Motorcycling is a popular choice for economical and iviolor cycums is a popular choice for economical and convenient travel. More than 241,000 New Yorkers use A Message from the Governor convenient traver. More man 241,000 trew rounders use motorcycles for commuting, touring and recreational

activities.

The New York State Motorcycle Safety Program is The New Tork State Motorcycle safety. We recognize dedicated to improving motorcycle safety. acurcused to promote rider education and motorcycle the need to promote rider education. the need to promote their each through education and awareness for all motorists. uwareness joi an mororisis. Inrough eancumon and greater public awareness, motorcycling can be a safe grewer puone awareness, mojorcycung can ve a saje
This manual will help to make
and enjoyable activity. and enjoyable activity. This manual will help to make it some first safer. I urge you to read it sour motorcycle traveling safer. your motor-carefully and to follow its good advice: keep your motorcurejuny and to journ us good anytice: keep your mood condition, wear a helmet and protective cycle in good condition, cycle in good common, went a neumer and protective always obey the rules of the clothing, drive defensively, always obey the rules of the clothing, drive defensively. road and never drink and drive.

Andrew M. Cuomo

Governor



NYS Department of Motor Vehicles Motorcycle Safety Program 6 Empire State Plaza, Room 336 Albanv. New York 12228

Visit our Internet Office at: www.dmv.ny.gov

## Table Of Contents

#### MOTORCYCLE LICENSES, OWNERSHIP, SPECIAL RULES

	Licenses	1
	Registration, Inspection, Insurance	2
	Special Rules and Required Equipment	3
	Children As Passengers	3
нои	V TO PREPARE TO RIDE	
	W	
	Wear the Right Gear	4
	Helmet Use	4
	Helmet Selection	4
	Eye and Face Protection	5
	Clothing	6
	Know Your Motorcycle	6
	The Right Motorcycle For You	6
	Receive and Lend	7
	Know Your Motorcycle Controls	7
	Check Your Motorcycle	7
	Know Your Responsibilities	9
RIDE	WITHIN YOUR ABILITIES	
	Vehicle Control	10
	Body Position	10
	Gear Shift	10
	Brakes	11
	Turns	12
	Keep Your Distance	13
	Lane Positions	14
	When You Follow Another Vehicle	15
	When You Are Followed	16
	Pass and Being Passed	17
	Lane Share	17
	Merging Cars	18
	Cars Next to You	18
	SEE	18
	Intersections	19
	Blind Intersections	19
	When You Pass Parked Cars	20
	When You Park at the Roadside	20
	Be Seen	21
	Clothes	21
	Headlight	21
	Signals	21
	Brake Light	22
	Mirror Use	22
	Head Checks	22

	Horn	23
	When You Ride at Night	24
	Crash Prevention	24
	Quick Stops	24
	Swerves or Quick Turns	25
	When You Ride a Curve	27
	How to Handle Dangerous Surfaces	27
	Difficult Surfaces	27
	Wet Surfaces	28
	Railroad Tracks, Grooves and Gratings	29
	Mechanical Problems	30
	Tire Failure	30
	Stuck Throttle	30
	Wobble	30
	Chain Problems	31
	Engine Failure	31
	Animals	31
	Flying Objects	32
	How to Get Off The Road	32
	How to Carry Passengers and Cargo	32
	Equipment	32
	Passenger Instructions	33
	How to Ride with Passengers	33
	How to Carry Loads	33
	Group Rides	34
	Keep the Group Small	34
	Keep the Group Together	34
	Keep Your Distance	34
	Noop four blockings	
PHY	SICAL SHAPE TO RIDE	
	<del></del>	
	Why this Information is Important	36
	Alcohol and Other Drugs in Motorcycle Operation	36
	Alcohol in the Body	36
	Blood Alcohol Concentration	37
	Alcohol and the Law	38
	Results of Conviction	38
	Decrease the Risks	39
	Do Not Drink	39
	Do Not Ride	39
	Get Involved to Protect Friends	40
	Fatigue	40
HOV	V TO EARN YOUR MOTORCYCLE LICENSE	
		_
	Knowledge and Skill	42
	Knowledge Test	42
	On-Cycle Skill Test	43
M/O	TORCYCLE SAFETY PROGRAM	
IVIU	UNCTULE SAPETY PRUGRAIN	
	Rider Training	45
	THUGI HAHIIIU	40

### Motorcycle Licenses, Ownership, Special Rules

#### **LICENSES**

To operate a motorcycle in New York State, you must have a motorcycle operator's license (Class M) or a motorcycle junior operator's license (Class MJ). You can drive a motorcycle in New York if you are a resident of another state or country and have a valid motorcycle license from there. If you are less than 18, you must obey the restrictions for both the out-of-state jurisdiction and New York State. The instructions to apply for a driver license, which includes a motorcycle license, are in Chapter One of the NYS Driver's Manual. You can study that manual as well as this one, even if you already have a license. Your motorcycle license written test will be based on information from both manuals. The Driver's Manual also contains the junior operator and learner permit restrictions, information on license suspension and revocation and vehicle registration, title and insurance. The Driver's Manual describes the junior operator and learner permit restrictions, information about license suspension and revocation, and vehicle registration, title and insurance. Junior motorcycle operators are also subject to the New York State graduated license requirements that apply to other drivers. In addition to the information in the Driver's Manual, motorcycle operators must know that:

When a motorcycle learner practices the supervising driver must hold a valid motorcycle license, be at least 21 and remain within 1/4 mile of the learner at all times. Additional restrictions apply to junior learners. The supervising driver need not ride on the motorcycle of the learner, but only the supervising

- driver can be a passenger. The learner and supervising driver should remain within sight of one another at all times and discuss the learner's performance after practice. We recommend at least 30 hours of practice, with at least 10 in moderate to heavy traffic.
- Your road test will include left and right circles and figure-eights on public streets. In addition to normal driving maneuvers, you must be able to accomplish these while being alert for other traffic. If you take the test on a three-wheeler, your motorcycle license will be restricted to driving three-wheelers.
- You must provide road test transportation for the license examiner in a properly registered and inspected car or truck, and a driver at least 21 years old who is licensed to drive both this vehicle and the motorcycle you will drive during the test.
- If you have a driver license, your current class and motorcycle class will both be listed on one license document (for example, Class DM).
- If you already have another class of driver license and a motorcycle operator's learner permit, the DMV will waive your motorcycle road test if you complete the Motorcycle Safety Foundation's (MSF) Motorcycle Basic RiderCourse®
- To qualify for the waiver, the course must be given by an approved training provider in New York State.

For information about the nearest MSF course, call 1-800- 446-9227.

## REGISTRATION, INSPECTION, INSURANCE

Unlike most other motor vehicles, motorcycles are registered for one year rather than two, and all motorcycle registrations expire on April 30.

Motorcycles must be inspected at least once every 12 months at a station licensed by the DMV to perform motorcycle safety inspections. The station will display a yellow and black sign reading "Official NYS Motorcycle Inspection Station." Dealerships must inspect motorcycles prior to delivery. If purchased in a private sale, you will be given 10 days from the date of registration to have the motorcycle inspected.

Motorcycles are not included in the "no fault" insurance provisions that cover other motor vehicles in New York State. Motorcycle owners and operators should know and understand the extent and limitations of their insurance coverage for themselves and their passengers.

Unlike other motor vehicles, liability insurance may be terminated on a motorcycle without a turn-in of the license plate at a DMV office. This makes it easier to put the motorcycle back on the road after winter storage. Under no circumstances may a motorcycle be operated on public highways without liability coverage. This also applies to motorcycles registered out-of-state.

## SPECIAL RULES AND REQUIRED EQUIPMENT

All motorcycle operators and passengers must wear approved motorcycle helmets as defined by USDOT Federal Motor Vehicle Safety Standards (section 218). To improve the visibility of the motorcyclist, we recommend that helmets have at least four square inches of reflective material on both sides.

All motorcycle operators must wear approved eye protection even if the motorcycle has a windshield. Any windshield must also be of an approved type. Prescription or made-to order safety glasses may be used if the user can present written certification that they meet DMV standards. The eye protection must be made in a way that conforms with the regulations established by the American National Standards Institute (ANSI - Z87.1). However, the DMV recommends approved goggles or a face shield for full protection.

The headlight and rear light of the motorcycle must be on at all times when you operate on the road.

Motorcyclists can use a full lane and can ride two abreast in a single lane. You can not ride abreast of another vehicle in the same lane, between lanes or between traffic and parked cars. Motorcyclists are subject to all rules of the road. This includes signals for all turns and lane changes and pass only where it is allowed for other vehicles.

#### **CHILDREN AS PASSENGERS**

A child of any age can be a motorcycle passenger in New York State. Every passenger must wear a DOT-approved motorcycle helmet, and ride upon a permanent, seat on a motorcycle that can carry more than one person. The passenger must sit with his face forward, one leg on each side of the motorcycle, with each foot on a foot peg, unless he or she is seated in a properly attached sidecar. It is illegal for an operator to carry a passenger, or for the passenger to ride, in a position that will interfere with the operation or control of the motorcycle or the vision of the operator.

A MOTORCYCLE MUST HAVE ALL OF THE FOLLOWING EQUIPMENT IN GOOD WORKING ORDER:

- Approved lights, that include headlight, rear light, stop lamp and license plate lamp, at least one red reflector on the rear and directional signals if the motorcycle was originally equipped with turn signals or is a 1985 or newer model.
- Brakes, on 1971 and newer motorcycles brakes are required on both wheels
- A horn or other warning device
- At least one mirror mounted on a handle bar, although mirrors on both handlebars are recommended
- A suitable muffler. "Cutouts" or mufflers with removable baffles are prohibited
- Handlebars no higher than the shoulder height of the operator

 A seat for the operator and a passenger seat in the rear if a passenger is carried (no more than one passenger is permitted)

For more information, please see "https://dmv.ny.gov/forms/mv529b.pdf," form MV-529-B, available from the DMV Web site www.dmv.ny.gov, by request from a DMV Call Center, and at any motor vehicle office.

### **Preparing To Ride**

What you do before you start a trip Determines if you will get where you want to go safely. Before any trip, a safe rider makes a point to:

- 1. Wear the right gear.
- 2. Become familiar with the motorcycle.
- 3. Check the motorcycle equipment.
- 4. Be a responsible rider.

#### WEAR THE RIGHT GEAR

When you ride, your gear is "right" if it protects you. In any crash, you have a better chance to avoid serious injury if you wear:

- An approved helmet.
- Face or eye protection.
- Protective clothes.

#### **HELMET USE**

Crashes are not rare events — particularly among beginning riders. And one out of every five motorcycle crashes results in head or neck injuries. Head injuries are just as severe as neck injuries — and far more common. Crash analysis shows that head and neck injuries account for a majority of serious and fatal injuries to motorcyclists. Research also shows that, with few exceptions, head and neck injuries are reduced by the proper wearing of an approved helmet.

Some riders do not wear helmets because they think helmets will limit their view to the sides. Others wear helmets only on long trips or when riding at high speeds. Here are some facts to consider:

An approved helmet lets you see as

far to the sides as necessary.
A study of more than 900
motorcycle crashes, where 40% of
the riders wore helmets, did not find
even one case in which a helmet
kept a rider from spotting danger.

- Most crashes happen on short trips (less than five miles long), just a few minutes after starting out.
- Most riders are riding slower than 30 mph when a crash occurs. At these speeds, helmets can cut both the number and the severity of head injuries by half.

No matter what the speed, helmeted riders are three times more likely to survive head injuries than those not wearing helmets at the time of the crash.

#### **HELMET SELECTION**

There are two primary types of helmets that provide two different levels of coverage: three-quarter and full face.
Whichever style you choose, you can get the most protection by making sure that the helmet:

- Meets U.S. Department of Transportation (DOT) and state standards. (Helmets with a label from the Snell Memorial Foundation give you an added assurance of quality.)
- Fits snugly, all the way around.
- Has no obvious defects such as cracks, loose pads or frayed straps. Whatever helmet you decide on, keep it securely fastened on your head when you ride. Otherwise, if you are involved in a crash, it is likely to fly off your head before it gets a chance to protect you.

## HELMETS





#### **EYE AND FACE PROTECTION**

A plastic shatter-resistant face shield can help protect your whole face in a crash. It also protects you from wind, dust, dirt, rain, insects and pebbles thrown from cars ahead. These problems can distract you and can be painful. If you have to deal with them, you cannot devote your full attention to the road. Goggles protect your eyes, though they will not protect the rest of your face like a face shield does. A windshield is not a substitute for a face shield or goggles. Most windshields will not protect your eyes from the wind. Neither will glasses or sunglasses. Glasses will not keep your eyes from watering, and they might blow off when you turn your head. To be effective, eye or face shield protection must:

- Be free of scratches.
- Be resistant to penetration.
- Give a clear view to either side.
- Fasten securely, so it does not blow off.
- Permit air to pass through to reduce fog.

Permit enough room for glasses or sunglasses, if needed. Tinted eye protection should not be worn at night or any other time when little light is available.

#### **CLOTHING**

The right clothing protects you in a collision. It also provides comfort, as well as protection from heat, cold, debris and hot parts of the motorcycle.

- Jacket and pants should cover arms and legs completely. They should fit snugly enough to keep from flapping in the wind, yet loosely enough to move freely. Leather offers the most protection. Sturdy synthetic material provides a lot of protection as well. Wear a jacket even in warm weather to prevent dehydration. Many jackets are designed to protect without getting you overheated, even on summer days.
- Boots or shoes should be high and sturdy enough to cover your ankles and give them support. Soles should be made of hard, durable slip- resistant material. Keep heels short so they do not catch on rough surfaces. Tuck laces in so they will not catch on your motorcycle.
- Gloves allow a better grip and help protect your hands in a crash. Your gloves should be made of leather or similar durable material. In cold or wet weather, your clothes should keep you warm and dry, as well as protect you from injury. You cannot control a motorcycle well if you are numb. Riding for long periods in cold weather can cause severe chill and fatigue. A winter jacket should resist wind and fit snugly at the neck, wrists, and waist. Quality rain suits designed for motorcycle use resist tearing or ballooning at high speeds.

#### KNOW YOUR MOTORCYCLE

There are plenty of things on the highway that can cause you trouble. Your motorcycle should not be one of them. To make sure that your motorcycle will not let you down:

- Read the owner manual first.
- Start with the right motorcycle for you.
- Be familiar with the motorcycle controls.
- Check the motorcycle before every ride.
- Keep it in safe condition between rides.
- Avoid modifications that make your motorcycle more difficult to handle.

## THE RIGHT MOTORCYCLE FOR YOU

First, make sure your motorcycle is right for you. It should "fit" you. Your feet should reach the ground while you are seated on the motorcycle. At minimum, your street-legal motorcycle should have:

#### Test Yourself

#### A plastic shatter-resistant face shield:

- A. Is not necessary if you have a wind shield.
- B. Only protects your eyes.
- C. Helps protect your whole face.
- D. Does not protect your face as well as goggles.

- Headlight, taillight and brake light.
- Front and rear brakes.
- Turn signals.
- Horn.
- State law requires only one mirror, though two mirrors are recommended

#### **UNFAMILIAR VEHICLE**

Those who borrow and lend motorcycles, beware. Crashes are fairly common among novice riders—especially in the first months. When you ride an unfamiliar motorcycle it adds to the problem. If you borrow a motorcycle, make sure you have its insurance identification card or that it is properly insured. No matter how experienced you may be, ride extra carefully on any motorcycle that is new or unfamiliar to you. More than half of all crashes occur on motorcycles ridden by the operator for less than six months.

## KNOW YOUR MOTORCYCLE CONTROLS

Make sure you are completely familiar with the motorcycle before you take it out on the street. Be sure to review the owner's manual. This is particularly important if you are riding a borrowed motorcycle.

If you are going to use an unfamiliar motorcycle:

- Make all the checks you would on your own motorcycle.
- Find out where everything is, particularly the turn signals, horn, headlight switch, fuel-control valve

- and engine cut-off switch. Find and operate these items without having to look for them.
- Know the gear pattern. Work the throttle, clutch, and brakes a few times before you start riding. All controls react a little differently.
- Ride very cautiously and be aware of surroundings. Accelerate gently, take turns more slowly and leave extra room for stopping.

#### CHECK YOUR MOTORCYCLE

A motorcycle needs more frequent attention than a car

A minor technical failure in a car seldom leads to anything more than an inconvenience for the driver.

If something is wrong with the motorcycle, you'll want to find out about it before you get in traffic. Make a complete check of your motorcycle before every ride.

Before mounting the motorcycle make these checks:

- Tires—Check the air pressure, general wear and tread.
- Fluids—Oil and fluid levels. At a minimum, check hydraulic fluids and coolants weekly. Look under the motorcycle for signs of an oil or gas leak.
- Headlights and Taillight—Check them both. Test your switch to make sure both high and low beams work.
- Turn Signals—Turn on both right and left turn signals. Make sure all lights work properly.

#### Engine Cut-Off Light switch (high/low) Switch Choke (varies) Electric Turn Start *NOTORCYCLE CONTROLS* Signal Switch Button Innition Key (varies) Horn Button Throttle Front Brake Lever Clutch Lever Speedometer & Odometer Tachometer (if equipped) Fuel Supply Valve (if equipped) Rear Brake Pedal Gear -Changing Lever Kick Starter (if equipped)

- Brake Light—Try both brake controls, and make sure each one turns on the brake light. Once you have mounted the motorcycle, complete these checks before you begin to ride:
- Clutch and Throttle—Make sure they work smoothly. The throttle should snap back when you let go. The clutch should feel tight and smooth.
- Mirrors—Clean and adjust both mirrors before you start. It is difficult to ride with one hand while you try to adjust a mirror. Adjust each mirror so you can see the lane behind and as much as possible of the lane next to you. When properly adjusted, a mirror may show the edge of your arm or shoulder—but it is the road behind and to the side that is most important.
- Brakes—Try the front and rear brake levers one at a time. Make sure each

- one feels firm and holds the motorcycle when the brake is fully applied.
- Horn—Try the horn. Make sure it works. In addition to the checks you should make before every trip, check these items at least once a week: Wheels, cables, fasteners and fluids. Follow your owner manual to get recommendations.

#### Test Yourself

#### More than half of all crashes:

- A. Occur at speeds greater than 35 mph.
- B. Happen at night.
- C. Are caused by worn tires.
- D. Involve riders who have ridden their motorcycles less than six months.

#### KNOW YOUR RESPONSIBILITIES

"Accident" implies an unforeseen event that occurs without fault or negligence. Most often in traffic, that is not the case. In fact, most drivers involved in a crash can usually claim some responsibility for what takes place. Consider a situation where someone decides to try to squeeze through an intersection on a yellow light about to turn red. Your light turns green. You pull into the intersection without checking for vehicles that may come late into the intersection. That is all it takes for the two of you to tangle. It was the driver of the vehicle who is responsible to stop. And it was your responsibility to look before you pulled out. Neither of you held up your end of the deal. Just because someone else is the first to start the chain of events that lead to a crash, you are not free of responsibility. As a rider you cannot be sure that other operators will see you or yield the right of way. To lessen your chances of a crash:

- Be visible—wear proper clothes, use your headlight, ride in the best lane position to see and be seen.
- Communicate your intentions—use the proper signals, brake light and lane position.
- Maintain an adequate space cushion—when you follow, when you are followed, when you share a lane, when you pass and are passed.
- Scan your path of travel 12 seconds ahead.
- Identify and separate multiple hazards.

Be prepared to act—remain alert and know how to carry out proper crash-avoidance skills.

Blame does not matter when someone is injured in a crash. There is rarely a single cause of any crash. The ability to ride aware, make critical decisions, and carry them out separates responsible riders from all the rest. Remember, it is up to you not to be the cause of or an unprepared participant in, any crash.

### Ride Within Your Abilities

#### **BASIC VEHICLE CONTROL**

This manual cannot teach you how to control direction, speed or balance. That is something you can learn only through practice. But control begins with knowledge of your abilities and to ride within them, along with knowledge of the rules of the road.

#### **BODY POSITION**

#### To control a motorcycle well:

- Posture—Sit so you can use your arms to steer the motorcycle rather than to hold yourself up.
- Seat—Sit far enough forward so that arms are slightly bent when you hold the handle grips. When you bend your arms it permits you to press on the handlebars without having to stretch.
- Hands—Hold the handle grips firmly to keep your grip over rough surfaces. Start with your right wrist flat. This will help you keep from accidentally using too much throttle. Also, adjust the handlebars so your hands are even with or below your elbows. This permits you to use the

proper muscles to steer with precision.

- Knees—Keep your knees against the gas tank to help you keep your balance as the motorcycle turns.
- Feet—Keep your feet firmly on the Foot pegs to maintain balance. Do not drag your feet. If your foot catches on something, you can be injured and it could affect your control of the motorcycle. Keep your feet near the controls so you can get to them fast . Also, do not let your toes point downward—they may get caught between the road and the foot pegs.

#### **GEAR SHIFTS**

There is more when you change gears than a simple smooth pickup of speed.

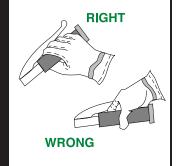
The ability to use the gears when you downshift, turn or start on hills is important for safe motorcycle operation.

Shift down through the gears with the clutch as you slow or stop. Remain in first gear while you are stopped so that you can move out quickly if you need to.

Make certain you are riding slowly enough when you shift into a lower gear. If not, the motorcycle will lurch, and the rear wheel may skid. When you ride downhill or shift into first gear you may need to use the brakes to slow enough before you downshift safely. Work toward a smooth, even clutch release, especially when you downshift.

It is best to change gears before you enter a turn. However, sometimes a shift while in the turn is necessary. If so, remember to do so smoothly.

# HOLDING HANDLEGRIPS



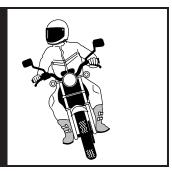
A sudden change in power to the rear wheel can cause a skid.

#### **BRAKES**

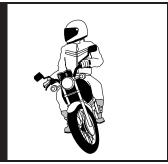
Your motorcycle has two brakes: one each for the front and rear wheel. Use both of them at the same time. The front brake is more powerful and can provide at least three-quarters of your total power to stop. The front brake is safe to use if you use it properly. Remember:

- Use both brakes every time you slow or stop. When you use both brakes for even "normal" stops it will permit you to develop the habit or skill of using both brakes properly in an emergency. Squeeze the front brake and press down on the rear. If you grab at the front brake or jam down on the rear, you can cause the brakes to lock. This results in control problems.
- If you know the technique, you can use both brakes in a turn, although it should be done very carefully. When you lean on the motorcycle some of the traction is used for when you corner. Less traction is available for stopping. A skid can occur if you apply too much brake. Also, if you use the front brake incorrectly on a slippery surface, it can be hazardous. Use caution and squeeze the brake lever, never grab.
- Some motorcycles have integrated brake systems that link the front and rear brakes together when you apply the rear brake pedal. (Consult the owner manual for a detailed explanation on the operation and use of these systems.)

## NORMAL TURNING



## SLOW TURNING



#### **TURNS**

Riders often try to take curves or turns too fast. When they cannot hold the turn, they end up in another lane of traffic or off the road. Or, they overreact and brake too hard, which causes a skid and loss of control. Approach turns and curves with caution.

#### Use four steps for better control:

- SLOW
- **LOOK**
- **LEAN**
- ROLL

**SLOW**— Reduce speed before the turn. Close the throttle and, if necessary, apply both brakes.

**LOOK** — Look through the turn to where you want to go. Turn just your head, not your shoulders, and keep your eyes level with the horizon.

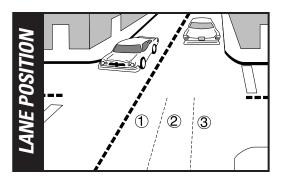
LEAN — To turn, the motorcycle must lean. To lean the motorcycle, press on the handgrip in the direction of the turn. Press left—lean left—go left. Press right—lean right—go right. Higher speeds and/or tighter turns require the motorcycle to lean more.

#### When you ride, you should:

- A. Turn your head and shoulders to look through turns.
- B. Keep your arms straight.
- C. Keep your knees away from the gas tank.

**Test Yourself** 

D. Turn just your head and eyes to look where you are going.



**ROLL** — Roll on the throttle through the turn to stabilize suspension. Maintain steady speed or accelerate gradually through the turn. This will help keep the motorcycle stable. In normal turns, the rider and the motorcycle should lean together at the same angle.

In slow tight turns, lean the motorcycle only and keep your body straight. In slow tight turns, counterbalance by leaning the motorcycle only and keeping your body straight.

#### KEEP YOUR DISTANCE

The best protection you can have is distance—a "cushion of space"—all around your motorcycle. If someone else makes a mistake, distance permits you:

- Time to react.
- Space to maneuver.

#### **LANE POSITIONS**

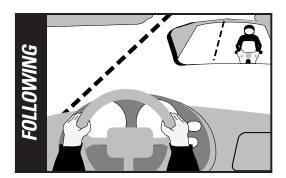
In some ways the size of the motorcycle can work to your advantage. Each traffic lane gives a motorcycle three paths of travel, as indicated in the illustration.

Your lane position should:

- Increase your ability to see and be seen.
- Avoid others' blind spots.
- Avoid surface hazards.
- Protect your lane from other drivers.
- Communicate your intentions.
- Avoid wind blast from other vehicles.
- Provide an escape route.

Select the appropriate path to maximize your space cushion and make yourself more easily seen by others on the road.

In general, there is no single best position for riders to be seen and to maintain a space cushion around the motorcycle. No portion of the lane need be avoided — including the center.



Position yourself in the portion of the lane where you are most likely to be seen and you can maintain a space cushion around you. Change position as traffic situations change. Ride in path 2 or 3 if vehicles and other potential problems are on your left only. Remain in path 1 or 2 if hazards are on your right only. If vehicles are being operated on both sides of you, the center of the lane, path 2, is usually your best option.

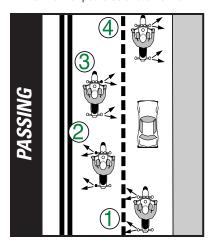
The oily strip in the center portion that collects drippings from cars is usually no more than two feet wide. Unless the road is wet, the average center strip permits adequate traction to ride on safely. You can operate to the left or right of the grease strip and still be within the center portion of the traffic lane. Avoid riding on big buildups of oil and grease usually found at busy intersections or toll booths.

## WHEN YOU FOLLOW ANOTHER VEHICLE

"Following too closely" is a major factor in crashes that involve motorcyclists. In traffic, motorcycles need as much distance to stop as cars. Normally, a minimum of two seconds distance should be maintained behind the vehicle ahead.

#### To gauge your following distance:

- Pick out a marker, such as a pavement marking or lamppost, on or near the road ahead.
- When the rear bumper of the vehicle ahead passes the marker, count off the seconds: "one-thousand-one, one-thousand-two."
- If you reach the marker before you reach "two," you are too close. A two-second following distance leaves a minimum amount of space to stop or swerve if the driver ahead suddenly stops. It also permits a better view of potholes and other haz-



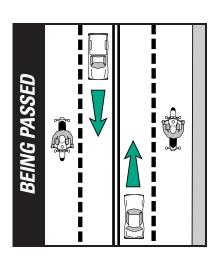
ards in the road. A larger cushion of space is needed if your motorcycle will take longer than normal to stop. If the pavement is slippery, if you cannot see through the vehicle ahead or if traffic is heavy and someone may squeeze in front of you, open up a three-second or more distance. Keep well behind the vehicle ahead even when you are stopped. This will make it easier to get out of the way if someone bears down on you from behind. It will also give you a cushion of space if the vehicle ahead starts to back up for some reason. When behind a car, ride where the driver can see you in the rearview mirror. Riding in the center portion of the lane should put your image in the middle of the rearview mirror-where a driver is most likely to see you.

Riding at the far side of a lane may permit a driver to see you in a side view mirror. But remember that most drivers do not look at their side view mirrors nearly as often as they check the rearview mir-

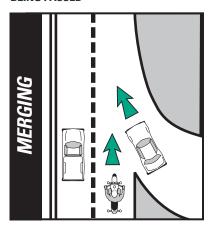
ror. If the traffic situation allows, the center portion of the lane is usually the best place for you to be seen by the drivers ahead and to prevent lane sharing by others.

#### WHEN YOU ARE BEING FOLLOWED

Speeding up to lose someone who follows too closely only ends up with someone trying to tailgate you at a higher speed. A better way to handle tailgaters is to get them in front of you. When someone follows too closely, change lanes and let them pass. If you cannot do this, slow down and open up extra space ahead of you to allow room for both you and the tailgater to stop. This will also encourage them to pass. If they do not pass, you will have given yourself and the tailgater more time and space to react in case an emergency does develop ahead.



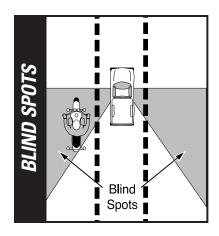
#### THE ART OF PASSING, BEING PASSED



When you pass or are passed by another Vehicle, it is not much different than with a car. However, visibility is more critical. Be sure other drivers see you, and that you see potential hazards.

#### **PASSING**

- Ride in the left portion of the lane at a safe distance to increase your line of sight and make you more visible.
   Signal and check for oncoming traffic. Use your mirrors and turn your head to look for traffic behind.
- When safe, move into the left lane and accelerate. Select a lane position that does not crowd the car as you pass and provides space to avoid hazards in your lane.
- **3.** Ride through the blind spot as quickly as possible.
- **4.** Signal again, and complete mirror and head checks before you return to your original lane and then cancel signal.



Remember, passes must be completed within posted speed limits, and only where permitted. Know your signs and road markings!

#### **BEING PASSED**

When you are being passed from behind or by a vehicle from the opposite direction, stay in the center portion of your lane. Riding any closer to them could put you in a hazardous situation. Avoid being hit by:

- The other vehicle—A slight mistake by you or the passing driver could cause a sideswipe.
- Extended mirrors—Some drivers for-

#### Test Yourself

Usually, a good way to handle tailgaters is to:

A.Change lanes and let them pass.

B.Use your horn and make obscene gestures.

C.Speed up to put distance between you and the tailgater.

D.Ignore them.

get that their mirrors hang out farther than their fenders.

- Objects thrown from windows— Even if the driver knows you're there, a passenger may not see you and might toss an object on you or the road ahead of you.
- Blasts of wind from larger vehicles— They can affect your control. You have more room for error if you are in the middle portion when hit by this blast than if you are on either side of the lane.

Do not move into the portion of the lane farthest from the passing vehicle. It might invite the other driver to cut back into your lane too early.

#### WHEN YOU SHARE A LANE

Cars and motorcycles cannot share a lane safely. Lane sharing is permitted only for two motorcycles. When you ride between rows of stopped or moving cars in the same lane, it can leave you vulnerable to the unexpected. A hand could come out of a window; a door could open; a car could turn suddenly. Discourage lane sharing by others. Keep a center-portion position whenever drivers might be tempted to squeeze by you. Drivers are most tempted to do this:

- In heavy, bumper-to-bumper traffic.
- When they want to pass you.
- When you prepare to turn at an intersection.
- When you are move into an exit lane or leave a highway.

#### WHEN CARS MERGE

Drivers on an entrance ramp may not see you on the highway. Give them plenty of room. Change to another lane if one is open. If there is no room for a lane change, adjust speed to open up space for the driver making the merge.

#### CARS ALONGSIDE

Do not ride next to cars or trucks in other lanes if you do not have to. You might be in the blind spot of a car in the next lane, which could switch into your lane without warning. Cars in the next lane also block your escape if you come upon danger in your own lane. Speed up or drop back to find a place clear of traffic on both sides.

#### SEE

Good experienced riders remain aware of what is going on around them. They improve their riding strategy with SEE, a three-step process used to make appropriate judgments, and apply them correctly in different traffic situations:

- Search
- Evaluate
- Execute

Let's examine each of these steps.

#### **SEARCH**

Search aggressively ahead, to the sides and behind to avoid potential hazards even before they arise. How assertively you search, and how much time and space you have, can eliminate or reduce harm. Focus even more on finding potential escape routes in or around intersections, shopping areas and school and construction zones.

#### Search for factors such as:

- Traffic from the other direction may turn left in front of you.
- Traffic from the left and right.
- Traffic from behind.

#### 5 Test Yourself

To reduce your reaction time, you should:

A.Ride slower than the speed limit.

- B.Cover the clutch and the brakes.
- C.Shift into neutral when slowing.
- D.Pull in the clutch when turning.

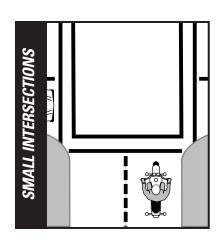
Answer - page 42

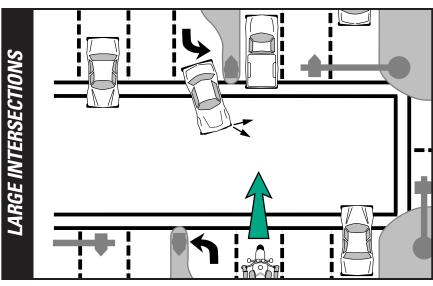
Hazardous road conditions. Be especially alert in areas with limited visibility. Visually "busy" surroundings could hide you and your motorcycle from others.

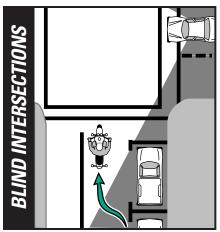
#### **EVALUATE**

Think about how hazards can interact to create risks for you. Anticipate potential problems and have a plan to reduce risks.

- Stationary Objects— potholes, guardrails, bridges, telephone poles and trees won't move into your path but may influence your strategy as you ride.
- Traffic control devices— Look for traffic signals. This includes regulatory signs, warning signs, and pavement mark, to help you evaluate circumstances ahead.
- Other vehicles, pedestrians and animals—may suddenly into your path and increase the likelihood of a crash. Think about your time and







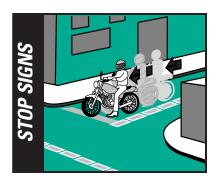
space requirements in order to maintain a margin of safety. You must leave yourself time to react if an emergency arises.

#### **EXECUTE**

Carry out your decision. To create more space and minimize harm from any hazard:

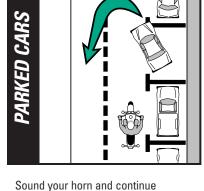
- Communicate your presence with lights and/or horn.
- Adjust your speed with acceleration, a stop or going slowly.
- Adjust your position and/or direction.

Apply the old adage "one step at a time" to handle two or more hazards. Adjust speed to permit two hazards to separate. Then deal with them one at a time as single hazards. Decisions become more complex with three or more hazards. Weigh consequences of each and give equal distance to the hazards. In potential high risk areas, such as intersections, store areas, school and construction zones, cover the clutch and both brakes to reduce the time you need to react.



#### WHEN YOU PASS PARKED CARS

When pass parked cars, stay toward the left of your lane. You can avoid problems caused by doors that may open, drivers who get out of cars or people who step out from between cars. If traffic from the other direction is present, it is usually best to remain in the centerlane position to maximize your space cushion. A bigger problem can occur if a driver does not check for traffic behind as he pulls away from the curb. Even if he does look, he may fail to see you. In either event, the driver might cut into your path. Slow down or change lanes to make room for someone who may cut in. Cars that make a sudden U-turn are the most dangerous. They may cut you off entirely and block the entire roadway and leave you with no place to go. Since you can not tell what a driver will do, slow down and get his attention.



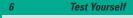
Sound your horn and continue with caution.

#### WHEN YOU PARK AT THE ROADSIDE

Park at a 90-degree angle to the curb. Your rear wheel should touch the curb.

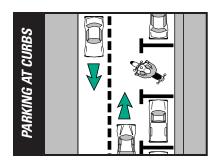
#### **BE CONSPICUOUS**

In crashes with motorcyclists, drivers often say they never saw the motorcycle. From ahead or behind, a motorcycle outline is much smaller than that of a car. Also, it is hard to see an object you do not look for, and most drivers do not look for motorcycles. More likely, they will look through the skinny, two-wheeled silhouette in search of cars that may pose a problem to them.



#### Making eye contact with other drivers:

- A. Is a good sign they see you.
- B. Is not worth the effort it takes.
- C. Doesn't mean that the driver will yield.
- D. Guarantees that the other driver will yield to you.



Even if a driver does see you, you are not necessarily safe. Smaller vehicles appear farther away, and seem to be travel slower than they actually are. It is common for drivers to pull out in front of motorcyclists, as they think they have plenty of time. Too often, they are wrong. However, you can do many things to make it easier for others to recognize you and your motorcycle.

#### **CLOTHES**

Most crashes occur in broad daylight. Wear bright colored clothes to help you be seen. Remember, your body is half of the visible surface area of the rider/motorcycle unit.

Bright orange, red, yellow or green jackets or vests are your best bets for visibility. Your helmet can do more than protect you in a crash. Brightly colored helmets can also help others see you.

Any bright color is better than drab or dark colors. Reflective, bright colored clothes (helmet and jacket or vest) is best. Reflective material on a vest and on the sides of the helmet will help drivers who come from the side spot you.

Reflective material can also be a big help for drivers from the other direction or from behind.

#### **HEADLIGHT**

The best way to help others see your motorcycle is to keep the headlight on—at all times (motorcycles sold in the U.S. since 1978 have the headlights on automatically when running.) Studies show that, during the day, a motorcycle with its light on is twice as likely to be noticed. Use of the high beam during the day

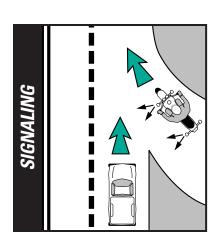
increases the likelihood that drivers from the other direction will see you. Use the low beam at night and in cloudy weather.

#### **SIGNALS**

The signals on a motorcycle are similar to those on a car. They tell others what you plan to do. However, due to a rider's added vulnerability, signals are even more important. Use them anytime you plan to change lanes or turn. Use them even when you think no one else is around. It is the car you do not see that is going to give you the most trouble. Your signal lights also make you easier to spot. That is why it is a good idea to use your turn signals even when what you plan to do is obvious.

When you enter onto a freeway, drivers who approach from behind are more likely to see your signal and make room for you.

When you turn your signal light on before each turn it reduces confusion and frustration for the traffic around you. Once you turn, make sure your signal is



off or a driver may pull directly into your path, because he thinks you plan to turn again. Use your signals at every turn so drivers can react accordingly. Do not make them guess what you intend to do.

#### **BRAKE LIGHT**

Your motorcycle brake light is usually not as noticeable as the brake lights on a car—particularly when your taillight is on. (It goes on with the headlight.) If the situation permits, flash your brake light before you slow down to help others notice you . It is especially important to flash your brake light before:

- You slow more quickly than others might expect (when you turn off a high-speed highway).
- You slow where others may not expect it (in the middle of a block or at an alley). If you are being followed closely, it is a good idea to flash your brake light before you slow. The tailgater may be watching you and not see something ahead that will make you slow down. This may discourage them from tailgating and warn them of hazards ahead they may not see.

#### **MIRROR USE**

While it is most important to keep track of what goes on ahead, you cannot afford to ignore situations behind. Traffic conditions change quickly. Knowledge of what is going on behind is essential for you to make a safe decision about how to handle trouble ahead. Frequent mirror checks should be part of your normal routine.

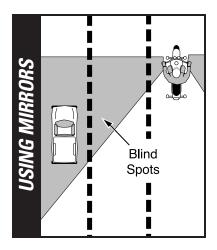
Make a special point to use your mirrors:

- When you are stopped at an intersection. Watch cars that approach from behind. If the driver is not attentive, he could be on top of you before he sees you.
- Before you change lanes. Make sure no one is about to pass you.
- Before you slow down. The driver behind may not expect you to slow, or may be unsure about where you will slow. For example, you signal a turn and the driver thinks you plan to turn at a distant intersection, rather than at a nearer driveway.

Some motorcycles have rounded (convex) mirrors. These provide a wider view of the road behind than do flat mirrors. They also make cars seem farther away than they really are. If you are not used to convex mirrors, get familiar with them. (While you are stopped, pick out a parked car in your mirror. Form a mental image of how far away it is. Then, turn around and look at it to see how close you came.) Practice with your mirrors until you become a good judge of distance. Even then, allow extra distance before you change lanes.

#### HEAD CHECKS

It is not enough to check your mirrors. Motorcycles have "blind spots" like cars. Before you change lanes, turn your head and look to the side for other vehicles. On a road with several lanes, check the far lane and the one next to you. A driver in the distant lane may head for the same space you plan to take. Frequent head checks should be your normal routine. Know the situation all around you.



#### **HORN**

Be ready to use your horn to get the attention of someone quickly. It is a good idea to give a quick beep before you pass anyone that may move into your lane. Here are some situations:

- A driver in the lane next to you is driving too closely to the vehicle ahead and may want to pass.
- A parked car has someone in the driver seat.
- Someone is in the street, riding a bicycle or on foot. In an emergency, press the horn button loud and long. Be ready to stop or swerve away from the danger. Keep in mind that a motorcycle horn is not as loud as a car horn, therefore, use it but do not rely on it. Other strategies may be appropriate along with the horn.

#### WHEN YOU RIDE AT NIGHT

At night it is harder for you to see and be seen. The ability to pick your headlight or taillight out of the car lights around you is not easy for other drivers. To compensate, you should:

**Reduce Your Speed**—Ride even slower than you would during the day—particularly on roads you do not know well. This will increase your chances of avoiding a hazard.

Increase Distance—Distances are harder to judge at night than in daylight. Your eyes rely upon shadows and light contrasts to determine how far away an object is and how fast it is coming. These contrasts are missing or distorted under artificial lights at night. Open up a three-second distance or more when you follow. And allow more distance to pass and be passed.

Use the Car Ahead—The headlights of the car ahead can give you a better view of the road than even your high beam can. Its taillights bouncing up and down can alert you to bumps or rough pavement.

Use Your High Beam—Get all the light you can. Use your high beam whenever you are not following or meeting a car.

Be visible, wear reflective materials when you ride at night.

#### Be Flexible About Lane Position.

Change to whatever portion of the lane is best able to help you see, be seen and keep an adequate space cushion.

#### CRASH AVOIDANCE

No matter how careful you are, there will be times when you find yourself in a tight spot. Your chances of getting out safely depend on your ability to react quickly and properly. Often, a crash occurs because a rider is not prepared or skilled in crash-avoidance maneuvers.

in crash-avoidance maneuvers. Know when and how to stop or swerve, two skills critical to avoid a crash. It is not always desirable or possible to stop quickly to avoid an obstacle. Riders must also be able to swerve around an obstacle. How you determine the skill necessary for the situation is important as well. Studies show that most riders involved in crashes:

- Underbrake the front tire and overbrake the rear.
- Did not separate using brakes from a swerve or did not choose to swerve when it was appropriate.

The following information offers some good advice.

#### **QUICK STOPS**

To stop quickly, apply both brakes at the same time. Do not be shy about using the front brake, but do not "grab" it, either. Squeeze the brake lever firmly and progressively. If the front wheel locks, release the front brake immediately

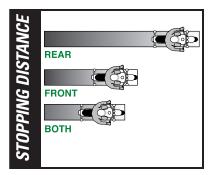
#### Test Yourself

#### Reflective clothing should:

- A. Be worn at night.
- B. Be worn during the day.

D. Be worn day and night.

- C. Not be worn.



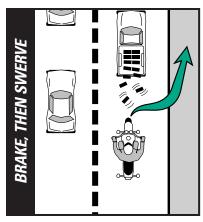
then reapply it firmly. At the same time, press down on the rear brake. If you accidentally lock the rear brake on a good traction surface, keep it locked until you have completely stopped. Even with a locked rear wheel, you can control the motorcycle on a straightaway if it is upright and going in a straight line. Always use both brakes at the same time to stop. The front brake can provide 70 percent or more of the potential stopping power. If you must stop quickly when you turn or ride a curve, the best technique is to straighten the bike upright first and then brake. However, it may not always be possible to straighten the motorcycle and then stop. If you must brake while

SIWERVE, THEN BRAKE

the throttle. As you slow, you can reduce your lean angle and apply more brake pressure until the motorcycle is straight and maximum brake pressure is possible. You should "straighten" the handlebars in the last few feet of stopping, the motorcycle should then be straight up and in balance.

#### **SWERVES OR QUICK TURNS**

Sometimes you may not have enough room to stop, even if you use both brakes properly. An object might appear suddenly in your path. Or the car ahead might squeal to a stop. The only way to avoid a crash may be to turn quickly, or swerve around it. A swerve is any sudden change in direction. It can be two quick turns, or a rapid shift to the side. Apply a small amount of hand pressure to the handgrip located on the side of your intended direction of escape. This will cause the motorcycle to lean guickly. The sharper the turn(s), the more the motorcycle must lean. Keep your body upright and allow the motorcycle to lean in the direction of the turn while you keep your knees against the tank and your feet solidly on the foot rests. Let the



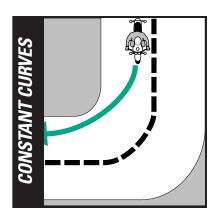
motorcycle move underneath you. Make your escape route the target of your vision. Press on the opposite handgrip once you clear the obstacle to return you to your original direction of travel. To swerve to the left, press the left handgrip, then press the right to recover. To swerve to the right, press right, then left

#### IF BRAKING IS REQUIRED, SEPARATE IT FROM SWERVING.

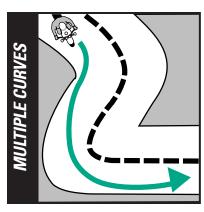
Brake before or after — never while swerving.

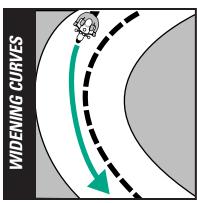
#### **RIDING A CURVE**

A primary cause of single-vehicle crashes is motorcyclists who run wide in a curve or turn and collide with the roadway or a fixed object. Every curve is different. Be alert to whether a curve remains constant, gradually widens, gets tighter or involves multiple turns. Ride within your skill level and posted speed limits. Your best path may not always follow the curve of the road. Change lane position as traffic, road conditions and curve of the road dictate. If no traffic is present, start at the outside of a curve to









increase your line of sight and the effective radius of the turn. As you turn, move toward the inside of the curve, and as you pass the center, move to the outside to exit. Another alternative is to move to the center of your lane before you enter a curve—and stay there until you exit. This permits you to spot traffic that approaches as soon as possible. You can also adjust for traffic that crowds the center line, or debris that blocks part of your lane.

#### HOW TO HANDLE DANGEROUS SURFACES

Your chance of a fall or being involved in a crash increases whenever you ride across:

- Uneven surfaces or obstacles.
- Slippery surfaces.

#### R Test Yourself

#### The best way to stop quickly is to:

- A. Use the front brake only.
- B. Use the rear brake first.
- C. Throttle down and use the front brake.
- D. Use both brakes at the same time.

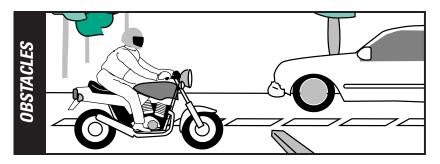
Answer - page 42

- Railroad tracks.
- Grooves and gratings.

## UNEVEN SURFACES AND OBSTACLES

Watch for uneven surfaces such as bumps, broken pavement, potholes or small pieces of highway trash. The best way to avoid obstacles is to slow down or go around them. If you must go over the obstacle, first, determine if it is possible. Approach it at as close to a 90° angle as possible. Look where you want to go to control your path of travel. If you have to ride over the obstacle, you should:

- Slow down as much as possible before contact.
- Make sure the motorcycle is straight.
- Rise slightly off the seat with your weight on the foot pegs to absorb the shock with your knees and elbows, and avoid being thrown off the motorcycle.
- Just before contact, roll on the throttle slightly to lighten the front end. If you ride over an object on the street, pull off the road and check your tires



and rims for damage before you ride any farther.

#### SLIPPERY SURFACES

Motorcycles handle better when ridden on surfaces that permit good traction. Surfaces that provide poor traction include:

- Wet pavement, particularly just after it starts to rain and before surface oil washes to the side of the road
- Gravel roads, or where sand and gravel collect.
- Mud, snow, and ice.
- Lane markings, steel plates and manhole covers, especially when wet.

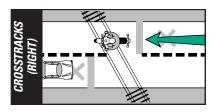
#### To ride safely on slippery surfaces:

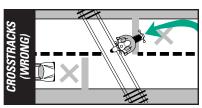
- Reduce Speed—Slow down before you get to a slippery surface to lessen your chances of skidding. Your motorcycle needs more distance to stop. And, it is particularly important to reduce speed before you enter wet curves.
- Avoid Sudden Moves—Any sudden change in speed or direction can cause a skid. Be as smooth as possible when you speed up, shift gears, turn or brake.
- Use Both Brakes—The front brake is still effective, even on a slippery surface. Squeeze the brake lever gradually to avoid a lock of the front wheel. Remember, gentle pressure on the rear bake.
- The center of a lane can be hazardous when wet. When it starts to rain, ride in the tire tracks left by

- cars. Often, the left tire track will be the best position. This depends on traffic and other road conditions as well
- Watch for oil spots when you put your foot down to stop or park. You may slip and fall.
- Dirt and gravel collect along the sides of the road—especially on curves and ramps that lead to and from highways. Be aware of what is on the edge of the road, particularly when you make sharp turns and get on or off freeways at high speeds.
- Rain dries and snow melts faster on some sections of a road than on others. Patches of ice tend to crop up in low or shaded areas and on bridges and overpasses. Wet surfaces or wet leaves are just as slippery. Ride on the least slippery portion of the lane and reduce speed. Cautious riders steer clear of roads covered with ice or snow. If you cannot avoid a slippery surface, keep your motorcycle straight up and proceed as slowly as possible. If you encounter a large surface so slippery that you must coast, or travel at a slow pace, consider letting your feet skim along the surface. If the motorcycle starts to fall, you can catch yourself. Be sure to keep off the brakes. If possible, squeeze the clutch and coast. If you attempt this maneuver at anything other than the slowest of speeds it could prove hazardous.

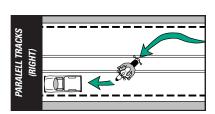
## RAILROAD TRACKS, TROLLEY TRACKS AND PAVEMENT SEAMS

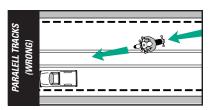
Usually it is safer to ride straight within your lane to cross tracks. If you try to turn to take tracks head-on (at a 90° angle), it





can be more dangerous—your path may carry you into another lane of traffic. For track and road seams that run parallel to your course, move far enough away from tracks, ruts, or pavement seams to cross at an angle of at least 45°. Then, make a quick, sharp turn. Edging across

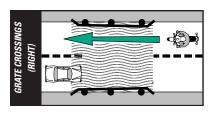


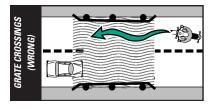


could catch your tires and throw you off balance.

#### **GROOVES AND GRATINGS**

Riding over rain grooves or bridge gratings may cause a motorcycle to weave. The uneasy, wandering feeling generally is not hazardous. Relax, maintain a steady speed and ride straight across. Crossing at an angle forces riders to zigzag to stay in the lane. The zigzag is far more hazardous than the wandering feeling.





#### Test Yourself

#### When it starts to rain it is usually best to:

- A. Ride in the center of the lane.
- B. Pull off to the side until the rain stops.
- C. Ride in the tire tracks left by cars.
- D. Increase your speed.

#### **MECHANICAL PROBLEMS**

You can find yourself in an emergency the moment something goes wrong with your motorcycle. With any mechanical problem, take into account the road and traffic conditions you face. Here are some guidelines that can help you handle mechanical problems safely.

#### TIRE FAILURE

You will seldom hear a tire go flat. If the motorcycle starts to handle in a different manner, it may be a tire failure. This can be dangerous. You must be able to tell from the way the motorcycle reacts. If one of your tires suddenly loses air, react quickly to keep your balance. Pull off and check the tires. If the front tire goes flat, the steering will feel "heavy." A front-wheel flat is particularly hazardous because it affects how you steer. You have to steer well to keep your balance. If the rear tire goes flat, the back of the motorcycle may jerk or sway from side to side.

#### If either tire goes flat while riding:

- Hold handle grips firmly, ease off the throttle, and keep a straight course.
- If you must brake, however, gradually apply the brake of the tire that is not flat, if you are sure which one it is.
- When the motorcycle slows, edge to the side of the road, squeeze the clutch and stop.

#### STUCK THROTTLE

Twist the throttle back and forth several times. If the throttle cable is stuck, this may free it. If the throttle remains stuck immediately operate the engine cut-off switch and pull in the clutch at the same time. This will remove power from the rear wheel, though engine noise may not immediately decline. Once the motorcycle is "under control," pull off and stop.

After you have stopped, check the throttle cable carefully to find the source of the trouble. Make certain the throttle works freely before you start to ride again.

#### **WOBBLE**

A "wobble" occurs when the front wheel and handlebars start to shake suddenly from side to side at any speed. Most wobbles can be traced to improper loading, unsuitable accessories or incorrect tire pressure. If you have a heavy load, lighten it. If you cannot, shift it. Center the weight lower and farther forward on the motorcycle. Make sure tire pressure, spring pre-load air shocks and dampers are at the settings recommended for that much weight. Make sure windshields and fairings are mounted properly. Check for poorly adjusted steering; worn steering parts; a front wheel that is bent, misaligned, or out of balance; loose wheel bearings or spokes; and swing arm bearings. If none of these are determined to be the cause, have the motorcycle checked out thoroughly by a qualified professional. Trying to "accelerate out of a wobble" will only make the motorcycle more unstable. Instead:

Grip the handlebars firmly, but do not fight the wobble.

- Close the throttle gradually to slow down. Do not apply the brakes; this could make the wobble worse.
- Move your weight as far forward and down as possible.
- Pull off the road as soon as you can to fix the problem.

#### CHAIN PROBLEMS

A chain that slips or breaks while you

#### 10 Test Yourself

#### If your motorcycle starts to wobble:

- A. Accelerate out of the wobble.
- B. Use brakes gradually.
- C. Grip the handlebars firmly and close the throttle gradually.
- D. Downshift.

Answer - page 42

operate the motorcycle could lock the rear wheel and cause your cycle to skid. Chain slippage or breakage can be avoided by proper maintenance.

**Slippage**—If the chain slips when you try to speed up quickly or ride uphill, pull off the road. Check the chain and sprockets. It may help to tighten the chain. If the problem is a worn or stretched chain or worn or bent sprockets, replace the chain, the sprockets or both before riding again.

**Breakage**—You will notice an instant loss of power to the rear wheel. Close the throttle and brake to a stop.

#### **ENGINE SEIZURE**

When the engine "locks" or "freezes" it is usually low on oil. The moving parts of the engine cannot move smoothly against each other, and the engine overheats. The first sign may be a loss of engine power or a change in the engine sound. Squeeze the clutch lever to disengage the engine from the rear wheel. Pull off the road and stop. Check the oil. If needed, oil should be added as soon as possible or the engine will seize. When this happens, the effect is the same as a locked rear wheel. Let the engine cool before restarting.

#### **ANIMALS**

Naturally, you should do everything you safely can to avoid a collision with an animal. If you are in traffic, however, remain in your lane. A collision with a small animal is less dangerous to you than a collision with big animal or object—like a car. Motorcycles seem to attract dogs. If you are chased, downshift and approach the animal slowly. As you approach it, accelerate away and leave the animal behind. Do not kick at an animal. Keep control of your motorcycle and look to where you want to go.

For larger animals (deer, elk, cattle) brake and prepare to stop, they are unpredictable.

#### 1 Test Yourself

#### If you are chased by a dog:

- A. Kick it away.
- B. Stop until the animal loses interest.
- C. Swerve around the animal.
- D. Approach the animal slowly, then speed up.

#### **FLYING OBJECTS**

From time to time riders are struck by insects, cigarettes thrown from cars or pebbles kicked up by the tires of the vehicle ahead. If you are wearing face protection, it might get smeared or cracked. This makes it difficult to see. Without face protection, an object could hit you in the eye, face or mouth. Whatever happens, keep your eyes on the road and your hands on the handlebars. When safe, pull off the road and repair the damage.

#### HOW TO GET OFF THE ROAD

If you need to leave the road to check the motorcycle (or just to rest for a while), be sure you:

- Check the roadside—Make sure the surface of the roadside is firm enough to ride on. If it is soft grass, loose sand, or if you are just not sure about it, slow way down before you turn onto it.
- Signal—Drivers behind might not expect you to slow down. Give a clear signal that you will slow down and change direction. Check your mirror and make a head check before you take any action.
- Pull off the road—Get as far off the road as you can. It can be very hard to spot a motorcycle by the side of the road. You do not want someone else to pull off at the same place you are.
- Park carefully—Loose and sloped shoulders can make setting the side or center stand difficult.

## HOW TO CARRY PASSENGERS AND CARGO

Only experienced riders should carry passengers or large loads. The extra weight changes the way the motorcycle handles, balances, turns, speeds up and slows down. Before you take a passenger or heavy load on the street, practice away from traffic.

#### **EQUIPMENT**

#### To carry passengers safely:

- Equip and adjust your motorcycle to carry passengers.
- Instruct the passenger before you start.
- Adjust your riding technique for the added weight.

#### Equipment should include:

- A proper seat—large enough to hold both of you without crowding. You should not sit any farther forward than you usually do.
- Foot rests—for the passenger. Firm footing prevents your passenger from a fall off the cycle, which could possibly pull you off too.
- Protective equipment—the same protective gear recommended for operators. Adjust the suspension to handle the additional weight. You will probably need to add a few pounds of pressure to the tires if you carry a passenger. (Check your owner's manual for appropriate settings.) While your passenger sits on the seat with you, adjust the mirror and headlight according to the change in

the motorcycle's angle.

#### HOW TO INSTRUCT PASSENGERS

Even if your passenger is a motorcycle rider, provide complete instructions before you start. Tell your passenger to:

- Get on the motorcycle only after you have started the engine.
- Sit as far forward as possible without crowding you.
- Hold firmly to your waist, hips or belt.
- Keep both feet on the pegs, even when stopped.
- Keep legs away from the muffler(s), chains or parts that move.
- Stay directly behind you, and lean as you lean.
- Avoid unnecessary talk or motion. \* Also, tell your passenger to tighten his or her hold when you:
- Approach surface problems.
- Are about to start from a stop.
- Warn that you will make a sudden move.

#### 12 Test Yourself

#### Passengers should:

- A. Lean as you lean.
- B. Hold on to the motorcycle seat.
- C. Sit as far back as possible.
- D. Never hold onto you.

Answer - page 42

## WHEN YOU RIDE WITH PASSENGERS

Your motorcycle will respond more slowly with a passenger on board. The heavier your passenger, the longer it will take to slow down, speed up, or turn—especially on a light motorcycle.

- Ride a little slower, especially when taking curves, corners, or bumps.
- Start slowing earlier as you approach a stop.
- Open up a larger cushion of space ahead and to the sides.
- Wait for larger gaps to cross, enter, or merge in traffic.

Warn your passenger of special conditions—when you will pull out, stop quickly, turn sharply or ride over a bump. Turn your head slightly to make yourself understood, but keep your eyes on the road ahead.

#### WHEN YOU CARRY LOADS

Most motorcycles are not designed to carry much cargo. Small loads can be carried safely if positioned and fastened properly.

- Keep the Load Low—Fasten loads securely or put them in saddle bags. Piling loads against a sissy bar or frame on the back of the seat raises the motorcycle's center of gravity and disturbs its balance.
- Keep the Load Forward—Place the load over, or in front of, the rear axle. Tank bags keep loads forward, but use caution when you load hard or sharp objects. Make sure the tank

bag does not interfere with the handlebars or controls. When you put loads behind the rear axle, it can affect how the motorcycle turns and brakes. It can also cause a wobble.

- Distribute the Load Evenly—Load saddlebags with about the same weight. An uneven load can cause the motorcycle to drift to one side.
- Secure the Load—Fasten the load securely with elastic cords (bungee cords or nets). Elastic cords with more than one attachment point per side are more secure. A tight load will not catch in the wheel or chain, which can cause it to lock up and skid. Rope tends to stretch and knots come loose, which permits the load to shift or fall.
- Check the Load—Stop and check the load every so often to make sure it has not worked loose or moved.

# **GROUP RIDES**

If you ride with others, do it in a way that promotes safety and does not interfere with the flow of traffic.

# KEEP THE GROUP SMALL

Small groups make it easier and safer for car drivers who need to get around them. A small number is not separated as easily by traffic or red lights. If your group is larger than four or five riders, divide it up into two or more smaller groups.

### KEEP THE GROUP TOGETHER

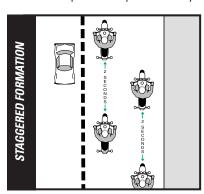
Plan—The leader should look ahead for road changes and signal early so "the word gets back" in plenty of

- time. Start lane changes early to permit everyone to complete the change.
- Put Beginners Up Front —Place inexperienced riders just behind the leader. That way the more experienced riders can watch them from the back.
- Follow Those Behind—Let the last rider set the pace. Use your mirrors to keep an eye on the person behind. If a rider falls behind, everyone should slow down a little to stay with that rider.
- Know the Route—Make sure everyone knows the route. Then, if someone is separated he or she will not have to hurry to try to catch up. Plan frequent stops on long rides.

# KEEP YOUR DISTANCE

Maintain close ranks but at the same time keep a safe distance to allow each rider in the group time and space to react to hazards. A close group takes up less space on the highway, is easier to see and is less likely to be separated. However, it must be done properly.

Don't Pair Up—Never operate directly



alongside another rider. There is no place to go if you have to avoid a car or something on the road. To talk, wait until you are both stopped.

Staggered Formation—This is the best way to keep ranks close yet maintain an adequate space cushion. The leader rides in the left side of the lane, while the second rider stays one second behind in the right side of the lane. A third rider maintains in the left position, two seconds behind the first rider. The fourth rider would keep a two-second distance behind the second rider. This formation keeps the group close and permits each rider a safe distance from others ahead, behind and to the sides.

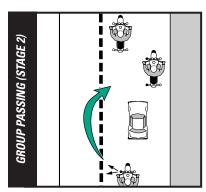
- Passing in Formation—Riders in a staggered formation should pass one at a time.
- First, the lead rider should pull out and pass when it is safe. After he passes, the leader should return to the left position and continue at passing speed to open room for the next rider. After the first rider passes safely, the second rider should move up to the left position and watch for a safe chance to pass. After he passes, this rider should return to the right position and open up room

GROUP PASSING (STAGE 1)

for the next rider. Some people suggest the leader should move to the right side after he passes a vehicle. This is not a good idea. It encourages the second rider to pass and cut back in before there is a large enough space cushion in front of the passed vehicle. It is simpler and safer to wait until there is enough room ahead of the passed vehicle to allow each rider to move into the same position held before the pass.

**Single-File Formation**—It is best to move into a single-file formation when riding curves, turning, entering or leaving a highway.

After the first rider passes safely, the second rider should move up to the left position and watch for a safe chance to pass. After passing, this rider should return to the right position and open up room for the next rider.



# 13 Test Yourself

When riding in a group, inexperienced riders should position themselves:

- A. Just behind the leader.
- B. In front of the group.
- C. At the tail end of the group.
- D. Beside the leader.

Answer - page 42

# In Shape To Ride

Operation of a motorcycle is a complex task. Skilled riders pay attention to the environment and to the operation of the motorcycle. They try to identify potential hazards, make good judgments and execute decisions quickly and skillfully. Your ability to perform and respond to road and traffic conditions that constantly change is influenced by how fit and alert you are. Alcohol and other drugs, more than any other factors, degrade your ability to think clearly and to ride safely. As little as one drink can have a significant effect on your performance.

This section looks at the risks involved in the operation of a motorcycle after you drink or use drugs. What to do to protect yourself and your fellow riders is also examined.

# WHY THIS INFORMATION IS IMPORTANT

Alcohol is a major contributor to motorcycle crashes, particularly fatal crashes. Studies show that 40 percent to 45 percent of all riders killed in motorcycle crashes had used alcohol. Only one-third of those riders had a blood alcohol concentration above legal limits. The rest had only a few drinks in their systems enough to impair skills. In the past, drug levels have been harder to distinguish or have not been separated from alcohol violations for the traffic records. But operation of a motorcycle "under the influence" of either alcohol or drugs poses physical and legal hazards for every rider.

Alcohol and drug use is as big a problem among motorcyclists as it is among automobile drivers. Motorcyclists, however, are more likely to be killed or severely injured in a crash. Injuries occur in 90 percent of motorcycle crashes and 33 percent of automobile crashes that involve abuse of substances. On a yearly basis, 2,100 motorcyclists are killed and about 50,000 seriously injured in this same type of crash. These statistics are too significant to ignore.

By becoming knowledgeable about the effects of alcohol and other drugs you will see that operation of a motorcycle and substance abuse do not mix.

Take positive steps to protect yourself and prevent others from injuries.

# ALCOHOL AND OTHER DRUGS IN MOTORCYCLE OPERATION

No one is immune to the effects of alcohol or drugs. Friends may brag about their ability to hold their liquor or perform better on drugs, but alcohol or drugs make them less able to think clearly and perform physical tasks skillfully. Judgment and the decision-making processes needed for vehicle operation are affected long before legal limitations are reached.

Many over-the-counter, prescription, and illegal drugs have side effects that increase the risk of motorcycle operation. It is difficult to accurately measure the involvement of particular drugs in motorcycle crashes. But we do know what effects various drugs have on the process involved in riding a motorcycle. We also know that the combined effects of alcohol and other drugs are more dangerous than either is alone.

# ALCOHOL IN THE BODY

Alcohol enters the bloodstream quickly. Unlike most foods and beverages, it does not need to be digested. Within minutes after being consumed, it reaches the brain and begins to affect the drinker. The major effect alcohol has is to slow down and impair bodily functions— both mental and physical. Whatever you do, you do less well after consuming alcohol.

# BLOOD ALCOHOL CONCENTRATION

Blood Alcohol Concentration or BAC is the amount of alcohol in relation to blood in the body. Generally, alcohol can be eliminated in the body at the rate of almost one drink per hour. But a variety of other factors may also influence the level of alcohol retained. The more alcohol in your blood, the greater the degree of impairment.

Three factors play a major part to determine BAC:

- The amount of alcohol you consume.
- How quickly you drink.
- Your body weight. Other factors also contribute to the way alcohol affects

your system. Your sex, physical condition and food intake are just a few that may cause your BAC level to be even higher. But the full effects of these are not completely known.

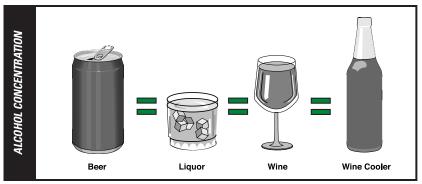
Alcohol may still accumulate in your body even if you are drinking at a rate of one drink per hour. Abilities and judgment can be affected by that one drink.

A 12-ounce can of beer, a mixed drink with one shot of liquor, a 5-ounce glass of wine and a 12-ounce bottle of wine cooler all contain the same amount of alcohol.

The quicker you drink, the more alcohol accumulates in your body. If you drink two drinks in an hour, at the end of that hour, at least one drink will remain in your bloodstream.

Without any of the other factors, the formula below illustrates the LEAST amount of drinks remaining in the blood-stream: *A person drinking:* 





- 7 drinks in 3 hours would have at least 4 drinks that remain in their system.
- 4 drinks in 2 hours would have at least 2 drinks that remain in their system.

There are times when a larger person may not accumulate as high a concentration of alcohol for each drink consumed. They have more blood and other bodily fluids. But because of individual differences it is better not to take the chance that abilities and judgment have not been affected. Whether or not you are legally intoxicated is not the real issue. Impairment of judgment and skills begins well below the legal limit.

# ALCOHOL AND THE LAW

In New York State, a driver with a BAC of .08 percent or above is legally intoxicated. In other states, the legal limit may be .10 percent .08 percent or .05 percent. It does not matter how sober you may look or act. The breath or urine test usually determines whether the operation of your motorcycle is legal illegal.

The chances are greater than ever that you could be stopped when you operate under the influence of alcohol. Throughout the nation, law enforcement response to the senseless deaths and injuries caused by operators and drivers consuming alcohol is on the increase.

Your insurance company may refuse to pay the injury or medical costs caused by a traffic crash in which you were operating a motorcycle while under the influence of alcohol or drugs.

# CONSEQUENCES OF CONVICTION

The laws of most states impose stiff penalties on operators who use alcohol. And those penalties are mandatory, meaning that judges must impose them. If you are convicted of the operation of a motorcycle under the influence of alcohol or drugs, you may receive any of the following penalties:

- Driving While Intoxicated (DWI) or .08% Blood Alcohol Content (BAC) minimum 6 month license revocation; Driving While Ability Impaired by a Drug (DWAI-Drug) — 6-month suspension. Minimum 1-year revocation for conviction of these offenses committed within 10 years of any previous alcohol or drug violation.
- DWAI or .05% BAC 90-day suspension. Minimum 6-month revocation for conviction of these offenses committed within 5 years of any previous alcohol or drug violation.
- First alcohol or drug-related violation, except Zero Tolerance, by a driver under age 21 minimum 1-year revocation. Second violation by a driver under age 21 minimum 1-year revocation or until 21, whichever is longer.
- Chemical test refusal minimum 1 year revocation for most drivers; minimum 1-year revocation for a driver under 21. Chemical test refusal revocations are separate from, and in addition to, those for alcohol or drug-related violations.
- Zero Tolerance Law for drivers under 21, (BAC .02% to .07%) – First viola-

tion, 6-month suspension. Second violation, minimum 1-year revocation or until 21, whichever is longer.

- Driving Under the Influence (DUI) conviction outside New York State For drivers over 21 years old: 90-day revocation for alcohol; 6-month suspension for drug. For drivers under 21: 1-year revocation for alcohol or drug.
- The court must levy a mandatory fine in addition to a license revocation or suspension for an alcohol or drug conviction. It depends on the conviction, but the fine will be from \$300 to \$10,000. A Zero Tolerance Law violation will result in a civil penalty of at least \$125.
- Community Service such as the pickup of litter along the highway, keeping cars washed in the motorvehicle pool, or work at an emergency ward.
- Other costs this can include lawyer's fees, time lost from work due to court appearances or attendance in alcohol/drug-education programs, public transportation while your license is revoked or suspended, higher insurances rates for years, and being known as a "drunk driver" in your family and community. The law and consequences of conviction for driving while intoxicated or ability impaired in New York State are summarized in the "ALCOHOL AND OTHER DRUGS" section of the NYS Driver's Manual.

# **MINIMIZE THE RISKS**

Your ability to judge how well you ride is affected first. Although you may ride more and more poorly, you think you are doing better and better. The result is that you ride confidently, taking greater and greater risks. Minimize the risks of alcohol and riding by taking steps before you drink. Control how much you drink or control the operation of your motorcycle.

# **DO NOT DRINK**

**Don't Drink** — Once you start, your resistance becomes weaker.

A set limit or pace are poor alternatives at best. Your ability to exercise good judgment is one of the first things affected by alcohol. Even if you have tried to drink in moderation, you may not realize to what extent your skills have suffered from the effects of alcohol. If you haven't controlled your intake of alcohol, you must control your operation of a motorcycle.

- Leave the motorcycle home—so you won't be tempted to operate it. Arrange another way to get home. Wait—If you exceed your limit,
- wait until your system eliminates the alcohol and its effects.

### 4 Test Yourself

If you wait an hour for each drink before you ride:

- A.You cannot be arrested for drinking and riding.
- B.Your skills will not be affected.
- C.Side effects may still remain.
- D. You will be okay as long as you ride slowly.

  \*\*Answer page 42\*\*

# STEP IN TO PROTECT FRIENDS

People who have had too much to drink are unable to make a responsible decision. It is up to others to step in and keep them from taking too great a risk. No one wants to do this—it is uncomfortable and thankless. You are rarely thanked for your efforts at the time. But the alternatives are often worse. There are several ways to keep friends from possible injury to themselves:

- Arrange a safe ride—Provide alternative ways for them to get home.
- Slow the pace of alcohol intake— Involve them in other activities \*
- Keep them there—Use any excuse to keep them from their motorcycle. Serve them food and coffee to pass the time. Explain your concerns for their risks of possible arrest or injury to themselves or someone else.
- Get friends involved—Use peer pressure from a group of friends to intervene. It helps to enlist support from others when you decide to step in.

The more people on your side, the easier it is to be firm and the harder it is for the rider to resist. While you may not be thanked at the time, you will never have to say, "If only I had..."

# **FATIGUE**

Operation of a motorcycle is more tiring than the operation of a car. On a long trip, you'll tire sooner than you would in a car. Avoid operation of a cycle when tired. Fatigue can affect your control of the motorcycle.

- Protect yourself from the elements —Wind, cold, and rain make you tire quickly. Dress warmly. A windshield is worth its cost if you plan to ride long distances.
- Limit your distance—Experienced operators seldom try to ride more than about six hours a day.
- Take frequent rest breaks—Stop, and get off the motorcycle at least every two hours.
- Don't drink or use drugs—Artificial stimulants often result in extreme fatigue or depression when they start to wear off. Drivers and riders are unable to concentrate on the task at hand.

# How to Earn Your License

# Knowledge And Skill

Safe operation of a motorcycle requires knowledge and skill. License tests are the best measurement of the skills necessary to operate safely in traffic. The assessment of your own skills is not enough. People often overestimate their own abilities. It is even harder for friends and relatives to be totally honest about your skills. License exams are designed to be scored more objectively.

To earn your license, you must pass a knowledge test and an on-cycle skill test. Knowledge test questions are based on information, practices and ideas from this manual. They require that you know and understand road rules and safe practices. An on-cycle skill test will either be conducted in an actual traffic environment or in a controlled, off-street area.

# .

of the turn.

D. Press the handgrip in the opposite direction of the turn.

# 4. If a tire goes flat while you ride and you must stop, it is usually best to:

A. Relax on the handle grips.

B. Shift your weight toward the good tire.

C. Brake on the good tire and steer to the side of the road.

D. Use both brakes and stop quickly.

# 5. The car below waits to enter the intersection. It is best to:

A. Make eve contact with the driver.

B. Reduce speed and be ready to react.

C. Maintain speed and position.

D. Maintain speed and move right.

### KNOWLEDGE TEST

(Sample Questions)

# 1. It is MOST important to flash your brake light when:

A. Someone follows too closely.

B. You will slow down suddenly.

C. There is a stop sign ahead.

D. Your signals do not work.

# 2. The FRONT brake supplies how much of the potential power to stop?

A. About one-quarter.

B. About one-half.

C. About three-quarters.

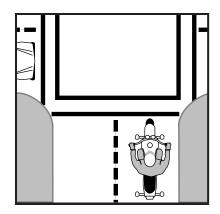
D. All of the power.

# 3. To swerve correctly:

A. Shift your weight quickly.

B. Turn the handlebars quickly.

C. Press the hand grip in the direction



1-B, 2-C, 3-C, 4-C, 6-B Answers to the above knowledge test:

### Answers to Test Yourself (previous pages)

1-C,	2-D,	3-D,	4-A,	5-B
6-C,	7-D,	8-D,	9-C,	10-C,
11-D,	12-A,	13-A,	14-C	

# **ON-CYCLE SKILL TEST**

Basic vehicle control and crash-avoidance skills are included in on-cycle tests to determine your ability to handle normal and hazardous traffic situations. You may be tested for your ability to:

- Know your motorcycle and your riding limits.
- Accelerate, brake, and turn safely.
- See, be seen and communicate with others.
- Adjust speed and position to the traffic situation.
- Stop, turn and swerve quickly.
- Make critical decisions and carry them out.

# Examiners may score on factors related to safety such as:

Selection of safe speeds to perform maneuvers.

- Selection of the correct path and staying within boundaries.
- Completion of normal and quick stops.
- Completion of normal and quick turns, or swerves.

# TO RECEIVE A MOTORCYCLE LICENSE WITH FULL PRIVILEGES, MOST STATES REQUIRE THAT MANEUVERS BE PERFORMED AS DESIGNED.

On-motorcycle skill tests are not designed for sidecars or three-wheeled vehicles. Those vehicles maneuver differently than a two-wheeled motorcycle. It depends on the state, but an examiner may follow you on a car test-route. Restrictions (sidecar, three-wheeled vehicle) may be added until completion of a two-wheeled motorcycle test.

Diagrams used in this manual are for reference only and are not to correct scale for size of vehicles and distances.

# **Motorcycles Make Sense So Does Professional Training**

Motorcycles are inexpensive to operate, fun to ride and easy to park. Unfortunately, many riders never learn the critical skills needed to ride safely.

Professional training prepares beginning and experienced riders for traffic situations in the real world. Motorcycle RiderCourses® teach and improve such skills as:

Effective turning

Braking maneuvers

Protective apparel selection

Obstacle avoidance

■ Traffic strategies

Maintenance

# For the location of the basic or experienced Motorcycle RiderCourse® nearest you in New York State call toll-free: 800-446-9227



The Motorcycle Safety Foundation's purpose is improving safety of motorcycles on the nation's streets and highways. In an attempt to reduce motorcycle accidents and injuries, the Foundation has programs in rider education, licensing improvement, public information and statistics. These programs are designed for both motorcyclists and motorists. A national not-for-profit organization, MSF is sponsored by the U.S. motorcycle distributors or manufacturers: BMW, Ducati, Harley-Davidson, Honda, Kawasaki, KTM, Piaggio/Vespa, Suzuki, Vengeance, Victory and Yamaha.

The information contained in this publication is offered for the benefit of those who have an interest in riding motorcycles. The information has been compiled from publications, interviews and observations of individuals and organizations familiar with the use of motorcycles, accessories, and training. Because there are many differences in product design, riding styles, Federal, State and local laws, there may be organizations and individuals who hold differing opinions. Consult your local regulatory agencies for information concerning the operation of motorcycles in your area. Although the Motorcycle Safety Foundation will continue to research, field test and publish responsible viewpoints on the subject, it disclaims any liability for the views expressed herein.

Content & Illustrations courtesy of Motorcycle Safety Foundation

2 Jenner Street, Suite 150, Irvine, CA 92618-3806 http://www.msf-usa.org

# Motorcycle Safety Program Rider Education



Rider education is one part of a comprehensive motorcycle safety program supported by the Department of Motor Vehicles. To locate the Motorcycle Safety Foundation Rider Course nearest you, call 1-800-446-9227, or visit the web site at www.msf-usa.org

# MOTORCYCLE SAFETY FOUNDATION - MOTORCYCLE RIDER COURSES:

For many people, motorcycling is a fun and energy-efficient means of transportation or recreation. However, motorcycling requires skill, concentration and reasonable precautions. Although it is possible to ride a motorcycle on your own, trial and error is a tough teacher of motorcycling skills. That is why nearly all motorcycle groups have endorsed the Motorcycle Safety Foundation's Motorcycle RiderCourse®: the Basic RiderCourse® (BRC) for beginning riders and the Experienced RiderCourse® (ERC) for advanced riding skills.

# THE COURSE

The BRC is designed for beginning riders. It was developed by the Motorcycle Safety Foundation and approved by the New York State Department of Motor Vehicles. It consists of a combined 18 hours classroom, online and on-motorcycle instruction including the following:

- 1. Preparation to ride.
- 2. Shifts, turns, brakes.
- 3. Street strategies.
- 4. Special situations.
- 5. Enhanced riding skills.
- 6. Maintenance and insurance.

### INSTRUCTORS

Instructors for the course are all certified by the Motorcycle Safety Foundation. All are motorcycle riders and have completed 80+ hours of instructor training.

# PROVIDED FOR YOU

The BRC is taught using lightweight (100 - 350cc) motorcycles provided for class use. These will be used off-street only.

### YOU PROVIDE

Students provide this protective clothing:

- 1. Boots with walking heels, high enough to cover ankles;
- 2. Long pants of denim or other heavy material;
- 3. Leather gloves unlined but not too thin;
- 4. Long-sleeved jacket or shirt, made from denim or other heavy material;
- 5. Eye protection;
- USDOT-approved motorcycle helmet. Some sites have loaner helmets available, check with the site for information.

# WAIVER OF SKILLS TEST

The motorcycle skills test, ordinarily required for a Class M license, may be waived if a student successfully completes an approved Basic Rider (BRC) Course at a Motorcycle Safety Foundation training site approved under the New York State Motorcycle Safety program. To be eligible for the motorcycle road test waiver, you must also possess a current and valid New York State driver license and a motorcycle learner permit. You must have a valid motorcycle permit before you apply for the road test waiver and motorcycle license.

"The Basic Rider Course 2 License/Waiver Course (BRC2-LW) is a condensed version of the BRC geared toward riders who have had a motorcycle permit for at least one year and who have on-road experience and basic street-riding skills. Riders will use their own motorcycle for this intensive 8 hour training program. BRC2-LW provides the same road test waiver benefit as the BRC. For more information, visit www.NYSMSP.org or www.MSF-USA.org."

### **BASIC RIDERCOURSE 2**

The BRC2 is designed for experienced motorcyclists who already have a motorcycle license and want to improve their riding skills on their own motorcycles. This half-day course will enable riders to hone the physical and mental skills necessary for surviving traffic. The BRC2 includes:

- 1. Physical aspects of a safe ride.
- 2. Risk management
- 3. Increased visibility and optimum lane position.
- 4. Personal protective gear.
- 5. Rider responsibility.
- 6. Motorcycle inspection and care.
- 7. The effects of alcohol and other drugs on operation.

# ADVANCED TRAINING

DMV and the Motorcycle Safety Foundation encourage riders to maintain their skills by continuing to participate in rider training programs throughout their riding lifetime.

Remember – Learning is for Life." MSF offers a variety of courses to meet the training needs of every motorcyclist at every level of experience. For more information, visit www.NYSMSP.org or www.MSF-USA.org

### **NOTES**

### 47 48

### Class A B C

Top speed range mph (km/h) Over 30 to 40 Over 20 to 30 20 or less

(Over 48 to 64) (over 32 to 48) (32 or less)

Type of license or learner permit required 4 M ANY CLASS4 ANY CLASS4

Registration required YES (A Plate) YES (B Plate) YES (C Plate)

Headlight to be on when operating YES YES YES

Helmet & eye protection required when operating 5 YES YES Recommended

 $\textit{Where operation is permitted} \ \text{Any Traffic Lane Right Hand Lane Right Hand Lane Only}_{1} \ \& \ \text{Shoulder Only}_{1} \ \& \ \text{Shoulder Only}_{2} \ \& \ \text{Shoulder Only}_{3} \ \& \ \text{Shoulder Only}_{4} \ \& \$ 

Shoulder or Shoulder

Mandatory insurance required YES YES Recommended2

Safety responsibility: applies YES YES YES

Annual inspection required YES Recommended Recommended

Title required NO NO NO

- 1 Except when making a left hand turn.
- 2 If a Class C limited use motorcycle is used in a rental business, insurance is mandatory.
- 3 Safety responsibility is the requirement to pay for or post security for damage or personal injury you may cause in a traffic crash.
- 4 Usual learner permit and junior license restrictions apply.
- 5 Motorcyclists must wear approved motorcycle helmets, as defined by USDOT federal motor vehicle safety standards (FMVSS 218). To improve the motorcyclist's visibility, the DMV recommends that helmets have at least four square inches of reflective material on both sides. Motorcyclists must also wear approved eye protection, even if the motorcycle is equipped with a windshield. Prescription or made-to-order safety glasses may be used if the user can present written certification that they meet DMV standards. The eye protection must be manufactured in conformity with the regulations issued by the Vehicle Equipment Safety Commission (VESC-8).

Motorcyclists can get an Enhanced Motorcycle License too! For more information visit: www.dmv.ny.gov

GUIDE TO LIMITED USE MOTORCYCLE (MOPEDS) OPERATION					
Class	Α	В	С		
Top speed range mph (km/h)	Over 30 to 40 (Over 48 to 64)	Over 20 to 30 (over 32 to 48)	20 or less (32 or less)		
Type of license or learner permit required*	М	ANY CLASS⁴	ANY CLASS⁴		
Registration required	YES (A Plate)	YES (B Plate)	YES (C Plate)		
Headlight to be on when operating	YES	YES	YES		
Helmet & eye protection required when operating <sup>s</sup>	YES	YES	Recommended		
Where operation is permitted	Any Traffic Lane Only & Shoulder	Right Hand Lane Only¹ & Shoulder	Right Hand Lane <sup>1</sup> or Shoulder		
Mandatory insurance required	YES	YES	Recommended <sup>2</sup>		
Safety responsibility³ applies	YES	YES	YES		
Annual inspection required	YES	Recommended	Recommended		
Title required	N0	N0	N0		

<sup>1</sup>Except when making a left hand turn.

<sup>2</sup>If a Class C limited use motorcycle is used in a rental business, insurance is mandatory.

<sup>3</sup>Safety responsibility is the requirement to pay for or post security for damage or personal injury you may cause in a traffic crash.

\*Usual learner permit and junior license restrictions apply.

<sup>5</sup>Motorcyclists must wear approved motorcycle helmets, as defined by USDOT federal motor vehicle safety standards (FMVSS 218). To improve the motorcyclist's visibility, the DMV recommends that helmets have at least four square inches of reflective material on both sides. Motorcyclists must also wear approved eye protection, even if the motorcycle is equipped with a windshield. Prescription or made-to-order safety glasses may be used if the user can present written certification that they meet DMV standards. The eye protection must be manufactured in conformity with the regulations issued by the Vehicle Equipment Safety Commission (VESC-8).











# TAKE

YOUR

PRIDE

FOR A

RIDE

Check our custom plate web gallery for updated custom motorcycle and passenger plates. dmv.ny.gov/cplates.htm