

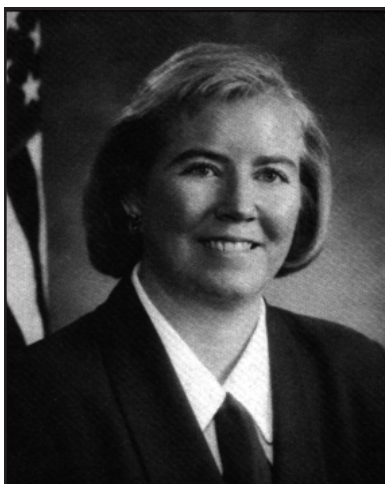


Michigan Motorcycle Operator Manual

Secretary of State



Candice S. Miller



Dear Motorcycle Operator,

Operating a motorcycle requires special skills as well as a thorough knowledge of traffic laws, registration and license requirements.

This Michigan Motorcycle Operator Manual provides useful information regardless of your riding experience. It discusses preparing to ride, controlling for safety, seeing and being seen, keeping your distance, handling dangerous surfaces, riding at night, dealing with emergencies, carrying passengers and cargo, group riding, being in shape to ride, equipment and motorcycle care, and earning your license.

Remember, while riding your motorcycle, never speed or use alcohol or other drugs and always wear a properly fastened safety helmet on your head. Enjoy your travels in Michigan.

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TABLE OF CONTENTS

PREFACE: MICHIGAN LAWS	P-1
PREPARING TO RIDE	1
WEAR THE PROPER GEAR	1
The Safety Helmet	1
Safety Helmet Use	1
Safety Helmet Selection	2
Eye and Face Protection	2
Clothing	3
CHECK THE MOTORCYCLE	3
GET FAMILIAR WITH THE MOTORCYCLE	4
CONTROL FOR SAFETY	6
BODY POSITION	6
TURNING	6
BRAKING	8
SHIFTING GEARS	8
Downshifting	8
Shifting for a Turn	8
SEE AND BE SEEN	9
CLOTHING	9
HEADLIGHT	9
SIGNALS	9
Turn Signals	9
Brake Light	10
POSITION FOR BEING SEEN	10
Stay Out of Blind Spots	11
Let the Driver Ahead See You	12
Help Drivers at Intersections See You	13
HORN	13
SCAN, IDENTIFY, PREDICT, EXECUTE, (SIPDE)	14
USING YOUR MIRRORS	16
HEAD CHECKS	16
POSITION TO SEE	17
KEEPING YOUR DISTANCE	19
DISTANCE IN FRONT	19
DISTANCE TO THE SIDE	19
Passing Vehicles	19
Cars at Intersections	20
Parked Cars	21
Lane Sharers	21
Merging Vehicles	22
Cars Alongside	22
DISTANCE BEHIND	22
HANDLING DANGEROUS SURFACES	23
SLIPPERY SURFACES	23
Handling Slippery Surfaces	23
Very Slippery Surfaces	23
UNEVEN SURFACES AND OBSTACLES	24

RAILROAD TRACKS.....	25
GROOVES AND GRATINGS	26
RIDING AT NIGHT	27
DEALING WITH EMERGENCIES	28
QUICK STOPS	28
EVASIVE MANEUVERS.....	28
MECHANICAL PROBLEMS.....	29
Tire Failure	29
Stuck Throttle.....	29
Wobble	29
Chain Problems	30
Engine Seizure	30
GETTING OFF THE ROAD.....	30
OTHER EMERGENCIES.....	31
Flying Objects.....	31
Animals	31
CARRYING PASSENGERS AND CARGO	32
PASSENGERS	32
Equipment	32
Instructing Passengers	32
Riding with Passengers	33
CARRYING LOADS	33
GROUP RIDING.....	34
KEEP THE GROUP SMALL.....	34
KEEP THE GROUP TOGETHER	34
KEEP YOUR DISTANCE	34
BEING IN SHAPE TO RIDE	36
WHY THIS INFORMATION IS IMPORTANT	36
ALCOHOL IN THE BODY	36
Bodily Alcohol Content	36
What Determines BAC	37
ALCOHOL AND THE LAW.....	37
Consequences of Conviction.....	38
The Laws in Your State	38
ALCOHOL AND OTHER DRUGS IN MOTORCYCLE OPERATION.....	38
MINIMIZING THE RISKS	38
Controlling Drinking.....	39
Controlling Riding	39
STEPPING IN TO PROTECT FRIENDS.....	39
FATIGUE	40
YOUR MOTORCYCLE	41
THE RIGHT EQUIPMENT	41
MOTORCYCLE CARE.....	41
EARNING YOUR LICENSE	43
KNOWLEDGE TEST.....	43
ON-CYCLE TEST	44

A motorcycle is a two- or three-wheeled motor vehicle which has:

- A gasoline engine with more than 50 cubic centimeters (cc) piston displacement and two brake horsepower; and
- A top speed over 30 miles per hour on level surfaces.

A motorized two- or three-wheeled vehicle which meets or exceeds these specifications is classified as a “motorcycle” even if it has a working pedaling system.

□ Registration and License Requirements

■ REGISTRATION

You must register your motorcycle at any Secretary of State branch office if you plan to operate it on public roads.

- Your motorcycle must have a title.
- When you buy a license plate for your motorcycle, you must prove you have an insurance policy with at least \$20,000/\$40,000 public liability and \$10,000 property damage coverage.

Motorcycle license plates expire on March 31 each year. License plates are available for half-fee beginning October 1.

■ LICENSE

To operate a motorcycle on public roads, you must possess a valid Michigan driver license with a **“motorcycle endorsement.”** The cost of the motorcycle endorsement is added to the regular driver license fee.

To get your original motorcycle endorsement, you must pass a:

- **Special knowledge test** at your local Secretary of State branch office.
- **Skills test** by an independent testing agency approved by the Secretary of State; or **Motorcycle safety course** approved by the Department of Education. If you are age 16 or 17, you must present proof (course completion certificate) of passing a motorcycle safety course to the Secretary of State branch office. For applicants at least age 18, proof of passing a motorcycle rider course is required only when the applicant has failed more than one motorcycle skills test.

This requirement may be waived if you have a valid license or endorsement to operate a motorcycle in another state.

Contact your local Secretary of State branch office for additional information and for the nearest motorcycle safety course.

For the skills test, you must have a **legally equipped and registered motorcycle**. To operate the motorcycle on the way to the test, you must have a motorcycle temporary instruction permit (TIP) and be under the constant visual supervision of a licensed motorcycle operator at least age 18.

■ **MOTORCYCLE TEMPORARY INSTRUCTION PERMIT (TIP)**

To obtain a motorcycle temporary instruction permit (TIP) which is valid for only 150 days, you must:

- Be at least age 16;
- Hold a valid Michigan driver license or a Michigan temporary instruction permit which allows you to practice driving motor vehicles; and
- Show **proof of enrollment in or successful completion of a motorcycle safety course** if you are age 16 or 17.

When using the TIP, you cannot operate at night or carry passengers and you must be under the constant visual supervision of a licensed motorcycle operator at least age 18.

□ **Motorcycle Operator Skills Test**

The motorcycle operator skills test approved by the Department of State has seven exercises which test your ability to handle a motorcycle, including starting, accelerating, turning and braking.

- **Engine Stall:** This is scored during the entire test. Points are assessed each time you stall the engine during any exercise.
- **Sharp Turn:** You ride a short path and then make a sharp left turn at low speed while staying inside a 5-foot path.
- **Normal Stop:** You must make a smooth stop without skidding, with the front tire of your motorcycle in a painted box.
- **Cone Weave:** You must weave through a series of five cones which are placed 12 feet apart with a 2-foot offset.
- **U-Turn:** You must make a right U-turn in a marked area. Those operating motorcycles over 500 cc are allowed more room to complete the U-turn. Motorcycles of 500 cc or less have a smaller U-turn area.
- **Quick Stop:** You accelerate along a straight path. At the end of the path (marked by cones), you must stop your motorcycle as quickly and safely as possible.
- **Obstacle Turn:** You accelerate along a straight path. At the end of the path (marked by cones), you must swerve to avoid an obstacle line and then swerve to avoid the side lines of the exercise.

☐ **Laws You Must Know**

■ OPERATING YOUR MOTORCYCLE

Michigan law requires you to:

- Wear a properly fastened safety helmet on your head. It must meet U.S. Department of Transportation standards and be properly labeled. Passengers must also wear a properly fastened and approved safety helmet on their heads;
- Use either shatterproof goggles, a face shield or windshield to protect your eyes when riding at speeds of 35 mph or more. Eye protection is recommended when riding at any speed;
- Sit on a regular, permanently attached seat;
- Never carry any package, bundle or article which prevents you from keeping both hands on the handlebars of the vehicle;
- Never let a non-licensed person operate your motorcycle;
- Never attach yourself to another vehicle for a "tow";
- Never operate a motorcycle on sidewalks, more than two side-by-side on a public road, between lanes of traffic, between traffic and the curb, or on a bicycle path.

■ LANE USE

When operating your motorcycle, you are entitled to use a full lane.

■ FREEWAYS OR LIMITED ACCESS HIGHWAYS

Motorcycles with engines smaller than 125 cc are not allowed on freeways or limited access highways.

■ EQUIPMENT

Your motorcycle must have the following equipment which must be in good condition: front and rear wheel brakes, headlight, taillight, stoplight, muffler, horn, rear-view mirror, and permanently attached seat.

■ HANDLEBARS

Your motorcycle handlebars must be positioned so that there are no more than 15 inches between the lowest point of the (unoccupied) seat to the highest point of the handle grips.

■ SIGNALING TURNS

Signaling is a courtesy and a legal requirement. Before stopping or turning, see if it is safe. Then, communicate to other drivers by giving the required signal, either by using your left hand and arm or an electrical signaling device. Start your signal at least 100 feet before you turn. In heavy traffic or on freeways, signal sooner so drivers behind you have time to change their speed or position. Make sure your turn signal light has stopped blinking after you have turned. Always use turn signals to alert other drivers when you plan to change lanes.

The proper hand and arm signals are: left arm and hand bent up for a right turn; left arm and hand straight out for a left turn; and left arm and hand bent down for slow or stop.

■ PASSENGERS

Motorcycles with extra foot pegs and seating space may be used to carry a passenger. If your motorcycle has this equipment, it does not necessarily mean that a passenger can be carried legally or safely. If in doubt, check with a motorcycle manufacturer or dealer. A motorcycle operator may **never** carry more than one passenger.

□ Special Situations

■ STARTING ON A HILL

- Use the front brake to hold the motorcycle while you start the engine and shift into first gear.
- Change to the foot brake to hold your vehicle while you operate the throttle with your right hand.
- Slowly open the throttle for more power.
- Slowly release the clutch. If you release it too quickly, the front wheel may lift off the ground or the engine may stall.
- Ease off the foot brake as the engine begins to slow down and engage.

■ BE EXTRA CAREFUL

- Of animals crossing the road, especially at night.
- Because of ice, particularly in the winter, early spring and late fall.
- When approaching livestock being ridden, driven or led so as not to startle the rider or animals.
- Of pedestrians crossing, including blind pedestrians and joggers. You must yield the right-of-way.
- Of bicyclists who may cross roads without warning. Be prepared to stop or avoid them.

□ **Anti-Drunk Driving Laws**

The anti-drunk driving laws require swift and sure action and stiff penalties from drunk drivers. The laws:

- Require courts to **decide drunk driving cases within 77 days** after an arrest;
- Require a **mandatory 6-month driver license suspension** for even a first conviction of drunk driving. Possible restricted license after first 30 days.
- Require **48 hours of consecutive jail or 10 days of community service** for a second conviction of drunk driving;
- Create a **15-year felony** for a conviction for drunk driving that causes the death of another person;
- Create a **5-year felony** for a conviction for driving drunk that causes a long-term serious injury to another person;
- **Increase the fines for a conviction** of driving while a driver license is suspended or revoked to \$500 for a first offense and \$1,000 for a subsequent offense;
- **Eliminate hardship appeals** for habitual alcohol violators;
- **Raise the reinstatement fee to \$125** if your driver license is suspended, revoked or restricted.

■ **IF YOU ARE STOPPED...**

If you are stopped by a police officer for suspicion of operating a motorcycle while intoxicated:

- You may be asked to take some sobriety tests including a **Preliminary Breath Test (PBT)** at the roadside to determine whether you are under the influence of alcohol. (If you refuse to take the PBT, you will be charged with a civic infraction and fined up to \$100 plus court costs.)
- If you are arrested, you will be required to take a blood, breath and/or urine test to determine your blood alcohol level. Under **Michigan's Implied Consent Law**, you are considered to have given your consent to this test. If you refuse to take the test, six points will be added to your driving record and your license will be suspended for six months. If you have previously refused to take the test, six points will be added to your driving record and your license will be suspended for one year;
- **Your driver license will be cut up by an officer** if you refuse to take the test under the Implied Consent Law or if your bodily alcohol content is .10 percent or more.

■ **YOU CAN BE CHARGED WITH...**

- **Operating While Impaired (OWI)** which means that because of alcohol or other drugs in your body, your ability to operate a motor vehicle was affected to the point that anyone could see that it lowered your driving ability.
- **Operating Under the Influence of Liquor (OUIL)** which means the alcohol in your body substantially affected your driving ability so it was obvious to anyone that you could not operate a motor vehicle safely.
- **Operating Under the Influence of Drugs (OUID)** which means that drugs in your body substantially affected your driving ability so it would be obvious to anyone that you could not operate a motor vehicle safely.
- **Operating With an Unlawful Bodily Alcohol Content (UBAC)** which means that at the time of your driving your bodily alcohol content was unlawful. This can be shown by an analysis of your blood, breath or urine.
- **Under Age 21 Operating With Any Bodily Alcohol Content** means having a bodily alcohol content of .02% to .07% and/or any presence other than that consumed at a religious ceremony.

■ **IF YOU ARE CONVICTED...**

- The court may order time in jail, fines and costs, community service, alcohol treatment or education, or a combination of these consequences. The Michigan Vehicle Code also requires the court to order driver license sanctions. Please see the following chart:

☐ **Driver License Actions**

■ **FIRST OFFENSE**

OUIL/OUID/UBAC

- \$100 to \$500 fine and/or
- Up to 90 days jail and/or
- Up to 45 days community service
- Driver license suspension of 6 months to 2 years; no restricted license for first 30 days
- 6 points on driving record
- Possible vehicle forfeiture.

OWI

- Up to \$300 fine and/or
- Up to 90 days jail and/or
- Up to 45 days community service
- Driver license suspension of 3 months to 1 year; 6 months to 1 year if impaired by controlled substance
- Restricted license possible
- 4 points on driving record.

■ ANY COMBINATION, SECOND OFFENSE WITHIN 7 YEARS

OUIL/OUID/UBAC

- \$200 to \$1,000 fine and
- 48 hours to 1 year jail and/or
- 10 to 90 days community service
- Driver license revocation
- 6 points on driving record
- Possible vehicle forfeiture.

OWI

- \$200 to \$1,000 fine and
- Up to 1 year jail and/or
- 10 to 90 days community service
- Driver license suspension of 6 months to 2 years; no restricted license for first 60 days
- 4 points on driving record
- Possible vehicle forfeiture.

■ ANY COMBINATION, THIRD OFFENSE WITHIN 10 YEARS (FELONY)

OUIL/OUID/UBAC

- \$500 to \$5,000 fine and
- 1 to 5 years imprisonment
- Driver license revocation
- 6 points on driving record
- Possible vehicle forfeiture.

OWI

- \$200 to \$1,000 fine and
- Up to 1 year jail and/or
- 10 to 90 days community service
- Driver license revocation
- 4 points on driving record
- Possible vehicle forfeiture.

■ OUIL/OUID/UBAC/OWI CAUSING SERIOUS INJURY (FELONY)

- \$1,000 to \$5,000 fine and/or
- Up to 5 years imprisonment
- Driver license revocation
- 6 points on driving record
- Possible vehicle forfeiture.

■ OUIL/OUID/UBAC/OWI CAUSING DEATH (FELONY)

- \$2,500 to \$10,000 fine and/or
- Up to 15 years imprisonment
- Driver license revocation
- 6 points on driving record
- Possible vehicle forfeiture.

■ OPEN INTOXICANTS IN A MOTOR VEHICLE

- Up to \$100 fine
- Driver license suspension up to 1 year
- Alcohol screening may be required
- 2 points on driving record

■ ZERO TOLERANCE (UNDER AGE 21)

FIRST OFFENSE

- Up to \$250 fine and/or
- Community Service up to 45 days
- Driver license suspension of 30 to 90 days (restrictions allowed)
- 4 points on driving record

SECOND OFFENSE WITHIN 7 YEARS

- Up to \$500 fine and/or
- Community service up to 60 days
- Driver license suspension 90 days to 1 year (restrictions allowed after 90 days)
- 4 points on driving record

PERSON UNDER 21 IN POSSESSION OF ALCOHOL

- Up to a \$500 fine
- Community service may be required
- Alcohol screening may be required
- Driver license suspension up to 1 year

PERSON UNDER 21 TRANSPORT/POSSESS ALCOHOL IN MOTOR VEHICLE

- Up to \$100 fine
- Alcohol screening may be required
- Community service may be required
- Driver license suspension up to 1 year
- 2 points on driving record
- Vehicle can be impounded up to 30 days

USE OF FRAUDULENT ID TO PURCHASE LIQUOR

- Up to a \$100 fine
- 90 day driver license suspension
- Alcohol screening may be required

PREPARING TO RIDE

As a rider, what you do ***before you start*** a trip goes a long way toward determining whether or not you will get where you want to go safely. Before taking off on any trip, a safe rider makes a point of:

- Wearing the proper gear;
- Checking the motorcycle;
- Getting familiar with the motorcycle.

☐ WEAR THE PROPER GEAR

When you ride, your gear is “proper” if it ***protects*** you. In any crash, you have a far better chance of avoiding serious injury if you are wearing:

- An approved helmet (USDOT, ANSI, or Snell);
- Face or eye protection;
- Protective clothing.

■ The Safety Helmet

Crashes are not rare events—particularly among beginning riders. And one of every five motorcycle crashes reported results in head or neck injuries—the worst kind of injuries you can get. Head injuries are your greatest threat. They are just as severe as neck injuries—and far more common. Wearing a safety helmet neither raises nor reduces your risk of neck injury. But head injuries are another matter. Wearing a securely fastened safety helmet is the single most important thing you can do to improve your chances of surviving a crash.

■ Safety Helmet Use

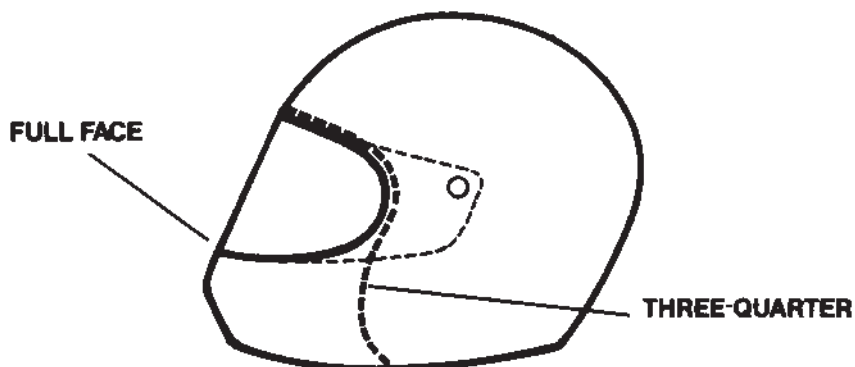
Some riders do not wear safety helmets because they think safety helmets will limit their view to the sides. Others wear safety helmets only on long trips or when riding at high speeds. Here are some facts to consider:

- An approved safety 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 safety helmets, failed to find even one case in which a safety helmet kept a rider from spotting danger;
- Most crashes occur on short trips (less than five miles long), just a few minutes after starting out;
- Even low-speed crashes can be fatal. Most riders are going slower than 30 mph when they get hurt. At these speeds, safety helmets can cut both the number and the severity of head injuries in half.

No matter what the speed, unhelmeted riders are ***three times*** more likely to die from the head injuries than are riders who are wearing safety helmets at the time of the crash.

■ Safety Helmet Selection

There are two primary types of safety helmets, providing two different levels of coverage: three-quarter and full face.



Whichever style you choose, you can get the most protection by making sure it:

- Meets U.S. Department of Transportation (USDOT) standards. Safety helmets with labels from the American National Standards Institute (ANSI) or the Snell Memorial Foundation give you added assurance of quality.
- Fits snugly, all the way around.
- Has no obvious defects such as cracks, loose padding or frayed straps.

Not all safety helmet damage is obvious. If you are thinking of buying a used safety helmet, first make sure it is made by a company that will check it for damage. Then have the manufacturer check it before you pay for it.

Whichever safety helmet you decide on, keep it securely fastened. Otherwise, if you have a crash it is likely to fly off your head before protecting you.

■ Eye and Face Protection

A plastic faceshield can help protect your whole face in a crash. It also protects you from wind, dust, dirt, rain, insects, and stones thrown up from vehicles ahead. These things are distracting and can be painful.

Goggles can protect your eyes, although they will not protect the rest of your face like a faceshield does. A windshield is no substitute for a faceshield or goggles. Most windshields will not protect your eyes from wind, nor will eyeglasses or sunglasses. Glasses will not keep your eyes from watering. They might blow off when you turn your head while riding.

To be effective, eye or face protection must:

- Be free of scratches;
- Be made of materials that does not shatter;
- Give a clear view to either side;
- Be fastened securely, so it cannot be blown off;
- Allow air to pass through, to reduce fogging;
- Allow enough room for eyeglasses or sunglasses if needed.

Tinted eye protection should not be worn at night or any other time when little light is available.

■ Clothing

Clothing can help protect you in a crash.

Jacket and pants should cover your arms and legs completely. Make sure they fit snugly enough to keep from flapping in the wind, yet loosely enough to let you move freely. Leather offers the most protection, but heavy denim does an adequate job in most cases, at a reasonable price. However, sturdy synthetic material can give you a lot of protection as well. Wear a jacket even in warm weather. Many jackets are designed to protect you without getting you overheated, even on summer days.

Boots or shoes should be high enough to cover your ankles and sturdy enough to give them support. Soles should be made of hard, durable material. Heels should be short, so they do not catch on rough surfaces. If your boots or shoes have laces, be sure they are tucked in to avoid catching on your motorcycle.

Gloves are also important. They give you a better grip and help protect your hands in a crash. Your gloves should be made of leather or heavy cloth.

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. Rain suits should be of good quality and designed for wearing while riding. otherwise they may tear apart or “balloon up” at high speeds. Some gloves are made to keep wind or rain from going up your sleeves.

□ CHECK THE MOTORCYCLE

If something is wrong with the motorcycle, you will want to find out about it **before** you get in traffic. Here are the things you should check before **every ride**.

While walking to the motorcycle take a good look at your **tires**. If one looks low, check the pressure. The motorcycle will not handle properly if the air pressure is too low and could result in tire failure.

Look under the bike for signs of an oil or gas leak. If there is a puddle, determine the cause and get the leak fixed.

Before mounting the motorcycle, make the following checks:

- **Fluids**—Oil and fuel levels;
- **Headlight and Taillight**—Check them both. Test your dimmer to make sure both high and low beams are working;
- **Turn Signals**—Turn on both right and left turn signals. Make sure all four lights flash;
- **Brake Light**—Try both brake controls. Make sure *each one* turns on the brake light;
- **Hydraulic Fluids**—Check sight windows when accessible. At a minimum, check weekly;
- **Coolants**—Check reservoir when accessible. At a minimum, check weekly.

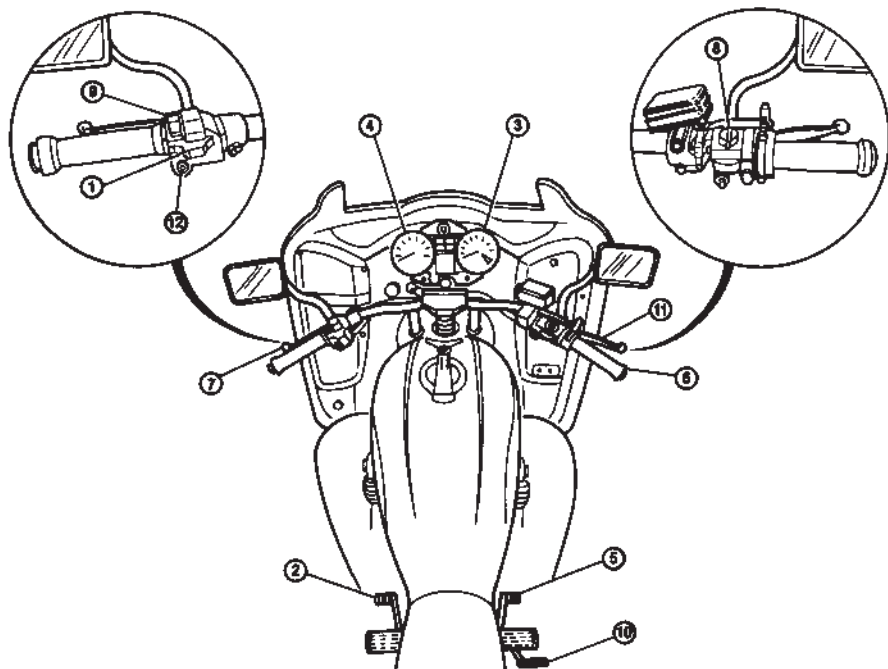
Complete the following checks before starting out:

- **Clutch and Throttle**—Make sure they work smoothly. The throttle should snap back when you let go;
- **Mirrors**—Clean and adjust both mirrors before starting out, because it is difficult to ride with one hand while you try to adjust a mirror. Adjust each mirror to let you 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.

☐ GET FAMILIAR WITH THE MOTORCYCLE

Make sure you are completely familiar with the motorcycle before you take it out on the street. This is particularly important if you are riding a *borrowed* motorcycle. Over half of the motorcycle crashes involve riders with less than six months experience. If you are using an unfamiliar motorcycle:

- (1) Make all the checks you would on your own motorcycle;
- (2) Find out where everything is, particularly the turn signals, horn, headlight switch, fuel control valve and engine cut-off switch. Make sure you can operate them without having to look for them;
- (3) Check the controls. Make sure you know the gear pattern. Work the throttle, clutch and brakes a few times before you start riding. All controls react a little differently;
- (4) Ride very cautiously until you are used to the way the motorcycle handles. For instance, accelerate gently, take turns more slowly, and leave yourself extra room for stopping.



1. Turn Signal Switch
2. Gear Change Lever
3. Tachometer
4. Speedometer & Odometer
5. Rear Brake Pedal
6. Throttle
7. Clutch Lever
8. Engine Cut-off Switch
9. Light Switch
10. Kick Starter
11. Front Brake Lever
12. Horn Button

CONTROL FOR SAFETY

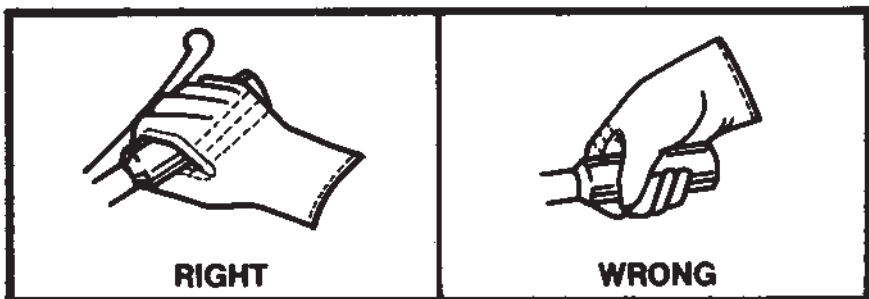
This manual cannot teach you how to control direction, speed or balance. That is something you can learn only through a lot of practice. However, here are a few pointers to help you keep control.

☐ BODY POSITION

To control a motorcycle well, your body must be in the proper position.

Seat—Sit far enough forward so that your arms are slightly bent when you hold the handlegrips. Bending your arms lets you turn the handlebars without having to stretch.

Hands—Hold the handlegrips firmly. This will help you keep your grip if the motorcycle bounces. Start with your right wrist down. This will help you keep from accidentally using too much throttle—especially if you need to reach for the brake suddenly. Also, ensure that the handlebars are adjusted so your hands are even with, or below your elbows. This allows you to use the proper muscles for precision steering.



Knees—Keep your knees against the gas tank. This will help you keep your balance as the motorcycle turns.

Feet—Keep your feet firmly on the footpegs. Firm footing helps you keep your balance. Do not drag your foot along the ground. If your foot catches on something, you could lose control of the motorcycle. Keep your feet near the controls. This lets you get to the controls fast if you have to use them. Also do not let your toes drop down—they may get caught between the road and the footpeg.

Posture—You should sit fairly erect. This lets you use your arms to steer the motorcycle rather than to hold yourself up.

☐ TURNING

New riders often try to take curves or turns too fast. When they can not hold the turn, they end up crossing into another lane of traffic or going off the road. Or, they overreact and brake too hard causing a skid

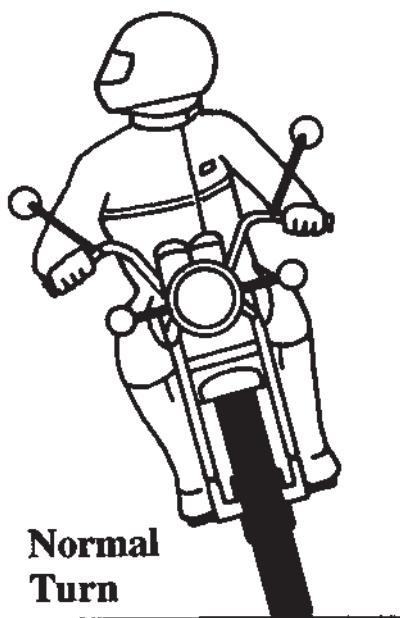
and loss of control. Until you learn to judge how fast you can safely take a curve, approach all turns with caution. When turning, use the following four steps for better control:

- SLOW
- LOOK
- LEAN
- ROLL

Slow—Reduce speed before the turn by closing the throttle and, if necessary, applying both brakes.

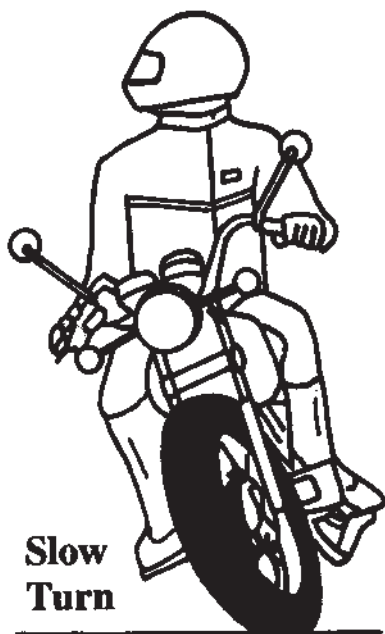
Look—Use your head and eyes for directional control. Look through the turn to where you want to go. Turn just your head, not your shoulders and keep your eyes level.

Lean—To turn, the motorcycle must lean. To lean the motorcycle push on the handgrip in the direction of the turn. Push left—lean left—go left. Push right—lean right—go right. Higher speeds and/or tighter turns require more lean.



**Normal
Turn**

**LEAN WITH
MOTORCYCLE**



**Slow
Turn**

**LEAN
MOTORCYCLE ONLY**

In normal turns, the rider and motorcycle should lean together. In slow tight turns, lean the motorcycle only and keep your body straight.

Roll—Roll on the throttle through the turn. Maintain steady speed or gradually accelerate. Avoid deceleration while in the turn.

□ BRAKING

Your motorcycle has two brakes. You need to use both of them. The front brake is more powerful. It provides about three-quarters of your motorcycle's total stopping power. The front brake is not dangerous if you learn to use it properly. Here are some things to remember about braking:

- Use both brakes ***every time*** you slow down or stop. If you use only the rear brake for “normal” stops, you may not develop the habit or the skill to use the front brake properly when you really need to stop quickly;
- Apply both brakes ***at the same time***. Some people believe that the rear brake should be applied first. That is not a good idea. The sooner you apply the front brake, the sooner it will start slowing you down;
- Remember, you ***can*** use both brakes in a turn. Some motorcycles have integrated braking systems which link the front and rear brakes together, on application of the rear brake pedal. Using the front brake is dangerous only if the road is very slippery and you use the brake incorrectly. Otherwise, using both brakes in a turn is possible although it should be done very carefully. When leaning the motorcycle, some of the traction available is used for cornering. So if you use the brakes when leaning, less traction is available for stopping. A skid can occur when too much brake is applied.

□ SHIFTING GEARS

There is more to shifting gears than simply getting the motorcycle to pick up speed smoothly. Crashes can happen if you use the gears incorrectly when downshifting, turning or starting on hills.

■ Downshifting

Shift down through the gears as you slow down or stop. And stay in first gear while you are stopped. This way you can move out quickly if necessary.

Make certain you are going slow enough when you shift into a lower gear. If you are going too fast when you downshift, the rear wheel may skid. This is more likely to happen when you are going downhill or shifting into first gear. Under these conditions, you may need to use the brakes to slow down enough to downshift safely.

■ Shifting for a Turn

It is best to change gears ***before*** entering a turn, however, sometimes shifting is necessary during a turn. If so, remember to do so smoothly. A sudden change in power to the rear wheel can cause a skid.

SEE AND BE SEEN

In crashes involving motorcycles, car drivers often say that they never saw the motorcycle. It is hard to see something you are not looking for, and most drivers are not looking for motorcycles. Also, from ahead or from behind, a motorcycle's outline is much smaller than a car's.

Even if a driver sees you coming, you are not necessarily safe. Because you and your motorcycle are smaller than other vehicles, it is easier for others to mistake your distance and speed. However, you can do many things to make it easier for others to recognize you and your motorcycle.

☐ CLOTHING

Most crashes occur in broad daylight. If you do not wear bright clothing, you greatly increase your risk of not being seen during the day. Remember, your body is half of the visible surface area of the rider/cycle unit.

Clothing that helps you be seen includes bright orange, yellow, or green jackets or vests. And your *safety helmet* can do more than protect you in a crash. If it is brightly colored, it can help others see you.

Any bright color is better than drab or dark colors. Fluorescent clothing (safety helmet and jacket or vest) is best for daytime riding. At night, it is best to wear reflective gear. Reflective material on the sides of your safety helmet and vest will help drivers coming from the side spot you. Reflective material can also be a big help for drivers coming toward you on the road ahead or from behind.

☐ HEADLIGHT

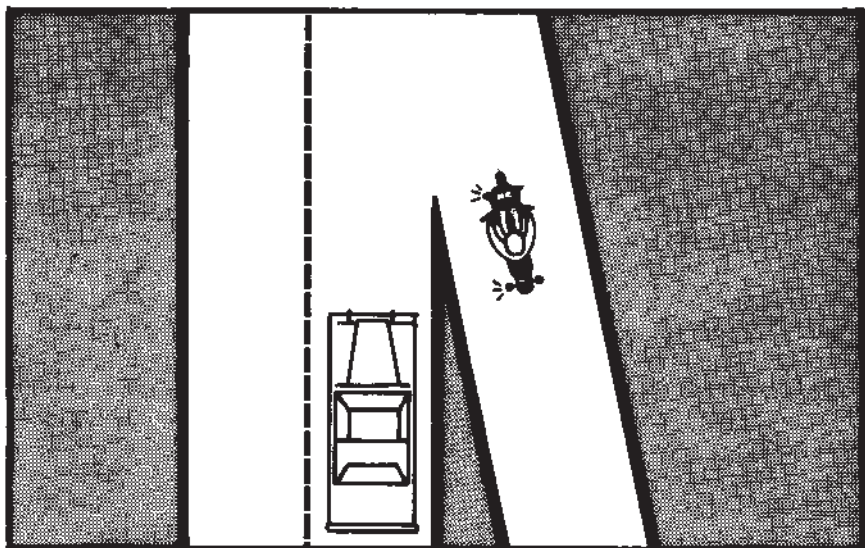
The best way to help others on the road see your *motorcycle* is to keep the headlight on—at all times. Studies show that, during the day, a motorcycle with lights off is twice as likely to go unnoticed by other road users. Also, use of the high beam in daylight increases the likelihood that you will be seen by oncoming drivers.

☐ SIGNALS

The signals on a motorcycle are similar to those on a car. However, signals are far more important to motorcycle riders to inform other vehicles of their intentions to change course.

■ Turn Signals

Turn signals do two things for you. First, they tell others what you plan to do. Use them anytime you plan to change lanes. 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. Second, your signal lights make you easier to spot. Drivers behind are more likely to see your turn signal than your taillight. That is why it is a good idea to use your turn signals even when what you plan to do is obvious. For example, when you are on a freeway entrance ramp, drivers on the freeway are more likely to see you and make room for you if you use your turn signal.



Not turning off a signal is just as bad as not turning it on. A driver may think you plan to turn again and pull directly into your path. Once you have made your turn, check your signal to make sure it is off.

■ **Brake Light**

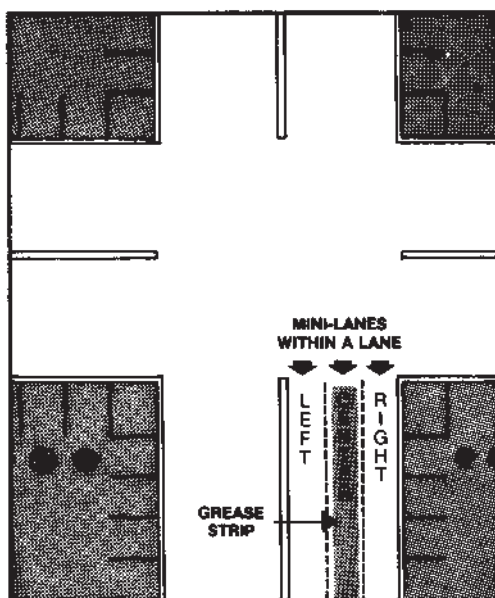
Your motorcycle's brake light is usually not as noticeable as the brake lights on a car—particularly when your taillight is on. (The taillight goes on with the headlight.) Still, you can help others notice you by tapping the foot brake lightly before you slow down. This will flash your brake light. It is especially important to signal others by flashing your brake light whenever:

- You are going to slow down more quickly than might be expected (for example, when you are going to make a turn off a high-speed highway);
- You are going too slow where others may not expect it (for example, when you will slow to turn in the middle of a block, at an alley).

If you are being followed closely, it is a good idea to flash your brake light before you slow—even if you will not be slowing more quickly than might be expected. The tailgater may be looking only at you and fail to see something farther ahead that will make you slow down.

□ **POSITION FOR BEING SEEN**

Though the size of a motorcycle can make it harder for other drivers to spot you, you can make size work to your advantage. Car drivers have very little choice about positioning their car in a lane. However, each marked lane gives a motorcyclist three possible paths of travel, as indicated in the picture.



Each “mini-lane” is approximately four feet wide. By selecting the appropriate “mini-lane,” you can make yourself more easily seen by others on the road.

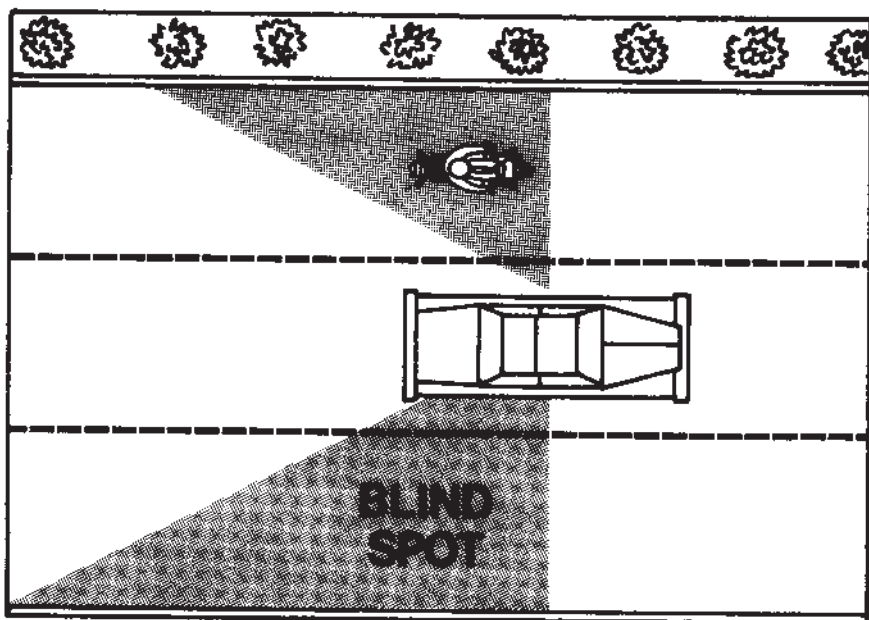
In general there is no *best* position for riders when it comes to being seen. The main idea of positioning yourself to be seen is this: Ride in the portion of the lane where it is *most* likely that other drivers will see you.

The “Keeping Your Distance” section of this manual provides recommended lane positions for various situations. However, no portion of the lane need be avoided—including the center. In fact, the center portion of the lane is usually the best position when you are being passed from behind or by an oncoming vehicle.

Some people feel that riding in the center portion is dangerous. They argue that the grease strip which often appears in this portion (formed by droppings from other vehicles) is slippery and will cause riders to fall. Such fears are overblown since grease strips are usually not more than two feet wide. You can operate to the left or right of the grease and still be within the center portion of the lane. Unless the road is wet with rain, the average grease strip gives just as much traction as the rest of the pavement. Of course, big build-ups of grease—as may be found at very busy intersections or toll booth—should be avoided. Here are some additional ways to position yourself to be seen.

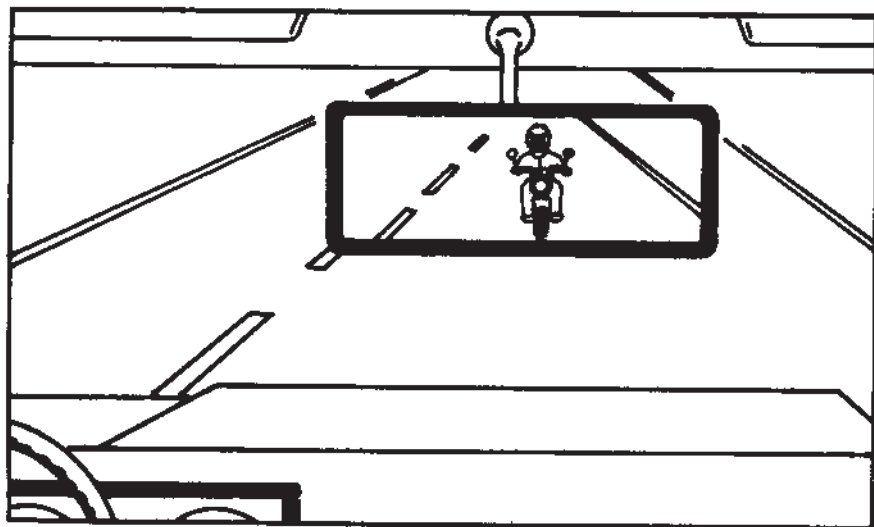
■ Stay Out of Blind Spots

Either pass the other vehicle or drop back. When you pass a car, get through the blind spot as quickly as you can. Approach with care. But once you are alongside, speed up and get by quickly.



☐ **Let the Driver Ahead See You**

When behind a car, try to ride where the driver can see you in their rearview mirror. Riding in the center portion of the lane should put your image in the middle of the rearview mirror—where it is most likely to be seen. Riding at the far side of a lane may let you be seen in a sideview mirror. But most drivers do not look at their sideview mirrors nearly as often as they check the rearview mirror.



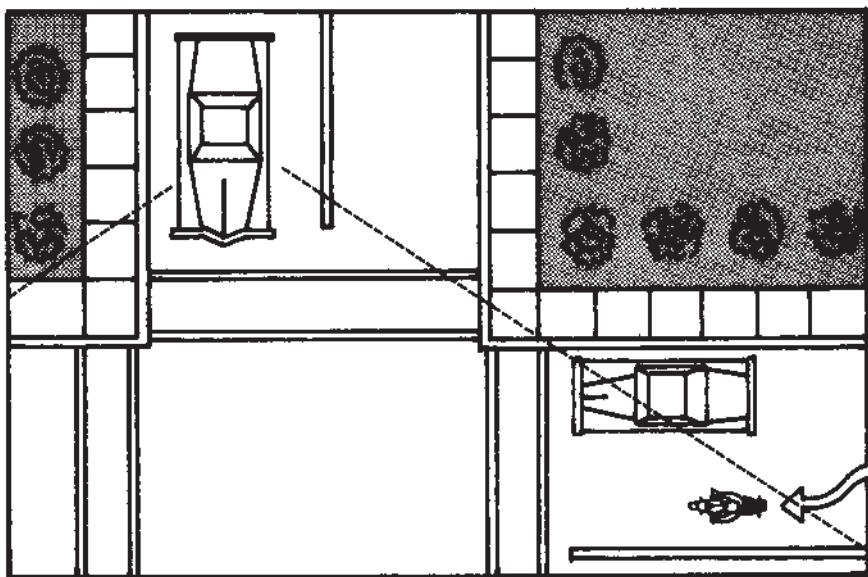
■ Help Drivers at Intersections See You

The most dangerous place for any rider is an intersection. That is where most motorcycle crashes take place. The most common cause of these crashes is that the car driver infringed on the motorcycle rider's right-of-way.

The best way to increase your chances of being seen as you approach an intersection usually is to ride with your lights on and in the portion of the lane that gives the best view of oncoming traffic. As you enter the intersection, position yourself to provide a space cushion all around you that allows you to take evasive action.

If you are approaching a blind intersection, it is best to move to the portion of the lane that will bring you into another driver's field of sight at the earliest possible moment. In the picture below, the motorcycle rider has moved to the left portion of the lane—away from the parked car—so the driver on the cross street can see the motorcycle as soon as possible.

Remember, the key is to see as much as possible. This will usually make you as visible as possible while protecting your space.



☐ HORN

Place your thumb on the horn button and be ready to use it whenever you need to get someone's attention.

It is a good idea to give a quick beep **before** you pass anyone you think may move into your lane. Here are some situations:

- A driver in the lane next to you is getting too close to the vehicle ahead and may want to pass.
- A parked car has someone in the driver's seat.
- Someone is in the street, riding a bicycle or walking.

In an emergency, a warning beep will not be enough. Blast the horn in a true emergency and be ready to slow or turn away from the danger.

The two biggest dangers facing you as a motorcycle rider are: (1) oncoming vehicles that turn left in front of you; and (2) vehicles on side streets that pull out into your lane. ***Never count on “eye contact” as a sign that a driver has seen you and will yield the right-of-way. All too often, a driver looks right at a motorcyclist and still fails to “see” them.***

No matter what you do, you cannot ***guarantee*** that others will see you. The only eyes you can really count on are your own. A good rider is always “looking for trouble”—not to get into it, but to stay out of it.

□ **SIPDE**

Experienced motorcycle riders make a practice of being aware of what is going on around them. They can create their riding strategy by using a system known as SIPDE.

SIPDE is an acronym for the process used to make judgments and take action in traffic. It stands for:

- Scan
- Identify
- Predict
- Decide
- Execute

Let us examine each of these steps.

■ **Scan**

Search aggressively for potential hazards. Scanning provides you with the information you need to make your decisions in enough time to take action.

■ **Identify**

Locate hazards and potential conflicts. The hazards you encounter can be divided into three groups based on how critical their effect on you may be.

Cars, trucks, and other vehicles—They share the road with you, they move quickly, and your reactions to them must be quick and accurate.

Pedestrians and animals—They are characterized by unpredictability and short quick moves.

Stationary objects—Chuckholes, guard rails, bridges, roadway signs, hedges, or rows of trees may complicate your riding strategy.

The greatest potential for a conflict between you and other traffic is at intersections. An intersection can be in the middle of an urban area

or at a driveway on a residential street—anywhere other traffic may cross your path of travel. Most motorcycle/automobile collisions occur at intersections. And most of these collisions are caused by an on-coming vehicle turning left into the path of the motorcycle. Your use of SIPDE at intersections is critical to avoiding these collisions.

Before you enter an intersection, search for:

- Oncoming traffic that may turn left in front of you.
- Traffic from the left;
- Traffic from the right;
- Traffic approaching from behind.

Be especially alert at intersections with limited visibility. Be aware of visually “busy” surroundings that could camouflage you and your motorcycle.

■ Predict

Anticipate how the hazard may affect you. The moving direction of a potential hazard is important. Clearly, a vehicle moving away from you is not as critical as a vehicle moving in your path.

Determine the effect of the hazard—where a collision might occur. How critical is the hazard? How probable is a collision? This is the “What if...?” phase of SIPDE that depends on your knowledge and experience. Now estimate the consequences of the hazard. How might the hazard—or your effort to avoid it—affect you and others?

■ Decide

Determine how to reduce the hazard. There are only three things you can do:

- Communicate your presence;
- Adjust your speed;
- Adjust your position.

Communication is the most passive action you can take since it depends on the response of someone else. Use your lights and horn, but do not rely on the actions of others.

Adjustments of speed can be acceleration, slowing or stopping.

Adjustments of position can be changing lane position or completely changing direction.

In both adjustment cases, the degree of adjustment depends on how critical the hazard is and how much time and space you have. The more time and space you have to carry out your decision, the less amount of risk you will encounter.

In areas of high potential risk, such as intersections, give yourself more time and space by reducing the time you need to react. Cover both brakes and the clutch and be ready with possible escape routes.

■ **Execute**

Carry out your decision. This is when your riding skills come into play. They must be second nature. The best decision means nothing without the skills to carry it out. Know your limits and ride within them.

☐ **USING YOUR MIRRORS**

While it is most important to keep track of what is happening ahead, you can not afford to ignore what is happening behind. Traffic conditions can change quickly. By checking your mirrors every few seconds, you can keep track of the situation behind.

Knowing what is going on behind can help you make a safe decision about how to handle trouble ahead. For instance, if you know someone is following you too closely, you may decide to avoid a problem ahead by turning away from it, rather than trying to stop quickly and risk being hit by the tailgater.

Frequent mirror checks should be part of your **normal** scanning routine. Make a **special** point of using your mirrors in these situations:

- **When you are stopped at an intersection.** Watch cars coming up from behind. If drivers are not paying attention, they could be too close before they see you.

- **Anytime you plan to change lanes.** Make sure no one is about to pass you.

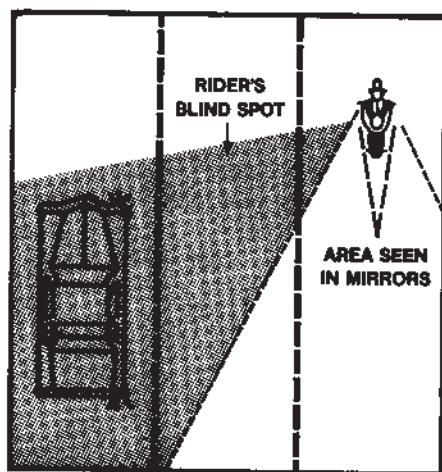
- **Anytime you will slow down.** It is especially important to check if the driver behind may not expect you to slow, or if they may be unsure about exactly where you will slow. For example, they might see you signal a turn and think you plan to slow for a turn at a distant intersection, rather than at a nearer driveway.

Many motorcycles have rounded “convex” mirrors. These give you a wider view of the road behind than do flat mirrors. However, they also make cars seem **farther away** than they really are. If you are not used to convex mirrors, become familiar with them. Here is how: **While you are stopped, pick out a parked car in your mirror. Try to imagine how far away it is. Then, turn around and look at it. 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**

Mirrors do a pretty good job of letting you see behind. But motorcycles have “blind spots” just like cars. Before you change lanes, make sure to do a head check: turn your head, and look at traffic to the side. This is the only way you can be sure of spotting a car just about to pass you.

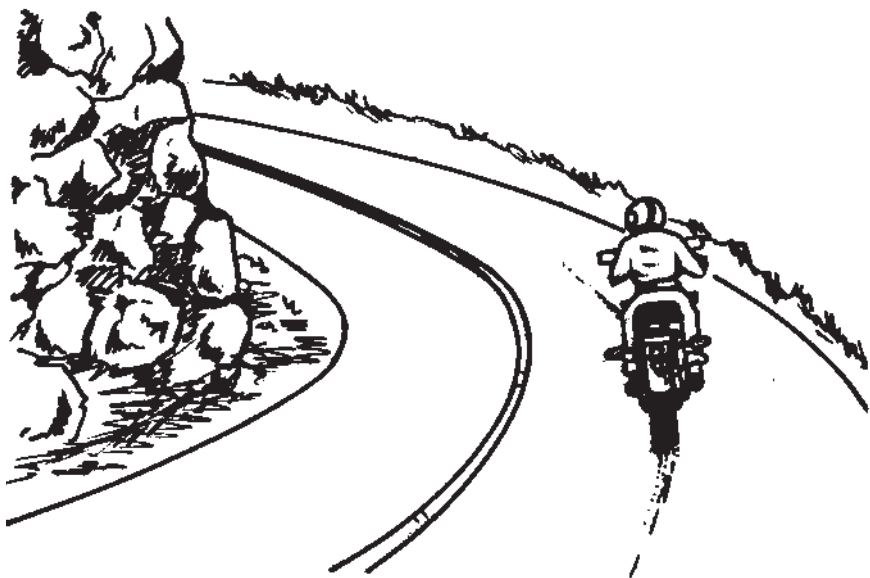
On a road with several lanes, check the far lane as well as the one next to you. A driver in the distant lane may be headed for the same space you plan to take.



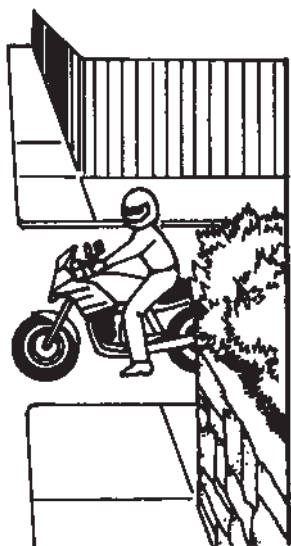
☐ **POSITION TO SEE**

As a motorcycle rider, you can put yourself in a position to see things that a car driver cannot see.

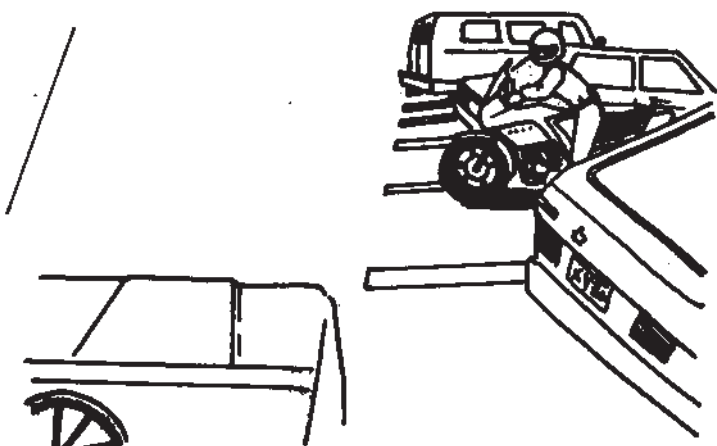
- On Curves**—You can move from one portion of a lane to another to get a better view through a curve. Moving to the center portion of your lane before a curve—and staying there until you come out of a curve—lets you spot traffic coming toward you as soon as possible. This also allows you to adjust for traffic that is “crowding” the center line or for debris that is blocking part of your lane.



- **At blind intersections**—Blind intersections can make it hard to see danger coming from the side. If there is a stop sign, make sure to stop there first. Then edge forward and stop again, just short of where the cross-traffic lane meets your lane. From that position, you can lean your body forward and look around buildings, parked cars or bushes to see if anything is coming. Just make sure your front wheel stays out of the cross lane of travel while you are looking.



- **At the roadside**—Angle your motorcycle so that you can see in both directions without straining and without having any part of the motorcycle in the lane of travel. Angling your motorcycle so that you can get a clear view in both directions is particularly important if you plan to turn across a lane of traffic.



KEEPING 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 gives you two things.

- Time to react.
- Some place to go.

□ DISTANCE IN FRONT

“Following too closely” is a major factor in crashes involving motorcycles. Motorcycles usually need as much distance to stop as do cars.

How much distance do you need to keep from following too closely? Normally, you will need a minimum of **2 seconds distance** between yourself and the vehicle ahead. Here is how to gauge your following distance:

- Pick out a marker—a pavement marking or lamp post, for instance—on or near the road ahead;
- When the rear bumper of the vehicle ahead passes your marker start counting off the seconds: “one-second-one, one-second-two”;
- If you reach your marker before you reach “two,” you are following too closely.

A two-second following distance leaves you enough time to stop or swing by if the driver ahead of you stops suddenly. It also gives you a better view of potholes and other dangers in the road.

In some situations, you should use a three-second following distance. This larger cushion of space is needed if your motorcycle will take longer than normal to stop (for example, if the pavement is slippery with rain) or if you cannot see through the vehicle ahead.

Keep well behind the vehicle in front of you, even when you are stopped. This will give you a cushion of space if the vehicle ahead starts to slow down or back up for some reason, or the vehicle behind follows too closely.

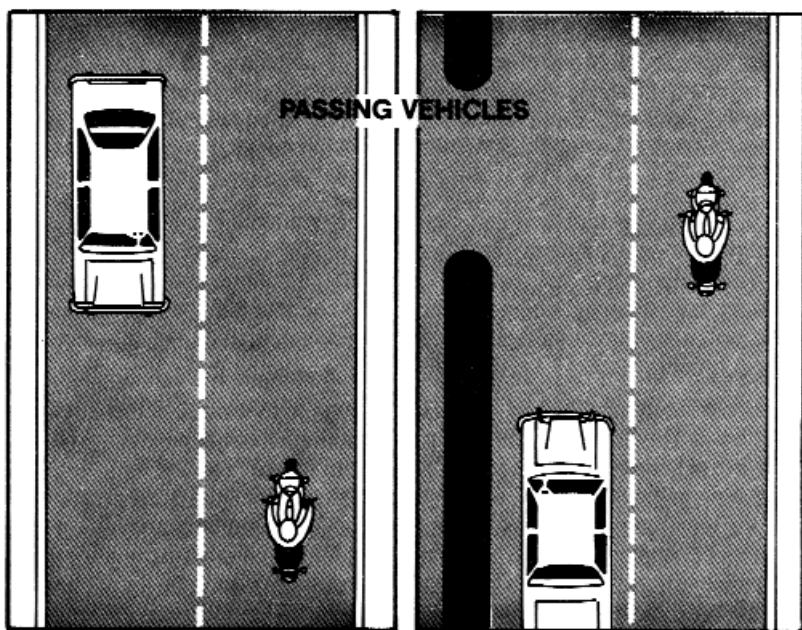
□ DISTANCE TO THE SIDE

By shifting from one portion of a lane to another you can keep a safe cushion of space on both sides. An experienced rider changes position within the lane as traffic conditions change. Here are some conditions that require changes in lane position.

■ Passing Vehicles

When you are being passed from behind or by the oncoming vehicle keep in the center portion of your lane. If you ride any closer to them, you could be hit by:

- **The other vehicle**—A slight mistake by you or the passing driver could cause a sideswipe.
- **Extended mirrors**—Some drivers forget that their mirrors hang out further than their fenders.
- **Something thrown from windows**—Even if the driver knows you are there a passenger may not see you and might toss something on you or the road ahead of you.
- **Blasts of wind from larger vehicles**—They can affect your control. The middle portion of the lane allows more space to adjust to wind blast.

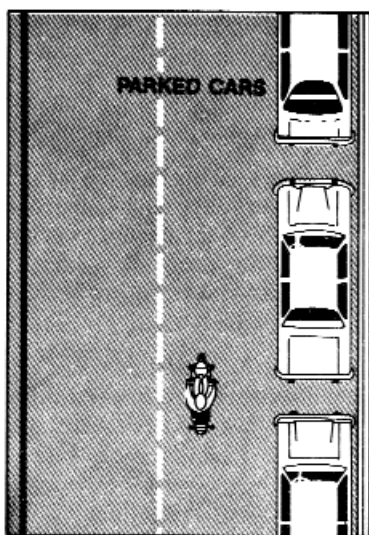
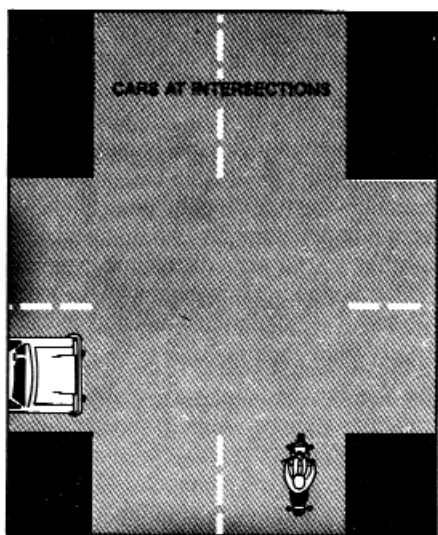


Do **not** move into the portion of the lane farthest from the passing vehicle. This may invite the passing driver to move back into your lane too early.

■ Cars at Intersections

If a car **can** enter your path at an intersection, assume that it **will**. As you approach the intersection, select a lane position to increase your visibility to the oncoming car. Try to make eye contact with the driver and at the same time, be prepared to use the clutch and brake.

Reduce your speed before the intersection and as you enter the intersection move away from the turning car. Do not change speed or position radically, as that may tell the car driver that you are preparing to turn.



■ **Parked Cars**

When passing parked cars, stay toward the left of your lane. This lets you avoid problems caused by doors opening, drivers getting out of cars, or people stepping from between cars.

A bigger problem is the car pulling out in front of you. A driver may pull away from the curb without checking traffic behind. Even if the driver does look, they may fail to see you. In either event, the driver might move into your path.

Drivers making U-turns are the most dangerous. By slowing down or changing lanes, you can make room for someone wanting to enter your lane. But a vehicle making a sudden U-turn may cut you off entirely, blocking the roadway and leaving you with no place to go. Since you can not tell what a driver will do when they start to pull out, your first move should be to get their attention. Sound your horn. Then continue with caution, until either the driver completes the U-turn or you are past the car.

■ **Lane Sharers**

Cars and motorcycles both need a full lane to operate safely. Drivers should not share lanes with motorcycles; motorcyclists should not share lanes with cars.

As a motorcycle rider, you can do two things to prevent lane sharing. First, you can make sure you do not try to share lanes. Do not ride between rows of stopped vehicles in the same lane. Anything can happen: a hand could come out of a window; a door could open; a car could turn suddenly. Second, discourage lane sharing by others. The best way to do this is to keep a center-portion position whenever other 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 are preparing to turn at an intersection.
- When you are about to get in an exit lane, or leave a highway.

If you move to the far side of your lane in these situations, you invite others to share the lane with you.

■ **Merging Vehicles**

Do not assume that drivers on an entrance ramp can see you on the highway. Give them plenty of room. Change to another lane if it is open. If there is not room for a lane change, adjust speed accordingly to open up space for the merging driver.

■ **Cars Alongside**

Do not ride next to cars or trucks in other lanes if you do not have to. A car in the next lane could switch into your lane without warning. Speed up or drop back until you find a place that is clear of traffic on both sides.

☐ **DISTANCE BEHIND**

If someone tailgates you, do not try to lose them by speeding up. Most likely you will end up being tailgated at a high speed.

When someone is following too closely, the best thing to do is change lanes and let them pass. If you can not do this, slow down and open up extra space ahead of you. This will encourage them to pass. If they do not, you will have given yourself and the tailgater more time and space to react in case an emergency develops.

HANDLING DANGEROUS SURFACES

Your chance of falling increases whenever you ride across:

- Slippery surfaces.
- Uneven surfaces or obstacles.
- Railroad tracks.
- Grooves and gratings.

☐ SLIPPERY SURFACES

Motorcycles handle better when ridden on surfaces giving 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 places where sand and gravel have collected on paved roads.
- Mud, snow and ice.
- Lane markings and steel plates and manhole covers, especially when wet.

■ Handling Slippery Surfaces

There are a number of things you must do to ride safely on slippery surfaces:

Reduce Speed—Slow down before you get to a slippery surface as your motorcycle needs more distance to stop. By going slower, you can stop and turn more gradually, lessening your chances of skidding. It is particularly important to reduce speed before entering wet curves.

Avoid Sudden Moves—On slippery surfaces, 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—Do not be afraid to use the front brake as well as the rear brake. The front brake is still more effective than the rear brake, even on a slippery surface. Just be careful to apply it gradually and avoid locking up the front wheel.

Avoid Slippery Areas—Try to find the best surface available, and use it.

- Under normal conditions, riding on the grease strip is not dangerous. However, the grease strip can become dangerous when wet. When it starts to rain, move out of the center portion entirely, and ride in the tire tracks left by cars. Often, the left tire track will be the best position. However, you should change your lane position for traffic and other roadway conditions as well.
- Watch for oil spots when you stop or park. If you put your foot down in the wrong place, you may slip and fall.

- Dirt and gravel tend to collect along the sides of the road—especially on curves and ramps leading to and from the highways. Stay away from the edge of the road, particularly when making sharp turns at intersections and when getting on or off freeways at high speed.
- Rain dries and snow melts faster on some sections of a road than on others. Try to stay on the driest, least slippery part of the lane at all times.

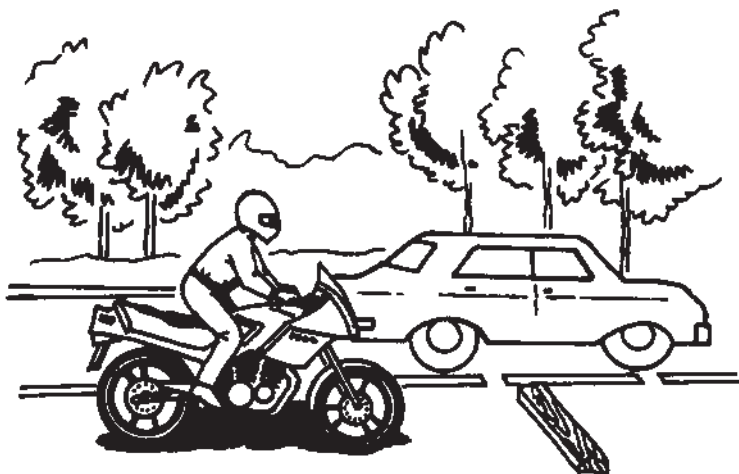
■ **Very Slippery Surfaces**

Safe riders would not even consider riding on roads covered with ice or snow. However, you may find yourself on the road with scattered patches of ice or snow. Patches of ice tend to crop up in low or shaded areas and on bridges and overpasses. You may also encounter, from time to time, wet surfaces or wet leaves in the fall. These are just as slippery as an ice patch.

Avoid all of these surfaces if at all possible. If you can not, keep your motorcycle straight up and proceed as **slowly** as possible, letting your feet skim along the surface so you can balance yourself if the motorcycle starts to fall. Be sure to keep **off** the brakes and if possible, squeeze the clutch and coast while you are on a very slippery surface.

□ **UNEVEN SURFACES AND OBSTACLES**

Watch for uneven surfaces such as bumps, broken pavement, potholes or railroad tracks. If you have to ride over them, or obstacles such as a piece of tire tread or tailpipe, do the following:



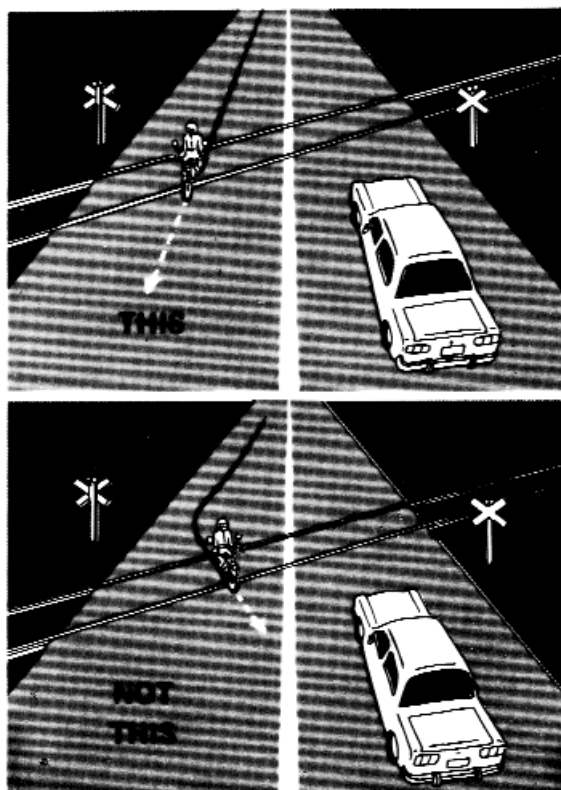
- If time permits, slow down to reduce the jolt;
- Avoid leaning the motorcycle;
- Rise slightly off the seat with your weight on the footpegs so you can absorb the shock with your knees and elbows.

Rising off the seat will reduce your chances of being thrown off the motorcycle. However, controlling the throttle can be somewhat tricky. Practice this technique in a safe area (such as a deserted parking lot) before you try to do it on-street.

If you ride over an object on the street, it is a good idea to pull off the road and check your tires and rims for damage before going any farther.

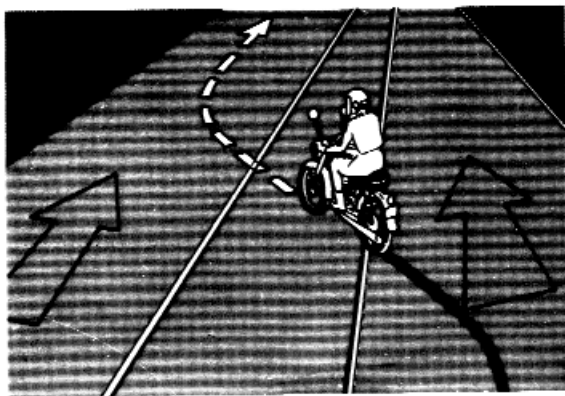
☐ **RAILROAD TRACKS**

You do not have to cross railroad tracks head-on (at a 90 degree angle). Usually, it is safer to take the tracks as they come, riding straight within your lane. A motorcycle can cross tracks at an angle as sharp as 45 degrees without difficulty. Changing your course to take tracks head-on can be more dangerous than crossing at an angle—it may carry you into another lane of traffic.



You do need to change direction, however, to cross something that runs in the same direction you are going. For example, you may wish to cross trolley tracks, ruts in the middle of the road or pavement seams that run parallel to your course.

To cross these safely, move far enough away to be able to cross them at an angle of at least 45 degrees. Then, make a quick, sharp turn across. Do **not** try to edge across. The tracks or seam could catch your tires and throw you off balance.



☐ **GROOVES AND GRATINGS**

When you ride over rain grooves or metal bridge gratings, the motorcycle shakes. It is an uneasy, wandering feeling, but it is generally not dangerous. The best thing to do is stay on course, maintain speed, and ride straight across. Some riders make the mistake of trying to cross these surfaces at an angle. This may reduce the uneasy feeling, but it also forces the rider to zigzag to stay in the lane. The zigzag is far more dangerous than the wandering feeling.



RIGHT



WRONG

At night it is harder for you to see and be seen. Other drivers may have a hard time seeing your headlight or taillight with the greater number of car lights around you.

Here are some methods that will help you ride safely at night:

Reduce Your Speed—If something is laying in the road ahead, you may not be able to see it until you are very close. If you are going too fast, you may not be able to avoid it. Always drive slower at night than you would during the day—particularly on roads you do not know well;

Increase Distance—You can not judge distance as well at night as during the day. Your eyes rely greatly upon shadows and light contrasts to judge both how far away an object is and how fast it is moving. These contrasts are missing or distorted under the artificial light available at night. Allow yourself extra distance at night. Open up a three-second following distance. And, give yourself more distance in which to pass;

Use the Car Ahead—If a car is ahead of you, make the most of it. The car's headlights can give you a better view of the road ahead than even your high beam. And keep an eye on the car's taillights and brakelights. 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 another vehicle.

You should be flexible about lane position, changing to whatever portion of the lane is best for you to see, be seen and keep an adequate space cushion. For example, riding in the center portion at night is not nearly as dangerous as some people would lead you to believe. Cars seldom pass over a pothole or road debris without some warning like a flash of brake lights.

DEALING WITH EMERGENCIES

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 upon your ability to react quickly and properly. The most important emergency skills are those needed to make quick stops and quick turns. These skills should be practiced in safe areas before you need to use them on the road.

☐ QUICK STOPS

To stop quickly, apply both brakes. Do not be shy about using the front brake, but do not “grab” at it, either. Squeeze the brake lever steadily and firmly, applying the front brake as fully as you can **without** locking the front wheel. At the same time, apply the rear brake hard without locking it.

If you are *on a straightaway*, even with a locked rear wheel, you can still control the motorcycle and stop quickly as ***long as your motorcycle is upright and going in a straight line.***

If you must stop quickly ***while turning***, conditions may not always permit you to straighten up the motorcycle and then stop. In such cases, apply the brakes and start slowing the motorcycle. As you slow down, you can reduce your lean angle and apply more brake pressure until the motorcycle is straight and maximum brake pressure is possible. In either case, remember that the motorcycle should be straight up when you come to a full stop. If you “straighten” the handlebar in the last few feet of stopping, you know the motorcycle will be straight up and in balance.

☐ EVASIVE MANEUVERS

Sometimes, you may not have enough room to stop, even if you were to use both brakes properly. For example, an object might appear suddenly in your path. Or, the car ahead might squeal to a stop. The only way to avoid a collision would be to make an evasive maneuver.

The key to making an ***evasive maneuver*** is to get the motorcycle to lean quickly in the direction you wish to turn. The sharper the turn the more the motorcycle must lean.

To get the motorcycle to lean quickly, push on the inside of the handgrip in the same direction you want to turn. If you wish to turn to the right, push on the inside of the right handlegrip. This causes the front wheel to move slightly to the left as you and the motorcycle continue straight ahead. As a result, the motorcycle will lean to the right.

As the motorcycle begins to lean, you will maintain pressure on the inside of the handlegrip in the direction of the lean. Your instincts will make you press on the handlegrip to keep the motorcycle from falling over.

You can demonstrate this to yourself. ***While riding in a straight line, press the inside of the right handlegrip. You will notice the motorcycle***

turn to the right. This is how you get the motorcycle to lean in normal turns, but most people do not notice it except on very sharp turns. Practice making quick turns so you can make them in a real emergency.

In making an evasive maneuver, try to **stay in your own lane.** the moment you change lanes, you risk being hit by another vehicle. Change lanes only if you have enough time to make sure there are no vehicles in the other lane. You should be able to squeeze by most obstacles without leaving your lane. This is one time when the size of the motorcycle is in your favor. Even if the obstacle is a car, there is generally room to pass beside it. **However, the only time you should try to squeeze by a vehicle in your lane is when you are faced with a true emergency.**

☐ MECHANICAL PROBLEMS

You may find yourself in an emergency the moment something goes wrong with your motorcycle. Mechanical problems include tire failure, a stuck throttle, a “wobble,” chain problems and engine seizure.

In dealing with any mechanical problem, you must consider the road and traffic conditions you face. Here are some guidelines that can help you handle some mechanical problems safely.

■ Tire Failure

If the motorcycle starts handling differently, pull off and check the tires. Perhaps the hardest part of dealing with tire failure is to “get on top of the situation” quickly. You will seldom **hear** a tire go flat. You must be able to tell when a tire has lost air suddenly from the way the motorcycle reacts.

If the **front** tire goes flat, the steering will feel “heavy.” If the **rear** tire goes flat, the back of the motorcycle will tend to jerk from side to side. If one of your tires suddenly loses air, you must react quickly to keep your balance. A front wheel flat is particularly dangerous as it affects your steering.

1. Hold the handlegrips firmly and concentrate on steering. Try to keep a straight course.
2. If you know which tire is flat, gradually apply the other brake.
3. Wait until the motorcycle is going very slowly. Then, edge to the side of the road, and stop.

■ Stuck Throttle

Sometimes when you try to operate the throttle you may find that it will not close. If this happens when you are slowing for traffic ahead or making a turn, you must react quickly to prevent a crash.

Your first reaction should be to twist the throttle back and forth. If the throttle cable is stuck, this may free it. However, if the throttle stays stuck after you have rotated it several times, **immediately** operate the engine cut-off switch and pull in the clutch. Use of the engine cut-off switch and the clutch at the same time will remove power from the rear wheel though engine noise may not immediately decline.

Once you have the motorcycle “under control” pull to the side of the

road 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” is when the front wheel and handlebars suddenly start to shake from side-to-side. This can occur at low, as well as high speeds.

Most wobbles can be traced to improper loading, the use of unsuitable accessories, or the use of incorrect tires or tire pressure. If you are carrying a heavy load, lighten it. If you can not lighten the load, center the weight lower to the ground and farther forward on the motorcycle. Also check your tire pressure and the settings for spring pre-load, airshocks and dampers. Make sure they are at the levels recommended by the manufacturer for carrying that much weight. If you have a windshield or fairing, make sure it is mounted properly.

Other factors that may contribute to wobble are:

Poorly adjusted steering.

Worn steering parts.

A front wheel that is bent, misaligned or out of balance.

Loose wheel bearings.

Loose spokes and swing arm bearings.

Do **not** try to “accelerate out of a wobble.” That will only make the motorcycle more unstable. Instead:

- Grip the handlebars firmly, but do not try to fight the wobble;
- Close the throttle gradually and let the motorcycle slow down. Do not apply the brakes. Braking could make the wobble worse;
- Pull off the road as soon as you can. Then find out what caused the wobble—and fix it.

■ Chain Problems

If your chain slips or breaks while you are riding, it could lock the rear wheel and cause your motorcycle to skid. You must react quickly.

Slippage—You may first hear or feel the chain slip when you try to speed up quickly or while riding uphill. If so, pull off the road, and check the chain **and** sprockets. Tightening the chain may help. But usually the problem is a worn or stretched chain or worn or bent sprockets. In these cases, replace the chain, the sprockets or both before riding again.

Breakage—When the chain breaks, you will notice an instant loss of power to the rear wheel. Close the throttle and brake to a stop.

Chain slippage or breakage can be avoided by proper maintenance.

■ Engine Seizure

Engine seizure means that the engine “locks” or “freezes.” Engines seize when they are low on oil. Without oil, the engine’s moving parts can not move smoothly against each other and the engine overheats.

The first sign that an engine needs oil may be loss of engine power. You may also notice a change in the engine's sound. If available, check the engine oil pressure light and temperature gauge.

Squeeze the clutch lever to disengage the engine from the rear wheel. Pull off the road and stop. Let the engine cool. You may be able to add oil and restart the engine. Even so, you should have the engine checked thoroughly for damage as soon as possible.

☐ GETTING OFF THE ROAD

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

1. **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 down before you turn onto it;
2. **Signal others**—Drivers behind might not expect you to slow down. **As soon as you can**, give a clear signal that you will be slowing down and changing direction. Make sure to check your mirror and make a head check before you take any action;
3. **Pull well 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 pulling off at the same place you are.

☐ OTHER EMERGENCIES

There are two other emergencies that motorcycle riders should be prepared for. They happen often enough to be real problems.

■ Flying Objects

From time to time you can be struck by insects, cigarettes thrown from vehicles or rocks kicked up by the tires of the vehicle ahead. If you are not wearing face protection, you could be hit in the eye, face, or mouth. If you are wearing face protection, it might get smeared or cracked, making it difficult for you to see. Whatever happens, **do not let it affect your control of the motorcycle**. Keep your eyes on the road and your hands on the handlebars. As soon as it is safe, pull off the road and repair the damage.

■ Animals

Naturally, you should do everything you can to avoid hitting an animal. However, if you are in traffic, do not swerve out of your lane to avoid a small animal. Hitting something small is less dangerous to you than hitting something big—like a car.

Motorcycles tend to attract dogs. If you find yourself being chased do not kick at the animal. It is too easy to lose control of the motorcycle. Instead, shift down and approach the animal slowly. As you reach it, speed up quickly.

CARRYING PASSENGERS AND CARGO

You should avoid carrying passengers or large loads until you have gained a lot of experience riding alone. The extra weight changes the way the motorcycle handles, balances, turns, speeds up, and slows down. And, before taking a passenger or heavy load on the street, practice in a safe, off-road area.

☐ PASSENGERS

To carry passengers safely you must:

- Make sure your motorcycle is equipped and adjusted to carry passengers;
- Instruct the passenger before you start;
- Adjust your riding technique for the added weight of the passenger.

■ Equipment

To carry passengers, you must have:

- **A *proper seat***—The seat should be large enough to hold both you and your passenger without crowding. You should not sit any further forward than you usually do;
- **Footpegs**—The passenger must have a set of footpegs. Without a firm footing, your passenger can fall off and pull you off too;
- **Protective equipment**—Passengers should have the same type of protective equipment and clothing recommended for operators.

You should also adjust the motorcycle to handle the extra weight. While your passenger sits on the seat with you, adjust the mirror and headlight to accommodate the change in the motorcycle's angle. And it is a good idea to add a few pounds of pressure to the tires if you carry a passenger. (Check your owner's manual.) Then, adjust the suspension to handle the additional weight.

■ Instructing Passengers

Do not assume the passenger knows what to do—even if he or she is a motorcycle rider. Provide complete instructions before you start.

To prepare your passenger for riding, tell him or her to:

- Get on the motorcycle 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 footpegs at all times, even when the motorcycle is stopped;
- Keep their legs away from the muffler;
- Stay directly behind you, leaning as you lean;
- Avoid any unnecessary talk or motion.

Also, be sure to tell your passenger to tighten his or her hold when you approach surface problems, are about to start from a stop and warn that you are going to make a sudden move.

■ **Riding With Passengers**

Your motorcycle will respond slower with a passenger on board. The heavier your passenger, the longer it will take to slow down, speed up, or make a turn—especially on a light motorcycle. Here is what you should do to adjust for the difference in handling:

- Go 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 when you want to cross, enter or merge with traffic.

Remember, you should try to warn your passenger of special conditions ahead—when you will pull out, stop quickly, turn sharply or ride over a bump. Otherwise, talk as little as possible. When you must talk, turn your head slightly to make yourself understood. But, be sure you do not turn your head too far. Never take your eyes off the road ahead.

□ **CARRYING LOADS**

Most motorcycles are not really designed to carry much cargo. However, small loads can be carried safely if they are positioned and fastened properly.

- **Keep the Load Low**—Fasten loads to the seat, or put them in saddle bags. Do not pile loads against a sissybar or frame on the back of the seat. Placing a load high against a bar or frame 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 are one way to keep loads forward, however, use caution when loading hard or sharp objects. Mounting loads behind the rear axle can affect how the motorcycle turns and brakes. It can also cause a wobble.
- **Distribute the Load Evenly**—If you have saddle bags, make sure each is loaded 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). A loose load can catch in the wheel or chain. If that happens, the rear wheel may lock up and skid. Do not use rope as it tends to stretch and knots come loose permitting the load to shift or fall off.
- **Check the Load**—Stop and check the load every so often. Make sure it has not worked loose or moved.

GROUP RIDING

If you ride with others, you must do it in a way that does not endanger anyone or interfere with the flow of traffic.

☐ KEEP THE GROUP SMALL

A large group tends to interfere with traffic. It makes it necessary for vehicles to pass a long line of motorcycles at a time. Also, large groups tend to be separated easily by traffic or red lights. Those who are left behind often ride unsafely trying to catch up. If your group is larger than four or five motorcycles divide it into two or more smaller groups.

☐ KEEP THE GROUP TOGETHER

Here are some ways to keep the group together:

Plan Ahead—If you are the leader, look ahead for changes. Give signals early so “the word gets back” in plenty of time. Start lane changes early enough to allow everyone to complete the change;

Put Beginners up Front—Place inexperienced riders behind the leader, where they can be watched by more experienced riders;

“Follow Those Behind”—Let the tailender set the pace. Use your mirrors to keep an eye on the person behind. If he or she falls behind, slow down a little. If everyone does this, the group will stay with the tailender;

Know the Route—Make sure everybody knows the route. Then, if someone is separated, they will not have to hurry to avoid getting lost or taking a wrong turn.

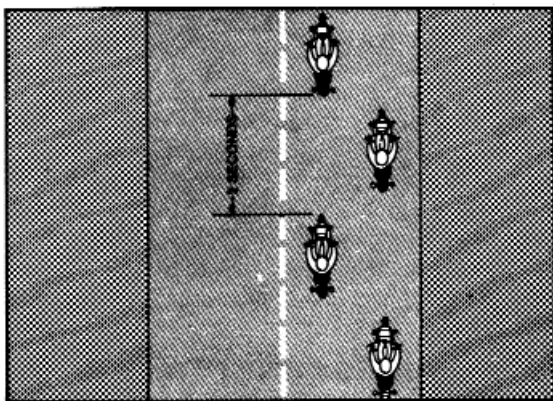
☐ KEEP YOUR DISTANCE

It is important to stay together, at a safe distance. 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.

Do Not Pair Up—Never operate directly alongside another motorcycle rider. If one of you has to avoid a vehicle or something on the road, there would be no place to go. If you have to say something to another rider, wait until you are both stopped—then it is okay to pull up alongside.

Staggered Formation—Riding in a “staggered” formation is the best way to keep ranks close and yet maintain an adequate space cushion. In a staggered formation, the leader rides to the left side of the lane, while the second rider stays a little behind and rides to the right of the lane. A third rider would take the left position, a **normal two-second distance** behind the first rider. The fourth rider would be a normal two-second distance behind the second rider. This formation keeps the group close and keeps each rider a safe distance from others ahead, behind and to the sides.

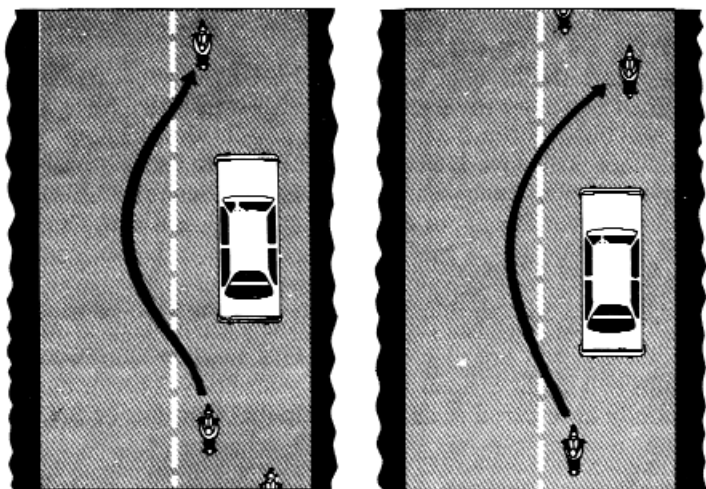
A staggered formation can be used safely on an open highway. However, it is best to move into a single file formation when taking



curves, making turns, or entering or leaving a highway.

Passing in Formation—When riders in a staggered formation want to pass, they should do it one at a time. First, the lead rider should pull out and pass when it is safe. After passing the leader should return to the left position and continue riding at passing speed until they have made room for the next rider. As soon as the first rider has passed 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 provide room for the next rider.

Some people suggest that the leader should move to the right side after passing a vehicle. This is not a good idea. By taking up a right-side position, the leader would encourage the second rider to pass and move back in before a large enough cushion of space exists. It is much simpler and safer if each rider waits until there is enough room ahead of the passed vehicle to allow the rider to move into the same position held before the pass.



BEING IN SHAPE TO RIDE

Riding a motorcycle is demanding. You must be able to pay adequate attention to operating the motorcycle, identifying potential hazards, making good judgments and making each decision quickly and skillfully.

Your ability to perform at your best and to respond to changing road and traffic conditions is influenced by how fit and alert you are. Alcohol and other drugs, more than any other factor, even in small quantities, lessen your ability to think clearly and ride safely. Do not drink and drive. Many risks are involved in riding after drinking or using other drugs.

☐ WHY THIS INFORMATION IS IMPORTANT

Alcohol is a major contributor to motorcycle crashes, particularly fatal crashes. Studies show that 40 to 45 percent of all riders killed in motorcycle crashes had been drinking. Only a third of these riders had a bodily alcohol content above legal limits. The rest had only a few drinks in their systems—enough to impair their riding skills.

The drinking problem is just as extensive among motorcyclists as it is among automobile drivers. However, motorcyclists are far more likely to be killed or severely injured in a crash. Injuries occur in 90 percent of alcohol-involved motorcycle crashes and only 33 percent of automobile accidents. On a yearly basis, 2,500 motorcyclists are killed and about 50,000 are seriously injured in crashes involving alcohol. These statistics are too overwhelming to ignore.

People should **never**, under any circumstances, ride a motorcycle after drinking alcohol or taking any drugs. Some are willing to take their chances, even when it means the odds are against them. The most effective way to ride safely is to avoid all alcohol and drugs. Learning about the effects of alcohol and other drugs is a positive step you can take to protect yourself and prevent others from injuring themselves.

☐ 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 of alcohol is to slow down and impair bodily functions—both mental and physical. Whatever you do, you do not do as well after consuming alcohol.

■ Bodily Alcohol Content

The more alcohol in your blood, the greater the degree of impairment. Your body is able to eliminate alcohol at the rate of almost one drink per hour. If you are drinking at a rate **greater** than one drink an hour, alcohol will begin to accumulate in your body. The amount of alcohol in the body is referred to as Bodily Alcohol Content or BAC. Though

prosecution for “Driving While Impaired” can start as low as .05 percent, actual abilities and judgment can be affected by as little as one drink.

■ What Determines BAC

Three factors determine BAC:

- The amount of alcohol you consume;
- The number of hours you have been drinking;
- Your body weight.

The typical drink contains six-tenths of an ounce of alcohol. A 12-ounce can of beer, a 5-ounce glass of wine or a shot of liquor all contain the same amount of alcohol. BAC is determined in part by how much alcohol you have consumed.

The faster you drink, the more alcohol accumulates in your body. The body can only burn off one drink in an hour. Thus, if you drink two drinks an hour, at the end of that hour, one drink will be burned off and one will remain in your bloodstream.

Your weight is also a factor in determining BAC. A larger person will not accumulate as high a concentration of alcohol for each drink consumed. This is because they have more blood and other bodily fluids and BAC is the percent of alcohol *in relation* to other fluids in the body. Impairment of skills begins well below the legal limit of bodily alcohol content.



□ ALCOHOL AND THE LAW

It is against the law to operate a motor vehicle while intoxicated. In most states, a person with a BAC of .08 to .10 percent or above is considered intoxicated. It does not matter how sober you may look or act, the breath test is what determines whether you are riding illegally.

Your chances of being stopped for riding under the influence of alcohol are increasing. Law enforcement has been stepped up across the country in response to the senseless deaths and injuries caused by drinking drivers.

■ Consequences of Conviction

The laws of most states impose stiff penalties on drinking drivers. And those penalties are mandatory, meaning that judges **must** impose them.

If you were convicted of riding while intoxicated, you could receive any of the following penalties:

License suspension—Mandatory suspension for conviction or refusal to submit to a breath test.

Fines—Severe fines are another aspect of a conviction usually levied in conjunction with a license suspension.

Community service—Performing tasks such as picking up litter along the highway, washing cars in the motor vehicle pool, or working at an emergency ward.

Costs—Additional costs such as lawyers' fees to pay; lost work time spent in court or alcohol education programs; public transportation costs (while your license is suspended); and the added psychological cost of being tagged a "drunk driver."

■ The Laws in Your State

You should know the laws that apply to alcohol and the operation of a motor vehicle. If you do not know, phone the local Department of State branch office.

☐ ALCOHOL AND OTHER DRUGS IN MOTORCYCLE OPERATION

No one is immune to the effects of alcohol. No matter how much friends may brag about their ability to hold their liquor, alcohol makes them less able to think clearly and to perform physical tasks skillfully. Alcohol has extremely harmful effects on the processes involved in motorcycle operation, and these effects begin long before you are legally intoxicated.

Alcohol is not the only drug that affects your ability to ride safely. Many over-the-counter, prescription, as well as illegal drugs have side effects that increase the risks of riding. While it is difficult to accurately measure the involvement of any particular drug in motorcycle crashes, we do know what effects various drugs have on the processes involved in riding a motorcycle. We also know that the combined effects of alcohol and any drug are more dangerous than either is alone.

☐ MINIMIZING THE RISKS

One of the functions that alcohol affects first is your ability to judge how well you are doing. This means that although you may be performing more and more poorly, you **think** you are doing better and better and you ride confidently into greater and greater risks. The best way to minimize the risks of drinking and riding is to take steps **before** you drink either to control your drinking or to avoid operating a motorcycle.

■ Controlling Drinking

- ***Do not drink***—Once you start, your resistance becomes weaker.
- ***Set a limit***—Figure out beforehand how many drinks you can have over the time you plan to be drinking. Set a limit for yourself and stick to it.
- ***Pace yourself***—Find other things to do besides drinking to slow down your rate of consumption.

■ Controlling Riding

If you have not controlled your drinking, you must not ride your motorcycle.

- ***Leave the motorcycle home***—When you know you will be drinking, leave the motorcycle at home so you will not be tempted to ride. Arrange another way to get home.
- ***Wait***—Once you have exceeded your limit, you will have to wait until your system eliminates the alcohol—one drink per hour. ***No other method will work!***

□ STEPPING IN TO PROTECT FRIENDS

When people have had too much to drink to make a responsible decision themselves, 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, embarrassing and thankless. But the alternatives are often worse.

There are several ways you can step in to keep your friends from hurting themselves or being involved in a crash.

- ***Arrange a safe ride***—Provide alternative ways for them to get home.
- ***Slow the pace of drinking***—Direct them by involving them in other activities.
- ***Keep them there***—Use any excuse to keep them from getting on their motorcycle if they have had too much. Only time will reduce bodily alcohol levels. Explain your concerns for their risks of getting arrested or wrecking their motorcycle.
- ***Keep the motorcycle there***—If you can not control the rider, control the vehicle. Take the keys or temporarily disable the motorcycle (e.g., loosen or switch the plug leads enough so they will not fire).

It helps to enlist support from others. The more people on your side, the easier it is to be firm and the harder it is for the drunk rider to resist. While you may not be thanked at the time, you will never have to say, “If only I had...”

Even small amounts of alcohol or other drugs can negatively effect your riding performance. Be sure of your abilities, by avoiding the mixing or riding with either alcohol or drugs.

□ **FATIGUE**

Riding a motorcycle is much more tiring than driving a car. When you plan a long trip, keep in mind that you will tire much sooner than you would in a car. Also, remember that fatigue can affect your control of the motorcycle.

Here are some things you can do to keep from getting too tired:

- ***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 do a lot of long distance riding;
- ***Limit your distance.*** Experienced riders seldom try to ride more than about six hours a day;
- ***Take frequent rest breaks.*** Stop and get off the motorcycle.

There are many things on the highway that can cause you trouble. Your motorcycle should not be one of them. To make sure your motorcycle is dependable: start with the right equipment, keep it in safe riding condition and avoid add-ons or modifications that make your motorcycle harder to handle.

☐ THE RIGHT EQUIPMENT

First, make sure your motorcycle is right for you. It should “fit” you. Your feet should be able to reach the ground while you are seated.

Crashes are fairly common among beginning riders—especially in their first six months of riding. Do not try a “big bike” until you have a lot of riding experience.

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 their riders have used for less than six months.

A few items of equipment are necessary for safe operation. At a minimum, your motorcycle should have:

- Headlight and taillight;
- Front and rear brakes;
- Turn signals;
- Horn;
- Mirror.

☐ MOTORCYCLE CARE

A motorcycle needs more frequent attention than a car. When something goes wrong with a motorcycle, it may lead to a crash.

The only way to head off problems before they cause trouble is to inspect your motorcycle carefully and often. If you find something wrong, fix it right away. In addition to the checks you should make before every trip, here are some checks you should make at least ***once each week***:

Tires—Look for cuts or nails in the tread and cracks in the sidewalls. Check for excess or uneven tread wear. Tread problems can make the motorcycle hard to handle, especially on wet pavement. If the wear is uneven, have the wheels checked for balance and alignment. Check the air pressure with a gauge to make sure each tire is at the pressure recommended by the manufacturer. Improper air pressure can affect your motorcycle’s braking and turning. Low pressure also can lead to blowouts.

Wheels—Check the rims for cracks, dents or rust. Check for missing or loose spokes on wire-spoked wheels. Lift each wheel off the ground and spin it, listening for noise and looking for out-of-line motion. Shake the wheel from side to side, checking for looseness.

Cables—Check brake, clutch and throttle cables for kinks or broken strands. Replace as necessary. Lubricate the control mechanisms at both ends of each cable.

Oil—Keep the oil up to the recommended level. Lack of oil can make your engine seize.

Drive Train—For a chain-driven motorcycle, make sure your chain is adjusted properly. Check the sprockets for worn or bent teeth. For a shaft-driven motorcycle, look for oil on the shaft unit. If the housing is greasy check the grease level and make sure any access plugs are fitted tightly.

Fasteners—Check for loose or missing bolts, nuts or cotter pins. It is easier to spot missing items if you keep the motorcycle clean.

Brakes—Make sure the brakes are adjusted properly. If you hear a scraping sound when stopping, check the brake system—linings, calipers and linkage. For hydraulic brakes, check the fluid level.

Lights—Check all lights for lens cracks or moisture inside the lens. Also look for rust spots on light reflectors.

Hydraulic Systems—Motorcycles with hydraulic clutches and brakes should have fluid levels checked routinely and fluids changed according to the manufacturer's recommendations. See your owner's manual.

Coolant—On water-cooled motorcycles, the radiator and coolant reservoirs should be checked and serviced according to the owner's manual.

EARNING YOUR LICENSE

Safe riding requires knowledge and skill. To earn your license, you must pass both a knowledge test and an on-cycle skills test.

These tests will cover the information, practices and ideas from this manual. For example, you will be tested for your ability to:

- Get and keep yourself and your motorcycle in safe condition;
- Accelerate, brake, shift and turn safely;
- Help others see you and help you see and communicate with them;
- Adjust speed and position to changes in traffic and riding conditions;
- Stop and turn quickly to cope with problems while riding.

To pass, you will have to study this manual thoroughly *and* practice the skills and techniques it discusses.

☐ KNOWLEDGE TEST

Here are some study questions. They are the same kind of questions you will find on the knowledge test. See if you can complete them correctly. Answers are printed upside down at the bottom of the next page.

1. It is MOST important to flash your brake light to warn a driver behind that:
 - A. They are following too closely.
 - B. You will be slowing suddenly.
 - C. There is a stop sign ahead
2. The FRONT brake supplies how much of a motorcycle's total stopping power?
 - A. About one-quarter.
 - B. About one-half.
 - C. About three-quarters.
3. The key to making a quick turn is:
 - A. Shifting your weight quickly.
 - B. Turning the handlebars quickly.
 - C. Getting the motorcycle to lean quickly.
4. If you have a flat tire while riding, you should:
 - A. Hold the handlebars firmly and stay off the brakes.
 - B. Shift your weight toward the good wheel and brake normally.
 - C. Brake on the good wheel and pull off the road as soon as possible.

☐ **ON-CYCLE TEST**

During the on-cycle test you will be graded on how safely you handle your motorcycle. For example, you may be tested on:

- **Five Foot Left Turn.** Highway lanes are between 10 and 12 feet wide. You must show you can turn in half that space riding side by side with another motorcyclist;
- **Stop in Box Without Skid.** To demonstrate your ability to stop without skidding at a stop sign or light;
- **Twelve Foot Offset Come Weave.** At a slow speed, demonstrate ability to avoid potholes and other objects on the pavement;
- **20-24 Foot "U" Turn.** Tests ability to make a "U" turn on two-lane highway;
- **Quick Stop in a Straight Line.** Tests rider's ability to stop in emergencies;
- **Obstacle Avoidance.** Most vehicles are approximately seven feet wide. This test demonstrates ability to avoid a seven-foot obstacle in the road, yet stay on the pavement.
- **Engine Stall.** Stalling indicates a rider's lack of clutch and throttle control. Stalling in traffic creates an unsafe situation.

Ans: 1-b, 2-c, 3-c, 4-a.

GENERAL DRIVER LICENSE RENEWAL INFORMATION

Before obtaining a motorcycle endorsement you must have a valid Michigan driver license. A driver license is valid for four years. The year your license expires is shown on the upper right corner of the license.

The Department of State sends a renewal notice at least 45 days before your license expires. Plan to renew at least two weeks before it expires. If your renewal notice does not arrive or is lost, do not let your driver license expire. Go to a branch office and renew.

When you renew your driver license at a branch office, you will be required to have a vision screening and take a 15-question test. You will have a new photograph taken. There is a fee for renewing. You can pay with cash, money order or personal check.

☐ **RENEWING YOUR DRIVER LICENSE BY MAIL**

You may be eligible to renew your driver license by mail if you:

- Renewed the last time in person; and
- Have received no traffic convictions or been involved in any crashes in the past four years.

If you have had a change in your physical condition during the past six months, you must renew in person. You may need to submit a physician's statement to renew.

☐ **BRANCH OFFICE HOURS**

Mondays, Tuesdays, Thursdays and Fridays 9 a.m. to 5 p.m.

Wednesday hours:

Most branch offices are open 11 a.m. to 7 p.m., as a convenience for customers who work a traditional workday.

All other offices have traditional 9 a.m. to 5 p.m. hours.

☐ **CHANGE OF ADDRESS**

- If you move your residence, you are required by state law to update your address with the Secretary of State.
- You can update your address at any Secretary of State branch office. Some offices have drop boxes, allowing you to complete the proper forms and leave them for processing to avoid unnecessary waiting.
- There is no fee for updating your address.
- Failure to update your address can result in a license suspension.

☐ **RENEW BY FAX, MAIL AND TOUCH-TONE TELEPHONE!**

Renew your motorcycle registration the most convenient way: By fax, mail or touch-tone telephone. Look for the instructions with the registration renewal notice. For the cost of a telephone call or postage stamp, license plate tabs will arrive by mail within seven days.

☐ **INTERPRETERS!**

Customers can request Ameslan (sign language) interpreters in advance of a branch office visit or may use an interpreter they know. Interpreters are compensated by the Department of State. For more information contact TTY 517/322-1477 or telephone the Michigan Relay Center at 800/649-3777.

For general information not listed, telephone 517/322-1166
Visit the Secretary of State's Web Site
www.sos.state.mi.us

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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 produce 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, it disclaims any liability for the views expressed herein.



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