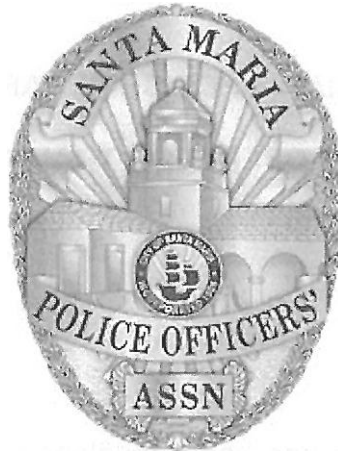


# SANTA MARIA POLICE DEPARTMENT



## MOTORCYCLE TRAINING BASIC MOTORCYCLE ACADEMY

REV. 2/18

**SANTA MARIA POLICE DEPARTMENT**  
**MOTORCYCLE OPERATOR TRAINING COURSE**

**PREFACE**

This motorcycle operator course has been developed to create uniformity in training. Using the skills developed through this course, the operator will be able to safely operate an enforcement motorcycle and be aware of surroundings and potential hazards that can occur. It is important to emphasize that each of student is in charge of their own safety and shall only ride at their personal ability

## Important Training Criteria

One of the primary objectives of motorcycle training is to teach the student basic techniques that will make a better rider, in that the student will gain expertise to avoid a potential accident, or if unavoidable, minimize the consequences. The following are some of the techniques that will be taught. Also listed, are the corresponding results that usually occur if the student cannot master the techniques.

### Training Techniques

Head and Eye placement Look where you want to go	Failure to learn  Improper positioning Lack of control Hitting Objects
Coordinated Clutch and Throttle	Lack of control Motor stalling Motorcycle dropping Damage and/or injury
Controlled Braking- Proper application of front & rear brake	Not slowing fast enough Locking brakes Brake fade Collision and/or injury
Keep both feet on the foot pegs/boards NOT ON THE GROUND	Lack of control Injury to foot Lack of confidence
Surface appraisal Overall awareness of potential hazards	Sliding in oil, sand or debris Hitting objects Dropping motorcycle Damage and/or injury

**Safety** is the key word in the training program. Every effort is directed towards making the student a safer, more proficient rider. On the other hand, a failure to properly learn and apply pertinent safety techniques can, and in most cases will be a determining factor for a student's failure to pass the course.

It is not the intention of the motorcycle instructor(s) to "Wash out" any student. To the contrary, motorcycle instructors at Santa Maria Police Department are committed to using all their available skills to correct the problems of students, so that success is achieved.

SANTA MARIA POLICE DEPARTMENT'S  
MOTORCYCLE OPERATOR TRAINING COURSE  
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## I. INTRODUCTION

### A. PURPOSE OF COURSE

1. The Motorcycle Operator Training Course was developed to teach the techniques necessary to develop proficient police motorcycle riders.
2. The object of this manual is two fold
  - a) To serve as a guide for formal instruction
  - b) To assist the student in developing techniques consistent with safe operation of an enforcement motorcycle
3. Implementation of this course will:
  - a) Increase the number of competent motorcycle operators
  - b) Standardize police motorcycle training with other Agencies who follow the POST curriculum
4. Objectives:
  - a) Motorcycle riding is inherently dangerous, but hazards can be reduced by learning to respond rapidly and accurately to most emergency situations. Responses must be automatic. Training and experience will instill conditioned reflexes. It is recognized that some riders will become proficient more rapidly than others, due to background, age, vision, speed of reflexes, etc. It is also a fact that not all can learn to ride a motorcycle safely due to physical size, strength, etc. However, experience has shown that a normal person should reach a satisfactory level of basic skill upon completion of the training period.

### B. TECHNIQUES OF INSTRUCTION

1. Lecture, demonstration and performance. The majority of the time will be devoted to performance. There will be drills under various conditions to assist in learning proper reflexes. The student may spend hours working on the same drill over and over again to assist them on how to lean and understand muscle memory.

### C. PERSONAL ATTENDANCE

1. Students for Motorcycle Operator Training should have completed a minimum of 40 hours of pre-training either provided by their own agency or through Santa Maria Police Department. In order to successfully graduate this course, students shall attend all eighty (80) hours. If students are going to be late to class, they shall be responsible for notifying the Santa Maria Police Department Staff. Make-up time will be allocated at the end of the classes to ensure a total of eighty hours are completed.

## II. TRAINING

### A. LENGTH OF TRAINING

1. This course is a ten day (80 hour) session beginning on Monday and concluding on Friday of the second week. Each training day will be eight hours in length. Times may vary according to weather or scheduling conflicts

### B. TRAINING SITE

1. Minimum obstructions
2. Minimum interference with non-controllable intrusions
3. Maximum area for "run out" room adjacent to exercises

### C. TRAINING MATERIAL AND EQUIPMENT

1. Vehicle
  - a) The student's agency will be responsible for furnishing a **STREET LEGAL** and agency approved motorcycle for the duration of the training period.
2. Personal Equipment
  - a) The student will be responsible for providing necessary safety and riding gear.

### D. Course Critique

1. At the conclusion of the course, each student will be required to evaluate each instructor (POST Critique form).

### E. TRAINING INSTRUCTORS

1. It is recommended that the instructors for this course meet minimum qualifications and be selected by the Santa Maria Police Department Training Sergeant and Coordinator
2. Each instructor for the Motorcycle Operator Training course shall be required to have successfully completed a POST Basic Enforcement Motorcycle Operator Course and an instructor's course.

### F. IMPLEMENTATION OF TRAINING

1. Implementation of training shall be the responsibility of the Santa Maria Police Department training division.

### III. POST SAFETY QUALIFICATIONS

- A Each student should be of sufficient stature to safely control a typical enforcement motorcycle.
- B. Soles of training boots should not exceed three quarters of an inch.
- C. All students shall demonstrate the ability to simultaneously place the balls of both feet on the ground, while astride the motorcycle.
- D. The student shall be attired in the clothing and safety equipment previously specified, when demonstrating the ability to touch the balls of both feet.

### IV. SAFETY RULES

- A All riders in training shall be charged with the responsibility of adhering to all rules of conduct and safety.
- B. Willful violation or disregard of any rules by any student may be cause for immediate removal from the training program.
- C. STUDENTS PERSONAL EQUIPMENT
  - 1. All students are required to use approved safety equipment while operating a motorcycle.
  - 2. Department issued helmets are required to be D.O.T. approved and meet the Snell Safety Foundation standard.
    - a) Use correct size. (Snug Fit)
    - b) Headband and straps shall be in good condition
    - c) Properly adjusted straps are necessary
  - 3. Students are required to wear black, plain toed, high-top boots. Boots are to be of leather construction and high enough for complete ankle protection. Soles on boot should not exceed three quarters of an inch.
  - 4. A jump suit (BDU uniform) or Class B uniform will be worn by each student during motorcycle training. The uniform will be fitted, neat and in good condition.
  - 5. Leather gloves, in good condition, shall be worn by each student. The gloves shall be, at a minimum, wrist length, and thin enough to allow the student to grasp the handle bar and operate the motorcycle controls. The gloves shall also be thin enough to allow full operation of the student's duty firearm. The student is responsible for having the proper gloves.
  - 6. Shatter-resistant (polycarbonate) sun glasses or clear glasses are required for daytime riding hours. Glasses shall be worn at all times while operating a motorcycle.
  - 7. Carrying of gun belts and service weapons will be at the discretion of the training department and/or instructor.

D. OPERATION OF TRAINING MOTORCYCLE

1. Training motorcycles are only to be ridden by students with the immediate and direct supervision of an instructor
2. Students riding from one site to another will do so only under the direct supervision of an instructor.
3. Obey all traffic rules going to and from the training grounds.
4. Preventative maintenance will be performed every day prior to riding.
5. When stopped on a motorcycle, one foot (not two) will be used for balance.
6. A safe distance between motorcycles will be maintained at all times- Two second rule.
7. If a mechanical problem is encountered, safely move the motorcycle out of the path of other riders.
8. Reckless operation of a motorcycle is forbidden and is grounds for dismissal from the course. Loss of temple is not an excuse. No horseplay is allowed.
9. No falling out of line or riding out of an exercise, unless directed by an instructor or if mechanical problems are encountered.
10. Mounting and dismounting from the right side only
11. Do not make fun of or laugh at the mistakes of others. Learn to benefit from them and remember you will also make mistakes.
12. All training motorcycle will remain at a designated site during the training period.
13. During after-hours and on weekends, training motorcycles will be secured at the storage area provided.
14. Sitting on a motorcycle while the side stand is down is prohibited
15. Students in training will not be allowed to ride the training motorcycle to and from home during the course of the training program.

E. RIGHTING A DOWNED MOTORCYCLE

1. Each student will be shown how to right a downed motorcycle without causing a back injury.
2. Each student shall demonstrate the ability to perform the righting of a downed motorcycle.

F. Thereafter and throughout the training program, the buddy system will be utilized

G. REPORTING AN INJURY

1. Prior to beginning training, all students will be asked to identify any preexisting injuries or medical restrictions that may affect the ability to safely participate in motorcycle training
2. A student may be required to provide a physician's certification of medical clearance in order to participate in training
3. A student sustaining an injury any injury during the course of training shall immediately report the injury to the nearest available instructor.

V. MAINTENANCE

A. GENERAL

1. Your responsibilities are simple, but important.
  - a) Major repairs and adjustments such as clutch, chain, brakes, etc. are the responsibility of a qualified motorcycle mechanic.
  - b) Under no circumstances will the individual student make such repairs and adjustments.
  - c) If a problem develops during the course of training, immediately notify a training officer and arrangements will be made to have the problem corrected.

B. DAILY MAINTENANCE

1. Upon completion of training, each student should contact their agency supervisor to receive training on the maintenance required by their individual department. Each officer should develop a routine daily inspection of the equipment that includes, but is not limited to:
  - a) Oil
    - (1) Engine oil quality and quantity is a major factor and affects both the performance and service life of the engine, therefore, it is imperative that you regularly check the oil level. Running the engine with insufficient oil can cause serious damage to the engine and transmission.
  - b) Tires
    - (1) Maintenance of specific tire pressure is important for proper tire mileage, safety, and handling. Each officer is responsible for maintaining proper air pressure. Proper tire pressure for the BMW 1200RT is 40 PSI (Cold). Officers are responsible for notifying their department mechanic when tire replacement is necessary.

- c) Gasoline
  - (1) Always shut the engine off before refueling. Care should be taken not to overfill the tank. A definite fire hazard exists, if gasoline is allowed to spill over onto a hot engine. Gasoline can also stain the paint on the motorcycle, which will affect the appearance of the motorcycle.
- d) Coolant
  - (1) BMW 1200 RT has a liquid cooling system, which dissipates engine heat through the coolant jacket that surrounds the cylinder head. Maintaining the coolant is important to prevent overheating, freezing and corrosion.

## VI. NOMENCLATURE

### A. GENERAL

- 1. The ability to ride well will necessitate knowing the general characteristics, nomenclature, and function of the motorcycle. This same knowledge will be valuable when inspecting the motorcycle, determining necessary repairs and properly describing work to be performed. The instructor should specify important items of nomenclature and their purpose. For a student to ride well and safely, it is imperative that they learn how to properly, automatically and rapidly operate all of the various controls. The student must learn how to operate these controls, without looking at them. Their safety will depend upon the speed and accuracy of their reflexes.

### B. THROTTLE

- 1. The throttle is closed with the right handle grip turned all the way outward (away from the rider). The throttle is fully opened by turning the handle grip all the way inward (towards the rider). With all adjustments correct, a warm engine should idle with the throttle closed.

### C. CLUTCH

- 1. The BMW 1200 RT clutch lever is located on the left handle bar and is operated with the left hand. The clutch is disengaged by squeezing the lever towards the handle bar. The clutch is engaged by slowly releasing the lever to its extended position. The clutch system must be periodically inspected for leakage and proper fluid level. If lever free-play becomes excessive, the clutch slips and the motorcycle creeps or stalls when shifted into gear, there is probably air in the clutch system which will have to be bled out by a mechanic. The clutch lever fluid reservoir is located on the left handlebar.

- D. GEAR SHIFT (BMW 1200 RT)
1. The BMW 1200 RT has six gears in a one-down, five up shift configuration. That is to say that neutral is located in between first and second gear. The gear shifting is coordinated simultaneously with disengaging the clutch. Transmission gears are shifted by a foot operated gear shift lever. Disengaging the clutch and pressing down on the gear shift lever will downshift the transmission. To shift up to the next gear, disengage the clutch, place the toes of your left foot under the gear shifter and left the lever up. The toe shift lever must be released after each gear change because in order to change gears, the pedal must return to its central position. When placing the transmission in neutral, downshift to first gear and then slightly lift up on the toe shift lever. When in neutral, the green "N" will illuminate on the dashboard display.
  2. **WARNING!** When shifting down to a lower gear, do not shift at such a high speed that the engine is suddenly jerked into a high RPM or into the red-zone. This may result in engine damage and the rear wheel may skid causing loss of control and possibly a collision.
- E. FUEL TANK AND FUEL CAP
1. High octane gasoline should be used in the fuel tank. Avoid filling the tank in the rain or where heavy dust is blowing so that the fuel does not get contaminated.
  2. **WARNING-** Never fill the tank completely to the top! As gasoline expands in the warm tank, it may overflow from the vents. Always put gasoline in while the engine and ignition switch is off.
  3. The fuel cap is an automatic type which shuts off the fuel supply when the engine is stopped.

## F. BRAKES

1. Reservoirs must be inspected daily for leaky or lack of fluid. Check the owner's manual for proper type.
2. The front and rear brakes are hydraulic disk types. The reservoirs must be kept filled with brake fluid or they will not work.
3. The BMW 1200RT has a linked braking system. Squeezing the front brake lever applies the front brake and a portion of rear brake. Pressing the rear brake pedal, applies the rear brake and a portion of the front brake. The rider must apply both the front and rear brake for full braking effectiveness. As the brake pads wear, the brake fluid will drop. Frequently check that there is adequate brake fluid. The front brake fluid reservoir is located on the right handle bar. The rear brake fluid reservoir is located on the lower right side of the motorcycle
4. The rear brake pedal is located on the right side, just in front of the right foot peg. It is applied by pressing down.
5. The front wheel brake is located on the right handle bar in front of the throttle and is activated with the right hand. It is applied by squeezing the lever towards the handle bar.
6. **WARNING-** Just because your motorcycle has an anti-lock braking system, proper front and rear brake application should always be applied. ABS systems can fail. In the event of a front wheel lock, release the front brake lever immediately. If the motorcycle is not too far over, it will right itself.

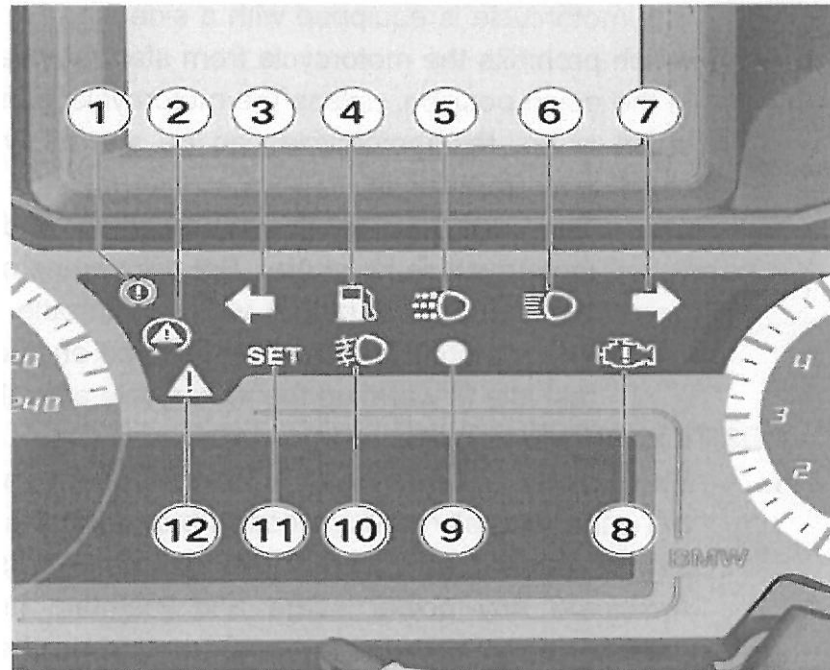
## G. SWITCHES, BUTTONS AND VALVES

1. The location will be shown and demonstrated to students by the instructors, followed by explanations of:
  - a) Headlight high/low beam switch
  - b) Turn indicator switch
  - c) Flasher switch
  - d) Horn button
  - e) Code three lights switch
  - f) Siren automatic switch

## H. SPEEDOMETER AND TACHOMETER

1. The speedometer displays the speed of the motorcycle. The odometer displays the total distance in miles the motorcycle has traveled. The trip mileage button is a resettable mileage counter.
2. The Tachometer displays the RPMs (Rotations Per Minute) of the engine. The portion highlighted in red is an indication that the RPMs of the engine should not exceed this measurement or engine damage may occur

## I. INDICATOR LIGHTS FOR BMW 1200 RT



- 1.
2. There are 12 indicator lights in the center of the dashboard display.
  - a) The ABS light (1) if this light is on, it means your ABS system is not activated. Front and/or rear wheel skid may occur.
  - b) The ASC (2) (Automatic Stability Control) is located below that. If this light is on that means your ASC is deactivated or not functioning. If this light blinks while braking, turning, or accelerating, it means it was activated by your riding.
  - c) The left turn signal (3)
  - d) Reserve fuel being used (4). Approx. 1 gallon of fuel left in the tank.
  - e) Daytime running light indicator (5) (not present in US)
  - f) High beam indicator (6) controlled on left hand grip
  - g) Right turn signal (7)
  - h) Engine Electronics- Check Engine light (8). If this light is activated, stop the bike when safe and check engine performance while stopped.
  - i) DWA- Not present of Police Model (9)
  - j) LED auxiliary lights (10) not present on Police Model.
  - k) Cruise Control (11) activated on left handle.
  - l) General Warning Light (12) will be activated with other lights

J. STARTING THE ENGINE

1. The motorcycle is equipped with a side stand ignition cut-off switch which prohibits the motorcycle from starting when the side stand is in the down position, unless the motorcycle is in neutral. If the side stand is up, the motorcycle can be started while in gear, if the clutch lever is pulled in.
  - a) Turn the key to the on position and confirm that the motorcycle is in neutral. Set the engine stop switch to RUN. Press the start button with the throttle completely closed. The motorcycle has a fuel injected engine with an automatic fast idle to warm up the motorcycle after the initial starting.

K. POSITION AND POSTURE

1. Sit squarely and firmly on the seat with your shoulders erect. Hold the grips naturally with a loose grip and elbows slightly bent. Lean slightly forward with your knees pulled inwards, toward the tank. Anticipate any power surge and maintain proper position and balance. Keep your back straight and your chest raised. This not only looks better, but it is far more comfortable and less tiring (especially on your lower back). An additional reason for this positioning is a reduction in strain on the kidneys. In the proper position, pounding and vibration of the motorcycle is less, making the ride more comfortable and less straining on the body. When riding or on long rides, if you experience backaches or an abnormally frequent desire to urinate, your position is probably incorrect.

## VII. RIDING

### A. AUTOMOBILES vs MOTORCYCLES

1. When you were learning to drive manual car, you probably made a number of errors in coordinating the clutch and throttle smoothly when starting. Too little power caused the engine to stall when the clutch was engaged. Too much power caused the car to jump or lunge forward. The same results will occur when first learning to ride a motorcycle. With too much power however, the danger exists that a rider may be thrown off balance, or cause the rear wheel to spin uncontrollably, causing the motorcycle to lose control and the rider to fall. Proper clutch and throttle control is imperative.
2. Slipping the clutch
  - a) When driving a car, the clutch may not be slipped for any length of time without causing damage. For example, a car on a slight incline could be held motionless by simply slipping the clutch only enough to overcome the pull of gravity. If prolonged too long, the clutch would burn out. This is not true for a motorcycle. A motorcycle clutch is built to be slipped for prolonged periods of time without damage. This does not apply in the event of abuse (revving engine and slipping clutch).

### B. IMPORTANCE OF SLIPPING A MOTORCYCLE CLUTCH

1. It's almost impossible to ride a motorcycle well without knowing how and when to slip a clutch.
  - a) At slow speeds the machine will progress with a series of jerks, also known as lugging.
  - b) Lugging is very hard on the motorcycle drivetrain.
  - c) Lugging is fatiguing, uncomfortable and dangerous to a rider.
  - d) The clutch, when properly utilized, acts as a cushion or buffer between the engine and rear wheel.
2. A very advanced rider can hold a constant low speed using only the proper use of the clutch and throttle. Furthermore, a motorcycle throttle is far more sensitive than the throttle in a car. Use the throttle to control your power, and use the clutch to draw from its power and as you need it to control your speed. Keep in mind that improper clutch usage results in a jerking machine and results in your inability to control the desired speed.

3. How to slip a clutch

- a) Ride with your left hand firmly on the clutch. Hold the throttle to a reasonable steady RPM. Pick up the desired speed by slightly releasing the clutch lever. When riding on the open road or in an area where the speed can be controlled by the throttle, select the gear which will allow the machine to run smoothly and leave the clutch fully engaged. Even though the motorcycle clutches are well built, they will not stand the friction and heat generated by prolonged slipping at a higher speed.

C. STOPPING THE MOTORCYCLE

1. General

- a) Most experienced people have little difficulty in stopping a car. A car will not fall over when stopped, and both feet are free to operate the clutch and brake before, during and after the stop. Stopping a motorcycle is accomplished utilizing both hand and foot brakes, leaving on foot to maintain balance when stopping.

2. Emergency stops.

- a) An emergency stop is executed by simultaneously:
  - (1) Rolling off the throttle
  - (2) Disengaging the clutch
  - (3) Applying a controlled squeezing pressure to the front brake
  - (4) Applying rear brake pressure in a controlled manner.
- b) NOTE- Don't worry about downshifting. Keep pressure on the brakes to the end of the stop (ease off pressure if lock up occurs). Put your left foot on the ground upon completion of the stop. Most emergency stops can be avoided by driving defensively.

3. Turning the motorcycle

- a) Motorcycle inherent stability
  - (1) Inertia- Any mass in motion will continue in motion in the same straight line, unless acted upon by some external force. This is one of Newton's laws of gravity.
  - (2) Given a chance to do so, your motorcycle will stay upright at any reasonable speed. In fact, the higher the speed, the more difficult it is to force it down.
  - (3) Gyroscopic Action- The heavy wheels and tires, clutch, flywheel and crankshaft of your machine all rotate in the plane of your travel and right angles to

the ground. The faster you travel, the more difficult it is to turn the handlebars as well as lean.

#### 4. Why Motorcycles Turn When Leaned

- a) As mentioned before, at higher speeds, turn by merely leaning in the direction of the desired turn. The greater the lean angle, the lesser the radius of the curve. The possibility of leaning without gravity pulling the machine over on its side is determined by the centrifugal forces incurred. A higher speed and a shorter radius curve, along with centrifugal forces, requires more lean angle.
- b) Adjust Lean Angle to Speed and Radius of Curves
  - (1) If a curve has a constant radius, and the lean for that radius and the speed are correct, the starting angle of the lean will remain constant through the curve.
- c) Insufficient Lean Angle
  - (1) Insufficient lean angle going into a curve will cause running off the road onto the outside edge of the curve. Therefore increase the lean.
- d) Leaning Too Much
  - (1) Too much lean, going into a curve, will cause you to shorten the turn, potentially riding over the center portion of the roadway and into oncoming traffic. To overcome this, partially straighten up the motorcycle and decrease the lean angle.
- e) Tires
  - (1) Motorcycle tires are made with tread that extends onto the sidewalls. To a novice rider, it may seem that the wheels will slip out from under the motorcycle if leaned out too far. This is not true, provided the roadway surface has reasonably good traction.
- f) Dragging the Underside of the Motorcycle.
  - (1) When a motorcycle has been leaned over to a certain lean angle, parts of the underside will scrape the roadway. On a hard surface, this scraping will produce a loud startling noise. When done at night, this scraping will produce a visible shower of sparks. Dragging the underside of the motorcycle should be avoided. It can be dangerous and damage the equipment unnecessarily.

- g) Value of Understanding Principals
  - (1) It may seem that a slide rule will be required to ride curves. Such is not the case. For many persons have learned to ride a motorcycle not knowing or thinking why they do certain things. However, understanding the principles, in the long run, will produce better and safer riders and enable faster learning.
- h) Speed and Curves
  - (1) Every curve has a designated safe speed at which it can be ridden on a motorcycle. When the safe speed is exceeded even the best rider will have trouble completing the curve. Learn to estimate this critical speed prior to entering the curve and stay below it. As experience increases, both judgement and the ability to take curves faster will improve

## 5. HIGH SPEED WOBBLE

- a) A high speed wobble is a violent shaking of the front wheel. It usually occurs during periods of high speed. It is not an everyday occurrence, but it does happen. Some tips to avoid high speed wobble would be to make certain your tires are inflated properly and your side boxes are evenly weighted and not exceeding manufactures specifications.
- b) Some rider techniques for preventing high speed wobble
  - (1) Cutting across pavement at a fairly sharp angle will minimize the possibility of upsetting the front wheel stability.
  - (2) Maximize control of the motorcycle and provide a dampening effect by keeping both hands on the handlebars at all times during high speed operations.
  - (3) Some concrete roadways have highly irregular anti-skid patterns brushed into the pavement as well as irregular rain grooves. Use caution because this type of roadway surface tends to induce and unintended condition. Bats Dots may also induce a high speed wobble while in a lean at moderate high speeds.
  - (4) Make certain your tires are inflated properly and your side boxes are evenly distributed and not exceeding manufactures specifications.

## **VIII. CONCLUSION**

A. This manual is a training tool and guideline. The suggested daily training schedule can and will be altered depending upon progression of each student. If multiple students are being trained don't hold one back to accommodate different learning rates. If necessary, get a second instructor and split the training sessions, allowing students to progress at their own rate.

## HINTS AND TIPS

### A. PREVENTIVE MAINTENANCE

- a. Having a motorcycle serviced as directed by a mechanic or operators manual
- b. Report any unusual change in sound or performance to an authorized mechanic.
- c. Clean (wipe down) motorcycle daily, check for cracks in frame, brackets etc. Check for loose or missing nuts and bolts.
- d. Check all lights, siren and horn daily. Replace burned out bulbs promptly. Pre-ride check: cases, drivetrain, tires, kickstand, leaks and wires.
- e. Check for cracked, bent, out of round or unbalanced wheels and tires.
- f. Check tire pressure and condition daily. Don't over or under inflate
- g. Check engine oil at every gas fill-up.

### B. OPERATING TIPS

- a. Don't ride the clutch or brakes
- b. Don't over-rev the engine-don't lug the engine
- c. Don't spin the tires when accelerating
- d. Don't speed shift-use the clutch properly
- e. Don't idle the engine for extended periods of time while standing still

### C. DEFENSIVE RIDING

- a. Be alert, be in control, know your motorcycle and know your abilities
- b. Always wear protective clothing, glasses, gloves, and boots.
- c. Keep a minimum of two second following distance from vehicles ahead of you
- d. Reduce speed on wet, oily or gravel covered streets and turns.
- e. Constantly scan ahead of your direction of travel for potential hazards
- f. Avoid riding in driver's blind spots or in the center track of the roadway
- g. Drive in lane furthest away from parked cars
- h. HEAD CHECKS. Make them often, make them vigorous.

### D. OTHER HAZARDS

- a. Dogs (don't kick), children playing i.e. balls, toys etc.
- b. Cars discharging passengers
- c. Weather conditions- wind, fog, rain, etc.
- d. Roadway: RR tracks, painted markings, leaves, sand, etc.
- e. Trucks: Dirt/rock haulers, unstable loads, etc.
- f. Bats Dots

#### E. THINGS TO WATCH OUT FOR

- a. Don't trust red lights, stop signs and vehicles attempting to turn in front of you.
- b. #1 cause of motorcycle collisions are right of way violations
- c. Where to ride: freeways, one way streets, etc.
- d. Other drivers will see you but may not register
- e. Assume the worst from other drivers-compensate.
- f. Freeway ramps; fuel-oil, debris, sand, cans, gravel, disabled vehicles, etc.
- g. Water, leaves, sand, pedestrians, etc. at intersections and driveways
- h. Painted markings on roadway

#### F. THINGS TO KNOW

- a. 60% of motorcycle accidents involve riders with less than one year riding experience regardless of age.
- b. Lateral distance and speed adjustments
- c. Most serious or fatal accidents with motorcycles involve cars at intersections
- d. Parking of motorcycles on a traffic stop: think gloves and gun hand.
- e. Double riders passing
- f. Parking hazards, traffic stops, hills, soft surfaces.
- g. Night riding, head light adjustment, safe following distance, slow down
- h. Keep feet up and knees against the tank

## GRADING PROCEDURE FOR RIDING ABILITY

- A The following will be the rating key that is to be used during motorcycle training:
- a. Score (1) Unsatisfactory: This rating reflects that the rider's performance is unacceptable
  - b. Score (2) Weak: this rating reflects that the rider has been able to perform a small portion of the event, but still has some minor problems to overcome.
  - c. Score (3) Improvement needed: this rating reflects that the rider has been able to perform the majority of the vent, but still has some minor problems to overcome.
  - d. Score (4) Qualified: this rating reflects that the rider has passed the event in a satisfactory manner
  - e. Score (5) Above Average: This rating reflects that the rider is very well qualified in the event and has displayed a higher than average skill ability.
  - f. If a rider receives a rating score of 1 or 2 in any training event or events, that score will be deemed unacceptable, even though other areas are acceptable.
  - g. During the first few training days it is highly probable that that some of the rider's will receive a score of 1 or 2.
  - h. Score examples: A motorcycle down is a score of (1)
  - i. If a rider puts their foot down on time during any event, their score would be a 2. If their foot touches two or three times, the score is still a 2. **FOUR** or more touches is a (1)

If the rider is having trouble with clutch friction control in all the events, the scoring would be 2. If the rider has difficulty only when the event, by its nature, has the clutch lever fully extended, then the score would be a three.

If the rider knocks cones over and continually rides out of the pattern without attempting to "correct", their score is a 2. If the rider knocks one cone over, then continues through the patterns without striking or knocking down cones, their score is a 3

If the rider hits cones but they continue to stand, their score is a 3. A score of 3 is determined when the rider makes it though the pattern without hitting any cones, or putting their foot down.

If a rider has six or less SEPARATE COMMENTS marked, then their score is a 3, with the exception of foot down or motorcycle down.

If a rider has sever or more SEPARATE COMMENTS marked then their score is a 2 (if a rider hits 20 cones it is still just one comment)

- j. Instructors will record the rider's progress on a day-to-day basis. The instructors will complete a form entitled "INSTRUCTORS WORK SHEET" on each student that he or she is assigned to evaluate and observe, making notations at the time of the observations.
- k. Instructors will use the "INSTRUCTORS WORK **SHEET**" that will double as an EVALUATION REPORT. This report will be discussed in detail with their assigned student at the end of the day to assist them on how to make the necessary improvements

SANTA MARIA POLICE DEPARTMENT  
MOTORCYCLE TRAINING PROGRAM  
INSTRUCTOR WORK SHEET

DAY 1  
(EXAMPLE)

STUDENT:  
Department:

DATE:

EVENTS	GRADE	COMMENTS
BASIC BRAKING		Hit cones – Cones down-Foot down -Motorcycle down-Clutch/throttle control Both feet down -Wrong foot down -Braking in turn -Head & eyes down - No head check -Cover clutch- ___Finger braking-Shifts in seat-Knees out
CIRCLES& FIGURE 8'8		Head/Eyes down-Foot down-Motorcycle down-Clutch/throttle control- Coasts thru turns-Maintain friction point-Knees out-Scrapes boards- Turns too wide –Shoulder down –Shifts in seat –
OFFSET90 DEGREE TURNS (FLAT)		Hit cones – Cones down-Foot down -Motorcycle down-Clutch/throttle control- Head/Eyes down –Shoulder down -Knees out-Shifts in seat –Coasts thru turns - Late head turns-Rode out of pattern-Too wide-Too slow-Scrapes boards - ___Finger braking-Braking in turns –
INTERSECTION		Hit cones-Cones down-Foot down-Motorcycle down-Clutchffhrottle contro' Head/Eyes down –Shoulder down -Knees out-Shifts in seat-Coasts thru turns - Late head turns-Rode out of pattern-Too wide-Too slow-Scrapes boards - _Finger braking –Braking in turns –
SHORT CONE WEAVE		Hit cones – Cones down-Foot down-Motorcycle down –Clutchffhrottle control- Head/Eyes down –Shoulder down-Knees out –Shifts in seat-Stalls motorcycle- _Finger braking-Skipped gate-Rode out-Too wide –Too slow-Too fast
KEYHOLE		Hit cones – Cones down -Foot down -Motorcycle down –Clutchffhrottle control- Head/Eyes down-Shoulder down-Knees out-Shifts in seat-Coasts thru turn- Late head turn -Rode out of pattern-Scrapes boards -Pumping throttle - Pumping clutch-Too fast-Too slow-Braking in turn

Rating Key: (1) Unsatisfactory (2) Weak (3) Improvement needed (4) Qualified (5) Above average rc,1-13 pm

Comments; \_\_\_\_\_

Student ----- Student Instructor ----- EVOC Instructor -----

## WEEK ONE- Day one

1. Motorcycle inspection and safety briefing at station
2. Nomenclature of motorcycle to include demonstrations of controls, switches, gauges, proper fueling techniques, windshield adjustments, oil levels and starting procedures.
3. Proper method for picking up a downed motorcycle. (Demonstrate and application)
4. Classroom discussion topics: Chain of Command, Rules and regulations, training program overview, turning foot down, "Head Checks", lane positioning, 2 second rule, remedial training if necessary, Test day requirements, etc.
5. Proper hand signals for communicating while riding and for road hazards.
6. Discussion on road safety, "Head and Eye" placement "you go where you look", vigorous head checks, situational awareness.

### EXERCISES:

1. Basic Braking- rear and front brake in combination at slow speeds
2. Circles
3. Figure eights
4. Offset 90 Degree Turns (Flat)
5. Intersection
6. Short Cone Weave
7. Keyhole
8. 40 MPH Decel (start slow at 35 with ABS)
9. 30 MPH cone weave (start slow at 25)
10. Start/Stop- U-turns

Review of daily student evaluations by instructors.

## WEEK ONE- Day two

1. Maintenance and safety inspection of motorcycles at the station.
2. Classroom Discussion
  - a. Proper foot placement
  - b. Head Checks and lane positioning
  - c. Following distances (2 second rule)

### EXERCISES

1. Circles
2. Figure Eights
3. Offset 90 degree turns
4. Intersection
5. Short cone weave
6. Keyhole
7. Cone pattern one
8. Cone pattern two
9. 40 **MPH** decel (start at 35)
- 10.30 **MPH** cone weave
11. Start and Stop Turns
12. Starting and turning U-turns

Review of evaluations sheets with students

## WEEK ONE-Day 3

### EXERCISES

1. Maintenance at station
2. Circles and Figure Eights
3. Offset 90 Degree Turns
4. Intersection
5. Short (slow) Cone Weave
6. Keyhole
7. Cone Pattern One
8. Cone Pattern Two
9. Cone Pattern Three
- 10.30 MPH Cone Weave
11. 40 MPH Decel.
12. 180 Decel
13. Pavement Ride \*
14. Apexing\*

Review of evaluation sheets with students

(\* Denotes optional exercise)

## WEEK ONE-Day 4

### EXERCISES:

1. Maintenance at station
2. Circles and Figure Eights
3. Offset 90 Degree Turns
4. Intersection
5. Short (slow) Cone Weave
6. Keyhole
7. Cone Pattern Three
8. 30 MPH Cone Weave
9. 40 MPH Decel.
10. 180 Decel.
11. Pavement Ride
12. Pairs U-Turns\*
13. Apexing\*
14. Dirt Ride\*

Remedial training for those who need it.

(\* Denotes optional exercise)

## WEEK ONE-Day five

### EXERCISES:

1. Maintenance at Station
2. Circles and Figure Eights
3. Offset 90 Degree turns
4. Pre-Test
5. Pavement Ride
6. Remedial training for those who need it
7. Apexing \*

### Classroom discussion on the following topics

- Upcoming week
- Street strategies
- Apexing techniques
- Canyon riding
- 2 second rule
- Head checks
- Surface appraisal
- Freeway Riding

## WEEK TWO- Day one

### TEST DAY

#### EXERCISES:

1. Maintenance at Station
2. Circles and Figure Eights
3. Offset 90 Degree Turns
4. **TEST**
5. Day Ride

#### Classroom discussion on following topics

- Lane changes and positioning
- Speed control
- Defensive riding
- Freeway lane positioning (on and off ramps)
- Surface appraisal and road hazards
- Following distance (2 second rule)
- Proper apexing techniques

All students must pass either the Pre-test or the Test in order to continue with training.

#### Classroom Lecture

- Enforcement stops
- Positioning behind violator prior to stop
- Surface appraisal
- Following distance
- When to activate warning/hazard lights
- Shooting videos
- Utilizing motorcycle for cover
- Using weapon with gloves
- Stopping locations
- Proper night riding techniques (head checks, passing, don't override headlights)
- Code 3 runs, pursuits-civil and physical liabilities

## WEEK TWO- Day two

### TRAINING

1. Maintenance at Station
2. Review of proper position of motorcycle during normal traffic stops and high risk traffic stops
3. Practice enforcement stops (controlled)
4. Following distances
5. Activation of emergency equipment
6. Surface appraisal at stopping locations
7. Night Ride

### NIGHTTIME EXERCISE:

The day will cover a variety of conditions, including roads, bridges, freeways, mountain roads and various lighting conditions. Emphasis will be placed on safety, and speed control along with proper lane positioning. Students will be encouraged to make lane changes which require checking for vehicular traffic around them.

The ride will begin during daylight hours and lead into the night ride.

Classroom discussion-  
Range Safety

## WEEK TWO- Day three

Safety Lecture:

1. Day ride/perform skills
2. Perform stops-high risk scenario
3. Range Day

Classroom lecture and videos on the following subjects:

- Proper apexing techniques (high low high)
- Mountain/canyon riding techniques
- Street strategies
- Freeway lane positioning
- Warning/advisory signs
- Following distance-two second rule
- Surface appraisal
- Single lane passing-when legal and when safe
- Safety
- Speed control

## WEEK TWO- DAY FOUR

### SKILLS:

1. Practice night enforcement stops

### LECTURE:

- Care and cleaning of motorcycle
- Proper apexing techniques (high low high)
- Proper cornering techniques
- Surface appraisal
- Straight line braking and downshifting
- Head and eye placement
- Passing techniques (when legal and when safe)
- Head checks while attempting lane changes and at intersections

### RIDING

Students will participate in a cross-country ride using local rural roads and canyons

Review day's activities

## WEEK TWO- Day five

### Riding:

- Day check off ride
- Day check off enforcement stops

### LECTURE:

Review all topics discussed throughout training and re-enforce the importance of defensive driving tactics and surface appraisal. Classroom discussion on Motorcades and Escorts.

### EVALUATION:

Provide students with instructor evaluation

## **IMPORTANT DON'TS:**

1. Don't ride on the oil slick in the center of the traffic lanes
2. Don't ride side by side with another officer going into a curve
3. Don't go into a curve too fast
4. Don't try to lay the motorcycle down in an attempt to avoid a collision
5. Don't fail to check the motorcycle daily for defects
6. Don't stay in a driver's blind spot
7. Don't overestimate/override your riding abilities-know your motorcycle
8. Don't let your attention wander- stay alert
9. Don't depend on other drivers to see you
10. Don't trust the other drivers to do what is legal or right
11. Don't just use one brake- use combination braking
12. Don't fail to react in an emergency
13. Don't let speed dictate your riding style-safety must be the priority
14. Don't let the power of the pen overtake clear thinking

## LESSON PLANS AND DIAGRAMS

		Lesson plan Page	Diagram Page
1.	19 ft. Enclosed Circle	36	37
2.	Figure Eight	38	39
3.	Off-set 90 turns	40	41
4	Intersection	42	43
5.	Keyhole	44	45
6.	Short/Slow Cone Weave	46	47
7.	40 MPH Decel	48	49
8.	30 MPH Cone Weave	50	51
9.	180 Decel	52	53
10	Stopping and Turning Flat	54	55
12.	Pairs U-Turns	56	57
13.	Slow Ride	58	59
14.	Pattern 2 ("S" Curves)	60	61-62
15.	Apexing	63	NA
16.	Pavement Ride	64	NA
18.	Dirt Riding	65	NA

## LESSON PLAN

LESSON: 19' Enclosed Circles- No brake exercise

### OBJECTIVES:

1. Ride within coned diameter of circle
2. Promotes control of motorcycle at extremely slow speed in a confined area.
3. Lock to lock turn required.
4. Proper balance, control and coordination of clutch and throttle taught
5. Inspires confidence of student in control of the motorcycle in heavy traffic or closed area situations

### INTRODUCTION

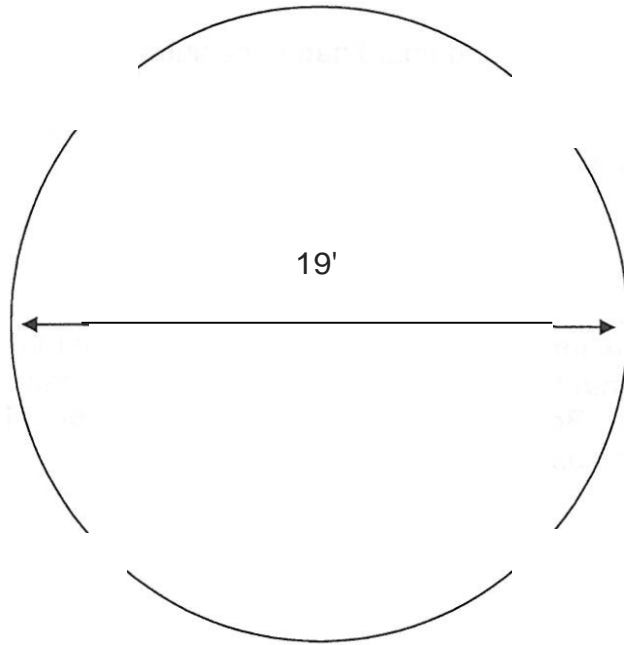
Demonstrated by instructor. Begin from either the left or right turn. Complete three circles then transition into the opposite direction. Motorcycle can remain upright or lean in the direction of travel. Body to be positioned to the high side- "Turning Shoulder Up"- in order to obtain proper balance

### APPLICATION:

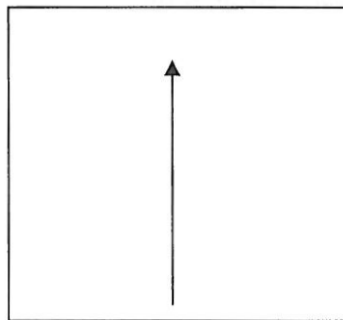
1. Student observations;
  - a. Smooth application of throttle, clutch and balance when making turns. Head up and turn in the direction of travel.
  - b. Maintain slow steady speed so as not to run-out of pattern and without stalling the motorcycle
  - c. Feet should not touch the ground.

**SANTA MARIA POLICE DEPARTMENT  
MOTORCYCLE TRAINING BASIC COURSE**

**19 FOOT CIRCLE PATTERN  
BOTH DIRECTIONS**



Instructors position  
anywhere outside of  
the circle.



Student enters circle  
at any given point, then  
remains within the  
circle for 5 rotations  
then reverse direction

## LESSON PLAN

LESSON: Figure Eight

### OBJECTIVES:

1. Ride figure eight pattern while remaining inside the specified area.
2. Teaches student balance and coordination.
3. Exercise simulates in field maneuvers requiring small areas

### INTRODUCTION

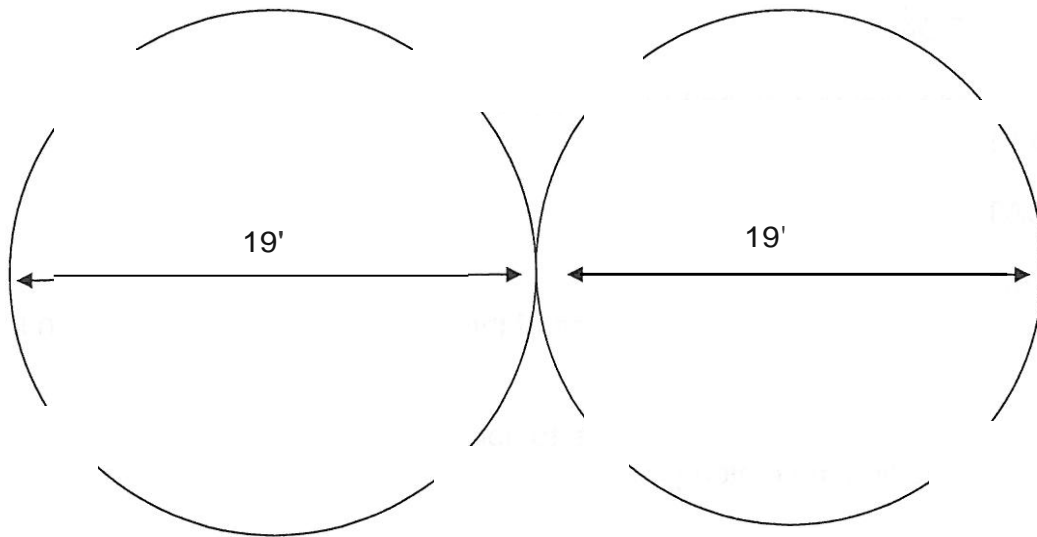
Demonstrated by instructor, no brakes used on this exercise. Rider must stay inside of assigned area. Smooth flowing rhythm.

### APPLICATION

1. Student observation
  - a. Look for smooth application of throttle, clutch and balance when making turns,
  - b. Maintain slow speed so as to not cross designated area and without stalling the motorcycle.
  - c. Feet should not touch the ground.

**SANTA MARIA POLICE DEPARTMENT**  
**MOTORCYCLE TRAINING BASIC COURSE**

**FIGURE EIGHT PATTERN**  
**NO BRAKE EXERCISE**



Instructor's position anywhere  
outside of the pattern

Student enters figure eight  
near center of pattern, then  
remains within the circles.  
Natural flow of pattern forms  
the figure eight.

## LESSON PLAN

LESSON: Offset 90 Degree Turns- **No Brake Exercise**

### OBJECTIVES:

1. Ride within the coned area of a series of 90 degree turns.
2. Promotes control of the motorcycle at slow speed in a confined area.
3. Lock to lock turns required
4. Proper balance, control and coordination of clutch and throttle are taught
5. Inspires confidence of student in control of the motorcycle while making turning movements on the street

### INTRODUCTION

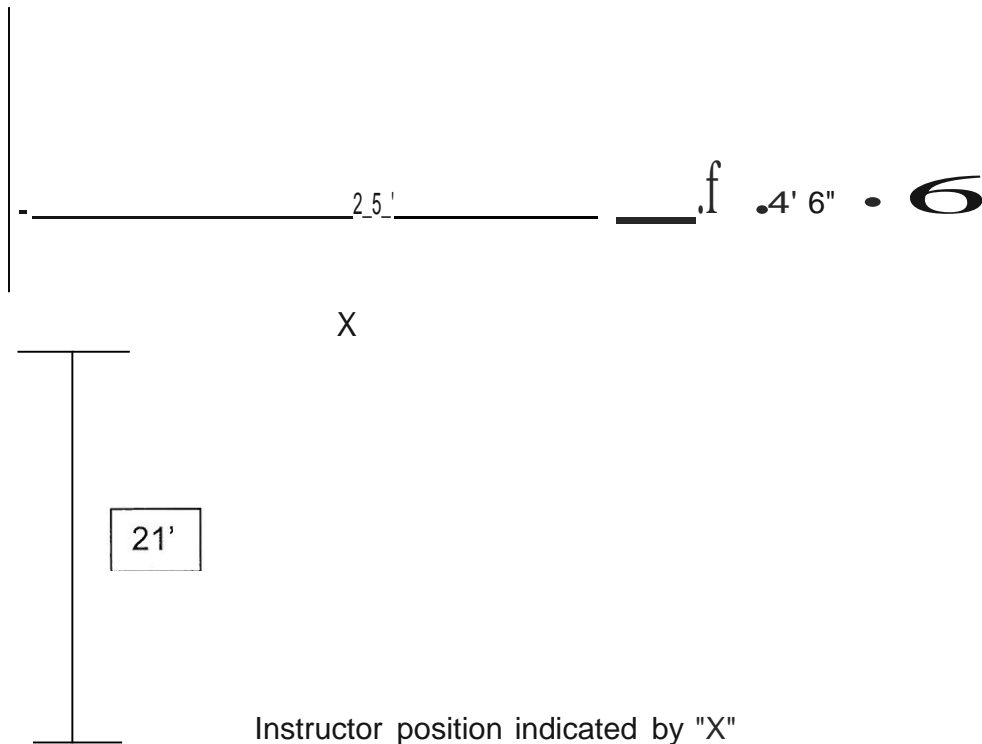
Demonstrated by instructor. Enter the pattern making smooth "U" turns without using the brakes. Motorcycle will be in a constant leaning position attitude either left or right

### APPLICATION

1. Student observations:
  - a. Smooth and slow operation of motorcycle by student
  - b. Look for proper application of throttle and clutch along with balance.
  - c. Feet on pegs/boards. Head/Eyes should be in proper demonstrated position
  - d. Cones are not to be touched. Remain inside the coned area.
  - e. Feet should not touch the ground.

SANTA MARIA POLICE DEPARTMENT  
MOTORCYCLE TRAINING BASIC COURSE

OFFSET 90 DEGREE TURNS  
NO BRAKE EXERCISE



Class line up position approx. 30'  
from first two cones proceed only  
at the direction of instructor



X



## LESSON PLAN

LESSON: Intersection- **No Brake Exercise**

### OBJECTIVE

1. Ride within the coned intersection.
2. Promotes complete control of motorcycle at slow speed in enclosed area.
3. Assist in beginning lock to lock turns in preparation of 19 foot enclosed circle and other exercises
4. Proper balance, control and coordination of clutch and throttle.
5. Inspires confidence in student.
6. Represents turning situations in field operations.

### INTRODUCTION

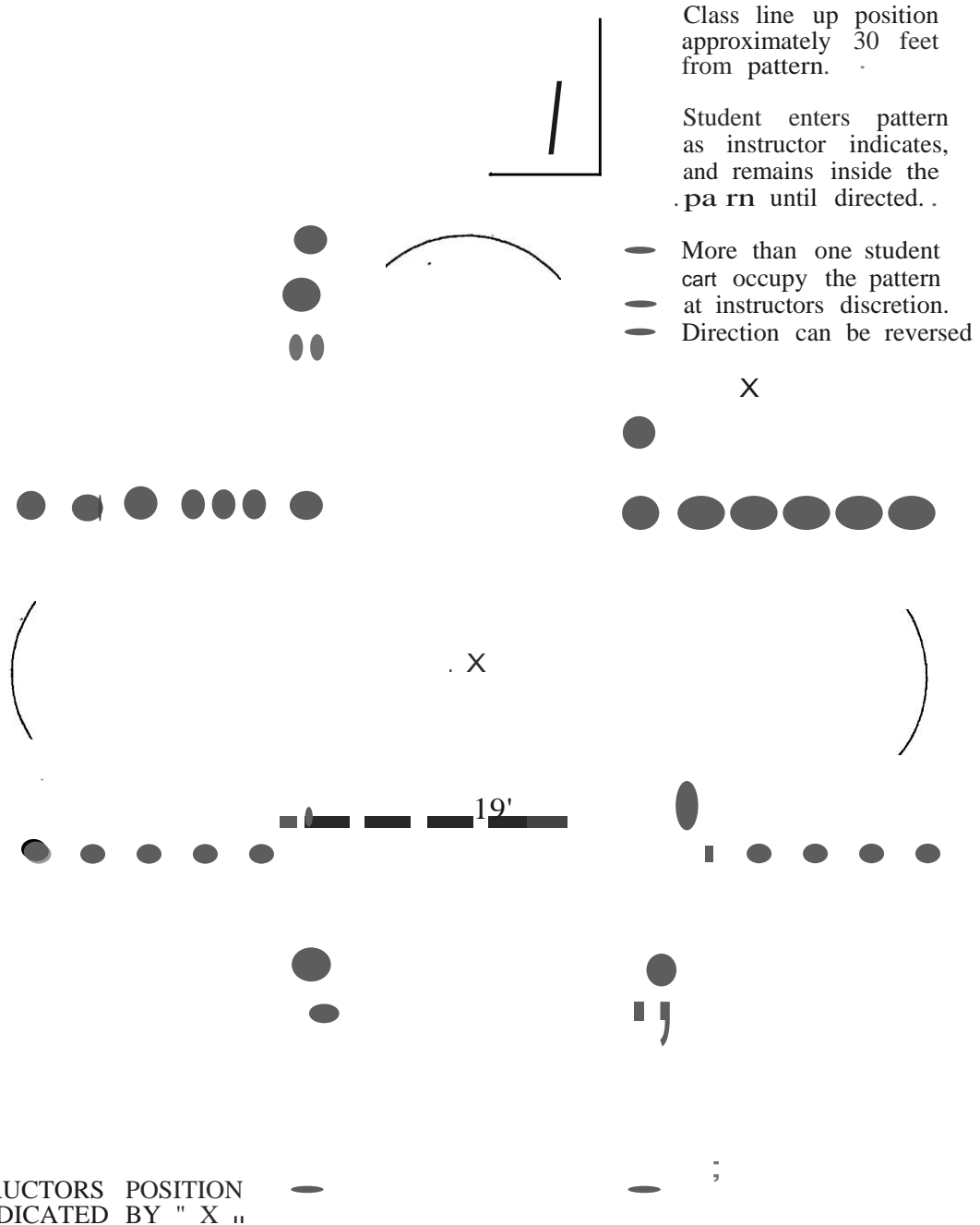
Demonstrated by instructor. Enters either right or left side. Completes at least two times in one direction, exits, and then begins in opposite direction.

### APPLICATION

1. Student observations:
  - a. Look for proper balance, clutch and throttle application
  - b. Use throttle to keep motorcycle upright
  - c. Proper head and eye placement. Feet should not touch the ground. Cones should not be touched.
  - d. Correctly done, the student should remain inside coned intersection.
  - e. No braking exercise.

**SANTA MARIA POLICE DEPARTMENT**  
**MOTORCYCLE TRAINING BASIC COURSE**

**INTERSECTION PATTERN**  
**NO BRAKE EXERCISE**





## LESSON PLAN

LESSON: Two-Way Keyhole- No Brake Exercise

### OBJECTIVES:

1. Cones circular, weaving through pattern incorporating "lock to lock" turns.
2. Continues to teach balance along with throttle, clutch, head and eye coordination and control.
3. Represents heavy traffic situations and lane changing, making U-turns and looking ahead.

### INTRODUCTION

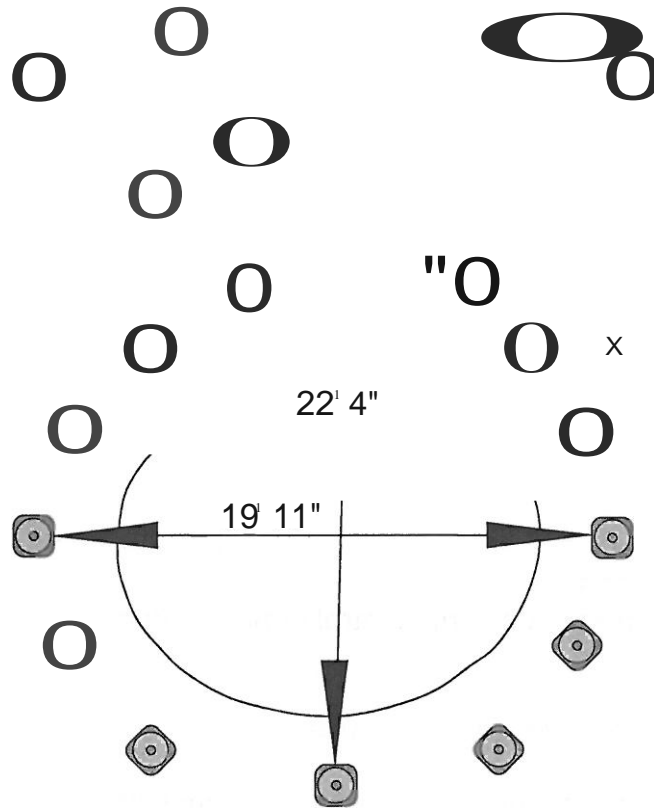
Demonstrated by instructor. Motorcycle makes extreme locked wheel turning movement alternating from left to right sides. Exercise is demonstrated in both directions

### APPLICATION

1. Student observations
  - a. Look for smoothness and control during locked turns. Rhythm should develop.
  - b. No elongated sweeping turns used.
  - c. Feet should not touch the ground and cones should not be touched
  - d. Head and eye placement should be upright for proper balance.
  - e. Turning shoulder up.

**SANTA MARIA POLICE DEPARTMENT**  
**MOTORCYCLE TRAINING BASIC COURSE**

**LEFT AND RIGHT SIDE KEYHOLE**  
**NO BRAKE EXERCISE**



Students line up  
approximately  
20' from first cones,  
enter the gate that  
the instructor indicates

INSTRUCTORS POSITION  
IS INDICATED BY " X "

## LESSON PLAN

LESSON: Short Cone Weave (Rear Brake Exercise)

Objectives:

1. Cones in line. Weave through pattern incorporating lock to lock turns, utilizing slight pressure to the rear brake while maintaining proper friction point.
2. Continues to teach balance along with throttle, clutch and brake coordination
3. Represents heavy traffic situations. Splitting obstacles at slow speeds while maintaining an upright position while looking ahead.

### INTRODUCTION

Demonstrated by instructor. Motorcycle slaloms through exercise in smooth flowing motion.

Application

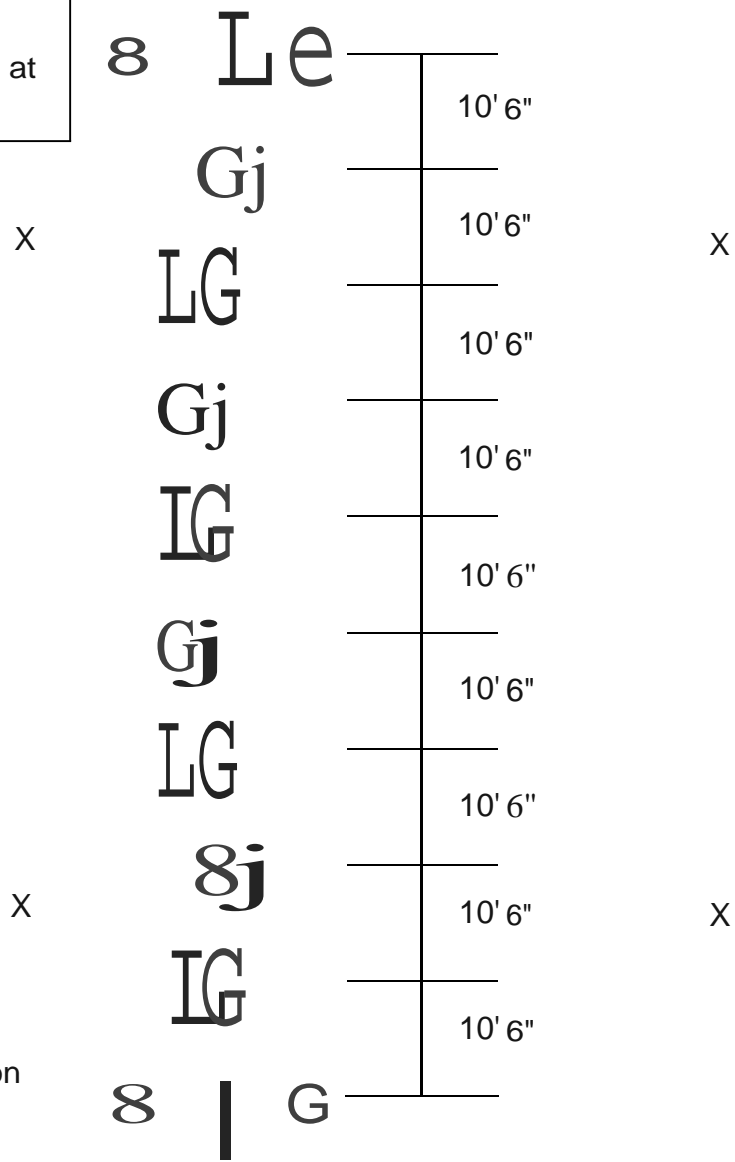
1. Student observations;
  - a. Look for smoothness and control during lock to lock turns.
  - b. No elongated turns.
  - c. Feet should not touch the ground and cones should not be touched.
  - d. Rear brake mandatory.

**SANTA MARIA POLICE DEPARTMENT**

MOTORCYCLE TRAINING COURSE  
FOR BMW-HONDA-HARLEY

SLOW CONE WEAVE  
(Rear Brake Exercise)

Class lines up at Entry Gate. Lock to Lock steering using Rear brake only. One rider at a time.



Instructor's position indicated by "X"

## LESSON PLAN

LESSON: 40 MPH Decel

### OBJECTIVES:

1. Approach cone pattern at 40 mph, brake in designated area first, then enter the "L" shaped area, full wheel lock turn to enter the 180 degree turn, and a locked wheel turn to exit utilizing power through the course of the turn. (No coasting)
2. Third gear, 40 mph.
3. Throttle off, disengage clutch while applying front and rear brakes and then down shifting to first gear.
4. No movement will be made prior to entering the starting gate. No rolling off the throttle or pre-braking.

### INTRODUCTION

Demonstrated by the instructor. Should produce controlled slowing, braking and downshifting of the motorcycle.

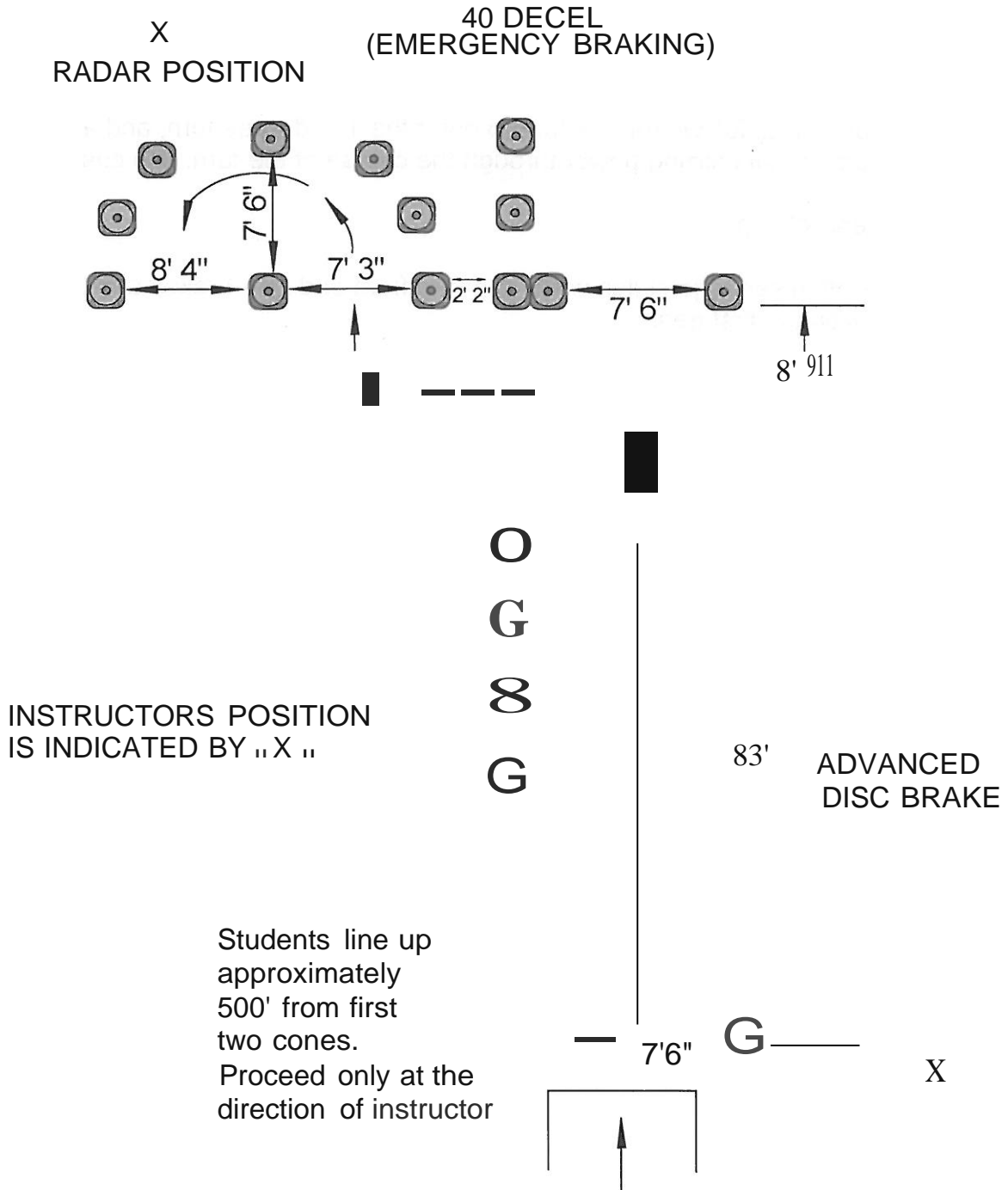
### APPLICATION:

1. Student observations;
  - a. Proper use of coordinated brake and clutch application. (No skidding)
  - b. No loss of control of the motorcycle (riding through cones at the end of the "L" shaped pattern)
  - c. Proper judgement used while stopping or slowing

**\*\*REFER TO INSTRUCTOR NOTES TAKEN DURING CLASS FOR IDENTIFICATION OF MISTAKES AND THE APPROPRIATE CORRECTIONS.**

**SANTA MARIA POLICE DEPARTMENT**

MOTORCYCLE TRAINING BASIC COURSE  
FOR BMW-HONDA-HARLEY



## LESSON PLAN

LESSON: 30 MPH Cone Weave

### OBJECTIVE:

1. Cones in a straight line. Weave through pattern using counter steering technique.
2. Continue to teach balance along with throttle and clutch coordination and control.
3. Simulates heavy traffic situations, lane changing, avoiding obstacles and looking ahead.
4. Teaches collision avoidance.

### INTRODUCTION:

Demonstrated by the instructor riding through the pattern in a smooth flowing motion and while maintaining a steady speed.

### APPLICATION:

1. Student observations:
  - a. Look for slight pressure on the hand on the inside of the handlebar in the direction of travel. Push right to go right. Push left to go left.
  - b. Look for smoothness and control during the side to side motion. Rhythm should be developed. Head and shoulders should be level- eyes straight ahead.
  - c. Speed between 29 and 31 mph with one test run allowed at 28 mph.
  - d. Feet should not touch the ground. Pegs/Floorboards should not scrape the pavement.
  - e. No brakes used.

**SANTA MARIA POLICE DEPARTMENT**

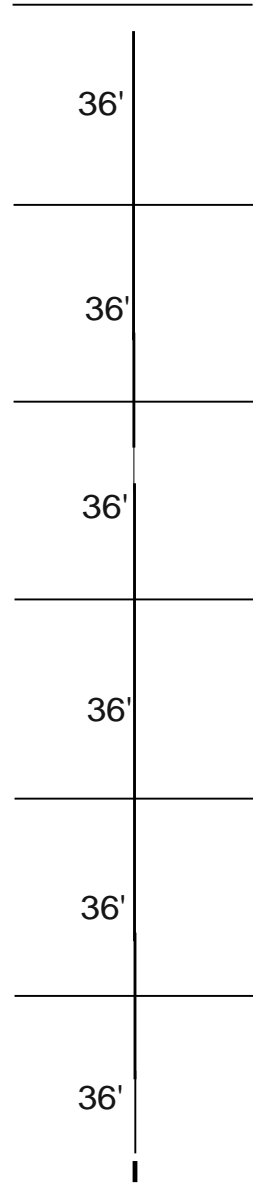
**MOTORCYCLE TRAINING BASIC COURSE  
FOR BMW/HONDA/HARLEY**

30 mph CONE WEAVE  
(NO BRAKE EXERCISE)

X

Instructor radar  
position approx.  
75 feet from last  
set of cones

800



INSTRUCTORS POSITION  
IS INDICATED BY " X "



Gj

1-3'6" |

Class line up position  
approximately 500'  
from first three cones.  
Proceed only at the  
direction of instructor,  
maintain proper speed

lffi.

## LESSON PLAN

LESSON: 180 Decel

Objective:

1. Coned weave pattern, incorporating lock to lock turns causing change of direction.
2. Excellent development of balance, coordination and control of clutch, throttle and brakes. (front and rear)
3. Simulates in-town traffic conditions at slow speed. Collision avoidance exercise simulated right-of-way violator.
4. Promotes confidence in students when completed.

INTRODUCTION:

Demonstrated by instructor. Smoothness should be maintained through entire exercise. Once cone pattern is entered, brakes will not be used beyond designated point.

APPLICATION:

1. Student observations:
  - a. Proper lock to lock turns along with smooth coordination of clutch, throttle and brakes.
  - b. Look for proper balance and control. Riders have a tendency to drop the motorcycle due to slow speeds and stalling.
  - c. Feet should not touch the ground and cones should not be touched.
  - d. Monitor head/eye placement, turning shoulder up, no coasting in the turns.



## LESSON PLAN

LESSON: Stopping and Turning on a Flat Surface

OBJECTIVES:

1. Motorcycle stopped, shifted into first gear on a flat surface and then start turning right or left as directed.
2. Teaches balance, control and coordination of throttle and clutch while turning from a stopped position with handlebars locked in position and directed.

INTRODUCTION

Demonstrated by the instructor. Approach and stop on a flat surface. Find the friction point with the clutch while stopped. Begin with head checks in both directions then let clutch out with smooth application. Increase throttle pressure, never putting the foot down while turning unless you stall the motorcycle. Complete the turn as directed.

APPLICATION:

1. Student observations:
  - a. Look for sooth stop, turning foot down and proper balance.
  - b. Look for smooth clutch/throttle control.
  - c. Look for proper balance while turning.
  - d. No stalling of engine.
  - e. No dragging of feet for balance when starting out.
  - f. Look for proper head/eye placement.
  - g. No braking

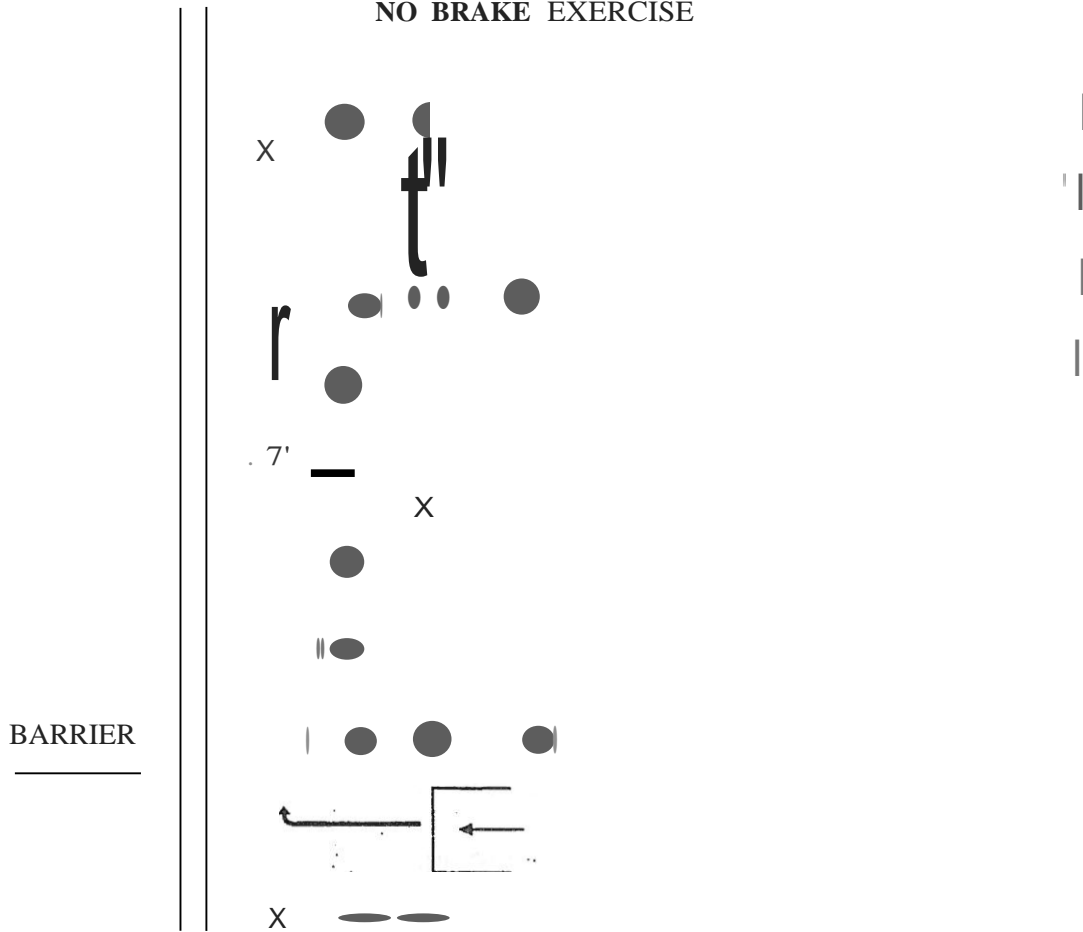
**\*\*REFER TO INSTRUCTOR NOTES TAKEN DURING CLASS FOR IDENTIFICATION OF MISTAKES AND THE APPROPRIATE CORRECTIONS.**

**SANTA MARIA POLICE DEPARTMENT**

MOTORCYCLE TRAINING BASIC COURSE

STOPPING AND TURNING-FLAT

**NO BRAKE EXERCISE**



INSTRUCTOR POSITION IS INDICATED BY "X"

Class line up position at coned entrance. Proceed only at the direction of instructor.

## LESSON PLAN

LESSON: Pairs "U" Turns

### OBJECTIVES:

1. Control of motorcycles within a limited space while turning together.
2. Proper balance, control and coordination of clutch, throttle, and rear brake taught.
3. Inspires confidence of students in control of motorcycles while in heavy traffic, attempting U-turns on a single lane roadway.

### INTRODUCTION:

Demonstrated by instructors. Riders complete exercise on simulated two lane roadway (one lane each direction). Motorcycles to remain upright, then leaned in the direction of the U-turn.

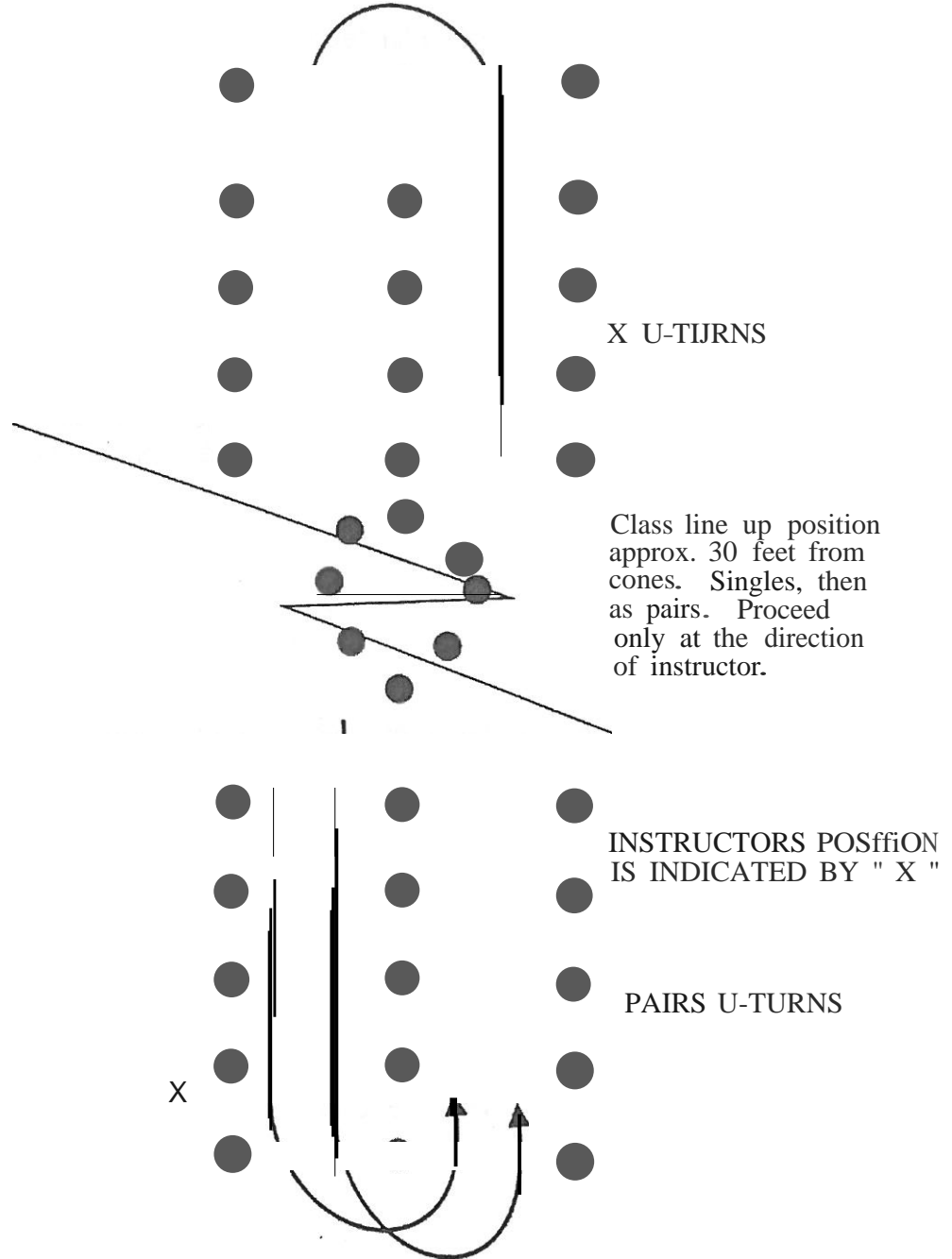
### APPLICATION:

1. Student observations:
  - a. Smooth and slow operation of motorcycle by student.
  - b. Look for proper application of throttle, clutch, brake, along with balance.
  - c. During pairs U-turns, riders will switch positions (track) while making the turn, and riders to stay on paved surfaces

**\*\*REFER TO INSTRUCTOR NOTES TAKEN DURING CLASS FOR IDENTIFICATION OF MISTAKES AND THE APPROPRIATE CORRECTIONS.**

SANTA MARIA POLICE DEPARTMENT

MOTORCYCLE TRAINING BASIC COURSE  
U-TURNS/PAIRS U-TURNS



## LESSON PLAN

LESSON: Slow Ride

### OBJECTIVES:

1. Ride in straight line as slow as possible.
2. Ultimate teaching of balancing a motorcycle at extremely slow speed, simulating riding in slow or stopped traffic.
3. Proper control and coordination of throttle and clutch.
4. Promotes confidence in student's ability to operate the motorcycle at slow speed.

### INTRODUCTION:

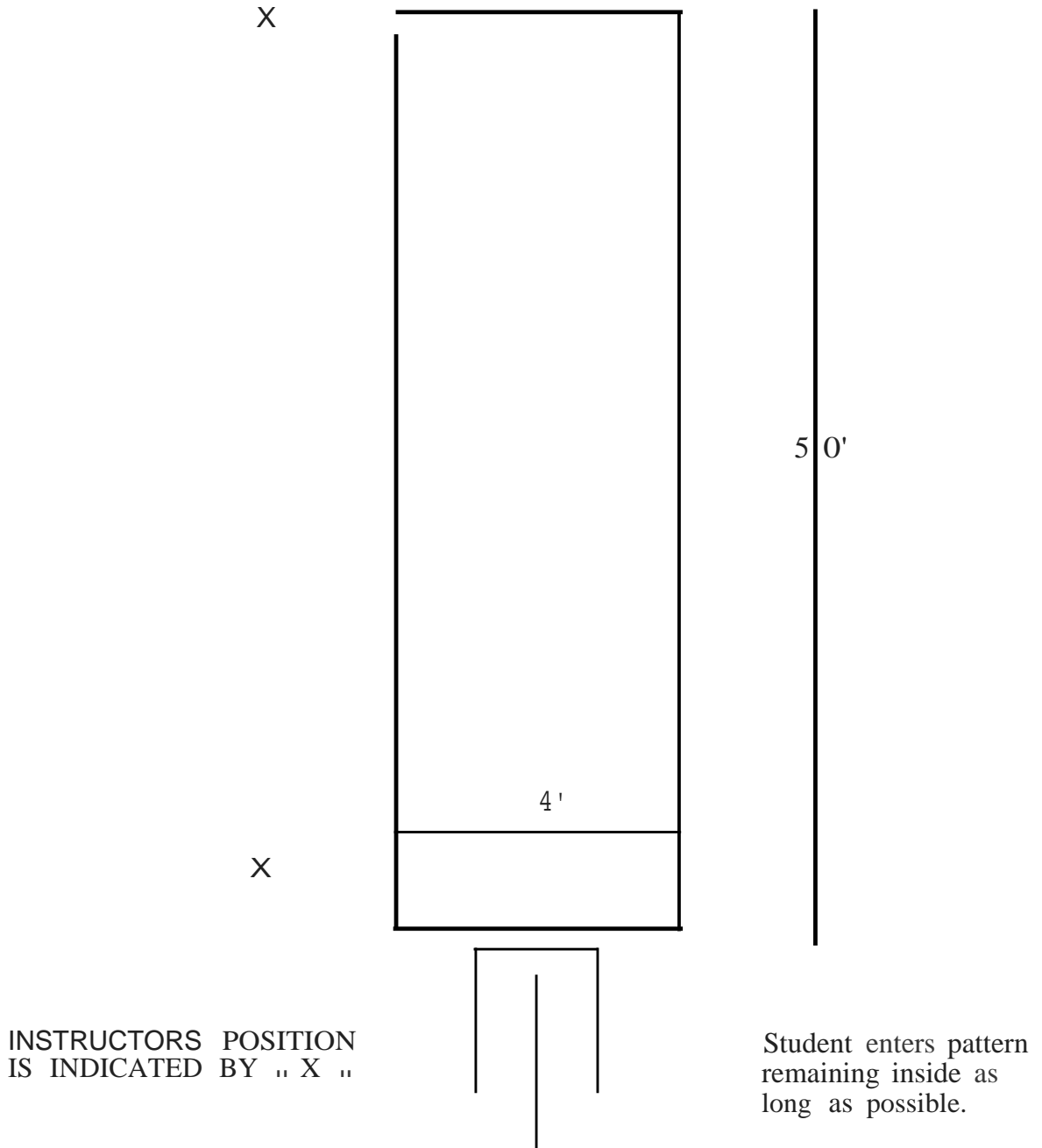
Instructor demonstrates using proper control of throttle and clutch while maintaining as straight a course as possible.

### APPLICATION:

1. Student observations:
  - a. Watch for lateral movement to keep speed down. Direction should be as straight as possible.
  - b. Rider should not over-rev the engine. Rider must maintain proper coordination of throttle and clutch.
  - c. Feet should not touch the ground.
  - d. No braking allowed.

SANTA MARIA POLICE DEPARTMENT  
MOTORCYCLE TRAINING BASIC COURSE

SLOW RIDE PATTERN  
NO BRAKE EXERCISE



## LESSON PLAN

LESSON: "S" Curves- Cone Patterns #2 and #3

### OBJECTIVES:

1. Coned, weave pattern incorporating lock to lock turns causing change of direction.
2. Excellent development of balance, coordination and control of clutch and throttle.
3. Simulates in town traffic conditions at slow speeds weaving between obstacles.
4. Two to three cone patterns set up, each increasing in difficulty.
5. Promotes confidence in students when completed.

### APPLICATION:

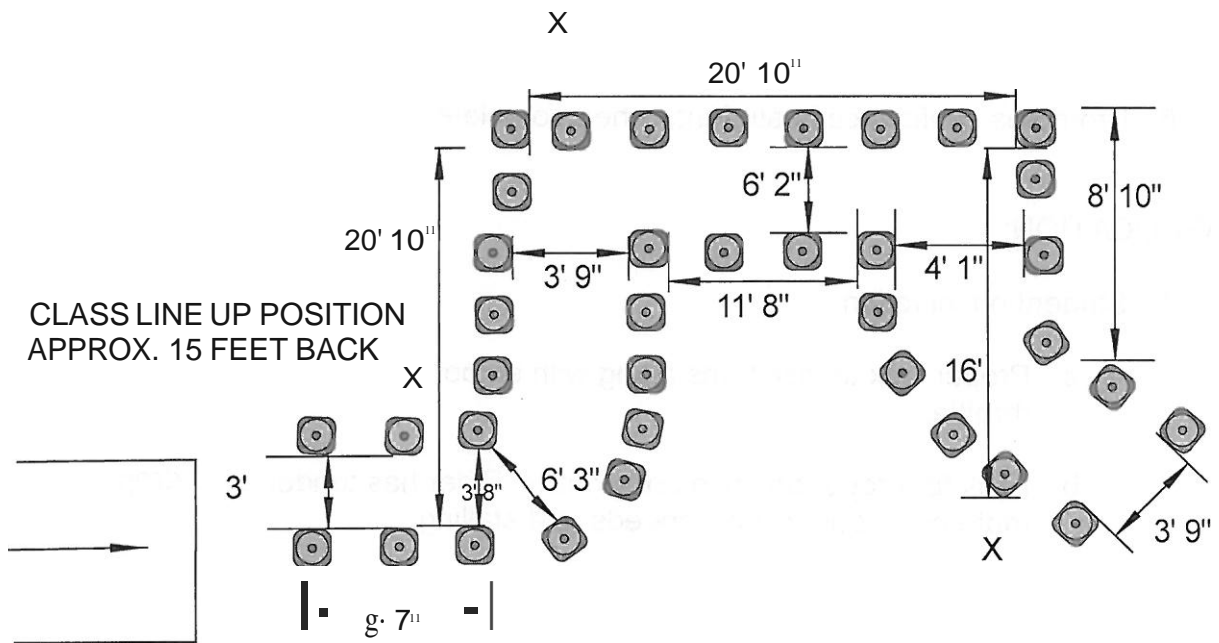
1. Student observation:
  - a. Proper lock to lock turns along with smooth coordination of clutch and throttle.
  - b. Look for proper balance and control. Rider has tendency to drop motorcycle due to slow speeds and stalling.
  - c. Feet should not touch the ground.
  - d. Cones should not be touched.
  - e. Continue to monitor rider for proper head and eye placement and turning shoulder up.
  - f. Rider is not allowed to coast through the turns. Power through the turns.

**\*\*REFER TO INSTRUCTOR NOTES TAKEN DURING CLASS FOR IDENTIFICATION OF MISTAKES AND APPROPRIATE CORRECTIONS.**

**SANTA MARIA POLICE DEPARTMENT**

**MOTORCYCLE TRAINING BASIS COURSE  
FOR BMW-HONDA-HARLEY**

**CONE PATTERN #2  
"S" CURVES**

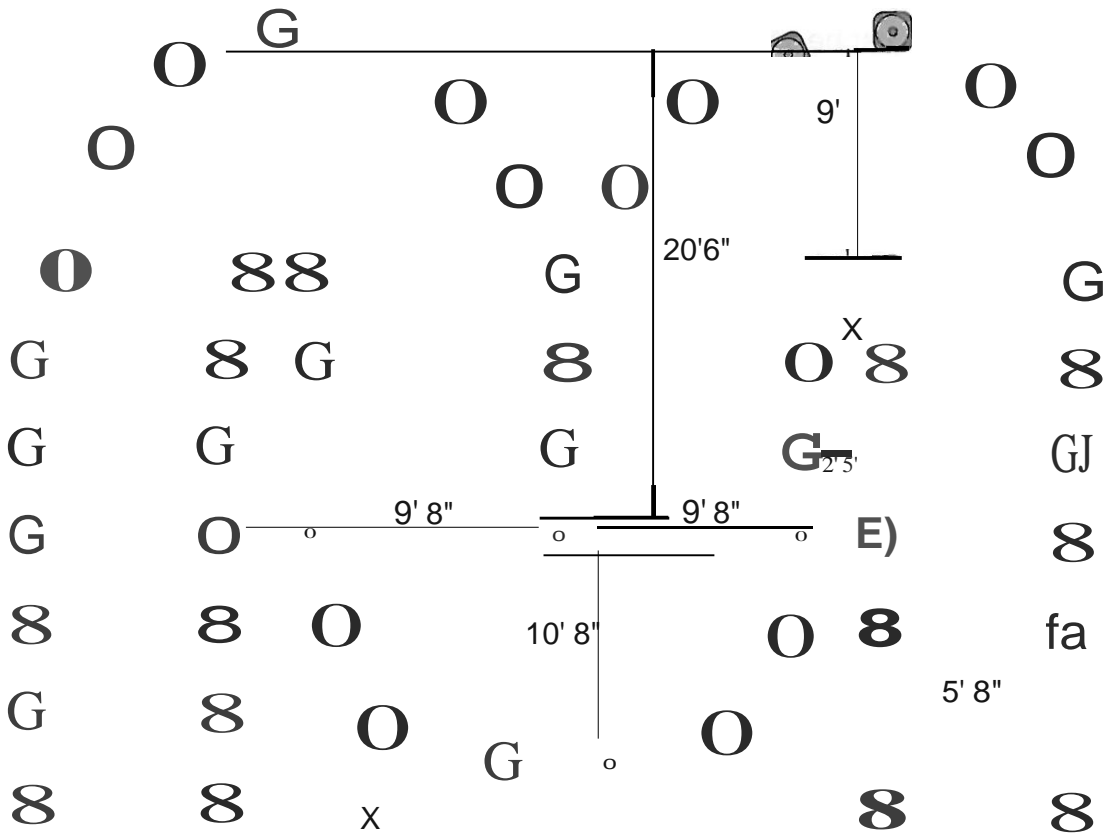


INSTRUCTORS POSITION  
IS INDICATED BY "X"

**SANTA MARIA POLICE DEPARTMENT**

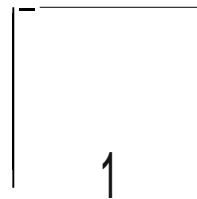
MOTORCYCLE TRAINING BASIC COURSE  
BMW-HONDA-HARLEY

CONE PATTERN #3  
"S" CURVES



INSTRUCTORS POSITION  
IS INDICATED BY "X"

CLASS LINEUP  
POSITION APPROX  
20 FEET FROM  
PATTERN CAN  
CHANGE FROM  
RIGHT TO LEFT



## LESSON PLAN

LESSON: Apexing

### OBJECTIVES:

1. Students must be able to maintain an entrance speed to a curve while driving down to the center line while increasing speed upon the exit of the curve to straighten up the motorcycle.
2. Student must be able to cause the motorcycle to lean in a given direction by applying pressure to the appropriate handgrip.
3. Teaches student to look up and through the curve.
4. Teaches student to increase speed and lean in a curve in order to decrease the radius of a curve.
5. Teaches student that if they use the brakes while in a curve, the motorcycle will have a tendency to straighten up and go wide.

### INTRODUCTION:

This will first be discussed in the classroom and diagrammed on chalk board. The instructor will then demonstrate to the class in a controlled environment at slow speeds, ultimately increasing the speed and lean angle of the motorcycle while holding a tight line utilizing the apexing method.

### APPLICATION:

#### 1. STUDENT OBSERVATIONS:

- a. Advise student to put sufficient pressure on the inside handlebar grip in the direction of their turn while remaining within the marked lines.
2. Student should relax.
    - a. Counter steer to create lean angle.
    - b. Do not brake while in the radius of the turn.
    - c. Look through the curves using deep entry method (High- Low- High)

**\*\*REFER TO INSTRUCTOR NOTES TAKEN DURING CLASS FOR IDENTIFICATION OF MISTAKES AND THE APPROPRIATE CORRECTIONS.**

## LESSON PLAN

LESSON: Pavement Ride

### OBJECTIVES:

1. Open ride not confined to small specific area.
2. Follow the leader exercise putting student in riding situations incorporating minor obstacles and difficulties.
3. Proper acceleration, gear selection, braking and body position.
4. Designed to use between other skills to loosen and relax students.

### INTRODUCTION:

Students will follow the instructor. Instructor will ride alongside the students, noting reactions, control balance and coordination.

### APPLICATION:

1. Student observations:
  - a. Look for proper body position and judgement of students.
  - b. Students must be continually looking around (head on a swivel)
  - c. Look for coordination and control of motorcycle or each student (speed, tailgating, hitting objects etc.)

Note: No diagram and no specific course.

**\*\*REFER TO INSTRUCTOR NOTES TAKEN DURING CLASS FOR IDENTIFICATION OF MISTAKES AND THE APPROPRIATE CORRECTIONS.**

## LESSON PLAN

LESSON: Dirt Riding

### OBJECTIVES:

1. Dirt riding is an effort to aid students in operating the motorcycle in a less than ideal situation that from time to time will be encountered on the street.
2. Simulates debris such as oil, loose dirt/gravel, rutted roads, etc.
3. Sharpens control and coordination of throttle and rear brake application.
4. Maximum lack of control with minimum chance of injury during training.

### INTRODUCTION:

Students will follow instructor using off-road course incorporating gravel, sand and dirt surfaces. Deep ruts, trenches, washboard surfaces and steep inclines will be encountered.

### APPLICATION:

1. Student observations:
  - a. Look for student judgement and their tendency to override their capabilities.
  - b. Look for balance, coordination and control.
  - c. Look for rear brake use only.

Note: No Diagram- No specific course.

# STREET SURVIVAL TIPS:

## **ASSUME YOU ARE INVISIBLE:**

To a lot of drivers, you are. Never make a move based on the assumption that another driver sees you, even if you've made eye contact with them.

## **PREDICT:**

If an incident is predictable, it is **PREVENTABLE**. Prepare for the worst and hope for the best.

## **MAINTAIN A SAFE FOLLOWING DISTANCE:**

Maintain a minimum 2 second following distance from the vehicle in front of you. Remember, it takes% of a second for the mind to perceive a threat and % of a second to react to that threat.

## **"RIGHT of WAY Violations are the leading killer of motorcyclists:**

VC 21801(a), VC 21802, VC 21804, VC 21658(a) VC. Etc.

## **BE PATIENT:**

Always take an extra second to two before you pull out to pass, ride away from a curb or merge into traffic, it's what you don't see that will get you.

## **THINK BEFORE YOU ACT:**

Be careful accelerating around a slower moving vehicle in front of you. Bad things happen when they suddenly turn without signaling.

## **BEWARE OF CARS RUNNING RED LIGHTS:**

The first few seconds after a signal turns red, slow down, or come to a stop.

## **CHECK YOUR MIRRORS IN ASSOCIATION WITH HEAD CHECKS:**

Do it every time you change lanes, slow down, or come to a stop.

## **FLASHING IS GOOD FOR YOU:**

A few quick taps on the brake lever before stopping makes your brake lights more eye catching to cars behind you.

## **USE YOUR PERIPHERAL VISION:**

Constant use of your peripheral vision will result in a more proficient and safer rider.

## **DON'T PATROL NEXT TO-OR RIGHT BEHIND AND 18 WHEELER:**

The threat from a sideways exploding tire on an 18 wheeler has enough velocity to brake and arm or a leg and incapacitate the rider.

## **PROPER CARE OF TIRES AND EQUIPMENT:**

Don't take your tires for granted. Check for cuts, nails, and any deformities. Tire pressure is critical. Check it daily. Check all engine fluids daily as well.

## **PROPER BRAKING:**

Use combination straight-line braking, 70-30 graduating to 80-20. Avoid using brakes in a turn.

Lane position is particularly important to a motorcyclist because it's hard for other drivers to see you, even when your headlights are on. Sometimes, though, the relatively small side of your motorcycle can be a safety advantage.

**\*\*Steps:**

1. Remember that each lane gives a motorcycle three paths of travel rights, center and left.
2. Use your lane position to enhance your ability to see and be seen. Avoid driving in other driver's blind spots.
3. Watch out for surface hazards and wind blasts from other vehicles.
4. Protect your lane from those who might try to share it with you by honking to let them know you are there.
5. Use your signals and let other drivers know what you're going to do.
6. Position yourself so you can use your height and visibility advantage to see things other drivers can't see. Move to one side of the lane or the other to get a better view on traffic and road conditions ahead.
7. Ride within your skill level and posted speed limits. It's easier than you may think to take a turn wide and risk a collision when with a fence, phone pole, or tree.
8. Approach curves cautiously do determine whether they're banked, flat, gradually widening, getting tighter or the first of multiple turns.
9. Take advantage of the fact that you don't have six feet of rubber, chrome and steel sticking out in front of you. Riders can easily peek around buildings, parked cars, or bushes to see if any hazards are approaching.
10. Increase your visibility at intersections by riding with your high beams on. Ride in the lane position that provides the best view of oncoming traffic.
11. Keep possible escape routes in mind at all times and leave a space cushion around you so you'll best be able to react to dangerous situations you may encounter.

**\*\***

- Ride next to larger vehicles while crossing an intersection or other dangerous places.
- Position your motorcycle several feet from the crosswalk when stopping at a stop light. Make sure the stoplights signal device is "picking you up."
- Back into parking spaces whenever possible. That way you'll be driving your bike out into traffic rather than backing into it.

**WARNING:**

Try to stay out of center lanes when on city streets. Oil builds up there and can make taking corners very dangerous.