

# THE NEW AMERICAN MOTORCYCLE

2002

V92TC

**V92TC DELUXE** 



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# 2002 OWNER'S MANUAL V92TC/V92TC Deluxe

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# **Foreword**

Thank you for choosing a Victory Motorcycle!

The *Owner's Manual* contains information on the following Victory Motorcycles:

V92TC Touring Cruiser

V92TC Deluxe Touring Cruiser

All photographs and illustrations used are generalizations, and your specific model may be slightly different than what is shown.

If you misplace or damage the *Owner's Manual*, you should purchase a replacement copy from an authorized Victory dealer. The manual should be considered part of the motorcycle, and remain with the motorcycle when it is sold.

If after reading the *Owner's Manual* you have questions about the operation or maintenance of the motorcycle, contact an authorized Victory dealer. To locate an authorized Victory dealer near you:

Call 1-800-POLARIS and provide the area code or zip code of your location.

Visit www.polarisindustries.com for a listing of authorized Victory dealers by state, zip code, or area code.

#### **Foreword**

Your authorized Victory dealer will resolve all issues regarding the motorcycle. If you are unsatisfied with the performance of your Victory dealer, contact Polaris Customer Service at 763-417-8650.

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

Have a safe and enjoyable ride.

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# Introduction

## **Read the Owner's Manual**

The Owner's Manual contains information that is essential to safe riding and proper maintenance of all 2002 Victory motorcycles. Anyone who uses the motorcycle (Operators and Passengers) must read the Owner's Manual before riding. Carefully read and understand the information found in the "Safety Precautions" section. Understand and follow the procedures in the Owner's Manual to keep your Victory motorcycle in top condition on the road or in storage. If possible, bring the manual with you when you ride. Failure to follow the safety precautions and operation and maintenance procedures may result in death or injury to you or your passenger, or damage to your motorcycle. Following the precautions and procedures in this manual will add to your enjoyment, and keep you riding safely.

#### Introduction

# Symbols and Terms Used in the Owner's Manual

The following signal words and symbols appear in the *Owner's Manual*. Your safety, and the safety of others are involved when these words and symbols are used. Become familiar with their meanings before reading the *Owner's Manual*.



The safety alert symbol indicates a potential for personal injury to you or others.



Indicates a potential hazard that could result in serious injury or death.

# Caution

Indicates a potential hazard that may result in minor personal injury or damage to the motorcycle.

# Caution

Indicates a situation that may result in damage to the motorcycle.

**Notice** 

Highlights important information that we don't want you to overlook.

# **MARNING**

Improper use of this motorcycle can result in serious injury or death. To minimize the risk of injury to you, your passenger, and others, read and understand the information contained in this section before operating the motorcycle. This section contains safety information specific to the Polaris Victory, as well as information about general motorcycle safety. Anyone who uses 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. Take the time to read and understand the following information to help minimize risk and maximize pleasure when operating the motorcycle. Even if you are an experienced motorcycle operator or passenger, read this section of the *Owner's Manual* before operating the motorcycle.

- Your ability to safely operate the motorcycle depends on your judgment and use of safe riding habits. 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 homepage at <a href="http://msf-usa.org">http://msf-usa.org</a>.
- Read and understand the rest of the *Owner's Manual*. The Manual contains safety information specific to individual components and operations throughout.

• Pay close attention to the motorcycle maintenance requirements in this Manual. For additional information or assistance regarding technical service specified in the *Owner's Manual* or required by mechanical circumstances, see the *Victory Service Manual* or your authorized Victory Dealer.

# Safe Riding

# **Design Characteristics**

The following design characteristics affect how you should ride the Victory motorcycle:

- The motorcycle is designed for on-road use with one rider and one passenger. Do not exceed the gross vehicle weight rating (see Specifications or the certification label on the steering head). Riding off-road, riding with more than one passenger, or carrying weight exceeding the maximum weight rating can make handling difficult, which could cause you to lose control of the motorcycle.
- In the first 500 miles, operate the motorcycle according to the break-in procedures described in "Engine Break-in" on page 57. Operating the motorcycle without following break-in procedures can result in serious engine damage.
- Some Victory motorcycles include saddlebags, auxiliary lights, a windshield, a passenger backrest, and a highway bar as standard equipment. Under certain conditions it may be necessary to reduce the operating speed of motorcycles with this equipment.

# Safe Riding Practices

Follow these general safe riding practices:

- Before you ride, make sure you can operate the motorcycle safely and properly by following the recommendations given at the beginning of the Safety Precautions section on page 3.
- Each time you ride, make the checks described in the Pre-Operation Check section. Operating the motorcycle without completing the pre-operation check can cause damage to the motorcycle or result in an accident.
- Until you are thoroughly familiar with the Victory motorcycle and all of its controls, practice riding where there is little or no traffic. Practice riding at moderate speed on varying road surfaces and under varying 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.
- Do not ride when you are fatigued or under the influence of alcohol, prescription drugs, over-the-counter drugs, or any other drugs. Fatigue, alcohol, and drugs can cause drowsiness, loss of coordination, loss of balance, and can affect your awareness and judgment.
- If your motorcycle operates abnormally, correct the problem immediately (see the *Victory Service Manual* or contact your authorized Victory Dealer). If you continue to operate the motorcycle in this condition, you are likely to aggravate the initial problem, increase the cost of repairs, and threaten your safety.

# **Safe Riding Practices (continued)**

- The most common cause of accidents involving a motorcycle and an automobile is the automobile driver's failure to see the motorcycle. Ride defensively, as if you are invisible to other motorists, even in broad daylight. Ride where you are visible to other motorists and observe their behavior carefully, as they may not see or be aware of you.
- Be especially cautious at an intersection, as this is the most likely place for an accident. Remember that you are more vulnerable to injury on a motorcycle than in an enclosed vehicle.
- To prevent loss of control while operating the motorcycle, keep your hands on the handlebars and your feet on the footrests.
- 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 lessen the motorcycle's stability and increase the possibility of your losing control of the motorcycle.
- Do not move or operate the motorcycle with the steering locked, as steering is severely restricted and you could drop or lose control of the motorcycle.

#### • If in doubt, reduce your speed when:

- The road has potholes or is otherwise rough or uneven.
- The road has sand, dirt, gravel or other loose substances on it.
- The road is wet, icy, or oily.
- The road contains painted surfaces, manhole covers, metal grating, railway crossings, or other slippery surfaces.

# Safe Riding Practices (continued)

- If in doubt, reduce your speed when:
  - The weather is windy, raining, or otherwise causing slippery or rapidly changing conditions.
  - The 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 produces 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.
  - Consider road conditions before applying the brakes; when the road is wet, rough, or contains loose or other slippery substances, apply the brakes gradually.
  - Bring the motorcycle to the upright position before applying the brakes, and avoid applying the brakes in a corner if at all possible. When the motorcycle is leaning through a corner, the amount of traction available for braking is reduced, increasing the possibility of the tires skidding when you apply the brakes.
  - Improper braking may cause you to lose control of the motorcycle or may not slow you in time to avoid a collision.
- As you approach a curve, choose a speed and a lean angle that allow 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 you to lose control of the motorcycle.

# **Safe Riding Practices (continued)**

- Ground clearance is reduced when you lean the motorcycle. Do not allow components to contact the road surface when leaning the motorcycle in a curve, as this could cause you to lose control of the motorcycle.
- Retract the sidestand fully before riding. If the sidestand is not fully retracted while you are riding, it could contact the road surface and cause you to lose control of the motorcycle.
- Do not tow a trailer. Towing a trailer can make the motorcycle hard to handle and cause you to lose control of the motorcycle.

# **Carrying a Passenger**

To carry a passenger safely, do the following:

- 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 is not holding on properly or who cannot reach the passenger footrests can shift their body erratically, which can make the motorcycle hard to handle and cause you to lose control of the motorcycle.
- If necessary, adjust the rear shock absorber preload according to the instructions in "Rear Shock Absorber Adjustment" page 82. Improper preload adjustment can make your motorcycle hard to handle and cause you to lose control of the motorcycle.
- Before you ride, be sure your passenger knows safe riding procedures. Discuss any safety information
  unfamiliar to your passenger. A passenger who is unaware of safe riding procedures may distract you or
  make movements that make the motorcycle hard to handle and cause you to lose control of the
  motorcycle.

# Carrying a Passenger (continued)

Adjust your riding style to compensate for the differences in handling, acceleration, and braking caused
by the additional weight of the passenger. Failure to do so can cause you to lose control of the
motorcycle.

# **Protective Apparel**

To decrease the risk of injury and increase riding comfort, wear the following:

- Wear a Department of Transportation (DOT) or SNELL approved helmet. Some state laws require that you wear an approved helmet. In accidents involving motorcycles, head injuries are the leading cause of motorcyclist fatalities, and statistics prove that an approved helmet is the most effective protection in preventing or reducing head injuries.
- Wear eye protection. Some state laws require that you wear eye protection. Eye protection reduces the chance that your vision could be impaired by wind or by airborne particles and objects.
- You and your passenger should wear bright or light colored and/or reflective clothing to improve your visibility to other motorists. A motorist's failure to see or recognize a motorcycle is the leading cause of automobile/motorcycle accidents.
- Wear gloves and a jacket to prevent or reduce abrasions, lacerations, or burns that you can suffer if you fall.

# **Protective Apparel (continued)**

- Wear heavy boots and pants to prevent or reduce abrasions, lacerations, or burns that you can suffer if you fall. Wear boots with low heels because boots with high heels can catch on pedals or footrests. The combination of your boots and pants should completely cover your legs, ankles, and feet, protecting you from engine and exhaust system heat. The engine and exhaust system get hot soon after the engine is started, and stay hot for about half an hour after the engine is turned off.
- Do not wear loose, flowing clothing or long boot laces, as they can catch on components like handlebars, levers, or footrests, or get caught in the wheels, causing you to lose control of the motorcycle.

# **Gross Vehicle Weight Rating (GVWR)**

Gross vehicle weight is the total weight of the motorcycle, the operator, and the passenger.

- The weight of the motorcycle includes: the motorcycle and all its fluids; any accessories and their contents; and any additional cargo on the motorcycle.
- The weight of the operator or passenger includes: body weight, all apparel, and objects in or on apparel.

Do not exceed the motorcycle's gross vehicle weight rating. Exceeding the weight rating can reduce stability and handling and could cause you to lose control of the motorcycle.

For the gross vehicle weight rating of your specific Victory model, see Specifications or the certification label on the steering head.

# Example 1: V92TC Touring Cruiser with no cargo Gross Vehicle Weight Rating 1210 lbs (549 kg)

Item	Weight
Touring Cruiser - with full capacity of all fluids	759 lbs (344 kg)
Operator - with recommended riding apparel	220 lbs (100 kg)
Passenger - with recommended riding apparel	155 lbs (70 kg)
Total Weight	1134 lbs (514 kg)

# Example 2: V92TC Deluxe Touring Cruiser with cargo Gross Vehicle Weight Rating 1210 lbs (549 kg)

Item	Weight
Deluxe Touring Cruiser - with full capacity of all fluids	770 lbs (349 kg)
Cargo - saddlebags at capacity	30 lbs (13.6 kg)
Operator - with recommended riding apparel	220 lbs (100 kg)
Passenger - with recommended riding apparel	155 lbs (70 kg)
Total Weight	1175 lbs (533 kg)

# Loading

Use the following guidelines when attaching cargo or accessories to the motorcycle. Where applicable, these guidelines refer to accessories and their contents.

- Keep cargo and accessory weight to a minimum, and keep it as close to the motorcycle as possible, to minimize a change in the motorcycle's center of gravity. Changing the center of gravity can lessen stability and handling and could cause you to lose control of the motorcycle.
- Distribute weight evenly on both sides of the motorcycle. Maintain even weight distribution by checking accessories and cargo to make sure they are securely attached to the motorcycle before riding and whenever you take a break while riding. Uneven weight distribution, or accessories or cargo that shift suddenly while you are riding, can make the motorcycle hard to handle and cause you to lose control of the motorcycle.
- Do not attach large or heavy cargo such as sleeping bags, duffle bags, or tents to the handlebars, front fork area, or front fender. If you add accessories to the handlebars or the front fork area, they must be as small and as lightweight as possible. Cargo or accessories placed in any of these areas can cause instability due to improper weight distribution or aerodynamic changes, and can cause you to lose control of the motorcycle. Such items can also block airflow to the engine and could cause overheating that can damage the engine.
- Do not exceed the maximum cargo weight limit of any accessory (see accessory instructions and labels), and do not attach cargo to an accessory not designed for that purpose, as either of these could result in an accessory failure that could cause you to lose control of the motorcycle.
- Except for highway footrests, do not attach anything else to the highway bar.

# **Saddlebags**

Saddlebags are included with some Victory models. Use the following guidelines when operating a motorcycle with saddlebags installed.

- Never ride a motorcycle with saddlebags above 80 mph (120 km/h). Depending on load and weather conditions, the maximum safe operating speed may be less than 80 mph (120 km/h). Saddlebags can make the motorcycle unstable due to the lifting or buffeting effects of wind and can cause you to lose control of the motorcycle.
- Distribute weight evenly in each of the saddlebags.
- Do not exceed the maximum cargo weight limit of the saddlebags.

Lockable hard saddlebags = 10 lbs. (4.5 kg) each

• Do not exceed the motorcycle's gross vehicle weight rating. Exceeding the weight rating can reduce stability and handling and could cause you to lose control of the motorcycle.

# **Parking**

For complete parking procedures, see "Parking" page 67.

When leaving the motorcycle unattended, turn the engine off, engage the steering lock, and take the ignition key with you.

The engine and exhaust system are very hot after the engine has been running. Therefore, park the motorcycle where people are not likely to touch the engine or exhaust system or place combustible materials in close proximity to these hot areas.

Do not park near a flammable source such as a kerosene heater or an open flame, as the motorcycle could catch fire.

Park the motorcycle on a firm level surface if possible. Sloped or soft surfaces may not support the motorcycle when it is parked, and it may fall over. If you must park on a sloped or soft surface, reduce the chances of the motorcycle falling over by following the procedures described in "Parking" page 67.

# **Transporting**

If you must transport the motorcycle, do the following:

- Use a truck or trailer. Do not tow the motorcycle with another vehicle, as towing will impair the motorcycle's steering and handling, which can cause you to lose control of the motorcycle.
- Position and restrain the motorcycle so it is kept upright on the truck or trailer, as gasoline may leak out of the fuel tank if the motorcycle leans over. Gasoline is a fire hazard and it can also damage the motorcycle's finish.

## **Product Modifications**

Modifying the motorcycle by removing any equipment or adding equipment not approved by Victory may void your warranty. Such modifications may also make the motorcycle unsafe to ride and could severely injure you or others or damage the motorcycle. Some modifications may be illegal in some states. If in doubt, contact your authorized Victory Dealer.

# **Selecting and Installing Accessories**

Because Victory cannot test and make specific recommendations concerning every accessory or combination of accessories sold, you are responsible for determining that your motorcycle can be safely operated with accessories you install or additional weight you carry. Use the following guidelines when choosing and mounting accessories:

- Do not install accessories that impair the stability, handling, or operation of the motorcycle. 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 make the motorcycle unstable due to the lifting or buffeting effects of wind and can cause you to lose control of the motorcycle.

# Selecting and Installing Accessories (continued)

- Do not install electrical accessories that exceed the capacity of the motorcycle's electrical system. An electrical failure could result and cause hazardous loss of engine power or lights, or damage to the electrical system.
- If you want to add a windshield, backrest, or luggage rack, choose one designed and approved by Victory specifically for your model, and follow the instructions for proper installation and use. An improperly designed or installed windshield, backrest, or luggage rack can reduce stability, causing you to lose control of the motorcycle.

## **Gasoline and Exhaust Gases**

For complete fueling procedures, see "Fueling and Fill Height" page 59.

Gasoline is highly flammable and can be explosive in certain conditions. Observe the following precautions when you refuel or service the fuel system:

- Turn off the engine.
- Use a well-ventilated area.
- Remove the fuel cap slowly.
- Do not spill gasoline on the engine or the exhaust system. Immediately wipe, or rinse with water, gasoline spilled on any part of the motorcycle or the surrounding area.
- Do not smoke while fueling.
- Do not fuel in an area where there are sparks or open flame.

# **Gasoline and Exhaust Gases (continued)**

Gasoline and gasoline vapors are poisonous and can cause severe injury. Do not swallow gasoline, inhale gasoline vapors, or spill gasoline on yourself or your clothes. If you swallow gasoline, inhale more than a few breaths of gasoline vapor, or get gasoline in your eyes, see a physician immediately. If you spill gasoline on your skin, wash it off immediately with soap and water. If you spill gasoline on your clothes, change your clothes immediately.

Exhaust gases contain carbon monoxide, a colorless, odorless gas that can cause unconsciousness or severe injury. Observe the following precautions to avoid the effects of exhaust gases:

- Do not breathe exhaust gases.
- Do not start or run the engine in a closed area.

#### **Maintenance**

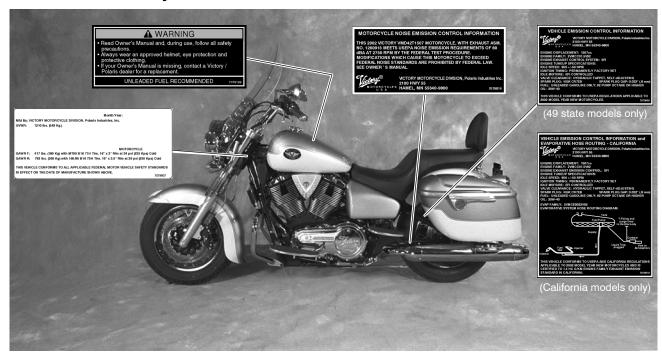
Maintain the motorcycle according to the following requirements:

- Before you ride each time, complete a pre-operation check as described in the Pre-Operation Check section. Operating the motorcycle without completing the pre-operation check can cause damage to the motorcycle or result in an accident.
- Perform periodic maintenance according to the intervals specified in "Periodic Maintenance Intervals" beginning on page 70. Operating the motorcycle without performing periodic maintenance can damage the motorcycle or injure you or others.
- Maintain proper tire inflation pressure and tread condition, and proper wheel and tire balance. Inspect tires regularly and replace them if they are worn or damaged. Use only an approved replacement tire and

see the *Victory Service Manual* or your authorized Victory Dealer for tire replacement. Operating the motorcycle with improper tire pressure or tread condition, or improper wheel or tire balance, can make the motorcycle hard to handle and cause you to lose control of the motorcycle.

- Check proper steering head bearing adjustment. Regularly inspect the rear shock absorber and the front forks. Check for fork oil or shock absorber fluid leaks. Operating the motorcycle with a loose, worn, or damaged steering system or front or rear suspension system can make the motorcycle hard to handle and cause you to lose control of the motorcycle. To repair steering or suspension system wear or damage, see the *Victory Service Manual* or contact your authorized Victory Dealer.
- Keep the motorcycle clean. In addition to extending the service life and the original appearance of the motorcycle, a complete and thorough cleaning can reveal items in need of repair. For complete cleaning procedures, see "Cleaning" page 115.
- Keep equipment required by federal, state, and local laws in place and in good working condition. Your license plate must be clean, clearly visible in all conditions, and installed in a position specified by law.
- Each fastener used in the motorcycle meets our quality specifications for strength, finish, and type. If you need a replacement fastener, use only a genuine Victory fastener, tightened to the proper torque. A fastener that does not meet original specifications could fail and damage the motorcycle or injure you or others.

# **Location of Safety and Vehicle Information Labels**



(Deluxe Touring Cruiser Left Side Shown)

# Location of Safety and Vehicle Information Labels (continued)



(Deluxe Touring Cruiser Left Side Shown)

# **Location of Safety and Vehicle Information Labels (continued)**



(Deluxe Touring Cruiser Right Side Shown)

# **Reporting Safety Defects**

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

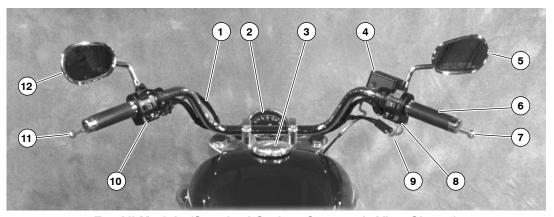
If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer, or Polaris Industries.

To contact NHTSA, or obtain other information about motor vehicle safety, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393, visit the NHTSA website at www.nhtsa.dot.gov, or write to:

#### **NHTSA**

US Department of Transportation 400 7th Street Southwest Washington, DC 20590

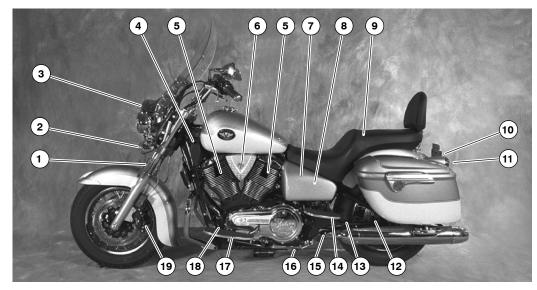
Use the following information to identify and locate the major components of the Victory motorcycle. Information on vehicle and engine identification numbers, model number, and the ignition key number is also provided.



For All Models (Standard Cruiser Operator's View Shown)

- 1. Clutch Cable page 90
- 2. Instrument Cluster page 31
- 3. Fuel Cap page 41
- 4. Front Brake Fluid Reservoir page 93
- 5. Right Mirror
- 6. Throttle Control Grip page 40

- 7. Front Brake Lever 40
- 8. Right Handlebar Controls page 39
- 9. Throttle Cables page 89
- 10.Left Handlebar Controls page 38
- 11. Clutch Lever page 39
- 12.Left Mirror



### (Deluxe Touring Cruiser Left Side Shown)

- 1. Front Forks page 85
- 2. Front Turn Signal/Running Light page 38
- 3. Headlamp page 38
- 4. Air Filter page 76
- 5. Spark Plug (2) page 101
- 6. Ignition Switch page 30

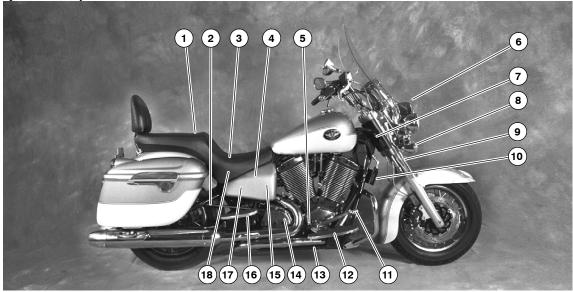
- 7. Side Cover page 43
- 8. Battery (under side cover) page 105
- 9. Seat (one piece) page 104
- 10.Rear Turn Signal page 38
- 11 Taillight page 46
- 12. Rear Brake Caliper page 97
- 13.Horn page 38

- 14. Passenger's Foot Rest
- 15.Oil Filter page 74
- 16. Sidestand page 43
- 17. Operator's Foot Rest
- 18.Gear Shift Lever page 41
- 19. Front Brake Caliper page 97



### (Deluxe Touring Cruiser Left Side Shown)

- 1. Auxiliary Lights page 110
- 2. Auxiliary Lights Switch page 42
- 3. Lockable Hard Saddlebags page 42
- 4. Exhaust Muffler (2) page 103



## (Deluxe Touring Cruiser Right Side Shown)

- 1. Seat Strap
- 2. Drive Belt (under guard) page 77
- Rear Shock Absorber (under seat) page 82
- 4. Side Cover page 43
- 5. Engine Oil Fill Cap/Dipstick page 75
- 6. Headlamp page 38
- 7. Steering Lock page 29

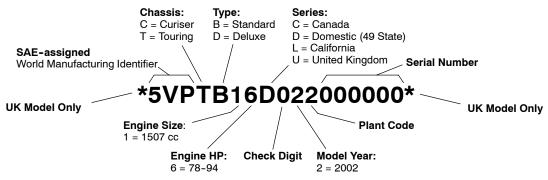
- 8. Front Turn Signal/Running Light page 38
- 9. Front Fork page 85
- 10.Oil Cooler
- 11. Rear Brake Pedal page 41
- 12. Operator's Foot Rest
- 13. Engine Oil Drail Plug (under engine) page 74

- 14.Drive Sprocket (under cover) page 77
- 15.Rear Brake Fluid Reservoir (under side cover) page 96
- 16. Passenger's Foot Rest
- 17.Fuses (under side cover) page 108
- 18. Evaporative Canister Calif. Models (under seat) page 87

### **Vehicle Identification Number**

The vehicle identification number (VIN) is stamped into the front of the steering head and also appears on the certification label.

You will need the vehicle identification number to title, register, license, or insure the motorcycle, or to order replacement parts.



# **Engine Identification Number**

The engine identification number is a combination of the engine model and serial numbers. The engine identification number is located on top of the crankcase behind the rear cylinder. The engine serial number is stamped into the rear of the crankcase just to the right of the oil filter.

You may need the engine identification number to title, register, license, or insure the motorcycle, or to order replacement parts.

# **Ignition Key Number**

The ignition key identification number is stamped into the shaft of each key.

With the ignition key number and proof of ownership, an authorized Victory dealer can assist you in obtaining a replacement key (have your dealer reference Voice of Victory April/May 2001).

**Notice** For easy reference, record all vehicle numbers in the space provided on page 140.

# **Ignition Key**

The ignition key operates the steering lock, the ignition switch, and the saddlebag lock on models equipped with hard saddlebags.

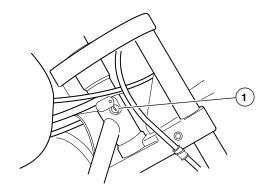
# **Steering Lock**

The motorcycle is equipped with a steering lock to deter others from moving or using the motorcycle. The steering lock is on the right side of the steering head.

To lock the steering, turn the handlebars fully to the left, open the lock cover, insert the key and turn it clockwise. To unlock the steering, move the handlebars to the left or right slightly and turn the key counterclockwise. Always remove the key after locking or unlocking the steering.

# **WARNING**

Moving or operating the motorcycle with the steering locked severely restricts steering and can cause you to drop or lose control of the motorcycle.



Steering Lock

# **Ignition Switch**

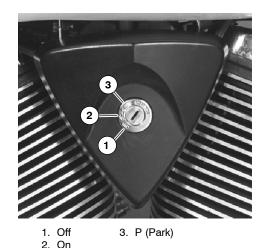
The ignition switch energizes the ignition, the lighting system, and all electrical switches and buttons.

### **Off Position**

In the **Off** position, all electrical circuits are inactive and the ignition key can be removed. Turn the ignition switch to the **Off** position and remove the ignition key when leaving the motorcycle unattended.

#### On Position

In the **On** position, all electrical circuits are energized and the ignition key cannot be removed. The headlamp, running lights, taillight, and instrument lights illuminate. With the engine stop/run switch set to the **Run** position (see page 39) you can start the engine. You can also activate the emergency flashers, turn signals, and all other electrical features.





Before starting the engine, read the instructions for starting the engine on page 60.

## P (Park) Position

In the Park position, the taillight and running lights illuminate, the emergency flashers can be activated, and the ignition key can be removed. You must push the ignition key into the switch while selecting the Park position.

### **Instrument Cluster**

The instrument cluster includes the speedometer, the tachometer, the indicator lights, and the multi-function display.

## **Speedometer**

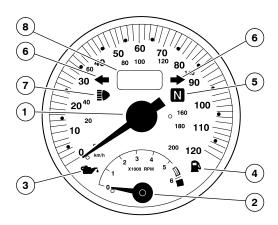
The speedometer reports current motorcycle speed in miles per hour or kilometers per hour.

#### **Tachometer**

The tachometer reports current engine speed in revolutions per minute (RPM). A red line on the gauge indicates maximum safe engine RPM.

# **⚠** WARNING

Do not operate the engine over 5600 RPM. Excessive RPM could cause engine damage or failure that could result in you losing control of the motorcycle.



- 1. Speedometer
- 2. Tachometer
- 3. Low Oil Pressure Indicator
- 4. Low Fuel Indicator
- 5. Neutral Indicator
- 6. Turn Signal Indicators
- 7. Headlamp High Beam Indicator
- 8. Multi-Function Display (MFD)

# **Indicator Lights**

### Low Oil Pressure Indicator

illuminates when engine oil pressure drops below safe operating pressure. If this indicator illuminates while the engine is running, turn the engine off immediately and check the oil level. Add oil if necessary. If the oil level is correct and the indicator remains illuminated after the engine is restarted, turn the engine off immediately.

The low oil pressure indicator also illuminates when the ignition switch is in the **On** position and the engine is not running. This demonstrates that the indicator is functioning properly.

### Low Fuel Indicator

illuminates when approximately 0.8 gallons (3.03 liters) of fuel remains.

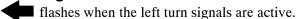
The low fuel indicator also illuminates momentarily when the ignition switch is in the **On** position and the engine is not running. This demonstrates that the indicator is functioning properly.

#### **Neutral Indicator**

illuminates when the transmission is in neutral.

The neutral indicator also illuminates momentarily when the ignition switch is in the **On** position and the engine is not running. This demonstrates that the indicator is functioning properly.

## **Turn Signal Indicators**



flashes when the right turn signals are active.

Both turn signal indicators flash when the emergency flashers are active.

If a turn signal bulb has failed, or if there is a short circuit in the turn signal system, the turn signal indicator flashes at more than twice the normal rate.

### **Headlamp High Beam Indicator**



illuminates when the headlamp switch is set to high beam (see page 38).

# **Multi-Function Display (MFD)**

Use the MFD to view the odometer, the trip odometer, the clock, the fuel gauge, the voltmeter, the instrument cluster light dimmer, the headlamp high beam indicator light dimmer, and the check engine indicator. The MFD operates only when the ignition switch is in the **On** position. To select the desired function, press the MFD **Mode** button (page 40). To adjust a particular function, press the MFD **Set** button (page 39).

### Odometer

The odometer is the default mode of the MFD after starting the engine. The odometer shows total miles traveled.

To toggle the odometer and trip odometer reading between miles and kilometers, and the fuel gauge reading between gallons and liters, the ignition switch must be in the **On** position with the MFD in odometer mode. Press and hold the MFD **Set** button for 3 seconds.

To change to the next MFD function, press the MFD **Mode** button.

## **Trip Odometer**

"TRIP" appears as part of the display when in trip odometer mode. The trip odometer shows total miles traveled since the trip odometer was reset. You can use the trip odometer to calculate your miles per gallon and estimate the number of miles you can travel on a tank of fuel.

To reset the trip odometer, the ignition switch must be in the **On** position with the MFD in trip odometer mode. Press and hold the MFD **Set** button for 3 seconds.

To change to the next MFD function, press the MFD **Mode** button.

#### Clock

A clock icon appears as part of the display when in clock mode. When the clock is operating normally, the colon between the hour and minutes flashes.

To set the clock, the ignition switch must be in the **On** position with the MFD in clock mode.

- 1. Press and hold the MFD **Set** button for 3 seconds when in clock mode. The hour digits should flash.
- 2. Press the MFD **Set** button to select the desired hour.
- 3. Press the MFD **Mode** button to accept the new hour setting. The ten-minute digit should flash.
- 4. Press the MFD **Set** button to select the desired ten-minute.
- 5. Press the MFD **Mode** button to accept the new ten-minute setting. The minute digit should flash.
- 6. Press the MFD **Set** button to select the desired minute.
- 7. Press the MFD **Mode** button to accept the new minute setting. The clock should return to normal operation, and the colon should flash.

To change to the next MFD function, press the MFD **Mode** button.

Notice The multi-function display (MFD) clock will not function if the battery voltage drops below 11.5 volts. The clock will reset to 12:00 if the battery is disconnected.

### **Instrument Cluster Light Dimmer**

"DIM" appears as part of the display when in instrument cluster light dimmer mode. To change the intensity of the instrument cluster light, press the MFD **Set** button to select from six (6) intensity levels. The engine does not need to be running to change the light intensity.

To change to the next MFD function, press the MFD **Mode** button.

### **Headlamp High Beam Indicator Light Dimmer**

"HB" appears as part of the display when in headlamp high beam indicator light dimmer mode. To change the intensity of the headlamp high beam indicator light, press the MFD **Set** button to select from four (4) intensity levels. The engine does not need to be running to change the indicator intensity.

To change to the next MFD function, press the MFD **Mode** button.

## **Fuel Gauge**

The fuel gauge shows the amount of fuel in the fuel tank. The fuel gauge range is from LOW (0.8 gallons/3.03 liters) to FULL (5 gallons/18.9 liters).

To change to the next MFD function, press the MFD **Mode** button.

#### Voltmeter

When the engine is not running, "BAT" and the battery voltage appear.

When the engine is running, "ALT" and the charging system voltage appear.

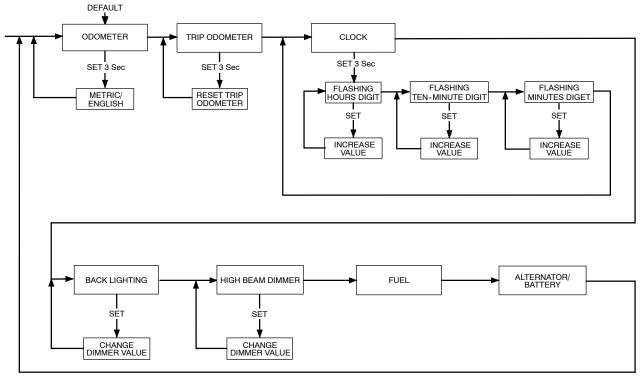
To return to the odometer function, press the MFD **Mode** button.

## **Check Engine Indicator**

The check engine indicator will flash "CH ENG" any time the the ignition switch is in the **On** position and the Engine Control Module sensors report abnormal sensor or engine operation. The check engine indicator will continue to flash as long as the fault condition exists.



If the check engine indicator flashes repeatedly while the engine is running, a serious engine problem may exist. Contact an authorized Victory dealer as soon as possible.



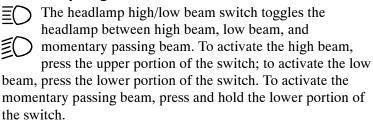
**Multi-Function Display (MFD) Functions** 

## **Left Side Handlebar Controls**

#### Fast Idle I ever

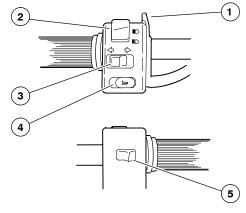
The fast idle lever increases the engine idle speed when starting a cold engine (see page 60). To engage the fast idle lever, move the lever toward the rear of the motorcycle until the lever stops.

## Headlamp High/Low Beam Switch



## Turn Signal Switch

signals. To activate the left turn signals, push the switch to the



- 1. Fast Idle Lever
- 2. Headlamp High/Low Beam Switch
- Turn Signal Switch
- Horn Button
- 5. Multi-Function Display Set Button

left; to activate the right turn signals, push the switch to the right. To cancel the turn signals, push the switch in, toward the handlebar.

The turn signals cancel automatically at speeds above 6 miles per hour (9.6 kilometers per hour).

### **Horn Button**

To sound the horn, press the horn button.

#### Clutch Lever

To disengage the clutch, pull the clutch lever toward the handlebar. To engage the clutch, gradually release the clutch lever. For smooth clutch operation, pull the lever quickly and release it gradually.

Notice The motorcycle is equipped with a clutch interlock switch that prevents the engine from starting when the transmission is in gear and the clutch is engaged (see page 62).

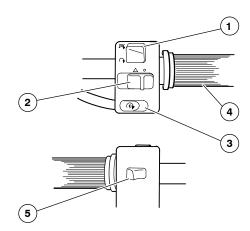
## Multi-Function Display (MFD) Set Button

Use the MFD **Set** button in conjunction with the MFD **Mode** button to control the features of the multi-function display (see page 33).

# Right Side Handlebar Controls Engine Stop/Run Switch

The engine stop/run switch completes or interrupts the ignition, starter, and fuel pump circuits. To complete the circuits, allowing the engine to start and run, press the lower portion of the engine stop/run switch (Run position). To interrupt the circuits, press the upper portion of the switch (**Stop** position). The engine should not start or run when the switch is in the **Stop** position.

Use the engine stop/run switch to turn the engine off under normal or emergency conditions.



- 1. Engine Stop/Run Switch
- 2. Emergency Flasher Switch
- 3. Starter Button
- 4. Throttle Control Grip
- 5. Multi-Function Display Mode Button

## **Emergency Flasher Switch**



The emergency flasher switch activates and cancels the emergency flashers. When the emergency flashers are active, all of the turn signals flash. To activate the emergency flashers, slide the switch to the left; to cancel the flashers, slide the switch to the right.

#### **Starter Button**



To engage the engine starter motor, press the right side of the starter button. The starter button works only when the engine stop/run switch is in the **Run** position, and the transmission is in Neutral or the clutch is disengaged.

For complete engine starting procedures, see "Starting the Engine," page 60.

#### **Front Brake Lever**

To apply the front brake, pull the front brake lever toward the handlebar.

For braking procedures in various riding conditions, see "Braking," page 66.

## **Throttle Control Grip**

The throttle control grip controls the engine speed. To increase engine speed, twist the throttle control grip toward you; to decrease engine speed, twist the grip away from you. When you release the grip, it returns to the idle speed position.

## Multi-Function Display (MFD) Mode Button

Use the MFD **Mode** button in conjunction with the MFD **Set** button to control the features of the multi-function display (see page 33).

### **Gear Shift Pedal**

The gear shift pedal is located on the left side of the motorcycle. To shift to a lower gear, press down on the front of the gear shift pedal. To shift to a higher gear, press down on the rear, or lift up on the front, of the gear shift pedal.

For proper gear shifting procedure, see "Shifting Gears," page 62.

### **Rear Brake Pedal**

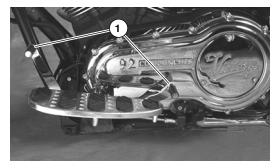
The rear brake pedal is on the right side of the motorcycle. To engage the rear brake, press down on the rear brake pedal.

For braking procedures in various riding conditions, see "Braking," page 66.

# **Fuel Cap**

The fuel cap is right-hand threaded (turn clockwise to tighten, turn counterclockwise to loosen). When tightening the fuel cap, continue turning the cap until a clicking sound is heard, indicating proper tightness. Continue turning the fuel cap clockwise to align the Victory logo if desired.

For fueling procedure, see "Fueling and Fill Height," page 59.



1. Gear Shift Pedal



1. Rear Brake Pedal

# **Auxiliary Light Switch**

A toggle switch located underneath the left side of the upper triple clamp controls both auxiliary lights. The auxiliary lights operate only when the headlight is set to Low Beam. The auxiliary lights extinguish automatically when the headlight is set to High Beam. You can operate the motorcycle with the auxiliary light switch on or off.

# **Saddlebags**

Saddlebags are included on some Victory models. For loading and operating speed information regarding models with saddlebags, see "Safety Precautions," page 13.

Lockable hard saddlebags are included with some Victory models. Use the Ignition Key to lock or unlock the saddlebag. Each saddlebag has a net for small cargo. The load carrying capacity for lockable hard saddlebags is 10 lbs. (4.5 kg) each.

To open the saddlebag, depress the lock button to release the cover latch and open the cover outward, away from the motorcycle.

To close the saddlebag, press down firmly near the lock button until the cover latch engages.



1. Lockable Hard Saddlebags

### **Side Covers**

The motorcycle is equipped with 2 removable side covers. Remove the left side cover to access the battery, and remove the right side cover to access the fuses and the rear brake fluid reservoir.

To remove either side cover, remove the operator's seat (see page 104) and pull the lower corners of the side cover out and away from the motorcycle. Lift the side cover up and off the motorcycle. Reverse this procedure to install the side cover.

### **Sidestand**

The sidestand is located on the left side of the motorcycle.

# **⚠** WARNING

Correctly retract the sidestand before operating the motorcycle. The sidestand could come into contact with the ground and cause you to lose control of the motorcycle.

To extend the sidestand, swing it out from the end until it is fully extended. Lean the motorcycle toward the sidestand until the sidestand firmly supports the motorcycle.

To retract the sidestand, lean the motorcycle away from the sidestand until the motorcycle is fully upright. Swing the sidestand back into its fully retracted position.

Notes:

# **Pre-Operation Check**

To keep your Victory motorcycle in good working order, make the checks described in this section before each ride. This is especially important before you make a long trip or when you remove the motorcycle from storage. You must be familiar with the Victory motorcycle instruments and controls to make these checks. You can find additional service information in the *Maintenance* section of the *Owner's Manual*, in the *Victory Service Manual*, or from an authorized Victory dealer.

During the pre-operation check you might use products that are potentially hazardous, such as oil or brake fluid. When using any of these products, follow the instructions and warnings on the product packaging.



Failure to perform these checks before you ride may result in serious injury or damage. Adjust components designed for normal wear adjustment, and repair or replace worn or damaged components, as necessary.

# **Check Electrical Equipment**

To perform a pre-operation check on the electrical equipment, set the ignition switch to the **On** position. Set the ignition switch to the **Off** position once you have completed the electrical equipment portion of the pre-operation check.

### **Instrument Cluster**

The low fuel indicator and the neutral indicator should illuminate momentarily. The multi-function display (MFD) should be in odometer mode. The low oil pressure indicator should illuminate. If the transmission is in neutral, the neutral indicator should remain illuminated.

### **Pre-Operation Check**

Pressing the MFD Mode button should advance the MFD through the various functions (see page 33).

## Headlamp

Check the headlamp to see that it is on. Set the headlamp switch to the high beam position. The headlamp brightness should increase and the headlamp high beam indicator in the instrument cluster should illuminate.

## **Taillight**

With the ignition switch in the **On** position, the taillight and the license plate light should illuminate. Apply slight pressure to the front brake lever; taillight brightness should increase. Apply slight pressure to the rear brake pedal; taillight brightness should increase.

## **Turn Signals/Running Lights**

The two amber front running lights should illuminate (US and Canadian models only). Move the turn signal switch to the left. The front and rear left turn signals, and the left turn signal indicator in the instrument cluster, should flash. Push the switch in toward the housing. The turn signals and turn signal indicator should stop flashing. Repeat the procedure for the right turn signals.

## **Emergency Flashers**

Slide the emergency flasher switch to the left. All four turn signals, and both turn signal indicators in the instrument cluster; should flash. Slide the switch to the right. The turn signals and turn signal indicators should stop flashing.

#### Horn

Press the horn button. The horn should sound loudly.

### **Engine Stop/Run Switch**

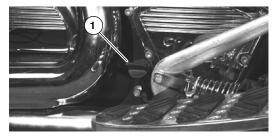
Be sure the engine stop/run switch stops the engine, or prevents the engine from starting when set to the **Stop** position.

**Notice** If you regularly use this switch to shut off the engine, you are already checking its operation each time you use the motorcycle.

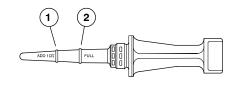
# **Check Engine Oil Level**

A dipstick attached to the oil fill cap registers the engine oil level.

- 1. With the transmission in neutral, start and run the engine for several minutes.
- 2. Shut the engine off and wait for 3-5 minutes.
- 3. Straddle the motorcycle on level ground and bring it to a vertical position. Remove the oil fill cap and wipe the dipstick clean. Reinstall the dipstick and turn the cap clockwise until it seats.
- 4. Remove the dipstick again and note the oil level.
- 5. If necessary, add or remove oil to bring the level into the area on the dipstick above the ADD mark and below the FULL mark (see "Engine Oil Specifications," page 139). Repeat steps 1-2 each time you adjust the oil level.



1. Oil Fill Cap/Dipstick



1. ADD Mark

2. FULL Mark

### **Pre-Operation Check**

# **⚠** WARNING

Do not operate the motorcycle with the oil level above the FULL mark or below the ADD mark. Operating the engine with too much or too little oil can cause serious engine damage or engine seizure, resulting in you losing control of the motorcycle.

### **Fuel**

#### **Check Fuel Level**

- 1. Straddle the motorcycle on level ground and bring it to a vertical position.
- 2. Turn the ignition switch to the **On** position and press the multi-function display (MFD) **Mode** button until the fuel gauge appears in the MFD.
- 3. Note the fuel level.
- 4. Estimate your next fuel stop and plan accordingly.

## **Check Fuel Hose, Rail, and Connections**

Inspect the fuel hoses for cracks or damage. Inspect the hose connection at the fuel tank and at the fuel rail for dampness or stains from leaking or dried fuel.

# **Check Evaporative Emission Control System (California model only)**

Visually inspect all evaporative emission control system hoses and connections. Make sure all connections are tight. Also, inspect the evaporative canister to make sure it has not been damaged.

### **Tires**

### **Check Tire Pressure**

Normal riding warms the tires and increases the tire air pressure. For an accurate reading, check the tire pressure before you ride. Adjust tire pressure as required for the total weight of your intended load.

### **Tire Pressure Table**

V92TC Touring Cruiser		
	Up to 200 lbs (91 kg) load	200-449 lbs (91-204 kg) load
FRONT: Dunlop 491 Elite II - MT90 B16 71H	34 psi (235 kpa)	40 psi (275 kpa)
REAR: Dunlop D417 - 160/80 B16 75H	36 psi (250 kpa)	41 psi (280 kpa)
V92TC Deluxe Touring Cruiser (inner tubes required)		
	Up to 200 lbs (91 kg) load	200-441 lbs (91-200 kg) load
FRONT: Dunlop 491 Elite II - MT90 B16 71H	34 psi (235 kpa)	40 psi (275 kpa)
REAR: Dunlop D417 - 160/80 B16 75H	36 psi (250 kpa)	41 psi (280 kpa)

### **Pre-Operation Check**

#### **Check Tire Condition**

Inspect the tire sidewalls, road contact surface, and tread base for cuts, punctures, and cracking. Replace damaged tires immediately (see your *Victory Service Manual* or an authorized Victory dealer).

## **Check Tread Depth**

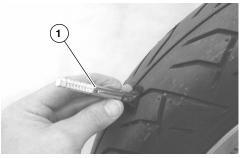
Raised areas at the base of the tread, known as wear bars; act as easily visible tread depth indicators. When the road contact surface has worn to the top of the wear bars, replace the tire.

For more precise measurement, use a depth gauge or an accurate ruler to measure the depth of the center tire tread. Replace the tire if the tread depth is less than 1/16 inch (1.6 mm).

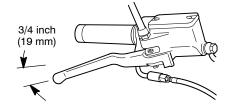
## **Brakes**

### **Check Front Brake Lever Movement**

Squeeze the front brake lever toward the handlebar and release it. It should move freely and smoothly and should return to its rest position quickly when released. You should feel a firm resistance in the lever within the first 3/4-inch (19 mm) of lever travel.



1. Tread Depth Gauge



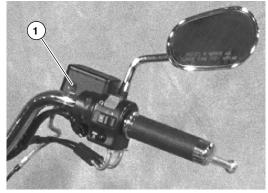
#### Check Front Brake Fluid Level

- 1. To check the front brake fluid level, rest the motorcycle on the sidestand and on level ground. Turn the handlebars until the front brake fluid reservoir is level.
- 2. View the brake fluid through the sight glass. The fluid should be clear and at a level in or above the sight glass. Add brake fluid if necessary (see page 93).

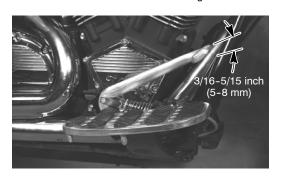
## **Check Rear Brake Pedal Freeplay and Movement**

Rear brake pedal freeplay - the amount of brake pedal movement from the rest position to the point of contacting the master cylinder - should be 3/16-5/16 inch (5-8 mm). Adjust pedal freeplay as necessary (see page 95).

Press and release the rear brake pedal. It should move freely and smoothly and should return to its rest position quickly when you release it. You should feel a firm resistance in the pedal within the first 3/4 inch (19 mm) of pedal travel.



1. Front Brake Fluid Reservoir Sight Glass



### **Pre-Operation Check**

#### Check Rear Brake Fluid Level

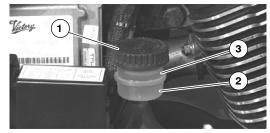
- 1. To check the rear brake fluid level, remove the right side cover. Straddle the motorcycle and bring it to a vertical position.
- 2. View the brake fluid through the reservoir. The fluid should be clear and at a level between MIN and MAX. Add brake fluid if necessary (see page 96).

#### **Check Hoses and 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.

### **Check Brake Pads**

Look into the front brake caliper(s) from underneath, and into the rear brake caliper from behind, you should see at least 1/16 inch (1.6 mm) of friction material on each of the brake pads. If in doubt, measure remaining friction material. Replace brake pads having less than the specified amount of friction material at their thinnest point.



- 1. Rear Brake Fluid Reservoir
- 2. MIN Fluid Level
- 3. MAX Fluid Lever







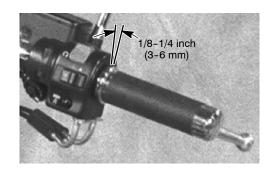
Rear Brake Pad Friction Material

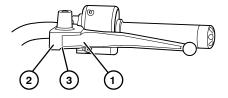
# **Check Throttle Control Grip and Cables**

- Rotate the throttle control grip. It should rotate smoothly from its rest position to its completely open position and back again. It should return to its rest position quickly when released.
- 2. Throttle freeplay the amount of throttle control grip movement from the rest position to the point of cable resistance should be 1/8-1/4 inch (3-6 mm).
- 3. Adjust throttle cable freeplay if necessary (see page 89).

### **Check Clutch**

- 1. Squeeze the clutch lever toward the handlebar and release it. It should move freely and smoothly and should return to its rest position quickly when released.
- 2. Clutch freeplay the amount of clutch lever movement from the rest position to the point of cable resistance should be between 0.04-0.08 inch (1-2 mm). Measure the thickness of the gap between the clutch lever and the lever housing.
- 3. Adjust clutch lever freeplay if necessary (see page 91).





- 1. Clutch Lever
- 2. Lever Housing
- Gap

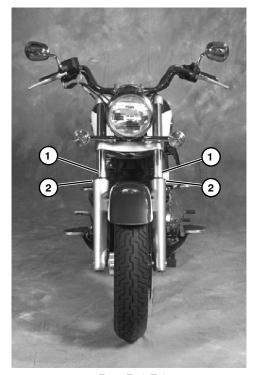
### **Pre-Operation Check**

### **Check Fast Idle Lever**

- 1. Move the fast idle lever. It should move smoothly from its rest position to its completely open position and back again
- 2. Fast idle lever freeplay the amount of lever movement from the rest position to the point of cable resistance should be 1/8-1/4 inch (3-6 mm).
- 3. Adjust fast idle lever freeplay if necessary (see page 88).

# **Check Front Suspension**

- 1. To check the front suspension, straddle the motorcycle and bring it to a vertical position.
- 2. Apply the front brake and push down hard on the handlebars several times. The front suspension should operate smoothly and quietly.
- 3. Place the motorcycle on the sidestand and inspect the front forks. Make sure there is no fork oil present on the fork tube or around the fork seal.



1. Front Fork Tube

2. Fork Seal

# **Check Steering**

Straddle the motorcycle and bring it to a vertical position. Turn the handlebars from stop to stop. The action should be smooth but not loose or interfered with by wires, hoses, or control cables.

# **Check Rear Suspension**

Proper rear suspension adjustment is essential for a safe and comfortable ride. Check the rear shock absorber movement and preload to insure the motorcycle has the correct amount of suspension travel and ground clearance (see page 82).



Inadequate ground clearance could allow components to come into contact with the ground, causing you to lose control of the motorcycle.

### **Check Drive Belt**

The drive belt should fit tightly.

Replace the drive belt if it is cracked or has broken teeth or frayed edges (consult your *Victory Service Manual* or an authorized Victory dealer).

### **Pre-Operation Check**

### **Check Sidestand**

Straddle the motorcycle and bring it to a vertical position. Move the sidestand to its stored (up) position, then to its fully extended (down) position, and back again. It should move smoothly and quietly. When the sidestand is in its stored position, the sidestand return spring should hold the sidestand tightly against the motorcycle.

Check the condition of the sidestand rubber pad, and make sure it is firmly attached to the sidestand.



- Sidestand
- 2. Rubber Pad

### **Check Fasteners**

Visually inspect the entire motorcycle chassis and engine for loose, damaged, or missing fasteners. Tighten loose fasteners to the proper torque (see the *Specifications* section of the *Owner's Manual*, or the *Victory Service Manual*). Replace stripped, damaged, or broken fasteners with genuine Victory fasteners of equal size and strength immediately.

# **Operation**

This section describes how to operate the Victory motorcycle for best performance and longevity, including:

- Engine Break-in Period
- Fueling And Fill Height
- Starting The Engine
- Shifting Gears
- Accelerating
- Braking
- Stopping The Engine
- Parking

For safe operation and riding, see Safety Precautions, beginning on page 3.

# **Engine Break-in Period**

During the first 500 miles (800 kilometers), critical engine parts require special wear-in procedures so they seat and mate properly. Read, understand, and use the following rules for operating the motorcycle during the first 500 miles (800 kilometers) to ensure your engine's long-term performance and durability.

### Caution

Do not put unnecessary load on the engine during the first 500 miles (800 kilometers). Avoid prolonged full throttle operation, or any condition that creates excessive engine heat.

### Operation

## **Engine Break-in Period (continued)**

- 0-90 miles (0-145 kilometers) Do not operate the motorcycle for extended periods of time at throttle positions above 1/3 throttle. Vary the engine speed of the motorcycle. Do not operate the motorcycle for extended periods of time at any one set throttle position.
- 90-300 miles (145-483 kilometers) Do not operate the motorcycle for extended periods of time at throttle positions above 1/2 throttle. Vary the engine speed of the motorcycle. Do not operate the motorcycle for extended periods of time at any one set throttle position.
- 300-500 miles (483-800 kilometers) Do not operate the motorcycle for extended periods of time at throttle positions above 3/4 throttle.
- At 500 miles (800 kilometers) Perform initial maintenance as described in the Maintenance section of the *Owner's Manual*. This maintenance is one of the most important services your motorcycle requires and should be performed by an authorized Victory dealer. Initial maintenance includes servicing all adjustments, tightening all fasteners, and changing engine oil. Performing this maintenance at the required mileage point helps the engine maintain top performance for its entire service life.

## Caution

If engine trouble should occur during the engine break-in period, consult the *Maintenance* section of the *Owner's Manual*, the *Victory Service Manual*, or an authorized Victory dealer immediately.

## **Fueling and Fill Height**

Fuel the motorcycle with the sidestand down and on level ground. Use only the recommended fuel (see "Fuel Specifications" page 139). Fill the fuel tank to a level just below the bottom of the fuel filler insert.

# **M** WARNING

- Do not allow gasoline to come into contact with a hot engine or exhaust system. This could cause a fire. Immediately wipe, or rinse with water, gasoline spilled on any part of the motorcycle or the surrounding area.
- Do not fill the fuel tank above the fuel filler insert. Overfilling the fuel tank may cause fuel to overflow when it expands.
- Fuel may leak from an improperly seated or tightened fuel cap. Tighten the fuel cap until you hear one or more distinct clicks. Be certain the fuel cap is properly seated and tightened before starting the engine.

### Caution

Fuel can damage painted surfaces and plastic parts. Wipe spilled fuel immediately from the motorcycle using a clean, dry, soft cloth.

**Notice** If the motorcycle has run completely out of fuel, cycle the fuel pump 4–5 times to prime the system before starting the engine. To cycle the fuel pump, set the ignition switch to the **On** position and toggle the engine stop/run switch from the **Stop** position to the **Run** position 4–5 times.

### Operation

# Starting the Engine

The Victory motorcycle has a starter interlock system. The engine can be started only when the transmission is in neutral, or when the transmission is in gear and the clutch is disengaged.

Follow these steps to start the motorcycle:

- 1. Unlock the steering lock (see page 29).
- 2. Perform the Pre-Operation Check (beginning on page 45). If you are carrying cargo, inspect cargo restraints for tightness.
- 3. Insert the ignition key into the ignition switch and turn the switch to the **On** position (see "Ignition Switch" page 30).
- 4. Mount the motorcycle and bring it to an upright position. Engage the front brake and place the sidestand in the stored (up) position. If the neutral indicator is not illuminated, shift the transmission to neutral (see "Shifting Gears" page 62).
- 5. If the engine is cold (has not been run in a few hours) move the fast idle lever toward the rear of the motorcycle until the lever stops.
- 6. Set the engine stop/run switch to the **Run** position.
  - You should hear the fuel pump momentarily as it pressurizes the fuel system.

## Starting the Engine (continued)

7. Leaving the throttle closed, press and hold the starter button until the engine starts.

If the engine does not start within a few seconds after you press the starter button, release the button and wait several seconds. Then press and hold the starter button again. Hold the starter button for as short a time as possible to minimize battery drain, and do not push the starter button for more than 10 seconds at any one time.

If either the check engine indicator or the low oil pressure indicator does not go out after the engine starts, stop the engine. See either "Check Engine Indicator" page 36 or "Low Oil Pressure Indicator" page 32.

8. As soon as the engine warms enough to idle smoothly, move the fast idle lever toward the front of the motorcycle until the lever stops.

## Caution

Allow the engine to idle for about 1 minute after a cold start, or 30 seconds after a warm start. Do not rev the engine or put the transmission in gear immediately after starting the engine. This allows the oil to reach all areas requiring lubrication before the engine is put under load.

### Operation

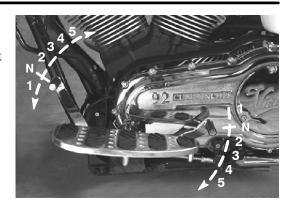
# **Shifting Gears**

# **WARNING**

The clutch must be fully disengaged (clutch lever pulled completely in toward the handlebars) before you attempt to shift gears. Forced shifting (shifting without the clutch disengaged) may damage the engine, transmission, and drive train, causing you to lose control of the motorcycle.

The motorcycle is equipped with a five-speed transmission. The gear pattern is shown in the illustration to the right. The motorcycle has a heel-toe shift pedal which allows you to shift to a higher gear by depressing the rear of the pedal with your heel or by lifting the front of the pedal with your toe. To shift to a lower gear, depress the front of the pedal with your toe.

Neutral position is between first and second gear. The transmission is in neutral when the motorcycle moves forward or backward freely while the clutch is engaged. With the Ignition switch set to the **On** position, the neutral indicator illuminates when the transmission is in neutral.



## **Shifting Gears (continued)**

To engage first gear, start the engine (see "Starting the Engine" page 60). With the engine at idle speed, engage the front brake (squeeze the brake lever) and disengage the clutch (squeeze the clutch lever). Push the shift pedal down until you feel it stop in first gear. Disengage the front brake (release the brake lever). Simultaneously moving both the clutch lever and the throttle control grip with a smooth, gentle motion, gradually engage the clutch (release the clutch lever) and open the throttle (roll the throttle control grip toward you). As the clutch begins to engage, the motorcycle begins to move forward.

To shift to the next higher gear, accelerate smoothly and easily to the recommended shift point (see "Recommended Shift Points" page 64). With a quick motion, simultaneously close the throttle completely and disengage the clutch. Raise the shift pedal with your toe, or depress it with your heel, until you feel it stop at the next gear. Simultaneously moving both the clutch lever and the throttle with a smooth, gentle motion, gradually release the clutch lever and open the throttle.

Within the recommended speed ranges (see "Recommended Shift Points" page 64), you can downshift (shift to a lower gear) to slow the motorcycle or to increase the available power. You may want to downshift when climbing a hill or passing. Downshifting also helps to decrease your speed when combined with closing the throttle.

To shift to a lower gear, simultaneously pull in the clutch lever and close the throttle. Shift into the next lower gear by depressing the shift pedal with your toe. Simultaneously release the clutch lever and open the throttle.

### Operation

## **Shifting Gears (continued)**

# **⚠** WARNING

- Downshifting at a speed in excess of the recommended downshift point may severely damage the transmission or cause the rear wheel to lose traction. It could also result in engine damage from running at excessive rpm. Reduce speed before downshifting and do not downshift at a speed above that in the table of recommended shift points.
- Downshifting abruptly on wet, rough, loose, or slippery surfaces can cause the motorcycle to skid. When downshifting while passing over such surfaces, release the clutch lever very gradually.
- Downshifting in a curve may cause the rear wheel to lose traction. Downshift before you enter a curve.

#### **Recommended Shift Points**

The following table shows the appropriate speed at which to shift up and shift down to each gear.

Upshift (Acceleration) Gear Change	Upshift Speed	Downshift (Deceleration) Gear Change	Downshift Speed
1st to 2nd	15 mph (24 km/h)	5th to 4th	35 mph (56 km/h)
2nd to 3rd	25 mph (40 km/h)	4th to 3rd	25 mph (40 km/h)
3rd to 4th	35 mph (56 km/h)	3rd to 2nd	15 mph (24 km/h)
4th to 5th	45 mph (72 km/h)	2nd to 1st	10 mph (16 km/h)

# **Accelerating**

To accelerate, open the throttle (roll the throttle control grip toward you). For even acceleration, open the throttle with a smooth, continuous motion. When you reach the recommended speed for upshifting, shift up one gear according to the instructions in "Shifting Gears" page 62. The more quickly you open the throttle, the more quickly the motorcycle accelerates.

# **MARNING**

- Abrupt acceleration can cause your body to shift suddenly toward the rear of the motorcycle.
- Accelerating abruptly on wet, rough, loose, or slippery surfaces may cause the rear wheel to lose traction. When accelerating on such surfaces, whether you are at a stop or already in motion, open the throttle gradually.

### Operation

# **Braking**

To slow the motorcycle with the brakes, close the throttle and apply the front and rear brakes evenly. As the motorcycle slows, either disengage the clutch or downshift each time your speed reaches a downshift point. Applying slightly more front brake than rear brake generally gives you the best braking performance. Do not apply the brakes so forcefully or quickly that either wheel stops rotating. Leave sufficient distance so you can apply the brakes gradually if you need to stop.

## **WARNING**

- Do not apply either brake so strongly that the wheel stops rotating. This may cause you to lose control of the motorcycle.
- Braking hard on wet, rough, loose, or slippery surfaces can cause the motorcycle to skid, and you could lose control of the motorcycle. Apply the brakes lightly on such surfaces.
- Braking while in a curve can cause you to lose control of the motorcycle. Bring the motorcycle to the upright position before applying the brakes, and avoid applying the brakes in a corner if at all possible.

## **Stopping the Engine**

Before stopping the engine, bring the motorcycle to a complete stop either in neutral or with the clutch disengaged. Once the motorcycle is at a complete stop, if it is not already in neutral, shift into neutral. To stop the engine, set the engine stop/run switch to the **Stop** position, turn the ignition switch to the **Off** position, and remove the ignition key.



- Stopping the engine while the motorcycle is in motion and the transmission is engaged may damage the engine and the transmission or cause the rear wheel to lose traction. In either case, you may lose control of the motorcycle.
- If the motorcycle is in motion and the engine stops on its own, guide the motorcycle to a safe location off the road and away from traffic.

## **Parking**

When parking the motorcycle, choose a flat, firm surface. Bring the motorcycle to a complete stop and, with the transmission in neutral, stop the engine. Fully extend the sidestand, turn the handlebars to the left, and lean the motorcycle to the left until the sidestand firmly supports the motorcycle. Lock the steering lock, and take the key with you.



Moving or operating the motorcycle with the forks locked severely restricts steering and can cause you to drop or lose control of the motorcycle.

### Operation

## Parking (continued)

If you must park on a slope, point the motorcycle toward the top of the slope. Put the transmission in gear and park the motorcycle so that it is stable when it rests on the sidestand.

If you must park on a soft surface, use a sidestand plate 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. Many motorcyclists carry a sidestand plate.

## Caution

Asphalt pavement can become soft in hot weather. The sidestand can sink into soft asphalt until the motorcycle falls over. When parking on asphalt in hot weather, use a sidestand footrest under the foot of the sidestand to prevent the sidestand from sinking into the asphalt.

## **⚠** WARNING

A hot engine or hot exhaust pipes can be hazardous. The engine and exhaust pipes are hot for some time after the engine is stopped. Touching the engine or exhaust pipes while hot can cause serious burns. Allowing flammable materials to contact a hot engine or exhaust pipes may cause a fire. Park the motorcycle where people will not touch the engine or exhaust pipes and where it is not near flammable materials.

This section includes information for maintaining your Victory motorcycle. It also includes recommended periodic maintenance intervals. "Periodic maintenance" means performing the regular service required to keep your motorcycle in top working condition. Regular service increases motorcycle durability, safety, and dependability, and provides greater riding pleasure.

Also see Safety Precautions, "Maintenance," page 17.

Before you begin any maintenance procedure, read the instructions for the entire procedure in this section of the *Owner's Manual*. Choose a flat, firm surface for servicing the motorcycle. Make sure you have the time, tools, and expertise to complete a procedure properly.

During maintenance you might use products that are potentially hazardous; such as oil or brake fluid. When using any of these products, follow the instructions and warnings on the product packaging.

For information on major repairs, see the *Victory Service Manual*. Major repairs typically require the technical skills and specially designed tools available from your authorized Victory dealer.

Your Victory dealer has the equipment and training required to properly perform emission system maintenance and repairs.

### **Initial Maintenance**

Perform the initial maintenance after you've ridden your new motorcycle 500 miles (800 kilometers). This maintenance is one of the most important services your motorcycle requires and should be performed by an authorized Victory dealer. Initial maintenance includes servicing all adjustments, tightening all fasteners, and changing engine oil. Performing this maintenance at the required mileage point helps the engine maintain top performance for its entire service life.

### **Periodic Maintenance Intervals**

Use the following table to determine how often you should perform maintenance on various components. For additional information on maintenance operations for each component listed in the table, refer to the instructions in this section.

# **A** Caution

If you regularly ride your motorcycle at high or low speed for extended periods of time, or in dusty or other adverse conditions, perform the required maintenance more frequently to help keep your motorcycle in safe operating condition.

**Notice** Use the space provided at the back of this manual to record information about maintenance performed on your motorcycle.

#### **Periodic Maintenance Interval Table**

	Ι						1101														
								DOME	IER F	EADIN	IG in M	ILES (	KILOM	FLEERS	s)						
Component (see operation codes below)	500 (800)	2,500 (4,000)	5000 (8,000)	7,500 (12,000)	10,000 (16,000)	12.500 (20,000)	15,000 (24,000)	17,500 (28,000)	20,000 (32,000)	22,500 (36,000)	25,000 (40,000)	27,500 (44,000)	30,000 (48,000)	32,500 (52,000)	35,000 (56,000)	37,500 (60,000)	40,000 (64,000)	42,500 (68,000)	45,000 (72,000)	47.500 (76,000)	50,000 (80,000)
Engine Oil* - page 74	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Engine Oil Filter* - page 74	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Air FIlter - page 76	ı	ı	R	ı	R	-	R	ı	R	-	R	I	R	ı	R	ı	R	ı	R	ı	R
Drive Sprocket and Sprocket Nut - page 77							I						I						ı		
Drive Belt - page 77	ı	I	ı	ı	I	I	ı	ı	I	ı	ı	I	R	ı	I	ı	I	ı	I	ı	I
Rear Wheel Alignment - page 80	ı		ı		ı		ı		ı		ı		ı		I		ı		ı		I
Rear Shock Absorber - page 82	I		ı		ı		R		ı		I		R		I		ı		R		I
Swing Arm and Rear Axle - page 84	ı		ı		ı		ı		ı		ı		ı		I		ı		ı		ı
Front Fork Oil** - page 85	ı		I		I		R		I		ı		R		ı		ı		R		ı
Front Forks and Front Axle - page 86	ı		ı		ı		ı		ı		ı		ı		-		ı		ı		ı
Fuel System - page 87	I	I	I	I	I	I	I	I	I	ı	I	I	I	ı	I	ı	I	I	ı	I	ı

Operation Codes:

I-Inspect (tighten, clean, adjust, correct or replace if necessary)

L-Lubricate with proper lubricant

R-Replace/Rebuild

\*Replace at specified interval or annually

\*Replace at specified interval or every 2 years

## Periodic Maintenance Interval Table (continued)

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							0	DOME	TER R	EADIN	IG in M	ILES (I	KILOM	ETERS	3)						
Component (see operation codes below)	500 (800)	2,500 (4,000)	5000 (8,000)	7,500 (12,000)	10,000 (16,000)	12.500 (20,000)	15,000 (24,000)	17,500 (28,000)	20,000 (32,000)	22,500 (36,000)	25,000 (40,000)	27,500 (44,000)	30,000 (48,000)	32,500 (52,000)	35,000 (56,000)	37,500 (60,000)	40,000 (64,000)	42,500 (68,000)	45,000 (72,000)	47.500 (76,000)	50,000 (80,000)
Crankcase Ventilation System - page 87	ı	ı	ı	ı	ı	ı	ı	ı	ı	_	ı	-	ı	ı	ı	ı	ı	ı	ı	ı	ı
Evaporative Emission Control System (Calif. Only) - page 87	ı		ı		ı		ı		ı		ı		ı		ı		ı		ı		ı
Fuel Filter - page 88											R										R
Fast Idle Lever - page 88	I		I		L		I		L		I		L		I		L		I		L
Throttle - page 89	-	-	1	ı	L	I	ı	ı	L	_	ı	ı	L	ı	ı	ı	L	ı	ı	ı	L
Clutch Lever - page 90	I		I		L		I		L		I		L		I		L		I		L
Control Cables - page 92	I		I		L		I		L		I		L		I		L		I		L
Front Brake Lever - page 92	ı		ı		L		ı		L		ı		L		ı		L		ı		L
Rear Brake Pedal - page 95	ı		ı		I		ı		I		ı		I		I		ı		ı		ı
Brake Fluid** - page 93 & 96	I	ı	ı	I	I	I	I	I	I	I	I	I	R	I	I	I	I	I	I	ı	I

Operation Codes:

I-Inspect (tighten, clean, adjust, correct or replace if necessary)
L-Lubricate with proper lubricant

**R**-Replace/Rebuild **P**-Perform

\*Replace at specified interval or annually
\*\*Replace at specified interval or every 2 years

## **Periodic Maintenance Interval Table** (continued)

				mai																	
							0	DOME	TER R	EADIN	IG in M	IILES (	KILOM	ETERS	3)						
Component (see operation codes below)	(800)	2,500 (4,000)	5000 (8,000)	7,500 (12,000)	10,000 (16,000)	12.500 (20,000)	15,000 (24,000)	17,500 (28,000)	20,000 (32,000)	22,500 (36,000)	25,000 (40,000)	27,500 (44,000)	30,000 (48,000)	32,500 (52,000)	35,000 (56,000)	37,500 (60,000)	40,000 (64,000)	42,500 (68,000)	45,000 (72,000)	47.500 (76,000)	50,000 (80,000)
Brake Pads - page 97	-	-	-	I	I	-	-	-	-	-	I	ı	ı	-	-	I	I	I	ı	ı	ı
Gear Shift Pedal - page 98	I		-		_		I		ı		I		ı		ı		ı		I		ı
Tires - page 99	ı	ı	ı	ı	_	ı	ı	ı	ı	ı	ı	ı	ı	ı	I	-	1	1	ı	_	I
Wheel Spokes - page 100	I		I		I		I		I		I		ı		I		I		I		I
Spark Plugs - page 101	I		I		I		I		I		I		R		I		I		I		ı
Engine Compression - page 103	ı				_				ı				I				ı				I
Exhaust System - page 103	I	ı	I	I	ı	I	I	I	I	I	I	I	ı	I	ı	I	I	I	I	ı	I
Battery - page 105	I		I		I		I		I		I		ı		I		I		I		I
Headlamp - page 109	I				I				I				ı				I				I
Auxiliary Lights - page 110	I		I		Ι		I		I		I		ı		ı		I		I		I
Sidestand - page 111	I		I		L		I		L		I		L		I		L		I		L
Fasteners - page 113	ı		ı		Ι		ı		ı		I		ı		ı		I		I		I
Road Test - page 113	P	Р	Р	Р	Р	P	P	P	Р	Р	Р	P	P	P	P	Р	Р	Р	P	Р	Р

Operation Codes:

I-Inspect (tighten, clean, adjust, correct or replace if necessary)
L-Lubricate with proper lubricant

**R**-Replace/Rebuild **P**-Perform

\*Replace at specified interval or annually
\*\*Replace at specified interval or every 2 years

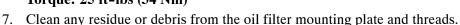
# **Engine Oil**

## Change Engine Oil and Oil Filter

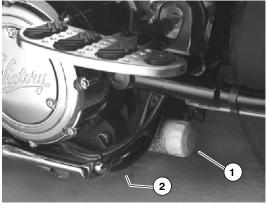
This procedure involves using a small automotive style oil filter wrench.

- 1. Start and run the engine until it reaches normal operating temperature. Stop the engine.
- 2. Securely support the motorcycle on the sidestand.
- 3. Place an oil drain pan under the drain plug and oil filter (center rear of the engine).
- 4. Remove the drain plug and seal, allowing the oil to drain into the pan.
- 5. Use an oil filter wrench to loosen the filter slowly. Allow oil in the filter to drain before removing the filter. Remove the oil filter.
- 6. Use a new seal and reinstall the drain plug.

Torque: 25 ft-lbs (34 Nm)



- 8. Make sure the new oil filter gasket is properly seated in the oil filter, and apply a thin film of clean engine oil to the gasket. Screw the new filter on until the gasket contacts the filter mounting plate. Tighten the filter by hand an additional 1/2 to 3/4 turn.
- 9. Fill the crankcase through the oil fill cap with 6 quarts (5.7 liters) of the proper grade and viscosity oil (see "Engine Oil Specifications," page 139).



- 1. Oil Filter
- 2. Drain Plug (under engine)

10. Reinstall the oil fill cap and then start and run the engine until it reaches normal operating temperature.

## Caution

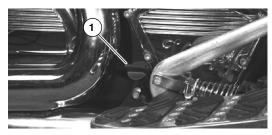
After an oil change, the low oil pressure indicator remains illuminated longer than usual before going out. Revving the engine while the low oil pressure indicator is illuminated can damage the engine.

11. Stop the engine and make sure there are no leaks around the drain plug and oil filter. Check the oil level and adjust if needed.

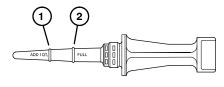
**Notice** Recycle used oil and oil filters in accordance with local regulations.

## **Check Engine Oil Level**

- With the engine at normal operating temperature, straddle the motorcycle on level ground and bring it to a vertical position. Remove the oil fill cap and wipe the dipstick clean. Reinstall the dipstick and turn the cap clockwise until it seats.
- 2. Remove the dipstick again and note the oil level.
- 3. If necessary, add or remove oil to bring the level into the area on the dipstick above the ADD mark and below the FULL mark (see "Engine Oil Specifications," page 139). Repeat steps 1-2 each time you adjust the oil level.



1. Oil Fill Cap/Dipstick



1. ADD Mark

2. FULL Mark

## **⚠** WARNING

Do not operate the motorcycle with the oil level above the FULL. mark or below the ADD mark. Operating the engine with too much or too little oil can cause serious engine damage or engine seizure, resulting in you losing control of the motorcycle.

## **Inspect Air Filter**

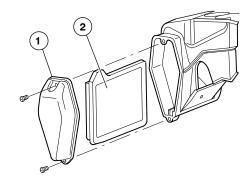
The standard Victory air filter element is a dry paper design and does not require the use of air filter oil.

**Notice** Inspect the air filter often if riding in unusually wet or dusty conditions.

- 1. Remove the air filter access cover and the air filter element.
- 2. To remove debris from the element, use low-pressure air and blow from the rear forward.

# **WARNING**

Wear face protection when using pressurized air.



- Air Filter Access Cover
- 2. Air Filter Element
- 3. Apply a small amount of lubricant to the edge of the air filter element frame and reinstall the element and access cover. Do not overtighten the access cover screws.

## **Inspect Drive Sprocket and Sprocket Nut**

1. Remove the drive sprocket cover.

Notice On some models it may be necessary to remove portions of the exhaust system to access all of the drive sprocket cover screws (see the *Victory Service Manual* or an authorized Victory dealer).

- 2. Inspect drive sprocket and sprocket nut for wear or damage. Make sure the sprocket nut is tight.
- 3. If the sprocket nut is loose, remove the sprocket nut retainer screws and the retainer.
- 4. Remove the sprocket nut. Replace with a new sprocket nut if necessary.
- 5. Clean the output shaft threads and the sprocket nut threads.
- 6. Apply a few drops of Loctite Thread Locker #262 or equivalent to the output shaft threads.
- 7. Apply the rear brake and tighten the drive sprocket nut.

**Torque: 100 ft-lbs (136 Nm)** 

8. Install the nut retainer and the retainer screws.

**Torque: 115 in-lbs (13 Nm)** 

**Notice** The nut retainer can be installed in many positions and on either side. If you cannot align the mounting holes, tighten the sprocket nut slightly and install the nut retainer.

9. Check rear wheel alignment (see page 80) and drive belt tension (see page 78).

### **Drive Belt**

#### **Check Drive Belt Condition**

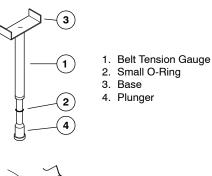
Replace the drive belt if it is cracked or has broken teeth or frayed edges. No matter its condition, the drive belt should be replaced at periodic intervals (see the *Victory Service Manual* or an authorized Victory dealer).

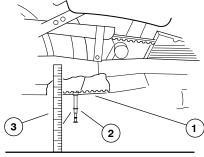
#### **Check Drive Belt Tension**

This procedure involves using the belt tension gauge, part no. PV-43532, which is designed specifically for measuring drive belt tension.

Before beginning this procedure:

- Make sure the drive belt is dry and at room temperature.
- Make sure the rear suspension is properly adjusted (see "Adjust Rear Shock Absorber" page 82).
  - 1. Place the transmission in Neutral and lift the rear wheel off the ground with an appropriate motorcycle lift or a block of wood or steel placed securely under the frame.
  - 2. Position the small O-ring on the belt tension gauge directly over the 10 lbs. mark on the plunger (as shown).
  - 3. Place a tape measure or rule next to the drive belt (as shown).
  - 4. Place the base of the tension gauge bracket squarely against the lower strand of the drive belt halfway between the front and rear drive sprockets. Use the tape measure or ruler and record the position of the base of the tension gauge bracket. This position represents *zero force*.





- 1. Drive Belt
- 2. Belt Tension Gauge

3. Rule

- 5. Push the plunger upward until the small O-ring touches the tension gauge body. Make sure the tension gauge is seated squarely against the drive belt, and record the position of the base of the tension gauge bracket. This position represents 10 lbs. force.
- 6. Calculate the difference between the *zero force* position and the *10 lbs. force* position you recorded. V92TC Touring Cruiser and Deluxe Touring Cruiser: 3/8 inch (9.5 mm)
- 7. Adjust belt tension as necessary.

## **Adjust Drive Belt Tension**

**Notice** Before adjusting drive belt tension, be sure the rear axle is properly aligned (see "Align Rear Wheel" page 80).

- 1. Remove and discard the rear axle cotter pin. Loosen the rear axle castle nut and the rear axle adjuster jam nuts.
- 2. Turn both rear axle adjusters an equal amount until the drive belt tension is correct (see "Check Drive Belt Tension," page 78), making sure the adjusters are firmly seated against the axle spacers.
- 3. Tighten the adjuster jam nuts.

Torque: 12 ft-lbs (16 Nm)

4. Tighten the rear axle castle nut.

Torque: 65 ft-lbs (88 Nm)

5. Recheck drive belt tension, and install a new rear axle cotter pin.

# WARNING

Do not reuse a cotter pin because it may fail, allowing the wheel to loosen and you to lose control of the motorcycle.

6. Pump rear brake several times to reset brake pad distance.

## Align Rear Wheel

This procedure involves using the rear wheel alignment tool, part no. PV-43528, which is designed specifically for aligning the rear wheel. Do not rely on the rear axle reference marks for wheel alignment.

# **WARNING**

A skewed rear axle can damage the drive belt, causing it to fail and you to lose control of the motorcycle.

- 1. Bring the motorcycle to a vertical position with an appropriate motorcycle lift or a block of wood or steel placed securely under the frame.
- 2. Remove the swing arm pivot caps and install the rear wheel alignment tool on the right side of the motorcycle.
- 3. Measure and record the distance from the tip of the alignment tool to the center of the rear axle.
- 4. Install the rear wheel alignment tool on the left side of the motorcycle.
- 5. Measure and record the distance from the base of the alignment tool to the center of the rear axle. The right side measurement and the left side measurement must be identical.

- 6. To adjust the rear wheel alignment, remove and discard the rear axle cotter pin and loosen the rear axle castle nut. Loosen the rear axle adjuster jam nuts.
- 7. Turn the axle adjuster on the side with the longer measurement counterclockwise one flat (1/6 revolution). Turn the axle adjuster on the side with the shorter measurement clockwise one flat (1/6 revolution). Recheck rear wheel alignment as outlined in steps 2-5. Readjust if necessary.

**Notice** Whenever you turn the rear axle adjusters, push the rear wheel forward to keep the axle spacers seated against the axle adjusters.

- 8. Reinstall the swing arm pivot caps.
- 9. Check and adjust drive belt tension (see page 78).
- 10. Hold the axle adjusters in position and tighten the adjuster jam nuts.

Torque: 12 ft-lbs (16 Nm)

11. Tighten the rear axle nut.

Torque: 65 ft-lbs (88 Nm)

12. Recheck drive belt tension and install a new rear axle cotter pin.

# **⚠** WARNING

Do not reuse a cotter pin because it may fail, causing the wheel to loosen and you to lose control of the motorcycle.

13. Pump rear brake several times to reset brake pad distance.

# **Rear Suspension**

## **Adjust Rear Shock Absorber**

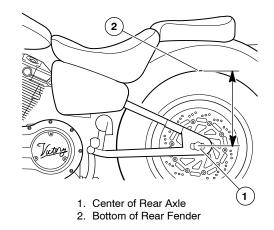
This procedure involves using the shock absorber preload wrench, part no. PV-43507, which is designed specifically for adjusting the shock absorber preload.

Notice The distance measured while the motorcycle is elevated will not change, and needs only be measured once. After the measurement and the locations from where the measurement is taken are recorded (steps 1-4), you will only need to perform steps 5-8 to correctly adjust the rear shock absorber.

Have an assistant help you complete the following procedure.

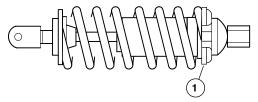
- 1. Elevate the rear of the motorcycle until the rear wheel is about 1 inch (2.5 cm) off of the ground. Use an appropriate motorcycle lift or a block of wood or steel placed securely under the frame.
- 2. Measure the distance from the center of the rear axle to the bottom of the rear fender directly above the axle.

On some models it may be easier to measure from the top of the drive belt guard to a convenient spot on the rear fender (along the pinstriping for example). Both locations must be directly above the rear axle.



Measu	rement (step 2)	
Upper	Location (step 2)	
Lower	Location (step 2)	

- 3. Record the measurement and the locations from where the measurement is taken in the space provided.
- 4. Remove the motorcycle lift apparatus and return the motorcycle to the ground.
- 5. Load the motorcycle with all the things you intend to carry (cargo and accessories). Sit in the operator's seat with your riding gear on, and if you plan on carrying a passenger, have them sit on the passenger seat with their riding gear on.
- 6. Have your assistant bounce the rear suspension a few times by pushing down on the rear fender slowly and releasing. Make sure the suspension moves freely without binding.
- 7. Without moving the motorcycle, have your assistant measure the distance from the center of the rear axle to the bottom of the rear fender directly above the axle. This measurement must be taken from the same locations recorded in step 2.
- 8. Subtract the second measurement (step 7) from the first measurement (recorded in step 2). The difference is called "sag" and should be 3/4 to 1 1/4 inch (19 to 32 mm). Adjust the shock absorber preload and recheck the sag if necessary.



1. Preload Adjustment Collar

## **Inspect Swing Arm and Rear Axle**

1. Remove the swing arm pivot covers and tighten the swing arm pivot nut.

**Torque: 85 ft-lbs (115 Nm)** 

- 2. Reinstall the pivot nut covers.
- 3. Sit in the operator's seat and slowly bounce the rear suspension a few. Make sure the suspension moves freely without binding.
- 4. Elevate the rear of the motorcycle until the rear wheel is off of the ground. Use an appropriate motorcycle lift or a block of wood or steel placed securely under the frame.
- 5. Grasp the rear tire and attempt to move the rear wheel side-to-side.
  - If there is movement at the rear axle, inspect the wheel bearings and rear axle (see the *Victory Service Manual* or an authorized Victory dealer).
  - If there is movement at the front of the swing arm, check the swing arm pivot nut torque. If movement is still present, inspect the swing arm pivot bushings (see the *Victory Service Manual* or an authorized Victory dealer).
- 6. With the transmission in neutral, slowly rotate the rear wheel. If the wheel does not rotate smoothly, inspect the wheel bearings, rear brake rotor and caliper, and rear axle (see the *Victory Service Manual* or an authorized Victory dealer).

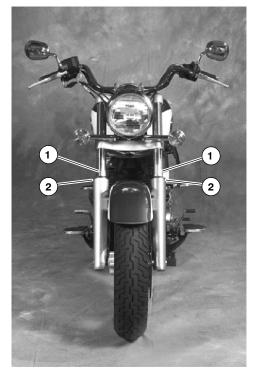
# Front Suspension and Steering

#### **Check Front Forks**

- 1. To check the front suspension, straddle the motorcycle and bring it to a vertical position.
- 2. Apply the front brake and push down hard on the handlebars several times. The front suspension should operate smoothly and quietly.
- 3. Place the motorcycle on the sidestand and inspect the front forks. Make sure there is no fork oil present on the fork tube or around the fork seal.

## Replace Front Fork Oil

Front fork oil condition and level is associated with front suspension performance and internal component wear. For fork oil replacement procedures and special tools required, see the *Victory Service Manual* or contact an authorized Victory dealer.



- 1. Front Fork Tube
- 2. Fork Seal

## Inspect Steering and Front Axle

- 1. Elevate the front of the motorcycle until the front wheel is off of the ground. Use an appropriate motorcycle lift or a block of wood or steel placed securely under the frame.
- 2. Turn the handlebars from stop to stop. The action should be smooth but not loose or interfered with by wires, hoses, or control cables.
- 3. Point the front wheel straight ahead. Grasp the front forks near the front axle and attempt to move the front wheel front-to-back.
  - If there is front-to-back movement at the steering head, the steering head bearings should be inspected, lubricated, and adjusted (see the *Victory Service Manual* or an authorized Victory dealer).
- Notice The steering head bearings require periodic lubrication even if there is no front-to-back movement at the steering head when checked (see the *Victory Service Manual* or an authorized Victory dealer).
  - 4. Turn the handlebars all the way to the right or left. Grasp the front tire and attempt to move the front wheel side-to-side.
    - If there is movement at the front axle, inspect the wheel bearings and front axle (see the *Victory Service Manual* or an authorized Victory dealer).
  - 5. Slowly rotate the front wheel. If the wheel does not rotate smoothly, inspect the wheel bearings, front brake rotors and calipers, and front axle (see the *Victory Service Manual* or an authorized Victory dealer).

## **Fuel System**

## **Check Fuel Hose, Rail, and Connections**

Inspect the fuel hoses for cracks or damage. Inspect the hose connection at the fuel tank and at the fuel rail for dampness or stains from leaking or dried fuel.

#### **Check Crankcase Ventilation Hose and Connections**

Remove the operators seat and fuel tank. Inspect the crankcase ventilation hose for cracks or damage. Inspect the hose connection at the air cleaner and at the crankcase for dampness or stains from leaking.

## **Evaporative Emission Control System**

(California models only)

Visually inspect all evaporative emission control system hoses and connections. Make sure all connections are tight. Also, inspect the evaporative canister to make sure it has not been damaged.

#### **Fuel Tank**

- 1. To remove the fuel tank, remove the operator's seat.
- 2. Remove the front and rear fuel tank mounting screws.
- 3. Unplug the fuel level sensor and fuel pump wire harness.
- 4. Wrap a clean rag around the fuel rail bleed valve and relieve the fuel line pressure by depressing the center of the bleed valve.

## Caution

Fuel can damage painted surfaces and plastic parts. Wipe spilled fuel immediately from the motorcycle using a clean, dry, soft cloth.

- 5. Disconnect the fuel line.
- 6. Disconnect the tank vent line.
- 7. To reinstall the fuel tank, reconnect all fuel lines and wire harness.
- 8. Reinstall the fuel tank mounting screws.

**Torque: 20 ft-lbs (27 Nm)** 

9. Reinstall the operator's seat.

## **Replace Fuel Filter**

The fuel filter is attached to the electric fuel pump located inside the fuel tank. Fuel filter condition is associated with engine performance and fuel economy. For fuel filter replacement procedures and special tools required, see the *Victory Service Manual* or contact an authorized Victory dealer.

## **Fast Idle Lever**

#### Check Fast Idle Lever and Cable

- 1. Move the fast idle lever. It should move smoothly from its rest position to its completely open position and back again
- 2. Fast idle lever freeplay the amount of lever movement from the rest position to the point of cable resistance should be 1/8-1/4 inch (3-6 mm).
- 3. Adjust fast idle lever freeplay if necessary.

## **Adjust Fast Idle Lever Freeplay**

- 1. Remove the operator's seat.
- 2. Remove the fuel tank.

- 3. Loosen the fast idle cable adjuster jam nut.
- 4. Turn the cable adjuster in or out until the fast idle lever freeplay is 1/8-1/4 inch (3-6 mm).
- 5. Tighten the adjuster jam nut and reinstall the fuel tank and operator's seat.

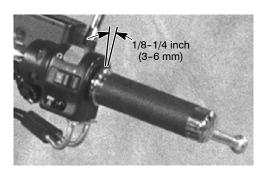
## Throttle

## **Check Throttle Control Grip and Cable**

- 1. Rotate the throttle control grip. It should rotate smoothly from its rest position to its completely open position and back again. It should return to its rest position quickly when released.
- 2. Throttle freeplay the amount of throttle control grip movement from the rest position to the point of cable resistance should be 1/8-1/4 inch (3-6 mm).
- 3. Adjust throttle freeplay if necessary.

## Adjust Throttle Freeplay

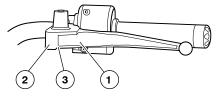
- 1. Slide the rubber covers off both cable adjusters, and loosen both adjuster jam nuts.
- 2. Turn both cable adjusters into the cable as far as possible.
- 3. Turn the cable adjuster on the throttle opening cable out until the throttle freeplay is between 1/8-1/4 inch (3-6 mm).
- 4. Hold the throttle control grip at the fully closed position and turn the cable adjuster on the throttle closing cable out until resistance is felt.
- 5. Tighten the adjuster jam nuts on both cables, and reinstall both rubber covers.



## Clutch

#### **Check Clutch Lever and Cable**

- 1. Squeeze the clutch lever toward the handlebar and release it. It should move freely and smoothly and should return to its rest position quickly when released.
- 2. Clutch freeplay the amount of clutch lever movement from the rest position to the point of cable resistance should be between 0.04-0.08 inch (1-2 mm). Measure the gap between the clutch lever and the lever housing.
- 3. Adjust clutch freeplay if necessary (see page 91).



- 1. Clutch Lever
- 2. Lever Housing
- 3. Gap

### **Lubricate Clutch Lever**

- 1. Remove the operator's seat.
- 2. Remove the front and rear fuel tank screws.
- 3. Raise the rear of the fuel tank high enough to expose the clutch cable. Support the rear of the fuel tank with a block of wood.
- 4. Slide the rubber cover off the cable adjuster, and loosen the adjuster jam nut.
- 5. Turn the cable adjuster all the way in.
- 6. Disconnect the clutch cable from the clutch lever.
- 7. Remove clutch lever pivot nut and screw.
- 8. Remove any old grease and dirt from the clutch lever and lever housing.
- 9. Lubricate the clutch lever and lever pivot screw with Victory All Purpose Grease or equivalent.

10. Reconnect the clutch cable and reinstall the clutch lever, lever pivot screw, and nut.

Torque: 40 in-lbs (5 Nm)

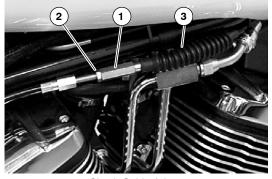
11. Adjust clutch freeplay.

## **Adjust Clutch Freeplay**

- 1. Remove the operator's seat.
- 2. Remove the front and rear fuel tank screws.
- 3. Raise the rear of the fuel tank high enough to expose the clutch cable. Support the rear of the fuel tank with a block of wood.
- 4. Slide the rubber cover off the cable adjuster, and loosen the adjuster jam nut.
- 5. Turn the cable adjuster in or out until the clutch freeplay is 0.04-0.08 inch (1-2 mm).
- Tighten the adjuster jam nut and reinstall the rubber cover.
- 7. Reinstall and tighten the front and rear fuel tank screws.

**Torque: 20 ft-lbs (27 Nm)** 

8. Reinstall the operator's seat.



- 1. Clutch Cable Adjuster
- 2. Adjuster Jam Nut
- 3. Rubber Cover

### **Lubricate Control Cables**

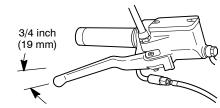
The following cables used on the motorcycle require periodic lubrication for smooth operation and longevity:

- Throttle Cables
- Clutch Cable
- Fast Idle Lever Cable
  - 1. Loosen the adjuster of the cable to be lubricated, and disconnect one end of the cable.
  - 2. Lubricate the cable and the inside of the cable housing with Victory Cable Lube or a commercially available cable lubricant.
  - 3. Lubricate the cable end with Victory All Purpose Grease or equivalent.
  - 4. Reconnect the cable and adjust as necessary.

### **Brakes**

### **Check Front Brake Lever Movement**

Squeeze the front brake lever toward the handlebar and release it. It should move freely and smoothly and should return to its rest position quickly when released. You should feel a firm resistance in the lever within the first 3/4-inch (19 mm) of lever travel.



If the brake lever travels too far before beginning to engage the brake, see the *Victory Service Manual*, or contact an authorized Victory dealer for service.

#### **Lubricate Front Brake Lever**

- 1. Remove right mirror, brake lever pivot nut and pin.
- 2. Remove any old grease and dirt from the brake lever and lever housing.
- 3. Lubricate the brake lever and lever pivot pin with Victory All Purpose Grease or equivalent.
- 4. Reinstall the brake lever, lever pivot pin and nut, and right mirror.

**Torque: 12 ft-lbs (16 Nm)** 

5. Check front brake lever movement.

#### **Check Front Brake Fluid Level**

- 1. To check the front brake fluid level, rest the motorcycle on the sidestand and on level ground. Turn the handlebars until the front brake fluid reservoir is level.
- 2. View the brake fluid through the sight glass. The fluid should be clear and at a level in or above the sight glass. Add brake fluid if necessary.

#### **Add Front Brake Fluid**

- 1. Straddle the motorcycle and bring it to a vertical position. Turn the handlebars until the reservoir is horizontal.
- 2. Wipe the area around the reservoir cover with a clean cloth.
- 3. Wipe the brake fluid container with a clean cloth.
- 4. Remove the reservoir cover and gasket.

### Caution

Brake fluid attacks painted surfaces and plastic parts. Always clean spilled brake fluid immediately with plenty of water and a mild detergent.



- Do not operate the front brake while its reservoir cover is removed. Fluid could overflow from the reservoir and cause air to enter the fluid system. Air in the brake fluid system could cause the brakes to malfunction.
- Use only DOT 4 brake fluid from a sealed, clean container. Using the wrong brake fluid, or allowing contaminants into the brake fluid system, can damage the system seals, resulting in the brakes malfunctioning.
  - 5. Carefully add enough brake fluid to bring the level just above the sight glass.
  - 6. Reinstall the reservoir gasket and cover.

### **Check Rear Brake Pedal Freeplay and Movement**

Rear brake pedal freeplay - the amount of brake pedal movement from the rest position to the point of contacting the master cylinder - should be 3/16-5/16 inch (5-8 mm). Adjust pedal freeplay as necessary (see page 95).

Press and release the rear brake pedal. It should move freely and smoothly and should return to its rest position quickly when you release it. You should feel a firm resistance in the pedal within the first 3/4 inch (19 mm) of pedal travel.



If the brake pedal travels too far before beginning to engage the brake, see the *Victory Service Manual*, or contact an authorized Victory dealer for service.

### Adjust Rear Brake Pedal Freeplay

- 1. Loosen the brake linkage rod locknuts.
- 2. Turn the linkage rod in or out as necessary.
- 3. Tighten the linkage rod locknuts.
- 4. Check the brake pedal freeplay.

#### **Check Rear Brake Fluid Level**

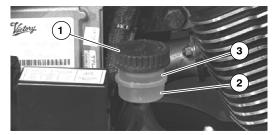
- 1. To check the rear brake fluid level, remove the right side cover. Straddle the motorcycle and bring it to a vertical position.
- 2. View the brake fluid through the reservoir. The fluid should be clear and at a level between MIN and MAX. Add brake fluid if necessary.

#### Add Rear Brake Fluid

- 1. Bring the motorcycle to a vertical position with an appropriate motorcycle lift or a block of wood or steel placed securely under the frame.
- 2. Remove the right side cover.
- 3. Wipe the area around the reservoir cover with a clean cloth.
- 4. Wipe the brake fluid container with a clean cloth.
- 5. Remove the reservoir cover and gasket.

### Caution

Brake fluid attacks painted surfaces and plastic parts. Always clean spilled brake fluid immediately with plenty of water and a mild detergent.



- 1. Rear Brake Fluid Reservoir
- 2. MIN Fluid Level
- 3. MAX Fluid Lever

# **WARNING**

- Do not operate the rear brake while its reservoir cover is removed. Fluid could overflow from the reservoir and cause air to enter the fluid system. Air in the brake fluid system could cause the brakes to malfunction.
- Use only DOT 4 brake fluid from a sealed, clean container. Using the wrong brake fluid, or allowing contaminants into the brake fluid system, can damage the system seals, resulting in the brakes malfunctioning.
  - 6. Carefully add enough brake fluid to bring the level between MIN and MAX.
  - 7. Reinstall the reservoir gasket and cover.
  - 8. Reinstall the side cover.

#### **Check Brake Pads**

Look into the front brake caliper(s) from underneath, and into the rear brake caliper from behind, you should see at least 1/16 inch (1.6 mm) of friction material on each of the brake pads. If in doubt, measure remaining friction material. Replace brake pads having less than the specified amount of friction material at their thinnest point.

If the brake pads require replacement, see the *Victory Service Manual* or an authorized Victory dealer for assistance.



Front Brake Pad
 Friction Material



Rear Brake Pad Friction Material

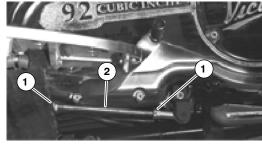
#### **Check Brake Hoses and Connections**

Inspect all brake hoses and connections for dampness or stains from leaking or dried fluid. Tighten any leaking connections and replace components as necessary.

### Gear Shift Pedal

### **Adjust Gear Shift Pedal Height**

- 1. Loosen the gear shift linkage rod locknuts.
- 2. Turn the linkage rod in or out as necessary.
- 3. Tighten the linkage rod locknuts.
- 4. Check the gear shift pedal height.



- 1. Gear Shift Linkage Rod Locknut
- 2. Linkage Rod

### Caution

Do not remove and reposition the shift arm on the shift shaft to adjust gear shift pedal height. A  $90^{\circ} \pm 5^{\circ}$  angle between the shift arm and the linkage rod must be maintained to insure correct shift linkage operation.

### **Tires**

#### **Check Tire Pressure**

Normal riding warms the tires and increases the tire air pressure. For an accurate reading, check the tire pressure before you ride. Adjust tire pressure as required for the total weight of your intended load.

### **Tire Pressure Table**

V92TC Touring Cruiser			
	Up to 200 lbs (91 kg) load	200-449 lbs (91-204 kg) load	
FRONT: Dunlop 491 Elite II - MT90 B16 71H	34 psi (235 kpa)	40 psi (275 kpa)	
REAR: Dunlop D417 - 160/80 B16 75H	36 psi (250 kpa)	41 psi (280 kpa)	
V92TC Deluxe Touring Cruiser (inner tubes required)			
	Up to 200 lbs (91 kg) load	200-441 lbs (91-200 kg) load	
FRONT: Dunlop 491 Elite II - MT90 B16 71H	34 psi (235 kpa)	40 psi (275 kpa)	
REAR: Dunlop D417 - 160/80 B16 75H	36 psi (250 kpa)	41 psi (280 kpa)	

#### **Check Tire Condition**

Inspect the tire sidewalls, road contact surface, and tread base for cuts, punctures, and cracking. Replace damaged tires immediately (see your *Victory Service Manual* or an authorized Victory dealer).

### **Check Tread Depth**

Raised areas at the base of the tread, known as wear bars; act as easily visible tread depth indicators. When the road contact surface has worn to the top of the wear bars, replace the tire.

For more precise measurement, use a depth gauge or an accurate ruler to measure the depth of the center tire tread. Replace the tire if the tread depth is less than 1/16 inch (1.6 mm).



1. Tread Depth Gauge

# **Check Wheel Spokes**

Inspect both wheels for loose, bent, broken, or missing spokes. To identify loose spokes, grasp each spoke and try to move it side to side or up and down. All spokes should be equally tight and have the same amount of flex. Tighten loose spokes or replace bent, broken, or missing spokes (see an authorized Victory dealer).



Spokes adjusted or replaced improperly could distort the wheel, making the motorcycle difficult to handle and cause you to lose control of the motorcycle.

# **Check or Replace Spark Plugs**

The spark plugs must be removed from the engine to inspect them. Spark plugs with bright white deposits, sooty black deposits, or with damaged insulators or electrodes can indicate engine problems. If these conditions exist, or if the condition of one plug is markedly different from the other, see the *Victory Service Manual* or an authorized Victory dealer for assistance.

- 1. Make sure the engine is at room temperature, and remove the operator's seat.
- 2. Remove the fuel tank.
- 3. Disconnect the spark plug wire by pulling upward on the spark plug boot.

- 3
  - Insulator
  - 2. Electrode Tip
  - 3. Electrode Bridge
- 4. To prevent any debris from entering the engine through the spark plug hole, use pressurized air to blow clean the area around each spark plug before removing it.

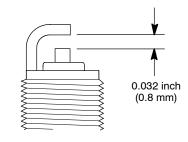


Wear face protection when using pressurized air.

5. Remove the spark plug from the cylinder head with a spark plug socket.

Both spark plugs should have the same light or medium tan color deposits on the insulator around the electrode tip. The spark plug electrode tip and bridge should have sharp, square edges.

If spark plugs are in good condition and are not due for replacement, you can clean them with a stiff bristle brush, set the gap and reinstall them.



Replace spark plugs (NGK CR7EB or equivalent) at the recommended intervals. Always replace spark plugs in pairs.

6. Set the electrode gap with a spark plug gauge.

Gap: 0.032 inch (0.8 mm)

7. Clean the mating surface on the cylinder head and install the spark plug with a spark plug socket.

Torque: 8 ft-lbs (11 Nm)

- 8. Reconnect both spark plug wires.
- 9. Reinstall and tighten the front and rear fuel tank screws.

**Torque: 20 ft-lbs (27 Nm)** 

10. Reinstall the operator's seat.

# **Check Engine Compression**

An accurate periodic engine compression check documents engine wear and condition. For engine compression check procedures and special tools required, see the *Victory Service Manual* or contact an authorized Victory dealer.

# **Check Exhaust System**

Check the exhaust system for stains from leaking exhaust gasses. Replace exhaust gaskets if necessary (see the *Victory Service Manual* or an authorized Victory dealer). Check all exhaust system fasteners.

1. Tighten exhaust header flange nuts.

**Torque: 12 ft-lbs (16 Nm)** 

2. Tighten muffler clamps.

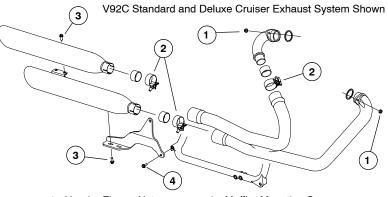
Torque: 44 ft-lbs (59 Nm)

3. Tighten muffler mounting screws.

Torque: 18 ft-lbs (24 Nm)

4. Tighten muffler bracket screws.

Torque: 18 ft-lbs (24 Nm)



- Header Flange Nut
- 2. Muffler Clamp

- 3. Muffler Mounting Screw
- 4. Muffler Bracket Screw

### Remove and Install Seat

The V92TC Touring and Deluxe Touring Cruiser has a combined operator and passenger seat.

# **WARNING**

Always make sure the seat is securely attached before riding the motorcycle. A loose seat could cause a sudden shift in riding position, causing you to lose control of the motorcycle.

- 1. Remove the acorn nut from behind the seat.
- 2. Lift rear of seat slightly to clear the rear mounting stud and slide seat rearward and off of the motorcycle.
- 3. To reinstall the seat, slide it forward and into position on the motorcycle. Make sure the front seat mount is engaged. Lower the seat onto the rear mounting stud and reinstall the acorn nut.

# **Battery**

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

# **MARNING**

The battery contains sulfuric acid, which can cause severe burns. Do not allow sulfuric acid to contact skin, eyes, or clothing.

#### **Antidotes:**

- External: Flush with water.
- Internal: Drink large quantities of water or milk. Follow with milk of magnesia, beaten eggs, or vegetable oil. Call physician immediately.
- Eyes: Flush with water for 15 minutes and get prompt medical attention.

**Notice** If your Victory motorcycle will not be used for a period of 6 weeks or longer, a maintenance charger should be connected to the battery. A fused maintenance charger connection is provided beneath the left side cover. The connector is designed for use with the Victory Maintenance Charger available at your authorized Victory dealer.

### **Remove Battery**

- 1. Remove the left side cover.
- 2. Remove the battery hold-down strap.
- 3. Disconnect the negative ( ) battery cables (exposed connectors).
- 4. Disconnect the positive (+) cables (covered with a red boot).

# Caution

Disconnecting the positive cable first can produce an electric shock that could result in damage or injury.

5. Slide the battery out.

Notice The multi-function display (MFD) clock will not function if the battery voltage drops below 11.5 volts. The clock will reset to 12:00 if the battery is disconnected.

### **Charge Battery**

# **WARNING**

The battery may contain explosive gases.

- Keep sparks, cigarettes, or any flame away from the battery.
- Shield eyes and protect skin and clothing when handling or working near the battery.
- Make sure ventilation is adequate when charging or using the battery in an enclosed space.
- During charging, if the battery gets very hot to the touch, stop charging and let the battery cool down before continuing.

- 1. To clean oxidation from the battery posts and cable connectors, use a wire brush. Wash the posts and cable connectors with a solution of 1 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.
- 2. 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.
- 3. After charging the battery, use a voltmeter to check the condition of the battery. Allow battery to sit 1-2 hours before checking the charge. The charge should be a minimum of 12.5 volts. Repeat the charging cycle if the charge is less than the minimum. Replace the battery if it fails to reach a 12.5 volt charge after 2 complete charging cycles.

### **Install Battery**

- 1. Before installing the battery, make sure it is fully charged and clean.
- 2. Slide the battery into position in the battery tray.
- 3. Connect the positive (+) battery cables (covered with a red boot).
- 4. Connect the negative ( ) cables (exposed connectors).

# **A** Caution

- Connecting the negative cable first can produce an electric shock that could result in damage or injury.
- Connecting the battery cables to the wrong terminals can severely damage the electrical system.
  - 5. Reinstall the battery hold-down strap.
  - 6. Reinstall the left side cover.

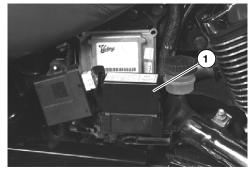
# Electrical Equipment Replace Fuses

### Caution

Use only recommended amperage fuses or you can damage the electrical system.

- 1. Remove the operator's seat and the right side cover.
- 2. Release the tabs on each side of the fuse box cover, and remove the cover.
- 3. Remove the damaged fuse from the fuse box and seat the new fuse firmly in its place.
- 4. Reinstall the fuse box cover with the double cutout toward the front of the motorcycle. The fuse box decal should be readable from the right side of the motorcycle.
- 5. Reinstall the side cover and the operator's seat.

Fuse Application	Fuse Size
Ignition/Coil	15 amp
Horn/Brake/Headlamp	20 amp
Flashers	15 amp
Powertrain Control Module (PCM)	20 amp
Fuel Pump	10 amp

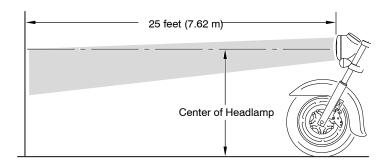


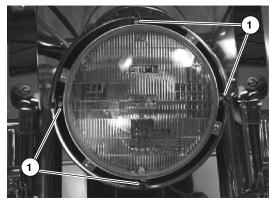
1. Fuse Box

### **Adjust Headlamp**

The headlamp should shine straight ahead of the motorcycle. The top of the headlamp High beam should be just below the center of the lamp at a distance of 25 feet (7.62 m).

- 1. Check and adjust the tire pressure and rear shock absorber.
- 2. Straddle the motorcycle in an upright position and sit in the operator's seat.
- 3. Set the ignition switch to the **On** position and set the headlamp to High beam. Check the headlamp for correct aim.
- 4. To adjust the headlamp, remove the headlamp bezel to expose the adjusting screws. Turn the desired adjusting screw clockwise one revolution, and turn the screw directly across the headlamp counterclockwise one revolution. Repeat if necessary, one revolution at a time.
- 5. Reinstall the headlamp bezel.



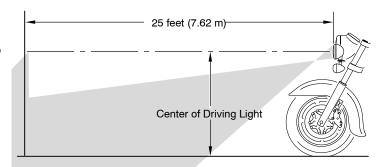


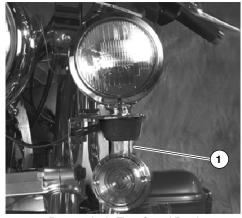
1. Headlamp Adjusting Screws

### **Adjust Auxiliary Lights**

Each lamp should shine straight ahead or slightly to the right of the motorcycle. The top of each lamp beam should be just below the center of the lamp at a distance of 25 feet (7.62 m).

- 1. Check and adjust the tire pressure and rear shock absorber.
- 2. Straddle the motorcycle in an upright position and sit in the operator's seat.
- 3. Set the ignition switch to the **On** position and turn the auxiliary lights on. Check the auxiliary lights for correct aim.
- 4. To adjust the lights, remove the front running light/turn signal bracket to expose the auxiliary light nut. Loosen the nut and adjust the auxiliary light.
- 5. Tighten the auxiliary light nut and recheck the light for correct aim.
- 6. Reinstall the front running light/turn signal bracket.





1. Running Light/Turn Signal Bracket

# Remove and Install Saddlebags

- 1. Remove the lower saddlebag mounting screw located outside and underneath the saddlebag.
- 2. Remove the two (2) upper saddlebag mounting screws located inside the saddlebag.
- 3. Disconnect the wiring harness and remove the saddlebag.
- 4. To reinstall the saddlebag, reconnect the wire harness and install all spacers and fasteners in their original location.

**Torque: 18 ft-lbs (25 Nm)** 

### **Sidestand**

Straddle the motorcycle and bring it to a vertical position. Move the sidestand to its stored (up) position, then to its fully extended (down) position, and back again. It should move smoothly and quietly. When the sidestand is in its stored position, the sidestand return spring should hold the sidestand tightly against the motorcycle.

If the sidestand is bent, it should be replaced immediately.

### Caution

Do not try to straighten a bent sidestand. The sidestand will be weakened, and may not be able to support the motorcycle.

#### **Lubricate Sidestand**

1. Bring the motorcycle to a vertical position with an appropriate motorcycle lift or a block of wood or steel placed securely under the frame.

2. Move the sidestand to its stored (up) position and remove the sidestand return spring.



Wear face protection. The sidestand return spring is under tension and can injure your eyes and face when released.

- 3. Remove the sidestand pivot bolt.
- 4. Remove any old grease and dirt from the sidestand, frame, and pivot bolt.
- 5. Lubricate the sidestand and pivot bolt with Victory All Purpose Grease or equivalent.
- 6. Reinstall the sidestand pivot bolt.

Torque: 35 ft-lbs (47 Nm)

7. Move the sidestand to its stored (up) position and reinstall the sidestand return spring.

### **Inspect Sidestand Pad**

- 1. Check the condition of the sidestand rubber pad, and make sure it is firmly attached to the sidestand.
- 2. Inspect the sidestand rubber pad for wear. Replace the rubber pad if it is worn above the wear limit (see the *Victory Service Manual* or an authorized Victory dealer).



- Sidestand
- Rubber Pad

### **Check Fasteners**

Visually inspect the entire motorcycle chassis and engine for loose, damaged, or missing fasteners. Tighten loose fasteners to the proper torque (see the Specifications section of the *Owner's Manual*, or the *Victory Service Manual*). Replace stripped, damaged, or broken fasteners with genuine Victory fasteners of equal size and strength immediately.

### **Road Test**

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

# **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 case, damage or serious injury could result.

Notes:

# **Cleaning and Storage**

This section explains how to properly clean the various parts of your Victory motorcycle and how to store it to keep it in good working order and appearance.

# Cleaning

Clean your motorcycle regularly to protect it from corrosion and to keep it looking new. As you clean your motorcycle you perform a complete and thorough visual inspection that may reveal components in need of repair.

Clean the motorcycle if it is dusty or muddy, or if it has picked up foreign material such as road salt, insects, oil, tar, or tree sap. If you ride in an area with salty or polluted air, wash your motorcycle frequently. Proper cleaning requires washing and drying the motorcycle, and then applying wax, polish, and protectants to extend the service life and appearance of various components.

During cleaning you might use products that are potentially hazardous; such as polishing compounds. When using any of these products, follow the instructions and warnings on the product packaging.

Some foreign materials like insects, oil, tar, and tree sap can damage the motorcycle's fit and finish, and you should remove these materials as soon as possible. If normal washing does not remove these materials, you may need to use a special cleaner. Choose a cleaner designed for use on the type of surface you need to clean.

### **Cleaning and Storage**

# **Washing and Drying**

Before washing the motorcycle, make sure the exhaust pipes are not hot. Cover each exhaust pipe opening with a plastic bag and attach the bag to the pipe with a strong rubber band. To prevent contamination from water, check that the spark plugs, spark plug wire caps, oil fill cap, and fuel caps are properly seated.

- 1. Park the motorcycle in the shade to prevent water spotting.
- 2. The engine cases are painted. If you choose to use a degreaser, follow the degreaser manufacturer's instructions.
- 3. Rinse off as much dirt and mud as possible with water running at low pressure.

### Caution

- Do not use high water pressure or high-pressure sprayers such as those found at coin-operated car washes. Excessive water pressure may allow water to seep into and deteriorate such components as wheel bearings, brake caliper assemblies, brake master cylinders, and transmission seals.
- Electrical components may be damaged by contact with water. Do not spray or allow water to come into contact with electrical components or connectors.
  - 4. Wash the entire motorcycle using a soft cloth or sponge soaked in a solution of mild detergent and warm water, applying minimal pressure as you wash. Let the detergent do the cleaning, not the pressure you apply. Excessive washing pressure may cause dirt, sand, or other foreign materials on the motorcycle to scratch the finish. Keep the cloth or sponge clean by rinsing it frequently, and soak it in the detergent and water solution to provide plenty of soapy water for washing. A toothbrush or bottlebrush can help you wash places that are difficult to reach with a cloth or a sponge.

### Caution

Use as little water as possible when washing near the air cleaner or the exhaust pipe openings. An excessively wet air cleaner, or water in the exhaust pipes, may cause the engine to start and run poorly. Dry these components thoroughly before using the motorcycle.

- 5. Clean the front fork tubes thoroughly to reduce fork seal wear and leakage.
- 6. If insects, oil, tar, tree sap, or other foreign material is difficult to remove by applying gentle pressure using the warm water and mild detergent mixture, you may need to use a special cleaner. See "Cleaning" page 115.
- 7. Rinse the motorcycle with water running at low pressure.
- 8. Remove the rubber bands and plastic bags from the exhaust pipes, and wipe the motorcycle dry with a soft cloth or chamois.
- 9. After washing the motorcycle, start the engine and let it idle for a few minutes. Make sure the brakes are functioning properly before riding.

# **⚠** WARNING

Excessively wet brake pads or discs may diminish braking effectiveness. Dry these components thoroughly before using the motorcycle.

### **Cleaning and Storage**

# Waxing, Polishing, and Applying Protectants

(Items Other Than Windshields)

After washing and drying the motorcycle, you can help extend the life and appearance of its components by waxing painted surfaces, polishing chrome surfaces, and applying a protectant to exposed rubber, vinyl, and plastic parts. Avoid cleaning-waxing compounds, as they may contain abrasives that may damage the finish of painted parts. For chrome surfaces, use either a window-cleaning solution or a polish specifically designed for chrome. Follow manufacturer's instructions for proper application and use of wax, polish, or protectants.

After washing and drying the motorcycle, to help extend the life and appearance of its components:

- Wax painted surfaces. Avoid cleaning-waxing compounds, as they may contain abrasives that may damage the finish of painted surfaces.
- Polish chrome surfaces. Use either a window-cleaning solution or a polish specifically designed for chrome.
- Apply a protectant to exposed rubber, vinyl, and plastic components.

# **MARNING**

- Do not use a protectant on the seats, footboard inserts, or handgrips that leaves a slippery coating after it dries. If these surfaces are slippery, you may have difficulty holding your position on the motorcycle while riding, which may cause you to lose control of the motorcycle.
- Follow manufacturer's instructions and safety precautions on wax, polish, and protectant labels to prevent injury or damage.

#### Windshield Care

A windshield is included with some Victory models.

Wash the windshield using a soft cloth or sponge soaked in a solution of mild detergent and warm water, applying minimal pressure as you wash. Let the detergent do the cleaning, not the pressure you apply. Excessive washing pressure may cause dirt, sand, or other foreign materials on the windshield to scratch it. Soak the cloth or sponge in the detergent and water solution frequently to provide plenty of soapy water for washing, and keep the cloth or sponge clean by rinsing it frequently.

- Minor scratches may be removed with a quality plastic polishing compound. Follow the manufacturer's instructions when using plastic polishing compounds.
- Insects, oil, tar, and tree sap may also damage the motorcycle's finish. If normal washing does not remove these materials, you may need to use a special cleaner. Choose a cleaner designed for use on clear plastic and follow the manufacturer's instructions when using special cleaners.

### Caution

Do not use glass water and soil repellents or alcohol based cleaners as these products can damage the windshield.

### **Repairing Painted Surface Damage**

After cleaning the motorcycle, inspect it for damage to the painted surfaces. If you discover chips or scratches in the paint, apply genuine Victory touch-up paint as soon as possible to prevent corrosion.

### **Cleaning and Storage**

# **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.

### **Preparing for Storage**

Choose an adequate storage location.

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 motorcycle should not be near a radiator or other heat source, or any type of electric motor.
- The storage surface should be free of oil and gasoline.

### **Clean and Protect the Motorcycle**

To prepare the motorcycle for storage, begin by cleaning it (see "Cleaning," page 115). Wax painted surfaces and polish chromed surfaces. Apply protectant to exposed rubber, vinyl, and plastic parts.

#### Stabilize Fuel

- 1. Using a mixture of fuel and the amount of gasoline stabilizer recommended by the stabilizer manufacturer, fill the fuel tank only to the top of the filler insert.
- 2. Start and run the engine for 15 minutes to pass the stabilized fuel through entire fuel-injection system.

### **Protect Engine Components**

1. Change the engine oil (see "Change Engine Oil and Oil Filter" page 74). You do not need to replace the oil filter at this time, but you must replace the oil filter when you remove the motorcycle from storage.

### Caution

Carbon deposits, normally suspended in engine oil that is in service, settle on internal engine components during storage. Settled carbon deposits can cause engine damage.

2. Using pressurized air, blow any debris from the area around each spark plug.

# WARNING

Wear face protection when using pressurized air.

3. Remove the spark plugs (see "Check or Replace Spark Plugs" page 101). Pour one tablespoon of clean motor oil into each spark plug hole.

### **Cleaning and Storage**

- 4. Connect the spark plugs to the spark plug wires and ground the spark plugs to the engine. With the main switch in the **On** position, the stop/run switch set to **Run**, and the transmission in neutral, press the electric starter button to crank the engine a few times. This procedure inhibits corrosion by coating the cylinder walls with the oil you poured in the spark plug holes.
- 5. Set the main switch to the **Off** position and reinstall the spark plugs.

#### **Inflate Tires**

Inflate the tires to normal pressure.

### Remove, Clean, and Store Battery

- 1. Remove the battery (see "Remove Battery" page 106).
- 2. To clean oxidation from the battery posts and cable connectors, use a wire brush. Wash the posts and cable connectors with a solution of 1 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 location that maintains a temperature of 32° to 90°F (0° to 32°C).
- 5. While in storage, fully charge the battery once a month (see "Charge Battery" page 106).

### Park and Cover the Motorcycle

Park the motorcycle in its storage location and lock the steering. Cover the motorcycle with a durable, breathable material or with a high-quality motorcycle cover 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.

### **Maintaining During Storage**

Check and maintain normal tire pressure and battery voltage during storage.

### **Removing from Storage**

- 1. Remove the cover and unlock the front forks.
- 2. Check the tire pressure and inflate the tires if necessary.
- 3. Reinstall the battery (see "Install Battery" page 107).
- 4. Wash and dry the entire motorcycle (see "Washing and Drying" page 116).
- 5. Prior to starting the engine, change the engine oil and filter (see "Change Engine Oil and Oil Filter" page 74, beginning with step 2).

### Caution

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.

- 6. Wax, polish, or apply protectant to the appropriate motorcycle components (see "Waxing, Polishing, and Applying Protectants" page 118).
- 7. Perform the pre-operation check described in *Pre-Operation Check*, page 45.
- 8. Test ride the motorcycle before returning it to regular use (see "Road Test" page 113).

### **Cleaning and Storage**

Notes:

### **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 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.
- 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 of, or puncturing the muffler, baffles, header pipes or any other component which conducts exhaust gases.
- 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 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.

#### **Warranties**

# **Noise Emission Warranty**

Victory Motorcycle Division 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 dealer or Victory Motorcycle Division, Polaris Sales Inc., P.O. Box 47700, Hamel, MN 55340-9960

# **Emissions Control System Warranty**

Victory Motorcycles, Polaris Sales Inc. - Emission Control System Warranty Statement

### **Your Warranty Rights and Obligations**

The California Air Resources Board and Victory Motorcycle Division, Polaris Sales Inc. (hereinafter Victory) are pleased to explain the emission control system warranty on your 2002 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 owner'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.

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 Sales Inc., P.O. Box 47700, Hamel, Minnesota 55340–9960, or the California Air Resources Board, P.O. Box 8001, 9528 Telstar Avenue, El Monte, CA 91734-8001.

Victory Motorcycle Division, Polaris Sales Inc. - Limited Warranty on Emission Control System

#### **Warranties**

Victory Motorcycle Division, Polaris Sales Inc., (hereinafter Victory) warrants that each new 2002 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 purchases 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 of 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.

### I. Coverage

Warranty defects shall be remedied during customary business hours at any authorized Victory motorcycle 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 128

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 dealers 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:
  - (1) accident
  - (2) misuse
  - (3) repairs improperly performed or replacements improperly installed
  - (4) use of replacement parts or accessories not conforming to Victory specifications which adversely affect performance and/or
  - (5) use in competitive racing or related events.

#### **Warranties**

- 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.

### 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 motorcycle 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 MOTORCYCLE 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 Motorcycle Division, Polaris Sales Inc. P.O. Box 47700 Hamel, MN 55340-9960 ATTN: Warranty Department

#### **Warranties**

# **Victory Motorcycle Warranty Policy**

# **Limited Warranty**

Victory Motorcycle Division, Polaris Sales Inc., P.O. Box 47700, Hamel, Minnesota 55340-9960, gives a ONE YEAR LIMITED WARRANTY on all components of the Victory Motorcycle against defects in material or workmanship. This warranty covers the parts and labor charges for repair or replacement of defective parts which are covered by this warranty. This warranty begins on the date of purchase. This warranty is transferrable to another consumer during the warranty period through a Victory Motorcycle dealer.

# Registration

At the time of sale, the Warranty Registration Form must be completed by your dealer and submitted to Victory Motorcycle Division, Polaris Sales Inc. within ten days. Upon receipt of this registration, Victory Motorcycle Division, Polaris Sales Inc. 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 the warranty entitlement. 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 VICTORY MOTORCYCLE IS REGISTERED WITH VICTORY MOTORCYCLES DIVISION OF POLARIS SALES INC.

Initial dealer preparation and set-up of your Victory Motorcycle is very important in ensuring trouble-free operation. Purchasing a motorcycle in the crate or without proper dealer set-up will void your warranty coverage.

## **Warranty Coverage And Exclusions:**

#### **Limitations Of Warranties And Remedies**

The warranty excludes any failures that are not caused by a defect in material or workmanship. This warranty does not cover accidental damage, normal wear and tear, abuse or improper handling. This warranty also does not cover any Victory Motorcycle that has been altered structurally, modified, neglected, improperly maintained, used for racing, or used for purposes other than for which it was manufactured, or for any damages which occur during trailer transit or as a result of unauthorized service or the use of unauthorized parts. In addition, this warranty does not cover physical damage to paint or finish, stress cracks, tearing or puncturing of upholstery material, corrosion, or defects in parts, components or Victory Motorcycle due to fire, explosions or any other cause beyond Victory Motorcycle Division, Polaris Sales Inc. control.

This warranty does not cover the use of unauthorized lubricants, chemicals, or fuels that are not compatible with the Victory Motorcycle.

The exclusive remedy for breach of this warranty shall be, at Victory Motorcycle Division, Polaris Sales Inc. exclusive option, repair or replacement of any defective materials, or 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 DIVISION OF POLARIS SALES INC. 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. Some states do not permit the exclusion or limitation of incidental or consequential damages or implied warranties, so the above limitations or exclusions may not apply to you if inconsistent with controlling state law.

#### **Warranties**

ALL IMPLIED WARRANTIES (INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE LIMITED IN DURATION TO THE ABOVE ONE YEAR WARRANTY PERIOD. VICTORY MOTORCYCLES DIVISION OF POLARIS SALES INC. FURTHER DISCLAIMS ALL EXPRESS WARRANTIES NOT STATED IN THIS WARRANTY OTHER THAN EMISSIONS AND EXCISE WARRANTIES. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you if inconsistent with controlling state law.

### **How To Obtain Warranty Service**

If your Victory Motorcycle requires warranty service, you must take it to a Victory Motorcycle 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 division of Polaris Sales Inc. suggests that you use your original selling dealer; however, you may use any Victory Motorcycle Servicing Dealer to perform warranty service.

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 division of Polaris Sales Inc.

This warranty also gives you specific legal rights, and you may also have other rights which vary from state to state.

If any of the above terms are void because of state or federal law, all other warranty terms will remain in effect.

Model Year 2002	V92TC Touring Cruiser	V92TC Deluxe Touring Cruiser
Dimensions		-
Overall Length	98 in (249 cm)	98 in (249 cm)
Overall Width	42 in (107 cm)	42 in (107 cm)
Overall Height	60.8 (154 cm)	60.8 (154 cm)
Seat Height	28.3 in (72 cm)	28.3 in (72 cm)
Weelbase	65.5 in (166 cm)	65.5 in (166 cm)
Ground Clearance	5 in (13 cm)	5 in (13 cm)
Weight		
Dry Weight	720 lbs (326.6 kg)	727 lbs (329.8 kg)
Wet Weight	759 lbs (344.3 kg)	770 lbs (349.3 kg)
Gross Vehicle Weight Rating (GVWR)	1210 lbs (549 kg)	1210 lbs (549 kg)
Capacities		•
Engine Oil	6 Qt (5.7 Ltr)	6 Qt (5.7 Ltr)
Fuel	5 US Gal (19 Ltr)	5 US Gal (19 Ltr)

Model Year 2002	V92TC Touring Cruiser	V92TC Deluxe Touring Cruiser
Engine		
Engine Model Number	MCVT1507D 2002	MCVT1507D 2002
Configuration	50° V-Twin	50° V-Twin
Displacement	92 cu in (1507 cc)	92 cu in (1507 cc)
Cooling System	Air & Oil	Air & Oil
Compression Ratio	9.2:1	9.2:1
Valves per Cylinder	4	4
Bore and Stroke	97 x 102 mm	97 x 102 mm
Throttle Body Bore	44 mm	44 mm
Exhaust System	Dual-Crossover	Dual-Crossover
Lubrication System	Wet Sump	Wet Sump
Spark Plug/Gap	NGK CR7EB .032 in (0.8 mm)	NGK CR7EB .032 in (0.8 mm)
Drive System		•
Transmission Type	5 speed Constant Mesh	5 speed Constant Mesh
Primary Reduction System	Wet Multi-Gear	Wet Multi-Gear
Primary Reduction Ratio	1.5:1	1.5:1
Gear Shift Pattern	1 Down, 4 Up	1 Down, 4 Up

Model Year 2002	V92TC Touring Cruiser	V92TC Deluxe Touring Cruiser
Internal Gear Ratios 1st	3.21:1	3.21:1
2nd	2.19:1	2.19:1
3rd	1.53:1	1.53:1
4th	1.24:1	1.24:1
5th	1:1	1:1
Final Drive Ratio	2.13:1	2.13:1
Clutch Type	Wet Multi-Disk Diaphragm Spring	Wet Multi-Disk Diaphragm Spring
Drive Belt Deflection	3/8 inch (9.5 mm)	3/8 inch (9.5 mm)
Chassis	•	
Front Suspension Type/Travel	Telescopic 5.1 in (13 cm)	Telescopic 5.1 in (13 cm)
Rear Suspension Type/Travel	Single Shock 4 in (10 cm)	Single Shock 4 in (10 cm)
Front Brakes	Dual 300 x 5 mm Disc with 4 Piston Fixed Caliper	Dual 300 x 5 mm Disc with 4 Piston Fixed Caliper
Rear Brakes	Single 300 x 6 mm Disc with 2 Piston Floating Caliper	Single 300 x 6 mm Disc with 2 Piston Floating Caliper

Model Year 2002	V92TC Touring Cruiser	V92TC Deluxe Touring Cruiser
Wheels and Tires		
Front Wheel Type/Size	Cast 5 Spoke 16 x 3 in	Laced 40 Spoke 16 x 3 in
Rear Wheel Type Size	Cast 5 Spoke 16 x 3 in	Laced 40 Spoke 16 x 3.5 in
Front Tire Type/Size	Dunlop 491 Elite II MT90 B16 71H	Dunlop 491 Elite II MT90 B16 71H (use with inner tube)
Rear Wheel Type/Size	Dunlop D417 160/80 B16 75H	Dunlop D417 160/80 B16 75H (use with inner tube)
ights and Fuses		
Fuses Ignition/Coil/Speedo	15 amp	15 amp
Horn/Brake/Headlamp	20 amp	20 amp
Flashers	15 amp	15 amp
PCM	20 amp	20 amp
Fuel Pump	10 amp	10 amp
Bulbs Headlamp (Intl.)	ANSI HG024XV (H4)	ANSI HG024XV (H4)
Driving Lights	ANSI 4449	ANSI 4449
Taillight	ANSI 198	ANSI 198
Running/Front Turn	ANSI 198	ANSI 198
Rear Turn Signals	ANSI 199	ANSI 199
UK Front Position Light	ANSI 193	ANSI 193

# **Fuel Specifications**

Use only unleaded gasoline, 92 pump octane minimum.

DO NOT USE GASOLINE CONTAINING METHANOL.

Using gasoline/methanol blends can result in poor starting and drivability, and may damage critical fuel system components.

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

Gasoline containing up to 10% Ethanol can be used.

Gasoline that has been Reformulated or Oxygenated can be used.

# **Engine Oil Specifications**

Use only Victory Brand Semi-Synthetic 20W-40 Motor Oil or equivalent.

### Caution

Do not combine mineral-base and synthetic oil in the crankcase at the same time, as this can cause serious engine damage.

# **Identification Numbers for Your Motorcycle**

Vehicle Identification Number	:	
Engine Identification Number	:	
Ignition Key Number:		
Model Number:		

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