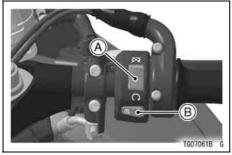
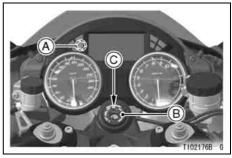
# Starting the Engine

• Check that the engine stop switch is in the O position.



A. Engine Stop Switch B. Starter Button

- Turn the ignition key to "ON".
- Make sure the transmission is in neutral.



A. Green Neutral Indicator Light

- **B.** Ignition Switch
- C. ON position

#### NOTE

The motorcycle is equipped with a vehicle-down sensor which causes the engine to stop automatically if the motorcycle falls down. The engine warning indicator light ( ) blinks

when the starter button pressed if the engine cannot be started. After righting the motorcycle, first turn the ignition key to "OFF" and then back to "ON" before starting the engine.

• Without holding the throttle grip, push the starter button to start the engine.

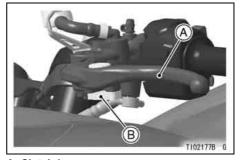
## NOTICE

Do not operate the starter continuously for more than 5 seconds, or the starter will overheat and the battery power will drop temporarily. Wait 15 seconds between each operation of the starter to let it cool and the battery power recover.

#### NOTE

O The motorcycle is equipped with a starter lockout switch. This switch is

designed so that the engine does not start if the transmission is in gear and the side stand is down. However, the engine can be started if the clutch lever is pulled and the side stand is fully up.



A. Clutch Lever

B. Starter Lockout Switch

#### NOTICE

Do not let the engine idle longer than five minutes, or engine overheating and damage may occur.

## **Jump Starting**

If your motorcycle battery is "run down", it should be removed and charged. If this is not practical, a 12 volt booster battery and jumper cables may be used to start the engine.

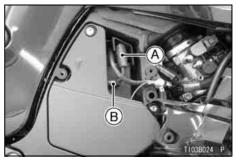
# **A** DANGER

Battery acid generates hydrogen gas which is flammable and explosive under certain conditions. It is present within a battery at all times, even in a discharged condition. Keep all flames and sparks (cigarettes) away from the battery. Wear eye protection when working with a battery. In the event of battery acid contact with skin, eyes, or clothing, wash the affected areas immediately with water for at least five minutes. Seek medical attention.

## Connecting Jumper Cables

- Make sure the ignition key is turned to "OFF".
- Remove the right fairing cover (Refer to the "Battery" section in the

- MAINTENANCE AND ADJUST-MENT chapter).
- Slide the red cap from the positive (+) terminal.

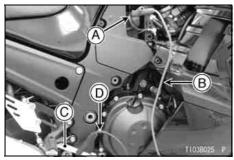


A. Red Cap B. Positive (+) Cable

 Connect a jumper cable from the positive (+) terminal of the booster battery to the positive (+) terminal of the motorcycle battery.

## **NOTICE**

Be careful not to contact the jumper cable slip on the positive battery terminal to the frame, or it cause a short circuit.



- A. Motorcycle Battery Positive (+) Terminal
- B. From Booster Battery Positive (+) Terminal
- C. Rear Brake Pedal
- D. From Booster Battery Negative (–)
  Terminal

 Connect another jumper cable from the negative (-) terminal of the booster battery to your motorcycle rear brake pedal or other unpainted metal surface. Do not use the negative (-) terminal of the battery.

# **A** DANGER

Batteries contain sulfuric acid that can cause burns and produce hydrogen gas which is highly explosive. Do not make this last connection at the fuel system or battery. Take care not to touch the positive and negative cables together, and do not lean over the battery when making this last connection. Do not connect to a frozen battery. It could explode. Do not reverse polarity by connecting positive (+) to negative (-), or a battery explosion and serious damage to the electrical system may occur.

 Follow the standard engine starting procedure.

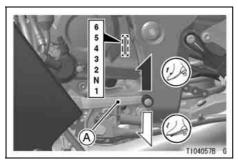
## **NOTICE**

Do not operate the starter continuously for more than 5 seconds or the starter will overheat and the battery power will drop temporarily. Wait 15 seconds between each operation of the starter to let it cool and the battery power recover.

- After the engine has started, disconnect the jumper cables. Disconnect the negative (–) cable from the motorcycle first.
- Reinstall the parts removed.
- Check the cables are correctly routed (Refer to "Battery" section in the MAINTENANCE AND ADJUST-MENT chapter).

## **Moving Off**

- Check that the side stand is up.
- Pull in the clutch lever.
- Shift into 1st gear.
- Open the throttle a little, and start to let out the clutch lever very slowly.
- As the clutch starts to engage, open the throttle a little more, giving the engine just enough fuel to keep it from stalling.



A. Shift Pedal

#### NOTE

O The motorcycle is equipped with a side stand switch. This switch is designed so that the engine does not start if the transmission is in gear and the side stand is down.

## **Shifting Gears**

- Close the throttle while pulling in the clutch lever.
- Shift into the next higher or lower gear.
- Open the throttle part way, while releasing the clutch lever.
- For smooth riding, each gear position should cover the proper rate of speed shown in the table.

# **A** WARNING

Downshifting to a lower gear at high speed causes engine rpm to increase excessively, potentially damaging the engine and it may also cause the rear wheel to skid and cause an accident. Downshifting should be done below the vehicle speeds for each gear shown in the table.

#### Vehicle speed when shifting

Shifting up	km/h (mph)	Shifting down	km/h (mph)
1st → 2nd	15 ( 9)	6th → 5th	30 (19)
2nd → 3rd	25 (15)	5th → 4th	25 (15)
3rd → 4th	35 (21)	4th → 3rd	20 (12)
4th → 5th	45 (27)	3rd → 2nd	15 ( 9)
5th → 6th	55 (34)	2nd → 1st	15 ( 9)

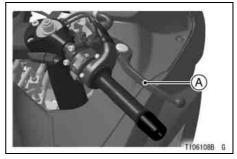
#### **NOTE**

O The transmission is equipped with a positive neutral finder. When the motorcycle is standing still, the transmission cannot be shifted past neutral from 1st gear. To use the positive neutral finder, shift down to 1st gear, then lift up on the shift pedal while standing still. The transmission will shift only into neutral.

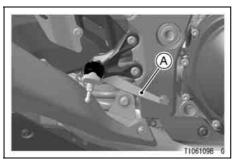
## **Braking**

- Close the throttle completely, leaving the clutch engaged (except when shifting gears) so that the engine will help slow down the motorcycle.
- Shift down one gear at a time so that you are in 1st gear when you come to a complete stop.
- When stopping, always apply both brakes at the same time. Normally the front brake should be applied a little more than the rear. Shift down or fully disengage the clutch as necessary to keep the engine from stalling.
- Never lock the brakes, or it will cause the tires to skid. When turning a corner, it is better not to brake at all. Reduce your speed before you get into the corner.

 For emergency braking, disregard downshifting, and concentrate on applying the brakes as hard as possible without skidding.



A. Front Brake Lever



A. Rear Brake Pedal

## Stopping the Engine

- Close the throttle completely.
- Shift the transmission into neutral.
- Turn the ignition key to "OFF".
- Support the motorcycle on a firm, level surface with the side stand.
- Lock the steering.

#### NOTE

O The motorcycle is equipped with a vehicle-down sensor which causes the engine to stop automatically if the motorcycle falls down. The engine warning indicator light ( □ ) blinks when the starter button pressed if the engine cannot be started. After righting the motorcycle, first turn the ignition key to "OFF" and then back to "ON" before starting the engine.

# Stopping the Motorcycle in an Emergency

Your Kawasaki Motorcycle has been designed and manufactured to provide you optimum safety and convenience. However, in order to fully benefit from Kawasaki's safety engineering and craftsmanship, it is essential that you, the owner and operator, properly maintain your motorcycle and become thoroughly familiar with its operation. Improper maintenance can create a dangerous situation known as throttle failure. Two of the most common causes of throttle failure are:

 An improperly serviced or clogged air cleaner may allow dirt and dust to enter the throttle body and stick the throttle open. During removal of the air cleaner, dirt is allowed to enter and jam the fuel injection system.

In an emergency situation such as throttle failure, your vehicle may be stopped by applying the brakes and disengaging the clutch. Once this stopping procedure is initiated, the engine stop switch may be used to stop the engine. If the engine stop switch is used, turn off the ignition switch after stopping the motorcycle.

## **Parking**

# **▲** WARNING

Operating or parking the vehicle near flammable materials can cause a fire, and can result in property damage or severe personal injury.

Do not idle or park your vehicle in an area where tall or dry vegetation, or other flammable materials could come into contact with the muffler or exhaust pipe.

# **A** WARNING

The engine and exhaust system get extremely hot during normal operation and can cause serious burns.

Never touch a hot engine, exhaust pipe, or muffler during operation or after stopping the enaine.

- Shift the transmission into neutral and turn the ignition key to "OFF".
- Support the motorcycle on a firm, level surface with the side stand.

#### NOTICE

Do not park on a soft or steeply inclined surface, or the motorcycle may fall over.

 If parking inside a garage or other structure, be sure it is well ventilated and the motorcycle is not close to any source of flame or sparks; this includes any appliance with a pilot light.

# **WARNING**

Gasoline is extremely flammable and can be explosive under certain conditions, creating the potential for serious burns. Turn the ignition switch to "OFF". Do not smoke. Make sure the area is well ventilated and free from any source of flame or sparks; this includes any appliance with a pilot light.

 Lock the steering to help prevent theft.

## **Catalytic Converter**

This motorcycle is equipped with a catalytic converter in the exhaust system. The converter reacts with carbon monoxide, hydrocarbons and nitrogen oxides to convert them into carbon dioxide, water, nitrogen and oxygen resulting in much cleaner exhaust gases to be discharged into the atmosphere.

For proper operation of the catalytic converter, the following cautions must be observed.

# **▲** WARNING

Operating or parking the vehicle near flammable materials can cause a fire, and can result in property damage or severe personal injury.

Do not idle or park your vehicle in an area where tall or dry vegetation, or other flammable materials could come into contact with the muffler or exhaust pipe.

# **▲** WARNING

The engine and exhaust system get extremely hot during normal operation and can cause serious burns.

Never touch a hot engine, exhaust pipe, or muffler during operation or after stopping the enaine.

- Use only unleaded gasoline. Never use leaded gasoline. Leaded gasoline significantly reduces the capability of the catalytic converter.
- Do not operate the vehicle with the engine or any one cylinder misfiring. Under these conditions unburned air/fuel mixture flowing out of engine excessively accelerates reaction in the converter allowing the converter to overheat and become damaged when the engine is hot, or reduces converter performance when the engine is cold.

# KTRC (Kawasaki TRaction Control)

KTRC is an intelligent system that calculates the slip level of the rear wheel (wheelspin) during acceleration and controls the optimum slip ratio to suit the riding conditions. KTRC can contribute to a stable ride not only for sports riding but also when riding on a rough or slippery road surface.

KTRC is designed for use on public roads. KTRC cannot respond to every condition. Acceleration may be delayed under certain conditions.

# **A** WARNING

KTRC cannot protect the rider from all possible hazards and is not a substitute for safe riding practices. All riders must be aware of how the KTRC system operates and its limitations. It is still your responsibility to ride at appropriate speeds and throttle control for weather, road surface and traffic conditions.

If a wheelie occurs due to excessive acceleration, KTRC will control the engine output to make the front wheel contact the road surface. In this case, slightly release the throttle grip so that the front wheel stays in contact with the road surface.

# WARNING

Use of nonrecommended tires could cause a malfunction or improper operation of KTRC. Always use recommended standard tires for this motorcycle.

KTRC determines the traction control characteristics with three mode selections. KTRC can also be set to OFF.

KTRC and the Power mode can be set separately. By combining each setting, the rider can get various riding feelings. For further details on the combined use of the KTRC and the Power mode, refer to "KTRC and Power Mode Combination"

#### Mode 1:

KTRC least intervenes among the three modes. This mode gives maximum acceleration for sport riding.

#### Mode 2:

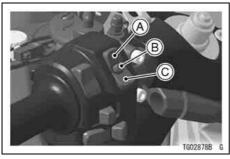
KTRC intervention is at the intermediate level between the mode 1 and mode 3

#### Mode 3:

KTRC intervenes early enough to prevent the rear wheel from spinning whenever possible. This mode is used in low grip situations.

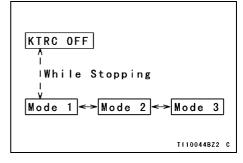
#### KTRC mode setting -

- Close the throttle grip completely.
- Push the "SEL" button to select the KTRC mode indicator. When the KTRC mode indicator is selected, it blinks



A. Upper Button B. "SEL" Button C. Lower Button

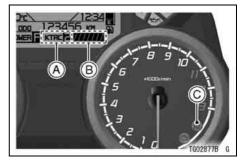
 Push the Upper or Lower button to select the KTRC mode. The KTRC OFF can be selected only when the motorcycle is at a stop. Upper Button:
Mode3 → Mode2 → Mode1 → OFF
Lower Button:
OFF → Mode1 → Mode2 → Mode3



#### NOTE

- O When changing the mode, stop the motorcycle.
- When 30 seconds have passed or the throttle is opened after the KTRC mode indicator starts blinking, it

- stops blinking and the selected mode is fixed
- O The mode can be changed only when the throttle grip is closed completely.
- O The display/mode is switched when the button is released. When the button is held for more than two seconds, the switching function does not work.
- Operate the throttle carefully while the KTRC is OFF because wheelspin of the rear wheel cannot be controlled
- Check the indicator to make sure that the mode has been changed. When the traction control is activated rear wheel starts to break traction, the segment(s) of the KTRC level indicator goes on.



A KTRC Mode Indicator B. KTRC Level Indicator

C. Yellow KTRC Warning Indicator Light

For more detailed information about the KTRC warning indicator light and the KTRC indicator light, see "Warning/Indicator Light" section in the GEN-ERAL INFORMATION chapter.

#### NOTE

O In the KTRC mode 1-3, the selected mode is maintained even when the

ignition switch is turned to OFF position, or the battery is discharged or removed.

OIn the KTRC OFF, the mode is automatically switched to 1, whenever the ignition switch is turned to OFF position. Also, the mode is automatically switched to 1, when the ignition switch is turned to ON position after the battery is discharged or removed.

#### **Power Mode**

The Power mode determines the engine power output characteristics and has two settings.

The Power mode and the KTRC can be set separately. By combining each setting, the rider can get various riding feelings. For further details on the combined use of the Power mode and the KTRC, refer to "KTRC and Power Mode Combination".

## Mode F (Full power):

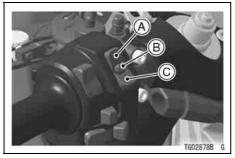
The highest engine power output is achieved. The rider can feel the full throttle response of the engine.

## Mode L (Low Power):

About 75% of the highest engine power output is achieved. The throttle response is milder than F mode.

#### Power mode setting -

- Close the throttle grip completely.
- Push the "SEL" button to select the Power mode indicator. When the Power mode indicator is selected, it blinks.



A. Upper Button B. "SEL" Button C. Lower Button

 Push the Upper or Lower button to select the Power mode. Upper Button: Mode F (Full Power) Lower Button: Mode L (Low Power)

#### **NOTE**

- O When changing the mode, stop the motorcycle.
- OWhen 30 seconds have passed or the throttle is opened after the Power mode indicator starts blinking, it stops blinking and the selected mode is fixed.
- The mode can be changed only when the throttle grip is closed completely.
- The display/mode is switched when the button is released. When the button is held for more than two seconds, the switching function does not work.
- Check the indicator to make sure that the mode has been changed.



A. Power Mode Indicator

#### **NOTE**

 The Power mode setting is maintained if the ignition switch is turned to OFF position, or if the battery is disconnected.

# KTRC and Power Mode Combination

By combining the KTRC mode and Power mode, the eight-pattern settings are available to suit the various conditions. For example, on a slippery road surface, combining the Power mode "L" with the KTRC mode "3" can reduce the rear wheelspin.

The combination of each mode should be decided according to the driving skill and road conditions. Set the combination with reference to the following table.

## examples of mode combinations

