

**Road Safety Education Program  
Operating a Three-Wheeled Motorcycle**

**Société de l'assurance automobile du Québec**

**November 2009**

## INTRODUCTION

With the introduction of three-wheeled motorcycles on roads in recent years, the Société de l'assurance automobile du Québec (SAAQ) has had to define specific rules concerning the class of licence necessary as well as requirements governing driver training and evaluation to operate this type of vehicle.

## CLASS OF LICENCE REQUIRED

Section 4 of the *Highway Safety Code* (HSC) defines a motorcycle as follows:

“Motorcycle”: a passenger vehicle, other than a power-assisted bicycle, having two or three wheels that has at least one characteristic different from the characteristics of a moped;

“Moped”: a passenger vehicle having two or three wheels and a maximum speed of 70 km/h, equipped with an electric motor or a motor having a piston displacement of not more than 50 cm<sup>3</sup> and with an automatic transmission.

A three-wheeled motorcycle that does not comply with the definition of a moped is therefore a motorcycle within the meaning the HSC.

Recent studies<sup>1</sup> have concluded, however, that a Class 6A driver's licence (any type of motorcycle) should not be a requirement to operate a three-wheeled motorcycle, despite the fact that this type of vehicle is considered to be a motorcycle under the HSC. Operating a three-wheeled motorcycle differs in certain respects from driving a conventional motorcycle (braking, counter-steering and balance).

Analyses have also revealed that holding a Class 5 driver's licence (passenger vehicle) is simply not enough because operating a three-wheeled motorcycle and its primary and secondary controls cannot be considered similar to those of an automobile.

That is the reason holding a valid<sup>2</sup> Class 5 driver's licence and successfully completing this driving course are necessary to operate a three-wheeled motorcycle. A person who holds a valid Class 6A driver's licence is also authorized to operate a three-wheeled motorcycle.

## DRIVER TRAINING REQUIREMENTS

The three-wheeled motorcycle driving course is based on the Road Safety Education Program to obtain a Class 5 driver's licence. Like the Class 5 program, this driving course goes beyond simply learning general skills for handling a three-wheeled motorcycle, since it also educates drivers about the risks of operating a three-wheeled motorcycle, risks that are inherent to a motorcycle operator, a motorcycle and the environment.

---

1. In 2007, the SAAQ performed road tests on different models of three-wheeled motorcycles and between 2008 and 2009 introduced a pilot project on the use of Spyder three-wheeled motorcycles.

2. A learner's licence and probationary licence are not accepted.

This new driving course also stresses the importance of sharing the road with other users, especially since the operator of a three-wheeled motorcycle is a vulnerable user, like drivers of motorcycles, mopeds or motorized scooters.

The general profile of a three-wheeled motorcycle operator is similar to that of a motorcyclist. During the Spyder pilot project in 2008, an estimated 87% of participants were between the ages of 31 and 50. These were users who, like motorcyclists, had some degree of driving experience, mainly behind the wheel of a passenger vehicle.

During the period of 2003 to 2007 and in 2008, the main causes of motorcycle accidents resulting in fatal, serious and minor injuries were attributed to the following factors: speeding, lack of visibility of motorcyclists and inattentiveness (or distraction). In the case of fatal accidents, alcohol was also a major cause.

The driving course for three-wheeled motorcycles therefore focuses on, among other things, educating future users of this type of vehicle about these accident risk factors.

## **PROGRAM INTRODUCTION**

### **Program Goals**

The goals of the program provide an overview of the anticipated overall results of training. They are based on the SAAQ's road safety education strategies, which target safe, cooperative and responsible driving.

- Prepare an individual to drive a three-wheeled motorcycle.
- Educate an individual about driving risks (risks related to the driver, the vehicle and the environment).

### **Program Application Standards**

To obtain an authorization to drive a three-wheeled motorcycle with a Class 5 driver's licence, a candidate must have successfully completed a theoretical and practical course at a driving school recognized by an agency accredited by the SAAQ.

The driving course lasts a minimum of 7 hours and consists of the following:

- 3 hours of theoretical instruction;
- 2 hours of practical training on a closed circuit track;
- 2 hours of practical training on the road, the final hour of which is devoted to evaluating the learner<sup>3</sup>.

Theoretical instruction must be completed before practical training can begin.

### **Program Competencies**

Like the Road Safety Education Program (passenger vehicle), the three-wheeled motorcycle program was developed according to a competency-based approach. The approach is grounded in a teaching philosophy that aims to stimulate learners to mobilize their personal resources and act, succeed and progress in a variety of situations, according to defined performance levels and with all the types of knowledge required.

The program covers two competencies:

- To handle a three-wheeled motorcycle
- To share the road – application of the Observe-Evaluate-Act driving strategy (OEA)

For the competency *To handle a three-wheeled motorcycle*, a learner must be able to properly prepare for travel and control the motorcycle in a variety of driving situations.

For the competency *To share the road*, learners must be able to quickly observe and evaluate what is going on around them. This allows them to better anticipate at-risk situations and react accordingly so that they always behave safely and cooperatively in the presence of a variety of road users. The OEA driving strategy can be defined as follows:

---

3. See the evaluation form.

1. **Observe the road environment:** examine the surroundings (know where and how to look and what to look for).
2. **Evaluate potential at-risk situations:** think of possible solutions and choose the safest.
3. **Act safely:** Perform manoeuvres that are safest for you and others.

## To Handle a Three-Wheeled Motorcycle

### ***Competency Reflected in Behaviour***

---

#### **Statement of the Competency**

To handle a three-wheeled motorcycle

#### **Achievement Context**

- In a variety of driving situations
- Under a variety of weather and road conditions
- According to the rules of the *Criminal Code* and the *Highway Safety Code*
- According to road signs and traffic signals

#### **Elements of the Competency**

---

Prepare for travel

#### **Performance Criteria**

- Adequate identification the technical characteristics of the motorcycle that is used
- Accurate assessment of the motorcycle's condition
- Proper travel planning
- Safe seating of occupants
- Secure transportation of baggage
- Safe driving position

Perform driving manoeuvres

- Adequate visual exploration
- Adequate and constant safety margins
- Constant control of the motorcycle: braking, steering, acceleration, speed, etc.

Evaluate one's skills and limitations with regard to the manoeuvres performed

- Demonstration of critical judgment of one's behaviour, skills, abilities and limitations
- Accurate determination of the means necessary to improve knowledge and abilities

#### **For the Competency as a Whole**

- Obeying the *Criminal Code* and *Highway Safety Code*
- Obeying road signs and traffic signals
- Proper use of driving strategies in accordance with the rules
- Decision-making in keeping with road safety
- Constant courtesy to other road users

To Share the Road (implementing the OEA strategy)

## To Share the Road (implementing the OEA strategy)

### ***Competency Reflected in Behaviour***

---

#### **Statement of the Competency**

To share the road (application of the OEA strategy)

#### **Achievement Context**

- In a variety of driving situations
- Under a variety of weather and road conditions
- According to rules of the *Criminal Code* and *Highway Safety Code*
- According to road signs and traffic signals

#### **Elements of the Competency**

---

Determine factors that increase risk in a driving situation

- Determination of driver-related risk factors – physiological and psychological factors
- Determination of vehicle-related risk factors
- Determination of environment-related risk factors

Take other road users into account

- Consideration of other road users – characteristics, rights, etc.
- Adequate and constant communication with other users – communication of intentions (acts of courtesy, etc.)

Drive cooperatively and safely

- Use of strategies to ensure visibility to other road users
- Proper consideration of the actions of other users
- Appropriate actions in the presence of other users
- Avoidance of potential conflict, regardless of source

Anticipate potential at-risk situations

- Interpretation of useful clues
- Rapid risk assessment
- Choice of solutions to avoid or reduce risks
- Actions suited to the situation

Evaluating one's behaviour with regard to sharing the road

- Demonstration of critical judgment of one's behaviour, skills, abilities and limitations
- Accurate determination of the means necessary to improve knowledge and skills

#### **For the Competency as a Whole**

## To Share the Road (implementing the OEA strategy)

- Obeying the *Criminal Code* and *Highway Safety Code*
- Obeying road signs and traffic signals
- Proper use of driving strategies in accordance with the rules
- Decision-making in keeping with road safety
- Constant courtesy to other road users

The types of knowledge required for both competencies are listed in Appendix I.

## **EVALUATION**

To certify that a learner is able to drive a three-wheeled motorcycle on the road, an evaluation that takes one hour to complete is conducted at the end of the driving course. The evaluation takes place on the road network and is carried out in the following manner.

### **Part 1 in an Urban Setting**

Determine if the learner is able to manoeuvre the motorcycle and share the road in a variety of general situations common to urban areas (residential neighbourhood, school zone, commercial zone, etc.): park, drive through and make turns at intersections, come to a stop at an intersection, etc.

### **Part 2 on the Highway\***

Determine if the learner is able to manoeuvre the motorcycle and share the road while driving on a highway: merge onto a highway, drive with the flow of traffic, exit a highway, make lane changes and overtake vehicles, negotiate curves, etc.

\* Where no highway is available, this part of the evaluation can be performed on an express road (90 km/h zone).

Use the form in Appendix III to evaluate the learner.

## APPENDIX I

### List of Types of Knowledge Related to the Competency

The types of knowledge or focuses of training related to the competency are used as references for the information that candidates must learn to improve their competency.

The contents related to the types of knowledge that are required are found, among others, in the handbook entitled *Driving a Motorcycle* and in reference material that has been prepared for the Road Safety Education Program – *Road Access Binder, Checklist for Sharing the Road with Other Users*, the *Éducation routière* Web site, etc. The three-wheeled motorcycle owner's manual may also contain helpful information.

This list includes but is not limited to the principal types of knowledge required.

#### Competency 1: To Handle a Three-Wheeled Motorcycle

Elements of the Competency	Types of knowledge (focuses of training)
Prepare for travel	<ul style="list-style-type: none"> <li>• Strategies to have a motorcycle that is in good mechanical condition, safe and environmentally friendly – periodic maintenance, owner's manual</li> <li>• Consideration of weather and road conditions and time of day (information source)</li> <li>• Verification that the motorcycle can be driven safely</li> <li>• Travel planning to and from destination, where necessary – alternate route, road information source, etc.</li> <li>• Proper seating of occupants</li> <li>• Safe and proper transportation of baggage</li> <li>• Necessary driving gear – helmet, visor, clothing, gloves, boots, etc.</li> <li>• Safe driving position</li> </ul>
Perform driving manoeuvres	<ul style="list-style-type: none"> <li>• Importance of good visual exploration (what to look for, where to look and when)</li> <li>• Observation: visual scanning, shoulder checks (blind spot), peripheral vision, rearview mirrors, night vision, glare, etc.</li> <li>• Importance of constantly maintaining safety margins all around the motorcycle</li> <li>• Estimation of distance from other users</li> <li>• Estimation of the speed of other users</li> <li>• Factors that may require adjusting safety margins</li> <li>• Adjustment of safety margins (front, rear and side) based on presence of users, weather conditions, road conditions, etc.</li> <li>• Safe and responsible motorcycle control or handling</li> <li>• Anticipation of deceleration or stops and driving at a speed that is adapted to the situation</li> </ul>

	<ul style="list-style-type: none"> <li>• Consequences of speeding</li> <li>• Behaviour of the motorcycle: role of traction and friction in different driving situations</li> </ul>
--	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

## Competency 2: To Share the Road (application of the OEA strategy)

Elements of the Competency	Types of Knowledge (focuses of training)
Determine factors that increase risk in a driving situation	<p>Driver-related risk factors</p> <ul style="list-style-type: none"> <li>• Importance of being in a condition to drive and maintaining this condition</li> <li>• Causes of an impaired ability to drive – alcohol, drugs, medication, fatigue, etc.</li> <li>• Effects of impaired abilities on driving</li> <li>• Self and emotional control: recognize signs and control one’s reactions</li> <li>• Distractions</li> </ul> <p>Vehicle-related risk factors</p> <ul style="list-style-type: none"> <li>• Driver vulnerability due to motorcycle design – no passenger compartment, seat belt or airbags for protection</li> <li>• Consideration of unusual noises, indicator lights, etc.</li> <li>• Importance of having correctly inflated tires</li> </ul> <p>Environment-related risk factors</p> <ul style="list-style-type: none"> <li>• Consideration of weather and road conditions – driving at night, driving in rain, road work, gravel roads, etc.</li> <li>• Consideration of traffic density – presence of traffic jam</li> <li>• Consideration of the presence of vulnerable users – pedestrians, cyclists, moped and motorized scooter operators, motorcyclists, etc. – and the presence of heavy and emergency vehicles</li> <li>• Consideration of locations where a larger number of vulnerable users may be present – parks, schools, shopping centres, etc.</li> </ul>
Take other road users into account	<ul style="list-style-type: none"> <li>• Characteristics of other users</li> <li>• Importance of sharing the road for the safety of users, particularly vulnerable users</li> <li>• Visual exploration focused on other users (what to look for, where to look and when)</li> <li>• Need for adequate communication to ensure order and safety on the road network</li> <li>• Consideration of the environment and choice of appropriate methods of communication</li> <li>• Clear communication of one’s intentions at all times – whether or not users are present</li> </ul>

Elements of the Competency	Types of Knowledge (focuses of training)
Drive cooperatively and safely	<ul style="list-style-type: none"> <li>• Strategies to ensure visibility to other road users – avoiding driving in their blind spots, use of headlights at all times (day and night), wearing brightly coloured clothing and helmet or reflective strips</li> <li>• Consideration of the actions of other users</li> <li>• Consideration of unexpected actions and the errors of other users</li> <li>• Use of strategies in the presence of vulnerable users</li> <li>• Appropriate actions for cooperative and courteous driving</li> </ul>
Anticipate potential at-risk situations	<ul style="list-style-type: none"> <li>• Active search for clues related to the presence of other users, the environment and vehicle failure</li> <li>• Based on clues, detect, as soon as possible, potential sources of danger that may or may not be visible – including the errors of other drivers and unexpected actions</li> <li>• Accurate perception of risks</li> <li>• Honest risk assessment – consequences of a lack of confidence or recklessness</li> <li>• Selection of solutions to avoid or reduce risks</li> <li>• Determination of possible consequences related to the solutions</li> <li>• Choice of appropriate action based on safety – increase safety margins all around the motorcycle, slow down, allow others to pass, change lanes, etc.</li> </ul>

**APPENDIX II**

## Self-Evaluation of Driving Course

1. In the learner driver's view, what are the strengths and points to work on at this stage in the practical training?

Strengths	Points to Work On
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

2. In the instructor's view, what are the strengths and points to work on at this stage in the practical training?

Strengths	Points to Work On
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Learner's name: \_\_\_\_\_

Instructor's name: \_\_\_\_\_

### APPENDIX III

## Evaluation Sheet

Learner's name:			
Date of evaluation:			
Result: _____ / 100	Pass 🍏	Fail 🍏	
Signature of instructor:			

### Observations

	No	Yes	Results
<b>1. Observing the environment</b>			
1.1 Performs an effective visual scan	🍏	🍏	0 or 10
<ul style="list-style-type: none"> <li>• Looks in the direction of travel</li> <li>• Checks to the <b>left</b>, to the <b>right</b> and the <b>left</b> again before turning onto or exiting a public road and before entering or turning at an intersection.</li> </ul>			
1.2 Checks the rearview mirrors	🍏	🍏	0 or 10
<ul style="list-style-type: none"> <li>• Checks at the right moment</li> <li>• Checks in the appropriate rearview mirrors</li> </ul>			
1.3 Shoulder checks (blind spots)	🍏	🍏	0 or 10
<ul style="list-style-type: none"> <li>• Checks at the right moment</li> <li>• Checks the correct side</li> <li>• Checks without moving the body</li> </ul>			
<b>2. Communicating one's intentions</b>			
2.1 Uses turn signals and brake light	🍏	🍏	0 or 15
<ul style="list-style-type: none"> <li>• Uses them in advance</li> <li>• Uses them in a clear manner</li> <li>• Uses them at all times</li> <li>• Switches them off when a manoeuvre has been completed</li> </ul>			
<b>3. Maintaining safety margins</b>			

3.1 Maintains safety margins all around the three-wheeled motorcycle      🍏      🍏      0 or 20

- Creates and maintains a front safety margin
- Positions the three-wheeled motorcycle in a lane of traffic
- Proceeds with manoeuvres when there is enough distance and time to perform them safely

**4. Controlling the three-wheeled motorcycle**

4.1 Controls steering of the three-wheeled motorcycle      🍏      🍏      0 or 15

- Handles the three-wheeled motorcycle with adequate control
- Avoids driving in the blind spots of other vehicles

4.2 Controls the speed of the three-wheeled motorcycle      🍏      🍏      0 or 20

- Drives at legal speeds
- Adjusts speed according to situation
- Adjusts speed according to manoeuvre performed

**TOTAL:    \_\_\_/100**

**Minimum passing score: 75 points**

**Rule for Verdict**

To maintain a passing test score, the candidate must comply with the following rules for verdict:

- Obey the *Highway Safety Code* (including traffic regulations)
- Obey road signs and traffic signals
- Obey posted speed limits
- Yield the right-of-way
- Adjust driving to situations as they vary and proceed safely
- Drive without conflicts

*VIOLATION OF THESE RULES FOR VERDICT WILL RESULT IN AN AUTOMATIC FAILURE.*

**Comments**

---

---

---

---