

Idaho **STAR**  
Motorcycle Safety Program

# **BASIC II**

BASIC RIDER

# **TRAINING**

RANGE GUIDE



Skills Training Advantage for Riders

**Basic II**  
**Instructor Range Guide**

6th Ed.

# Range Rules

## RANGE RULES AND HAND SIGNALS FOR eBII COURSE ORIENTATION

- Do not practice without the instructor's permission.
- Stay with each exercise as it's being practiced.
- Wear all protective gear when seated on the motorcycle.
- Cover the clutch lever with four fingers at all times—this enables you to immediately disengage power from the rear wheel, if necessary.
- Keep your throttle hand in a flat wrist position with four fingers around the throttle/handgrip.
- Do not “cover” the front brake while moving forward. Keep all four fingers wrapped around the throttle.
- Always check around you—front, sides and behind—before moving.
- Don't crowd other riders—leave plenty of space between you and them.
- Do not pass other riders/motorcycles.
- Always use the engine cut-off switch to stop the engine, and then turn off the ignition.
- If you have a problem, move out of the way and signal your instructor.
- If you hear a referee-style whistle, stop smoothly and immediately and wait for further directions.
- If you don't understand an exercise, ask the instructor for clarification.
- Notify your instructor if you are too uncomfortable to ride safely.

Continue with hand signals and remaining bullets on opposite page.

## LATE ARRIVAL POLICY

- Students who arrive after the start of the first exercise of the day are not allowed to continue (see P&P). Instruct them to contact the **STAR** office at 208-639-4540.

# Range Day Preparation and Orientation

## RANGE PREPARATION

- Cordon off range with large cones.
  - Clear range of debris and gravel.
  - Start and warm up, and wipe down all training bikes.
  - Set cones for first exercise.
  - Place **STAR** bikes in staging.
  - Place first aid kit, fire extinguisher, extra cones, and water near staging but off range.
- 

## STUDENT ORIENTATION, ALL BASIC II COURSES

- Greet students.
- Inspect and approve riding gear.
- Have all students sign master waiver form.
- Collect individual waivers for students under 18.
- Inspect student motorcycles for obvious defects that could impair handling or create safety hazard:
  - Broken spokes
  - Tire wear or underinflation
  - Fluid leaks
  - Inoperable or missing controls such as:
    - Front or rear brakes
    - Sticky throttle
    - Engine cut-off switch
- Introduce Instructors.
- Read to students: "Today we are going to build upon the skills needed for basic motorcycle control and work on some more advanced techniques in cornering, braking, and swerving."
- Read Range Rules, opposite page.
- Review hand signals:
  - Start engine
  - Stop engine
  - Speed up
  - Slow down
  - Stop/Stop here
  - Staging
  - Referee's whistle—all stop
  - Neutral
  - Cover clutch
  - Uncover brake
- Identify range riding area.
  - Small cones define outside perimeter of range. Remain within 10' of this perimeter at all times. Do not ride off the range.
- Students choosing to use **STAR** motorcycles should be assigned bikes so that they can reach the ground with both feet when seated.
- Write student name on front number plate.

# Motorcycle Orientation

5 MINUTES

## RANGE PREP

*Range pre-set for Exercise 1. Conduct Motorcycle Orientation with motorcycles in staging.*

### **OBJECTIVE:**

You will locate and operate the controls and start and stop the engine.

**DIRECTIONS:** *(Have students perform each activity as you read the directions)*

Mount your motorcycle

Locate and operate the five primary controls  
*(Operate each control 2-3 times)*

- Throttle - roll on/off
- Clutch - squeeze/ease
- Front brake lever - squeeze/release/back to throttle
- Rear brake pedal - press/release
- Shift lever - lift up/press down

Locate and operate the other controls

- Engine cut-off switch
- Start button
- Choke
- Ignition switch

Starting and stopping the engine

*(Start and stop the engine 1-2 times)*

- Squeeze in the clutch and start the engine
- Stop the engine using the engine cut-off switch, then turn off the ignition

### **EVALUATE UNDERSTANDING: NONE**

### **DEBRIEF:**

- After using the front brake, what do you do with your right hand?  
*(Back to throttle)*
- Why do we stop the engine with the cut-off switch?  
*(Keep hands on grips)*

### **WHAT TO COACH:**

1. Smooth and proper operation of controls.
2. Starting and stopping procedure.

# Motorcycle Orientation

## ORIENTATION GUIDELINES:

- Allow the students to find the controls and operate them – coach only as needed.
- Evaluate student “fit” to the motorcycle. They should be able to reach the ground with both feet and reach the hand controls with arms slightly bent. Switch riders on program-owned bikes if needed.

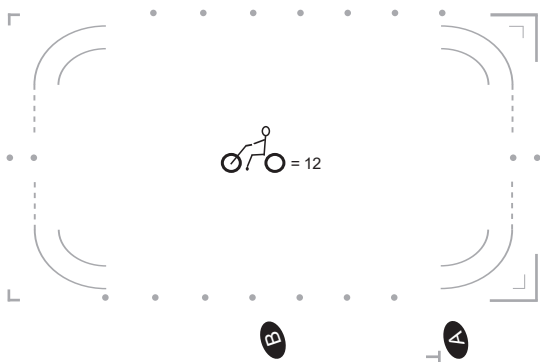
## RANGE CONTROL TIPS:

- Before they start their engines, position yourself bladed toward the students so that you can identify any problems and catch anyone who may have put the motorcycle in gear.

## TIME/REPETITIONS:

- Run this orientation for no more than 5 minutes.

## RANGE/CONE LAYOUT:



## STAGING:

Dismount for Exercise 1 directions. Leave motorcycles in Staging.

**RANGE  
PREP**

● - 18

*Set 20' weave cones and 2 cones for each gate. Motorcycles in staging.*

**OBJECTIVE:**

You will ride around the perimeter and weave between the cones.

**DIRECTIONS:**

- Begin riding around the perimeter to the left in 2<sup>nd</sup> gear.
- When you reach the far side of the range, begin weaving between the cones.
- Ride to the right of the first cone, left of the second cone, and so on.
- Ride through the gates (*point out*) on the end of the range.
- Keep your head and eyes up, looking where you want to go, not down at the cones.

**EVALUATE UNDERSTANDING:**

- What will help you balance the motorcycle in the weave?  
(*Speed, head and eyes*)
- How do you make the motorcycle lean?  
(*Press on the handgrip*)
- Do you have any questions?

**DEBRIEF:**

- Was it easier going faster or slower?  
(*Faster*)
- What happened if you looked down at the cones?  
(*Went toward cones/hit cones*)

**WHAT TO COACH:**

1. Speed for stability. Coach only if they are wobbling/unstable.
2. Head and eyes up.

# Exercise 1

## EXERCISE GUIDELINES:

- Coach as needed.
- Allow students to discover countersteering on their own.
- One of the objectives of this exercise is to provide the students with an opportunity to warm up for the day with a fun exercise. Let them ride!

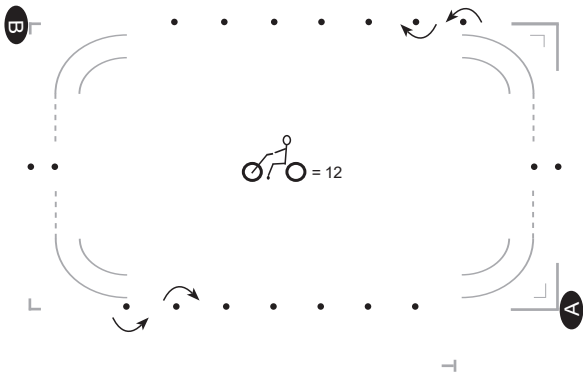
## RANGE CONTROL TIPS:

- Keep speeds under 15 mph.
- Counsel any student who is unable to complete this exercise safely to take a Basic I Course and dismiss from class. Advise student to contact **STAR** office on the next business day. Make note of this on Course Roster/Course Report.

## TIME/REPETITIONS:

- Run this drill for 10 minutes.

## RANGE/CONE LAYOUT:



## STAGING:

Instructor B give staging signal to riders in motion.

**RANGE  
PREP**

★ - 10

Strike previous setup. Set start gates (2) and first turning gate. Set exit gate for Part B.

**OBJECTIVE:**

You will cause the motorcycle to lean by pressing forward on the handgrip in the direction of the turn.

**DIRECTIONS:****PART A: Riding a Large Arc**

- Ride around the perimeter. Line up at the start gate on the near side (*point out*).
- Approach the cones in 2<sup>nd</sup> gear at about 15 mph.
- As you pass between the turning cue cones (*point out*), press left to initiate a left turn.
- Hold the press to make a large u-turn and get back in line.
- Do not decelerate or use your brakes before or in the turn.
- Proceed when the rider ahead reaches the turning cue cones.

**PART B: Riding Through the Gate**

- When directed, repeat to the right, riding through the exit gate (*point out*).

**STATIC PRACTICE: LOOK AND PRESS (PG 37)****EVALUATE UNDERSTANDING:**

- How do you initiate a lean?  
(*Pressing forward on the handgrip*)
- What helps your directional control?  
(*Looking through the turn*)
- When will you proceed?  
(*When the rider ahead clears the cue cones*)
- Do you have any questions?

**DEBRIEF:**

- Did you need to press the handlebar down or forward?  
(*Forward*)
- What happened if you released your press in the turn?  
(*Motorcycle straightened out of the turn*)

**WHAT TO COACH:**

1. Press on handgrip.
2. Head and eyes.



## EXERCISE GUIDELINES:

- Keep students moving. Students learn best with lots of practice.
- Part A: Instructor A coaches each student PRESS for several passes then coaches PRESS as needed. Instructor B coaches as needed.
- Part B: Students ride through the exit pathway (60'). Instructor A coaches LOOK/PRESS as needed. Instructor B coaches as needed.
- Coach riders to attain sufficient speed to experience countersteering. Target speed - 15 mph.

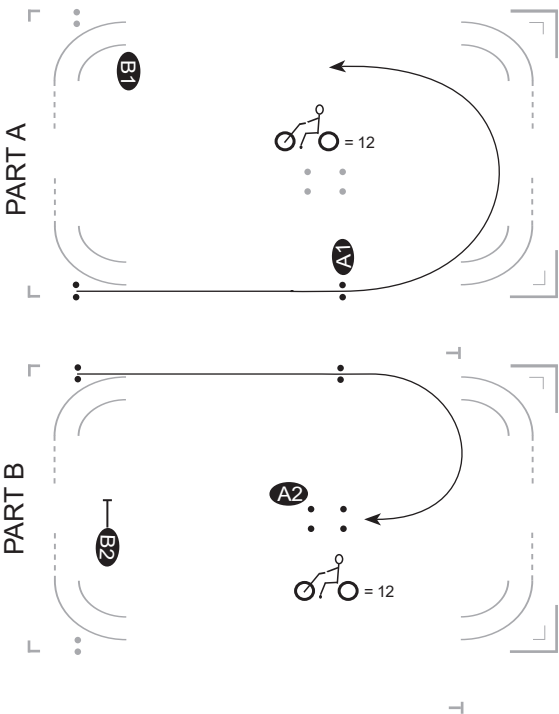
## RANGE CONTROL TIPS:

- Maintain rider spacing to ensure safety and facilitate coaching.
- When changing from Part A to Part B, set second turning gate cones. Move all students together in an S-turn to the next start point and remind them to ride through the exit gate.

## TIME/REPETITIONS:

- At 15 minutes move to Part B.

## RANGE/CONE LAYOUT:



## STAGING:

Direct lead rider to make a wide S-turn and return to staging.

## Exercise 3

30 MINUTES

# RIDING THROUGH CURVES

RANGE  
PREP

*Strike previous setup. Set 6 cones each to mark two curves.*

● -12

### OBJECTIVE:

You will ride through the curves demonstrating proper cornering technique.

### DIRECTIONS:

- Begin riding around the perimeter to the left in 2<sup>nd</sup> gear through the two marked curves (*point out*).
- Speed up to 14-18 mph on the long sides of the range.
- As you approach each curve, use both brakes to slow to a suitable entry speed, then turn your head and look through the turn.
- Apply throttle slightly before you lean, then press on the left handgrip to initiate your turn.
- Complete the curve and repeat the technique at the opposite end of the range.
- After both groups have ridden to the left, you will repeat the exercise to the right. Continue to practice proper cornering technique and entering from the outside of the turn.

### DEMONSTRATION:

*(Demo two laps to the left. Approach speed, 14-18 mph)*

As this exercise is demonstrated, watch for:

- When the SLOW is completed.
- When the LOOK and ROLL begin.

### EVALUATE UNDERSTANDING:

- When should you begin rolling on the throttle?  
*(Before the turn)*
- What should you do if you are running wide in the turn?  
*(Press more to lean more – maintain throttle)*
- Do you have any questions?

### DEBRIEF:

- Was it smoother starting the roll-on before the turn or in the turn?  
*(Before)*
- What is the best position for entering a curve?  
*(Outside)*

### WHAT TO COACH:

1. SLOW (both brakes) and ROLL before the turn (steady throttle is OK).
2. LOOK through the turn.

## EXERCISE GUIDELINES:

- Coach as needed.
- To the left, Instructor A coaches “SLOW/ROLL.” Instructor B coaches “LOOK TO YOUR NEXT TURN” or “ROLL” on same corner. Observe entire range, but allow students to ride opposite corner and find their own line without coaching.
- After both groups have ridden left, one Instructor moves curve cones while the other Instructor reminds riders to enter the curve from the outside.
- To the right, Instructor A coaches “LOOK TO YOUR NEXT TURN” or “ROLL” as needed. Instructor B coaches students in staging. Observe and help Instr. A if needed.
- For classes with 6 or fewer students, you must still run this exercise in two groups.

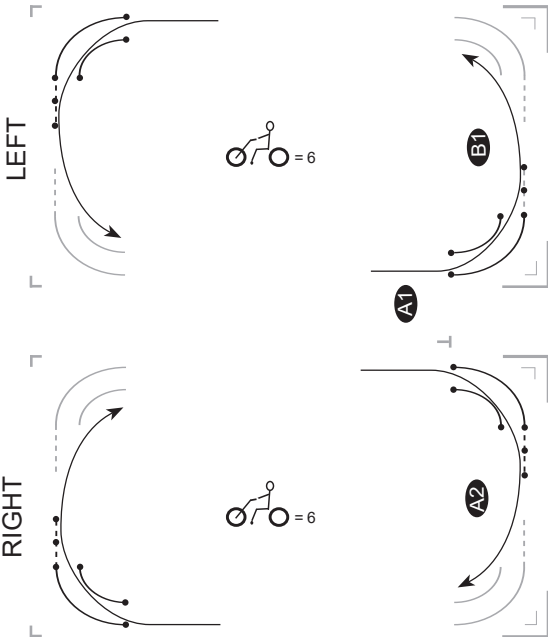
## RANGE CONTROL TIPS:

- Give “SLOW” signal early enough for students to complete transitions before the curve.
- Instructor B give stage signal in motion (left only).
- Use R3 reversal (pg 30) from staging (right).

## TIME/REPETITIONS:

- Run each group 6 minutes in each direction.

## RANGE/CONE LAYOUT:



## STAGING:

Instructor A - stop riders on perimeter. Direct lead rider to make a wide S-turn and return to staging.

## BREAK 15 MINUTES

## Exercise 4

20 MINUTES

# LOW SPEED TURNING AND CHANGING LANES

### RANGE PREP

- ☪ - 18
- ▲ - 2
- - 10

Strike previous setup. Set offset weave (7), sharp turns (5), 'gates' (2) on both sides, large lane change cones (2).

### OBJECTIVE:

You will balance and control the motorcycle in slow speed maneuvers and make safe lane changes.

### DIRECTIONS:

- Begin by riding up the center of the range. At the end, turn left or right. Ride between the two gate cones (*point out*) and down the perimeter.
- Ride to the right of the first cone, left of the second, and continue weaving past all the cones.
- After completing the weave, ride through the sharp turn (*point out*).
- After exiting the sharp turn, enter the lane closest to you. When you reach the large center cones, make a safe lane change using signals, mirrors, and over-the-shoulder head checks.
- Remain in your new lane.
- At the end of your lane, turn left if in the left lane or right if in the right lane and repeat the cone weave and the sharp turn.
- Continue the circuit by alternating sides.
- You may select 1<sup>st</sup> or 2<sup>nd</sup> gear.

**DEMONSTRATION:** (*Demo one complete lap. Speed, fast enough to show balance and control*)

As this exercise is demonstrated, watch for:

- Adequate speed for balance.
- Using the friction zone to control speed.
- Head and eyes for directional control.

### EVALUATE UNDERSTANDING:

- What helps you balance the motorcycle?  
(*Speed, head and eyes*)
- What guides you through a sharp turn?  
(*Looking through the turn*)
- How do you control speed when riding slowly?  
(*Use the friction zone*)
- Do you have any questions?

### DEBRIEF:

- Was it easier going faster or slower?  
(*Faster*)
- What helped you get through the sharp turn?  
(*Turning head and looking through the turn*)

### WHAT TO COACH:

1. Head and eyes for directional control.
2. Friction zone to control speed.
3. Safe lane changes.

## Exercise 4

### EXERCISE GUIDELINES:

- All coaching in this exercise is as needed.
- The objective is to teach the students how to maneuver the motorcycle at slow speeds in the “real world” by using head and eye placement and the friction zone. It is not about teaching them how to ride *this* cone weave.

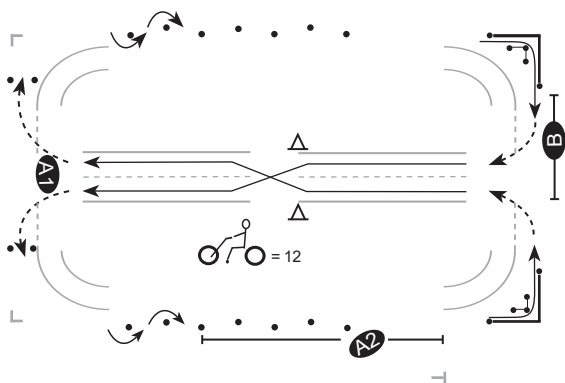
### RANGE CONTROL TIPS:

- Instructor A helps the students get started by sending riders from the center to alternating sides.
- Instructor B sends from staging.
- Both instructors have coaching objectives:  
Instructor A coaches lane changes (A1) and the offset weave (A2).  
Instructor B coaches the sharp turn, using “SLOW/LOOK” or “LOOK AT ME”.

### TIME/REPETITIONS:

- Run this exercise for 25 minutes.
- For first 5 minutes, Instructor A coaches lane changes from the A1 position.
- After 5 minutes, Instructor A moves to the A2 position.

### RANGE/CONE LAYOUT:



### STAGING:

Instructor A - stop students in the center of the range in one line. Instructor B - move to staging after the far side empties. Instructor A send students to staging.

NOTE: Instructor B can direct riders to ride single file up the middle to Instructor A.

RANGE  
PREP

▲ - 4

*Strike previous setup. Set 4 large cones for start and stop cue cone locations. Place blank side to face approaching riders.*

**OBJECTIVE:**

You will stop the motorcycle quickly.

**DIRECTIONS:**

- Ride towards the large cue cone (*point out*) and upshift into 2<sup>nd</sup> gear to 15 mph.
- Maintain a steady speed.
- When your front tire reaches the large cone, stop quickly, downshifting to 1<sup>st</sup> gear. Do not start braking until reaching the cue cone.
- After stopping, ride up the center of the range in single file and get in the shorter line.
- Remember to brake smoothly as you work on quicker stops.
- When signaled (*show signal*), you may speed up to 20 mph and continue to practice.

**EVALUATE UNDERSTANDING:**

- How do you use the front brake for a quick stop?  
(*Smoothly with increasing pressure*)
- What will help you stop in a straight line?  
(*Head and eyes up*)
- When will you begin braking?  
(*When the front tire reaches the cue cone*)
- Do you have any questions?

**DEBRIEF:**

- What happened if you grabbed the front brake?  
(*Abrupt, jerky, skid*)
- What is the key to a quick stop?  
(*Smooth increasing pressure on the front brake*)

**WHAT TO COACH:**

1. Smooth, increasing squeeze on the front brake.
2. Light pressure on rear.
3. Head and eyes up during stop.

# Exercise 5

## EXERCISE GUIDELINES:

- Coach as needed.
- Gradually coach the students to use more front brake pressure. The **minimum** standards are:  
15 mph – 13 feet; 20 mph – 23 feet
- The goal is to coach them to maximum braking. Watch for increasing fork compression and shorter stopping distances to indicate improved braking performance. The front wheel may 'howl' or 'chirp' indicating impending skid.
- Let them know when they have achieved maximum braking (we do not want them to exceed).

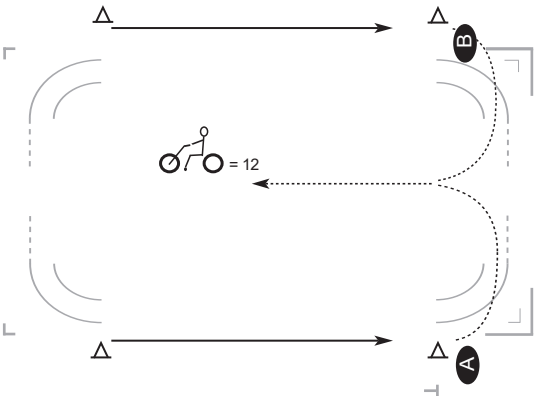
## RANGE CONTROL TIPS:

- Send 1<sup>st</sup> 6 up the center to line up to the right of the far start cone; send 2<sup>nd</sup> 6 up the center to line up to the left of the staging side start cone.
- Stand on the brake side of the braking chutes to evaluate brake application.

## TIME/REPETITIONS:

- After about 15 minutes, give the 20 mph signal. Students have the choice of 15 or 20 mph.

## RANGE/CONE LAYOUT:



## \*\*\*IF THE STUDENT SKIDS EITHER TIRE:

- Remind them to release the brake immediately, then reapply.

## STAGING:

Stop calling riders. Direct group nearest staging to return to staging. Direct other group to make a wide S-turn and return to staging.

## BREAK 15 MINUTES

RANGE  
PREP

▲ - 4

● - 4

*Strike previous setup. Set start cones and curve entrance/exit cones.*

**OBJECTIVE:**

You will ride a curved path. On the instructor's signal you will straighten the motorcycle then stop quickly.

**DIRECTIONS:**

- Begin riding around the large painted arc (*point out*) to the left in 2<sup>nd</sup> gear.
- When signaled (*show signal*), straighten the motorcycle, and then come to a rapid stop in a straight line.
- After stopping, move to the next starting point and continue the exercise.

**DEMONSTRATION:** (*Demo one complete lap to the left. Approach speed, 12-14 mph. Ride about 2/3 of the way through the arc then straighten and brake.*)

As this exercise is demonstrated, watch for:

- Separation of turning and braking.
- Head and eyes on new path when motorcycle straightens.

**EVALUATE UNDERSTANDING:**

- Why is it important to straighten the motorcycle first?  
(*Less traction is available for braking when in a lean*)
- How do you straighten the motorcycle?  
(*Press on the outside handgrip*)
- When will you straighten then brake?  
(*On instructor's signal*)
- Do you have any questions?

**DEBRIEF:**

- What would happen if you over-applied the brakes while leaned over?  
(*Lose balance, skid, fall over*)
- When you straighten the motorcycle, where should you look?  
(*Straight ahead to your new path - not through the turn*)

**WHAT TO COACH:**

1. Separating turning and braking.
2. Stopping quickly.
3. Head and eyes on new path.



## EXERCISE GUIDELINES:

- Coach as needed.
- Coach the students to straighten the motorcycle before braking.
- To the left, concentrate on separating turning and braking.
- To the right, continue to coach separating, but emphasize stopping quickly.

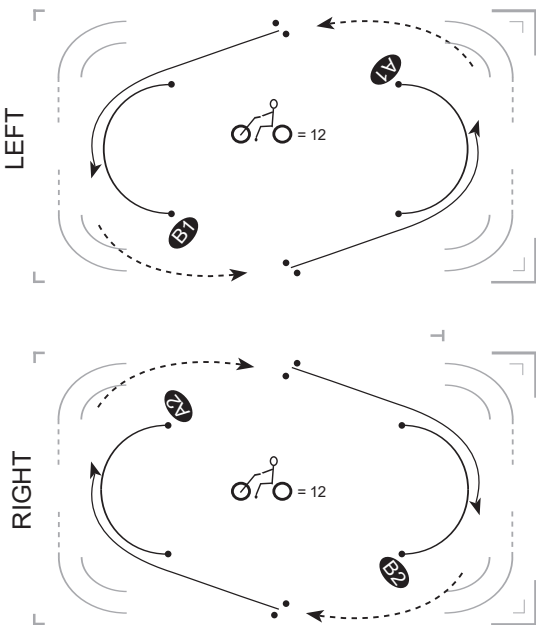
## RANGE CONTROL TIPS:

- Send 1<sup>st</sup> 6 all the way around the range to line up at staging side cones. Send 2<sup>nd</sup> 6 to line up at far side cones.
- Position yourself at the end of the painted arc so they are looking at you for the signal.
- Use R6 reversal (pg 36) to change direction to the right.

## TIME/REPETITIONS:

- Run this drill for 5-6 minutes each direction (ensure riders ride each side, each direction at least once).

## RANGE/CONE LAYOUT:



## STAGING:

Return to staging by directing group nearest staging to make a wide U-turn and return to staging, then direct the other group to make a wide S-turn and return to staging.

**RANGE  
PREP**

*Strike previous setup. Set 6 cones on each curve.*

● - 12

**OBJECTIVE:**

You will ride through faster curves demonstrating proper throttle application and cornering technique.

**DIRECTIONS:**

- Begin riding around the perimeter to the left in 2<sup>nd</sup> gear through the two marked curves.
- Speed up to 15-20 mph on the long sides of the range.
- As you approach the curve, use both brakes to slow to a suitable entry speed and look through the turn.
- Apply steady or slightly increasing throttle before you reach the curve entrance. Maintain throttle application through the curve.
- Complete the curve and repeat the technique at the opposite end of the range.
- Remember to complete all braking and apply the throttle before the curve entrance.
- Maintain a safe following distance.

**EVALUATE UNDERSTANDING:**

- When will you apply the throttle for the curve?  
*(Before reaching the curve)*
- How much throttle should be applied in a curve?  
*(Steady or slightly increasing)*
- Do you have any questions?

**DEBRIEF:**

- What happened if you were late turning your head or looked at a cone?  
*(Curve path was wide/drawn towards cone)*
- What helped make your turns smooth?  
*(Braking completed and throttle applied early; early head turn)*

**WHAT TO COACH:**

1. Complete braking and throttle application before curve.
2. Head and eyes for directional control.
3. Smooth and steady throttle application through entire curve.

## EXERCISE GUIDELINES:

- Coach as needed.
- Coach students to achieve a steady throttle or slightly increasing roll-on. Discourage excessive throttle use.
- Roll-on should begin before the curve entrance and be applied throughout the entire curve.
- For classes with 6 or fewer students, you must still run this exercise in two groups.

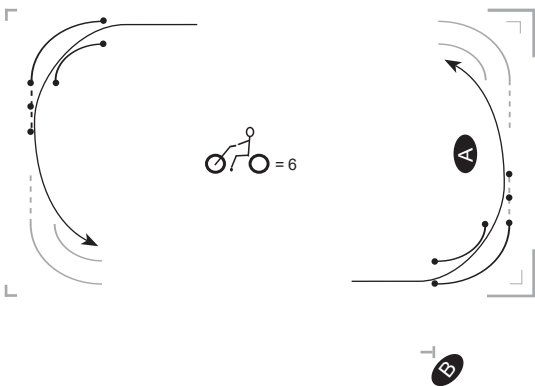
## RANGE CONTROL TIPS:

- Instructor A coaches “ROLL” and “LOOK TO YOUR NEXT TURN” as necessary.
- Do not coach “look to your next turn” before the rider reaches the entrance to the coached curve.
- Instructor B coaches students in staging to identify throttle timing. Observe and help Instructor A, if needed. Coach riders to target speed as needed.
- Instructor in staging can help keep track of time.

## TIME/REPETITIONS:

- Run each group 6 minutes to the left only.

## RANGE/CONE LAYOUT:



## STAGING:

Instructor A - give staging signal to riders in motion.  
Return to staging.

RANGE  
PREP★ - 30  
▲ - 2

*Strike previous setup. Set the swerve obstacle lines and gates (57' & 25') and large pivot cones with "SLOW" facing approaching riders.*

**OBJECTIVE:**

You will swerve to avoid an obstacle in your path.

**DIRECTIONS:**

- Line up at the start gates (*point out*).
- Ride toward the swerve gate and obstacle (*point out*) at 12-14 mph.
- After passing through the 2<sup>nd</sup> set of cones press forward on the appropriate handgrip to swerve into the escape lane.
- Press on the opposite handgrip to straighten the motorcycle in the lane.
- After straightening, slow before rounding the pivot cone. Be prepared to stop if directed.
- Move to the next start gate and repeat the swerve on the other side. You may go as soon as the rider ahead clears the first set of cones.

**DEMONSTRATION:**

*(Demo one lap, 12-14 mph)*

As this exercise is demonstrated, watch for:

- How the motorcycle moves and rider remains upright.
- How the rider separates swerving and braking.

**STATIC PRACTICE: PRESS-PRESS (PG 37)****EVALUATE UNDERSTANDING:**

- How will you initiate a swerve?  
*(Press forward on the handgrip)*
- What do you need to do after swerving?  
*(Slow)*
- How long do you pause at the start gate?  
*(Just until the rider ahead clears the first cones)*
- Do you have any questions?

**DEBRIEF:**

- How long did you need to hold the first press?  
*(Long enough to clear the obstacle)*
- Why do we always separate braking and swerving?  
*(Maintain traction reserve)*

**WHAT TO COACH:**

1. Press to lean/press to straighten.
2. Does not brake while swerving.
3. Posture for swerving.

## EXERCISE GUIDELINES:

- Coach as needed.
- Part B: Swerving from 13'. Move forward and stop riders approaching the swerve area. Move swerve gates from 25' to 13'. Resume exercise.
- Students found braking while swerving **MUST** be corrected.

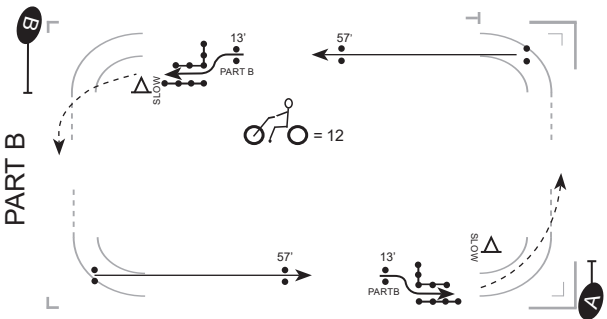
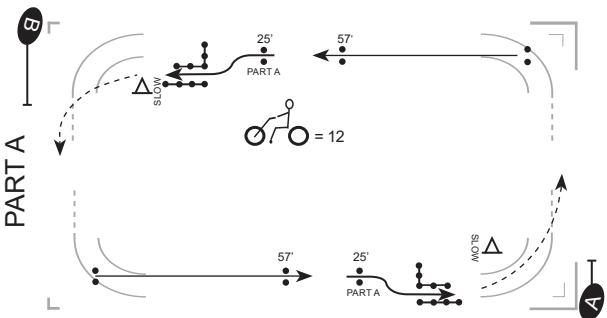
## RANGE CONTROL TIPS:

- Send 1<sup>st</sup> 6 all the way around to line up at staging side cones. Send 2<sup>nd</sup> 6 to far side cones.
- Position yourself well behind the swerve box (you should be back far enough so that you are standing on the short side of the perimeter). This allows you to stop students if they need coaching.
- If individual riders must be pulled out for coaching, move them outside the path of travel.
- Both instructors stop riders then send to staging.

## TIME/REPETITIONS:

- At 13 minutes move to Part B.

## RANGE/CONE LAYOUT:



## STAGING:

Stop both lines. Direct group nearest staging to return to staging then direct other group to return to staging.

## CONDUCT DAY 2 RANGE REVIEW (NEXT PG)

# RANGE REVIEW

5 MINUTES

**“LET’S TAKE A FEW MINUTES AND REVIEW WHAT WE HAVE DONE AND LEARNED ON THE RANGE TODAY.”**

## **STABILITY:**

- What are some of the things that helped you to be more stable and balanced while riding?  
*(Speed - riding faster is more stable)*  
*(Proper posture - head and eyes up; knees on the tank; arms slightly bent)*  
*(Smooth clutch release)*  
*(Smooth operation of controls)*
- What are some of the things that gave you confidence while riding?  
*(Speed)*  
*(Head and eyes up)*
- Since going faster was easier, what helped you control the motorcycle at very low speed?  
*(Using the clutch/friction zone to control how much power goes to the rear wheel; also called “riding the clutch”)*  
*(Keeping head and eyes up)*

## **MAXIMUM BRAKING:**

- What is the key to stopping in the shortest distance?  
*(Smoothly increasing pressure on the front brake as the weight transfers forward)*  
*(Light to lighter pressure on the rear brake)*  
*(Head and eyes up)*
- What do you do if you get a front wheel skid?  
*(Immediately release the front brake and reapply)*
- How should you apply the rear brake when stopping quickly?  
*(Light to lighter pressure)*
- What do you do if you get a rear wheel skid?  
*(Immediately release the rear brake and reapply)*

**TURNING:**

- What do we do before we enter a turn?  
*(Slow with the brakes)*  
*(Look through the turn)*  
*(Start to roll on the throttle to stabilize the motorcycle)*
  
- When should you start to apply the throttle (the “roll”) when cornering?  
*(Before you start to lean - the steady roll on of the throttle stabilizes the suspension of the motorcycle)*
  
- What should you do if you start to run wide in a turn?  
*(Press forward MORE on the handgrip)*  
*(Keep the throttle applied - constant speed)*  
*(Avoid abrupt brake application)*  
*(Keep your eyes looking all the way to the exit of the turn)*
  
- What are the primary causes of motorcyclists running wide in turns?  
*(Failure to look far enough through the turn - also called “overriding your sight distance”)*  
*(Ineffective pressing/countersteering)*  
*(Excessive speed)*

**“WHAT QUESTIONS OR OBSERVATIONS DO YOU HAVE?”**

**BREAK - 15 MINUTES**

# BRT Skills Evaluation 1

## SWERVE

### RANGE PREP

- - 5
- ▼ - 9
- ▲ - 1

*Strike far side swerve, pivot cone and end gates. Set start cone in the center of the lane lines. Set cone weave (7), sharp turn (5) and 'gate' (2) on far side. Stopwatch, clipboard and score sheet required.*

*Assemble class in staging area to assign testing order and read instructions for Evaluation 1.*

### READ TO CLASS:

We will begin a Skills Evaluation that consists of five exercises that evaluate your ability to perform basic vehicle control, riding judgment, and hazard-response skills that have been taught and practiced in this course. The test may be terminated due to falling or dropping the motorcycle or committing an unsafe act. You may stop the test for any reason, but you must complete the entire test to pass it. Do you have any questions?

### OBJECTIVE:

You will execute a proper swerve maneuver.

### DIRECTIONS:

1. Line up next to the large cones in the center of the range (*point out*).
2. One at a time and on signal, proceed to the start gate (*point out*) and ride toward the swerve gates and obstacle (*point out*) at 15 mph.
3. Ride between the last set of cones (*point out*), then swerve to the right. Stay within the boundaries. Do not brake while swerving.
4. Slow and turn left around the pivot cone and get back in line.
5. You will lose points for braking during the swerve, touching or crossing any line or cone, or not obtaining proper speed.
6. One re-ride may be given for specific time or path of travel errors.
7. Do you have any questions?

Direct students to ride up the center of the range and line up next to the large cones (cones can be placed as a "gate" or side-by-side but never stacked).

NOTE: Some students may stop at the start gate before proceeding to the swerve; others may not. Either is OK.



**SCORING****POINTS****Once      More**

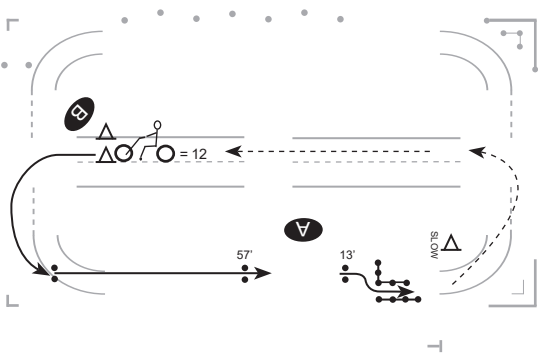
1. Swerve		
a. Brakes during swerve maneuver		-5
b. Touches any line or cone	-3	-5
c. Tire(s) crosses obstacle or boundary line	-5	-10
d. Does not attain proper speed, 2 <sup>nd</sup> attempt		-10
e. Swerves prior to gate cones, 2 <sup>nd</sup> attempt		-10
Maximum Penalty Points Allowed		-10

**NOTE:**

- Score if any part of the motorcycle touches a cone, line or boundary.
- A second attempt is authorized in the swerve maneuver only under the following conditions:
  - speed too fast – under 1.66 seconds with points violation
  - speed too slow – over 2.51 seconds
  - swerves prior to gate cones
- Brakes during swerve – watch for brake light from the time the front tire reaches 13' swerve gate until rear tire reaches barrier line.
- Drop bike (21 pts) - front tire enters the timing zone to rear tire clears pivot cone.

A – Position for timing and to score swerve

B – Position to line up and direct traffic as needed



## BRT Skills Evaluation 2

### OFFSET WEAVE AND SHARP TURN

RANGE  
PREP

*No cone movements.*

#### **OBJECTIVE:**

You will ride through a cone weave and execute a proper sharp turn.

#### **DIRECTIONS:**

1. One at a time and on signal, begin riding toward the end of the range. At the end, turn right, ride between the two gate cones (*point out*) and down the perimeter.
2. Ride to the right of the first cone, left of the second, and continue weaving past all the cones without hitting or skipping a cone or putting your foot down.
3. After completing the weave, ride toward the sharp turn (*point out*).
4. Turn your head and execute a tight turn without hitting a boundary or cone or putting your foot down.
5. After completing the maneuver, ride up the center of the range and get back in line.
6. You will lose points in the cone weave for hitting a cone, skipping a cone, or putting your foot down.
7. You will lose points in the sharp turn for not turning your head and looking through the turn, touching or crossing any line or cone, or putting a foot down.
8. There are no re-rides for this evaluation.
9. Do you have any questions?

NOTE: Some students may stop at the gate cones before proceeding to the cone weave; others may not. Either is OK.

**SCORING**

**POINTS**  
**Once More**

1. Offset Cone Weave		
a. Hits cone	-3	-5
b. Skips cone	-3	-5
c. Puts foot down	-1	-3

Maximum Penalty Points Allowed -10

2. Sharp turn		
a. Does not turn head and look through turn	-5	-5
b. Touches boundary line or cone	-3	-5
c. Puts foot down	-1	-3
d. Tire crosses boundary line or cone	-10	-10

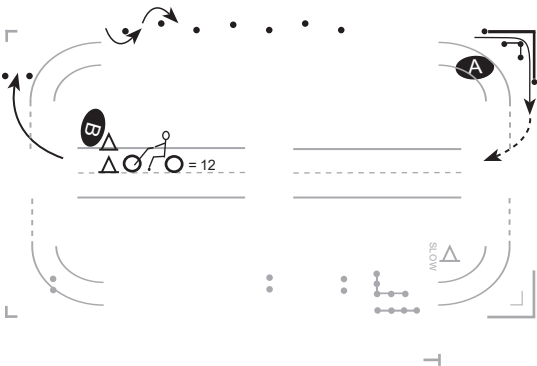
Maximum Penalty Points Allowed -10

**NOTE:**

1. Score if any part of the motorcycle touches a cone, line or boundary.
2. A proper head turn includes head turned and eyes looking all the way through the turn.
  - a. Head turn does not have to be exaggerated or instructor demo quality.
  - b. Looking halfway through the turn, looking down, turning head but not looking or looking but not turning head are all scorable violations.
3. Drop bike (21 pts) - front tire passes the gate to rear tire clears all sharp turn boundary lines.

A – Position to score

B – Position to line up



# BRT Skills Evaluation 3

## CORNERING PROFICIENCY

RANGE  
PREP

*Strike previous setup. Set 2 curves and one pivot cone.*

▲ - 2

● - 12

### OBJECTIVE:

You will demonstrate cornering proficiency.

### DIRECTIONS:

1. One at a time and on signal, begin riding toward the end of the range. Turn right, round the pivot cone (*point out*) and ride toward the first marked curve, upshifting to 2<sup>nd</sup> gear.
2. Continue riding around the range to the 2<sup>nd</sup> marked curve (*point out*).
3. Stabilize your speed between 15-20 mph.
4. Use both brakes to slow to a suitable entry speed.
5. Turn your head and apply steady or slightly increasing throttle through the curve. Ride through the curve as rapidly as you safely can, staying within the boundaries.
6. Continue riding around the perimeter of the range and get back in line.
7. You will lose points for not using both brakes to slow prior to the turn, not turning your head and looking through the turn, decelerating in the curve, touching or crossing any line or cone, or not obtaining proper speed.
8. One re-ride may be given for a clear and obvious misunderstanding of path of travel only.
9. Do you have any questions?

## SCORING

## POINTS

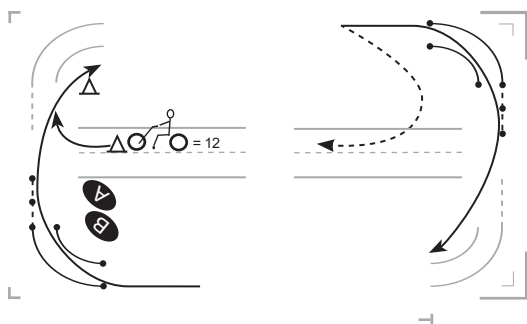
1. Does not use both brakes to slow	-5
2. Does not turn head to look through turn	-5
3. Decelerates in curve	-3
4. Touches boundary line or cone	-3 -5
5. Tire crosses boundary line	-5 -10
6. Turns 1.80 – 1.90	-3
7. Turns 1.91 or over	-5
Maximum Penalty Points Allowed	-10

### NOTE:

1. Score if any part of the motorcycle touches a cone, line, or boundary.
2. Riders not meeting the speed requirements are not given a second chance.
3. Timing is from when the front tire enters the curve (painted line) to when the front tire exits the curve (end of solid painted line).
4. The boundary includes the 20' past the end of the painted curve.
5. Deceleration includes any loss of speed while in the painted curve (late roll-on, clutch in or rolling off the throttle). Watch for fork compression and extension.
6. A proper head turn includes head turned and eyes looking all the way through the turn.
  - a. Head turn does not have to be exaggerated or instructor demo quality.
  - b. Looking halfway through the turn, looking down, turning head but not looking or looking but not turning head are all scorable violations.
7. Drop bike (21 pts) - front tire at 20' before curve entrance to rear tire past third outside curve cone.

A – Position to evaluate

B – Timing position



# BRT Skills Evaluation 4

## QUICK STOP

### RANGE PREP

- ▲ - 3
- - 2

*Strike previous setup. Set large cones for start/stop points (same as Exercise 14) and rotate to blank side. Set the braking timing zone (2).*

### OBJECTIVE:

You will stop the motorcycle as quickly and safely as possible.

### DIRECTIONS:

1. One at a time and on signal, ride toward the start cone (*point out*) and stopping area at about 15 mph in 2<sup>nd</sup> gear.
2. Maintain your speed.
3. When your front tire reaches the large cue cone (*point out*), stop in the shortest distance possible, downshifting to 1<sup>st</sup> gear.
4. Remain stopped until your distance is measured, then return up the center of the range and get back in line.
5. You will lose points for not using both brakes, not downshifting to first gear, stopping beyond the standard for your speed, or stopping too soon on a second attempt.
6. One re-ride may be given for not achieving target speed or for braking before the cone on the first attempt.
7. Do you have any questions?

NOTE: Some students may stop at the start gate before proceeding to the stopping area; others may not. Either is OK.

### TIMING CHART: 44-FOOT TIMING ZONE

SECONDS	STANDARD (FEET)
1.20 - 1.24	34
1.25 - 1.29	32
1.30 - 1.35	30
1.36 - 1.42	27
1.43 - 1.49	25
1.50 - 1.57	23
1.58 - 1.66	20
1.67 - 1.76	18
1.77 - 1.87	16
1.88 - 1.99	14
2.00 - 2.14	13
2.15 - 2.30	11
2.31 - 2.50	10
2.51	9

**SCORING****POINTS**

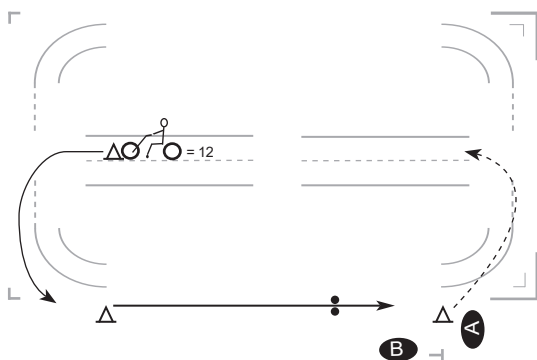
1. Does not use both brakes	-5
2. Does not downshift to 1 <sup>st</sup> gear	-1
3. Stops beyond standard (per foot)	-1
4. Does not attain proper speed, 2 <sup>nd</sup> attempt	-10
5. Begins braking in timing zone, 2 <sup>nd</sup> attempt	-10
Maximum Penalty Points Allowed	-10

**NOTE:**

- A second attempt is authorized in the quick stop maneuver only under the following conditions:
  - Speed too fast – under 1.20 seconds and stops beyond 34' standard
  - Speed too slow – over 2.51 seconds
  - Braking in the timing zone (brake light or obvious and significant fork compression more than 2 feet before reaching the end of the timing zone - a slight roll-off is not considered braking)
- Riders who ride too fast (under 1.20 seconds) and stop within the standard (34' or less) do not get a second attempt.
- Score stopping distance at the leading edge of the front tire (if in between marks, score the next highest number).
- Drop bike (21 pts) - front tire passes timing cones until motorcycle comes to full stop or rider loses control at full stop in the braking chute.

A – Position to score

B – Timing position

**STAGING:**

Have students walk the motorcycles to the storage area (or leave bikes in staging if another range group is to follow).

## **GRADUATION ON THE RANGE (ABOUT 45-60 SECONDS PER STUDENT)**

- Passed or did not pass.
- Identify strengths in their riding skills.
- Identify areas in which they need more practice.
- If students want more specifics, ask them to wait until class is dismissed.
- If the student did not pass (and qualifies for a retest), inform them that the office will contact them to discuss retesting options.
- Identify appropriate 'next step' in their training.

*Instructor Note: Identify possible candidates*

- Encourage participation.
- Provide handout with web resource.
- ID potential candidates on course roster.

## **CONDUCT GRADUATION**

- Identify Completion Status.
- Review and distribute "What's Next" handout.
- Thank students for participating.

## **DISMISS**

## **IF THEY STILL HAVE TO FINISH CLASSROOM - SUMMER TWO-DAY CLASSES**

### **(ABOUT 45-60 SECONDS PER STUDENT)**

- Passed or did not pass.
- Identify strengths in their riding skills.
- Identify areas in which they need more practice.
- If the student wants more specifics, ask them to wait until class is dismissed.
- If the student did not pass, encourage them to complete the classroom and knowledge test. They are eligible for a re-test only if they complete the entire class.
- Identify appropriate 'next step' in their training.
- Dismiss for lunch.





# Range Guide Legend and Markings

## Range Guide Legend

• - Small cones (2")

△ - Large cones (18")

 - Large cone with sign orientation

 = 12 - Max. number of students at one time

→ - Primary Path of Travel

- - - - - → - Secondary/Return Path of Travel

**A** - Instructor position: Where to stand &  
**B** direction to face

## Range Markings

● - Ex. 1-8 Small cone locations

◐ - Ex. 4 Small cone locations

★ - Ex. 2, 8 Small cone locations

▲ - Ex. 6 Small cone locations

▲ - Large cone locations

# Range Principles

## RANGE CARDS

- Read the **Exercise Title, Objectives,** and **Directions** for each exercise. Do not make additions.
- Directions and Debrief questions are read with students off the bikes and gathered together.
- Limit verbal directions for reversals to what is in quotation marks in Reversal Procedures. If no verbal instruction is printed, none is required.

## DEMOS

- Show accurate technique and timing.
- Students observe demos from the staging area.
- POT (path of travel) matches what the students will ride. Reversals are not demonstrated.
- Limit narration during demos.

## STATIC PRACTICE

- Both Instructors guide, evaluate, and coach static practice (no more than six students each).
- Guide these enough times to see each student succeed at least once. Coach as needed.

## STAGING

- Always cut engine power once safely stopped, then turn ignition to OFF.
- Enter – Hold “stop” signal until all riders are stopped; direct riders to cut off engines. It is not necessary to move forward to “catch” riders. Be ready to step up to assist if needed.
- Ensure that there is 2-3’ of space between bikes (nose to tail). OK to tell students.
- Exit – Ensure students are ready to go before sending from staging. Direct first rider; allow remaining students to exit on their own.
- Split exercises – Waiting riders move forward. If dismounted, stand right (outside) of staging area; maintain a clear escape route for incoming riders. Limit coaching in staging and observe the range.
  - Instructor stands at the tail of the line of parked motorcycles to park incoming riders.
- Be in position to assist and direct entry and exit.

## VERBAL COACHING

- Prioritize for
  1. Safety
  2. Exercise main objective (“What to Coach”)
- Limit to 1-2 items, presented in a positive manner.
- Brief and concise, typically limited to 3-5 seconds.
- Limit narration in staging during split exercises.

# Range Principles

## **SIMULATED COACHING**

- Large enough to be seen from across the range.
- Smooth motions.
- Consistent.
- Early enough that student can respond to signals.

## **EXERCISE TIME**

- Run exercises for full time allotted.
- Exercise time includes:
  - Striking and setting cones as appropriate
  - Objective and Directions
  - Static Practice (when appropriate)
  - Demo (when appropriate)
  - Evaluation of Understanding
  - Exercise activity
  - Staging
  - Debrief
- Allow 2-4 minutes to stage and debrief, depending on exercise and POT complexity.

## **RANGE CONTROL**

- Students are in front of Instructors at all times (unless otherwise specified).
- Students stay within 10' of perimeter at all times.
- Be aware of where all students are all the time.
- No surprises for students. Be deliberate.
- Coordinate with other Instructor regularly.

## **INSTRUCTOR POSITION**

- Place yourself so:
  - You can see/control entire range and coach for safety at all times.
  - If students must pass behind your back, it is only for a brief moment.
- If you need to move from your position to assist a student to meet a specific objective, return to your coaching position as soon as possible.

## **INSTRUCTOR PROFICIENCY**

- Instructors should routinely and independently ride exercises to reinforce timing, technique and performance.

## **SPEED**

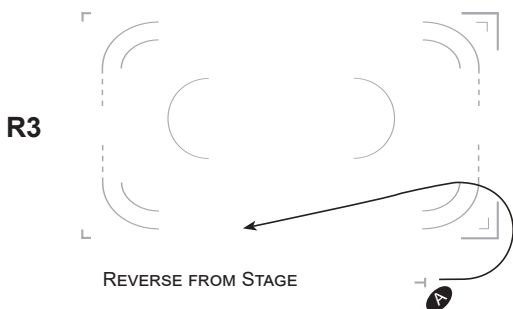
- Coach speed that is designated in the exercise directions, or if student is wobbly or unstable.
- If no speed is defined in the exercise directions, coach speed only if wobbly or unstable.

# Reversal Procedures

## REVERSALS

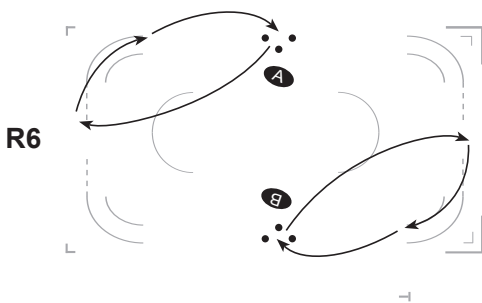
### R3 reverse from staging:

- Direct lead rider to “ride toward end of the perimeter and make a sweeping left U-turn.”



### R6 (Exercise 6 reversal)

- Both instructors walk to nearest start cones.
- Move start cone.
- Direct lead rider to “make a sweeping right turn and line up at the same start point.”



## **STATIC PRACTICE**

- Students are mounted, side stands up, engines off.
- Both instructors guide, evaluate, and coach static practice (no more than six students each).
- Guide these enough times to see each student succeed at least once. Coach as needed.
- Increase pace to 'real time' through repetitions, as appropriate.

## **EX. 2: LOOK AND PRESS**

1. Both feet down
2. Turn head and look, either direction
3. Press forward on handgrip
4. Students repeat Steps 2 and 3 several times on instructor direction

### **WHAT TO COACH**

- Looking and pressing in the same direction
- Enough forward press to make the bike lean

## **EX. 8: PRESS – PRESS**

1. Both feet down
2. Press right and hold; press left to straighten
3. Press left and hold; press right to straighten
4. Students repeat Steps 2 and 3 several times on instructor direction

### **WHAT TO COACH**

- Just enough forward press to create front wheel deflection