

# 2017 Rider's Manual

# **OCTANE**<sup>TM</sup>

## California Proposition 65 Warning

This product contains or emits chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.



## 2017 Rider's Manual

## **OCTANE**<sup>™</sup>

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# A WARNING

#### Improper vehicle use can result in SEVERE INJURY or DEATH.

#### **NEVER Operate:**

- If you are under the age of 16 and without a driver's license with motorcycle endorsement
- Under the influence of drugs or alcohol
- Off-road
- With more than one passenger (motorcycle must be equipped with passenger foot pegs)
- · With weight that exceeds maximum weight rating

#### ALWAYS:

- Wear a helmet, eye protection, gloves, long-sleeve shirt, long pants and over-the-ankle boots.
- Make sure any passenger reads and understands all safety labels.
- Be aware of your surroundings and driving conditions.
- · Keep both hands on the handlebars and both feet on the footrests when riding.
- Use only genuine VICTORY accessories designed for your model.





#### READ RIDER'S MANUAL. FOLLOW ALL INSTRUCTIONS AND WARNINGS.

#### Safety Training

Safety training is a top priority for POLARIS. POLARIS strongly encourages you to take a rider education course from the **Motorcycle Safety Foundation** or another qualified instructor. The course will help you develop or refresh your expertise in safe riding habits through instruction and riding.

For information on **Motorcycle Safety Foundation** rider education courses in your area, call 1-800-446-9227 or visit their home page at **www.msf-usa.org**.

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## Introduction

Thank you for purchasing a Polaris vehicle, and welcome to our world-wide family of Polaris owners. We proudly produce an exciting line of utility and recreational products.

- Snowmobiles
- All-terrain vehicles (ATVs)
- Low emission vehicles (LEVs)
- RANGER® utility vehicles
- BRUTUS® work vehicles
- SLINGSHOT® three wheel motorcycles
- RZR® sport vehicles
- GEM® electric vehicles
- VICTORY® motorcycles
- INDIAN® motorcycles
- POLARIS POWER® generators
- POLARIS DEFENSE® combat vehicles

For the safe and enjoyable operation of your vehicle, be sure to follow the instructions and recommendations in this rider's manual. Keep this manual with the motorcycle, especially when ownership changes. If your rider's manual is misplaced or damaged, please purchase a replacement from your VICTORY dealer.

All references in this manual to RIGHT, LEFT, FRONT or REAR are from the operator's perspective when seated in a normal riding position. If you have questions about the operation or maintenance of your motorcycle after you've read this manual, your authorized VICTORY dealer can assist. To locate the nearest authorized VICTORY dealer, call 1-877-737-7172 or visit www.victorymotorcycles.com.

VICTORY motorcycles comply with all federal, state and local safety and emission regulations for the area of intended sale.

## About the Rider's Manual

#### **WARNING**

Failure to follow recommended precautions and procedures could result in severe injury or death. Always heed all safety precautions and follow all operation, inspection and maintenance procedures outlined in this manual.

This rider's manual contains information that is essential to safe riding and proper maintenance of your VICTORY motorcycle. Anyone who uses the motorcycle (operators and passengers) must read the rider's manual before riding. Carefully read and understand the information found in the *Safety* section. Understand and follow the procedures outlined in the *Maintenance* section to keep your VICTORY motorcycle in top condition on the road or in storage. Bring the manual with you when you ride. Following the precautions and procedures in the manual will add to your enjoyment and help keep you riding safely. If you lose or damage this manual, you can purchase a new one through any authorized VICTORY dealer. The rider's manual should be considered part of the motorcycle and remain with it if sold.

## Safety Safety Terms and Signal Words

The following signal words and symbols appear throughout this manual and on your vehicle. Your safety and the safety of others is involved when these words and symbols are used. Become familiar with their meanings before reading the manual.

## Â

The safety alert symbol indicates a potential personal injury hazard.

#### DANGER

A DANGER indicates a hazardous situation that, if not avoided, will result in death or serious injury.

#### WARNING

A WARNING indicates a hazardous situation that, if not avoided, could result in death or serious injury.

#### CAUTION

A CAUTION indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.

#### NOTICE

A NOTICE indicates a situation that could result in property damage.



The Prohibition Safety Sign indicates an action NOT to take in order to avoid a hazard.



The Mandatory Action Sign indicates an action that NEEDS to be taken to avoid a hazard.

## Safe Riding Practices

#### **WARNING**

Improper use of this motorcycle can result in serious injury or death to you, your passenger and others. To minimize the risk of injury, read and understand the information contained in this section before operating the motorcycle. This section contains safety information specific to the VICTORY motorcycle, as well as information about general motorcycle safety. Anyone who rides the motorcycle (operators and passengers) must follow these safety precautions.

#### Motorcycling has inherent risks.

You can minimize those risks, but you can't eliminate them completely. Even if you're an experienced motorcycle operator or passenger, read all of the safety information in this manual before operating the motorcycle.

- Take a rider education course from the Motorcycle Safety Foundation or another qualified instructor. The course will help you develop or refresh your expertise in safe riding habits through instruction and riding. For information on Motorcycle Safety Foundation rider education courses in your area, call 1-800-446-9227 or visit their web site at www.msf-usa.org.
- Read and understand all information in this rider's manual.
- Observe all maintenance requirements specified in this manual. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.

#### Design characteristics affect how you should ride the VICTORY motorcycle.

- The motorcycle is designed for on-road use with one rider and one passenger. See the manufacturer's label (on the left side of the frame at the steering head). The label contains the Vehicle Identification Number (VIN) and Gross Vehicle Weight Rating (GVWR) and Gross Axle Weight Rating (GAWR) information. *Never exceed the GVWR or the GAWR*.
- Riding off-road, riding with more than one passenger, or carrying weight exceeding the maximum weight rating can make handling difficult, which could cause loss of control.
- During the first 500 miles (800 km) of operation, follow all break-in procedures as outlined in the break-in section beginning on page 44. Failure to do so can result in serious engine damage.
- Some VICTORY motorcycles include saddlebags, a windshield, a trunk, luggage racks or a passenger backrest as standard equipment. To maintain stability, be prepared to reduce the operating speed of motorcycles equipped with these items.

## Safety Safe Riding Practices

#### Follow these general safe riding practices:

- Before each ride, perform the pre-ride inspections as outlined beginning on page 36.
- Until you're thoroughly familiar with the motorcycle and all of its controls, practice riding where there is little or no traffic. Practice riding at a moderate speed on various road surfaces and in different weather conditions.
- Know your skills and limits, and ride within them.
- Allow only licensed, experienced operators to ride your motorcycle, and then only after they have become familiar with its controls and operation. Make sure all riders read and understand this rider's manual before riding.
- Do not ride when you're fatigued, ill or under the influence of alcohol, prescription drugs, over-the-counter drugs or any other drugs. Fatigue, illness, alcohol and drugs can cause drowsiness, loss of coordination and loss of balance. They can also affect your awareness and judgment.
- If your motorcycle operates abnormally, correct the problem immediately. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.
- Ride defensively, as if you are invisible to other motorists, even in broad daylight. *A motorist's failure to see or recognize a motorcycle is the leading cause of automobile/ motorcycle accidents*. Ride where you're clearly visible to other motorists, and observe their behavior carefully.
- Be especially cautious at intersections, as these are the most likely places for an accident.
- To prevent loss of control, keep your hands on the handlebars and your feet on the footrests.
- Be aware that the highway bar is not designed to protect the rider from injury in a collision.
- Do not move or operate the motorcycle with the steering locked (if equipped), as the severely restricted steering could result in loss of control.
- Obey the speed limit and adjust your speed and riding technique based on road, weather and traffic conditions. As you travel faster, the influence of all other conditions increases, which can affect the motorcycle's stability and increase the possibility of losing control.

## Safety

## **Safe Riding Practices**

- Reduce speed when:
  - the road has potholes, or is otherwise rough or uneven.
  - the road contains sand, dirt, gravel or other loose substances.
  - the road is wet, icy or oily.
  - the road contains painted surfaces, manhole covers, metal grating, railway crossings or other slippery surfaces.
  - The weather is windy, rainy or otherwise causing slippery or rapidly changing conditions.
  - Traffic is heavy, congested, not allowing sufficient space between vehicles or otherwise not flowing smoothly.
  - You are being passed in either direction by a large vehicle that may produce a wind blast in its wake.
- To maximize braking effectiveness, *use the front and rear brakes together*. Be aware of the following braking facts and practices:
  - The rear brake provides 40% of the motorcycle's stopping power, at most. Use the front and rear brakes together.
  - To avoid skidding, apply the brakes gradually when the road is wet or rough, or contains loose or other slippery substances.
  - If possible, avoid applying the brakes while making a turn. Motorcycle tires have less traction during turns, so braking will increase the possibility of skidding. Bring the motorcycle to the upright position before applying the brakes.
- When approaching a curve, choose a speed and lean angle that allows you to pass through the curve in your own lane without applying the brakes. Excessive speed, improper lean angle or braking in a curve can cause loss of control.
- Ground clearance is reduced when the motorcycle leans. Do not allow components to contact the road surface when leaning the motorcycle in a curve, as this could cause loss of control.
- Retract the sidestand fully before riding. If the sidestand is not fully retracted, it could contact the road surface and cause loss of control.
- Do not tow a trailer. Towing a trailer can make the motorcycle hard to handle.

#### Anti-Lock Brake System Response (if equipped)

• When the anti-lock brakes engage during a braking event, the rider will feel pulsing at the brake levers. *Continue to apply steady pressure to the brakes for the best stopping performance.* 

## Safety Safe Riding Practices Carrying a Passenger

*Do not carry a passenger* unless the motorcycle is equipped with passenger seat and passenger footrests.

#### To carry a passenger safely:

- Do not exceed the gross vehicle weight rating (GVWR). See the manufacturer's label (on the left side of the frame at the steering head).
- If necessary, adjust the rear shock preload. See page 70. Improper preload adjustment can make your motorcycle hard to handle and can cause loss of control.
- Before riding, be sure your passenger is familiar with safe riding procedures. An inexperienced passenger may distract you or make movements that cause instability.
- Direct the passenger to hold onto you or the seat strap with both hands and to keep both feet on the passenger footrests. Do not carry a passenger who cannot place both feet firmly on the passenger footrests. A passenger who rides improperly can shift body weight erratically and cause instability.
- Adjust your riding style to compensate for the differences in handling, acceleration and braking caused by the additional weight of the passenger.

## Safe Riding Practices Protective Apparel

Wear protective apparel to decrease the risk of injury and increase riding comfort.

- Always wear a helmet that meets or exceeds established safety standards. Approved helmets in the USA and Canada bear a U.S. Department of Transportation (DOT) label. Laws in some areas *require* that you wear an approved helmet. Head injuries are the leading cause of fatalities in accidents involving motorcycles. Statistics prove that an approved helmet is the most effective protection in preventing or reducing head injuries.
- Wear eye protection to protect eyes from wind or airborne particles and objects. Laws in some areas *require* that you wear eye protection. VICTORY recommends that you wear approved Personal Protective Equipment (PPE) bearing markings such as VESC 8, V-8, Z87.1, or CE. Make sure protective eyewear is kept clean.
- All riders should wear bright or light-colored and/or reflective clothing to improve visibility to other motorists. *A motorist's failure to see or recognize a motorcycle is the leading cause of automobile/motorcycle accidents.*
- Wear gloves, a jacket, heavy boots and long pants to prevent or reduce injury from abrasions, lacerations or burns should the motorcycle fall. Wear boots with low heels, as high heels can catch on pedals or footrests. The combination of boots and pants should completely cover legs, ankles and feet, protecting skin from engine and exhaust system heat.
- Do not wear loose, flowing clothing or long boot laces, as they can catch on handlebars, levers or footrests, or they can become entangled in the wheels, causing loss of control and serious injury.

## Safety Gross Vehicle Weight Rating (GVWR)

**WARNING!** Exceeding the gross vehicle weight rating of your motorcycle can reduce stability and handling and could cause loss of control. NEVER exceed the GVWR of your motorcycle.

The *maximum load capacity* of your motorcycle is the maximum weight you may add to your motorcycle *without exceeding the GVWR*. This capacity is determined by calculating the difference between your motorcycle's GVWR and wet weight.

Refer to the specification section beginning on page 102 or the Manufacturing Information/ VIN label on the motorcycle frame for model-specific information. See page 21.

When determining the weight you will be adding to your motorcycle, and to ensure you do not exceed the maximum load capacity, include the following:

- operator body weight
- passenger body weight
- weight of all riders' apparel and items in or on apparel
- weight of any accessories and their contents
- weight of any additional cargo on the motorcycle

## **Carrying Cargo**

Use the following guidelines when attaching cargo or accessories to the motorcycle. Where applicable, these guidelines also refer to the contents of any accessories.

- Keep cargo and accessory weight to a minimum, and keep items as close to the motorcycle as possible to minimize a change in the motorcycle's center of gravity. Changing the center of gravity can cause loss of stability and handling and could cause loss of control.
- Distribute weight evenly on both sides of the motorcycle. Maintain even weight distribution by checking accessories and cargo to make sure they're securely attached to the motorcycle before riding and whenever you take a break from riding. Uneven weight distribution, or accessories or cargo that shift suddenly while you're riding can make the motorcycle hard to handle, can cause loss of control, or cargo could fall from the motorcycle creating a hazard for surrounding vehicles.
- Do not attach large or heavy cargo such as sleeping bags, duffel bags or tents to the handlebars, front fork area or front fender. Cargo or accessories placed in these areas can cause instability (due to improper weight distribution or aerodynamic changes) and could cause loss of control. Such items can also block air flow to the engine and cause overheating that can damage the engine.
- Do not exceed the maximum cargo weight limit of any accessory (see accessory instructions and labels). Do not attach cargo to an accessory not designed for that purpose. Either circumstance could result in an accessory failure that could cause loss of control.
- Do not attach anything to the motorcycle unless specifically designed for that purpose by VICTORY.

## Carrying Cargo Saddlebags

When operating a motorcycle equipped with saddlebags:

- Never ride at speeds exceeding 80 MPH (120 km/h). Depending on load and weather conditions, the maximum safe operating speed may be less. Saddlebags, combined with the lifting or buffeting effects of wind, can cause instability.
- Distribute weight evenly in each of the saddlebags.
- Do not exceed the maximum cargo capacity of the saddlebags.
- Do not exceed the gross vehicle weight rating (GVWR).

## Parking the Motorcycle

When leaving the motorcycle unattended, turn the engine off. Remove the ignition key to prevent unauthorized use by minors or those without proper motorcycle certification and training.

Park the motorcycle where people are not likely to touch the hot engine or exhaust system or place combustible materials near these hot areas. Do not park near a flammable source such as a kerosene heater or an open flame, where hot components could ignite combustible materials.

Park the motorcycle on a firm, level surface. Sloped or soft surfaces may not support the motorcycle. If you must park on a slope or soft surface, follow the precautions outlined on page 51.

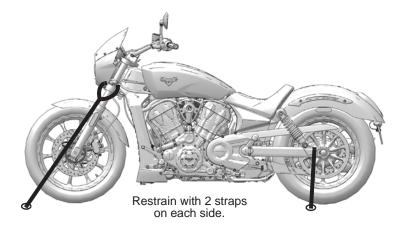
## Modifications

Modifying the motorcycle by removing any equipment or by adding equipment not approved by VICTORY may void your warranty. Such modifications could make the motorcycle unsafe to ride and could result in severe injury to operator or passengers, as well as damage to the motorcycle. Some modifications may not be legal in your area of operation. If in doubt, your authorized VICTORY dealer can assist.

## Safety Transporting the Motorcycle

When transporting the motorcycle:

- Use a truck or trailer. Never tow the motorcycle. Towing will impair steering and handling.
- Restrain the motorcycle in an upright position to prevent fuel leaks.
- Place the transmission in neutral.
- *Do not place restraints on the handlebars.* Carefully route the tiedown straps between the fairing and the fork tubes. Position the tiedown straps around the fork tubes above the lower triple clamp, being sure to not pinch brake lines or wire harnesses. Secure the rear of the motorcycle with tiedowns around both sides of the rear axle, being careful to avoid the brake line, exhaust and drive belt.



## **Use of Accessories**

Because VICTORY cannot test and make specific recommendations concerning every accessory or combination of accessories sold, the operator is responsible for determining that the motorcycle can be safely operated with any accessories or additional weight. Use the following guidelines when choosing and installing accessories:

- Do not install accessories that impair the stability, handling or operation of the motorcycle or operator visibility. Before installing an accessory, be sure that it does not:
  - Reduce ground clearance when the motorcycle is either leaned or in a vertical position.
  - Limit suspension or steering travel or your ability to operate controls.
  - Displace you from your normal riding position.
  - Obscure lights or reflectors.
- Bulky or large accessories can cause instability (due to the lifting or buffeting effects of wind) and loss of control.
- Do not install electrical accessories that exceed the capacity of the motorcycle's electrical system. Never install higher wattage light bulbs than those supplied as original equipment. An electrical failure could result and cause hazardous loss of engine power or lights, or damage to the electrical system.
- Use only genuine VICTORY accessories designed for your model.

## Safety Fuel and Exhaust Safety

#### **WARNING**

Gasoline is highly flammable and explosive under certain conditions.

- Always exercise extreme caution whenever handling gasoline.
- Always turn off the engine before refueling.
- Always refuel outdoors or in a well-ventilated area.
- Open the fuel cap slowly. Do not overfill the tank. Do not fill the tank neck.
- Do not smoke or allow open flames or sparks in or near the area where refueling is performed or where gasoline is stored.

Gasoline and gasoline vapors are poisonous and can cause severe injury.

- Do not swallow gasoline, inhale gasoline vapors, or spill gasoline. If you swallow gasoline, inhale
  more than a few breaths of gasoline vapor, or get gasoline in your eyes, see a physician
  immediately.
- If gasoline spills on your skin or clothing, immediately wash it off with soap and water and change clothing.
- If gasoline spills on the any part of the motorcycle, immediately rinse it off with water.

Exhaust gases contain carbon monoxide, a colorless, odorless gas that can cause loss of consciousness or death in a short time.

- Never start the engine or let it run in an enclosed area.
- Never inhale exhaust gases.

## Safety Maintenance

#### A WARNING

Failure to perform safety maintenance as recommended can result in difficult handling and loss of control, which could result in serious injury or death. Always perform the safety maintenance procedures as recommended in this manual. Perform safety-related maintenance and repairs promptly as outlined in the *VICTORY Service Manual*, or see your authorized VICTORY dealer for service.

- Before each ride, perform the pre-ride inspections. See page 36.
- Perform maintenance at the intervals specified in the periodic maintenance table. See page 54.
- Always maintain proper tire pressure, tread condition and wheel and tire balance. Inspect tires regularly and replace worn or damaged tires promptly. Use only approved replacement tires. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.
- Always ensure proper steering head bearing adjustment.
- Regularly inspect the rear shock absorber and the front forks for fluid leaks or damage. Make any necessary repairs promptly.
- Clean the motorcycle thoroughly to reveal items in need of repair.
- Fasteners must meet original specifications for quality, finish and type to ensure safety. Use only genuine VICTORY replacement parts, and ensure that all fasteners are tightened to the proper torque.

## Safety Electromagnetic Interference

This vehicle complies with the requirements of European regulation 44/2014/RVCR/Annex VII, United Nations ECE regulation 10 and Canadian ICES-002.

## **Reporting Safety Defects**

If you believe that your vehicle has a defect that could result in a crash or cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Polaris Industries in writing.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer or Polaris Industries.

To contact NHTSA, or obtain other information about motor vehicle safety, you may call the Vehicle Safety Hotline toll free at 1-888-327-4236 (TTY: 1-800-424-9153), visit the NHTSA web site at www.safercar.gov, or write to:

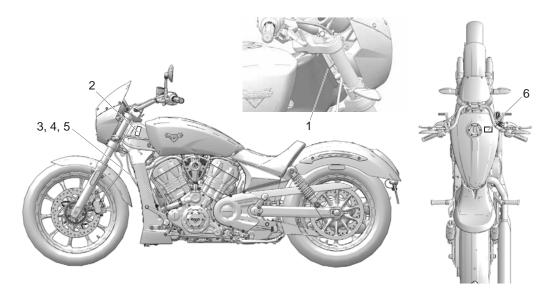
ADMINISTRATOR, NHTSA 1200 New Jersey Avenue, SE West Building Washington, DC 20590

## Safety

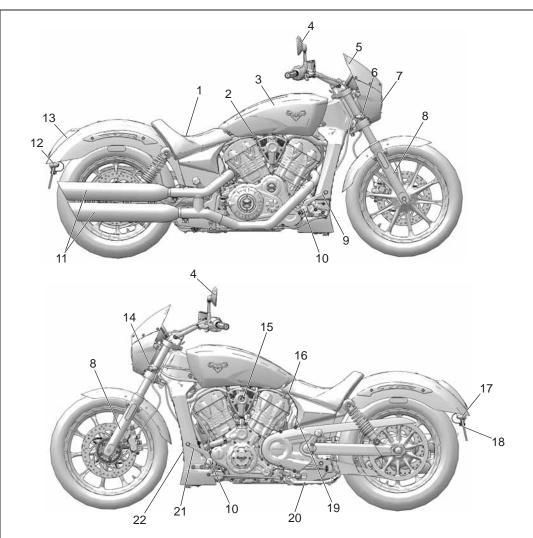
## Safety and Information Labels

Labels are model-specific and market-specific. Your motorcycle may not contain all of the labels shown.

- 1. Vehicle Identification Number (VIN) Stamped on Frame
- 2. Vehicle Identification Number (VIN) on Manufacturing Label
- 3. Vehicle Emission Control Information (VECI) Label
- 4. Noise Emission Control Information (NECI) Label
- 5. Evaporative Emissions Control Label
- 6. Operator Warning/Fuel Recommendation Label



## **Component Identification**

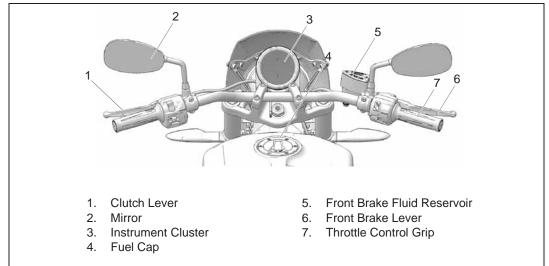


- 1. Driver's Seat
- 2. Air Box (under fuel tank)
- 3. Fuel Tank
- 4. Mirror
- 5. Fairing
- 6. Right Front Turn Signal
- 7. Headlight
- 8. Front Fork
- 9. Rear Brake Pedal
- 10. Driver's Footrest
- 11. Mufflers
- 12. Right Rear Turn Signal

- 13. Taillight
- 14. Left Front Turn Signal
- 15. Ignition Switch
- 16. Battery (under seat)
- 17. Left Rear Turn Signal
- 18. Multi-Tool (behind license plate bracket)
- 19. Coolant Recovery Bottle
- 20. Sidestand
- 21. Gear Shifter
- 22. Radiator

## **Component Identification**

## Handlebar/Console Components



## **Engine Identification Number**

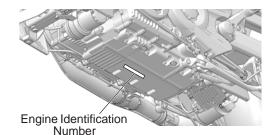
The engine number is stamped into the bottom of the left crankcase near the sidestand. The first 8 digits are the engine model number. The last 5 digits are the serial number.

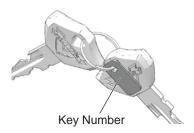
Record the number in the space provided on page 104.

## **Ignition Key Number**

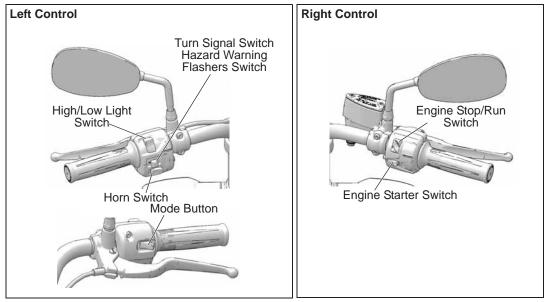
The key identification number is stamped on the metal key tag attached to the key ring. If it becomes necessary to replace the ignition key for any reason, provide the key number to your VICTORY dealer.

Record the number in the space provided on page 104.





## **Component Identification** Switches



| Symbol                              | Switch                            | Description  |  |
|-------------------------------------|-----------------------------------|--|--|
|                                     | Hazard Warning<br>Flashers Switch | The hazard warning flashers switch activates and cancels the hazard warning flashers. See page 26.   |  |
| ≣0<br>≣0                            | High/Low Headlight<br>Beam Switch | The high/low headlight beam switch toggles the headlight between high beam and low beam. See page 25.  |  |
| Jo                                  | Horn Switch                       | To sound the horn, press the horn switch.  |  |
| $\langle \neg \ \downarrow \rangle$ | Turn Signal Switch                | Move the switch to the left to activate the left turn signals. Move the switch to the right to activate the right turn signals. A signal will deactivate automatically when speed or distance reach predetermined levels. To cancel a signal manually, move the switch to the center position and push it inward. <i>Momentary Feature: Move the turn signal switch left or right and hold it in that position for at least one second. The momentary feature will activate and the signal will then cancel when the switch is released.</i> If a bulb fails, the lamp flashes at more than twice the normal rate. |  |
| X<br>C                              | Stop/Run Switch                   | Press the bottom of the switch (RUN) to allow the engine to start and run. Press the top of the switch (STOP) to stop the engine. See page 25.   |  |
| <b>(?)</b>                          | Starter Switch                    | Use the starter switch to start the engine. The engine stop/run switch must be in the RUN position. See page 25.   |  |

## **Component Identification**

#### Switches Engine Stop/Run Switch

Use the engine stop/run switch to turn the engine off quickly. Turn the key off after the engine stops.

- Press the top of the switch (STOP) to interrupt the circuits and stop the engine. The engine should not start or run when the switch is in the STOP position.
- Press the bottom of the switch (RUN) to complete the circuits and allow the engine to start and run.
- **Tip:** The headlights and any accessories plugged into power ports will remain on until the ignition key is turned off.

#### Starter Switch

Read the engine starting procedures before starting the engine. See page 47. The engine stop/run switch must be in the RUN position and the transmission must be in neutral, or the clutch must be disengaged.

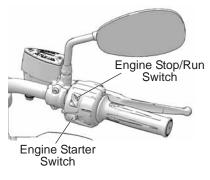
Press and release the starter switch to start the engine.

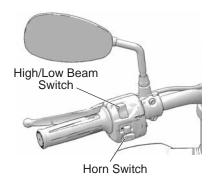
## High Beam/Low Beam Light Switch

Press the upper portion of the switch to activate the high beam. Press the lower portion of the switch to activate the low beam.

## Horn Switch

To sound the horn, press the horn switch.





## Component Identification Switches

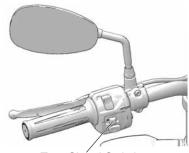
Turn Signal Switch

Move the turn signal switch to the left to activate the left turn signals. Move the switch to the right to activate the right turn signals. A signal ends when speed or distance reach preset levels. To end a signal manually, move the switch to the center and push it inward.

*Momentary Feature:* Move the turn signal switch left or right and hold it in that position. The signal flashes until the switch is released.

## Hazard Warning Flashers Switch

The ignition switch must be in the ON position to activate the hazard warning flashers, but once activated, the hazard warning flashers will continue to flash when the ignition switch is turned off.



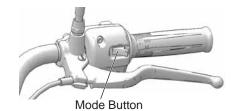
Turn Signal Switch Hazard Warning Flashers Switch

When the hazard warning flashers are active, all four turn signals flash.

- Press and hold the hazard warning flashers switch for 1-2 seconds to activate the hazard warning flashers.
- Press and release the switch to cancel the hazard warning flashers.

#### **Mode Button**

The mode button is located on the front side of the left handlebar controls. With the ignition switch on, use the mode button to toggle through the modes of the multi-function display. Use the mode button to set the display units to either standard or metric units of measurement. See page 30.



## **Component Identification**

## Switches Ignition/Light Key Switch

The ignition/light key switch controls the electrical functions of the motorcycle. The switch is located on the ignition cover on the left side of the motorcycle.

Motorcycle riders must remain as visible as possible at all times. To aid in this, the headlight must be on at all times while operating. The headlights automatically operate when the engine is running. Do not modify the ignition/light switch wiring to circumvent the automatic headlight feature.

Before starting the engine, read the instructions for starting the engine. See page 47.

Turn the ignition switch to the OFF position and remove the ignition key when leaving the motorcycle unattended.

#### OFF

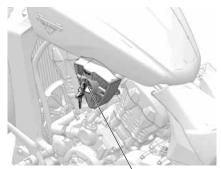
All electrical circuits are inactive and the ignition key can be removed.

#### ON

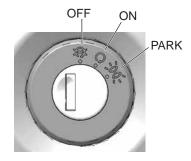
All electrical circuits are energized and the ignition key cannot be removed. The headlamp, taillight and instrument lights illuminate.

#### PARK (P)

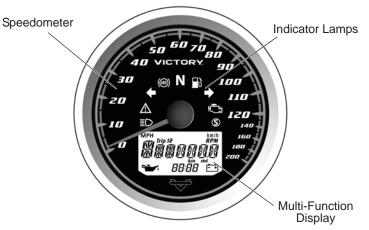
Push the key into the ignition switch while turning it to the PARK position. In PARK, the taillight, indicator lights and license plate light illuminate. Vehicle powered accessories (if equipped) can be operated and the instrumentation is active. The emergency flashers can be activated. The ignition key can be removed.



Ignition Switch



## Instruments, Features and Controls Instrument Cluster



#### Speedometer

The speedometer displays forward vehicle speed in either miles per hour or kilometers per hour.

| Lamp                              | Indicates  | Condition  |
|-----------------------------------|--|--|
| ĒD                                | High Beam  | This lamp illuminates when the headlamp switch is set to high beam.  |
|                                   | Chassis Fault  | The alert symbol illuminates if a chassis fault occurs.  |
| $\langle \neg \downarrow \rangle$ | Turn Signals   | The corresponding turn signal indicator flashes when the left, right or<br>both turn signals (hazard warning flashers) are active. If there is a<br>problem in the signal system, the lamps will flash at twice the normal<br>rate.  |
|                                   | Anti-Lock Brake<br>System Not Activated<br>(if equipped) | The ABS indicator always illuminates when the key is in the ON position and remains on until the anti-lock system activates, which occurs when vehicle speed exceeds 6 MPH (10 km/h). When the lamp is illuminated, the anti-lock brakes will not activate, but the conventional brake system will continue to operate normally. |
| N                                 | Neutral  | This lamp illuminates when the transmission is in neutral and the ignition key is in the ON position.  |
| B                                 | Low Fuel   | This lamp illuminates when about 1/2 gallon (1.9 L) of fuel remains in the tank.   |
|                                   | Check Engine   | If this lamp illuminates while the engine is running, prompt service is required. The light will remain on if the tilt sensor shuts down the engine. If abnormal sensor or engine operation is detected the light will remain on as long as the fault condition exists. Retrieve the error codes for diagnosis. See page 31.     |
| S                                 | Not used   |  |

#### **Indicator Lamps**

## Instruments, Features and Controls

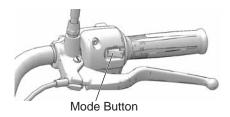
#### Instrument Cluster Multi-Function Display MFD Indicators

| Lamp | Indicates           | Condition  |  |
|------|---------------------|--|--|
|      | Low Oil Pressure    | This lamp illuminates when oil pressure drops below a safe operating pressure while the engine is running. If this lamp illuminates while the engine is running above idle speed, turn the engine off as soon as safely possible and check the oil level. If the oil level is correct and the lamp remains on after the engine is restarted, turn the engine off immediately. Your authorized VICTORY dealer can assist. |  |
|      | Low Battery Voltage | This lamp illuminates when battery voltage is low. Turn non-essential accessories off to conserve power. Make sure the charging system is operating properly. See page 85.   |  |
| MPH  | Vehicle Speed       | When standard mode is selected, speed displays in miles per hour.  |  |
| km/h |                     | When metric mode is selected, speed displays in kilometers per hour.   |  |

#### MFD Modes

With the ignition switch on, use the MODE button to toggle through the modes of the multi-function display and to change settings in the display.

| Modes Available            |
|----------------------------|
| Odometer                   |
| Trip Odometer              |
| Engine Speed               |
| Engine Coolant Temperature |
| Gear Indicator             |
| Clock                      |



#### Odometer

The odometer displays total distance traveled by the vehicle.

#### **Trip Odometer**

The trip odometer displays total distance traveled since being reset. To reset, toggle to the trip odometer, then press and hold the MODE button until the trip odometer resets to zero.

#### **Engine Speed (Tachometer)**

Engine speed displays in revolutions per minute (RPM).

#### **Engine Coolant Temperature**

The temperature area displays the temperature of the engine coolant.

#### **Gear Indicator**

Gear position will display when the transmission is in gear if the motorcycle is moving with the clutch lever released. It will also display when the transmission is in neutral.

## Instruments, Features and Controls Instrument Cluster Multi-Function Display

#### Clock

Tip: The clock must be reset any time the battery has been disconnected or discharged.

- 1. Turn the key to the ON position. Use the mode button to toggle to the odometer display.
- 2. Press and *hold* the mode button until the hour segment flashes. Release the button.
- 3. With the segment flashing, tap the mode button to advance to the desired setting.
- 4. Press and *hold* the mode button until the next segment flashes. Release the button.
- 5. Repeat steps 3-4 twice to set the 10-minute and 1-minute segments. After completing the 1-minute segment, step 4 will save the new settings and exit the clock mode.

#### **Display Units (Standard/Metric)**

The display can be changed to display either standard or metric units of measurement.

Tip: To exit the set-up mode at any time, wait 10 seconds. The display automatically exits and returns to the odometer display.

|             | Standard Display | Metric Display |
|-------------|------------------|----------------|
| Distance    | Miles            | Kilometers     |
| Temperature | Fahrenheit       | Celsius        |
| Time        | 12-Hour Clock    | 24-Hour Clock  |

- 1. Turn the ignition off. Wait 10 seconds.
- 2. Press and *hold* the mode button while turning the key to the ON or PARK position.
- 3. When the display flashes the distance setting, tap the mode button to advance to the desired setting.
- 4. Press and *hold* the mode button to save the setting and advance to the next display option.
- 5. Repeat the procedure to change remaining display settings.

#### **Diagnostic Functionality**

Certain conditions will cause the battery indicator to illuminate and an error message to display in the screen. If this occurs, your authorized VICTORY dealer can assist.

| Message | Location          | Indicates   |
|---------|-------------------|---|
| LO      | DC Voltage Screen | Voltage remains below 11.0 volts for more than 10 seconds |
| OV      | DC Voltage Screen | Voltage remains above 15.0 volts for more than 10 seconds |
| ERROR   | All               | Checksum error (gauge malfunction)                        |

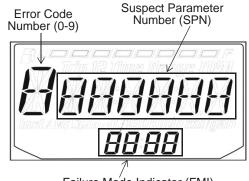
## Instruments, Features and Controls

#### Instrument Cluster Multi-Function Display Engine Error Codes

The error screen displays only when the CHECK ENGINE light is on or when it goes on and off during one ignition cycle. Error codes are not stored. When the key is turned OFF, the code and message is lost, but will reappear if the fault reoccurs after restarting the engine.

If the CHECK ENGINE indicator lamp illuminates, retrieve the error codes from the display.

1. If the error codes are not displayed, use the mode button to toggle until "Ck ENG" displays on the main line of the display.



Failure Mode Indicator (FMI)

- 2. Press and hold the mode button to enter the diagnostics code menu.
- 3. Record the three numbers displayed in the gear position, clock and odometer displays.
- 4. Press and release the mode button to advance to the next error code.
- 5. Press and hold the mode button to exit the diagnostics code menu.
- 6. Your authorized VICTORY dealer can provide code details and diagnosis.

#### **Over Temperature Display and Warning Indicator**

"HOt" displays and the CHECK ENGINE indicator lamp illuminates under the following conditions.

| <b> </b>   -<br>    _  _ |
|--------------------------|
| <br>1234                 |

| Condition  | Indicates  | Action Required  |
|--|--|--|
| Engine coolant<br>temperature<br>approaches unsafe<br>operating condition<br>while the engine is<br>running. | Engine coolant<br>temperature is above a<br>safe operating<br>temperature. | Stop the engine as soon as safely possible.<br>Check the coolant level. Check the radiator for<br>debris. Check cooling fan operation. If the<br>warning continues to display after restarting the<br>engine, stop the engine immediately. |

## Instruments, Features and Controls Brakes

The front brake lever activates the front brake calipers. The rear brake pedal activates the rear brake caliper. For maximum brake effectiveness, apply the front brake lever and the rear brake pedal together.

#### Anti-Lock Brake System (ABS) (if equipped)

The anti-lock brake system automatically reduces or increases brake pressure as needed to provide optimum braking control, reducing the chance of wheel lock-up during hard braking events or when braking on rough, uneven, slippery or loose surfaces. See page 11.

- The anti-lock brake system cannot be turned off.
- The ABS indicator always illuminates when the key is in the ON or PARK position and remains on until the anti-lock system activates, which occurs when vehicle speed exceeds 6 MPH (10 km/h).
- When the lamp is illuminated, the anti-lock brakes will not activate, but the conventional brake system will continue to operate normally.
- When the anti-lock brakes engage during a braking event, the rider will feel pulsing at the brake levers. *Continue to apply steady pressure to the brakes for the best stopping performance.*
- If the ABS light does not come on when the key is turned to the ON or PARK position, see your authorized VICTORY dealer for service.
- If the lamp continues to illuminate after vehicle speed exceeds 6 MPH (10 km/h), the ABS system is not functioning. See your VICTORY dealer promptly for service.
- Operating with non-recommended tires or improper tire pressure may reduce the effectiveness of the anti-lock brake system. Always use the recommended size and type of tires specified for your vehicle. Always maintain the recommended tire pressure.
- The anti-lock brake system will not prevent wheel lockup, loss of traction or loss of control *under all conditions*. Always adhere to all safe motorcycle-riding practices as recommended.
- It is not unusual to leave tire marks on the road surface during a hard braking event.
- The anti-lock brake system does not compensate for or reduce the risks associated with:
  - excessive speed
  - · reduced traction on rough, uneven or loose surfaces
  - poor judgment
  - improper operation

## Instruments, Features and Controls

#### Brakes Front Brake Lever

The front brake lever is located on the right handlebar. This lever controls only the front brakes. The front brakes should be applied simultaneously with the rear brakes. To apply the front brake, pull the lever toward the handlebar. See page 50 for braking procedures.

## Rear Brake Pedal

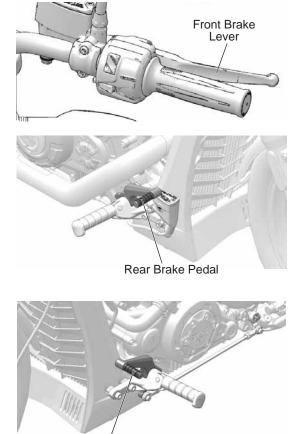
The rear brake pedal is located on the right side of the motorcycle. Press downward on the rear brake pedal to apply the rear brake. See page 50 for braking procedures.

**WARNING!** Resting your foot on the brake pedal will cause excessive and premature wear of brake pads and reduced braking efficiency, which could result in severe injury or death.

## Gear Shift Lever

The gear shift lever is located on the left side of the motorcycle. Operate the lever with your foot.

- Press downward on the toe lever to shift to a lower gear.
- Lift upward on the toe lever to shift to a higher gear.
- Release the lever after each gear shift.
- See page 49 for gear shifting procedures.



Gear Shift Lever

## Instruments, Features and Controls Throttle Control Grip

The throttle control grip is located on the right handlebar. Use the throttle control grip to control engine speed.

While seated in the proper riding position:

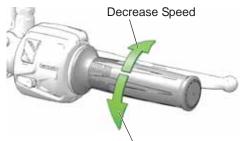
- Roll the grip rearward to open the throttle (increase engine speed and power).
- Roll the grip forward to close the throttle (decrease engine speed and power).

The control grip is spring loaded. When you release the grip, the throttle returns to the idle position.

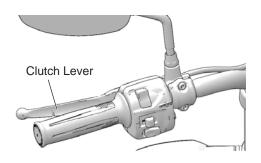
## **Clutch Lever**

The clutch lever is located on the left handlebar. Disengage the clutch before shifting gears. For smooth clutch operation, pull the lever quickly and release it in a brisk but controlled manner.

- To disengage the clutch, pull the lever toward the handlebar.
- To engage the clutch, release the lever in a brisk but controlled manner.



Increase Speed



## Mirrors

Your vehicle is equipped with convex mirrors. Objects seen in a mirror may be closer than they appear. Always adjust mirrors before riding.

To adjust the mirrors, sit on the motorcycle in the anticipated riding position. Adjust the mirrors so that you can see a small portion of your shoulders in each mirror.

# Instruments, Features and Controls

# **Fuel Cap**

Use the ignition key to open and close the fuel cap. Follow proper fueling procedures. See page 45.

Tip: Prime the fuel pump if the tank is completely empty.

- 1. Lift the key slot cover on the fuel cap and insert the key.
- 2. To open the fuel tank cap, insert the ignition key into the cap lock and turn it clockwise. Hold the key in this position while lifting the cap.
- 3. With the key rotated clockwise, close the fuel cap with your opposite hand and press it down firmly. Turn the key counter-clockwise to secure the lock.
- 4. Remove the key and close the key slot cover.

# Fuel Cap Key Slot Cover

# Sidestand

**WARNING!** An improperly retracted sidestand could contact the ground during operation and cause loss of control resulting in serious injury or death. Always make sure the sidestand is fully retracted before operating the motorcycle.

- 1. While the motorcycle is in the upright position, push the sidestand downward until it is fully extended.
- 2. Slowly lean the motorcycle to the left until the full weight of the motorcycle rests safely on the sidestand.
- 3. To retract the sidestand, bring the motorcycle to the upright position. Swing the sidestand upward to its fully retracted position.
- 4. See page 51 for parking instructions, including parking on slopes and soft surfaces.

**CAUTION!** If the motorcycle weight is not resting on the sidestand, it will not lock. In this situation, any movement of the motorcycle could cause the sidestand to retract slightly. If the sidestand is not in the full forward position when the motorcycle weight is rested on it, the motorcycle could fall over, possibly causing injury and damage to the motorcycle.

# **Pre-Ride Inspections**

To keep your motorcycle in safe operating condition, always perform the recommended preride inspections before each ride. This is especially important before making a long trip and when removing the motorcycle from storage.

**WARNING!** Failure to perform the recommended pre-ride inspections could result in component failure while riding, which could result in serious injury or death. Always perform the pre-ride inspections before each ride. When inspection reveals the need for adjustment, replacement or repair, perform the service promptly. Your authorized VICTORY dealer can provide service.

**WARNING!** Read the entire Instruments, Features and Controls section of this manual before riding your motorcycle. A complete understanding of the features and capabilities of your motorcycle is essential to its safe operation. Anything less may result in serious injury or death.

You must be familiar with all instruments and controls to perform the pre-ride inspections. During the pre-ride inspections you may use products that are potentially hazardous, such as oil or brake fluid. When using any of these products, always follow the instructions and warnings on the product packaging.

When inspections reveal the need for adjustment, replacement or repair:

- Refer to the maintenance section of this manual.
- Refer to the VICTORY Service Manual.
- Your authorized VICTORY dealer can assist.

| ltem  | Inspection Procedure  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|
| Turn the ignition key to the ON position and move the stop/run switch to RUN before performing the following electrical inspections. Return the ignition key to the OFF position after completing these inspections. If inspection of any electrical item reveals component failure, repair or replace the component before operating the motorcycle. |   |  |  |  |  |  |  |
| Headlamp  | The headlights automatically operate when the engine is running. Start the engine. Switch to high beam. Verify that the high beam indicator comes on and that lamp brightness increases.  |  |  |  |  |  |  |
| Taillight/Brake Light   | Verify that the taillight and license plate light illuminate. Verify that the taillight lamps increase in brightness when the front brake lever is applied and also when the rear brake pedal is applied.   |  |  |  |  |  |  |
| Turn Signals  | Move the turn signal switch to the left. Verify that front and rear left turn signals flash, as well as the corresponding light on the indicator panel. Move the switch to the center position and push it inward to cancel the signal. Verify that the signals and the indicator light stop flashing. Repeat the procedure for the right turn signals. |  |  |  |  |  |  |
| Hazard Warning<br>Flashers  | Press and hold the hazard warning flashers switch for 1-2 seconds to activate<br>the hazard warning flashers. Verify that all four turn signals flash, as well as<br>the lamps on the indicator panel. Turn the hazard warning flashers off. Verify<br>that all signals and indicator lamps stop flashing.  |  |  |  |  |  |  |
| Horn  | Press the horn switch. Verify that the horn sounds loudly.  |  |  |  |  |  |  |
| Neutral Indicator   | Place the transmission in neutral. Verify that the neutral indicator lamp illuminates and that the letter "N" displays in the gear position display.  |  |  |  |  |  |  |
| Low Oil Pressure<br>Indicator   | Start the engine. Verify that the low oil pressure indicator is not illuminated.  |  |  |  |  |  |  |
| Engine Stop/Run<br>Switch   | With the engine running, move the stop/run switch to the STOP position. Verify that the engine stops. Attempt to restart the engine to verify that the engine WILL NOT start.   |  |  |  |  |  |  |

# **Pre-Ride Inspections**

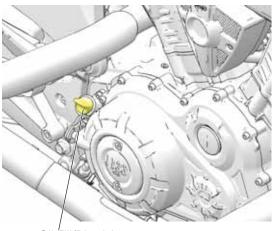
| Item   | Inspection Procedure  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|
| Perform the following inspections with the engine off. |   |  |  |  |  |  |  |
| Engine Oil   | Check the oil level. See page 38.   |  |  |  |  |  |  |
| Fuel   | Check the fuel level. See page 39.  |  |  |  |  |  |  |
| Coolant Level  | Check the coolant level in the recovery bottle. See page 57.  |  |  |  |  |  |  |
| Fluid Leaks  | Check the vehicle and the ground/floor for any fuel, oil, coolant or hydraulic fluid leaks.               |  |  |  |  |  |  |
| Tires  | Inspect condition, pressure and tread depth. See page 73.   |  |  |  |  |  |  |
| Brake Operation  | Inspect pedal and lever movement.   |  |  |  |  |  |  |
| Brake Fluid Levels                                     | Check front and rear brake fluid levels. See pages 40 and 41.   |  |  |  |  |  |  |
| Brake Components                                       | Inspect hoses and connections.  |  |  |  |  |  |  |
| Throttle   | Inspect hand grip and throttle movement.  |  |  |  |  |  |  |
| Clutch   | Check lever operation and freeplay.   |  |  |  |  |  |  |
| Front Suspension                                       | Check for leaks, debris and damage.   |  |  |  |  |  |  |
| Steering   | Check for smooth operation by turning handlebars full left and full right.                                |  |  |  |  |  |  |
| Rear Suspension  | Check mounting and inspect for leaks. Check for proper preload adjustment, adjust if needed. See page 69. |  |  |  |  |  |  |
| Rear Drive Belt  | Check for wear or damage.   |  |  |  |  |  |  |
| Sidestand  | Verify smooth operation, inspect pivot bolt and spring.   |  |  |  |  |  |  |
| Fasteners  | Inspect for loose, damaged or missing fasteners.  |  |  |  |  |  |  |
| Mirrors  | Adjust for proper rear view.  |  |  |  |  |  |  |

# Pre-Ride Inspections Engine Oil Level

With the semi-dry sump lubrication system, the engine oil level on the dipstick will fluctuate, depending on the motorcycle's position and engine speed when the engine is turned off. To ensure a proper reading of the engine oil level, follow all inspection procedures closely.

**WARNING!** Operating with insufficient, deteriorated or contaminated engine oil will cause accelerated wear and may result in engine or transmission seizure, which could result in loss of control and serious injury or death. Check the oil level frequently.

Always check the oil after running a cold engine at idle for 30 seconds. The oil fill/ dipstick is located on the right side of the motorcycle. Always use the recommended oil. See page 104.



Oil Fill/Dipstick

- 1. Position the motorcycle on level ground in the fully upright and centered position.
- 2. Start the engine (from cold) and allow it to idle for 30 seconds. Stop the engine.
- 3. Remove the dipstick and wipe it clean.
- 4. Reinstall the dipstick until fully seated.
- 5. Remove the dipstick and view the oil level.
- **NOTICE:** Do not overfill. Overfilling can result in loss of engine performance and an oil-saturated air filter. Use a suction device to remove excess oil if overfilled.
- 6. Add the recommended oil as needed to bring the level to the FULL mark on the dipstick. Verify the level on the dipstick.

Tip: The approximate volume between the ADD and FULL marks on the dipstick is 16 oz. (.45 L).

7. Reinstall the dipstick securely.

# **Pre-Ride Inspections**

# Fuel Level

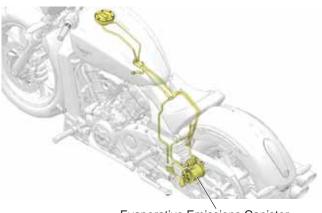
- 1. Position the motorcycle on level ground in the fully upright position.
- 2. Slowly open the fuel cap. See page 35.
- 3. View the fuel level in the tank.
- 4. Refuel as needed. See page 45 for fueling instructions. See page 104 for fuel specifications.

# Fuel Hose, Rail and Connections

- 1. Inspect the fuel hoses for cracks or damage.
- 2. Inspect the hose connection at the fuel tank and at the fuel rail for dampness or stains from leaking or dried fuel.
- 3. The fuel system is under pressure and caution must be used when inspecting and servicing the fuel system. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.

# **Evaporative Emission Control System**

- 1. Inspect all evaporative emission control system hoses and connections. Make sure all connections are tight and locked.
- 2. The canister is located under the mid frame. Make sure it is securely fastened to the mounting bracket.
- 3. Inspect connections at the evaporative emissions canister to be sure they are secure.



Evaporative Emissions Canister

# Pre-Ride Inspections Tire Pressure

Check tire pressure before riding, when the tires are cold. This will provide the most accurate reading, as riding warms the tires and increases tire air pressure.

Adjust tire pressure as needed based on the total weight of your intended load. Refer to the tire pressure table. See page 73.

# **Tire Condition**

Inspect the tire sidewalls, road contact surface and tread base. If inspection reveals cuts, punctures, cracks or other wear or damage, replace the tire before riding. Use only approved replacement tires. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.

# **Tire Tread Depth**

Tread wear indicators are located in at least six places on the tread circumference and become visible at a tread depth of approximately 1/16 inch (1.6 mm). The tread wear indicators appear as a solid band across the tread.

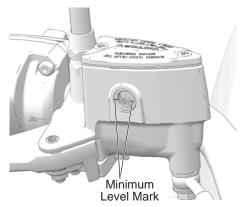
You may also use a depth gauge or an accurate ruler to measure the depth of the center tire tread on both front and rear tires.

# **Cargo Restraints**

Inspect all cargo restraints when carrying cargo. Make sure all restraints are tightly secure to prevent cargo from shifting.

# Front Brake Fluid Level

- 1. Straddle the motorcycle and bring it to the fully upright position. Position the handlebars so that the fluid reservoir is level.
- 2. View the fluid level through the sight glass. The fluid should be clear. Replace cloudy or contaminated fluid.
- 3. The fluid level should be above the minimum indicator mark in the sight glass.
- 4. If the fluid level is low, inspect brake pads as outlined on page 67. If pads are not worn beyond the service limit, inspect the brake system for leaks. Check for signs of brake fluid leaks around hoses, fittings, reservoir and brake calipers.



5. Add fluid as needed. See page 66.

# **Pre-Ride Inspections**

# Front Brake Lever

- 1. Pull the front brake lever toward the handlebar and hold it. The lever should move freely and smoothly. The lever should feel firm and continue to feel firm until released.
- 2. Release the lever. It should return to its rest position quickly when released.
- 3. If the front brake lever fails to perform as stated, service the brake lever before riding. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.

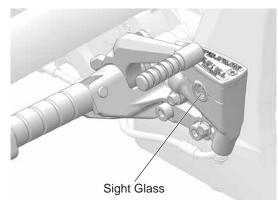
# Rear Brake Pedal

- 1. Press downward on the rear brake pedal. It should move freely and smoothly. The pedal should feel firm and continue to feel firm until released.
- 2. Release the pedal. It should return to its rest position quickly when released.
- 3. If the rear brake pedal fails to perform as stated or travels too far before beginning to engage the brake, service the brakes before riding. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.

# Rear Brake Fluid Level

The rear brake fluid reservoir is located near the rear brake pedal. View the reservoir level from the right side of the vehicle.

- 1. Position the motorcycle on level ground in the fully upright position.
- 2. View the brake fluid through the reservoir.
- 3. The fluid should be clear. Replace cloudy or contaminated fluid.
- 4. The fluid level should be above the minimum indicator mark on the reservoir body. Add brake fluid as needed. See page 65.



# Brake Lines

Inspect all brake hoses and connections for dampness or stains from leaking or dried fluid. Tighten any leaking connections and replace components as necessary. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.

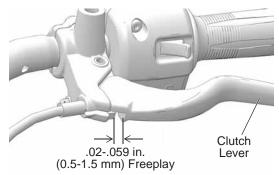
**WARNING!** Brake fluid leaks or low brake fluid levels could cause brake system failure, which could result in serious injury or death. Do not operate the vehicle with low brake fluid levels or when leaks are evident (dampness or stains from dried fluid). See your authorized VICTORY dealer.

# Pre-Ride Inspections Throttle

- 1. With the engine OFF, rotate the throttle control grip fully open and then release it. It should rotate smoothly from the rest position to the completely open position. It should return to the rest position quickly when released.
- 2. Repeat the twist and release process with the handlebars turned fully right and fully left.
- 3. Service the throttle system if throttle operation is not smooth or if throttle grip does not return properly. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.

## **Mechanical Clutch**

- 1. Squeeze the clutch lever toward the handlebar and release it. It should move freely and smoothly, and it should return to the rest position quickly when released. If the lever fails to perform as stated, service the clutch lever before riding.
- 2. Freeplay (gap) is the amount of lever movement from the rest position to the point of cable resistance. Clutch lever freeplay should be 0.5-1.5 mm. Measure the gap between the clutch lever and the lever housing. Adjust clutch lever freeplay if necessary. See page 62.



Tip: The starter interlock switch is dependent on the clutch lever freeplay being set correctly to ensure activation of the clutch safety switch.

#### Steering

- 1. On level ground, straddle the motorcycle and bring it to the fully upright position. Turn the handlebars from stop to stop. The action should be smooth but not loose.
- 2. Make sure wires, hoses and control cables do not interfere with smooth steering.

# **Pre-Ride Inspections**

# Sidestand

- 1. On level ground, straddle the motorcycle and bring it to the fully upright position.
- 2. Move the sidestand up to the stored position and down to the fully extended position several times. It should move smoothly and quietly. Make sure the return spring holds the sidestand tightly in place when the sidestand is in the stored position. Adjust or replace a loose spring.
- 3. Inspect the sidestand pivot bolt for looseness or wear. Tighten or replace a loose or worn bolt.

# **Front Suspension**

Inspect the front forks for oil leaks or damage, and verify smooth suspension operation. See page 71.

# **Rear Suspension**

Check the rear shock absorber mounting and inspect for leaks. If you discover leaks or malfunction of any kind, your vehicle requires prompt service that your authorized VICTORY dealer can provide. See page 69.

**WARNING!** Inadequate ground clearance could result in components contacting the ground, causing loss of control resulting in serious injury or death. Always ensure ground clearance is at specification.

# **Drive Belt**

- 1. Check the drive belt teeth for stones or other debris.
- 2. Inspect drive belt condition. If you discover cracks, broken teeth or frayed edges, replace the drive belt before riding. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.

#### Fasteners

- 1. Inspect the entire motorcycle chassis and engine for loose, damaged or missing fasteners. Tighten loose fasteners to the proper torque. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.
- 2. Always replace stripped, damaged or broken fasteners before riding. Use genuine VICTORY fasteners of equal size and strength.

# Operation

The operation section describes how to operate your VICTORY motorcycle to ensure the best performance and longevity of the engine and other components. Information includes:

- Engine Break-in Period
- Fueling
- Starting the Engine
- Shifting Gears

- Accelerating
- Braking
- Stopping the Engine
- Parking

Even if you're an experienced motorcycle operator or passenger, read all of the safety information in this manual before operating the motorcycle.

# **Engine Break-in Period**

The engine break-in period for your motorcycle is the first 500 miles (800 km) of operation. During this break-in period, critical engine parts require special wear-in procedures so they seat and mate properly. Read, understand and follow all break-in procedures to ensure the long-term performance and durability of your engine.

**NOTICE:** Failure to properly follow the engine break-in procedures outlined in this manual can result in serious damage to the engine. Follow all break-in procedures carefully. Avoid full throttle operation and other conditions that may place an excessive load on the engine during the break-in period.

The more cautiously you treat your motorcycle during the break-in period, the more satisfied you will be with its performance later on. Overloading the engine at low RPM and/or running the engine prematurely at high RPM may result in damage to the pistons and/or other engine components.

Observe the following precautions during the break-in period:

- Upon initial start-up, do not allow the engine to idle for long periods as overheating can occur.
- Avoid fast starts with wide open throttle. Drive slowly until the engine warms up.
- Avoid running the engine at extremely low RPM in higher gears (lugging the engine).
- Drive within the recommended operating speeds and gears. See page 45.

#### Engine Break-in Period Operating Speeds and Gears

| Odometer Reading |            | Instructions   |  |  |  |  |  |
|------------------|------------|--|--|--|--|--|--|
| Miles            | Kilometers | instructions   |  |  |  |  |  |
| 0-90             | 0-145      | Do not operate for extended periods above 1/3 throttle or at any one throttle position. Vary engine speed frequently.  |  |  |  |  |  |
| 91-300           | 146-483    | Do not operate for extended periods above 1/2 throttle or at any one throttle position. Vary engine speed frequently.  |  |  |  |  |  |
| 301-500 484-800  |            | Do not operate for extended periods above 3/4 throttle.  |  |  |  |  |  |
| At 500           | At 800     | Perform the break-in maintenance outlined in the maintenance section<br>of this manual. Break-in maintenance can be performed by an<br>authorized VICTORY dealer. Break-in maintenance must include<br>inspection, adjustments, fastener tightening and an engine oil and filter<br>change. Performing break-in maintenance at the required odometer<br>reading helps ensure peak engine performance, minimal exhaust<br>emissions and maximum service life of the engine. |  |  |  |  |  |

#### Fueling

Always dismount the motorcycle and refuel on level ground with the sidestand down. Review the fuel warnings. See page 18. Use only the recommended fuel. See page 104.

**WARNING!** Overflows or spilled gasoline could contact a hot engine or exhaust system and cause a fire, which could result in serious injury or death. Do not allow gasoline to contact hot components.

**WARNING!** Always open the fuel cap slowly and fill the fuel tank slowly to prevent spillage. Do not overfill the fuel tank. Leave space in the tank to allow for the fuel to expand.

- 1. Open the fuel tank cap. See page 35.
- 2. Insert the fuel nozzle into the fuel tank filler neck.
- 3. Hold the nozzle while filling. Do not rest the weight of the nozzle and hose on the filler neck. Do not leave the nozzle unattended.
- 4. Add fuel to the tank until it touches the bottom edge of the filler neck. The tank is full at this level.
- 5. Always close the fuel cap before remounting the motorcycle.
- 6. If the motorcycle runs out of fuel, prime the system before attempting to restart the engine.
- **NOTICE:** Fuel can damage painted surfaces and plastic parts. If gasoline spills on the any part of the motorcycle, immediately rinse it off with water.

#### Operation Engine Break-in Period Priming the Fuel System

If the motorcycle runs out of fuel, prime the fuel system before attempting to restart the engine.

- 1. Fill the fuel tank.
- 2. Turn the ignition switch to the ON position.
- 3. Move the engine stop/run switch to the RUN position.
- 4. Allow the fuel pump to run until it stops (about 2 seconds).
- 5. Move the engine stop/run switch to the STOP position.
- 6. Repeat steps 3-5 four to five times.
- 7. Turn the key to the OFF position.
- 8. Start the engine. See page 47.

#### Engine Break-in Period Starting the Engine

The starter interlock system allows the engine to be started only when the transmission is in neutral, or when the transmission is in gear with the clutch disengaged (clutch lever pulled in).

Tip: If the motorcycle runs out of fuel, prime the system before attempting to restart the engine. See page 46.

- 1. Perform the pre-ride inspections. See page 36.
- 2. Straddle the motorcycle and bring it to the fully upright position.
- 3. Turn the ignition key to the ON position.
- 4. Move the engine stop/run switch to the RUN position.
- 5. Shift the transmission to neutral.
- 6. Apply the front brakes. Place the sidestand in the stored (up) position.
- 7. Disengage the clutch (pull the clutch lever fully toward the handlebar).
- 8. Press and release the starter switch to start the engine. The starter motor will crank until the engine starts, but no more than 3 seconds. If the engine does not start, wait five seconds, then try again.
- 9. *If starting a COOL engine*, DO NOT open the throttle while starting. Idle speed is computer controlled and idle speed will adjust automatically. Allow the engine to warm up for 30 seconds minimum at low RPM after starting. Do not run the engine above 2500 RPM.

If starting a WARM engine, DO NOT open the throttle while starting.

- 10. If either the check engine indicator or the low oil pressure display in the multi-function display remains on after the engine starts, stop the engine immediately. Refer to the low oil pressure indicator information on page 29.
- **NOTICE:** Operating an engine with a misfire or non-firing cylinder can overheat the catalytic converter, which could result in catalytic converter damage and loss of emission control. DO NOT OPERATE the motorcycle if a misfire or non-firing cylinder exists.
- 11. Leave the throttle closed and allow the engine to idle. Idle speed will gradually slow to normal as the engine warms to operating temperature.
- Tip: Do not rev the engine or put the transmission in gear immediately after starting the engine. Allow the engine to idle for about 30 seconds after a warm start or at least one minute after a cold start (longer in cold weather). This will allow oil to reach all areas before the engine is put under load.
- **NOTICE:** Do not run the engine at high RPM with the clutch disengaged or the transmission in neutral. Maximum safe engine speed is 8300 RPM. Never exceed the maximum safe RPM as this could result in serious engine damage.

# Operation Shifting Gears

**WARNING!** Forced shifting (with clutch engaged) could cause damage to the engine, transmission and drive train. Such damage could cause loss of control, which could result in serious injury or death. Always pull the clutch lever fully toward the handlebars to disengage the clutch before shifting gears.

Your motorcycle is equipped with a six-speed transmission. Neutral is located between first and second gear.

Press downward on the toe lever to shift to a lower gear. Lift upward on the toe lever to shift to a higher gear. Release the clutch lever after each gear shift.

Shifting to neutral is easiest if the motorcycle is rolling slowly. To shift from first gear to neutral, gently lift the toe lever a half stroke.

**Tip:** The transmission is in neutral if you can move the motorcycle forward or rearward freely without disengaging the clutch. If the ignition switch is on, the neutral indicator illuminates when the transmission is in neutral.

# 

#### **Shifting Gears While Stationary**

*To locate neutral when the motorcycle is stationary,* use one of the following techniques to load and unload the transmission shift dogs, which allows them to disengage:

- 1. With the clutch disengaged (lever pulled inward), shift into neutral while rocking the motorcycle forward and rearward.
- 2. With the transmission in first gear, gently release the clutch until it just begins to engage. Apply upward pressure on the toe lever and quickly pull the clutch inward.

To shift gears when the motorcycle is stationary (engine may be running or stopped), disengage the clutch and apply slight pressure on the shift lever while rocking the motorcycle forward and rearward.

# Operation

#### Shifting Gears Shifting Gears While Driving

- 1. Start the engine. See page 47.
- 2. With the engine at idle speed, apply the front brakes.
- 3. Disengage the clutch (pull the clutch lever fully toward the handlebar).
- 4. Push the toe lever downward until you feel it stop in first gear.
- 5. Release the brake lever.
- 6. Simultaneously release the clutch lever while opening the throttle (rolling the throttle control grip rearward) in one smooth motion. As the clutch begins to engage, the motorcycle will move forward.
- 7. To shift to a higher gear, accelerate smoothly to the recommended shift point. See *Recommended Shift Points* chart. With a quick motion, simultaneously close the throttle completely and disengage the clutch. Raise the toe shift lever until you feel it stop at the next gear. Simultaneously release the clutch lever and open the throttle in one smooth motion.
- **Tip:** Within the recommended speed ranges (see Recommended Shift Points chart), you can downshift to slow the motorcycle or to increase power. You may want to downshift when climbing a hill or passing. Downshifting also helps to decrease speed when combined with closing the throttle.
- 8. To shift to a lower gear (downshift), simultaneously pull the clutch lever toward the handlebar and close the throttle. Move the toe shift lever downward until you feel it stop at the next gear. Simultaneously release the clutch lever while opening the throttle.

**WARNING!** Downshifting improperly could cause transmission damage, loss of traction and loss of control, which could result in serious injury or death.

- Reduce speed before downshifting. Always downshift within the recommended shift points.
- Use extreme caution when downshifting on wet, slippery or other low traction surfaces. Release the clutch lever very gradually in these conditions.
- Avoid downshifting in a curve. Downshift before entering the curve.

| Upshifting ( | Accelerating)        | Downshifting (Decelerating) |                   |  |  |  |  |  |
|--------------|----------------------|-----------------------------|-------------------|--|--|--|--|--|
| Gear Change  | Recommended<br>Speed | Gear Change                 | Recommended Speed |  |  |  |  |  |
| 1 to 2       | 17 MPH (27 km/h)     | 6 to 5                      | 40 MPH (65 km/h)  |  |  |  |  |  |
| 2 to 3       | 24 MPH (38 km/h)     | 5 to 4                      | 35 MPH (56 km/h)  |  |  |  |  |  |
| 3 to 4       | 35 MPH (57 km/h)     | 4 to 3                      | 29 MPH (47 km/h)  |  |  |  |  |  |
| 4 to 5       | 41 MPH (66 km/h)     | 3 to 2                      | 20 MPH (33 km/h)  |  |  |  |  |  |
| 5 to 6       | 50 MPH (81 km/h)     | 2 to 1                      | 10 MPH (16 km/h)  |  |  |  |  |  |

#### **Recommended Shift Points**

# Operation Accelerating

Accelerate by opening the throttle (rolling the throttle control grip rearward). The more quickly you open the throttle, the more quickly the motorcycle accelerates. For even acceleration, open the throttle with a smooth, continuous motion. When you reach the recommended speed for upshifting, shift up one gear. See page 49.

**WARNING!** Accelerating abruptly could cause your body to shift rearward suddenly, which could result in loss of control. Accelerating abruptly could also cause loss of control on low traction surfaces. Loss of control could result in serious injury or death. Always accelerate gradually, especially on wet, slippery or other low traction surfaces.

# Braking

Always allow sufficient stopping distance so that brakes can be applied gradually.

- Tip: Applying slightly more front brake than rear brake generally provides the best braking performance.
- 1. To slow the motorcycle with the brakes, close the throttle and apply the front and rear brakes evenly and gradually.
- **Tip:** If the anti-lock brake system activates while braking (if equipped) you'll feel pulsing at the foot brake or hand brake. Continue applying equal pressure to the brakes to slow or stop the motorcycle. See page 11.
- 2. As the motorcycle slows, disengage the clutch, or downshift each time vehicle speed reaches a downshift point.

**WARNING!** Braking improperly could result in loss of control, which could result in serious injury or death. Avoid braking abruptly. Always apply the brakes gradually, especially on wet, slippery or other low traction surfaces. Avoid braking in a curve or turn. Bring the motorcycle to the upright position before applying the brakes.

# **Stopping the Engine**

Before stopping the engine, bring the motorcycle to a complete stop. Shift to neutral or disengage the clutch.

**WARNING!** Stopping the engine with the transmission in gear while the motorcycle is moving could cause loss of rear wheel traction or engine and transmission damage, which could cause loss of control and serious injury or death. Always stop the engine after the motorcycle is fully stopped and the transmission is in neutral. If the engine stops unexpectedly while the motorcycle is moving, guide the motorcycle to a safe location off the road and away from traffic.

- 1. When fully stopped, shift into neutral.
- 2. Move the engine stop/run switch to the STOP position.
- 3. Move the ignition switch to the OFF position. Remove the ignition key.

# Operation

## Parking the Motorcycle

Choose a firm level surface to park the motorcycle.

- 1. When fully stopped, shift into neutral.
- 2. Stop the engine.
- 3. Fully extend the sidestand.
- 4. Turn the handlebars to the left and lean the motorcycle to the left until the sidestand firmly supports the motorcycle.
- 5. Remove the ignition key.

#### Parking on a Slope

If parking on a slope is unavoidable, position the front of the motorcycle toward the top of the slope. Place the transmission in gear and position the motorcycle so that it is stable when it rests on the sidestand.

#### Parking on a Soft Surface

If parking on a soft surface is unavoidable, place a sidestand footrest under the foot of the sidestand to provide a firm surface. The sidestand footrest must be strong enough and large enough to support the motorcycle's weight without sinking into the parking surface.

Asphalt becomes soft in hot weather. A sidestand can sink into soft asphalt and the motorcycle may fall. When parking on asphalt in hot weather, use a sidestand footrest.

**CAUTION!** Hot engine and exhaust components can cause burns to skin and can ignite a fire if exposed to flammable materials. Always park the motorcycle clear of flammable materials and where people are not likely to contact hot components.

# Maintenance

Any qualified repair shop or person may maintain, replace, or repair the emission control devices or systems on your vehicle. An authorized VICTORY dealer can perform any service that may be necessary for your vehicle. VICTORY recommends VICTORY parts for emissions-related service, however equivalent parts may be used for such service. It is a potential violation of the Clean Air Act if a part supplied by an aftermarket parts manufacturer reduces the effectiveness of the vehicle's emission controls. Tampering with emission controls is prohibited by federal law.

Owners are responsible for performing the scheduled maintenance identified in this owner's manual.

Proper maintenance assures the highest level of safety, durability and dependability for your motorcycle.

- Your VICTORY dealer can perform the initial maintenance procedures when the motorcycle's odometer registers 500 miles (800 km).
- Review the safety-related maintenance information. See page 19.
- Perform the recommended periodic maintenance at the intervals specified in the periodic maintenance table. See page 54.

Before beginning any maintenance procedure, read the instructions for the entire procedure. During some procedures you may use potentially hazardous products such as oil or brake fluid. Always follow the instructions and warnings on the product packaging.

**WARNING!** Improperly installed or adjusted components can make the motorcycle unstable or hard to handle. Improperly installed electrical components can cause engine or electrical system failure. In either event, damage or serious injury could result. If you do not have the time, tools and expertise necessary to complete a procedure properly, a qualified dealer can perform these operations.

#### **Break-In Maintenance**

Perform the break-in maintenance procedures when the motorcycle's odometer registers 500 miles (800 km). Your authorized VICTORY dealer can provide this service.

Performing the break-in maintenance will help ensure optimum engine performance for the entire service life of the engine. Your dealer can change engine oil, inspect all fluids and serviceable components, ensure that all fasteners are tightened and make other adjustments as needed.

#### **Major Maintenance**

Major repairs typically require technical skills and specially designed tools. Emission system service requires special tools and training and can be performed by your dealer. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.

#### **Periodic Maintenance**

Inspect, clean, lubricate, adjust and replace parts as necessary. When inspection reveals the need for replacement parts, use genuine VICTORY parts available from your VICTORY dealer. Equivalent parts may be used for emissions-related service. Record service and maintenance information in the Maintenance Record. See page 105.

Perform maintenance at the intervals specified in the periodic maintenance table. See page 54. *Vehicles subjected to severe use must be inspected and serviced more frequently.* 

#### Severe Use Definition

- high speed operation for extended periods
- low speed operation for extended periods
- · operation in dusty or otherwise adverse conditions
- operation in cold weather (temperatures below freezing)

# **Road Tests**

Before returning the motorcycle to regular use, perform a road test in a safe area. Pay special attention to the proper fit and operation of all serviced components. Make any corrections or additional adjustments promptly to ensure safe, reliable and enjoyable vehicle performance.

# **Elevating the Motorcycle**

**WARNING!** Serious injury or death can occur if the motorcycle tips or falls. Make sure the motorcycle will not tip or fall while elevated or while on the sidestand.

Some procedures require raising the motorcycle to remove weight from the component being inspected. Elevate the motorcycle by placing a stable, flat platform jack or lift mechanism on a firm, flat surface and lifting under the engine crankcase. The platform should be a minimum of 12 inches (30 cm) square. DO NOT attempt to lift the motorcycle without proper equipment. Always secure the motorcycle properly before lifting so it cannot tip or fall when elevated.

# Maintenance Periodic Maintenance Table

| Π  | See table key below                               | Odometer Reading in Miles (Kilometers)                                      |           |             |               |               |               |               |               |               |               |               |               |
|--|---|---|-----------|-------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|  | Component   | Page  | 500 (800) | 5000 (8000) | 10000 (16000) | 15000 (24000) | 20000 (32000) | 25000 (40000) | 30000 (48000) | 35000 (56000) | 40000 (64000) | 45000 (72000) | 50000 (80000) |
|  | Air Filter  | 58  | Ι         | 1           | R             | 1             | R             | 1             | R             |               | R             | 1             | R             |
|  | Crankcase Ventilation System                      | 58  | Ι         | 1           | Ι             | 1             | 1             | 1             |               |               |               | 1             | 1             |
|  | Oil Lines/Oil System Inspection                   | V   | Ι         | 1           | 1             | 1             | 1             | 1             |               |               |               | 1             | 1             |
| Ï.   | Cooling System/Radiator                           | 57  | Ι         | 1           | 1             | 1             | 1             | 1             |               |               | T             | 1             | R             |
| ENGINE   | *Engine Oil and Filter                            | 55  | R         | -           | R             | -             | R             | -             | R             | -             | R             | -             | R             |
| Ξ  | Valve Lash Clearance                              | V   | -         | -           | -             | -             | 1             | -             | -             | -             |               | -             | -             |
|  | Exhaust System                                    | 72  | Ι         | 1           | 1             | 1             | 1             | 1             |               |               |               | 1             | 1             |
|  | Spark Plugs                                       | V   | -         | -           | -             | 1             | -             | -             | R             | -             | - 1           | T             | -             |
|  | Battery   | 77  | Τ         | 1           | 1             | 1             | 1             | 1             |               |               | T             | T             | 1             |
|  | **Brake Fluid                                     | 65-66   | Ι         | 1           | 1             | 1             | 1             | 1             | R             |               |               | 1             | 1             |
|  | Brake Pads  | 67  | Τ         | 1           | T             | 1             | 1             | 1             |               |               | T             | T             |               |
|  | Clutch Lever                                      | 62  | L         | 1           | L             | 1             | L             | 1             | L             |               | L             | 1             | L             |
|  | Clutch Lever Freeplay                             | 62  | T         | 1           | 1             | 1             | 1             | 1             | 1             |               | T             | 1             | 1             |
|  | Clutch Cable                                      | 63  | T         |             | L             |               | L             |               | L             |               | L             |               | L             |
|  | Diagnostic Codes                                  | V   | 1         | 1           | 1             | 1             | 1             | 1             |               |               |               | 1             | 1             |
|  | Drive Belt  | 68  | 1         | 1           | 1             | 1             | 1             | R             |               |               |               | 1             | 1             |
|  | Drive Belt Tension Adjustment                     | V   |           | 1           | 1             | 1             |               | 1             |               |               |               |               | 1             |
|  | · · ·   | For adjustment at indicated intervals and with each tire change thereafter, |           |             |               |               |               |               |               |               |               |               |               |
|  |   | ,   | bur de    | ealer o     | r servi       | ce ma         | nual c        | an pro        | ovide a       | issista       | 1 - I         |               |               |
|  | Electrical Equipment/Switches                     | V   | 1         | 1           | 1             | 1             | 1             | 1             |               | 1.1           | 11            | 1             | 1             |
|  | Evaporative Emission Control System               | 58  | Ι         | 1           |               | 1             |               | 1             |               |               | 1             |               | 1             |
|  | (California models)                               | 43  |           |             |               |               |               |               | <b>.</b>      |               |               |               |               |
| CHASSIS  | Fasteners<br>Front Brake Lever                    | -   | Ľ         |             |               |               |               |               |               |               |               | H             | L             |
| AS   | **Front Fork Oil                                  | 41, 64<br>71  |           |             |               | R             |               | ÷             | R             |               |               | R             |               |
| ъ.   | Front Fork/Front Axle                             | 71  | +         |             | -             | R<br>I        | ÷             | ÷             | R<br>I        | +             | +             | R             |               |
|  |   | 58  | •         |             |               |               | -             | _             |               | -             | -             | 1             |               |
|  | Fuel Filter<br>Fuel System/Lines/Fittings         | 58  |           | -           |               |               |               | R             | I             | I             |               |               | R             |
|  | Gear Shift Lever                                  | 00<br>V   | +         |             | ι.            | H             |               | ÷             |               |               |               |               |               |
|  |   | 82  | +         |             |               |               |               |               |               | + +           |               |               | L             |
|  | Headlamp  | 75  | -         |             | -             |               | ÷             |               |               | +.+           |               |               |               |
|  | ABS Components<br>Rear Wheel Alignment            | 75<br>V   | +         |             | -             | ÷             | ÷             | ÷             |               |               | +             | +             |               |
|  | Rear Wheel Alighment<br>Rear Shock Absorber       | <b>v</b><br>69  | •         | -           | -             |               | -             | -             |               |               | -             | -             | R             |
|  | Rear Brake Pedal                                  |   |           | -           |               |               |               |               | 1             |               |               | -             |               |
|  |   | 41, 64  |           | I           |               |               |               |               |               |               |               |               | L             |
|  | Road lest<br>Sidestand                            | 53<br>72  | ۳<br>۱    | P           | P             | P             | P             | P             | P             | P             | P             |               | P             |
|  | Sidestand<br>Steering Head Bearings               | 72  | L         |             |               |               | 1             | H             |               | +             |               | -             |               |
|  | Steering Head Bearings<br>Swing Arm and Rear Axle | 72  |           |             |               | Ļ             | 1             |               |               |               |               |               |               |
|  | Tires/Wheels/Spokes                               |   |           |             | ÷             |               | 1             |               |               |               |               | H             |               |
| Ma   | intenance Kev                                     | 73-74   | <b>'</b>  |             |               |               |               |               |               | 11            |               |               |               |
| <b>V</b> = Your dealer can assist; <b>I</b> = Inspect, clean, adjust, correct or replace if necessary; <b>P</b> = Perform; <b>R</b> = Replace/Rebuild<br><b>L</b> = Lubricate w/ proper lubricant; * = Replace at specified interval or annually; ** = Replace as specified or every 2 years |   |   |           |             |               |               |               |               |               |               |               |               |               |

# Maintenance

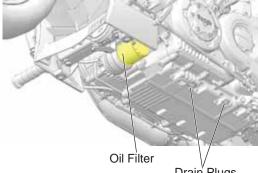
# **Engine Oil and Filter Change**

Follow all instructions carefully. Do not overfill.

Change the engine oil at the intervals specified in the periodic maintenance table beginning on page 54. Change the oil more frequently if the motorcycle is subjected to severe use, especially operation in cold weather. See page 53. Always use the recommended oil. See page 104.

- **NOTICE:** Failure to perform frequent oil changes during cold weather operation can result in condensation forming. Freezing condensation can result in plugged oil lines and serious engine damage.
- **NOTICE:** After an oil change, the low oil pressure indicator may illuminate when the engine is started. If this occurs, do not increase RPM above idle speed until the indicator turns off. Operating above idle speed could result in damage to the engine.
- 1. Change the oil and filter when the engine is warm. If the engine is cold, start the engine and allow it to run at idle for at least five (5) minutes.
- 2. Park the motorcycle with the sidestand down on a firm, level surface. For proper oil drain, use a service lift to ensure the motorcycle is vertically centered.
- 3. Clean the area around the two drain plugs. Place a drain pan under both drain plugs.

**CAUTION!** Hot oil can cause burns to skin. Do not allow hot oil to contact skin.



Drain Plugs

- 4. Remove the drain plugs. Allow the oil to drain completely.
- 5. Install new sealing washers on the drain plugs. The sealing surfaces on drain plugs and engine should be clean and free of burrs, nicks or scratches.
- 6. Reinstall the drain plugs.

Torque: 15 ft-lbs (20 Nm)

# Maintenance Engine Oil and Filter Change

- 7. Place a drain pan or shop towels under the oil filter. Using an oil filter wrench, turn the filter counter-clockwise to remove it.
- 8. Using a clean dry cloth, clean the filter sealing surface on the engine.
- 9. Lubricate the o-ring on the new filter with a film of fresh engine oil. Check to make sure the o-ring is in good condition.
- 10. Install the new filter and rotate it clockwise by hand until the filter gasket contacts the sealing surface, then turn it an additional 3/4 to one full turn.
- 11. Remove the dipstick. Using a funnel, add 3-4 qts. (2.8-3.8 L) of the recommended oil. Reinstall the dipstick securely.
- 12. With the motorcycle in an upright, centered position, start the engine and allow it to idle for 30 seconds. Stop the engine.
- 13. Add the recommended oil as needed to bring the level to the FULL mark on the dipstick. Verify the level on the dipstick.
- Tip: The approximate volume between the ADD and FULL marks on the dipstick is 16 oz. (.45 L).
- 14. Reinstall the dipstick securely.
- **NOTICE:** Do not overfill. Overfilling can result in loss of engine performance and an oil-saturated air filter. Use a suction device to remove excess oil if overfilled.
- 15. Dispose of used filter and oil properly.
- **NOTICE:** After an oil change, the low oil pressure indicator may illuminate when the engine is started. If this occurs, do not increase RPM above idle speed until the indicator turns off. Operating above idle speed could result in damage to the engine.

# Maintenance

# **Cooling System**

The engine coolant level is controlled by the recovery system. Recovery system components are the recovery bottle, the radiator filler neck, the radiator pressure cap and the connecting hose.

As coolant operating temperature increases, the expanding (heated) excess coolant is forced out of the engine, past the pressure cap, and into the recovery bottle. As engine coolant temperature decreases the contracting (cooled) coolant is drawn back up from the bottle, past the pressure cap, and into the radiator.

Some coolant level drop on new vehicles is normal as the system is purging itself of trapped air. Check the coolant level and maintain as recommended by adding coolant to the recovery bottle.

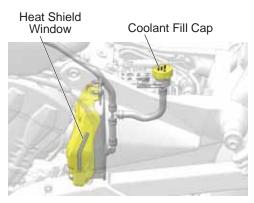
VICTORY recommends the use of Antifreeze 50/50 Premix. This antifreeze is already premixed and ready to use. Do not dilute with water.

To ensure that the coolant maintains its ability to protect the engine, we recommend that the system be completely drained every five (5) years or 50,000 miles, whichever comes first. Your authorized VICTORY dealer can assist.

#### **Coolant Level Inspection**

Tip: A flashlight is required for viewing the coolant level.

- 1. Allow the engine to cool before checking coolant level.
- 2. Position the motorcycle on level ground in the fully upright position.
- 3. Place a flashlight flush against an accessible area of the recovery bottle to illuminate the interior. View the coolant level through the window in the heat shield.
- 4. Maintain the coolant level at the COLD FULL mark on the recovery bottle (when the fluid is cool).
- 5. If the level is low, remove the seat to access the coolant fill cap.
- Tip: The recovery bottle is vented to prevent overfilling. Coolant will vent onto the ground if overfilled.
- 6. Remove the fill cap and add coolant. Do not overfill.
- 7. Reinstall the cap.





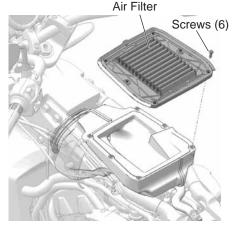
COLD<sup>'</sup>FULL Mark

# Maintenance Air Filter

Inspect and replace the air filter at the intervals specified in the periodic maintenance table beginning on page 54. Inspect more often if riding in unusually wet or dusty conditions.

- 1. Remove the seat. See page 76.
- 2. Remove the fuel tank. See pages 59-60.
- **NOTICE:** Use care to prevent debris from entering the air box when the filter is removed.
- 3. Loosen the six (6) captive air filter screws and remove the air filter.
- 4. Inspect the air filter. Do not attempt to clean the air filter. Replace a soiled or damaged filter with a new filter.
- 5. Reinstall the air filter or install a new air filter.
- 6. Torque screws to specification. Torque: 24 in-lbs (2.7 Nm)
- 7. Reinstall the fuel tank. See pages 60-61.
- 8. Reinstall the seat. See page 76.

#### **Fuel System**



**CAUTION!** Always observe all fuel safety procedures when inspecting or servicing the fuel system. See page 18.

#### **Fuel Hose Inspection**

Inspect the fuel hoses for cracks or damage. Inspect hose connections at the fuel pump and at the fuel rail for dampness or stains that would indicate a fuel leak.

#### **Crankcase Ventilation Hose Inspection**

Remove the operator's seat and fuel tank. Inspect the crankcase ventilation hose for cracks or damage. Inspect hose connections at the air cleaner and at the crankcase for dampness or stains that would indicate a leak.

#### **Evaporative Emission Control System**

Inspect all evaporative emission control system hoses and connections. Make sure all connections are tight. Inspect the evaporative canister for damage.

#### **Fuel Filter**

The fuel filter is attached to the electric fuel pump located inside the fuel tank. Your authorized VICTORY dealer can assist.

Fuel Tank

Fitting Plug

# **Fuel System**

**CAUTION!** Always observe all fuel safety procedures when inspecting or servicing the fuel system. See page 18.

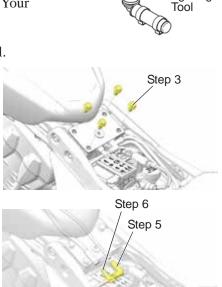
#### Fuel Tank Removal

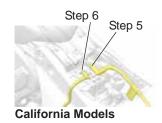
Before beginning, be prepared to place the fuel tank in a secure location to avoid scratching the finish and to catch any fuel that may leak or drip from disconnected hoses or fittings.

Please read the entire removal and reinstallaton procedure before beginning. Do not attempt to remove and install the fuel tank if you're not comfortable with this procedure. Your authorized dealer can provide this service.

A special fuel tank fitting plug tool is required for this procedure. Your VICTORY dealer can provide this tool.

- 1. Remove the seat. See page 76.
- 2. Remove the fuel tank filler pad to access the fuel tank bolts.
- 3. Remove the four (4) rear fuel tank bracket bolts. Set hardware aside for reassembly.
- 4. Locate the rubber elbow and the straight rubber coupler exiting the rear of the tank mounting bracket.
- 5. Gently pull the rubber elbow free of the tube to disconnect the fuel tank vent line.
- 6. Gently pull the straight coupler free of the tube to disconnect the fuel cap recess drain line.
- 7. Place the handlebars in the straight ahead position. Cover the front of the fuel tank with a protective cloth to prevent contact with the instrument cluster, which could cause damage.
- 8. Lift and support the rear of the tank approximately two inches (5 cm).



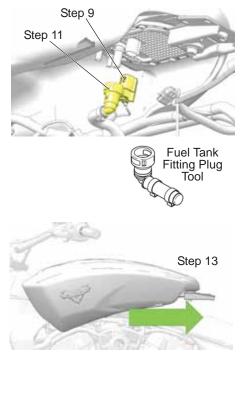


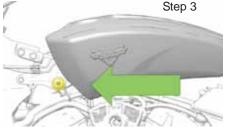
#### Maintenance Fuel System Fuel Tank Removal

- 9. Disconnect the fuel pump electrical connector by depressing the release tab on the connector body. Gently pull it free from the fuel pump.
- 10. Wrap a shop towel around the fuel fitting.
- 11. Disconnect the fuel supply line connector from the fuel pump by squeezing the release tabs on both sides of the fitting.
- 12. Install the fuel tank fitting plug tool onto the fuel pump fitting to protect the fitting and prevent fuel from seeping out of the tank.
- 13. Lift the rear of the fuel tank and carefully slide it rearward to release it from the front isolators.
- 14. Lift the tank up and away from the frame. Reinstall the front isolators if they become dislodged.
- 15. Place the fuel tank on a flat surface in a secure location.

#### **Fuel Tank Installation**

- 1. Place the handlebars in the straight ahead position. Cover the front of the fuel tank with a protective cloth to prevent damage.
- 2. Make sure the front isolators are installed to the frame. Apply alcohol, soapy water or rubber lubricant to the isolators and to the sides of the air box seal to ease tank installation.
- 3. Using care to avoid damage to the fuel tank fitting and special tool, lower the fuel tank onto the frame of the motorcycle. Slide the tank forward to make sure it's fully seated on the isolators.

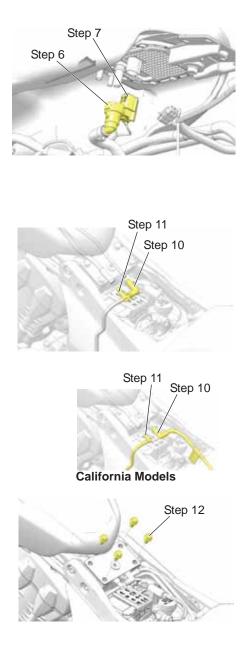




# Maintenance

#### Fuel System Fuel Tank Installation

- 4. Pivot the rear of the tank upward to access the tank bottom. Support the rear of the tank in this position.
- 5. Remove the plug tool from the fuel pump fitting.
- 6. Reconnect the fuel supply line connector to the fuel pump. Make sure you hear a click to indicate proper engagement. Test the connection by pulling the fuel line lightly.
- 7. Connect the fuel pump harness electrical connector. Make sure you hear a click to indicate proper engagement.
- 8. Verify that the fuel line is correctly routed and secured.
- 9. Slide the tank forward to make sure it's fully seated on the isolators.
- 10. Connect the fuel cap recess drain line.
- 11. Connect the fuel tank vent line.



- 12. Reinstall the four (4) rear fuel tank bolts. **Torque:** 18 ft-lbs (24.4 Nm)
- 13. Reinstall the fuel tank filler pad.
- 14. Prime the fuel pump. See page 46.
- 15. Check for leaks.
- 16. Reinstall the seat. See page 76.

#### Maintenance Clutch (Mechanical) Mechanical Clutch Lever Freeplay

Inspect clutch lever freeplay at the intervals recommended in the periodic maintenance table. See page 54.

- **NOTICE:** Incorrectly adjusted freeplay (cable too tight or too loose) will result in premature clutch wear and/or failure.
- 1. The clutch cable adjuster nut is located along the lower right frame. While holding the clutch cable, slide the rubber protective cover away from the lock nut. Loosen the lock nut.
- 2. While holding the cable, turn the cable adjuster inward or outward until clutch lever freeplay is 0.5-1.5 mm.
- 3. While holding the cable, tighten the adjuster lock nut securely.
- 4. Verify that the safety switch activates properly. The engine should not start in gear with the clutch lever released.
- Tip: The starter interlock switch is dependent on the clutch lever freeplay being set correctly to ensure activation of the clutch safety switch.



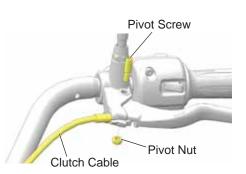
Clutch Cable Adjuster

#### **Mechanical Clutch Lever Lubrication**

- 1. Remove the clutch lever pivot nut and screw. Disconnect the clutch cable from the clutch lever.
- 2. Remove any old grease and dirt from the lever and housing. Lubricate the clutch lever and pivot screw with moly assembly grease or allpurpose grease.
- 3. Reconnect the clutch cable. Reinstall the lever, pivot screw and nut. Hold the screw down and tighten the nut.

Torque: 96 in-lbs (10.8 Nm)

- 4. Adjust clutch lever freeplay.
- 5. Tighten the adjuster nut and slide the protective cover over the adjuster.



.02-.059 in.

(0.5-1.5 mm) Freeplay Clutch

Lever

# Maintenance

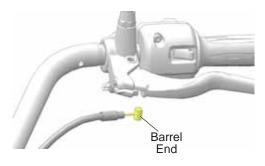
#### Clutch (Mechanical) Mechanical Clutch Cable Lubrication

Lubricate control cable barrel ends at the intervals recommended in the periodic maintenance table. See page 54.

**NOTICE:** The clutch cable is factory-lubricated. Additional lubrication could be detrimental to cable performance. Replace the clutch cable assembly if binding or sticking occurs. DO NOT lubricate between the cable and sheath.

Verify proper routing and smooth movement. Inspect for damage to the external casing, and inspect exposed cable wire for fraying, kinks or corrosion. Replace any damaged, sticky or sluggish cable.

- 1. Disconnect the cable at the clutch lever and at the primary cover.
- 2. Lubricate both barrel ends with VICTORY All Purpose Grease or equivalent.
- 3. Reconnect the cable and adjust freeplay as needed.

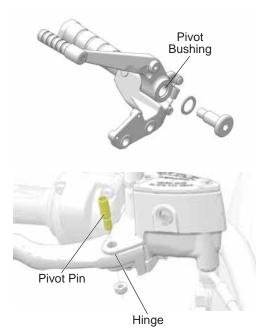


#### Maintenance Brake Systems Brake Hoses/Connections

Inspect all brake hoses and connections for dampness or stains from leaking or dried fluid. Tighten any leaking connections and replace components as necessary. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.

#### **Rear Brake Pedal Lubrication**

Lubricate the pivot bushing at the intervals recommended in the periodic maintenance table. See page 54. Also lubricate any time binding or noise is evident. Use all-purpose grease.



#### Front Brake Lever Lubrication

Lubricate the pivot pin and brake lever hinge points at the intervals recommended in the periodic maintenance table beginning on page 54. Also lubricate any time binding is evident. Use all-purpose grease.

#### Brake Systems Brake Fluid Precautions

#### A WARNING

Using the wrong fluid or allowing air or contaminants into the fluid system can damage the system seals or result in a malfunction that could lead to serious injury or death. Use only DOT 4 brake fluid from a sealed container.

Do not operate the front brake with the reservoir cover removed. Fluid could overflow from the reservoir and allow air to enter the system. Air in the brake system could cause the brakes to malfunction.

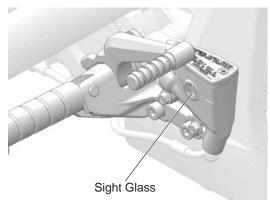
An over-full reservoir may cause brake drag or brake lock-up, which could result in serious injury or death. Maintain brake fluid at the recommended level. Do not overfill.

**NOTICE:** Brake fluid will damage painted surfaces and plastic parts. Always clean spilled brake fluid immediately with water and a mild detergent.

#### **Rear Brake Fluid**

Change the brake fluid at the intervals recommended in the periodic maintenance table beginning on page 54. Always add brake fluid from a new, unopened container. Always use the recommended fluid. See page 104.

- 1. Position the motorcycle on level ground in the fully upright position.
- 2. The rear brake fluid reservoir is located near the rear brake pedal. View the reservoir from the right side of the vehicle.
- 3. Wipe the fluid container and the area around the reservoir cover with a clean cloth.
- 4. If the fluid level is low, inspect brake pads as outlined on page 67. If pads are not worn beyond the service limit, inspect the brake system for leaks.
- 5. Remove the cover and diaphragm. The fluid level should be above the minimum indicator mark on the reservoir body. Add brake fluid as needed. *Do not overfill.*
- Reinstall the cover and diaphragm. Tighten the cover screws.
   Torque: 13 in-lbs (1.5 Nm)
- 7. Wipe away any fluid spills. Check for signs of brake fluid leaks around hoses, fittings, reservoir, and brake calipers.



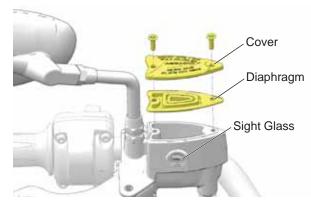
#### Maintenance Brake Systems Front Brake Fluid

Change the brake fluid at the intervals recommended in the periodic maintenance table beginning on page 54. Always add brake fluid from a new, unopened container. Always use the recommended fluid. See page 104.

- 1. Position the motorcycle on level ground in the fully upright position. Position the handlebars so that the fluid reservoir is level. Wipe the fluid container and the area around the reservoir cover with a clean cloth.
- 2. If the fluid level is low, inspect brake pads as outlined on page 67. If pads are not worn beyond the service limit, inspect the brake system for leaks.
- 3. To add fluid, remove the reservoir cover screws. Remove the cover and diaphragm.
- 4. The fluid level should be above the minimum indicator mark in the sight glass. Add brake fluid as needed. *Do not overfill*.
- 5. Reinstall the diaphragm, cover and screws.

Torque: 13 in-lbs (1.5 Nm)

 Wipe away any fluid spills. Check for signs of brake fluid leaks around hoses, fittings, reservoir and brake calipers. Check for deterioration of hoses.



# Maintenance

#### Brake Systems Brake Pads

Inspect each front brake pad on both sides of the front disc. Inspect each rear brake pad on both sides of the rear disc.

When checking brake pad friction material thickness, check each brake caliper for dampness or stains from leaking or dried brake fluid. If inspection reveals signs of fluid leakage, do not operate the vehicle. Your dealer can provide assistance.

Use an inspection mirror, positioned at the front side of the caliper, to view the friction material.

Replace brake pads when the thinnest point of the friction material has worn to 1.0 mm. Your dealer can provide this service.

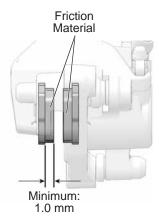
Tip: After replacing pads, allow up to 250 miles (500 km) of operation in urban driving conditions (not highway cruising) to allow pads to mate with new rotors. Brakes should be used frequently. During this time brake performance will be less effective. Avoid using brakes harshly unless in an emergency. Brake efficiency will gradually increase during this seating period.

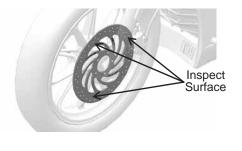
#### Brake Discs

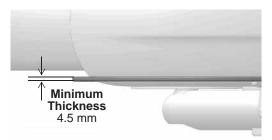
- 1. Inspect brake discs for nicks, scratches, cracks or other damage. Inspect the thickness of each brake disc at four or more locations around the disc. If any disc is worn to the minimum thickness at the thinnest point, or if a disc is damaged, your dealer can provide a replacement.
- 2. Clean discs if minor squeaks develop due to dirt or dust. Apply brake cleaner to a clean shop towel and wipe the discs. DO NOT allow brake cleaner to contact painted or plastic parts. Read all precautions on the label.

#### **Brake Lines**

Inspect all brake hoses and connections for dampness or stains from leaking or dried fluid. Tighten any leaking connections and replace components as necessary. Torque fasteners to specification. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.





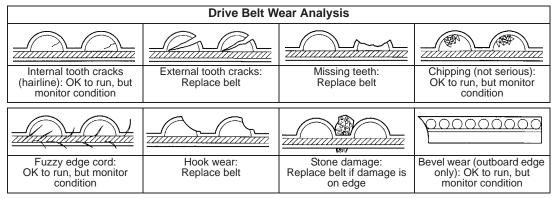


# Maintenance Drive Belt Condition

Inspect the rear drive belt at the intervals specified in the periodic maintenance table beginning on page 54. Replace the drive belt if it is cracked or has broken teeth or frayed edges. No matter its condition, the drive belt should be replaced at periodic intervals. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.

Replace the drive belt and both sprockets as a set if the drive belt has over 5,000 miles (8,000 km) of service at the time of damage or failure.

# **Rear Drive Belt Wear Analysis**



# **Drive Belt Cleaning**

Cleaning the drive belt will maximize belt and sprocket life and minimize drive line noise. Clean the belt at every tire change. Clean the belt more often if riding in dirty, dusty or high debris environments.

- 1. Mix a few drops of mild dish soap with a cup of warm water.
- 2. Use a soft nylon brush to clean the belt and sprocket teeth with the soapy water. Clean well in corner areas where road debris and belt dust can collect.
- 3. Rinse the belt with clear water, then dry thoroughly.

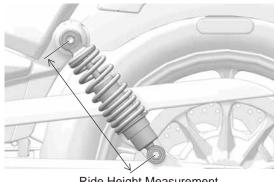
# Maintenance

#### Rear Suspension Rear Shock Preload (Ride Height) Inspection

Periodically measure rear shock preload. Have an assistant help with this procedure.

For the most comfortable ride and proper ground clearance, adjust preload if ride height is out of specification.

- 1. Verify that tire pressure is at specification. See page 73.
- 2. Load the motorcycle with all intended cargo. Wearing your riding gear, bring the motorcycle to the upright position and sit on the operator's seat. If you plan to carry a passenger, have the passenger (with riding gear) sit on the passenger seat.
- 3. Balance the motorcycle, allowing all rider and cargo weight to be supported by the motorcycle, not by the riders' feet. Bounce on the seat so the suspension cycles and comes to rest at its ride-in position.



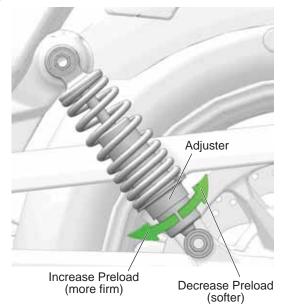
Ride Height Measurement 282 mm

**WARNING!** Do not carry a passenger unless the motorcycle is equipped with passenger seat and passenger footrests.

- 4. Measure shock preload from upper mount bolt center to lower mount bolt center (eye-toeye). Perform this measurement on both shocks.
- 5. Ride height should be 282 mm on both shocks. If the measurement differs, adjust the preload. See page 70.

#### Maintenance Rear Suspension Rear Shock Preload (Ride Height) Adjustment

- 1. Verify that tire pressure is at specification. See page 73.
- 2. Rest the motorcycle on the sidestand. Unload the rear suspension as much as possible.
- 3. Spray a light lubricant on the adjuster where it contacts the spring. DO NOT allow spray to contact the drive belt.
- 4. Adjust shock preload by rotating the adjuster clockwise (as viewed from the top of shock) to INCREASE preload (firm) or counter-clockwise to DECREASE preload (softer).
- 5. Recheck the preload measurement after adjusting. See page 69.



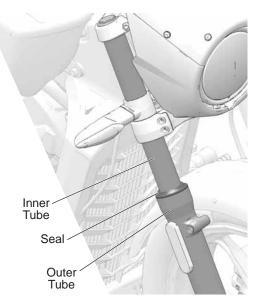
## Maintenance

### Rear Suspension Swing Arm and Rear Axle Inspection

- 1. Sit in the operator's seat and slowly bounce the rear suspension a few times. Make sure the suspension moves freely without binding. Listen for abnormal noises.
- 2. Elevate and support the motorcycle with the rear tire slightly off the floor. See page 53.
- 3. Make sure the motorcycle is stable when elevated. Injury may occur if the motorcycle tips or falls.
- 4. Grasp the rear wheel and attempt to move the wheel side-to-side. If there is movement at the front of the swingarm or in the axle area, see your dealer for service.
- 5. With the transmission in neutral, slowly rotate the rear wheel. If the wheel does not rotate smoothly, your dealer can assist.

### Front Suspension Front Fork/Suspension Inspection

- 1. Place the motorcycle on the sidestand and inspect the front forks. If fork oil is present on the outer tube, do not ride the motorcycle. See your dealer or other qualified person for service before operating. If fork oil is present around the fork seals or inner tubes, replace the fork seals.
- 2. Clean the fork tubes to remove bugs, tar or buildup which may cause seal wear or leakage. Inspect the outer surfaces of the inner fork tubes for scratches or damage from foreign objects.
- 3. Straddle the motorcycle and bring it to the fully upright position. Apply the front brake and push downward (hard) on the handlebars several times. The front suspension should operate smoothly and quietly.



4. Fork oil condition and level affects front suspension performance and internal component wear. Replace fork oil at the recommended intervals. Special tools are required to perform this procedure. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer has the necessary tools and can provide this service.

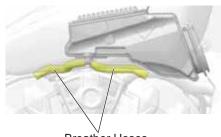
## Maintenance Steering Head Inspection

1. Elevate and support the motorcycle with the front tire slightly off the floor. See page 53. **CAUTION!** Make sure the motorcycle is stable when elevated. Injury may occur if the motorcycle tips or falls.

- 2. Turn the handlebars from stop to stop. The action should be smooth but not loose. Make sure wires, hoses and control cables do not interfere with smooth steering.
- 3. Position the front wheel straight ahead. Grasp the front forks near the front axle and attempt to move the wheel front-to-back. If there is front-to-back movement at the steering head, see your dealer or other qualified person for service.
- 4. If steering binds, feels rough or uneven, or if movement is detected at the steering stem, see your dealer or other qualified person for service.
- 5. Rotate the front wheel and inspect for smooth rotation of front wheel bearings. If roughness or unusual sounds are present, see your dealer or other qualified person for service.
- 6. Turn handle bars full right or left and hold against the fork stop. Attempt to move front wheel side-to-side. If movement is observed, see your dealer or other qualified person for service.

## **Crankcase Breather Hoses**

Inspect the crankcase breather (vent) hoses each time the fuel tank is removed to perform air filter service or other maintenance. Inspect both breather hoses along their length and at both ends. Make sure hoses are not restricted, kinked, cracked or otherwise damaged. Replace any worn or damaged hoses.



Breather Hoses

## **Exhaust System**

Check the exhaust system for stains from leaking exhaust gasses. Replace damaged or leaking exhaust gaskets. Check all exhaust system fasteners. Tighten loose clamps and fasteners. Do not overtighten. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.

## **Sidestand Lubrication**

Periodically lubricate the sidestand bushing. See page 43 for sidestand inspections.

## Tires

### **A**WARNING

Operating the motorcycle with improper tires or with improper or uneven tire pressure could cause loss of control or accident. Always use the correct size and type of tires specified for your vehicle. Always maintain proper tire pressure as recommended in the rider's manual and on safety labels.

#### **Tire Pressure**

Always check and adjust tire pressure when tires are cold. Do not adjust tire pressure immediately after riding. Wait at least 3 hours after riding to check pressure. If pressure checked and adjusted while tires are warm, the pressure will drop as tires cool and result in underinflation. Adjust tire pressure as recommended for the total weight of your intended load (see table).

**WARNING!** Do not exceed the maximum recommended inflation pressure to seat the bead. Tire or rim failure may result.

|          |               |       |         | Recommended Pressure           |   |
|----------|---------------|-------|---------|--------------------------------|---|
| Location | Size          | Brand | Туре    | Loads up to<br>200 lbs (91 kg) | Loads up to<br>maximum load<br>capacity |
| Front    | 130/70-18 63H | Kenda | Cruiser | 36 psi (248 kPa)               | 36 psi (248 kPa)                        |
| Rear     | 160/70-17 76H | Kenda | Cruiser | 40 psi (276 kPa)               | 40 psi (276 kPa)                        |

### **Tire Condition**

Inspect the tire sidewalls, road contact surface and tread base. If inspection reveals cuts, punctures, cracks or other wear or damage, replace the tire before riding. Use only approved replacement tires.

### **Tire Tread Depth**

Replace any tire with a tread depth of less than 1/16 inch (1.6 mm).

Tread wear indicators are located in at least six places on the tread circumference and become visible at a tread depth of approximately 1/16 inch (1.6 mm). The tread wear indicators appear as a solid band across the tread.

You may also use a depth gauge or an accurate ruler to measure the depth of the center tire tread on both front and rear tires.

### Maintenance Tires Tire Replacement

Tires, rims, innertubes and air valves must be correctly matched to wheel rims. Use only the proper size tires specified with the same or higher load and speed ratings. VICTORY-recommended tires provide proper clearance between fenders, swingarm, drive belts and other components. See the *Specifications* section beginning on page 102.

On models equipped with innertubes, innertubes MUST be replaced with new innertubes when tires are replaced. Use only the proper size innertubes.

**WARNING!** Mismatched tires, rims and air valves may result in damage to the tire bead during mounting or may allow the tire to slip off the rim, possibly resulting in tire failure

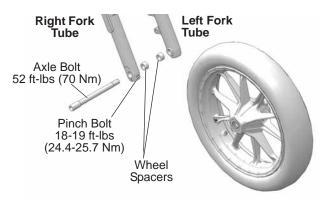
## Wheel Inspection

Inspect both wheels for cracks or damage and replace damaged wheels promptly. Do not operate the motorcycle if wheels are damaged or cracked. For more information, see the *VICTORY Service Manual*. Your authorized VICTORY dealer can assist.

## Front Wheel Installation

If the front wheel is removed for any reason, it must be reinstalled in the correct rotating direction.

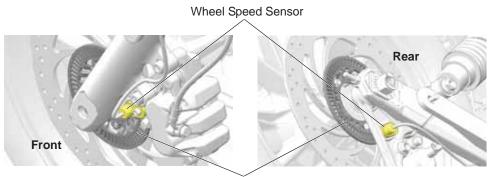
Clean all wheel components before installation. Apply a light coat of allpurpose grease to the axle and both spacers.



### Maintenance Anti-Lock Brake System (ABS) Tone Ring/Sensor Inspection (if equipped)

Visually inspect for damaged teeth on the front and rear ABS tone rings. Inspect for nicks and dents on the face of the teeth. The teeth edges should be consistent in appearance. If a tone ring is damaged, see your VICTORY dealer for replacement as soon as possible.

Inspect for debris adhering to the end of the wheel speed sensors. If contamination is observed, or if you are unable to visually inspect, slide a thin towel across the face of the sensor between the sensor and the tone ring to remove any potential debris.

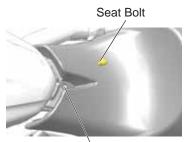


Tone Ring Teeth

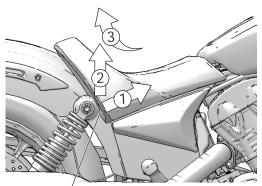
## Maintenance Seat Removal/Installation

- 1. Remove the seat retaining bolt at the front of the seat. The multi-tool can be used to remove the seat bolt (located behind the license plate bracket).
- **NOTICE:** Use caution to avoid contact with the fuel tank when removing or installing the seat.
- 2. Push the seat slightly forward (1) toward the fuel tank to disengage the seat retaining tab from the slot in the rear frame. The bracket at the front of the seat will slide under the rubber filler located between the seat and the tank.
- 3. Lift the rear of the seat slightly (2) and pull the seat rearward and upward (3) to remove.
- 4. Reverse the procedure to reinstall the seat.

**WARNING!** If the seat retaining tab is not installed into the slot, the rear of the seat will move from side to side. Make sure the retaining tab is engaged properly before operating.



Seat Mounting Bracket



Retaining Tab

## Maintenance

## Battery

The motorcycle battery is a sealed, maintenance-free battery. Do not remove the battery cap strip for any reason. Keep the battery connections clean and tight at all times.

### A WARNING

Battery electrolyte is poisonous. It contains sulfuric acid. Serious burns can result from contact with skin, eyes or clothing.

Antidote:

External: Flush with water.

**Internal**: Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg, or vegetable oil. Call physician immediately.

Eyes: Flush with water for 15 minutes and get prompt medical attention.

#### Batteries may produce explosive gases.

- Keep sparks, flame, cigarettes, etc. away.
- Ventilate when charging or using in an enclosed space.
- Always shield eyes when working near batteries
- KEEP OUT OF REACH OF CHILDREN.

### **Battery Removal**

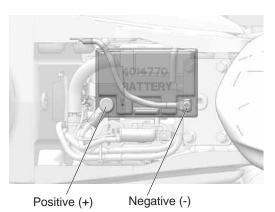
1. Remove the seat.

**WARNING!** Improperly connecting or disconnecting battery cables can result in an explosion and cause serious injury or death. When removing the battery, always disconnect the negative (black) cable first. When reinstalling the battery, always connect the negative (black) cable last.

- 2. Remove the fuse box from the frame of the motorcycle. Use care to avoid pulling or stretching wires. See page 79. Fold the wires to the right rear side of the motorcycle.
- 3. Remove the battery hold-down strap. **Tool:** 10 mm wrench
- 4. Remove the negative (-) battery cable from the battery terminal. Position the cable well clear of the terminal.

Tool: 10 mm wrench

- 5. Remove the rubber cover from the positive (+) battery cable and remove the cable from the terminal. Position the cable well clear of the terminal.
- 6. Tilt the battery slightly rearward, then lift it away from the motorcycle.



### Maintenance Battery Battery Charging

If your motorcycle will not be used for a period of four (4) weeks or longer, a maintenance charger should be connected to the battery. A maintenance charger can be purchased through your authorized VICTORY dealer.

- 1. Following the charger manufacturer's instructions, use a battery charger designed for use with 12-volt batteries. The charger should have a maximum charging rate of 1.8 amps. Charge the battery for approximately 10 hours at a rate of 1.8 amps. If you use a taper or trickle charger, it will take longer to charge the battery.
- 2. After charging the battery, allow the battery to sit 1-2 hours before checking the state of charge with a DC volt meter. The charge should be a minimum of 12.5 DC volts. Repeat the charging cycle if the charge is less than 12.5 DC volts. Replace the battery if it fails to reach 12.5 volts after the second charge.

### **Battery Installation**

**WARNING!** Improperly connecting or disconnecting battery cables can result in an explosion and cause serious injury or death. When removing the battery, always disconnect the negative (black) cable first. When reinstalling the battery, always connect the negative (black) cable last.

- **NOTICE:** Do not remove the battery cables while the engine is running. Doing so may damage the Electronic Control Unit (ECM). Take great care not to reverse the battery leads when installing the battery. Reverse power applied to the ECM will damage it instantly.
- 1. Inspect the battery box for damage. Be sure pads are in good condition and properly located.
- 2. Make sure cable ends and battery terminals are clean. Apply a light film of dielectric grease to the terminal bolt threads.
- 3. Carefully position the battery into the battery box with the negative (-) terminal toward the front of the motorcycle.
- Make sure the positive (+) cable is routed horizontally and perpendicular to the long side of the battery. Connect the positive (+) cable to the positive (+) battery terminal.
   Torque: 45 in-lbs (5 Nm)
- Install the negative (-) ground cable last.
   Torque: 45 in-lbs (5 Nm)
- Reinstall the battery hold-down strap.
   Torque: 96 in-lbs (10.8 Nm)
- 7. Reinstall the seat. See page 76.

## Maintenance

## **Fuse Replacement**

The standard fuse box is located under the seat. This fuse box houses all standard service fuses and the automatic circuit breakers. Fuse application and size are provided on a label on the fuse box cover.

The main vehicle fuse is located on the wiring harness at the rear of the battery. Remove the fuse cap to inspect or replace this fuse.

**NOTICE:** Use fuses with the recommended amperage to avoid damage to the electrical system.

- 1. Remove the seat. See page 76.
- 2. Press the fuse box release tab inward and slide the fuse box rearward to remove it from the bracket. Use care to avoid pulling or stretching the wires.
- 3. Bend the cover clips slightly away from the cover to remove the cover.

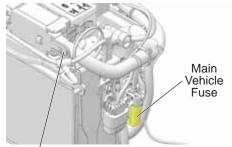
Tip: Use the fuse puller provided in the tool kit to remove a fuse.

- 4. After replacing a fuse, reinstall the fuse box cover.
- 5. Reinstall the fuse box to the bracket. Make sure the release tab engages.
- 6. Reinstall the seat.

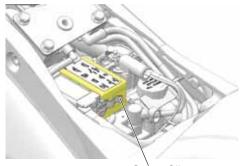
## Spark Plugs

Your dealer can assist with spark plug inspections and replacement at the intervals recommended in the periodic maintenance table. See page 54.

| Spark Plug Specifications |                     |  |
|---------------------------|---------------------|--|
| Spark Plug Type           | NGK MR7F            |  |
| Spark Plug Gap            | .030 inch (0.80 mm) |  |
| Spark Plug Torque         | 7.5 ft-lbs (10 Nm)  |  |



Release Tab



Cover Clip

## Maintenance Electrical Precautions

Be aware of the following precautions regarding the electrical system to avoid disruption of electrical signals and possible system malfunction.

- DO use ONLY genuine VICTORY parts and accessories designed for your model, and follow the instructions provided. Equivalent parts may be used for emissions-related purposes.
- DO use the accessory power jack provided (if equipped).
- If it is necessary to provide power to an item that does not use one of the previously mentioned power jacks, connect to the "hot" side of the starter solenoid with an inline fuse, and connect the ground wire to the chassis ground located at the left rear section of the frame under the seat.
- DO NOT splice or cut any wires.
- DO NOT tap in to any power or ground on the motorcycle unless specifically directed to do so by the VICTORY instructions that come with the kit.
- DO NOT back-probe electrical connectors on the vehicle unless directed to do so by the *VICTORY Service Manual*.
- DO NOT power any accessories from the diagnostic connector.

## Maintenance

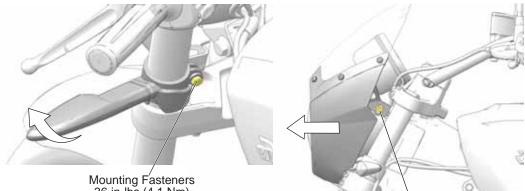
## **Fairing Removal/Installation**

- Remove the turn signal mounting fasteners on both sides of the motorcycle. 1.
- 2. Rotate the signals forward toward the front tire.
- Remove the two M8 fairing bracket fasteners. 3.
- 4. Carefully slide the fairing straight forward to clear the headlight.
- When reinstalling the fairing, make sure the fairing is centered about the headlight 5. before tightening the bracket fastener.

Torque: 15 ft-lbs (20 Nm)

Realign each turn signal to the forward-facing position by aligning the locating tab on 6. the turn signal mount with the gap in the lower triple clamp. Tighten the mounting fasteners.

Torque: 36 in-lbs (4.1 Nm)

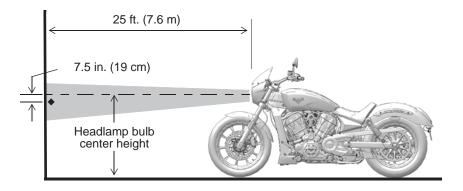


36 in-lbs (4.1 Nm)

Bracket Fasteners 15 ft-lbs (20 Nm)

## Maintenance Headlight Aim Inspection

On high beam, the center of highest intensity (appearing as a diamond shape) should be 7.5 in. (19 cm) lower than the headlamp bulb and centered straight ahead at 25 feet (7.6 m).



- 1. Verify that tire pressure is at specification. See page 73.
- 2. Verify that rear suspension ride height (preload) is at specification. See page 69.
- 3. Position the motorcycle on a level surface with the headlight 25 feet (7.6 m) from a wall. With the operator and passenger (if applicable) on board, bring the motorcycle to the fully upright position.
- 4. Turn the ignition switch on and switch the headlamp to high beam. Observe the headlight aim on the wall.
- 5. Make any necessary adjustments to headlight aim.

## Headlight Aim Adjustment

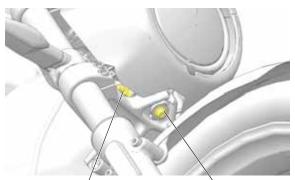
- 1. Remove the fairing. See page 81.
- 2. To adjust the headlamp vertically, loosen the housing mount fastener and pivot the housing upward or downward. Tighten the fastener.

Torque: 35 ft-lbs (47.5 Nm)

3. To adjust the headlamp horizontally, loosen the headlight mounting bolt and pivot the headlight to the left or right. Tighten the bolt.

Torque: 18 ft-lbs (24.4 Nm)

4. Reinstall the fairing. See page 81.



Headlight Mounting Bolt (Vertical Adjustment) Headlight Housing Mount Fastener (Horizontal Adjustment)

## Maintenance

## Headlight Lamp Replacement

- 1. Remove the headlight retaining screw.
- 2. Lift the bottom of the headlight upward to unhook the top from the base. Slide the headlight out of the fairing.
- 3. Disconnect the wire harness from the headlight by grasping the harness connector and pulling it straight back. Do not pull on the wire harness.
- 4. Remove the rubber boot from the rear of the headlight.
- 5. Squeeze the bulb retainer and move it away from the bulb. Remove the bulb.
- **Tip:** Avoid touching a halogen lamp with bare fingers. Oil from your skin leaves a residue, causing a hot spot that will shorten the life of the lamp. If a lamp is touched, clean it thoroughly with denatured alcohol.
- 6. Install the new bulb and secure the retainer.
- 7. Reinstall the rubber boot, making sure it seals around the bulb and headlight.
- 8. Connect the wire harness.
- 9. Reinstall the headlight to the base and tighten the screw.

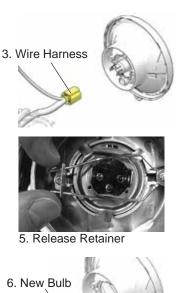
Torque: 36 in-lbs (4.1 Nm)



1. Retaining Screw



2. Remove Headlight



## Maintenance Troubleshooting

For your personal safety, do not attempt inspection or repairs not fully described in this rider's manual. Contact an authorized dealer or other qualified person for service if you cannot determine the cause of a problem or if the inspection/repair exceeds your mechanical ability or tool resources. Do not perform any inspection or repair with the engine running.

### Engine Cranks But Will Not Start

| Possible Cause             | Possible Remedy/Action   |
|----------------------------|--|
| Low fuel                   | Verify fuel level  |
| Fuel pump doesn't operate  | Turn engine STOP switch to RUN. Turn the ignition key on.<br>The fuel pump should run momentarily and then stop. Check<br>the fuel pump/ignition circuit breaker. See page 79. |
| Battery voltage is too low | Fully charge the battery. See page 78.   |
| Fouled spark plug(s)       | Your dealer can assist.  |
| Low compression            | Your dealer can provide an engine compression test.  |

### Starter Motor Clicks, Does Not Turn or Turns Slowly

| Possible Cause                             | Possible Remedy/Action   |
|--|--|
| Engine stop/run switch is in stop position | Place switch in RUN position.  |
| Discharged battery                         | Fully charge the battery. See page 78.   |
| Loose or corroded battery cables           | Inspect battery cables.  |
| Transmission is in gear                    | Shift transmission into neutral or pull the clutch lever in to disengage the clutch. See starting procedures on page 47. |

### **Engine Starts But Misses or Runs Poorly**

Tip: Turn engine OFF before inspecting any of these items.

| Possible Cause                               | Possible Remedy/Action   |
|--|--|
| Discharged battery                           | Fully charge the battery. See page 78.   |
| Loose or corroded battery cables             | Inspect battery cables and connections.  |
| Fouled spark plug(s)                         | Your dealer can assist.  |
| Contaminated fuel                            | Inspect fuel for water/contamination. Your dealer can assist.                    |
| Engine oil level incorrect or wrong oil type | Inspect level and quality of oil. See page 38.                                   |
| Loose, broken, shorted ignition coil wires   | Your dealer can assist.  |
| Air intake restricted                        | Inspect air filter. See page 58.   |
| Intake leaks                                 | Inspect air box, crankcase breather hoses, throttle body and intake boot joints. |

### Troubleshooting Shifting Difficulties or Hard to Find Neutral

| Possible Cause                         | Possible Remedy/Action   |
|--|--|
| Clutch damage                          | Replace clutch.  |
| Clutch cable not adjusted properly     | See page 62. Your dealer can provide an inspection and adjustment. |
| Shift linkage not adjusted properly    | Your dealer can provide an inspection and adjustment.              |
| Incorrect oil or oil in poor condition | Replace the oil with the recommended oil.                          |

### **Engine Overheating**

| Possible Cause                   | Possible Remedy/Action   |
|----------------------------------|--|
| Debris lodged in radiator screen | Inspect and clean the screen.  |
| Plugged radiator                 | Use a garden hose to flush any debris from the radiator fins.<br>DO NOT use a high pressure washer, which can damage the<br>radiator fins. |
| Blocked fan                      | Inspect fan, remove any blockage.  |
| Fan doesn't operate              | Your dealer can assist.  |
| Low coolant                      | Allow the engine to cool before checking coolant level. See page 57.   |
| Air in cooling system            | Your dealer can assist.  |

### **Battery Charging Rate Low or Battery Discharges**

| Possible Cause                                | Possible Remedy/Action   |
|---|--|
| Loose/Corroded Charging Circuit<br>Connection | Check/clean battery cable connections. Check/clean charging circuit connections. Your dealer can assist. |
| Accessory Load Exceeds Charge<br>Rate         | Limit accessory operation when the engine is off.  |
| Improperly Wired Accessory<br>(Current Draw)  | To check charging system output and current draw, your dealer can assist.                                |

#### **Brake Noise/Poor Brake Performance**

Tip: See your dealer if brake performance does not return after these inspections.

| Possible Cause                                 | Possible Remedy/Action                                |
|--|---|
| Dust/Dirt On Brake Disc(s)                     | Clean disc. See page 67.                              |
| Worn Pads Or Disc/Brake Disc<br>Damage         | Inspect pads. See page 67.                            |
| Brake Fluid Level Low Or Fluid<br>Contaminated | Inspect fluid level/fluid condition. See pages 40-41. |

## Cleaning and Storage VICTORY Cleaning Products

This section provides tips on the very best way to clean, polish and preserve every surface of your beautiful new VICTORY motorcycle. We recommend the use of our VICTORY cleaning and polishing products and accessories, which have been specially designed to offer the best care possible for your VICTORY motorcycle.

In addition to the products recommended in this section for cleaning and polishing, VICTORY also has specialty products for:

- · removing scratches, scuffs and swirls
- enhancing black and silver engines
- cleaning engines, tires and wheels
- · removing brake dust

After cleaning the motorcycle, inspect for damage to the painted surfaces. Chips or scratches should be repaired promptly to prevent corrosion.

For Suede Paint (Matte Clear Coat) Finish Care, see page 87.

For Gloss Clear Coat Finish Care, see page 88.

Your dealer can provide more information and answers to your cleaning and detailing questions.

## Washing the Motorcycle

**NOTICE:** Do not use pressurized water to wash the motorcycle. Water may seep in and deteriorate wheel bearings, brake caliper assemblies, brake master cylinders, electrical connectors, steering head bearings, and transmission seals.

Do not direct any water stream at air intakes, exhaust outlets, electrical connectors or audio system speakers.

Electrical components may be damaged by water. Do not allow water to contact electrical components or connectors.

- 1. Before washing, make sure exhaust pipes are cool. Cover each pipe opening with a plastic bag secured with a strong rubber band. Check that the spark plugs, spark plug wire caps, oil fill cap and fuel caps are properly seated.
- 2. Do not use abrasive cleaners.
- 3. Rinse off as much dirt and mud as possible with water running at low pressure. Use as little water as possible when washing near the air intake or the exhaust pipe openings. Dry these components thoroughly before using the motorcycle.
- 4. Clean the front fork tubes thoroughly to reduce fork seal wear and leakage.
- 5. After washing, remove the rubber bands and plastic bags from the exhaust pipes. Start the engine and let it idle for a few minutes.
- 6. Make sure the brakes are functioning properly before riding.

## **Cleaning and Storage**

## Windshield Care (if equipped)

Clean the windshield with a soft cloth and plenty of warm water. Dry with a soft clean cloth. Remove minor scratches with a high-quality polishing compound designed for use on polycarbonate surfaces.

**NOTICE:** Brake fluid and alcohol will permanently damage the windshield. Do not use glass cleaners, water or soil repellents, and petroleum or alcohol based cleaners on the windshield, as these products can damage the windshield.

## Suede Paint (Matte Clear Coat) Finish Care

Suede paint finishes are prone to trapping dirt, oils and other contaminants. Always clean this type of finish with warm water and a mild dish-washing detergent. Use a soft sponge to gently rub the surface, then rinse with clean warm water. For stubborn stains such as grease or oil, use a citrus-based cleaner. Spray the cleaner onto the area and rub gently with a soft sponge. Allow the cleaner to sit for a couple of minutes, then rinse well with clean warm water. Repeat as needed.

Apply VICTORY Suede Finish Protectant. Follow the instructions on the container.

**NOTICE:** Never use a polishing/buffing wax or any sponge that has an abrasive surface when cleaning a matte finish. These products will buff the matte surface of the finish and result in a glossy finish. Never clean matte finishes with a pressure washer, as this will further imbed contaminants into the clear coat and may damage labels and decals.

## Cleaning and Storage Gloss Clear Coat Finish Care

The Axalta Sports and Equipment Finish System was used to provide the original gloss finish on your motorcycle. This finish system provides superior protection against the elements. To maximize the benefits of this system, use the following guide to care for the gloss finish on your motorcycle.

- During the first 30 days, when the finish is still fresh, clean the motorcycle with a water rinse only.
- Do not wax the motorcycle for the first 60 days. Doing so can cause loss of the gloss. After 60 days, use only waxes designed for new clear coat finishes.
- Do not use pressurized water to wash the motorcycle. When paint is still fresh, pressurized water could damage the finish. If using a pressure washer is unavoidable, keep the spray nozzle at least 24 inches (60 cm) away from the surface of the motorcycle.
- Wash your motorcycle often, especially when exposed to salty, dusty, acidic or alkaline environments.
- Use warm or cool water and a soft cloth for cleaning.
- Use soaps that are non-abrasive and have a neutral pH (non acidic/non alkaline detergents).
- Do not use solvent-based solutions.
- Do not use a dry cloth to remove dust.
- Do not use a stiff bristle brush, which can scratch the surface.
- Do not wash with extremely hot water.
- Do not wash the motorcycle while the surface is hot and avoid washing the motorcycle in the hot sun. Minerals in the water may be difficult to remove once dried on the surface of the motorcycle.
- Do not allow spilled gasoline, motor oil or brake fluid to stand on the paint. Remove these substances immediately by rinsing with water. Use a soft cloth to absorb any remaining residue and dab dry.
- To remove bug remnants or road tar, use only products that are specifically designed for this purpose. Follow the product manufacturer's recommendations to prevent potential damage to the finish. Follow with a wash using the methods described in this section.
- Always brush away any ice or snow, do not scrape off.
- Chips or scratches should be repaired promptly to prevent corrosion.

# **Cleaning and Storage**

## **Polished Aluminum Care**

When a VICTORY motorcycle is new, the polished aluminum wheels, hand levers and shifter shine like chrome. Ultraviolet (UV) rays and oxidation will cause polished aluminum to grow dull, however, if it's not properly polished and protected.

VICTORY Awesome Metal Polish will clean, polish and protect these aluminum surfaces. This metal polish will restore that factory chrome-like shine and leave a protective coating that resists future oxidation for several months.

- 1. Shake the polish container well before using.
- 2. Apply the product with a terry cotton or microfiber cloth or pad.
- 3. Rub gently until the black begins to come to the surface or until shine begins to show through the haze.
- 4. Allow the product to haze.
- 5. Remove the haze with a terry cotton or microfiber cloth and buff to a long-lasting chrome-like shine.
- 6. Do not polish the spokes on painted spoked wheels.

## **Polishing Paint and Chrome**

There are two totally different styles of polishing or protecting your paint and chrome, standard polishing and premium polishing.

NOTICE: Do not polish matte finishes.

### Standard Method of Polishing Paint and Chrome

VICTORY Windshield, Paint and Chrome Polish is a unique formula designed to produce a glass-like shine on painted or clear-coated finishes and chrome surfaces. It provides long-lasting protection from oxidation, corrosion, UV rays and heat.

- Use it on chrome-plated accessories to prevent surface rust and create a glass-like shine.
- This product creates a high reflective index point, giving a deep, shiny finish without silicone.
- It repels water from windshields and keeps bugs from sticking.
- Use it to polish and fill light scratches on Plexiglas, Lexan, Acrylic and factory-coated windshields.
- 1. Shake the container well before using.
- 2. Apply with a VICTORY Plush Microfiber Towel in a circular motion or straight line to a clean surface. It can be applied in direct sunlight.
- 3. Rub the product until it is almost clear, then allow to dry to a haze before removal. The entire motorcycle can be treated before removing polish.
- 4. Use a clean, dry microfiber towel to wipe it off easily and dust-free.
- 5. For best results on a windshield, apply to a clean windshield. Once applied, rain water beads and blows off, enhancing rain visibility. The glass-like finish keeps bugs from sticking and permits their easy removal.

### Cleaning and Storage Polishing the Motorcycle Premium Polishing for Long-Lasting Protection

The premium method of polishing paint and chrome utilizes the latest in high-quality polymer technology that provides the longest-lasting protection available in the polish industry today. VICTORY Liquid Spray Wax for windshields, paint and chrome is formulated for polishing after washing and can be sprayed on wet or dry surfaces. Liquid Spray Wax quickly produces a durable, high-gloss shine with minimal effort. It contains NO ABRASIVES and is clear coat-safe. It contains NO PETROLEUM DISTILLATES or SILICONES.

- 1. Shake container well before use.
- 2. Begin by washing and rinsing the motorcycle.
- 3. Spray Liquid Spray Wax on a wet or dry bike, one section at a time. (For best results, the bike's surface should be cool.)
- 4. Wipe dry one section at a time with a VICTORY microfiber towel.
- 5. When finished drying, buff the entire motorcycle with a clean, dry microfiber towel for a clean and luxurious shine.
- Tip: Liquid Spray Wax can also be applied to clean and dry clear coats, windshields and chrome. Apply to one section at a time and wipe dry. When finished, use a second towel to buff to a luxurious, long-lasting shine.

## Leather, Rubber and Vinyl Care

**WARNING!** Never use a non-recommended protectant on seats, footrests, hand grips or tires. Slippery seats, footrests or hand grips can cause loss of control. Slippery tires can cause loss of traction and loss of control. Both situations could result in serious injury or death.

For the finest leather care, use VICTORY Leather, Vinyl & Rubber Conditioner, a unique, pleasantly scented formula of premium-quality polymers designed to restore luster and softness to vinyl, leather and rubber *without making them slippery*. This conditioner is available in the VICTORY Travel Kit.

This product is a true conditioner, not a coating. It does not close the pores of the surfaces but penetrates, nourishes and softens the material. It protects against ultra violet (UV) rays and cracking, repels water and prolongs the life and like-new appearance of the materials. Applied to rubber, this product creates a water-repellent, like-new appearance. Regular use increases soil resistance.

- 1. Apply the product on a clean dry surface using a VICTORY microfiber towel.
- 2. Rub the product into the material. Repeat the treatment if the surface is extremely dry.
- 3. Wipe dry with a clean, dry microfiber towel to remove excess product. Buff lightly with the towel for additional luster.

# **Cleaning and Storage**

If you will not operate the motorcycle for several months, such as during the winter, store the motorcycle to prevent damage to the fuel system and the battery and to protect components from corrosion or deterioration. During storage you might use products that are potentially hazardous; such as fuel stabilizer. When using any of these products, follow the instructions and warnings on the product packaging.

This section includes instructions for preparing the motorcycle for storage, maintaining it during storage and removing it from storage.

## **Storage Area Preparation**

Choose a dry, well-ventilated storage location, inside a garage or other structure if possible. The location should have a firm, flat surface and allow enough space for the motorcycle.

To best preserve tire condition:

- The storage area should have a relatively constant and moderate temperature.
- The storage surface should be free of oil and gasoline.
- The motorcycle should not be near a heat source or any type of electric motor.

## **Clean and Protect the Motorcycle**

Clean the motorcycle before placing it in storage. See page 86. Polish chromed and other metal surfaces. Apply protectant to exposed rubber, vinyl and plastic parts. *Do not apply rubber protectant to the tire tread surfaces*.

## Fuel Stabilizer

Using a mixture of fuel and the recommended amount of VICTORY Premium Carbon Clean Plus or other gasoline stabilizer, fill the fuel tank to a level just below the bottom of the fuel filler insert.

Ride the motorcycle or start and run the engine for 15 minutes in a well ventilated area to pass the stabilized fuel through entire fuel-injection system.

## **Engine Protection**

Change the engine oil. See page 55. Carbon deposits and combustion acids, normally suspended in the engine oil when in service, settle on internal engine components during storage. Settled deposits can cause engine damage or internal corrosion.

## **Cooling System**

Check the coolant level and maintain as recommended by adding coolant to the recovery bottle. See page 57.

## Tire Inflation

Verify that tire pressure is at specification. See page 73. Check and adjust tire pressure as needed during the storage period.

## Cleaning and Storage Battery Care

- 1. Remove the battery. See page 77.
- 2. Clean oxidation from battery posts and cable connectors with a wire brush. Wash the posts and cable connectors with a solution of one part baking soda to 16 parts water. Rinse with clean water and wipe dry. Apply a thin film of dielectric grease to the posts and cable connectors.
- 3. Clean the outside of the battery with a solution of mild detergent and warm water.
- 4. Store the battery in a dry area with a temperature of  $32^{\circ}$  to  $90^{\circ}$  F ( $0^{\circ}$  to  $32^{\circ}$  C).
- 5. While in storage, fully charge the battery monthly. If the motorcycle will not be used for a period of six months or longer, a maintenance charger should be connected to the battery. See page 78.

### Park and Cover the Motorcycle

- 1. Park the motorcycle in its storage location. Block the frame to take some of the weight off the front and rear wheels.
- **Tip:** Starting the motorcycle periodically during storage is NOT recommended. Water vapor is a byproduct of the combustion process, and corrosion may result unless the engine is operated long enough to bring the oil and exhaust system to normal operating temperature.
- 2. Secure a plastic bag over the (cooled) exhaust outlets to prevent moisture from entering the exhaust system.
- 3. Cover the motorcycle with a cover made from a durable, breathable material designed for storage. Covering the motorcycle helps protect it from dust and other airborne materials. The cover must be of a breathable material to prevent moisture from building up on the motorcycle which can cause oxidation of metal surfaces.

### **Protection from Rodents**

If the motorcycle will be stored in an area where mice are a concern (rural areas, barns, sheds, etc.), take extra measures to deter infestation. This may include placing a screen mesh over any intake or exhaust openings.

## **Cleaning and Storage**

## **Removal From Storage**

- 1. Verify that tire pressure is at specification.
- 2. Install a fully charged battery.
- 3. Perform an electrical inspection.
- 4. Check the oil level. If the motorcycle was stored in an area subject to wide swings in temperature and humidity (such as outdoors), change the engine oil before starting the engine. See page 55.
- **NOTICE:** During storage, temperature and humidity changes can cause condensation to form in the crankcase and mix with engine oil. Running the engine with oil that contains condensation can cause engine damage.
- 5. Inspect the storage area for signs of fluid leaks. Identify and perform service to any leaking components.
- 6. Remove any intake or exhaust mesh covers installed for rodent protection.
- 7. Make sure the fuel tank is at least 3/4 full.
- 8. Perform the pre-ride inspections. See page 36.
- 9. Perform a road test. See page 53.
- 10. Wash and polish the motorcycle. Wax, polish, or apply protectant to appropriate components.

### Warranties Victory Motorcycles Warranty Policy Limited Warranty

Victory Motorcycles Division, Polaris Industries Inc., 2100 Highway 55, Medina, Minnesota 55340 gives a TWO YEAR LIMITED WARRANTY on all components of your VICTORY motorcycle against defects in material or workmanship. This warranty covers parts and labor charges for repair or replacement of defective parts and begins on the date of purchase by the original retail purchaser. This warranty is transferable to another owner during the warranty period through an authorized VICTORY MOTORCYCLES dealer, but any such transfer will not extend the original term of the warranty. The duration of this warranty may vary by international region based upon local laws and regulations.

### Registration

At the time of sale, the Warranty Registration Form must be completed by your dealer and submitted to VICTORY MOTORCYCLES within ten days of purchase. Upon receipt of this registration, VICTORY MOTORCYCLES will record the registration for warranty. No verification of registration will be sent to the purchaser as the copy of the Warranty Registration Form will be your proof of warranty coverage. If you have not signed the original registration and received the customer copy, please contact your dealer immediately. NO WARRANTY COVERAGE WILL BE ALLOWED UNLESS YOUR MOTORCYCLE IS REGISTERED WITH VICTORY MOTORCYCLES. Initial dealer preparation and set-up of your motorcycle is very important in ensuring trouble-free operation. Purchasing a vehicle in the crate or without proper dealer set-up will void your warranty coverage.

### Warranty Coverage And Exclusions: Limitations Of Warranties And Remedies

This limited warranty excludes any failures that are not caused by a defect in material or workmanship. THIS WARRANTY DOES NOT COVER CLAIMS OF DEFECTIVE DESIGN. This warranty also does not cover acts of God, accidental damage, normal wear and tear, abuse or improper handling. This warranty also does not cover any motorcycle, component, or part that has been altered structurally, modified, neglected, improperly maintained or used for racing, competition or purposes other than for which it was designed.

This warranty excludes damages or failures resulting from: improper lubrication; improper engine timing; improper fuel; surface imperfections caused by external stress, heat, cold or contamination; operator error or abuse; improper component alignment, tension, adjustment or altitude compensation; snow, water, dirt or other foreign substance ingestion/contamination; improper maintenance; modified components; use of aftermarket or unapproved components, accessories, or attachments; unauthorized repairs; or repairs made after the warranty period expires or by an unauthorized repair center.

This warranty excludes damages or failures caused by abuse, accident, fire, or any other cause other than a defect in materials or workmanship and provides no coverage for consumable components, general wear items, or any parts exposed to friction surfaces, stresses, environmental conditions and/or contamination for which they were not designed or not intended, including but not limited to the following items:

- · Wheels and tires
- Suspension components
- Brake components
- Seat components
- Clutches and components
- Steering components
- Batteries
- Light bulbs/Sealed beam lamps
- Filters
- Lubricants
- Bushings

- · Finished and unfinished surfaces
- · Fuel injectors/Throttle body components
- Engine components
- Drive belts
- · Hydraulic components and fluids
- Circuit breakers/Fuses
- Electronic components
- Spark plugs
- Sealants
- Coolants
- Bearings

## Warranties

### Victory Motorcycles Warranty Policy Warranty Coverage And Exclusions: Limitations Of Warranties And Remedies

#### LUBRICANTS AND FLUIDS

- 1. Mixing oil brands or using non-recommended oil may cause engine damage. We recommend the use of VICTORY MOTORCYCLES engine oil.
- Damage or failure resulting from the use of non-recommended lubricants or fluids is not covered by this warranty.

This warranty provides no coverage for personal loss or expense, including mileage, transportation costs, hotels, meals, shipping or handling fees, motorcycle pick-up or delivery, replacement rentals, loss of vehicle use, loss of profits, or loss of vacation or personal time.

THE EXCLUSIVE REMEDY FOR BREACH OF THIS WARRANTY SHALL BE, AT VICTORY MOTORCYCLES' OPTION, REPAIR OR REPLACEMENT OF ANY DEFECTIVE MATERIALS, COMPONENTS, OR PRODUCTS. THE REMEDIES SET FORTH IN THIS WARRANTY ARE THE ONLY REMEDIES AVAILABLE TO ANY PERSON FOR BREACH OF THIS WARRANTY. VICTORY MOTORCYCLES SHALL HAVE NO LIABILITY TO ANY PERSON FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY DESCRIPTION, WHETHER ARISING OUT OF EXPRESS OR IMPLIED WARRANTY OR ANY OTHER CONTRACT, NEGLIGENCE, OR OTHER TORT OR OTHERWISE. THIS EXCLUSION OF CONSEQUENTIAL, INCIDENTAL, AND SPECIAL DAMAGES IS INDEPENDENT FROM AND SHALL SURVIVE ANY FINDING THAT THE EXCLUSIVE REMEDY FAILED OF ITS ESSENTIAL PURPOSE.

THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS EXCLUDED FROM THIS LIMITED WARRANTY. ALL OTHER IMPLIED WARRANTIES (INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY) ARE LIMITED IN DURATION TO THE ABOVE 24 MONTH WARRANTY PERIOD. VICTORY MOTORCYCLES DISCLAIMS ALL EXPRESS WARRANTIES NOT STATED IN THIS WARRANTY. SOME STATES DO NOT PERMIT THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR ALLOW LIMITATIONS ON THE DURATION OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU IF INCONSISTENT WITH CONTROLLING STATE LAW.

# Warranties

### How To Obtain Warranty Service

If your motorcycle requires warranty service, you must take it to a VICTORY MOTORCYCLES Servicing Dealer. When requesting warranty service you must present your copy of the Warranty Registration Form to the dealer. (THE COST OF TRANSPORTATION TO AND FROM THE DEALER IS YOUR RESPONSIBILITY.) VICTORY MOTORCYCLES suggests that you use your original selling dealer; however, you may use any VICTORY MOTORCYCLES Servicing Dealer to perform warranty service.

In the country where your motorcycle was purchased:

Warranty or Service Bulletin repairs must be done by an authorized VICTORY MOTORCYCLES dealer. If you move or are traveling within the country where your motorcycle was purchased, Warranty and Service Bulletin repairs may be requested from any authorized VICTORY MOTORCYCLES dealer.

Outside the country where your motorcycle was purchased:

If you are traveling temporarily outside the country where your motorcycle was purchased, you should take your motorcycle to an authorized VICTORY MOTORCYCLES dealer. You must show the dealer photo identification from the country of the selling dealer's authorized location as proof of residence. Upon residence verification, the servicing dealer will be authorized to perform the warranty repair.

#### If you move:

If you move to another country, be sure to contact VICTORY MOTORCYCLES Customer Assistance and the customs department of the destination country before you move. Vehicle importation rules vary considerably from country to country. You may be required to present documentation of your move to VICTORY MOTORCYCLES in order to continue your warranty coverage. You may also be required to obtain documentation from VICTORY MOTORCYCLES in order to register your motorcycle in your new country. You should warranty register your motorcycle at a local VICTORY MOTORCYCLES dealer in your new country immediately after you move to continue your warranty coverage and to ensure that you receive information and notices regarding your motorcycle.

#### If you purchase from a private party:

If you purchase a VICTORY motorcycle from a private party, to be kept and used outside of the country in which the motorcycle was originally purchased, all warranty coverage will be denied. You must nonetheless register your motorcycle under your name and address with a local VICTORY MOTORCYCLES dealer in your country to ensure that you receive safety information and notices regarding your motorcycle.

## Warranties

### **Exported Vehicles**

EXCEPT WHERE SPECIFICALLY REQUIRED BY LAW, THERE IS NO WARRANTY OR SERVICE BULLETIN COVERAGE ON THIS VEHICLE IF IT IS SOLD OUTSIDE THE COUNTRY OF THE SELLING DEALER'S AUTHORIZED LOCATION. This policy does not apply to vehicles that have received authorization for export from VICTORY MOTORCYCLES. Dealers may not give authorization for export. You should consult an authorized dealer to determine this vehicle's warranty or service coverage if you have any questions. This policy does not apply to vehicles registered to government officials or military personnel on assignment outside the country of the selling dealer's authorized location. This policy does not apply to Safety Bulletins.

#### Notice

If your vehicle is registered outside of the country where it was purchased and you have not followed the procedure set above, your vehicle will no longer be eligible for warranty or service bulletin coverage of any kind, other than safety bulletins. Vehicles registered to government officials or military personnel on assignment outside of the country where the vehicle was purchased will continue to be covered by the Limited Warranty.

Please work with your dealer to resolve any warranty issues. Should your dealer require any additional assistance, they will contact the appropriate person at VICTORY MOTORCYCLES.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or in different countries. If any of the above terms are void because of federal, state, local law, all other warranty terms will remain in effect.

For questions call VICTORY MOTORCYCLES Customer Assistance:

United States & Canada: 1-877-737-7172

French: 1-800-268-6334

## Warranties Motorcycle Noise Regulation

Tampering with noise control systems is prohibited. Federal law prohibits the following acts or causing thereof:

- The removal or rendering inoperative by any person other than for the purposes of maintenance, repair or replacement of any device or element of design incorporated into any new vehicle for the purpose of noise control prior to its sale or delivery to the ultimate purchaser or while it is in use, or
- The use of the vehicle after such device or element of design has been removed or rendered inoperative by any person.

Among those acts presumed to constitute tampering are:

- Removal or puncturing of the muffler, baffles, header pipes, or any other component which conducts exhaust gasses.
- Removal or puncturing of any part of the intake system.
- Lack of proper maintenance.
- Replacing any moving part of the vehicle, or parts of the exhaust system or intake system, with parts other than those specified by the manufacturer.

This product should be checked for repair or replacement if the motorcycle noise has increased significantly through use. Otherwise, the owner may become subject to penalties under state and local ordinances.

## **Noise Emission Warranty**

VICTORY MOTORCYCLES warrants that this exhaust system, at the time of sale, meets all applicable U.S. EPA Federal noise standards. This warranty extends to the first person who buys this exhaust system for purposes other than resale, and to all subsequent buyers.

Warranty claims should be directed to:

- · An authorized VICTORY MOTORCYCLES dealer, or
- VICTORY MOTORCYCLES, 2100 Highway 55, Medina, MN 55340

## **Emissions Control System Warranty**

Victory Motorcycle Division, Polaris Industries Inc. - Emission Control System Warranty Statement

### Your Warranty Rights and Obligations

The California Air Resources Board and VICTORY MOTORCYCLES (hereinafter VICTORY) are pleased to explain the emission control system warranty on your 2014 or later VICTORY motorcycle. In California, new motor vehicles must be designed, built and equipped to meet the state's stringent anti-smog standards. VICTORY must warrant the emission control system on your motorcycle for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your motorcycle. Your emission control system may include parts such as the fuel-injection system, the ignition system, catalytic converter and engine computer. Also included may be hoses, belts, connectors and other emission-related assemblies. Where a warrantable condition exists, VICTORY will repair your motorcycle at no cost to you, including diagnosis, parts and labor.

### Manufacturer's Warranty Coverage

Class III motorcycles (280 cc and larger): for a period of use of five (5) years or 30,000 kilometers (18,641 miles), whichever first occurs. If an emission-related part on your motorcycle is defective, the part will be repaired or replaced by VICTORY. This is your emission control system DEFECTS WARRANTY.

### **Owner's Warranty Responsibilities**

As the motorcycle owner, you are responsible for the performance of the required maintenance listed in your Rider's manual.

VICTORY recommends that you retain all receipts covering maintenance on your motorcycle, but VICTORY cannot deny warranty solely for the lack of receipts or for your failure to ensure the performance of all scheduled maintenance. For warranty repairs, you are responsible for presenting your motorcycle to a VICTORY dealer as soon as a problem exists. The warranty repairs should be completed in a reasonable amount of time, not to exceed 30 days. As the motorcycle owner, you should be aware that VICTORY may deny your warranty coverage if your motorcycle or part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

If you have any questions regarding your warranty rights and responsibilities, you should contact Victory Motorcycle Division, Polaris Industries Inc., 2100 Highway 55, Medina, Minnesota 55340 (Phone 877-737-7172) or the California Air Resources Board, P.O. Box 8001, 9528 Telstar Avenue, El Monte, CA 91731.

## **Emissions Control System Warranty**

VICTORY MOTORCYCLES - Limited Warranty on Emission Control System

VICTORY MOTORCYCLES (hereinafter VICTORY) warrants that each new 2014 and later VICTORY motorcycle that includes as standard equipment a headlight, taillight and stoplight, and is street legal:

- A. is designed, built and equipped so as to conform at the time of initial retail purchase with all applicable regulations of the United States Environmental Protection Agency, and the California Air Resources Board; and
- B. is free from defects in material and workmanship which cause such motorcycle to fail to conform with applicable regulations of the United States Environmental Protection Agency or the California Air Resources Board for a period of use, depending on the engine displacement, of 12,000 kilometers (7,456 miles) if the motorcycle's engine displacement is less than 170 cubic centimeters; of 18,000 kilometers (11,185 miles) if the motorcycle's engine displacement is equal or greater than 170 cubic centimeters but less than 280 cubic centimeters; or 30,000 kilometers (18,641 miles) if the motorcycle's engine displacement is 280 cubic centimeters or greater; or 5 (five) years from the date of initial retail delivery, whichever occurs first.

### Warranties Emissions Control System Warranty I. Coverage

Warranty defects shall be remedied during customary business hours at any authorized VICTORY dealer located within the United States of America in compliance with the Clean Air Act and applicable regulations of the United States Environmental Protection Agency and the California Air Resources Board. Any part or parts replaced under this warranty shall become the property of VICTORY.

In the State of California only, emission-related warranted parts are specifically defined by the state's Emission Warranty Parts List. These warranted parts are: carburetor and internal parts; intake manifold; fuel tank; fuel injection system; spark advance mechanism; crankcase breather; air cutoff valves; fuel tank cap for evaporative emission controlled vehicles; oil filler cap; pressure control valve; fuel/vapor separator; canister; igniters; breaker governors; ignition coils; ignition wires; ignition points; condensers, and spark plugs if failure occurs prior to the first scheduled replacement; and hoses, clamps, fittings and tubing used directly in these parts. Since emission-related parts may vary from model to model, certain models may not contain all of these parts and certain models may contain functionally equivalent parts.

In the State of California only, Emission Control System emergency repairs, as provided for in the California Administrative Code, may be performed by other than an authorized VICTORY dealer. An emergency situation occurs when an authorized VICTORY dealer is not reasonably available, a part is not available within 30 days or a repair is not complete within 30 days.

Any replacement part can be used in an emergency repair. VICTORY will reimburse the owner for expenses, including diagnosis, not to exceed VICTORY's suggested retail price for all warranted parts replaced and labor charges based on VICTORY's recommended time allowance for the warranty repair and the geographically appropriate hourly labor rate. The owner may be required to keep receipts and failed parts in order to receive compensation.

#### **II. Limitations**

This Emission Control System Warranty shall not cover any of the following:

- A. Repair or replacement required as a result of:
- Accident
- Misuse
- · Repairs improperly performed or replacements improperly installed
- Use of replacement parts or accessories not conforming to VICTORY specifications which adversely
  affect performance and/or
- Use in competitive racing or related events.
- B. Inspections, replacement of parts, and other services and adjustments necessary for required maintenance
- C. Any motorcycle on which the odometer mileage has been changed so that actual mileage cannot be readily determined.

### **Emissions Control System Warranty**

#### III. Limited Liability

A. The liability of VICTORY under this Emission Control System Warranty is limited solely to the remedying of defects in material or workmanship by an authorized VICTORY dealer at its place of business during customary business hours. This warranty does not cover inconvenience or loss of use of the motorcycle or transportation of the motorcycle to or from the VICTORY dealer. VICTORY SHALL NOT BE LIABLE FOR ANY OTHER EXPENSES, LOSS OR DAMAGE, WHETHER DIRECT, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY ARISING IN CONNECTION WITH THE SALE OR USE OF OR INABILITY TO USE THE VICTORY FOR ANY PURPOSE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

B. NO EXPRESS EMISSION CONTROL SYSTEM WARRANTY IS GIVEN BY VICTORY EXCEPT AS SPECIFICALLY SET FORTH HEREIN. ANY EMISSION CONTROL SYSTEM WARRANTY IMPLIED BY LAW, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS LIMITED TO THE EXPRESS EMISSION CONTROL SYSTEM WARRANTY TERMS STATED IN THIS WARRANTY. THE FOREGOING STATEMENTS OF WARRANTY ARE EXCLUSIVE AND IN LIEU OF ALL OTHER REMEDIES. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

C. No dealer is authorized to modify this VICTORY Limited Emission Control System Warranty.

#### IV. Legal Rights

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

#### V. This Warranty is in addition to the VICTORY Limited Motorcycle Warranty

#### VI. Additional Information

Any replacement part that is equivalent in performance and durability may be used in the performance of any maintenance or repairs. However, VICTORY is not liable for these parts. The owner is responsible for the performance of all required maintenance. Such maintenance may be performed at a service establishment or by any individual. The warranty period begins on the date the motorcycle is delivered to an ultimate purchaser.

VICTORY MOTORCYCLES 2100 Highway 55 Medina, MN 55340 ATTN: Warranty Department

# **Specifications**

| VICTORY OCTANE   |  |  |  |
|--|--|--|--|
| Dimensions (Dimensions and specifications may vary with features, options and accessories) |  |  |  |
| Overall Length   | 89.4 in. (2271 mm)   |  |  |
| Overall Width  | 35.4 in. (898 mm)  |  |  |
| Overall Height   | 42.2 in. (1071 mm)   |  |  |
| Seat Height  | Unladen 26.9 in. (683 mm)<br>Laden 25.9 in. (658 mm)   |  |  |
| Wheelbase  | 61.6 in. (1566 mm)   |  |  |
| Ground Clearance   | 5.5 in. (139 mm)   |  |  |
| Rake (frame)/Trail   | 29°/5.1 in. (129 mm)   |  |  |
| Weight   | ·  |  |  |
| Dry Weight (without fuel/fluids)   | 528 lbs. (240 kg)  |  |  |
| Wet Weight (with fuel/fluids)  | 548 lbs. (249 kg)  |  |  |
| Gross Vehicle Weight Rating (GVWR)   | 988 lbs. (449 kg)  |  |  |
| Gross Axle Weight Rating (GAWR)  | Front 337 lbs. (153 kg)<br>Rear 651 lbs. (296 kg)  |  |  |
| Maximum Load Capacity (riders, cargo, accessories)   | 440 lbs. (200 kg)  |  |  |
| Capacities   |  |  |  |
| Engine Oil   | 3-4 qts. (2.8-3.8 L) with filter at oil change<br>4.5 qts. (4.25 L) for new/rebuilt dry engine |  |  |
| Fuel   | 3.4 gal. (12.9 L)  |  |  |
| Fuel Reserve (fuel light on)   | .7 gal. (2.6 L)  |  |  |
| Engine   |  |  |  |
| Engine Type  | Liquid Cooled V-Twin (60 degrees)  |  |  |
| Displacement   | 72 cu. in. (1179 cc)   |  |  |
| Compression Ratio  | 10.8:1   |  |  |
| Valve Train  | DOHC, 4 Valves Per Cylinder, Graded Buckets  |  |  |
| Bore and Stroke  | 3.976" x 2.898" (101 mm x 73.6 mm)   |  |  |
| Fuel System/Throttle Body Bore   | Closed Loop Fuel Injection / 60 mm   |  |  |
| Exhaust System   | Split Dual Exhaust w/Crossover   |  |  |
| Rev Limit  | 8300 RPM   |  |  |
| Idle RPM   | 1200 +/- 50 RPM Fully Warm   |  |  |
| Lubrication System   | Semi-Dry Sump  |  |  |
| Spark Plug/Gap   | NGK MR7F/.030 inch (0.80 mm)   |  |  |
| Chassis  |  |  |  |
| Front Suspension Type/Travel   | Telescopic Fork/4.7 in. (120 mm)   |  |  |
| Front Fork Tube Diameter   | 41 mm  |  |  |
| Rear Suspension Type/Travel  | Dual Shocks/3 in. (76 mm)  |  |  |
| Swingarm   | Steel  |  |  |
| Front Brakes   | Single/298 mm Rotor/2-Piston Caliper   |  |  |
| Rear Brakes  | Single/298 mm Rotor/1-Piston Caliper   |  |  |

Tip: Dimensions and specifications may vary with features, options and accessories.

# **Specifications**

| VICTORY OCTANE<br>Drive System |   |  |
|--------------------------------|---|--|
|                                |   |  |
| Clutch Type                    | Wet, Multi-Plate                                    |  |
| Primary Reduction Ratio        | 1.674:1   |  |
| Transmission Type              | 6 Speed/Sliding Mesh/Foot Shift                     |  |
| 1st Gear Ratio                 | 2.769:1   |  |
| 2nd Gear Ratio                 | 1.882:1   |  |
| 3rd Gear Ratio                 | 1.500:1   |  |
| 4th Gear Ratio                 | 1.273:1   |  |
| 5th Gear Ratio                 | 1.125:1   |  |
| 6th Gear Ratio                 | 1.036:1   |  |
| Gear Shift Pattern             | 1 Down/5 Up   |  |
| Final Drive Type               | Belt Drive, 144-Tooth                               |  |
| Ratio                          | 2.536:1   |  |
| Overall Gear Ratio             |   |  |
| 1st Gear                       | 11.754:1  |  |
| 2nd Gear                       | 7.990:1   |  |
| 3rd Gear                       | 6.367:1   |  |
| 4th Gear                       | 5.402:1   |  |
| 5th Gear                       | 4.775:1   |  |
| 6th Gear                       | 4.396:1   |  |
| Wheels and Tires               |   |  |
| Front Wheel Size/Type          | 18 in. x 3.5 in. Cast                               |  |
| Rear Wheel Size/Type           | 17 in. x 4.5 in. Cast                               |  |
| Front Tire Type/Size           | Kenda Cruiser 130/70-18 63H                         |  |
| Rear Tire Type/Size            | Kenda Cruiser 160/70-17 76H                         |  |
|                                |   |  |
| Alternator                     | 460W @ 3000 RPM                                     |  |
| Battery                        | 12 volt, 12 amp/hour, 210 CCA, Maintenance Free AGM |  |
| Voltage Regulator              | 14.5 volts/35 amp                                   |  |
| Lamps (all bulbs are 12 volt)  |   |  |
| Headlight                      | Osram HB2 12V 60/55W LL                             |  |
| Tail/Brake Light               | Non-serviceable LED                                 |  |
| Turn Signal                    | Non-Serviceable LED                                 |  |
| License Plate                  | Non-Serviceable LED                                 |  |
| Speedometer                    | Non-Serviceable LED                                 |  |
| Indicator Lights               | Non-Serviceable LED                                 |  |
| Position Bulb (if equipped)    | W5W   |  |

Tip: Dimensions and specifications may vary with features, options and accessories.

## Specifications Fuel Specifications

For best performance, use only unleaded gasoline with a 91 pump octane minimum (R+M/2 Method). DO NOT USE E-85 GASOLINE OR GASOLINE CONTAINING METHANOL. Using E85 or gasoline/methanol blends can result in poor starting and driveability, engine damage and damage to critical fuel system components.

- Gasoline containing up to 15% Ethanol can be used.
- Gasoline containing up to 15% Methyl Tertiary Butyl Ether (MTBE) can be used.

In the event that the recommended premium unleaded gasoline is not available and low octane fuel must be used, fill the fuel tank only partially with unleaded regular gasoline, then fill the tank fully with premium unleaded gasoline as soon as possible.

## **Engine Oil Specifications**

We recommend the use of VICTORY Synthetic Blend 15W-60 Engine Oil or an equivalent for your motorcycle. This oil is formulated with synthetic-based oil and premium engine additive which have physical properties that meet API SM and ILSAC GF-4 specifications.

Do not blend oil additives with engine oil.

If oil must be added in an emergency and the recommended oil is not available, choose only a high-quality 15W-60 motorcycle oil. Change back to the recommended oil at the first opportunity.

**NOTICE:** Use of non-recommended lubricants can result in engine damage. Damage resulting from the use of non-recommended lubricants is not covered by warranty.

## Fork Oil

We recommend the use of VICTORY Fork Oil or an equivalent for your motorcycle.

## **Brake Fluid**

We recommend the use of VICTORY DOT 4 Brake Fluid or an equivalent for both brake master cylinders.

## Service Manual Availability

See your dealer to purchase a VICTORY Service Manual for your motorcycle.

# **Identification Numbers**

| Record important identification numbers below.       |  |  |
|--|--|--|
| Vehicle Identification Number<br>(VIN) (see page 21) |  |  |
| Engine Identification Number (see page 23)           |  |  |
| Ignition Key Number (see page 23)                    |  |  |

# **Maintenance Record**

| SERVICE PERFORMED | COMMENTS | MILES<br>(KM) | DATE | PERFORMED<br>BY |
|-------------------|----------|---------------|------|-----------------|
|                   |          |               |      |                 |
|                   |          |               |      |                 |
|                   |          |               |      |                 |
|                   |          |               |      |                 |
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|                   |          |               |      |                 |
|                   |          |               |      |                 |
|                   |          |               |      |                 |

# **Maintenance Record**

| SERVICE PERFORMED | COMMENTS | MILES<br>(KM) | DATE | PERFORMED<br>BY |
|-------------------|----------|---------------|------|-----------------|
|                   |          |               |      |                 |
|                   |          |               |      |                 |
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