
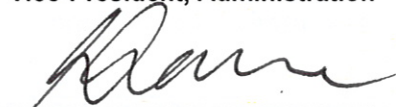


Complete Program Title: Care and Control of Golf Carts and other Off-Road Vehicles Program	Risk Management Manual (RMM) Number: 318
Approved by:  Vice-President, Administration  President and Vice-Chancellor	Date of Most Recent Approval: May 2013
Date of Original Approval: November 2003	Supersedes/Amends Program dated: March 2009
Responsible Executive: Vice-President, Administration	Enquiries: Environmental and Occupational Health Support Services (EOHSS) eohtss@mcmaster.ca
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1 Purpose

- 1.1 To provide rules and performance expectations for operators of golf carts and other off-road vehicles on McMaster campus.
- 1.2 To ensure that the users of golf carts and other off-road vehicles are trained and qualified to operate the vehicles in a safe and responsible manner.
- 1.3 To protect pedestrians and university property from injury and damage.
- 1.4 To ensure compliance with the Occupational Health and Safety Act, Ontario Highway Traffic Act and the McMaster University Security and Parking Services Rules and Regulations for vehicles on Campus.

2 Scope

- 2.1 The policy applies to all persons who have care and control of a golf cart, or any other off-road vehicle, on the McMaster University campus.

3 Related Documents

- 3.1 Occupational Health and Safety Act of Ontario RSO 1990; Industrial Regulation, O. Reg. 851.
- 3.2 McMaster University Parking Regulations

- 3.3 Ontario Highway Traffic Act, O. Reg. 455/07
- 3.4 McMaster University Risk Management Manual #100 Workplace and Environmental Health & Safety Policy.
- 3.5 McMaster University Risk Management Manual #300 Safety Orientation and Training Program.
- 3.6 McMaster University Risk Management Manual #302 Safety Audits and Inspections Program.
- 3.7 McMaster University Risk Management Manual #304 Working Alone Program.
- 3.8 McMaster University Risk Management Manual #406 Preventative Maintenance Program.
- 3.9 McMaster University Risk Management Manual #904 University Owned, Leased and Rented Vehicle Program.
- 3.10 McMaster University Risk Management Manual #1000 Reporting and Investigation Injury/Incident/Occupational Disease Program.

4 Definition / ACRONYMS

- 4.1 **Authorized Vehicle Operator** – person who holds a valid G-Class driver's license, has received approved training, and is authorized by their supervisor to operate a specific vehicle(s) on McMaster University property.
- 4.2 **Ensure** – take every reasonable precaution to achieve the stated objective.
- 4.3 **Golf cart** – means any open four-wheeled vehicle designed for use on pathways and includes any vehicle that looks or operates like a golf cart.
- 4.4 **Offending Behaviour** – any violation of the procedures as outlined in this program.
- 4.5 **Off-road** – means on walkways, pathways and all other areas not designed for vehicle traffic.
- 4.6 **Supervisor** – person who has charge of a workplace or authority over a worker.
- 4.7 **Worker** – person who performs work or supplies services for monetary compensation.
- 4.8 **Acronyms**
 - CJHSC** – Central Joint Health and Safety Committee
 - EOHSS** – Environmental and Occupational Health Support Services
 - JHSC** – Joint Health and Safety Committee

5 Responsibilities

5.1 Role of Senior Managers (Deans / Directors / Chairs / Managers):

Senior Managers shall:

- provide the resources and support necessary to ensure compliance with this program.

5.2 Role of the Supervisor:

The Supervisor shall:

- ensure all employees required to operate golf carts and other off-road vehicles have completed on-line and practical instructional training offered by EOHSS and Logistics and Mail Services prior to use;
- ensure all employees required to operate golf carts and other off-road vehicles have a valid G-Class driver's license;
- at least annually review the program and document this review with employees under their supervision who are authorized to drive golf carts and other off-road vehicles;
- record all incidents involving personal injury or property damage (regardless of severity) reported to them on an Injury/Incident Report;
- provide to Security Services, a list of rented and owned vehicles that are covered by this program and under control of the supervisor;
- allow only trained and authorized persons to operate vehicles of any description;
- maintain a list of all personnel who are authorized and trained to operate the vehicle(s) and if requested supply such list to Security Services.
Note: all summer/seasonal students expected to operate a University Golf Cart shall successfully complete the EOHSS Golf Cart Training; affix to all golf carts and other vehicles a sign indicating the department or association that has care and control of the vehicle;
- ensure that vehicles are secured in an area approved by Security Services when not in use;
- ensure that all vehicles are serviced and maintained in a safe operating condition with service records being maintained for audit purposes as described in RMM #406 Preventative Maintenance Program;
- respond to reports of unsafe vehicle operation by investigating and documenting the incident and actions taken to correct the situation including disciplinary procedures appropriate for the level and frequency of the violation;
- ensure individual operating the vehicle completes a daily "Visual Pre-Use Check Form" at the start of the shift and provide to the supervisor at the end of the shift,

should defects be found during the vehicle circle check, report immediately to the supervisor (Appendix A)

- ensure all vehicle keys are returned at the end of the shift or trip;
- during peak times on campus, if possible have a 2nd individual dedicated to assist with traffic control when backing up a University vehicle;
- maximum duration permitted to operate a vehicle in a one day shift is 12 hours with a 12 hours break prior to the next shift;
- shall ensure equipment is not removed from the University property;
- electronic devices such as cellular telephones and pagers, use of smart devices (i.e. BlackBerry, iPhone, etc.), without blue tooth ear sets shall only be used when the vehicle is safely parked;
- devices that may inhibit hearing such as iPods are strictly prohibited; and
- ensure operator of golf cart wears a seatbelt and occupancy is limited to available seatbelts in the golf cart and/or other off-road vehicles.

5.3 Role of the Authorized Vehicle Operator:

The Authorized Vehicle Operator shall:

- participate in on-line training (EOHSS) and practical instructional training (Logistics and Mail Services). Note: all summer/seasonal students expected to operate a Golf Cart on McMaster University property shall successfully complete the EOHSS Golf Cart Training annually at the start of the season, e.g. May and/or September;
- ensure a daily “Visual Pre-Use Check Form” is completed at the start of the shift and provided to the supervisor at the end of the shift, should defects be found during the vehicle circle check, report immediately to the supervisor (Appendix A)
- report all incidents involving personal injury or property damage (regardless of severity) to their immediate supervisor;
- not operate an unsafe vehicle and ensure safe driving procedures followed at all times;
- use roadways and limit use of pedestrian walkways, where possible;
- follow all of the procedures outlined in Section 6 of this program and in Appendix A Golf Cart Operation and Pre-Maintenance Procedures;
- abide by the Ontario Traffic Act and McMaster University Parking Regulations;
- electronic devices such as cellular telephones and pagers, use of smart devices (i.e. BlackBerry, iPhone, etc.) without blue tooth ear sets shall only be used when the vehicle is safely parked;
- ensure keys are removed from ignition if leaving vehicle unattended;

- ensure all vehicle keys are returned at the end of the shift or trip and logged out;
- seatbelts shall be worn. Limit occupancy in golf cart to seatbelts available in the golf cart; and
- authorized individual operating a University vehicle shall always back the vehicle up into the space allotted to store the vehicle.

5.4 **Role of EOHSS:**

EOHSS shall:

- provide on-line training and instruction in safe operation procedures, using this policy and the Golf Cart Operations and Maintenance Procedures manual as a basis for such training;
- issue training cards to user's upon successful completion of required training and instruction.

5.5 **Role of Facility Services manager of Logistics and Mail Services**

Facility Services manager of Logistics and Mail Services shall:

- provide practical training regarding golf cart operations.

5.6 **Role of Security and Parking Services:**

Security and Parking Services shall:

- monitor and investigate irregular driving or violation of the McMaster Parking Regulations involving a golf cart vehicle and/or off-road vehicles; and
- check and follow up with the department's supervisor if the selected secured area is suitable for the storage of the vehicle(s) and give approval to the supervisor.

5.7 **Role of Joint Health & Safety Committees:**

The JHSC's shall:

- review the application of this program within their area of responsibility; and
- review all incidents involving vehicles covered by this program.

5.8 **Role of the Central Joint Health and Safety Committee:**

The CJHSC shall:

- review and comment on the effectiveness of this program on a regular basis; and
- review Injury/Incident Reports related to the use of vehicles described in this program.

6 PROCEDURES

- 6.1 Only authorized users (licensed, trained and approved) may operate vehicles on McMaster University Property.
- 6.2 Material and/or equipment may only be transported in the golf cart cargo box. May not exceed 300 pounds and shall not pack cargo above the height of the box unless secured by tie-downs or cargo net (not supplied by Facility Services Logistics and Mail Services).
- 6.3 Do not alter the gasoline vehicle governor prescribed in Appendix A.
- 6.4 Vehicles described in this program that do not have headlights shall be operated only during daylight hours.
- 6.5 Vehicles shall never be left unattended with the key in the ignition.
- 6.6 Vehicles described in this program shall be stored in a secured area approved by Security Services.
- 6.7 Vehicles described in this program shall not be driven on public roads off University property.
- 6.8 Vehicles of any description shall not be driven on sidewalks or landscaped areas unless the operator has received approval from the immediate supervisor or Security Services. Such clearance must be specific to single tasks.
- 6.9 Vehicles shall not obstruct doorways and/or accessibility ramps at entrances to University buildings.
- 6.10 Operators of vehicles described in this program shall **ALWAYS give pedestrians the right-of-way.**
- 6.11 Any person who has care and control of a vehicle described in this program must produce identification at the request of Security Services or any member of the McMaster University community.
- 6.12 Seatbelts shall be worn. Limit occupancy in golf cart to seatbelts available in the golf cart.
- 6.13 Authorized individual operating a University vehicle shall always back the vehicle up into the space allotted to store the vehicle.

7 PENALTIES AND CENSURE

- 7.1 McMaster Security Services may issue tickets and citations under the authority McMaster University Parking regulations for any infraction.
- 7.2 Any member of McMaster University administration or McMaster Student Union administration, who has produced proper identification, may require a driver to relinquish control of a vehicle and turn over the keys until the offending behaviour is investigated.

- 7.3 Complaints regarding improper or dangerous use of a vehicle must be reported to Security Services, who will address the complaint to the supervisor of the vehicle driver.
- 7.4 Supervisors will take disciplinary action appropriate for the type and frequency of any unsafe act associated with the operation of golf carts or other off-road vehicles on campus.
- 7.5 Any person discovered driving a golf cart or other off-road vehicle without authorization may be charged with theft by McMaster Security Services and prosecuted.

8 RECORDS

- 8.1 The department/organization responsible for renting or leasing a vehicle described in this program shall maintain a record of the name and training records of persons approved by a supervisor to drive a vehicle described in this program.
- 8.2 Such records shall be maintained for a period of one year after the individual's role at the University ends.

9 TRAINING

- 9.1 All supervisors shall ensure that anyone under their supervision, who is required to operate golf carts or other off-road vehicles, completes the EOHSS Golf Cart Training and Practical Instructional Training from Logistics and Mail Services.
- 9.2 Summer/seasonal students who are hired by the department to operate a golf cart on University property shall at the start of each summer season successfully complete EOHSS Golf Cart Training.

10 RENTALS

- 10.1 All golf carts rentals shall be equipped with the following features:
- seatbelts
 - headlights
 - brake lights
 - turn signals
 - back up notification
 - mirrors
 - electric power where possible

Appendix A

GOLF CART OPERATION & PRE-MAINTENANCE PROCEDURES

1. STARTING THE VEHICLE

1. Perform a visual pre-use check.
2. Ensure load (if any) is secure.
3. Enter the vehicle.
4. Ensure everyone is seated and using appropriate seatbelt. Occupancy limit is dependent on number of seatbelts.
5. Study and understand controls on the dash and inside the cab.
6. Read safety warnings regarding pedals.
7. Ensure wheels are turned in desired direction.
8. Ensure path is clear of obstructions.
9. Turn key to 'on' position.
10. Select direction by placing shift in desired position F = forward or R = reverse.
11. Slowly push accelerator pedal to increase speed. The park brake pedal will release and the vehicle will move and the speed will increase as the accelerator is depressed until governed speed is reached.

WARNING

Occupancy limited to seatbelt availability. Do NOT allow people in cargo bed. Cargo box cannot exceed 300 pounds of material and/or equipment. Do NOT pack cargo above the height of the box unless tie-down or cargo net is used (not supplied by Facility Services Logistics and Mail Services).

Do not shift forward and reverse lever while vehicle is in motion. Always bring vehicle to a full stop before shifting lever to avoid injury to an unsuspecting passenger or damage to the vehicle.

2. WHEN DRIVING THE VEHICLE

1. The operator is required to have a valid G-Class Ontario driver's license.
2. Operate the vehicle from the driver's seat only.
3. Remain seated in moving vehicle wearing the seatbelt provided.

Keep arms, legs, feet and entire body inside vehicle to prevent injury.

<p>MAXIMUM SPEED LIMITS CAMPUS ROADWAYS/PARKING LOTS</p> <p>Parking Lots 10 km/hr (6 MPH)</p> <p>Roadway by IWC 20 km/hr (12 MPH)</p> <p>Sidewalks (if granted approval from the immediate supervisor or Security Services, specific to single tasks) 10 km/hr (12 MPH)</p> <p>Elsewhere on Campus 40 km/hr (24 MPH)</p>

4. Operator shall obey McMaster University's Traffic and Parking Regulations. Slow down at pedestrian walkways. Pedestrians have the right of way.
5. Drive slowly when loaded in turns and drive slowly straight up and down slopes to prevent turning the vehicle over.
6. Avoid stopping on hills when fully loaded since starting, rolling backwards, or sudden stops can cause vehicle to overturn or flip over backwards.
7. Reduce speed when backing up and for poor driving conditions such as wet surfaces or rough terrain to avoid losing control of vehicle or turning vehicle over.
8. **Do not use on public roads (city streets) outside of University property. This vehicle is not licensed and is not permitted to be driven off University property.**

3. STOPPING THE VEHICLE

1. To stop the vehicle, release the accelerator pedal and push the brake pedal with your right foot.

CAUTION

When stopped on a hill, use the brakes to hold your position, not the accelerator pedal.

WARNING: Avoid deep water where possible. Driving through deep water may affect the brakes. Check effectiveness by pressing the brake pedal gently. If the vehicle does not slow down at the normal rate, continue to apply the brakes gently until they dry out and normal performance returns.

4. PARKING AND LEAVING THE VEHICLE

1. After stopping the vehicle, firmly push parking brake pedal until it locks. This will prevent the vehicle from rolling.
2. Turn key to 'off' and place shift lever in the straight up 'neutral' position when the vehicle is not in use. This avoids unintentional starting of engine. Remove key when vehicle is not in use.
3. Authorized individual operating a University vehicle shall always back the vehicle up into the space allotted to store the vehicle.
4. Remove keys from vehicle.
5. Store vehicle in Security Services approved location.

WARNING

To avoid being struck by vehicle, do not stand in front of or behind vehicle.

5. LOADING AND UNLOADING

WARNING

Firmly engage park brake prior to loading.

1. **Do not** allow people in cargo bed.
2. **Do not** exceed 136 kg or 300 lbs. in the cargo bed. Do NOT pack cargo above the height of the box unless tie-down or cargo net is used (not supplied by Facility Services Logistics Services. Overloading can cause loss of vehicle control and severe personal injury by causing a vehicle component to fail or by affecting vehicle handling.
3. When driving up or down hills or on uneven terrain, vehicle speed and load must be reduced.
4. When backing up, reduce speed and avoid sudden stops which can cause front wheels to lift off the ground and the vehicle to overturn.
5. If vehicle is equipped with tailgate, do not load tailgate. Tailgate should be in upright position and latched securely while vehicle is in motion. The cargo bed load should not obstruct the driver's ability to see behind the vehicle when backing up to check the surroundings. (This is especially important if the golf cart is not equipped with side mirror(s).)
6. When vehicle is loaded, make starts, stops and turns in a smooth manner to avoid shifting the load or overturning the vehicle or both. The cargo centre of gravity may affect the handling, steering and braking of the vehicle.
7. Loose cargo should be secured to keep it from being thrown about, which could affect handling and injure the driver or passenger if vehicle is suddenly stopped.
8. Avoid top heavy loads. The centre of gravity of load should never exceed 38 cm or 15 inches above the cargo bed bottom. Cargo box cannot exceed 300 pounds of material and/or equipment. Do NOT pack cargo above the height of the box unless tie-down or cargo net is used.

6. FUELING INSTRUCTIONS

DANGER

Gasoline – flammable – explosive – no smoking

Never pour gasoline into tank while engine is hot or running

1. Ensure appropriate health and safety training has been successfully completed and Material Safety Data Sheets (MSDSs) have been reviewed prior to handling gasoline.
2. Follow appropriate safety precautions as per the MSDS including handling and storage requirements.
3. Remove seat bottom.
4. Fuel tank is located on passenger side of vehicle. Remove fuel cap and fill the fuel tank with regular or unleaded gasoline. Do not use gasoline with methyl alcohol blends.

WARNING

To allow for expansion, do not fill higher than the bottom of the filler neck.

Ensure appropriate clean-up of spilled gas before operating vehicle.

5. Replace fuel cap on tank, ensure cap is tightly sealed to tank.
6. Replace seat bottom.

7. CONTROLS

NOTE

Consult Golf Cart Manual as golf car controls may vary with different models.

KEY SWITCH

The key switch is mounted on the dash to the right of the steering column. It has two positions "on" and "off". Remove the key in the "off" position only. Do not leave the vehicle unattended without removing the key.

FORWARD-REVERSE CONTROL

The forward-reverse shift lever is located below and to the right of the driver's knee on the seat support panel. The lever has three (3) distinct positions: F (forward), N (neutral), and R (reverse). Rotate the lever toward the driver (F) to run vehicle in forward and toward the passenger (R) to run vehicle in reverse. When the lever is in the straight up or neutral position, the vehicle will not run, and the engine will stop if shifted to this position while running.

(Electric operates at half speed in reverse.)

WARNING

Do not shift forward and reverse lever while vehicle is in motion. Always bring vehicle to a full stop before shifting lever to avoid injury to an unsuspecting passenger or damage to the vehicle.

Turn key switch 'off' and place shift lever in neutral when leaving vehicle to avoid unintentional starting of the vehicle.

Buzzer will sound as a warning when vehicle is in reverse.

ACCELERATOR PEDAL

The accelerator pedal is the pedal on the right with the word 'go' molded in it. When the key switch is 'on', and the shift lever is in either forward or reverse, and the accelerator pedal is pushed, the parking brake will be automatically released and the engine will start. As the pedal is pushed further, the engine speeds up, and the vehicle will begin to move in the pre-selected direction (forward or reverse). Push the accelerator pedal still further to increase vehicle speed. When the accelerator pedal is released, power to the motor will be cut off or the engine will stop running.

The accelerator pedal differs from that of an automobile in the following way: depressing the accelerator will release the parking brake if engaged. Depressing the accelerator automatically starts the vehicle moving. Each time the accelerator pedal is released, the engine/motor will stop running.

WARNING:
Do not tamper with the gasoline vehicle's governor.

Brake Pedal

The brake pedal is the large pedal on the left with the word 'stop'. To slow or stop the vehicle, push the brake pedal with your right foot.

PARKING BRAKE PEDAL

The parking or park brake pedal is the small raised portion in the upper left corner of the brake pedal with the word 'park' moulded in. The words 'park brake' are marked above this pedal. To set the park brake, push the brake pedal firmly and tilt the park brake portion of the pedal forward with your right foot.

The parking brake will release when the accelerator or brake pedal is pushed. The parking brake has multiple locking positions and should be firmly pressed to prevent vehicle from rolling.

WARNING
The park brake should be firmly depressed before leaving the vehicle to prevent the vehicle from rolling.

SPECIAL CONTROLS

Gas Vehicles

Neutral Lock-Out

The vehicle has a neutral lock-out circuit that prevents the driver from starting the vehicle in neutral. If the vehicle is started in forward or reverse and shifted to neutral, the engine stops running.

DANGER Engines produce carbon monoxide which is an odourless, deadly gas. Do not operate in an enclosed area without proper ventilation

Choke

The choke is located below and to the left of the driver's left knee on the seat support panel. If on a cool morning the vehicle is hard to start, simply push in the choke cover with your left hand to activate the choke. Release the choke after the engine starts and runs smoothly.

Oil Light

The oil light is above the steering column. When the oil light is on, it indicates low engine oil. Oil should be added before further use. The vehicle should

never be driven if the oil light comes on and stays on. If the oil light goes on and off, you may proceed, but add oil at the first opportunity.

WARNING

Do not tamper with the gasoline vehicle's governor. To do so will void the limited warranty, result in damage to engine and other components, and may result in injury due to unsafe speeds.

8. VISUAL PRE-USE CHECK

Outside Circle Check

Headlights

Both lamps at the front of the golf cart light up and are clean, not cracked/loose

Windshield

Clean (damp wipe windshield to attain good visibility)

Mirror(s)

Clean, secure

Tires/Wheels

Good condition, inflated, nuts/lugs are tight

Body Damage

Scratches/dents need to be documented and provided to Supervisor

Tail lights/Turn Signals

In working order, clean, no cracks, secure

LEAKS

walking around the vehicle, check for leaks or oil drips from underneath the carriage.

Inside Check (Enter the Golf Cart)

Seat/mirrors

Adjust seat (if application is available) and mirrors

Windshield/mirrors

Clean (damp wipe windshield/mirror to attain good visibility)

Start engine

Unusual noises

Turn on low beam headlights & left turn signal (exit the cab and check to see if in working order, signals front & back of cab). Same application for the right hand signal.

Horn/Gauges

Check to ensure the horn works, check the gauges on the dash panel, and review the warning signs.

BRAKES

Ensure the brakes work properly. Both rear wheels should brake properly and the pedal should not go more than halfway to the floor. If it does, report immediately to the supervisor and do not operate the golf cart.

Back-up alarm buzzes or sounds

Park Brake

The park brake should lock the wheels when latched and should release when the accelerator or brake pedal is pushed.

STEERING

The vehicle should be easy to steer and should not have free play in the steering wheel.

ACCELERATOR PEDAL

As the accelerator pedal is pushed; the vehicle should come smoothly up to full speed. When the pedal is released, it should return to the original position and the engine or motor should stop gradually.

If after the visual check there is something unusual or found not to be in working order, do not operate the golf cart and report the results of the visual check to the supervisor immediately.

9. PRACTICAL GOLF CART INSTRUCTIONAL TRAINING & REVIEW

The golf cart training and review will be performed annually by anyone that operates a golf cart throughout the shift to perform work activities.

Reviewed and Understand the Golf Cart Operating Procedures

- _____ Starting the vehicle
- _____ When driving the vehicle
- _____ Stopping the vehicle
- _____ Parking and leaving the vehicle
- _____ Loading and unloading the vehicle
- _____ Fueling Instructions
- _____ Golf Cart Controls
- _____ Visual Circle Check
- _____ McMaster University Parking & Traffic Regulations (speed limits, right of way to pedestrians, safe practices when driving on walkways, acceptable parking protocol near buildings)

Proof of a valid G Class Ontario Driver's License (temporary or learner's is not acceptable)

(Driver's License Number and expiry date)

A golf cart driving competency was successfully completed on _____ by _____

Worker's Signature

Trainer/Supervisor