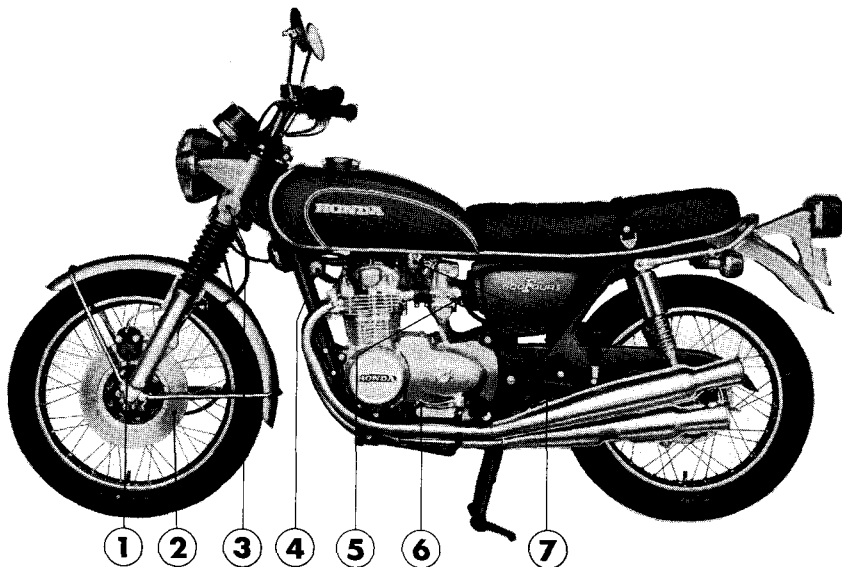


② Engine serial number

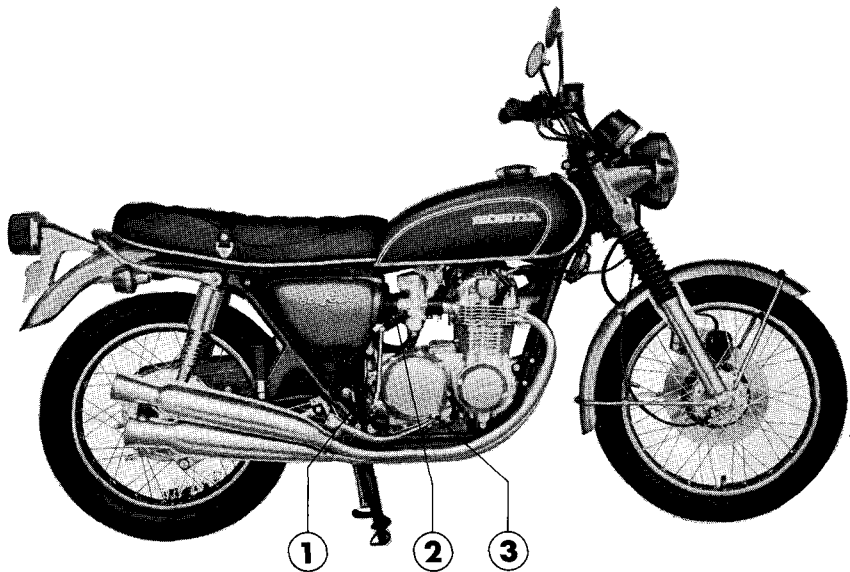
## **CONTROL LOCATION**

- ① Tachometer
- ② Turn signal lights
- ③ Disc brake fluid reservoir and master cylinder
- ④ Front brake lever
- ⑤ Ignition switch
- ⑥ Throttle control grip
- ⑦ Headlight beam selector switch (above), Starter switch (below)
- ⑧ Rear brake pedal
- ⑨ Footrests-rider
- ⑩ Kick starter pedal
- ⑪ Footrests-passenger
- ⑫ Speedometer
- ⑬ Indicator and warning lamp cluster
- ⑭ Clutch lever
- ⑮ Turn signal control switch (above) Horn button (below)
- ⑯ Fuel tank cap
- ⑰ Gear change pedal
- ⑱ Tail, stop and parking light





- ① Front brake caliper    ② Front brake disc    ③ Side marker reflector  
④ Main switch    ⑤ Choke lever    ⑥ Gear change pedal  
⑦ Fuel control valve and fuel strainer



① Engine oil filler cap

② Kick starter pedal

③ Rear brake pedal

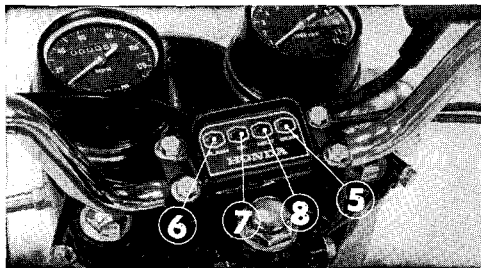
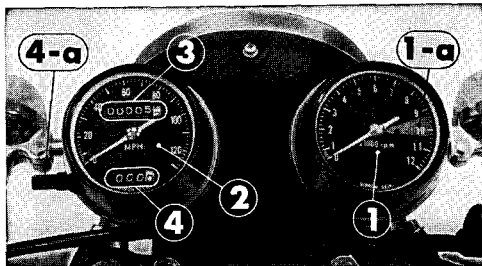
# OPERATING INSTRUCTIONS

The following pages explain the operation of individual controls. Study and become familiar with their location and function before attempting to start and operate the motorcycle.

## INSTRUMENTS AND INDICATOR LAMPS

The instruments are grouped together and mounted above the headlight. The indicator and warning lamps are clustered between the handle mounting clamps.

- Their functions are shown in the table.



- ① Tachometer    ①-a Tachometer RED zone    ② Speedometer    ③ Odometer  
 ④ Trip-meter    ④-a Trip-meter reset knob    ⑤ High beam indicator lamp    ⑥ Turn  
 signal indicator lamp    ⑦ Oil pressure warning lamp    ⑧ Neutral indicator lamp

Ref. No.	Description	Function
1	Tachometer	Indicates engine operating rpm.
1-a	Tachometer Red Zone	Indicates critical engine operating range. To avoid over-stressing engine components the tachometer needle must NEVER be permitted to enter the RED ZONE.
2	Speedometer	Indicates the riding speed.
3	Odometer	Indicates the total accumulated travelled distance.
4	Trip-meter	Indicates the distance travelled since meter resetting.
4-a	Trip-meter reset knob	Reset knob for "Zeroing" the trip-meter. Turn in direction of the arrow.
5	High beam indicator lamp (red)	Lamp will be ON when the headlight is on high beam.

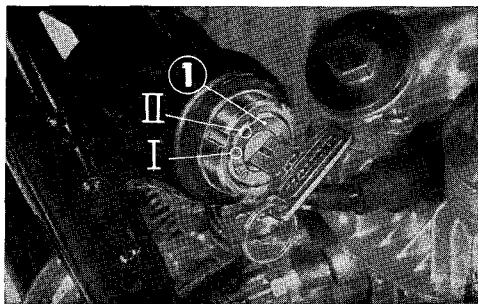
Ref. No.	Description	Function
6	Turn signal indicator lamp (amber)	Lamp will be flashing while the turn signal is operating.
7	Oil pressure warning lamp (red)	<p>After turning on the main switch but before starting engine, check to make sure the oil pressure warning lamp is functioning (lamp comes on).</p> <p>The oil pressure warning lamp comes on when the main switch is switched on; it goes off when the engine is started and the prescribed engine oil pressure reached. Should the lamp light up while driving, it is an indication of a malfunction in the lubricating system, in which case, the motorcycle must be stopped at once, the engine turned off, and the engine oil level checked. If the check reveals that the engine oil level is within the prescribed limits, the cause of the malfunction will have to be determined and corrected by contacting the nearest HONDA dealer. However, an occasional flickering of the warning lamp at or near idling speeds when the engine is at operating temperature, is of no concern since low oil pressure is normal at low-speed.</p>
8	Neutral indicator lamp (green)	Lamp will be on when the transmission is in neutral.

## ELECTRICAL CONTROLS

### MAIN SWITCH

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

① Main switch



Key position	Function	Key Removal
OFF	Electric circuit is open, engine will not start and no lights will operate.	Key can be removed.
I (ON)	Electric circuit is completed, lights will operate and engine can be started.	Key can not be removed.
II (Parking)	Electric circuit is open, however, the tail light will be lighted. The key should be removed when parking the motorcycle.	Key can be removed.

## **IGNITION SWITCH**

The three position ignition switch ① is located on top of the right handle grip switch housing. In the "ON" position (center) the ignition circuit will be completed and engine can be started.

In the "OFF" position (either side of center) the ignition circuit will be open and the engine will not operate.

This switch is intended primarily as a safety or emergency switch. When parking the motorcycle the main switch should always be turned to the "OFF" or parking position and the key removed.

## **STARTER SWITCH**

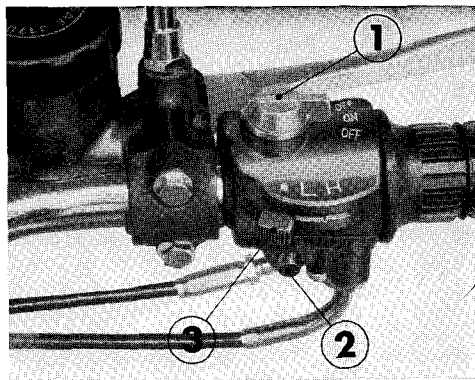
This is a push button switch ② located directly below the headlight control switch ③. While the starter switch is depressed the starter motor will crank the engine. Refer to the section on **STARTING THE ENGINE** (Page 28) for the correct starting procedure.

---

## **HEADLIGHT (CONTROL) SWITCH**

The click type, sliding switch ③ is located on the right handle grip switch housing. It can be operated without taking the hand off the handle grip. The red dot is the "OFF" position (headlight and tail light off). "L" is the low beam position (low beam light and tail light on). "H" is the high beam position (high beam light and tail light on). The headlight will only operate when the main

switch is in the "ON" position. Refer to main switch page 13.



- ① Ignition switch    ② Starter switch  
③ Headlight control switch

## STOP LIGHT SWITCHES

These switches operate the stop light when the front or rear brake is applied. The front brake switch is incorporated in the front brake hydraulic system and requires no adjustment. The rear brake switch, which is an adjustable plunger type, is located near the rear brake pedal (See page 80).

---

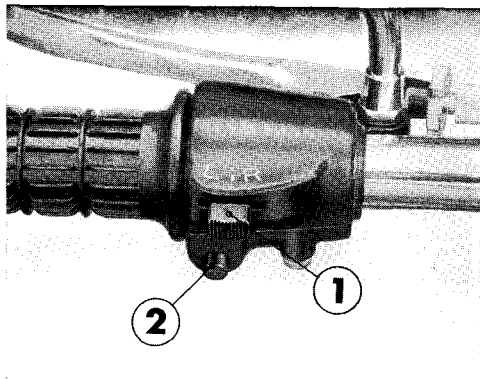
## HORN BUTTON

This is a push button switch ② located directly below the turn signal switch ①. While the horn button switch is depressed the horn will operate. (See page 16).

## TURN SIGNAL (CONTROL) SWITCH

This is a sliding switch ① located on the left handle grip switch housing. It can be operated without taking the hand off the handle grip. To signal a left turn, move the switch knob to the "L" position. To signal a right turn, move the switch knob to the "R" position. When the turn has been completed the switch knob must be returned to the center "OFF" position.

① Turn signal switch      ② Horn button

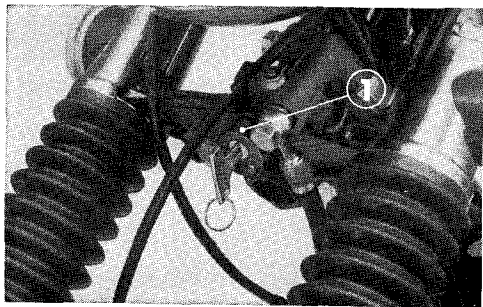


## MECHANICAL CONTROLS

### STEERING LOCK

The steering lock ① is located on the steering stem directly below the head light case. Turn the handle bar all the way to the steering stop, either to the

left or right, insert the key into the lock, turn key 60° to the left, press in, and then turn the key back to the original position and remove the key. This locks steering to prevent theft.



① Steering lock

## SEAT LOCK

The seat lock ① is located at the right center of bottom side. To raise the seat, insert the key into the seat lock and turn it counterclockwise.

### NOTE:

The seat lock is of 2-stage. To lock, push down the seat to make sure seat is locked properly.

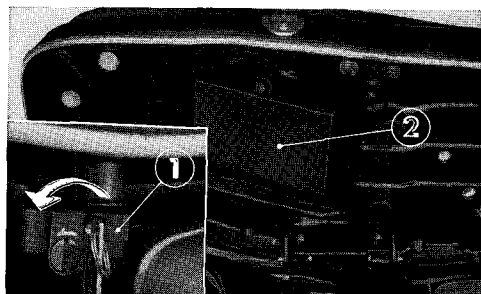
## Document Box

The document box ② is located under the seat.

Put owner's manual and other documents in vinyl sack and contain them in document box.

### NOTE:

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

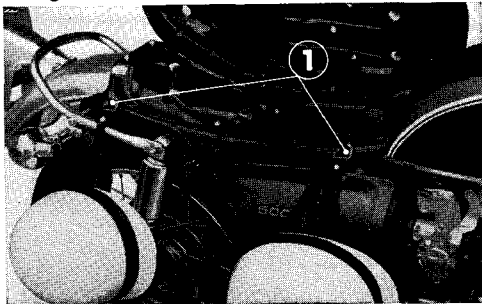


① Seat lock

② Document box

## HELMET HOLDER

Two helmet holders ① are located under the seat. To hang helmets, raise the seat, hang helmets and push down the seat.



① Helmet holder

## FRONT BRAKE (CONTROL) LEVER

The brake lever ① is located at the right handle bar grip. Application of the front brake is effected by squeezing the lever with a force proportional to the braking effort required.

---

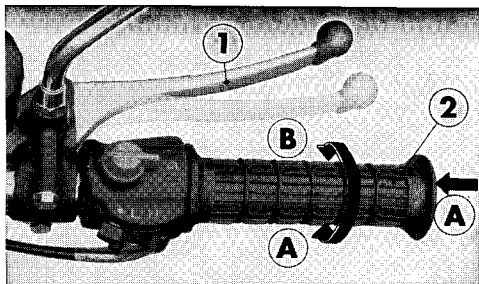
## NOTE:

If lever free play is excessive, see page 58 for inspection and servicing information.

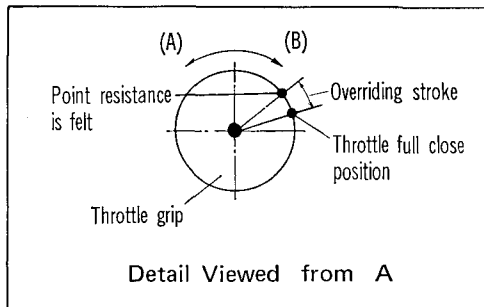
---

## THROTTLE GRIP

Throttle control is incorporated in the right handle bar grip ②. Twisting the throttle grip inward Ⓐ opens the throttle and increases the engine speed twisting the grip outward Ⓑ will close the throttle. As the throttle grip is closed all the way, a resistance will be felt. At this point the engine speed should drop to idling (1,000 rpm); if not, twist grip further into the overriding stroke. If the engine does not drop to the idle speed, the throttle control should be adjusted by referring to the section on THROTTLE CABLE and CARBURETOR ADJUSTMENT on page 51.

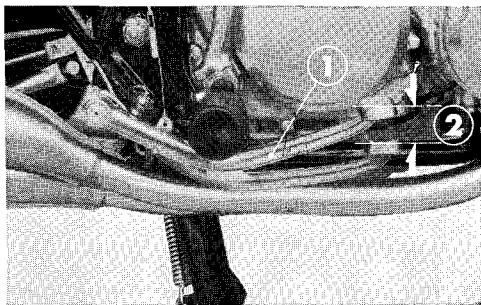


① Front brake lever      ② Throttle grip



## REAR BRAKE (CONTROL) PEDAL

The rear brake pedal ① is located at the right foot rest. Application of the rear brake is effected by depressing the pedal with a force proportional to the braking effort required. If pedal free travel is excessive, see page 62 for inspection and servicing. Normal free travel is approximately 1 inch (25 mm).



① Rear brake pedal      ② 1 in. (25 mm)

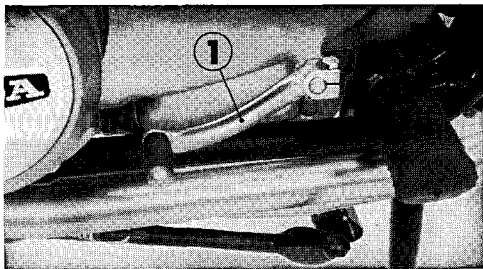
## GEAR CHANGE PEDAL

The gear change pedal ① located near the left foot rest is of the progressive shift, positive stop type, which means one full stroke of the gear change pedal will shift only one gear position. The shifting sequence is arranged as shown in the figure.

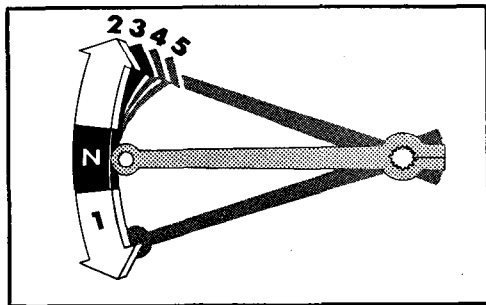
Shifting from the neutral position into low gear (1st) is performed by depressing the gear change pedal with the toe. Shifting to 2nd, 3rd, 4th and top gear (5th) is performed by progressively raising the pedal. Shifting down to the lower gears is performed by progressively depressing the pedal. The transmission neutral position is located between 1st and 2nd gear.

### CAUTION:

During all normal gear changes the clutch must be disengaged and the throttle momentarily closed to avoid excessive engine speed and overstressing of the drive train components.



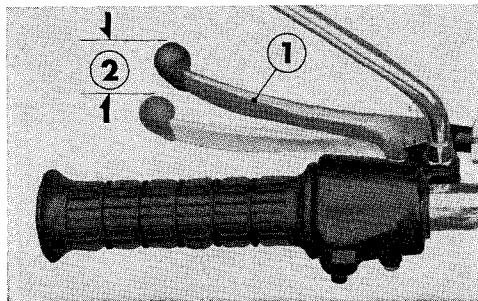
① Gear change pedal



SHIFTING SEQUENCE

## CLUTCH (CONTROL) LEVER

The clutch lever ① is located at the left handle grip. Squeezing the lever towards the handle bar grip disengages the clutch. Gradually releasing the lever will result in smooth clutch engagement. The clutch lever should have 0.4–1.0 inch (10–25 mm) free play measured at the lever end. See page 52 for adjustment information.



① Clutch lever    ② 0.4-1.0 in. (10-25 mm)

## KICK STARTER PEDAL

The kick starter pedal located at the right side of the engine can be used to start the engine in event the battery charge is too low to crank the engine with the electric starter. Operate the kick starter pedal with the right foot, starting from the top of the stroke and following through with a rapid and continuous kick.

---

### CAUTION:

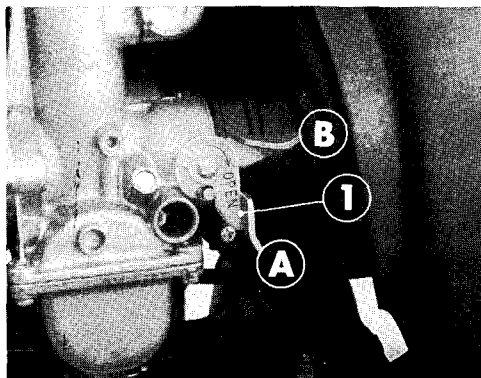
**Do not allow the kick starter pedal to snap back freely against the pedal stop.**

---

## CHOKE LEVER

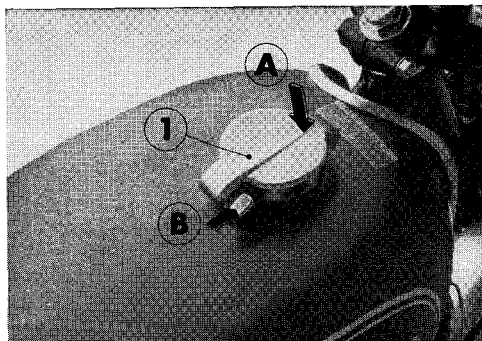
The choke lever ① is located at the left side of the engine near the left cylinder carburetor. When the choke lever is moved to ② (normal driving position) the chokes are fully open. When the choke lever is moved to ③, the chokes are fully closed (cold engine starting position).

① Choke lever



## FUEL TANK

The fuel tank capacity is 3.7 U.S. gallons (14ℓ) including the 1.0 U.S. gallon (4ℓ) in the reserve supply. Press down on the cap ① and then push in the lock to



① Fuel tank cap

Ⓐ Press down

Ⓑ Push in

open the fuel tank cap.

### WARNING:

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

### NOTE:

It is recommended that 90 or higher octane number gasoline containing a small percentage of lead.

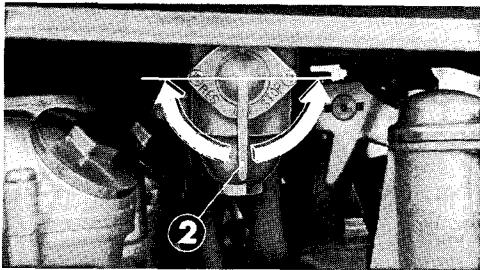
Do not mix oil with the gasoline.

**When refueling the tank, avoid overfilling into tank filler cap neck.**

## FUEL CONTROL VALVE

The fuel valve ② is located at the left under side of the fuel tank. When the fuel valve is in the "STOP" position, fuel can not flow from the fuel tank to the carburetors. The fuel valve should be set in this "STOP" position when the motorcycle is parked. Turning the fuel valve to the "ON" (straight down) position allows fuel to flow to the carburetors from the main fuel supply.

Turning the fuel valve to the "RES" position allows fuel to flow from the reserve supply. The fuel valve should be turned to the "RES" position only when the main fuel supply is exhausted, thereby allowing you to proceed to the nearest service station. The fuel valve also incorporates a filter screen and sediment bowl which requires periodic inspection and cleaning. (See page 47)



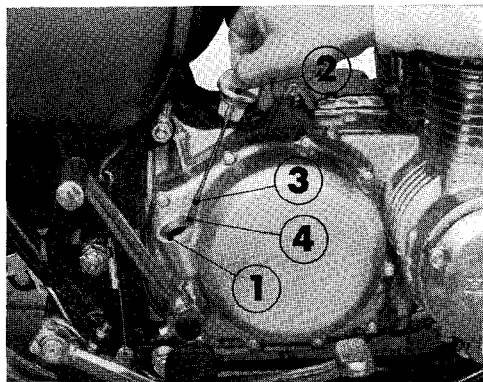
② Fuel valve

## OIL RESERVOIR

The oil reservoir is contained within the lower crankcase and is filled through the oil filler opening ① located on the right crankcase cover. This oil is supplied to engine, transmission and clutch components by an oil feed pump.

The oil capacity is 3.2 U.S. qts. (3ℓ). Oil level must be checked with the motorcycle standing upright on level ground.

Measure oil level by inserting the dipstick until the filler cap ② touches the filler opening ① but is not screwed in. Oil level must be maintained between the upper ③ and lower ④ marks on the dipstick.



- ① Oil filler opening    ② Oil filler cap  
③ Upper level mark    ④ Lower level mark

## ENGINE OIL RECOMMENDATIONS

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

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

Engine oil should be changed at the intervals prescribed in the Maintenance Schedule on page 35.

---

### NOTE:

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

---

### Viscosity

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

#### **Recommended oil viscosity :**

**General, all temperatures SAE 10W-40**  
**Temperatures above 59°F (15°C) SAE 20W-50**

Alternate:

Above 59°F(15°C)	SAE 30 or 30W
32° to 59°F(15°C)	SAE 20 or 20W
Below 32°F (0°C)	SAE 10W

## **PRE-RIDING INSPECTION**

Prior to starting your motorcycle, it is advised that you perform a general inspection as a matter of habit to make sure that the motorcycle is in good, safe riding condition. This inspection will only require a few minutes and can save you much time and expense in the long run.

Check the following items and if adjustment or servicing is necessary, refer to the appropriate section in the manual.

1. Oil Reservoir Level. (Page 25)
2. Fuel Level. (Page 23)
4. Front and Rear Brakes. (Page 18, 19)
4. Wheels and Tires. (Page 67, 68)
5. Front and Rear Suspension Units. (Page 72, 73)
6. Lighting System. (Page 13–16, 79–83)
7. Battery Electrolyte. (Page 76)
8. Drive Chain. (Page 54–58)
9. Throttle Operation. (Page 50)
10. Clutch Control Operation. (Page 52)
11. Visually check the security of all controls, axles, suspension and steering components.

## **STARTING THE ENGINE**

### **COLD ENGINE STARTING PROCEDURE**

1. Turn the fuel tank valve to the "ON" position.
2. Insert the key into the main switch and turn to the "ON" position. At this time, observe the GREEN neutral indicator lamp on the lamp cluster. The lamp will be lighted when the transmission is in the neutral position. Also at this time the RED oil pressure warning lamp should be lighted. If the lamp fails to come on, the connection should be checked for an open circuit and the bulb checked and replaced if burned out.
3. Make sure that handle grip ignition switch is in the "ON" position.
4. Position the choke lever to the full

closed position.

5. Twist the throttle grip inward slightly and depress the starter button. If the engine does not start within 5 seconds, release the starter button and allow the starter motor to rest for approximately 10 seconds before pressing the starter button again. If the engine does not start readily with the electric starter, to prevent excess battery discharge, use the kick starter pedal to start the engine.

If the engine fails to start after several repeated attempts, turn off the main switch and lower the choke lever to the full open position, twist the throttle grip inward fully and crank the engine using either the electric starter or the kick starter pedal. This

is then followed by turning the main switch to the "ON" position and following the starting procedure outlined in steps 1 through 5, however, at this time the use of the choke is not necessary.

6. After the engine starts, operate at approximately 2,000 rpm until the engine will properly respond to the throttle with the choke open.

---

**NOTE:**

The oil pressure warning lamp should go off within several seconds after the engine is started. If the lamp remains lighted, turn off the engine immediately and check the oil level of the reservoir. If the level is adequate, do not operate the motorcycle until the lubrication system can

**be examined by a qualified mechanic.**

---

## **STARTING IN EXTREME COLD WEATHER**

Prime the engine before starting by cranking several times with the kick starter pedal. The main switch or handle bar ignition switch should be turned off. The choke should be fully closed and the throttle opened. Followed by the procedure for COLD ENGINE STARTING.

---

## **WARM ENGINE STARTING PROCEDURE**

When the engine is to be re-started while it is still warm, proceed as for COLD ENGINE STARTING PROCEDURE, however, the use of the choke is not necessary.

## BREAK-IN PROCEDURE

Careful break-in procedure during the initial mileage will measurably extend the service life of the engine. During this crucial period the motorcycle must not be driven at full power over extended distances, nor should it be driven too slow. The general rules are as follows:

1. Maximum continuous engine speed during the first 600 miles (1,000 km) must not exceed 5,000 rpm (60% speed in the respective gears).
2. Increase the maximum continuous engine speed by 2,000 rpm between odometer readings of 600 miles (1,000 km) and 1,000 miles (1,600 km,) meaning not to exceed 7,000 rpm. Drive briskly, vary speeds frequently, and use full throttle for short spurts only.

3. Bear in mind never to lug the engine with heavy throttle at low engine speeds. This rule is applicable not only during break-in but at all times.
4. Upon reaching an odometer reading of 1,000 miles (1,600 km), you can subject the motorcycle to full throttle operation, however, do not exceed 8,500 rpm at any time (observe RED ZONE limit on tachometer).

---

### NOTE:

**Do not exceed 7,000 rpm when running the engine without load.**

---

## **RIDING THE MOTORCYCLE**

1. After the engine has been warmed up, the motorcycle is ready for riding.
  2. While the engine is idling, pull in the clutch lever and depress the gear change pedal to shift into low gear (1st).
  3. Slowly release the clutch lever and at the same time gradually increase the engine speed by twisting the throttle grip inward. Coordination of the throttle and clutch lever will assure a smooth, positive start of the motorcycle.
  4. When the motorcycle attains a speed of approximately 10 mph (16 kph), close the throttle, pull in the clutch lever and shift to 2nd gear by raising the gear change pedal.
  5. This sequence is repeated to progressively shift to 3rd, 4th and top gear (5th).
- 
- NOTE:**
- When shifting gears either up or down, the throttle should be closed and the clutch disengaged. Also, special attention must be given when accelerating in low (1st) and 2nd gears or when downshifting at high speed because the engine revolution can easily exceed engine maximum (RED ZONE) rpm.**
- 
- When decelerating the motorcycle co-

ordination of the throttle and the front and rear brakes is most important.

1. The smooth gradual application of both the front and rear brakes together with the required throttle coordination will, under most conditions, assure positive speed reduction and stability. As the motorcycle speeds are reduced, it is common practice to shift the transmission progressively into the gear appropriate for the speed of the motorcycle. This assures maximum control through better braking effectiveness and acceleration when necessary.
2. For maximum deceleration and stopping, simultaneously close the throttle, disengage the clutch and apply both the front and rear brakes, as the

motorcycle comes to a stop. The maneuver requires smooth coordination of the four controls and to maintain skill it should be practiced frequently.

Independent application of either the front or rear brakes is possible, but if only one brake is applied strongly enough to lock the respective wheel, braking effectiveness is greatly reduced and control of the motorcycle is difficult.

Do not coast for a long distance with the engine off, and do not tow the motorcycle a long distance, unless the drive chain is first removed, to disconnect the rear wheel from the transmission.

Even with gears in neutral, the transmission is properly lubricated only when the engine is running. Inadequate lubrication may damage the transmission.

## **PARKING**

When parking the motorcycle, turn the main switch to the "OFF" position and remove the key. The steering should also be locked. Turn the fuel valve to the "STOP" position. When parking at night

near traffic, the main switch can be turned to the parking position and the key removed. (see page 13). This will turn on the taillight and make the motorcycle visible to traffic.

## **SAFE RIDING SUGGESTIONS**

1. Prior to starting riding, make **PRE-RIDING INSPECTION** (see page 27).
2. When it is necessary to make your motorcycle more visible to approaching cars or to persons during day-time riding, turn on the headlight.
3. Be sure to signal when making a turn or when changing a lane.
4. While riding, place your hands on the handlebars and your feet on the foot rests. Encourage a passenger to hold himself with both hands and use the passenger foot rests if necessary.
5. Always wear a helmet when riding. keep in mind that a helmet is the only insurance against injuries to a rider.
6. It is recommended that you become familiar with your new HONDA CB 500 by riding it in an uncongested area under favorable conditions before going on a public road.
7. Never be a ramp rider. Remember that a motorcyclist should always preserve nature and structures.

# **MAINTENANCE**

## **MAINTENANCE SCHEDULE**

Periodic maintenance, in accordance with the schedule on the following page, is necessary to ensure continued trouble-free operation and peak performance. For each service operation make reference to the respective page indicated in this MAINTENANCE SCHEDULE. Sustained severe or high speed operation under adverse conditions may necessitate more frequent servicing. To determine specific recommendations for conditions under which you use your motorcycle, consult your authorized

HONDA dealer. If your HONDA CB500 is ever overturned or involved in a collision, have your HONDA dealer carefully inspect the major components, e.g., frame, suspension and steering parts, for misalignment or damage to ensure further safe operation.

Service Required	Months or Miles, whichever occurs first					Page Reference	
	Month	First	Second	Thlrd	Repeat Every		
			6	12	6		12
		Mile	600	3,000	6,000		3,000
km	1,000	5,000	10,000	5,000	10,000		
*Engine Oil-change		○ Every 2,000 Miles (3,000 km)				37	
*Oil Filter Element-replace		○	○	○	○	37	
Engine Oil Pressure-check				○		39	
Oil Pump Strainer-clean		Every 24 months or 12,000 Miles (20,000 km)				40	
*Spark Plugs-clean and adjust or replace			○	○	○	40	
*Contact Breaker Points-check or service			○	○	○	42	
Ignition Timing-check or adjust		○	○	○	○	43	
Valve Tappet Clearance-check or adjust		○	○	○	○	45	
Cam Chain-adjust		○	○	○	○	48	
*Air Cleaner-clean			○		○	49	
-replace				○		49	
Throttle Operation-check			○	○	○	50	
Carburetor-check or adjust		○	○	○	○	51	
*Fuel Valve Strainer-clean		Every 300 Miles (500 km)				47	
*Fuel Tank and Fuel Lines-check			○	○	○	—	
*Clutch-check or adjust		○	○	○	○	52	
*Drive Chain-check or adjust		Every 500 Miles (800 km)				54	
-lubricate		Every 300 Miles (500 km)					

“\*” denotes service you may perform. Others should be serviced at dealer's service shop. Bring your motorcycle to the nearest dealer for servicing at the specified intervals.

Service Required	Months or Miles, whichever occurs first					Page Reference	
		First	Second	Third	Repeat Every		
	Month		6	12	6		12
	Mile	600	3,000	6,000	3,000		6,000
km	1,000	5,000	10,000	5,000	10,000		
*Brake Fluid Level-check and replenish if necessary	○	○	○	○		58	
Front Brake Pads-check or replace		○	○	○		61	
Front Brake Lines-check		○	○	○		58	
*Rear Brake Pedal-adjust	○	○	○	○		63	
Rear Brake Shoes-check or replace			○		○	65	
Rear Brake Links-check		○	○	○		65	
Wheel Rims and Spokes-check	○	○	○	○		67	
Tires-check or replace		○	○	○		67	
Front Fork Oil-change			○		○	72	
Steering Head Bearings-check or adjust			○		○	—	
Steering Lock-check for operation			○		○	—	
*Side Stand Springs-check		○	○	○		—	
Rear Fork Bushing-grease		○	○	○		74	
*Battery Electrolyte Level-check and replenish if necessary	○	○	○	○		76	
*Lights, Horn, Speedometer and Tachometer-check for operation or adjust		○	○	○		79~83	

## ENGINE OIL

### 1. Changing Oil and Oil Filter Element

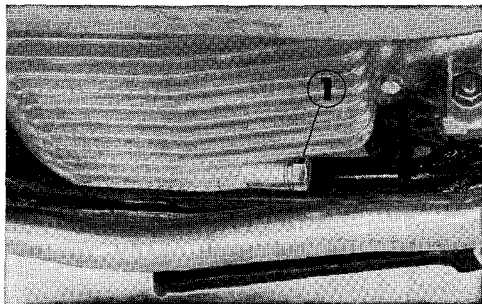
Engine oil is the chief factor affecting the performance and service life of the engine. Therefore the oil recommended on page 26 should be used and always maintained at the proper level. Further the oil and oil filter should be changed according to the schedule shown on page 35. Perform the engine oil change in the following manner.

Drain the oil while the engine is still warm, as this will assure complete and rapid draining saving much time.

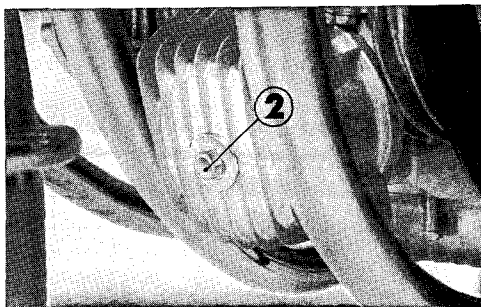
- a. Place an empty vessel of adequate size under the crankcase to catch the oil. Remove the drain plug ① with a 17 mm wrench and drain the oil. Also

remove the oil filter bolt ② and the filter element.

- b. After the oil has been drained from the crankcase, operate the kickstarter pedal several times to drain all residual oil



① Crankcase drain plug



② Oil filter bolt

remaining in the oil system passages.

- c. When the oil has been completely drained, reinstall the crankcase drain plug, making sure that the drain plug seal is in good condition.
- d. Install the oil filter element and tighten the filter cover, making sure the cover seal is in good condition. At the initial 600 mile (1,000 km) service remove and discard the original

oil filter element and install a new filter element. Thereafter, it is recommended that a new filter element be installed at every 3,000 miles (5,000 km).

- e. Fill the crankcase with approximately 3.2 U.S. qt. (3ℓ) of premium quality, SE, SAE 10W-40 or 20W-50 oil or its equivalent. Start the engine and operate for several minutes. Stop the engine and check the oil level with the filler cap dipstick ①.

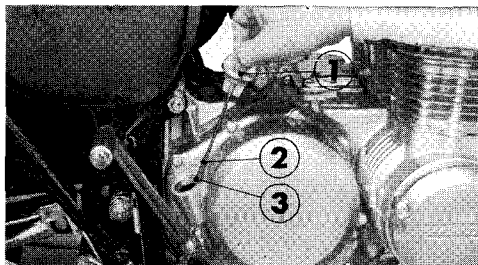
---

#### NOTE:

- (1) **Do not operate the motorcycle if the oil level is below the lower oil level mark ③ on the dipstick.**
- (2) **Overfilling the crankcase will cause**

oil to be discharged out of the breather system.

- (3) When operating the motorcycle in unusually dusty conditions, it is recommended that oil changes be performed at more frequent intervals than that which is specified in the maintenance schedule; this will have a very beneficial effect on the



- ① Filler cap dipstick    ② Upper level mark  
③ Lower Level mark

engine.

- (4) If the motorcycle is going to be stored for an extended period, the oil should be changed prior to storage.

---

The oil change interval for your HONDA engine is based on the use of oils that meet the requirements indicated in the section OIL RECOMMENDATION on page 26. Oil change intervals longer than those listed in the MAINTENANCE SCHEDULE will result in serious reductions in engine life and may affect HONDA obligation under the provisions of the new motorcycle warranty.

## 2. Oil Pressure Check

To test the condition of the oil pump, it is recommended that an oil pressure check be performed during the 12

months or 6,000 miles (10,000 km) service. As this check requires a special oil pressure gauge it should be done at your HONDA dealer.

### **3. Cleaning Oil Pump Strainer**

The oil pump strainer is located under the oil pump inside the crankcase oil pan. Remove the crankcase oil pan by removing ten retaining bolts. Dismantle the oil pump strainer. Clean the pump strainer and sump pan thoroughly and re-install.

This operation must be performed by a qualified mechanic and should be done during the 24 months or 12,000 miles (20,000 km) service.

### **SPARK PLUGS**

The NGK D-7ES or DENSO X22ES spark plug is used as standard equipment on

the CB500. For most riding conditions this spark plug heat range number is satisfactory. However, if the motorcycle is going to be operated for extended periods at extremely high speeds and near maximum power in hot climates, the spark plugs should be changed to a colder heat range number.

### **Servicing of the spark plug is as follows**

- a. Detach the high tension cord cap and remove the spark plug with the special wrench provided in the tool kit.
- b. Inspect the electrodes and center porcelain of the spark plug for deposits, eroded electrodes, or carbon fouling. If the spark plug deposits are heavy, or the electrodes appear to be eroded excessively, replace the spark plug with a new one. If the spark plug is carboned or wet fouled, the plug can be cleaned with a spark plug cleaner.

When the spark plug cleaner is not available use a stiff wire such as a pin to remove carbon, wash with gasoline and dry.

- c. Adjust the spark plug gap ① to 0.024–0.028 inch (0.6–0.7 mm). The gap can be measured with a thickness gauge. The adjustment is made by bending the negative (grounded) electrode ②.
- d. When installing the spark plug, it should be first screwed in finger tight and then torqued with the wrench 1/2 to 3/4 turn.

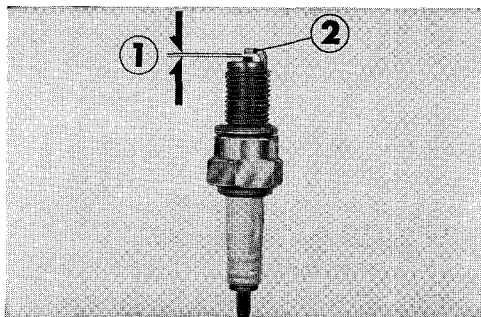
---

**NOTE:**

- (1) Use the spark plug wrench provided in the Honda tool kit to remove and install these spark plugs, otherwise it is possible for the plugs to become lodged in the cylinder head cavities.
- (2) All spark plugs must be tight. An improperly tightened plug

can become very hot and possibly cause damage to the engine.

- (3) Never use an improper heat range spark plug.
- (4) Do not attempt to dry or remove soot from the spark plug by burning.



- ① Spark plug gap
- ② Negative electrode

## IGNITION TIMING ADJUSTMENT

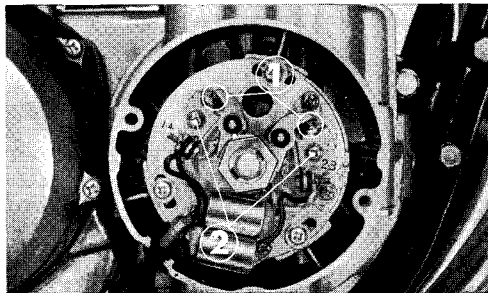
Contact breaker point gap must be adjusted before the ignition timing adjustment is performed. Any change in gap will affect ignition timing.

### 1. Contact Breaker Point Gap Adjustment

- a. Remove the point cover.
- b. Open contact points ① with finger or small screw driver blade and examine for pitting. If pitted or burned, the points should be replaced and the condensers checked. A gray discoloration is normal and can be removed with a point file. Filing should be done carefully. Clean the point contacts after filing with a clean piece of unwaxed paper such as a business card, or chemical point cleaner.
- c. Rotate the crankshaft in the clockwise direction to find the position

where each breaker point gap is at maximum and check using a thickness gauge.

- d. The standard gap is 0.012–0.016 in. (0.3–0.4 mm).
- e. When adjustment is necessary, loosen the contact breaker plate locking screws ② and move the contact breaker plate to achieve correct gap. When



- ① Contact breaker points  
② Contact breaker plate locking screws

properly adjusted, retighten locking screws ②.

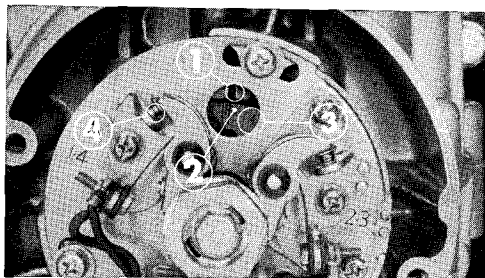
## 2. Ignition Timing Adjustment

Do not perform this operation until point gaps have been adjusted.

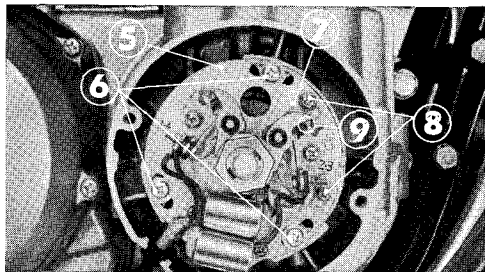
- a. Rotate the crankshaft in the clockwise direction (see arrow) and align the "F" timing mark ② (1.4 cylinder

③) to the timing index mark ①. At this time the contact breaker points ④ should just start to open. To determine accurately the exact moment of point opening, a timing light should be connected across the 1.4 cylinder breaker points ④.

- b. If the timing of the breaker point



- ① Index mark
- ② "F" mark
- ③ Cylinder number
- ④ 1.4 cylinder breaker points
- ⑤ Contact breaker base plate



- ⑥ Base plate locking screws
- ⑦ Contact breaker right base plate
- ⑧ Right base plate locking screws
- ⑨ 2-3 cylinder breaker points

opening is incorrect (too early or too late), adjustment is made by loosening the three base plate locking screws ⑥ and carefully rotating the base plate ⑤ until the timing light flickers. Tighten base plate locking screws.

---

**NOTE:**

**Rotating the base plate clockwise will retard ignition timing, counterclockwise rotation will advance ignition timing. Time the ignition to the "F" mark as advanced or retarded timing will cause engine damage.**

---

- c. Next, connect the timing light to 2.3 cylinder breaker points ⑨. Rotate the crankshaft 180° (1/2 turn) in the clockwise direction and align the "F" (2.3 cylinder) timing mark to the index

mark ①. If the timing light flickers or goes off when these marks come into perfect alignment, no adjustment is necessary. If the moment of point opening is incorrect loosening the two (2.3 cylinder) right base plate locking screws ⑧ and make the adjustment in the same manner as mentioned in section "b."

- d. Recheck the contact breaker point gaps and the ignition timing. This static timing procedure is relatively accurate if done with care, however, for best results a stroboscopic timing light should be used as both the retarded and advanced engine ignition timing can be checked. Your HONDA dealer has this equipment and can perform this operation for you.

## VALVE TAPPET CLEARANCE ADJUSTMENT

Excessive valve clearance will cause tappet noise, and negative clearance will prevent valve from closing and cause valve damage and power loss. Therefore, valve tappet clearance should be maintained properly. Perform the valve tappet clearance check at the specified intervals.

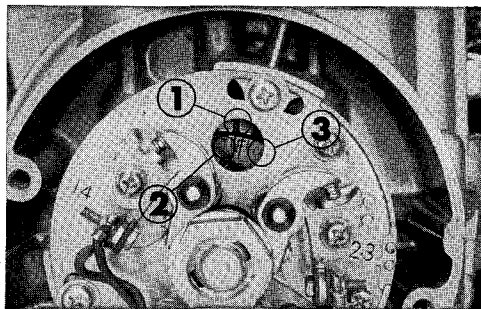
### NOTE:

The cylinders are numbered 1-4 from the left side of the riders position.

- a. Turn fuel valve to the "OFF" position, remove both fuel lines from the fuel valve body, raise the seat and pull the rear fuel tank rubber mounting away from the rear tank mount. Raise the back of the fuel tank slightly and

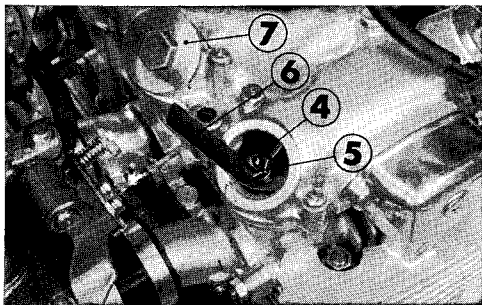
pull the tank back until it clears the forward tank mounts. Remove and set tank aside.

- b. Remove the ignition breaker point cover and the eight tappet adjusting hole caps ⑦.
- c. While slowly rotating the crankshaft clockwise with the kick pedal, watch the #1 cylinder inlet valve tappet.



- ① Index mark      ② "T" mark  
③ 1, 4 cylinder mark

When this tappet goes down all the way and the starts to lift, you must then watch for the alignment of the index mark ① and the "T" mark ②. Check the 1.4 cylinder mark ③. In this position, the piston in #1 cylinder will be at T.D.C. (top-dead-center) of the compression stroke and the

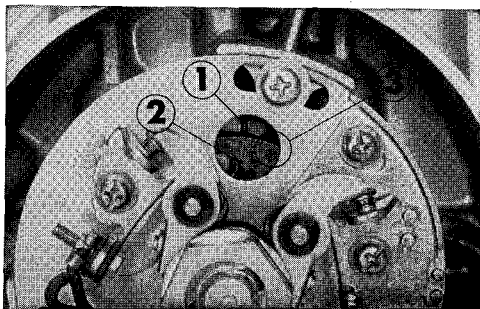


- ④ Tappet adjusting screw
- ⑤ Lock nut      ⑥ Thickness gauge
- ⑦ Hole cap

inlet and exhaust valves in the cylinder should be fully closed.

- d. Check the clearance of both valves by inserting the thickness gauge ⑥ between the tappet adjusting screw ④ and the valve stem. If clearance is correct there will be slight drag or resistance as the gauge is inserted. Adjustment is necessary if the clearance is too small or excessive. The standard tappet clearance is  
IN 0.002 in. (0.05 mm)  
EX 0.003 in. (0.08 mm)
- e. Adjustment is made by loosening the tappet screw lock nut ⑤ and turning the adjusting screw ④ until there is slight drag on the thickness gauge ⑥. Hold the tappet adjusting screw in this position and tighten the lock nut ⑤. Recheck the clearance with the gauge.

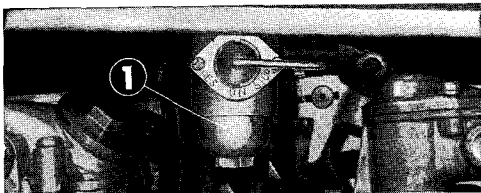
- f. To check or adjust clearance of #4 cylinder valves, rotate the crankshaft clockwise one full turn (360°) and align the marks as in step "c" above, then follow steps "d" and "e".
- g. Valve tappet adjustment for 2.3 cylinder can be performed as in steps "c" through "d", however, the 2.3 cylinder mark ③ must show (not 1.4 mark) when the index mark ① and "T" mark ② are aligned. The #2 cylinder inlet tappet should be watched (not #1).
- h. To check or adjust #3 cylinder tappets, rotate the crankshaft one full turn (360°) and align the marks ② as in step "g" above then follow steps "d" and "e"
- i. Install all tappet adjusting hole caps. Do not overtighten.



① Index mark    ② "T" mark  
③ 2.3 cylinder mark

## FUEL VALVE STRAINER

The fuel strainer is in the fuel valve body which is mounted on the bottom side of the fuel tank at the left side. Accumulation of dirt in the strainer will restrict the flow of the fuel and cause the carburetors to malfunction, therefore, the fuel stainer should be serviced periodically. Turn control valve to "STOP" position and unscrew the strainer cup. Remove the O ring seal, and the screen



① Strainer cup

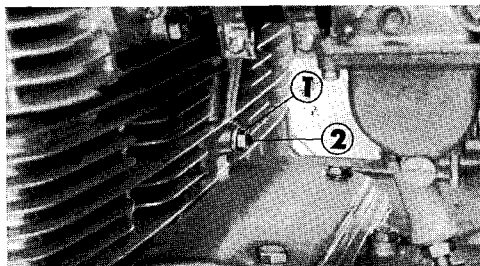
filter can be lifted out. Wash the screen and cup in solvent and reassemble. Turn control valve to "ON" position and check for leaks. At the same time check if there is any seepage around the fuel tank, its fuel leveling tube and fuel line to the carburetors, and if the hose clamps are properly installed.

## CAM CHAIN ADJUSTMENT

A loose cam chain will cause the valve

timing to change, resulting in poor performance. It will also cause excessive engine noise.

- a. Set the crankshaft to T.D.C. (top-dead-center) of the compression stroke with the kick pedal.
- b. Adjustment is made by loosening the tensioner lock nut ①. This will automatically release the tensioner bolt ②, applying the proper tension to the cam chain.



① Lock nut      ② Tensioner bolt

- c. After completing the adjustment, tighten the lock nut ①.

**NOTE:**

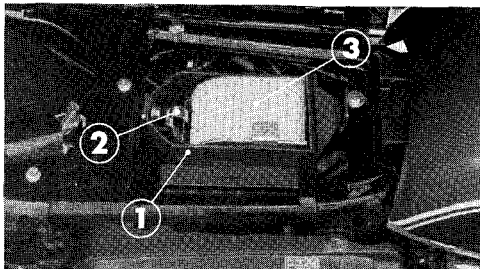
**Do not apply additional pressure on the tensioner bolt.**

**AIR CLEANER**

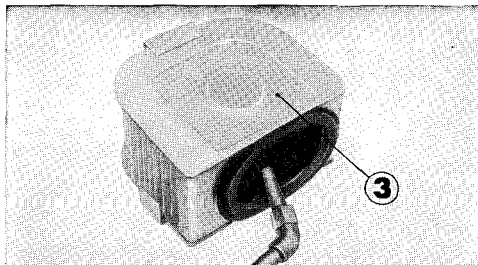
Air cleaner element cleaning and/or replacement depends on motorcycle operating conditions. Your HONDA dealer can help you to determine the fre-

quency of cleaning and replacing the element.

- Raise the seat and remove the tool case together with the air cleaner cover.
- Lift out the air cleaner element retaining clip ②. Remove the air cleaner element ③ and clean it by tapping lightly to loosen dust then using a soft brush, the remaining dust can be brushed from the outer element surface or apply compressed air from



① Air cleaner case      ② Retaining clip



③ Air cleaner element

the inside of the element as shown in the illustration.

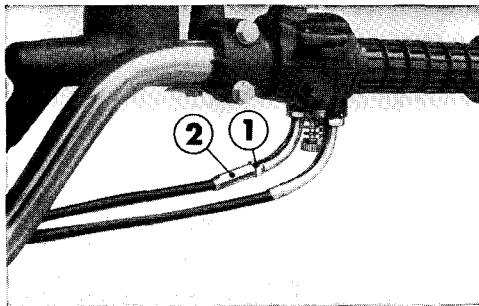
- c. When ready to install the air cleaner, assemble in the reverse order steps "b" and "a".

## THROTTLE CABLE ADJUSTMENT

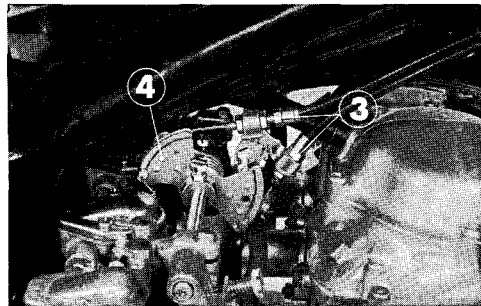
Two control cables connect the throttle grip to a crank on the carburetor operating bar. One cable opens the throttle

valves, while the other cable ensures positive closure.

Standard throttle grip play is approximately 10–15° of grip rotation. This play can be adjusted at the grip play adjuster ② and also with the adjusters ③ at the lower end of the cables at the throttle crank ④. To adjust, loosen the lock nut and turn the adjuster. When performing the adjustment, both the opening and



① Lock nut    ② Grip play adjuster



③ Adjusters    ④ Throttle crank

closing sides of the adjusters should be adjusted by equal amounts. Do not forget to tighten the lock nut upon completion of adjustment.

Check for smooth operation of throttle grip through the entire range from full open to full close with the steering handle set to the extreme right and left steering positions.

Inspect the physical condition of the throttle cables housing between the throttle grip and the carburetors for kinks, chafing, other damages or for improper routing; replace any damaged section or reroute if required.

## **CARBURETOR ADJUSTMENT**

Quadruple piston type carburetors are mounted on the cylinder head to provide independent carburation to the respective cylinders. Both the chokes and the throttles are linked to operate all four carburetors simultaneously.

1. Before making the idle adjustment the engine must be at operating temperature. Turn the stop screw ① on the throttle linkage which is accessible from the right side to obtain the proper idling speed. Turn the screw in the Ⓐ direction to increase the speed.
2. After performing the adjustment above if the proper idling speed cannot be obtained or if the exhaust back pressures from the cylinders are not uniform, the carburetors require individual adjustment and synchronization.

## NOTE:

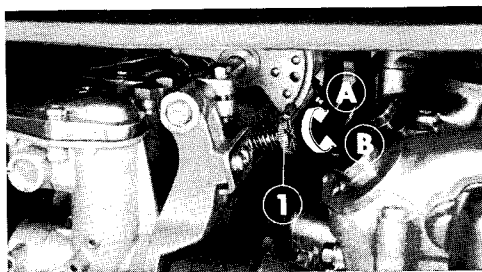
The carburetors were synchronized at the factory and should normally not require adjustment except when they have been disassembled.

To synchronize the carburetor will require special instrumentation and should be referred to an authorized dealer.

## CLUTCH ADJUSTMENT

The clutch must be adjusted so that the engine can be completely disengaged from the transmission, but not to the point where the clutch will slip when the machine in accelerating.

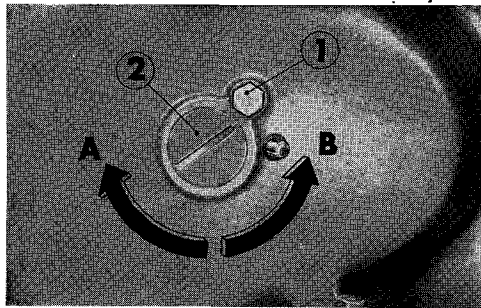
The clutch and clutch cable should be adjusted to provide 0.4–1.0 in. (10–25 mm) free play measured at the tip of the clutch lever.



- ① Stop screw
- Ⓐ Increase the speed
- Ⓑ Decrease the speed

To adjust, perform the following steps.

- a. Clutch adjustment is made by loosening the clutch adjuster locking bolt ① and turning the adjuster ② clockwise **A** to reduce the clutch play.

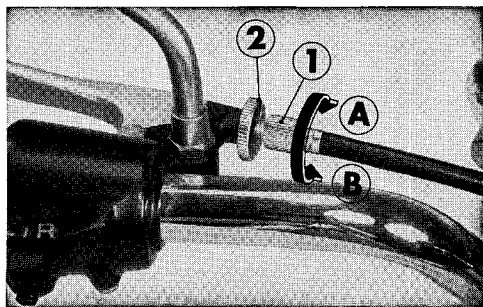


- ① Clutch adjuster locking bolt  
② Clutch adjuster

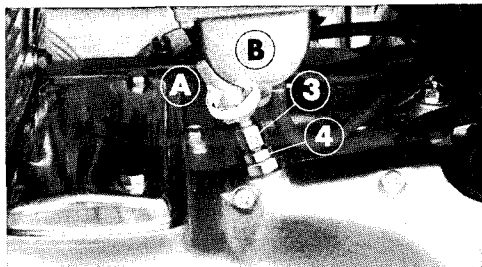
- b. Minor adjustment can be made at both adjusters at the upper and lower ends of the clutch cable. Loosen the lock nut ② (④ at the lower end) at

the clutch lever and turn the cable adjuster bolt ① (③ at the lower end). Turning the cable adjuster bolt clockwise **A** will increase the play in the clutch lever, turning in the **B** direction will decrease the play. Do not forget to tighten the lock nut after completing the adjustment.

- c. After the adjustment has been made,



- ① Clutch cable adjuster bolt    ② Lock nut



③ Clutch cable adjuster bolt ④ Lock nut

check to see that the clutch is not slipping or that the clutch is properly disengaging.

Start the engine and shift into gear. There should be no excessive grinding from the transmission, and the machine should not begin to creep forward. Drive the machine to check for clutch or slip.

## DRIVE CHAIN INSPECTION, ADJUSTMENT AND LUBRICATION

The service life of the drive chain is dependent upon proper lubrication and adjustment. Proper maintenance will help to extend service life and ensure smooth power transmission to the rear wheel. Poor maintenance can cause premature wear or damage to the drive chain and sprockets.

The drive chain must be checked, and serviced as necessary, after the first 500 miles (800km) of operation, and at least every 500 miles (800 km) thereafter. If your CB 500 is operated at sustained high speeds, or under conditions of frequent rapid acceleration, the drive chain must be serviced more often.

### 1. Inspection

Place the motorcycle on the center stand,

with transmission in neutral. Turn 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**

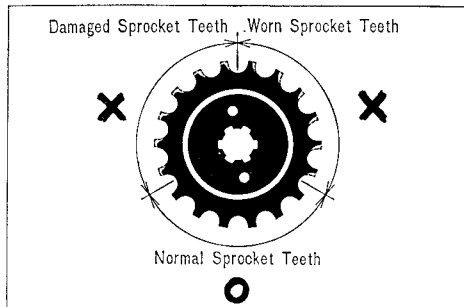
### **SPROCKETS**

- **Excessively Worn Teeth**
- **Broken or Damaged Teeth**

Drive chain with damaged rollers or loose pins must be replaced. Chain which appears dry, or shows signs of rust, requires supplemental lubrication. Kinked or binding links should be thoroughly lubricated and worked free

If links cannot be freed the chain must be replaced.

**NOTE :** Never install a new drive chain on badly worn sprockets, or use new sprockets with a badly worn drive chain. Both chain and sprockets must be in good condition, or the new replacement chain or sprocket will wear rapidly.



## **2. Drive Chain Adjustment**

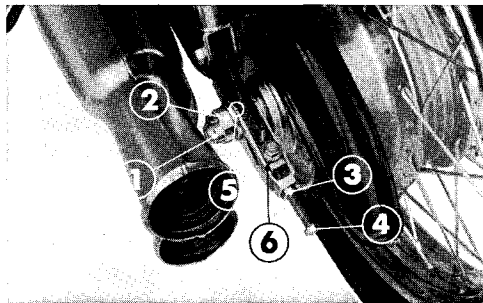
- a. Place the motorcycle on the center

stand and slowly rotate the rear wheel in forward direction. Observe the lower section of chain midway between the two sprockets. Stop the rear wheel at the position where the least amount of slack or sag is seen.

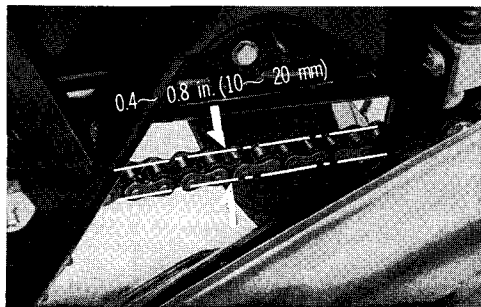
- b. Move the chain up and down at this minimum slack, midway point and

check the total movement. It should be no less than 0.4 in. (10 mm) and no more than 0.8 in. (20 mm).

- c. When adjustment is necessary, remove the rear axle nut cotter pin ① and loosen the axle nut ②. Loosen the lock nuts ③ on the rear axle adjusting bolts ④.
- d. To tighten the drive chain, turn each adjusting bolt ④ in an equal amount



- ① Cotter pin    ② Axle nut    ③ Lock nut  
④ Drive chain adjusting bolt  
⑤ Index mark    ⑥ Chain adjuster plate



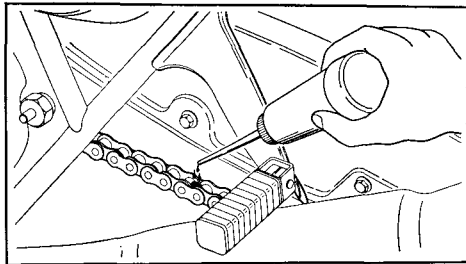
until correct chain slack is achieved. Note the index marks ⑤ on both the chain adjuster plates ⑥ and rear fork surface. These marks assist in attaining correct rear axle alignment. Tighten the rear axle nut securely and install the cotter pin. Replace the cotter pin if damaged or broken. Turn both adjusting bolts in to make good contact with the rear fork and tighten adjusting bolt lock nuts.

- e. When steps "a-d" have been performed, again rotate the rear wheel to recheck for correct drive chain slack as described in steps "a" and "b".
- f. Readjust the rear brake as necessary to correct for the repositioning of the rear wheel assembly (see page 63).
- g. Remove the motorcycle from the center stand and check chain slack while sitting on the machine. Roll

either forward or backward far enough to make certain there are no tight spots as the chain moves with the sprockets.

### 3. Drive Chain Lubrication

Normally rear drive chain lubrication is performed without removing the chain, at the time of chain adjustment. More frequent inspection and servicing is required under severe operating conditions.



- a. The CB500 is equipped with the endless type drive chain and requires periodic inspection. If dirty or rusted, clean with brush and solvent, wipe dry with a clean rag. Inspect the chain for wear (sloppy joints), stiffness and binding at the joints, and broken or separated rollers. Apply a liberal amount of good engine oil or chain lubricant.

If damaged or worn, the chain should be replaced. Replacement of the endless chain requires a special tool, therefore your HONDA dealer should be consulted.

- b. Adjust drive chain as described in steps "a-g", page 54—57.

## **BRAKE INSPECTION AND ADJUSTMENT**

Brakes are items of personal safety and

should always be maintained in proper adjustment.

### **1. Front Brake**

The CB500 front brake is a hydraulic operated caliper/disc type. This type brake will provide reliable operation and excellent braking qualities at much higher operating temperatures than the conventional drum type brake.

When pressure is applied to the brake lever, brake fluid transmits the pressure to the brake piston in the caliper, pressing the friction pads against the disc. Brake fluid is a medium for transmitting pressure and plays a vital roll in the brake system. Therefore, when scheduled brake maintenance is performed, it is imperative that the front brake system is inspected to insure that there is no fluid leakage. As the friction pads wear, additional fluid is taken into the system from the fluid reservoir to compensate for the friction pad wear. Because of this fea-

ture, the disc brake is selfadjusting and the brake control lever free travel will remain constant once the free travel has been established, providing the hydraulic system is free of air.

If the control lever free travel becomes excessive and the friction pads are not worn beyond the recommended limit (page 62), there is probably air in the brake system and it must be bled.

## 2. Replenishing Brake Fluid

The brake fluid level in the reservoir should be checked at regular intervals as in the MAINTENANCE SCHEDULE (page 36). Remove the reservoir cap, washer and diaphragm, and whenever the level is lower than the level mark ① engraved inside the reservoir, fill the reservoir to the level mark. Use only brake fluid which is designated **DOT 3** on the container. **DOT 3** brake fluid meets the **SAE J1703** specification. Outside the U. S. A., use **SAE J1703** brake

fluid. Reinstall the diaphragm and washer, and tighten the reservoir cap securely.

## 3. Bleeding The Brake System

The brakes must be bled with great care subsequent to work performed on the brake system, when the lever becomes soft or spongy, or when lever travel is excessive. The procedure is best performed by two mechanics.

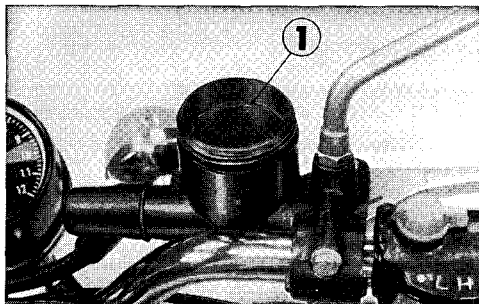
- a. Remove the dust cap from the bleeder valve and attach bleeder hose ②.
- b. Place the free end of the bleeder hose into a glass container which has some hydraulic brake fluid in it so that the end of the hose can be submerged.
- c. Fill the reservoir using only the recommended brake fluid. Screw the cap partially on the reservoir to prevent entry of dust.
- d. Rapidly pump the brake lever several times until pressure can be felt, holding the lever tight, open the bleeder valve by about one-half turn

and squeeze the lever all the way down. Do not release the lever until the bleeder valve has been closed again. Repeat this procedure until bubbles cease to appear in the fluid at the end of the hose.

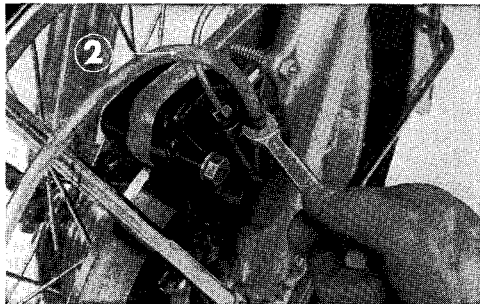
- e. Remove the bleeder hose, tighten the bleeder valve and install the bleeder valve dust cap.
- f. Do not allow the fluid reservoir to

become empty during the bleeding operation as this will allow air to enter the system again. Replenish the fluid as often as necessary while bleeding.

- g. Check for proper effect of bleeding and absence of leaks in the front brake lines while holding pressure against the brake lever. Replenish fluid in the reservoir when bleeding is completed. Reinstall the diaphragm,



① Level line



② Bleeder hose

washer and reservoir cap and tighten.

When the hydraulic brake system has been drained, it should be first filled as outlined below.

- a. Fill the fluid reservoir.
- b. Open the bleeder valve by one-half turn, squeeze the brake lever, close the valve and release the brake lever. This procedure must be repeated in this sequence until hydraulic fluid begins to flow through the bleeder hose. Having filled the hydraulic system with fluid, proceed with the actual bleeding operation.

---

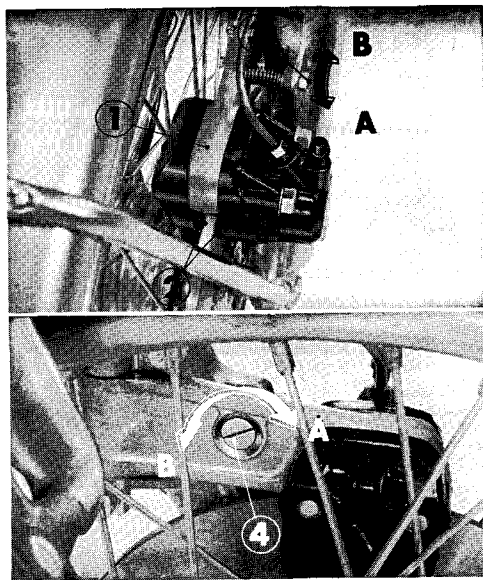
**NOTE:**

1. Brake fluid which has been pumped out of the system must not be used again.
  2. Care must be taken, as brake fluid will damage the paint finish and instrument gauge lenses.
- 

#### **4. Brake Caliper Adjustment**

Whenever the brake pads are replaced, the brake caliper ① must be adjusted. This adjustment is made in the following manner, so that there is a small clearance between the fixed friction pad ② and the brake disc.

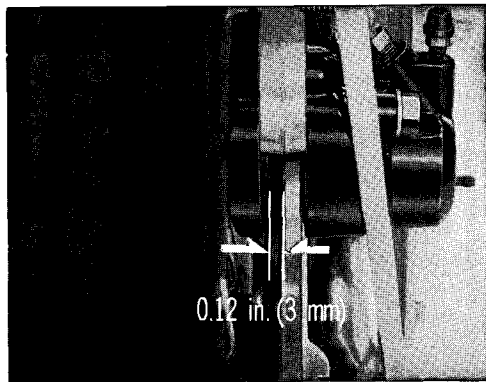
- a. Raise the front wheel off the ground using a suitable prop.
- b. Loosen the caliper stopper bolt lock nut ③.
- c. Using a suitable screw driver, turn the stopper ④ bolt in direction ④ until the friction pad contacts the brake disc. When the wheel is rotated, slight drag should be noticed.
- d. While rotating the front wheel, turn the stopper bolt in direction ⑤ until the front wheel rotates freely.
- e. Turn the stopper bolt in direction ⑥ 1/2 turn further and tighten the lock nut.



- ① Brake caliper    ② Brake pads  
③ Stopper bolt lock nut    ④ Stopper bolt

## 5. Brake Pads

Brake pad wear will depend upon the severity of usage, type of driving, and condition of the roads. It may be expected that the pads will wear faster on dirty and wet roads. Visually inspect the pads during all regular service intervals to determine the pad wear. The wear of the pad can be determined by measuring



the inside clearance between the face of the caliper housing and the brake disc by pressing the inner housing toward the disc. If clearance is less than 0.12 in. (3.0 mm), replace both pads with a new set.

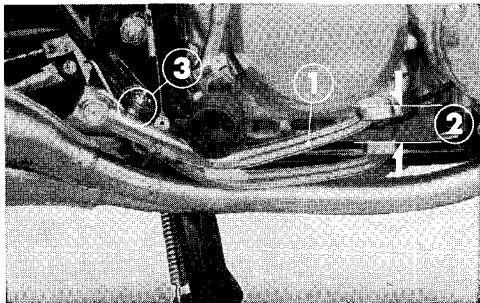
#### **NOTE:**

**Use only HONDA genuine replacement friction pads offered by authorized HONDA dealers. When service is necessary on the brakes, consult your HONDA dealer.**

### **6. Rear Brake Adjustment**

The rear brake is of an internally expanding type. To check the rear brake pedal ① free travel, raise the rear wheel off the ground by placing the motorcycle on the center stand. Rotate the wheel by hand and note the distance the pedal tip travels ② before the brake takes hold. Normal free travel is approximately 1 in (25 mm). If adjustment is necessary,

make the adjustment by turning the adjusting nut ⑤. Turn clockwise for less free travel, counterclockwise for greater free travel. The stopper bolt ③ is provided to make a adjustment of the pedal height before the adjustment by the nut. To turn this bolt, loosen the lock nut. Upon adjusting, tighten the lock nut.



- ① Rear brake pedal      ② pedal travel  
③ Pedal stopper bolt

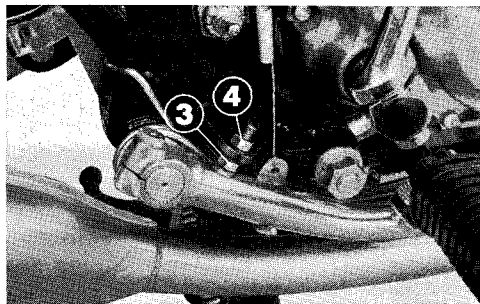
---

## NOTE:

Make sure that the cut-out on the adjusting nut is seated on the brake arm pin after the final adjustment has been made. If the rear wheel assembly has been moved forward or rearward, as during drive chain adjustment, the rear brake may require adjustment.

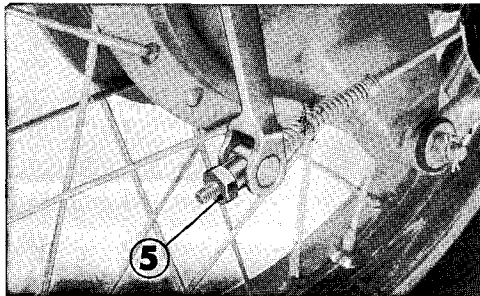
Inspect the mounting of the rear brake arm to the brake shoe actuating cam to make sure that the locking bolt is tight and the splines undamaged.

---



③ Pedal stopper bolt

④ Lock nut



⑤ Rear brake adjusting nut

## **7. Rear Brake Shoes**

Inspect the lining of the brake shoes for thickness and evenness of wear at specified intervals in the MAINTENANCE SCHEDULE (page 36). To examine the brake shoes, remove the rear wheels according to the instruction on page 66. Replace brake shoes with only HONDA genuine replacement brake shoes when thickness of lining becomes 0.08 in (2.0 mm).

---

### **NOTE:**

**When service is necessary on the brakes, consult your HONDA dealer.**

---

## **WHEEL REMOVAL AND INSPECTION**

### **1. Front Wheel Removal**

Removal of the front wheel is performed in the following manner.

- a. Raise the front wheel off the ground by placing a support under the engine.
- b. Remove the speedometer cable ① from the front wheel hub assembly.
- c. Remove the axle holder fixing nuts ② and the front wheel assembly can be removed from the front fork.

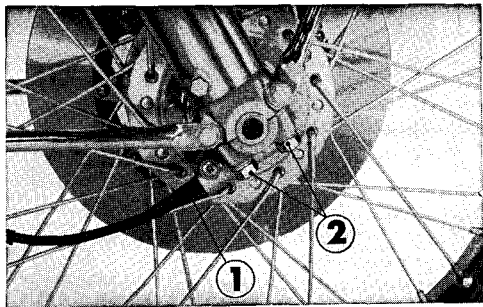
To install the front wheel reverse the sequence outlined above.

---

### **NOTE:**

- With the front wheel removed the friction pads can be taken out of the caliper assembly and measured for wear (see page 61).
- Do not depress the brake lever when the wheel is off the motor-

cycle as this can cause the caliper piston to be forced out of the cylinder with subsequent loss of brake fluid. If this does occur servicing of the brake system will be necessary (see page 58–61).



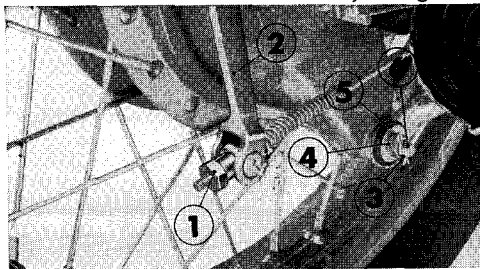
- ① Speedometer cable
- ② Axle holder fixing nuts

## 2. Rear Wheel Removal

Removal of rear wheel is performed in

the following manner.

- a. Place the motorcycle on the center stand.
- b. Remove the rear brake adjusting nut ① and actuating rod from the brake arm ②.
- c. Remove rear brake plate torque arm lock pin ③, nut ④, washer ⑤, and bolt ⑥.
- d. Remove the cotter pin and loosen the axle nut ⑦.
- e. Loosen the rear wheel adjusting bolt



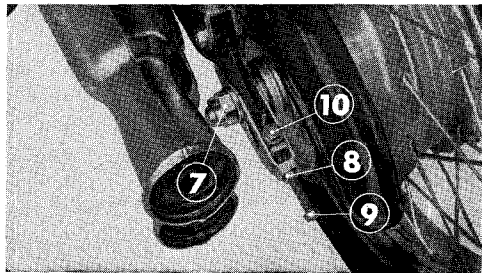
- ① Rear brake adjusting nut
- ② Brake arm
- ③ Lock pin
- ④ Nut
- ⑤ Washer
- ⑥ Bolt

lock nuts ⑧, back out the adjuster bolts ⑨ and turn the chain adjusting downward. Remove the rear fork cap fixing bolts ⑩ and end caps.

- f. Push the wheel forward, lift the chain off the sprocket, then pull the wheel rearward, clear of the rear fork.

To install the rear wheel, reverse the sequence outlined above.

Adjust the drive chain tensions following drive chain adjustment. (see page 55)



- ⑦ Axle nut      ⑧ Lock nut  
⑨ Adjuster bolt      ⑩ Fixing bolt

### 3. Wheel Inspection

At any time the front or rear wheel is removed, take the opportunity to thoroughly inspect the suspension components, brake friction linings and wheel bearings. Especially inspect the condition of wheel rim and spoke tension at regular intervals as in the MAINTENANCE SCHEDULE (page 36). It is recommended that retightening of spokes be done by a qualified mechanic.

### TIRES

If any one item would have to be singled out as the most important to motorcycle safety, it would probably be the tires. Yet, this is frequently the most neglected item on the motorcycle. Because the tires can be inspected easily, we recommended that you make it a matter of habit to check the condition of the tires during the PRE-RIDING INSPECTION.

## 1. Tire Inflation Pressure

Correct inflation pressure will provide maximum stability, riding comfort and tire life. To insure the proper tire inflation pressure, follow the recommendations in the following table.

### Recommended Tire Inflation Pressure (Cold)

Cold tire pressures psi (kg/cm <sup>2</sup> )	Up to 200 lbs(90kg) load	Front : 26(1.8)
		Rear : 28(2.0)
	Up to vehicle capacity load	Front : 28(2.0)
		Rear : 34(2.4)
Vehicle capacity load	300 lbs (135 kg)	
Tire size	Front : 3.25-19	
	Rear : 3.50-18	

See also the tire information label affixed to the rear fender.

## 2. Tire Tread Condition

Operating the motorcycle with excessively worn tire tread will adversely affect stability and traction, and consequently invite hazardous condition.

Determine the time when you need to replace the tires by measuring the remaining depth of tire tread.

The limits of tire center tread depth are 0.05 in. (1.5 mm) in front and 0.08 in. (2.0 mm) in the rear tires.

## 3. Tire Removal and Installation

In the event of a flat tire or puncture, or when installing a new tire, the following items should be kept in mind.

- Install only the tires listed on the label affixed to the rear fender.

### Recommended tire brand

	BRIDGESTONE	NITTO
Front	Supper speed 21F2	NT-79
Rear	Supper speed 21R2	NT-88

- b. Never attempt to patch or vulcanize a tire casing.
- c. Inner tubes should be patched only in EMERGENCY situations.
- d. Always locate and eliminate the CAUSE of tire or inner tube damage.

Puncture due to sharp object or severe impact.

Puncture due to loose and broken spokes.

Flat tire due to vandalism or leaking valve core.

Flat tire due to internal chafing or cuts.

Flat tire due to tire shifting on rim.

- e. The inner tube size must correspond to the tire casing size.

Tire removal should be performed in the following manner.

- a. Remove the wheel assembly to be

worked on as described in Front or Rear Wheel Removal, pages 65—67.

- b. Remove brake plate assembly and/or axle, so wheel can be layed flat. Lay wheel assembly on a rag or cardboard to prevent hub surface damage.

- c. Remove valve core and valve stem retaining nuts. Locate and remove any sharp objects imbedded in the tire.

- d. Step on tire casing to break it free from the rim. Repeat on the opposite side.

- e. Using two small or medium size irons, placed 4–6 in. (100–150 mm) apart and inserted between the rim edge and tire bead at the valve stem location, pry in and downward with both tire irons while depressing the tire bead opposite the tire irons, with your foot. When tire bead is above the rim edge, remove only one tire iron and

move it 3–4 in. (76–100 mm) further away from the tire iron supporting the tire bead and insert and pry the tire bead further off of the rim. Proceed in this manner until the entire side of the tire casing is above and clear of the rim edge.

The deflated inner tube can now be pulled from the tire casing and the inner tire casing inspected for damage or protruding sharp object, etc. Locate and eliminate cause of flat or puncture.

- g. Install a new inner tube of the correct size by inflating very slightly leave the valve core in the valve stem.
- h. Inspect the wheel rim inner tube protector strip to see that it is in good condition and centered over the spoke nipples.
- i. Align the tire balance mark with the

valve stem hole in the rim and insert the partially inflated inner tube into the tire casing. With the valve stem aligned with the valve stem hole in the rim.

- j. Work the inner tube into proper position in the tire casing and insert the valve stem through the valve stem hole in the rim. Install a valve stem retaining nut partially, but not tighten, onto the valve stem. Remove valve core.
- k. Apply a light coating of tire mounting solution (liquid detergent can be used in an emergency) to each of the tire bead surfaces, and between the free tire bead and rim edge.
- l. The tire can now be stepped into place using your heels. Placing both heels on the tire bead opposite the valve core and depressing the tire bead

into place progressively with each step in opposite directions around the wheel.

- m. When 80–90% of the tire bead is in place, use a tire mounting mallet (heavy rubber, leather or plastic hammer) to force the remaining section into position. Avoid using tire irons or screw driver for this operation as inner tube punctures will result due to pinching with the tool.
- n. Insert the valve core and over-inflate the standard pressure by approximately 10 psi (0.7 kg/cm<sup>2</sup>). This will help to properly seat the tire beads into the rim. Inspect for proper tire bead seating and deflate the tire. Reinflate to the correct specified pressure (see page 68) and tighten the valve stem retaining nut lightly.
- o. Recheck the tire pressure and install

the valve stem cap.

- p. Install wheel assembly as per instructions on page 65–67.

---

**NOTE:**

**These operations require skill and special tools, and in as much as the safety of the rider is dependent on the good condition of the tires and wheel assemblies, we urge you to have this service performed by your HONDA dealer when possible.**

---

## FRONT SUSPENSION

### 1. Front Suspension Inspection

Check the front fork assembly by locking the front brake and pumping the fork up and down vigorously. The motorcycle must not be on the center stand when performing this inspection. Inspect for the following items:

- Oil seepage around the cushion oil seals.
- Fork pipe bushing wear.
- Security of items attached to the fork assembly.
- Excessive play in the steering head.
- Carefully inspect all front suspension fasteners for tightness, this includes the attachment points of the fork pipes, brake components and handlebar.

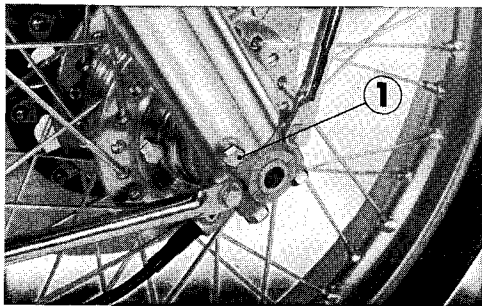
### NOTE:

Contact your Honda dealer for repair of any steering or front suspension wear or damage.  
Do not operate the motorcycle

with loose, worn, or damaged steering or front suspension, as handling will be adversely affected.

### 2. Front Fork Oil Change

To maintain good riding characteristics and increase fork service life, the oil in the front fork legs should be changed periodically. This should be done at least every 12 months or 6,000 miles (10,000 km), whichever occurs first.



① Front fork drain plug

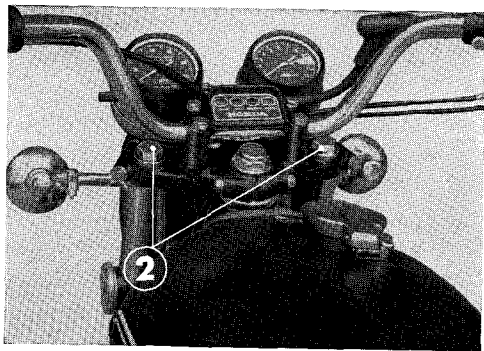
- a. Unscrew the front fork drain plug ① at the bottom of fork cylinder and drain the oil by pumping the fork. Screw in the plug securely after draining.
- b. Remove the top filler plug ② and fill the front fork cylinder with 5.4 ozs. (160 cc) of premium quality **ATF**.
- c. Securely tighten the top filler plug after filling.

## REAR SUSPENSION

### 1. Rear Suspension Inspection

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

- a. Rear fork bushing—This can be checked by pushing hard against the side of the rear wheel while the motorcycle is on the center stand and feeling for looseness of the fork bushings.
- b. Check side stand spring for damage and fitness.
- c. Check all suspension component attachment points for security of their respective fasteners.



② Top filler plug

---

**NOTE:**

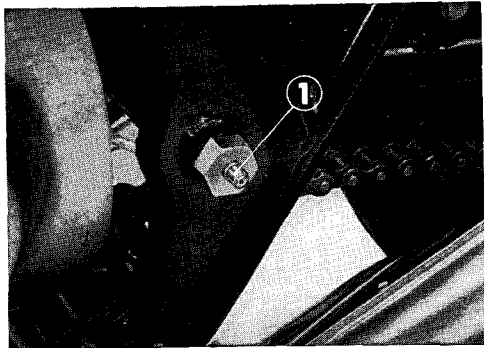
- (1) If any sign of the above conditions is noticed, consult your HONDA dealer for further inspection.
- (2) The rear suspension units on the CB 500 are sealed at the factory and do not require servicing

**NEVER attempt to destroy the seal and disassemble the rear suspension damper units.**

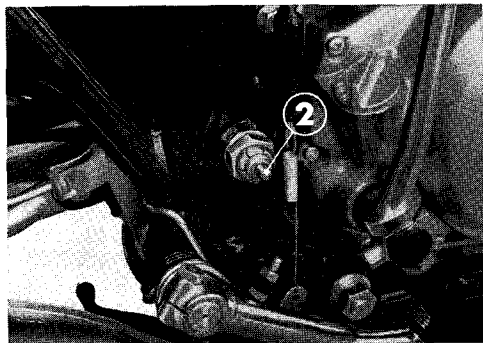
---

## **2. Rear Fork Bushing Lubrication**

There are two lubrication points ① and ② as shown in the figure. It is recom-



① Grease nipple



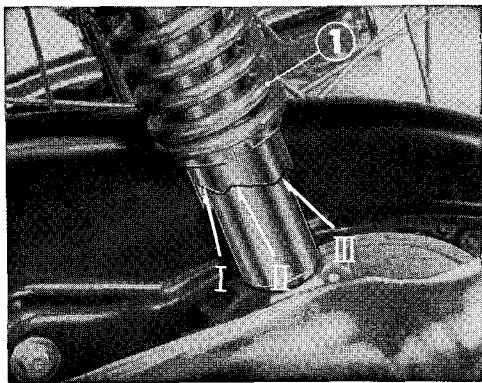
② Grease nipple

mended that lubrication be performed every 6 months or 3,000 miles (5,000 km), whichever occurs first, with **multi-purpose grease, Type NLGI No. 2.**

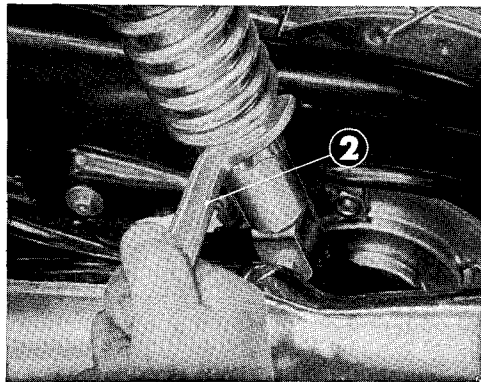
### 3. Rear Shock absorber Adjustment

The rear shock absorber ① has three-ranges of adjustment and can be adjusted

to meet the different types of road or riding conditions. Position "I" is for normal riding with the damper spring strength increasing progressively from "II" to "III"; to be used for heavy load conditions or when operating on rough roads



① Rear shock absorber



② 45 mm pin spanner

## BATTERY

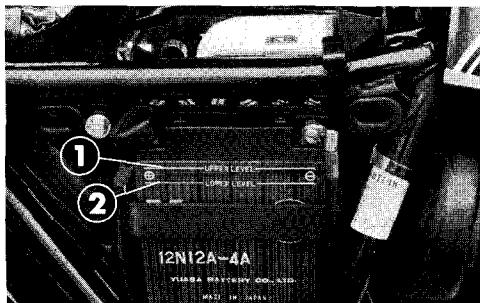
If the motorcycle is operated with an insufficient (low) battery electrolyte level, sulfation and battery plate damage may occur. Inspecting and maintaining the electrolyte level is a simple, quick operation, therefore, it should be performed frequently as indicated in the MAINTENANCE SCHEDULE (page 36) and PRE-RIDING INSPECTION (page 27).

### 1. Battery Electrolyte Replenishment

- a. For battery (12V-12AH) inspection and service access, remove the right cover by pulling free of the rubber mounts and by raising the seat. The electrolyte level can be seen from the right side at the motorcycle without removing the battery. The correct electrolyte level is between the "LOW-

ER" and "UPPER" level marks on the battery case.

- b. To correct the electrolyte level, remove the battery cell caps from the cells needing level correction. Use a small syringe or plastic funnel for adding water. Carefully add the proper amount of distilled water to bring the electrolyte level of the cells between the "LOWER" and "UPPER" marks.



① Upper level      ② Lower level

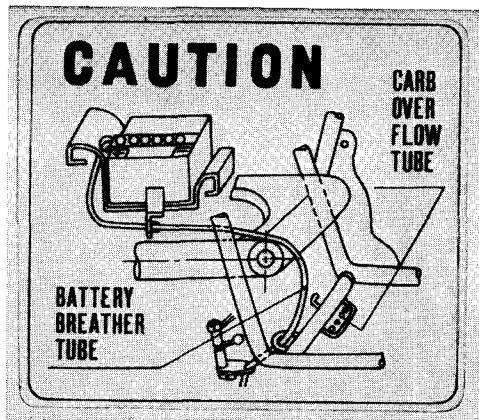
For maximum battery performance and life only distilled water should be added.

## 2. Battery Removal and Installation

Battery removal may be necessary when battery electrolyte specific gravity reading is below 1.200, indicating the need for battery recharging, or when the battery is removed for storage.

- a. Remove battery retainer, disconnect the ground (–) negative cable connection first, and then the positive (+) cable. The battery can now be lifted from its mounting. Note the positioning of the cables, protective rubber (+) terminal cover, and battery mount rubber pads, as well as the routing of the battery vent tube. Before installing the battery, clean the battery and its mounting area with water. Baking soda and water can be used to remove any existing corrosion.

- b. Battery installation is performed in the reverse order of removal. Pay particular attention to the battery rubber mounts pads and the vent tube routing. Connect and protect the positive (+) terminal with the rubber insulator first, and then connect the negative (–) terminal.



---

**CAUTION:**

**Do not overtighten these terminal connections as damage to the battery terminals may result. Install battery retainer, lower the seat and install the left side access cover.**

---

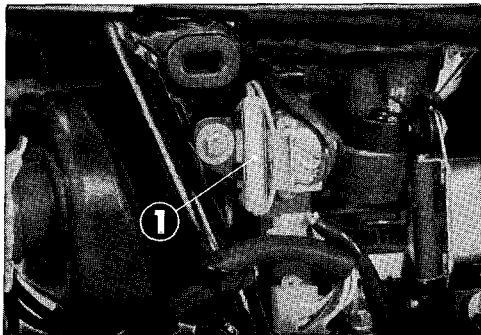
### **3. Battery Charging**

If the battery electrolyte specific gravity reading (measured with a hydrometer) drops below 1.200 @ 68°F (20°C), the battery should be charged at a rate not to exceed 1.5 amps until the specific gravity reading is between 1.260 and 1.280 @ 68°F (20°C). Frequent discharging, or partially discharge battery condition, is sometimes the result of improper starting procedure, poor engine condition and/or electrical system problems. To locate and correct the cause of this condition, we suggest you contact your HONDA dealer.

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

### **FUSE REPLACEMENT**

The fuse holder ① is located under the left side cover. The recommended fuse for the CB500 is 15A. When frequent failure of the fuse occurs, it usually indicates a short circuit or on overload in the electrical system. In this case the electrical system should be checked visually for shorts or other possible malfunctions. If the problem cannot be located visually, the motorcycle should be examined by an authorized HONDA dealer.



① Fuse holder

### **CAUTION:**

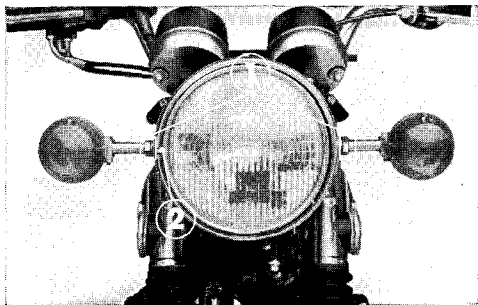
**Never substitute a fuse with wire or metal slug, or install a fuse of too large capacity. The fuse is provided to protect the electrical system and doing either of the above could result in severe damage to the system.**

## **HEAD LIGHT BEAM ADJUSTMENT**

The headlight must be properly adjusted for safe night driving in accordance with applicable regulations. This motorcycle has provisions to adjust the headlight beam in both the vertical and horizontal directions.

- a. Vertical adjustment is made by loosening the bolts ① which mount the headlight assembly. The headlight is normally adjusted in the vertical direction so that the center of the beam intersects the ground at the point 165 feet (50 m) in front of the motorcycle in the riding attitude.
- b. Horizontal beam adjustment is made with the adjusting screw ② located on the left side of the headlight when facing the motorcycle. Turning the screw in will focus the

beam toward the right side. Adjust the beam to coincide with the center line of the motorcycle.



- ① Headlight mounting bolts
- ② Adjusting screw

## STOP LIGHT SWITCH ADJUSTMENT

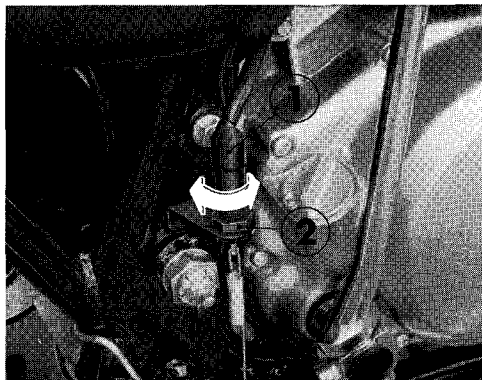
The CB500 is equipped with independent stop light switches for the rear and front brakes. A mechanically actuated pedal switch ① is mounted on the right side toward the rear of the engine for the rear brake system, and a pressure actuated switch ③ at the brake hose joint for the front brake system.

- a. First, make sure that the brakes are properly adjusted.
- b. Turn on the main switch ("RED" dot).
- c. Lower the center stand to clear the rear wheel from the ground, spin the wheel by hand and the stop light should come on when the brake pedal is depressed to the point where the rear brake just starts to take hold. Ad-

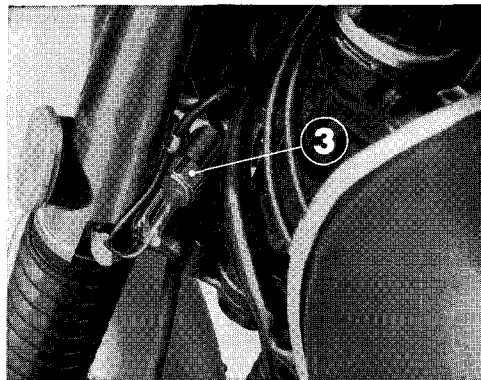
ust by loosening the lock nut ② and screwing the stop light switch ③ up or down. Tighten the lock nut after adjustment.

- d. The stop light switch ③ on the front brake is also checked in the same manner by raising the front wheel off the

ground. However, the pressure switch cannot be adjusted and must be replaced. After replacing the switch, bleed the front brake system in accordance with procedure on page 59.



① Stop light switch (rear) ② Adjusting nut

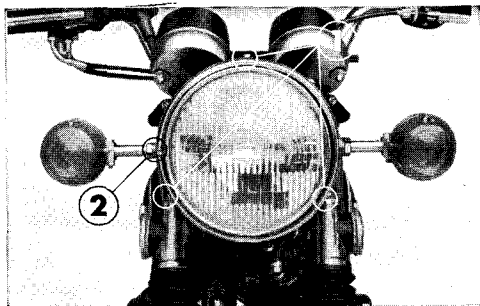


③ Stop light switch (front)

## REPLACING LIGHT BULBS

When exchanging the light bulbs, always replace the bulb with that of the specified type and rating. This is important to prevent the electrical lighting circuit from malfunctioning. The light bulbs are listed below.

**Headlight bulb; 12V-50/40W**

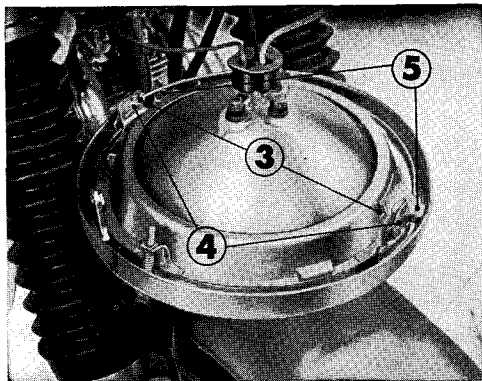


- ① Horizontal adjusting screw
- ② Mounting screws

**Tail/stop light bulb; 12V-7/23W**  
**Turn signal light bulb; 12V-25W**

### 1. Headlight Bulb Replacement Procedure

- a. Remove horizontal adjusting screw ① and mounting screws ②.

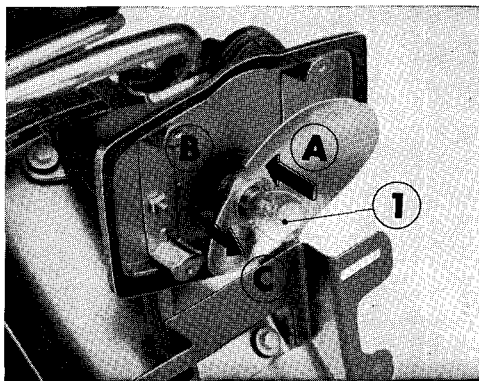


- ③ Lock pins    ④ Lock screws
- ⑤ Sealed beam unit retaining screws

- b. Remove the upper and lower retaining lock clips ③ and screws ④ from the rim.
- c. Remove the two sealed beam unit retaining screws ⑤.
- d. Install a new sealed beam unit. Assemble by reversing the procedure described above.

## **2. Tail/Stop Light Bulb Replacement Procedure**

- a. Remove the two screws mounting the tail/stop light lens.
- b. Press the bulb ① inward (A) and twist to the left (B), and the bulb can be removed (C).
- c. Replace with a new bulb.
- d. When installing the lens, tighten the screws uniformly and do not over-tighten, as this may cause poor sealing or damage the lens.



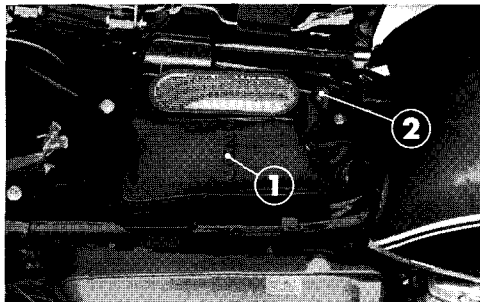
① Tail/stop light bulb

## **3. Turn Signal Light Bulb Replacement Procedure**

Bulb replacement is made in the same manner as for the tail/stop light bulb in paragraph "2" above.

## TOOL KIT

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



① Tool kit      ② Spare fuse holder

Listed below are the items included in the tool kit

- Axle wrench: for axle nuts
- 17×19 mm open end wrench
- 10×14 mm open end wrench
- 8×12 mm open end wrench
- 45 mm pin wrench: for adjustment of rear suspension
- Spark plug wrench
- Pliers
- No. 2 screwdriver
- No. 3 cross point screwdriver
- No. 2 cross point screwdriver
- Screw driver grip: for screwdriver
- Lever: for screwdriver
- Handle: for axle wrench
- Tool bag

Items attached to the motorcycle in a separate package during shipment

- ① A can of touch-up paint
- ② Spare battery fuse (in the spare fuse holder)

## **SPECIFICATIONS**

<b>ITEM</b>	
<b>DIMENSIONS</b>	
Overall length	83.5 in. (2,120 mm)
Overall width	32.5 in. ( 825 mm)
Overall height	44.0 in. (1,115 mm)
Wheel base	55.5 in. (1,405 mm)
<b>WEIGHT</b>	
Dry weight	403.5 lbs (183 kg)
<b>CAPACITIES</b>	
Engine oil	3.2 US qt (3.0 liter)
Fuel tank	3.7 US gal. (14.0 liter)
Fuel reserve tank	1.0 US gal (4.0 liter)
Front fork	5.4 ozs (160 cc)
Hydraulic fluid reservoir	1.2 ozs (35 cc)

<b>ENGINE</b> Bore and stroke Compression ratio Displacement Contact breaker point gap Spark plug gap Valve tappet clearance	2.205×1.992 in. (56.0×50.6 mm) 9.0 : 1 30.38 cu in. (498 cc) 0.012~0.016 in. (0.3~0.4 mm) 0.024~0.028 in. (0.6~0.7 mm) IN 0.003 in. (0.05 mm) EX 0.002 in. (0.08 mm)
<b>CHASSIS AND SUSPENSION</b> Caster Trail Tire size, front Tire size, rear	64° 4.1 in. (105 mm) 3.25-19 (4 PR) 3.50-18 (4 PR)
<b>POWER TRANSMISSION</b> Primary reduction Final reduction	3.246 2.000

<b>Gear ratio, 1st.</b> <b>2nd.</b> <b>3rd.</b> <b>4th.</b> <b>5th.</b>	<b>2.353</b> <b>1.636</b> <b>1.269</b> <b>1.036</b> <b>0.900</b>																		
<b>ELECTRICAL</b> <b>Battery</b> <b>Generator</b>	<b>12 V-12 AH</b> <b>A. C. generator</b>																		
<b>LIGHTS</b> <b>Headlight</b> <b>Tail/stoplight</b> <b>Turn signal light</b> <b>Meter light</b> <b>Neutral indicator light</b> <b>Turn signal indicator light</b> <b>High beam indicator light</b> <b>Fuse</b>	<table> <tr> <th data-bbox="692 536 921 578">U. S. A.</th><th data-bbox="1035 536 1263 578">U. K.</th></tr> <tr> <td data-bbox="692 583 921 624">12 V-50/40 W</td><td data-bbox="1035 583 1263 624">12 V-35/35 W</td></tr> <tr> <td data-bbox="692 624 921 666">12 V-7/23 W</td><td data-bbox="1035 624 1263 666">12 V-5/21 W</td></tr> <tr> <td data-bbox="692 666 921 707">12 V-25 W</td><td data-bbox="1035 666 1263 707">12 V-25 W</td></tr> <tr> <td data-bbox="692 707 921 749">12 V-2 W</td><td data-bbox="1035 707 1263 749">12 V-3 W</td></tr> <tr> <td data-bbox="692 749 921 790">12 V-2 W</td><td data-bbox="1035 749 1263 790">12 V-3 W</td></tr> <tr> <td data-bbox="692 790 921 831">12 V-2 W</td><td data-bbox="1035 790 1263 831">12 V-3 W</td></tr> <tr> <td data-bbox="692 831 921 873">12 V-2 W</td><td data-bbox="1035 831 1263 873">12 V-3 W</td></tr> <tr> <td data-bbox="692 873 921 914">15 amp</td><td data-bbox="1035 873 1263 914">15 amp</td></tr> </table>	U. S. A.	U. K.	12 V-50/40 W	12 V-35/35 W	12 V-7/23 W	12 V-5/21 W	12 V-25 W	12 V-25 W	12 V-2 W	12 V-3 W	12 V-2 W	12 V-3 W	12 V-2 W	12 V-3 W	12 V-2 W	12 V-3 W	15 amp	15 amp
U. S. A.	U. K.																		
12 V-50/40 W	12 V-35/35 W																		
12 V-7/23 W	12 V-5/21 W																		
12 V-25 W	12 V-25 W																		
12 V-2 W	12 V-3 W																		
12 V-2 W	12 V-3 W																		
12 V-2 W	12 V-3 W																		
12 V-2 W	12 V-3 W																		
15 amp	15 amp																		

# INDEX

## A

Air cleaner-element .....	49
-service .....	49
Axle-front .....	66
-rear .....	66
-wrench .....	84

## B

Battery-electrolyte level .....	76
-electrolyte specific gravity .....	77
-case .....	76
-service .....	67
Brake-adjustment .....	58
-fluid .....	59
-inspection .....	59
Break-in .....	30

## C

Cam chain-adjustment .....	48
----------------------------	----

-tensioner .....	48
Carburetor-adjustment .....	51
-choke lever .....	8, 22
-stop screw .....	51
Clutch-adjustment .....	52
-adjuster .....	52
-cable adjuster bolt .....	52
-(Control) lever .....	6, 21
Contact breaker points	
-adjustment .....	42
-file .....	42
Crankcase oil drain plug .....	37

## D

Distilled water .....	76
Drive chain-adjustment .....	54
-lubrication .....	57

## E

Engine oil-change .....	37
-pressure check .....	39

-pressure warning lamp.....	12, 29
-recommendation .....	26

## F

Foot rests .....	6
Frame serial number .....	5
Front brake-bleeding .....	59
-caliper .....	61
-(control) lever .....	6, 18
-disc .....	8, 62
-fluid reservoir.....	6, 59
-pad .....	62
Front fork-oil change .....	72
-oil drain plug.....	72
-oil filler plug .....	72
Front suspension-inspection .....	72
Front wheel-removal .....	65
-inspection .....	67
Fuel-grade .....	23
Fuel control valve-service.....	23
-strainer .....	47
Fuel tank filler cap .....	23
Fuse .....	78

## G

Gear change-pedal .....	8, 20
Gear changing procedure .....	31

## H

Headlight-adjustment.....	79
-(control) switch .....	14
-bulb replacement.....	82
Head light beam	
-indicator lamp .....	10
-selector switch .....	6, 10
Horn .....	8
-button.....	15

## I

Ignition switch .....	6, 14
Ignition timing-adjustment .....	43
Indicator lights .....	10

## K

Key .....	13
Kick starter pedal .....	9, 21

## M

Main switch .....	8, 13
Maintenance-schedule .....	34
-operations .....	37

## N

Neutral indicator lamp .....	10
Nomenclature .....	6

## O

Oil pump strainer .....	39
Oil reservoir-drain plug .....	37
-filler cap .....	38
-Oil level .....	38

## P

Parking.....	33
Pre-riding inspection .....	27

## R

Rear brake-adjustment .....	63
-adjusting nut .....	64
-pedal .....	9, 19, 63

-shoe .....	65
-------------	----

Rear shock absorber	
-adjustment .....	75
Rear fork bushing-inspection .....	74
-grease .....	74
Rear suspension .....	73

## S

Safe riding suggestion .....	33
Seat .....	6
-lock .....	18
Side marker reflector .....	8
Spark plug-service .....	40
-wrench .....	41, 84
Specifications-engine .....	86
-electrical system .....	87
-power train .....	87
-chassis and suspension.....	86
-filling capacities .....	85
-dimensions .....	85
-weights .....	85
-performance .....	86
Speedometer .....	6, 10

-odometer .....	6, 10
-tripmeter .....	6, 10
Starter-switch .....	14
Starting engine .....	28
Steering lock .....	8, 16, 36
Stop light-adjustment.....	80
-bulb replacement.....	82
-switches .....	15
Suspension-front and rear.....	72, 74

## T

Tachometer.....	6, 10
-red zone.....	10, 31
Tail light .....	6
-bulb replacement .....	83
Thickness gauge .....	45, 84
Throttle-cable adjustment .....	50
-control grip .....	18
Tire-front and rear .....	68
-inflationpressure .....	68
-removal .....	68
-tread condition.....	68
-tube .....	68
Tool kit.....	84

Touch-up paint .....	84
Transmission .....	86
Turn signal-bulb replacement .....	83
-(control) switch .....	16
-indicator light.....	10
-light .....	6

## V

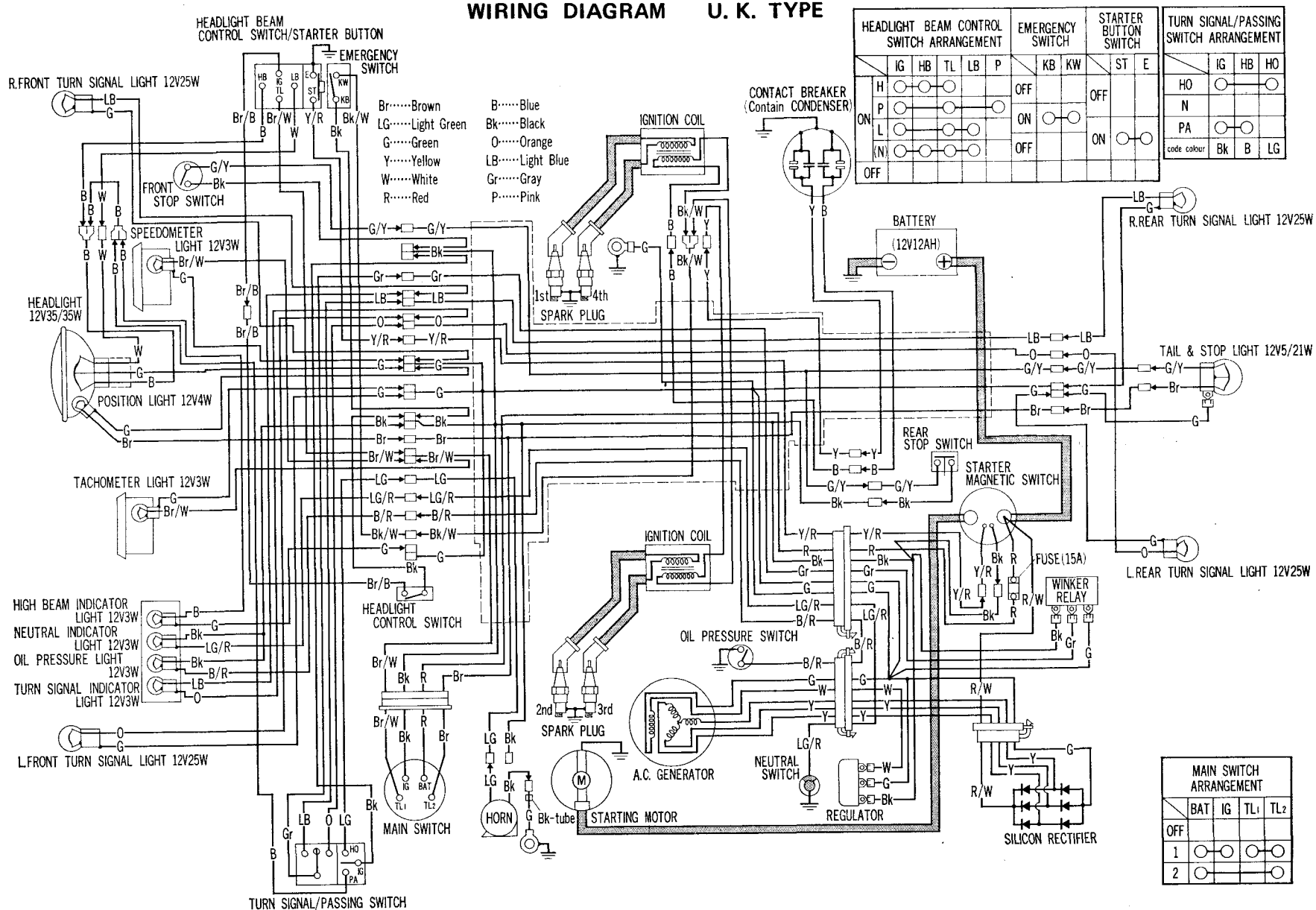
Valve tappet clearance	
-adjustment .....	45

## W

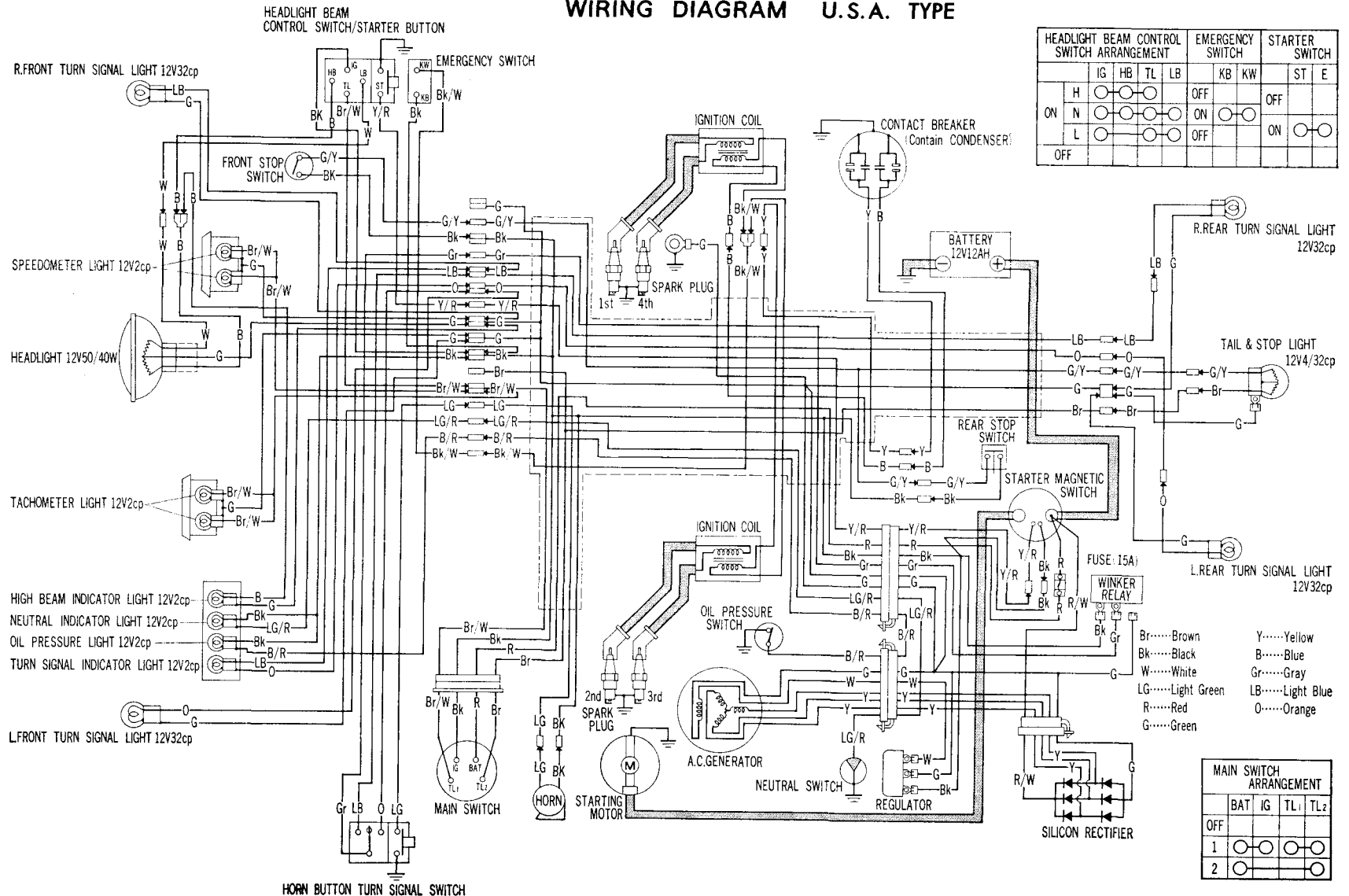
Wheel-inspection .....	36, 65
-removal .....	65
Wiring diagram	



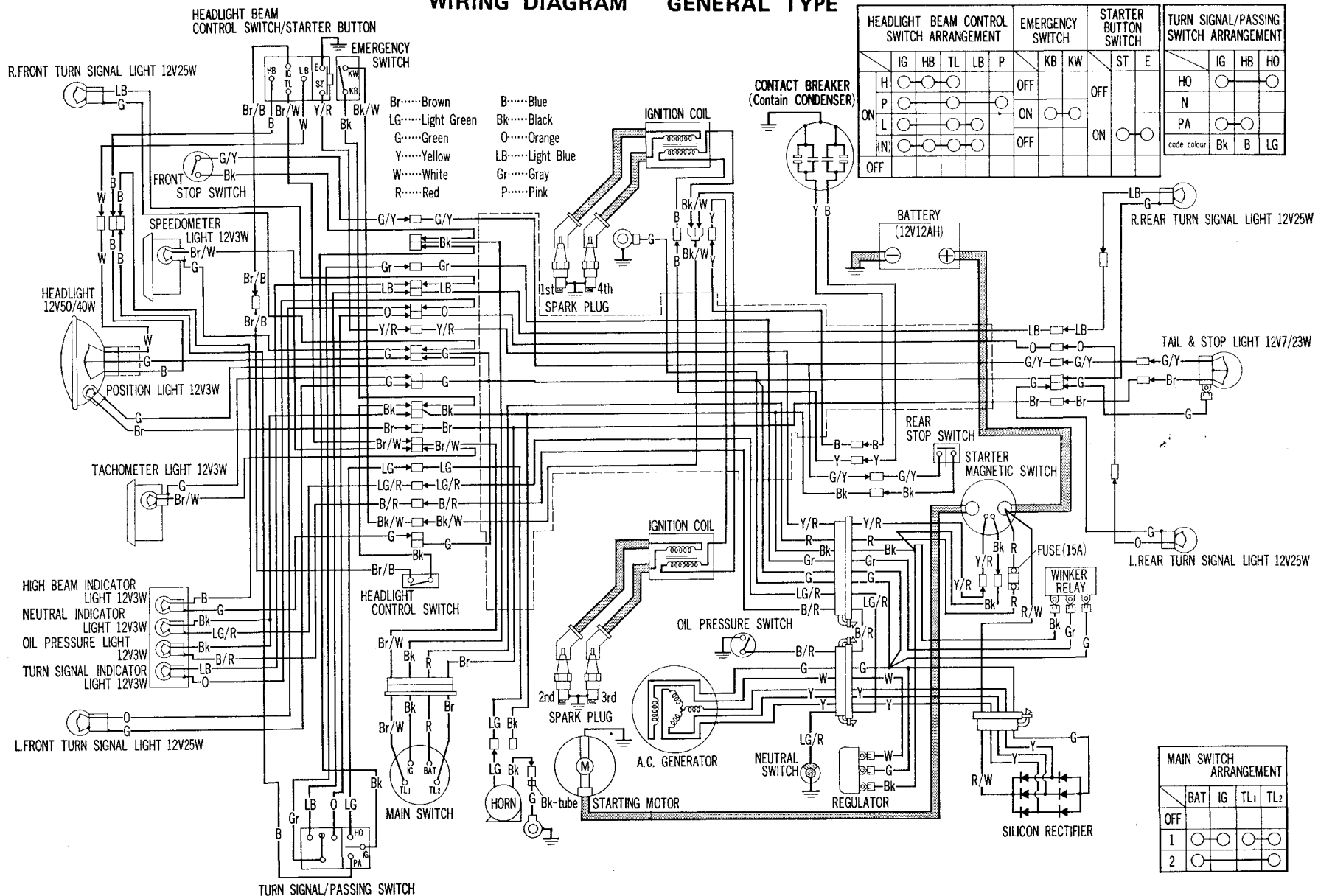
# WIRING DIAGRAM U. K. TYPE



# WIRING DIAGRAM U.S.A. TYPE



# WIRING DIAGRAM GENERAL TYPE



HEADLIGHT BEAM CONTROL SWITCH ARRANGEMENT						EMERGENCY SWITCH		STARTER BUTTON SWITCH		TURN SIGNAL/PASSING SWITCH ARRANGEMENT			
	IG	HB	TL	LB	P	KB	KW	ST	E	IG	HB	HO	
H	○	○	○	○	○	OFF	○	OFF	○	HO	○	○	
P	○	○	○	○	○	ON	○	ON	○	N	○	○	
L	○	○	○	○	○	OFF	○	ON	○	PA	○	○	
(N)	○	○	○	○	○	OFF	○	ON	○	code colour	Bk	B	LG
OFF													

MAIN SWITCH ARRANGEMENT				
	BAT	IG	TL <sub>1</sub>	TL <sub>2</sub>
OFF	○	○	○	○
1	○	○	○	○
2	○	○	○	○

# WIRING DIAGRAM ED TYPE

