



# QUICKART M3, M3 E, M3 HD



## Owners Manual

### QuickART Electric Utility Machine

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# QUICKART

## INTRODUCTION

Thank you for purchasing the Dane Technologies QuickKART. With proper operation and maintenance, the QuickKART will provide years of dependable service. This manual contains information, which will assist in the training, operation and maintenance of the QuickKART. Please read it thoroughly and review it regularly.

The QuickKART is a tool, which will increase workplace safety and productivity. Those goals will only be accomplished if all employees using the QuickKART are thoroughly trained in the safe operation of the QuickKART. We urge all of our clients to develop and implement a training and certification program for all employees using and supervising the use of the QuickKART. This manual, our training program and our training video are provided to assist you in developing your own operator's certification program.

If you have questions regarding the safe operation or maintenance of the QuickKART, which are not covered in this manual, please contact us at our toll-free service line: 888-544-7779.

Daniel T. Johnson  
President and CEO

# QuickKART M3, M3 E, M3 HD Owner's Manual

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Note on radio equipment used:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The abbreviation IC, before the Canadian Registration Number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

The CE mark, if present, declares that this equipment meets relevant EU Directives and Standards.

## OVERVIEW OF OPERATION

The QuickKART is an electrically powered shopping cart collection machine. It has several unique and patented features, which allow it to be used safely and simply in the shopping cart collection process.

The QuickKART is a productivity-enhancing tool, which will be most effective when it is well maintained and used responsibly. Training of employees is very important. Please read and review this manual. We strongly recommend that a training and operator certification program be developed and implemented to assure adequate training and safe operation.

The QuickKART provides the pushing power for a single employee to safely and easily move a maximum of 30 shopping carts from the parking lot into the store. Its ability to operate in Radio Mode allows a single employee to steer the chain of carts from the front of the cart line while controlling the QuickKART as it pushes and follows from behind.

The QuickKART has proven its ability to work in all types of weather ranging from extreme heat or cold to rain and snow. The QuickKART will operate dependably in winter weather as cold as -20 degrees. It will also push carts through loose snow. On packed snow the QuickKART M3 and M3 HD will push 10 to 20 carts. Winter operation can be enhanced with the use of optional snow tires.

The QuickKART operates on a 36-volt battery system. It will operate for up to ten hours on a single charge. Cold weather will reduce operating time. It will require eight to ten hours to fully recharge the batteries. Storing and charging the QuickKART in a warm area will increase the operating time.

Each hand-held remote control transmitter operates on a unique pre-programmed code. For the QuickKART to operate in the Radio Mode, the receiver, which is under the hood, must be programmed to match the hand held transmitter, see page 35 for details. The LED on the remote will start to flash red when the battery is running low, and then cease to operate when the battery needs replacing. After battery replacement, the remote needs to be reprogrammed; see page 35 for details.

## QUICKART M3, M3 E, M3 HD WARNINGS & SAFETY NOTES

Please read and understand all the information included in this manual and the service instructions prior to operating or servicing the QuickKART. In addition, make certain all operators have been given and passed the certified operators course before using the QuickKART.

### **IMPORTANT SAFETY NOTE: THE RED BATTERY PLUG MUST BE DISCONNECTED FROM THE BATTERIES ANY TIME MAINTENANCE IS BEING PERFORMED UNDER THE COVER**

1. The QuickKART is designed to push shopping carts. Any other use of the QuickKART is prohibited unless specifically endorsed by the manufacturer. Improper usage and operation of the QuickKART may void the warranty.
2. Federal regulations require that you be at least 16 years old to operate powered equipment.
3. Do not operate the QuickKART unless you meet the minimum operator requirements set down by federal and state regulations, and corporate policy.
4. Do not operate the QuickKART unless you have reviewed and understood the training materials provided by your employer, passed the QuickKART test included in the QuickKART operators manual, and have demonstrated the skills necessary to operate the QuickKART safely.
5. Never carry passengers on the QuickKART M3, M3 E, or M3 HD!
6. The QuickKART is equipped with a brake that automatically engages when the machine is turned off or not in motion. To avoid an accident, **do not leave the machine parked or unattended on slopes**. When the QuickKART is to be left unattended or in storage, turn it "OFF" and remove the key.
7. Do not use long extension cords. Use the cord supplied with the machine. Find a location for recharging that is close to an electrical outlet receptacle. If another cord must be used, it must be 16 gauge or larger and no more than 10 feet in length.
8. Do not plug more than one machine into an extension cord or electrical outlet receptacle, use one outlet for each machine.
9. Do not leave the QuickKART unattended while it is turned "ON".
10. Operate the QuickKART at a safe speed; go only as fast as safety considerations allow. Take into consideration the location of store entrances, sidewalks, pedestrian and vehicle traffic, driveways, and parking lot layout.
11. Always operate in slow speed when near store guests. Operating conditions, such as wet or slippery pavement or slopes can affect the stopping distance of the QuickKART. Do not push more carts than the individual operator can safely control

- when those conditions are present. **Do not exceed 30 carts at a time under any circumstance. Refer to your store policy for the maximum cart number.**
12. Verify all warning and emergency labels are legible and mounted in correct areas shown on drawings starting on page 26.
  13. Do not drive over curbs or the edges of hardened surfaces higher than one inch.
  14. Always look behind the QuickKART before and while operating in reverse.
  15. Batteries must be fully charged initially before using the QuickKART.
  16. The electrolyte in a storage battery is an acid, which can cause severe burns to the skin and eyes. Wear appropriate protective clothing when working with batteries. Treat all electrolyte spills with an extended flushing with clear water. Contact a physician immediately if contact is made with battery acid.
  17. Three types of batteries may be used in the QuickKART: Standard, Maintenance free and AGM. Please check your batteries to see which kind you have, the standard battery needs maintenance, and the others do not.
    - a. Standard batteries do require regular maintenance. Check the batteries weekly to add distilled water to the batteries.
    - b. Maintenance free batteries contain liquid and may have caps for filling and very rarely need filling.
    - c. AGM batteries have no free liquid and do not require maintenance.
  18. Hydrogen gas is formed when charging the batteries. Use a location with adequate ventilation when charging QuickKART batteries. Never smoke near batteries. Do not charge batteries in an area with open flame or where there is electrical equipment that could cause an electrical arc.
  19. Do not lay metal objects (wrenches, screwdrivers, etc.) on any of the batteries to prevent electrical short circuits.
  20. Batteries are heavy. Always use care and proper lifting technique to avoid injury when removing or replacing batteries.
  21. Make sure QuickKART is properly secured when changing tires. (See instructions on page 40.)
  22. An optional strap is available to tether the carts together. To view the procedure to strap the carts see the illustration on page 29.

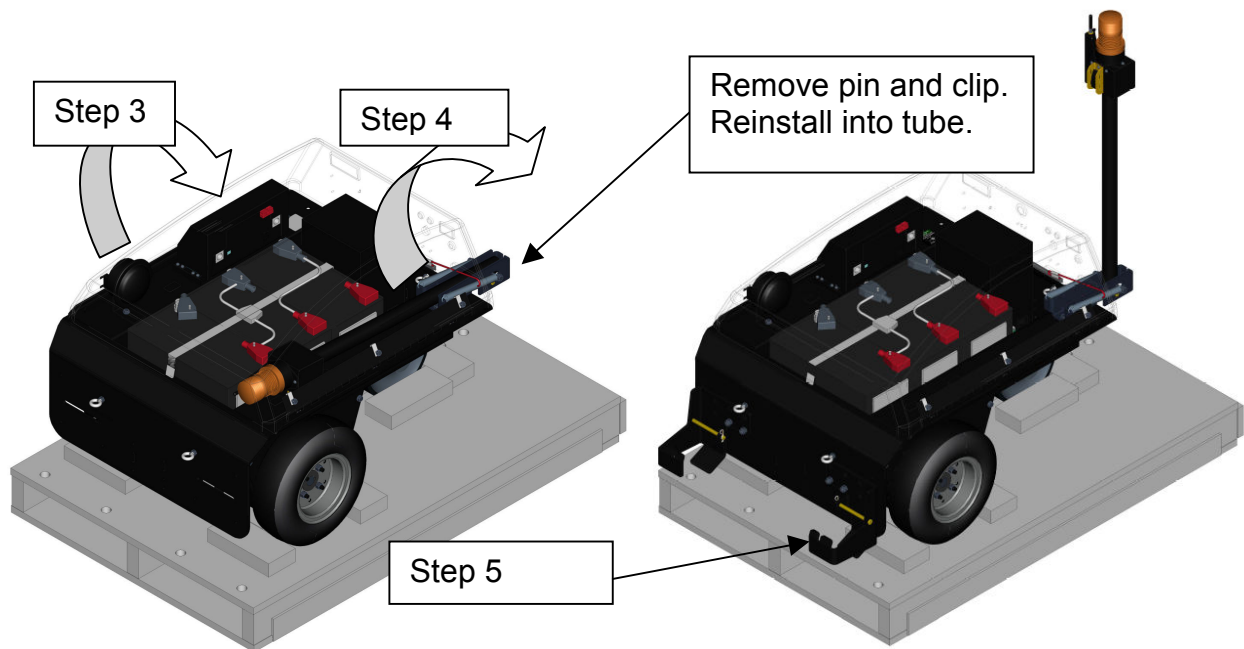
## UNPACKING THE QUICKKART M3, M3 E, M3 HD

- 1) The QuickKART M3, M3 E, M3 HD is typically shipped on a wooden pallet. It may come with additional individual components that are packaged inside the QuickKART. Care must be taken not to damage them during the unpacking. The components are:
  - a) **QuickKART**, the basic electric machine with two keys,
  - b) **A box including:** a Remote Control Transmitter, to remotely control the QuickKART, and Cart Coupler Hardware (yokes for the cart coupler).
  - c) Options may be strapped to the pallet.





- 2) Remove the material covering the QuickKART and components. Take care not to bend the antenna when removing the covering. Cut the banding material, which holds the QuickKART to the pallet.
- 3) Raise the hood to find a small box containing the remote control, and cart coupler hardware. Remove this box and set it aside.
- 4) On the M3 E only, remove the tower pin and clip. Unclip the red cable holding the hood open and raise the strobe tower. Carefully reinstall the pin and clip into the tower tube and clip the cable back in place.



- 5) To attach the cart coupler yokes/cups, select a typical cart from the store and then refer to the diagrams starting on page 30.
- 6) To remove the QuickKART from the pallet, use a sturdy wooden board(s) to create a ramp. Insert the key and turn it counter-clockwise to place the QuickKART in "manual mode". Use the nudge switch on the M3 E strobe tower to guide the QuickKART forward, down the ramp to the floor. .
- 7) **Turn "OFF" the QuickKART**
- 8) Each hand-held remote control transmitter operates on a unique pre-programmed code. For the QuickKART to operate in the Radio Mode, the receiver must be programmed to match the hand held transmitter. See page 35 for directions on how to program the remote control transmitter.

## ORIENTATION TO THE QUICKART M3-M3 HD

**CONTROL PANEL:** (See diagram on page 13.) At the back of the Control Panel are controls and indicators to operate the QuickART.

On the left is the **Horn** button, pressing the **HORN** button will sound the horn loudly as long as it is pressed. Next is the **Battery Level Meter** showing the percent of battery capacity. When the batteries are fully charged, the light on the right will be lit. As the QuickART is used throughout the day, that light will go out and the next will come on. Each light (indicating 10%) will slowly go out becoming fewer as the batteries discharge. When the 20% capacity light starts to flash on and off, it means there are approximately 4 minutes of remaining power before the QuickART automatically shuts down. The charging level is most accurately shown when the QuickART is pushing carts. *If the QuickART does shut down, turn the key off for a few minutes, then on again. This may allow time to reach the charging station.* Recharge the batteries for at least 8 to 10 hours or until fully recharged.

A large red **EMERGENCY** shut off button is located on the center back of the control panel. (See top and side views of the QuickART on page 14 and following.) This is located to provide easy access to stop the machine. *To restart the machine after the **EMERGENCY** shut off button has been activated, pull out the button, turn off the key switch, wait 1 second, then turn it back on.*

The far right of the control panel also includes two LEDs: The **Controller Status LED** indicates that the QuickART is turned on and will indicate problems with QuickART or the controller. A typical QuickART fault of the Emergency Shut-off switch engaged is indicated by a flashing LED. *To restart the machine after the "**EMERGENCY**" shut off button has been activated, pull out the button, turn off the key switch, wait 1 second, then turn it back on.* The **Radio Mode LED** indicates that the Radio Mode is on. It also indicates a radio transmission signal by flashing very fast.

The **Keyswitch**, on the right side of the control panel, can be turned to "**MANUAL**" for manual operation or to "**RADIO**" for remote operation. Turning the key straight up turns the QuickART off. Wait 1 second before turning the QuickART on again. The Radio Mode for cart collection allows operation only in the forward direction.

Underneath the LH rear corner of the control panel is the **Radio Learn** button. This button is pressed as part of the remote programming operation.

**MANUAL MODE:** Manual Mode is defined as operating the QuickART while walking behind the QuickART M3-M3 HD. Turning the key counter-clockwise turns the QuickART on and places it in manual mode. Steering is controlled from the handle bar. Turning the thumb wheel throttle controls speed and direction. With respect to the RH thumb wheel; counter-clockwise is reverse, clockwise is forward. Rotating the thumb wheel farther increases the speed. Releasing the thumb wheel stops the machine.



**RADIO MODE:** (See diagram on page 12.) Radio Mode is defined as operating the QuickKART M3 and M3 HD with the 5-button remote control while standing or walking alongside the lead cart of the cart chain coupled to the QuickKART M3-M3 HD. Turning the top of the key clockwise turns the QuickKART on and places it in Radio Mode. Guiding the lead cart in the desired direction controls steering. Forward speed, brakes and horn are operated with the hand held radio remote control. While in Radio Mode, the QuickKART M3 and M3 HD will only move forward.

**STEERING:** In Manual Mode, the QuickKART M3 and M3 HD are turned by exerting light pressure on the handlebars, to the left or right, similar to steering a bicycle. In Radio Mode, guiding the lead cart in the desired direction controls steering.

**ACCELERATION AND BRAKING:** The thumb wheel throttle located on the handle bar controls Acceleration and braking of the QuickKART in the Manual Mode. The QuickKART speed is controlled by twisting or rotating the throttle thumb wheel, similar to turning a speed knob. Braking action occurs as pressure is released. Braking force can be controlled for quick or gradual stops. Twisting the thumb wheel slowly brings the QuickKART to a gradual stop. Releasing it rapidly stops the QuickKART very quickly. Maximum braking force is applied when the throttle is fully released.

When the QuickKART M3 or M3 HD is stopped, the parking brake automatically engages. This prevents the QuickKART from rolling on slopes or being pushed manually. If it is necessary to push the QuickKART (i.e. dead battery or machine not working), the parking brake can be released by opening the cover and pulling the release lever marked "**Brake Release**" on the lower right corner at the back of the machine. Once the parking brake is released, the QuickKART will not operate until the parking brake is pushed back in. It is recommended that the brake be released only if batteries are dead and manual pushing is required.

## OPERATION OF THE QUICKKART M3-M3 HD

### MANUAL MODE:

To operate the QuickKART M3-M3 HD in the Manual Mode, perform the following steps:

1. Insert the key into the key-switch located on the control panel. Turn the key counter-clockwise to turn the QuickKART "on" in Manual Mode.
2. An LED on the control panel will show the controller status (see illustration on page 13). Confirm that all systems are working properly.
3. In manual operation, while standing behind the machine, both hands on the handles, slowly twist the RH thumb wheel throttle control clockwise and the QuickKART will start to move forward. Slowly release the pressure on the throttle control and the QuickKART will slow to a stop. A few seconds after the throttle control is fully released, the electronic brakes will be applied. When moving forward or backward, a sudden release of the throttle control will cause the automatic brake to bring the QuickKART to a controlled stop.
4. To change the direction of travel, slowly twist the thumb wheel throttle in the opposite direction and the QuickKART will start to move in that direction.

5. To turn the power off, turn the key to a straight up position. Note: Do not leave the machine "ON" and do not leave the key in the switch when unattended.
6. The collection of shopping carts begins by walking the QuickKART to a parking lot location where customers have left carts. To attach the first cart, remove the locking U-pin or clevis pins on the cart yoke or cart cup assembly.
  - a. For a cart yoke assembly; position the rear of the first shopping cart so that its vertical rear frame is aligned with the yoke openings on the coupler assembly. Lift the cart slightly off the ground and move it sideways until it engages both coupler yokes. Then, put the locking U-pin back into place to secure the shopping cart. The coupler yokes can be adjusted up and down and from side to side to accommodate various types and sizes of shopping carts. See illustration on page 32 and following.
  - b. For a cart cup assembly; position the rear wheels of the first shopping cart into cup assembly. The cart cups can be adjusted from side to side to accommodate various types and sizes of shopping carts. Then, put the two locking clevis pins back into place to secure the shopping cart. See illustration on page 30 and following.
  - c. Other cart coupling brackets require different steps.
7. Additional shopping carts can now be collected to form a train of a maximum of 30 carts.

#### RADIO MODE:

The QuickKART can be operated in the Radio Mode by turning the keyswitch to the "**Radio**" position.

1. While in Radio Mode, only one person is needed to collect shopping carts. This person gathers the carts and adds them to the train while using the 5-button remote control to control forward speed, braking and the warning horn. It is recommended that carts be formed into a line and then the machine brought up to the line in the "**SLOW**" speed and stopped and then started again to nest the carts. Continue to use the "**SLOW**" speed while operating near entrances and near store guests. **Never** use the "**FAST**" Radio speed near guests, the entrance or within the store.
2. **NEVER** press on the remote buttons unless you are at the front of the cart chain and controlling the lead cart. **NEVER** advance additional carts into the store unless you are at the front of the cart chain. The "**SLOW**" speed is .8 mph. The "**FAST**" speed allows movement at a safe walking pace of 2.7 mph as carts are returned to the store.
3. Only one button of the remote control is usable at a time. Press the "**SLOW**" or "**FAST**" button for the speed desired for the current conditions. The QuickKART will briefly coast when the control buttons are released, helping to prevent a separation of carts. If a sudden stop is required, press the "**STOP**" button. Sudden stops without a cart restraint strap will require the operator to hold back the lead cart at the front of the train to prevent cart separation.
4. In an emergency, press and hold the stop button until you walk over and shut off the key.
5. The QuickKART M3-M3 HD follows the train of shopping carts as guided by the cart attendant. The actual turning radius of the cart chain is a function of the design of the shopping carts being used. The tighter the carts nest together the longer the turning radius will be. After some experience the QuickKART operator will become familiar with this and be able to judge what turns will be practical. In practice the

operator places one hand on the cart, at the front of the train, walking along side and guiding the cart in the desired direction. The other hand is used to operate the hand held remote control transmitter. When turning the cart chain it is easier to maintain safe footing by leaning against the lead cart rather than pulling.

6. After delivering the carts to the store, stop the QuickKART and remove the carts and manually push them into the store.
7. A feature on newer M3's and M3 HD's is the 2 channel 5-button remote. When two QuickKART M3s are operating close together, the radios may interfere with each other. If one of the QuickKARTs has a 2 channel remote, reprogram that remote to its machine once and the problem will go away. It is now using the second channel.

## 5-BUTTON REMOTE CONTROL

BATTERY/TRANSMIT  
INDICATOR LIGHT

2 CHANNEL  
REMOTE  
SYMBOL

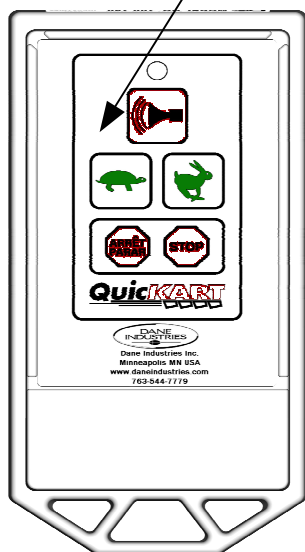
SLOW SPEED  
PRESS TO  
KEEP IN  
MOTION

NON- 2  
CHANNEL  
REMOTES  
HAVE NO  
SYMBOL HERE

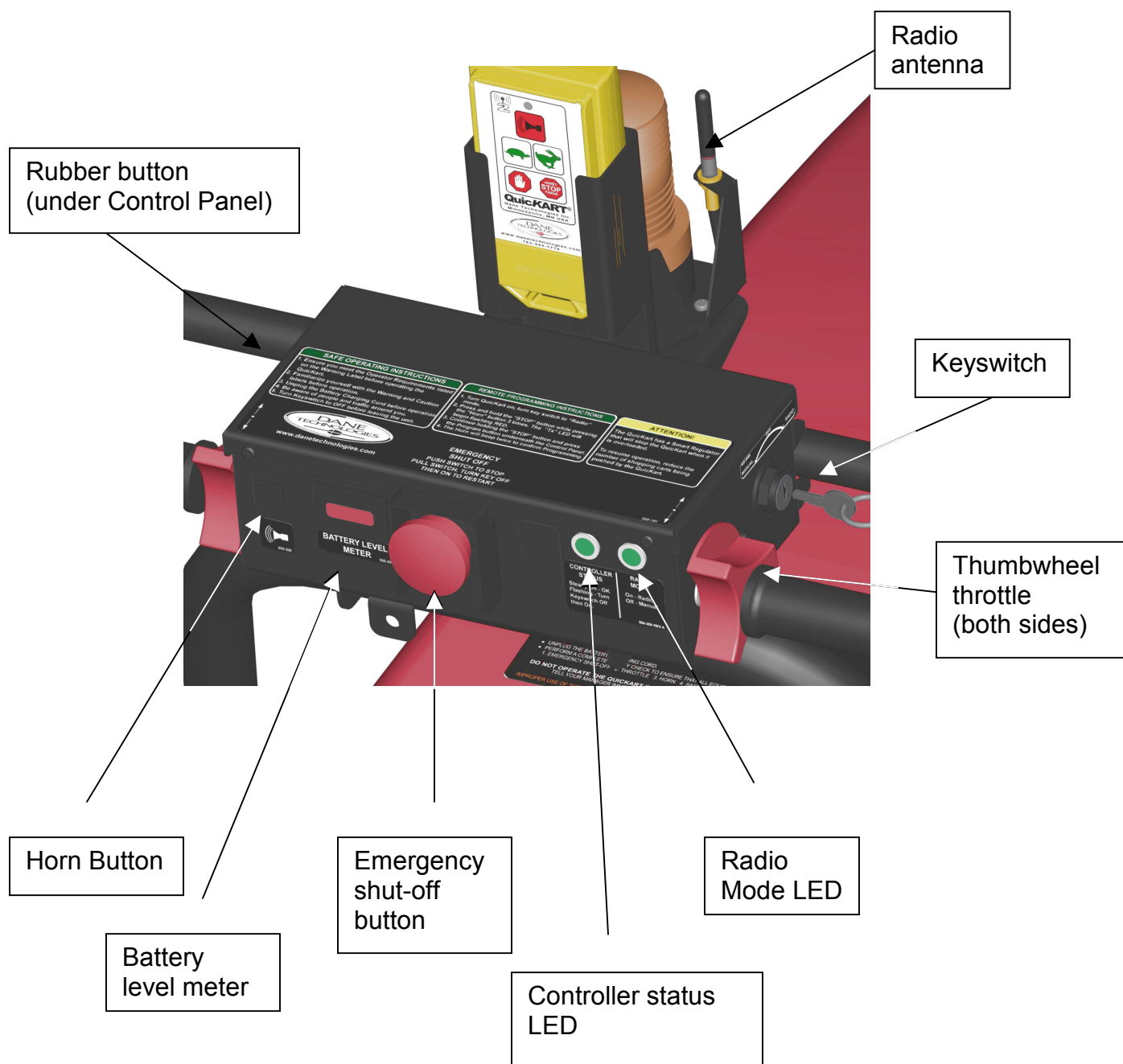
HORN  
PRESS TO  
SOUND

FAST SPEED  
PRESS TO  
KEEP IN  
MOTION

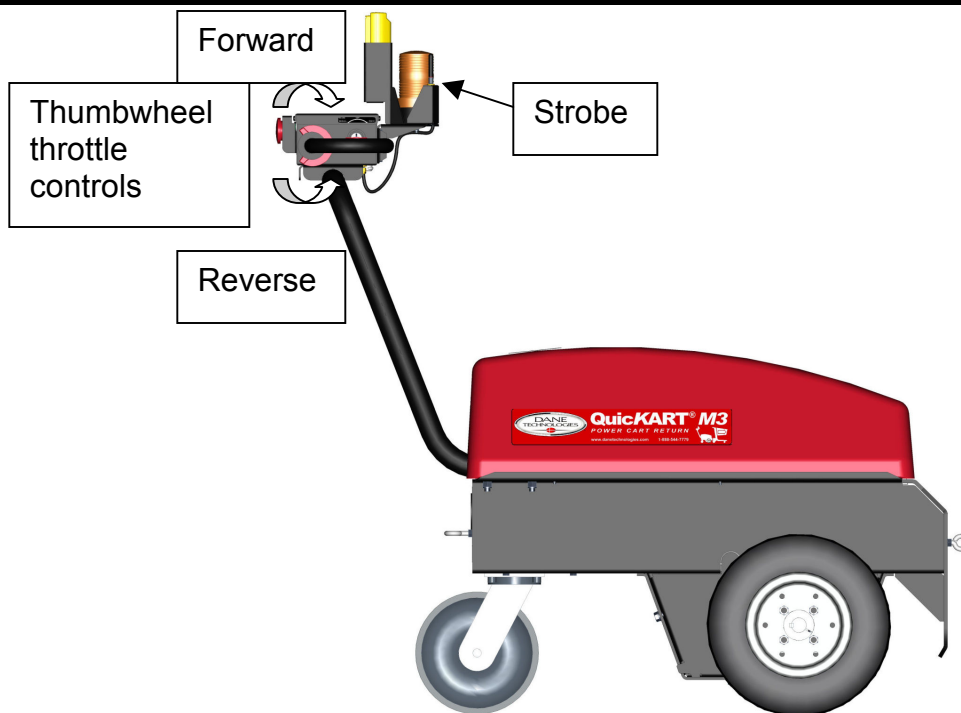
STOP BUTTON  
PRESS EITHER BUTTON  
TO STOP IN  
EMERGENCY.  
PRESS AND HOLD UNTIL  
KEY IS TURNED OFF.



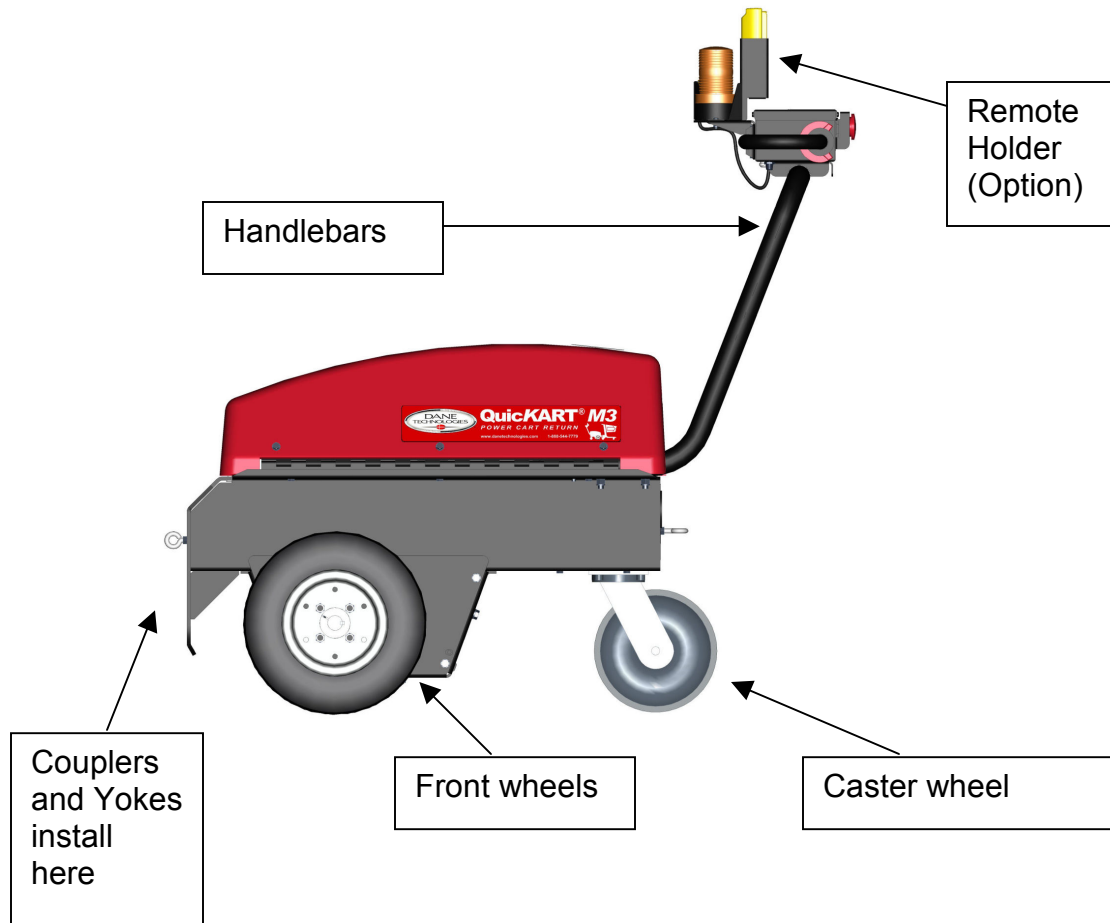
# M3, M3 HD CONTROL PANEL



## QUICKART M3-M3 HD – RIGHT SIDE VIEW

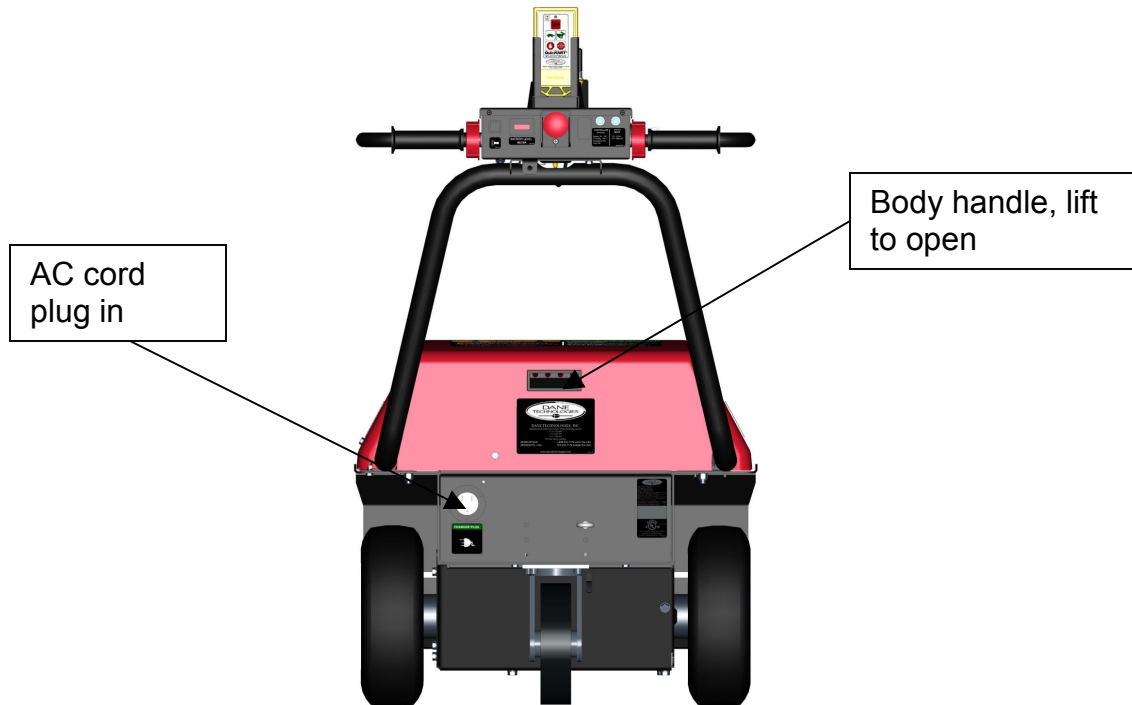


## QUICKART M3-M3 HD – LEFT SIDE VIEW

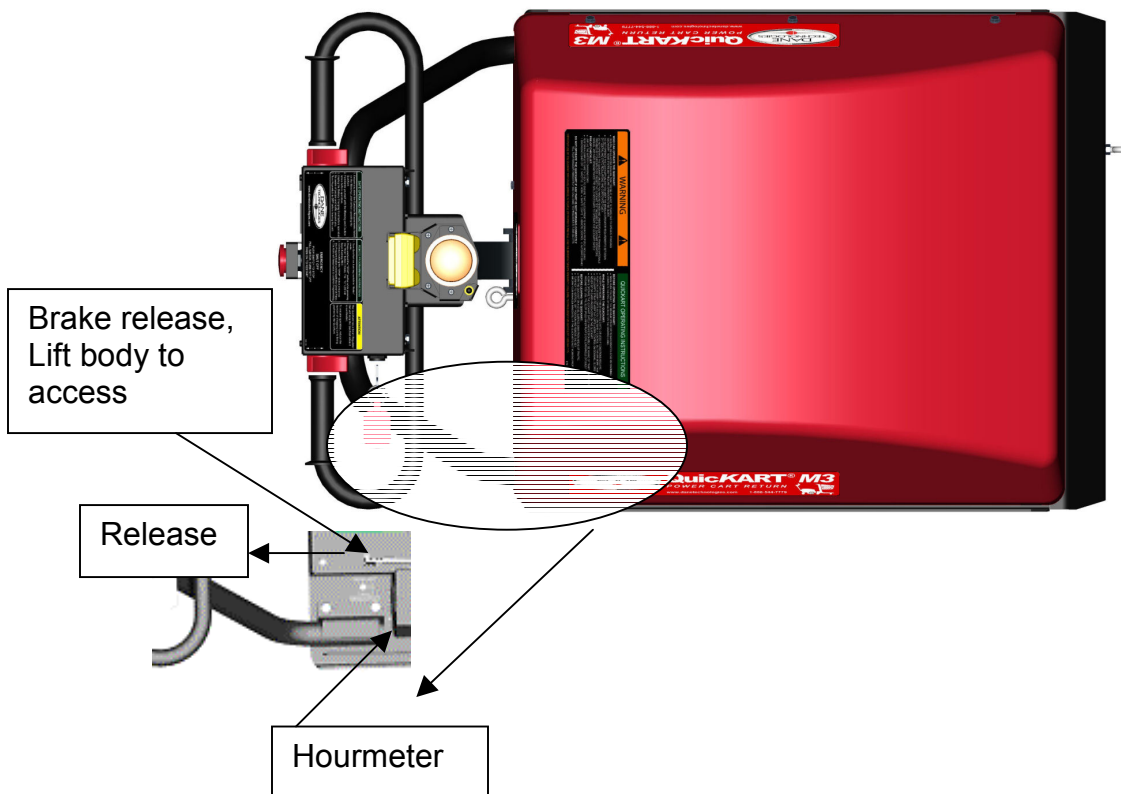




## QUICKART M3-M3 HD – REAR VIEW



## QUICKART M3-M3 HD – TOP VIEW



## ORIENTATION TO THE QUICKART M3 E

**CONTROL PANEL:** (See diagram on page 20.) At the back of the Control Panel are controls and indicator to operate the QuickKART.

On the left is the **Battery Level Meter** showing the percent of battery capacity. When the batteries are fully charged, the light on the right will be lit. As the QuickKART is used throughout the day, that light will go out and the next will come on. Each light (indicating 10%) will slowly go out becoming fewer as the batteries discharge. When the 20% capacity light starts to flash on and off, it means there are approximately 4 minutes of remaining power before the QuickKART automatically shuts down. The charging level is most accurately shown when the QuickKART is pushing carts. If the QuickKART does shut down, turn the key off for a few minutes, then on again. This may allow time to reach the charging station. Recharge the batteries for at least 8 to 10 hours or until fully recharged.

A large red **EMERGENCY** shut off button is located on the center back of the control panel. (See top and side views of the QuickKART on page 21 and following.) This is located to provide easy access to stop the machine. *To restart the machine after the **EMERGENCY** shut off button has been activated, pull out the button, turn off the key switch, wait 1 second, then turn it back on.*

The far right of the control panel also includes two LEDs: The **Controller Status LED** indicates that the QuickKART is turned on and will indicate problems with QuickKART or the controller. A typical QuickKART fault of the Emergency Shut-off switch engaged is indicated by a flashing LED. *To restart the machine after the "**EMERGENCY**" shut off button has been activated, pull out the button, turn off the key switch, wait 1 second, then turn it back on.* The **Radio Mode LED** indicates that the Radio Mode is on. It also indicates a radio transmission signal by flashing very fast.

The **Keyswitch**, on the control panel, can be turned to "**MANUAL**" for manual operation or to "**RADIO**" for remote operation. Turning the key straight up turns the QuickKART off. Wait 1 second before turning the QuickKART on again. The Radio Mode allows operation in the forward direction for cart collection or backing.

On the lower LH corner of the control panel is the **Radio Learn (rubber)** button. This button is pressed as part of the remote programming operation.

**MANUAL MODE:** Manual Mode is defined as operating the QuickKART while walking behind the QuickKART M3 E. Turning the key counter-clockwise turns the QuickKART on and places it in manual mode. Steering is controlled with the strobe tower (the tower can be pulled rearward to make steering more comfortable (see page 22). Pressing the nudge switch (manual throttle) controls speed and direction. With respect to the switch; press the end of the switch toward the direction you want to go. Releasing the nudge switch stops the machine.

**RADIO MODE:** (See diagram on page 19.) Radio Mode is defined as operating the QuickKART M3 E with the 6-button remote control while standing or walking alongside the lead cart of the cart chain coupled to the QuickKART M3 E. Turning the top of the key clockwise turns the QuickKART on and places it in Radio Mode. Guiding the lead cart in the desired direction controls steering. Forward and reverse speed, brakes and horn are operated with the hand held radio remote control. While in Radio Mode, the QuickKART M3 E with the 6-button remote will move forward or reverse.

**STEERING:** In Manual Mode, the QuickKART M3 E is turned by exerting light pressure on the strobe tower, to the left or right. In Radio Mode, guiding the lead cart in the desired direction controls steering.

**ACCELERATION AND BRAKING:** The nudge switch controls acceleration and braking of the QuickKART M3 E in the Manual Mode. Braking action occurs as pressure is released. Maximum braking force is applied when the nudge switch is fully released.

When the QuickKART M3 E is stopped, the parking brake automatically engages. This prevents the QuickKART from rolling on slopes or being pushed manually. If it is necessary to push the QuickKART (i.e. dead battery or machine not working), the parking brake can be released by opening the cover and pulling the release lever marked "**Brake Release**" on the lower right corner at the back of the machine. Once the parking brake is released, the QuickKART will not operate until the parking brake is pushed back in. It is recommended that the brake be released only if batteries are dead and manual pushing is required.

## OPERATION OF THE QUICKKART M3 E

### MANUAL MODE:

To operate the QuickKART M3 E in the Manual Mode, perform the following steps:

1. Insert the key into the key-switch located on the control panel. Turn the key counter-clockwise to turn the QuickKART "on" in Manual Mode.
2. An LED on the control panel will show the controller status (see illustration on page 20). Confirm that all systems are working properly.
3. In manual operation, press the side of the nudge switch toward the carts to move forward. Release the switch to stop. A few seconds after the nudge switch is released the QuickKART will stop and the electronic brakes will be applied. When moving forward or backward, releasing the nudge switch will automatically bring the QuickKART to a controlled stop.
4. To change the direction of travel, press the nudge switch in the opposite direction and the QuickKART will start to move to move in that direction.
5. To turn the power off, turn the key to a straight up position. Note: Do not leave the machine "ON" and do not leave the key in the switch when unattended.
6. The collection of shopping carts begins by walking the QuickKART to a parking lot location where customers have left carts. To attach the first cart, remove the locking U-pin or clevis pins on the cart yoke or cart cup assembly.
  - a. For a cart yoke assembly; position the rear of the first shopping cart so that its vertical rear frame is aligned with the yoke openings on the coupler

assembly. Lift the cart slightly off the ground and move it sideways until it engages both coupler yokes. Then, put the locking U-pin back into place to secure the shopping cart. The coupler yokes can be adjusted up and down and from side to side to accommodate various types and sizes of shopping carts. See illustration on page 32 and following.

- b. For a cart cup assembly; position the rear wheels of the first shopping cart into cup assembly. The cart cups can be adjusted from side to side to accommodate various types and sizes of shopping carts. Then, put the two locking clevis pins back into place to secure the shopping cart. See illustration on page 30 and following.
  - c. Other cart coupling brackets require different steps.
7. Additional shopping carts can now be collected to form a train of a maximum of 30 carts.

### RADIO MODE:

The QuickKART can be operated in the Radio Mode by turning the keyswitch to the "**Radio**" position.

1. While in Radio Mode, only one person is needed to collect shopping carts. This person gathers the carts and adds them to the train while using the 6-button remote control to control forward and reverse speed, braking and the warning horn. It is recommended that carts be formed into a line and then the machine brought up to the line in a "**SLOW**" speed and stopped and then started again to nest the carts. Continue to use a "**SLOW**" speed while operating near entrances and near store guests. **Never** use a "**FAST**" Radio speed near guests, the entrance or within the store. **Never** use the reverse "**FAST**" Radio with a chain of carts.
2. **NEVER** press on the remote buttons unless you are at the front of the cart chain and controlling the lead cart. **NEVER** advance additional carts into the store unless you are at the front of the cart chain. The "**SLOW**" speed is .8 mph. The "**FAST**" speed allows movement at a safe walking pace of 2.7 mph as carts are returned to the store.
3. Only one button of the remote control is usable at a time. Press the "**SLOW**" or "**FAST**" button for the speed and direction desired for the current conditions. The QuickKART will briefly coast when the control buttons are released, helping to prevent a separation of carts. If a sudden stop is required, press the "**STOP**" button. Sudden stops without a cart restraint strap will require the operator to hold back the lead cart at the front of the train to prevent cart separation.
4. In an emergency, press and hold the stop button until you walk over and shut off the key.
5. The QuickKART M3 E follows the train of shopping carts as guided by the cart attendant. The actual turning radius of the cart chain is a function of the design of the shopping carts being used. The tighter the carts nest together the wider the turning radius will be. After some experience the QuickKART operator will become familiar with this and be able to judge what turns will be practical. In practice the operator places one hand on the cart, at the front of the train, walking along side and guiding the cart in the desired direction. The other hand is used to operate the hand held remote control transmitter. When turning the cart chain it is easier to maintain safe footing by leaning against the lead cart rather than pulling.
6. After delivering the carts to the store, stop the QuickKART and remove the carts and manually push them into the store.

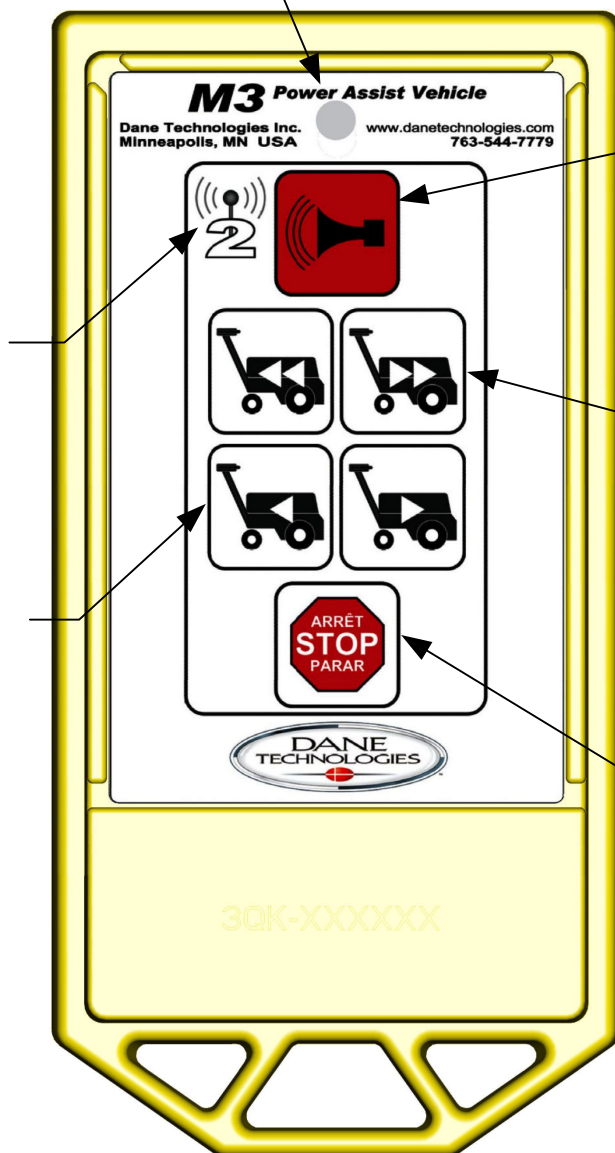
8. A feature on the M3 E is the 2 channel 6-button remote. When two QuickKART M3s are operating close together, the radios may interfere with each other. If one of the QuickKARTs has a 2 channel remote, reprogram that remote to its machine once and the problem will go away. It is now using the second channel.

## 6-BUTTON REMOTE CONTROL

BATTERY/TRANSMIT  
INDICATOR LIGHT

2 CHANNEL  
REMOTE  
SYMBOL

**SLOW SPEED**  
PRESS TO  
KEEP IN  
MOTION,  
ARROWS  
SHOW  
DIRECTION

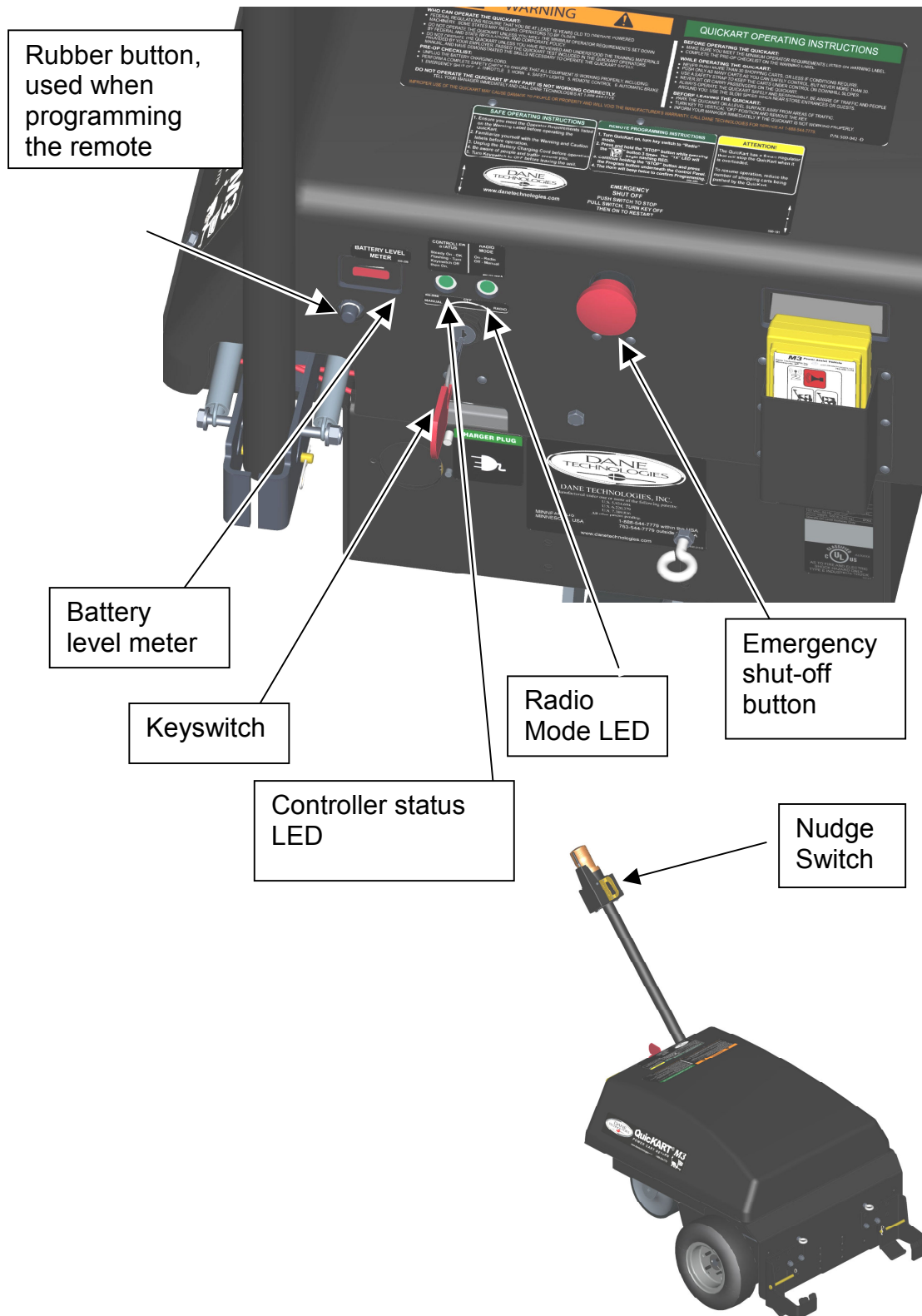


**HORN**  
PRESS TO  
SOUND

**FAST SPEED**  
PRESS TO  
KEEP IN  
MOTION,  
ARROWS  
SHOW  
DIRECTION

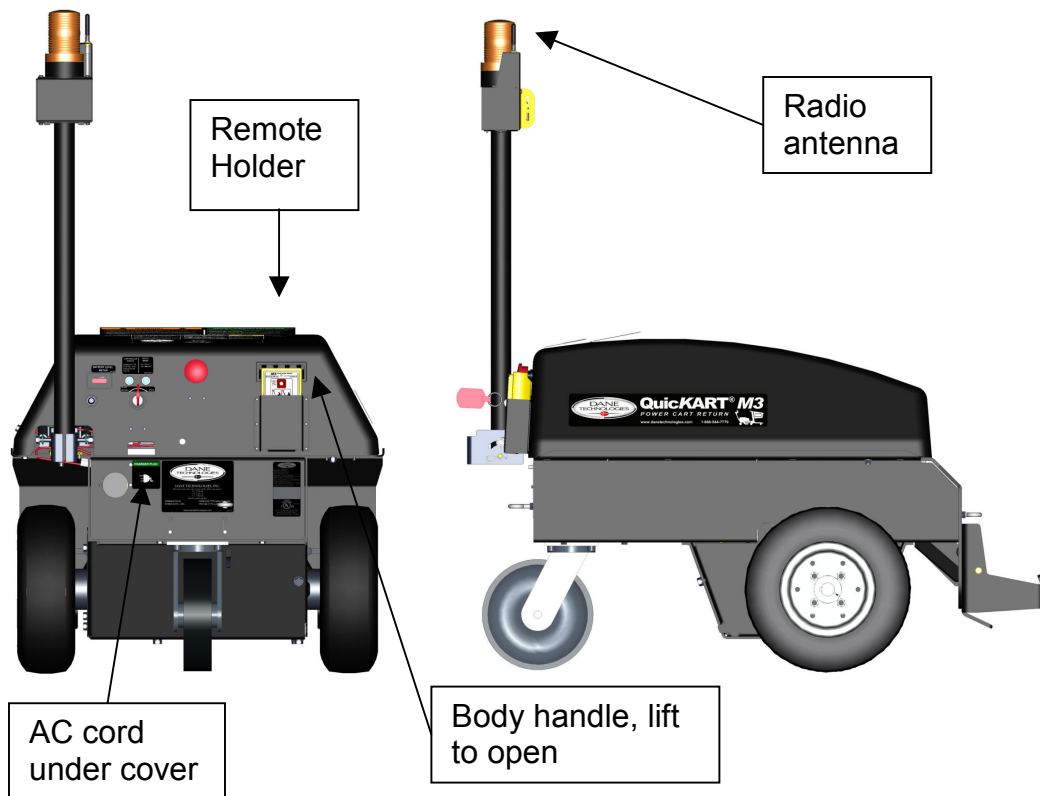
**STOP BUTTON**  
PRESS BUTTON TO  
STOP IN EMERGENCY.  
PRESS AND HOLD UNTIL  
KEY IS TURNED OFF.

# M3 E CONTROL PANEL

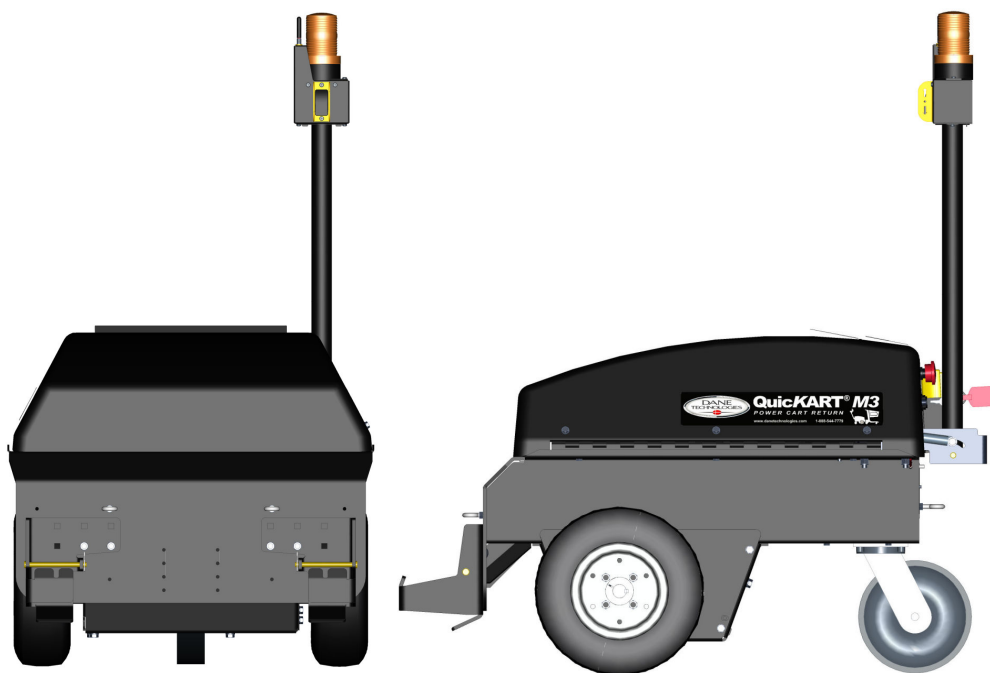




## QUICKART M3 E – RIGHT SIDE and REAR VIEW



## QUICKART M3 E – FRONT and LEFT SIDE VIEW



## PROGRAMMING THE REMOTE CONTROL

Each hand-held remote control transmitter operates on a unique pre-programmed code. For the QuickKART to operate in the Radio Mode, the receiver must be programmed to match the hand held remote control. Every time the batteries in the remote control are replaced, the remote control may need to be reprogrammed to match the receiver. If the QuickKART stops responding to the remote control there may be something wrong with the transmitter. Check the status of the remote battery by depressing one of the remote buttons. If the green LED light on the transmitter does not illuminate, change the battery and reprogram the remote control as follows:

### 5-button remote:

1. Turn the QuickKART to "**RADIO**". Hold remote about arms length from the antenna.
2. Press and continue to hold the Stop button on the hand-held remote (page 12)
3. Press the Horn button on the hand-held remote three times. (page 12) The LED on the remote changes color from green to red and flashes fast.
4. Press the Rubber button located on the underside (M3-M3 HD) of the CONTROL PANEL (see page 13)

### 6-button remote:

1. Turn the QuickKART to "**RADIO**". Hold remote about arms length from the antenna.
2. Press and continue to hold the Stop button on the hand-held remote (page 19)
3. Press the Slow Reverse button on the hand-held remote three times. (page 19) The LED on the remote changes color from green to red and flashes fast.
4. Press the Rubber button located on the left side (M3 E) of the CONTROL PANEL (see page 20)

The horn should sound twice indicating the reprogram is complete. Release the Stop button and the QuickKART is ready for operation. The remote LED should turn back to green color.

If the horn did not sound, retry the above steps making sure that the switch on the control panel is on "**RADIO**". If the horn still did not sound, you can also determine if the reprogram was successful by pressing the slow forward button on the remote to see if the QuickKART now responds to the remote signal.

## BATTERY CHARGING

Three, 12-volt, Deep Cycle batteries power the QuickKART M3-M3 HD. Under normal usage they will power the QuickKART for 10 or more hours, when the ambient temperatures are above approximately 40 degrees F. Colder temperatures will reduce the operating time of the batteries and increase the charging time. To optimize battery power, store and charge the QuickKART in a room with a temperature of at least 50 degrees F.

To recharge the batteries:

FIRST, park the QuickKART in a well-ventilated location near an electrical outlet. The QuickKART must be turned off and the key removed. Plug the Dane 10-foot extension cord (if provided) into the connector located at the lower left rear of the QuickKART, see page 15. Use special care to ensure the extension cord is properly seated inside the connector. Failure to do so can cause improper charging or damage to the battery charger.

SECOND, connect the charger's Dane 10-foot power extension cord or machine AC cord into a wall receptacle. The battery charger will automatically shut off when the batteries are fully charged. This takes between eight to ten hours for fully discharged batteries.

The LEDs on the charger tell you the status of the charge process. Flashing yellow, start of charge. Solid yellow, maximum charge. Flashing green, tapering charge. Solid green, charge complete; Ready to use.

The charger continues to monitor the condition of the battery and top off the charge after the green light is on. The charger should be connected any time the QuickKART is not being used.

**Make sure the power to the wall receptacle is not turned off during the nightly recharging time.**

The AC cord must be unplugged before the QuickKART will move.

To put the QuickKART back into service, after the batteries are fully charged, disconnect the charger's AC power cord from the wall receptacle and, if an extension cord is used, from the lower receptacle at the lower left rear of the QuickKART. Store the extension cord in an appropriate location.

**WARNING** Do not use long extension cords. Use the AC cord supplied with the machine. Find a location for re-charging that is close to an electrical outlet receptacle. If another cord must be used, it must be 16 gauge or larger and no more than 10 feet in length.

**WARNING** Do not plug more than one machine into an extension cord or electrical outlet receptacle, use one outlet for each machine.

## QUICKART M3, M3 E, M3 HD IMPORTANT MAINTENANCE NOTES

Check the QuickKART daily, for safe operation.

Routine maintenance should only be performed by those permitted by federal and state age regulations. Repairs should only be completed by Dane Technologies or an authorized service technician. Federal law requires that you must be at least 18 years old to service the batteries of the QuickKART.

**General condition:** Keep the QuickKART free from the accumulation of grease, dirt, and other materials.

If the QuickKART malfunctions in any way, turn it off and remove the key. Immediately report the malfunction to the appropriate store manager as well as Dane Technologies. Do not use the QuickKART until it has been repaired by an authorized service technician.

### WARNING

Do not permit open flame, sparks or smoking during maintenance. Adequate ventilation is essential for safety. Do not lay metal objects on the batteries.

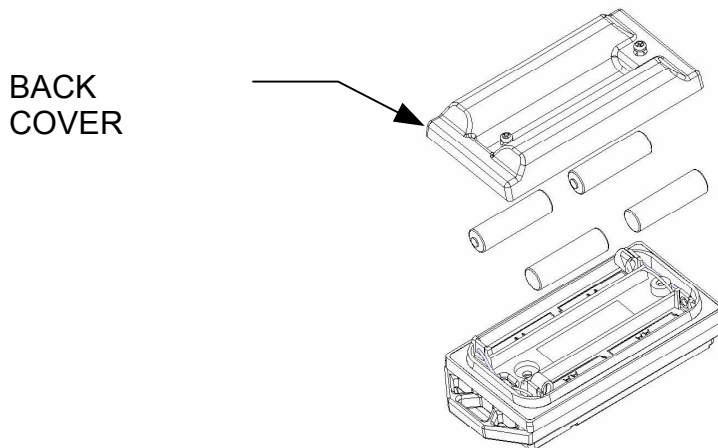
<b>D= Daily, M= Monthly, S-A = Semi-annually, Y=Yearly &gt;&gt;&gt;</b>				
	<b>D</b>	<b>M</b>	<b>S-A</b>	<b>Y</b>
Inspect throttle, turn keyswitch to "Manual". The cart should not move. Check that the RH thumb wheel throttle moves freely in a CW then CCW direction (nudge switch on M3 E). The cart should move forward then reverse.	X			
Test the parking brake system. With the keyswitch "Off", try to move the machine. The brake should keep the drive wheels from rotating.	X			
Test the Emergency shut-off button. With the keyswitch in "Manual" or "Radio", pressing the Emergency shut-off will disable all controls and stop the machine.	X			
Strobe Light: Check for damage and proper operation.	X			
Remote: Check for damage. With the keyswitch in "Radio", check operation with all buttons. The remote should operate up to 100' from the machine.	X			
<b>Charge batteries overnight, every night.</b>	X			
Check couplers and yokes for unsafe wear, loose or missing fasteners, and safe connection.	X			
Batteries: Inspect loose connections, frayed insulation, and corrosion. Clean away corrosion. Check charger operation, see page 36.		X		
Wiring: Inspect all wiring and electrical connections for loose connections, frayed or deteriorated insulation, exposed wire, and broken or missing hardware.		X		
Maintenance Type Batteries: Check water levels, add <b>distilled water</b> after charging as necessary.		X		
Check body for damage. Check all bolts, fasteners and connections for tightness and wear.		X		
Check tires and caster wheel for wear, bent rims and missing or loose lug nuts.		X		
Check the antenna for damage.		X		
Check the machine for damaged or missing labels.		X		
Apply grease to rear swivel wheel using a standard grease gun, two places.			X	
Check the AC charger cord for frayed or deteriorated insulation and exposed wire.			X	
Have your authorized service center check your QuickKART completely.				X

## REMOTE CONTROL: BATTERY CHANGING

Refer to Diagrams below.

1. The remote control is to be taken apart only when the batteries need replacing. There are no adjustments or switches inside the module. As long as the small light on the remote is green the battery does not need replacing. If the light is red the battery does need to be replaced.
2. Before opening the remote turn off the QuickKART that had been using this remote. If another remote is being used by this QuickKART it is OK to proceed.
3. To open the remote control, place the control panel face down on a table top and use a medium size Phillips screw driver to remove the two (2) screws from the remote's back cover.
4. After the screws are removed, leave the remote face down and remove the back cover.
5. To replace the batteries, take out the old batteries and replace them with new, ensuring that the new batteries are inserted as diagramed inside the battery compartment.
6. Properly dispose of the old batteries in an environmentally correct depository.
7. Examine the inside of the remote for any signs of condensation or water. If signs of moisture are present, allow the compartment to dry fully before replacing the back.
8. Before replacing the back, ensure that the gray rectangular gasket around the edge of the battery compartment is in good condition. If the gasket is damaged, return the remote to Dane Technologies for repair.
9. Ensure that the red and black wires leading away from the battery terminals and the black wire at the opposite end of the remote are intact. If they are broken, return the remote to Dane Technologies for repair.
10. The QuickKART should be "off". Before replacing the back, ensure the remote panel light comes on when a stop button is pressed.
11. Replace the back with the two Phillips screws.
12. Reprogram the remote control as described on page 35.

## REMOTE CONTROL: BATTERY CHANGING DIAGRAM





## CHANGING FRONT TIRES

Turn QuickKART off and remove key.

QuickKART must be on a flat surface. Make sure the parking brake is functional and on.

Use protective eyewear at all times.

Block the opposite drive tire to stop it from rolling.

Slightly loosen the four (4) lug nuts, about 1/2 turn, from the wheel needing service. Use a 9/16-inch socket on the QUICKART M3 12-inch tires. Use a 5/8-inch socket on the 16-inch tires for the QUICKART M3 HD . **IMPORTANT:** Do not remove any of the nuts; only slightly loosen them while the wheel is still on the ground.

Use a jack to lift the front of the QuickKART off the ground approximately 2 to 3 inches.

Insert a sturdy and stable block under the frame to hold it securely in this elevated position.

Unscrew the four front wheel lug nuts and place them in a location where they will not become lost. Remove the wheel. The new or repaired wheel is placed back on the front hub with the tire stem facing out. Replace the 4 lug nuts with the beveled side toward the inside and tighten.

Using the jack, lift the QuickKART off the supporting block. Remove the block and use the jack to lower the QuickKART to the ground. Tighten the 4 lug nuts again ensuring that they are tightened to a minimum of 50 foot-pounds torque.

## CHANGING REAR TIRE

Turn QuickKART off and remove key.

QuickKART must be on a flat surface. Make sure the parking brake is functional and on.

Use protective eyewear at all times.

Lift the back of the QuickKART so the rear castered wheel is approximately 2 inches off the ground. This is accomplished by using a jack under the rear frame of the QuickKART, in the center. Once the QuickKART is lifted, place a sturdy and stable block in each corner then lower the jack so the weight of the QuickKART is resting on the blocks. Also place blocks on the front wheels to keep the QuickKART from rolling.

With a 9/16" wrench, remove the four bolts holding the caster assembly to the frame.

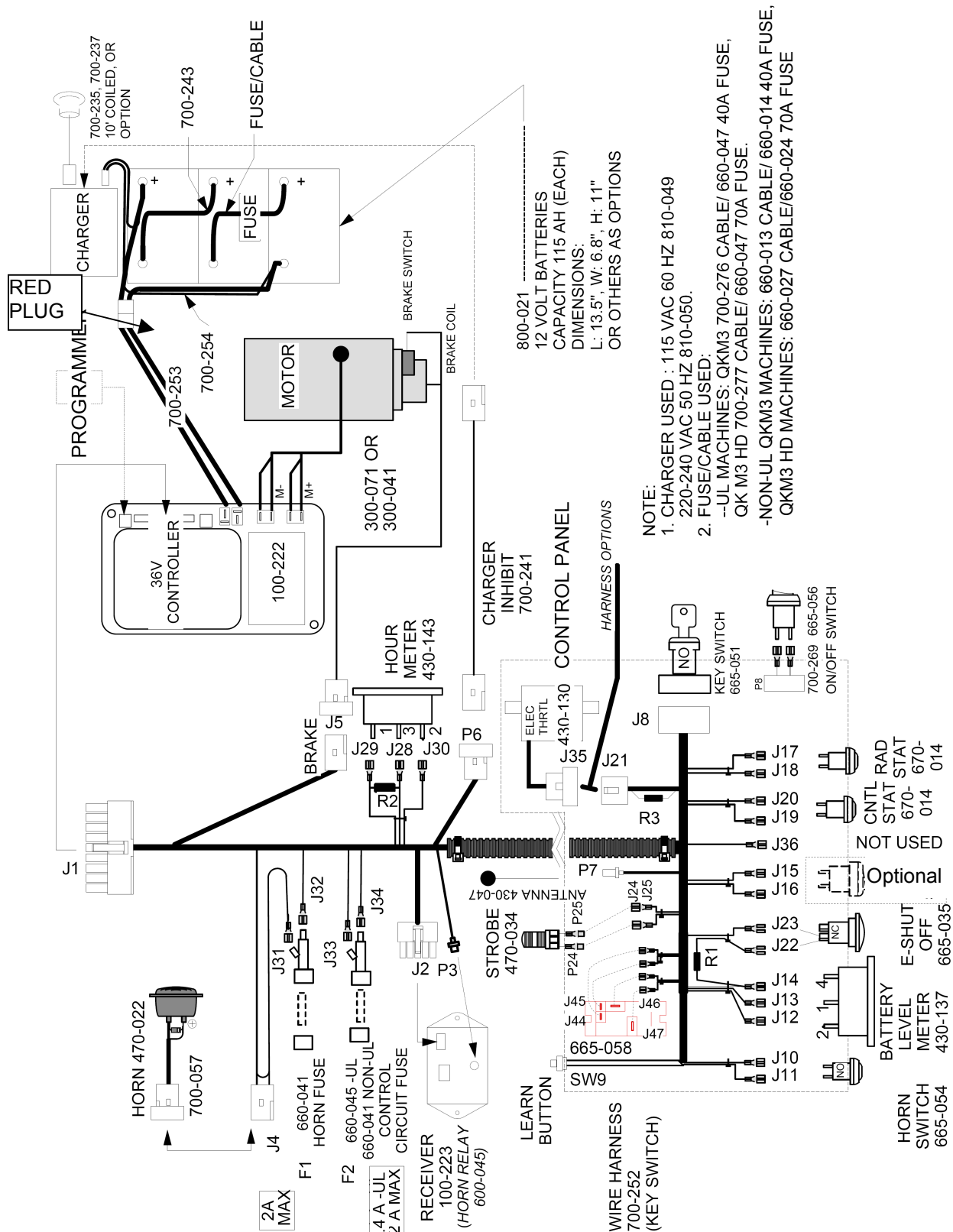
Save the hardware and use it when replacing the wheel.

When replacing the caster assembly, reuse the saved hardware. Insert bolts, apply nuts and tighten.

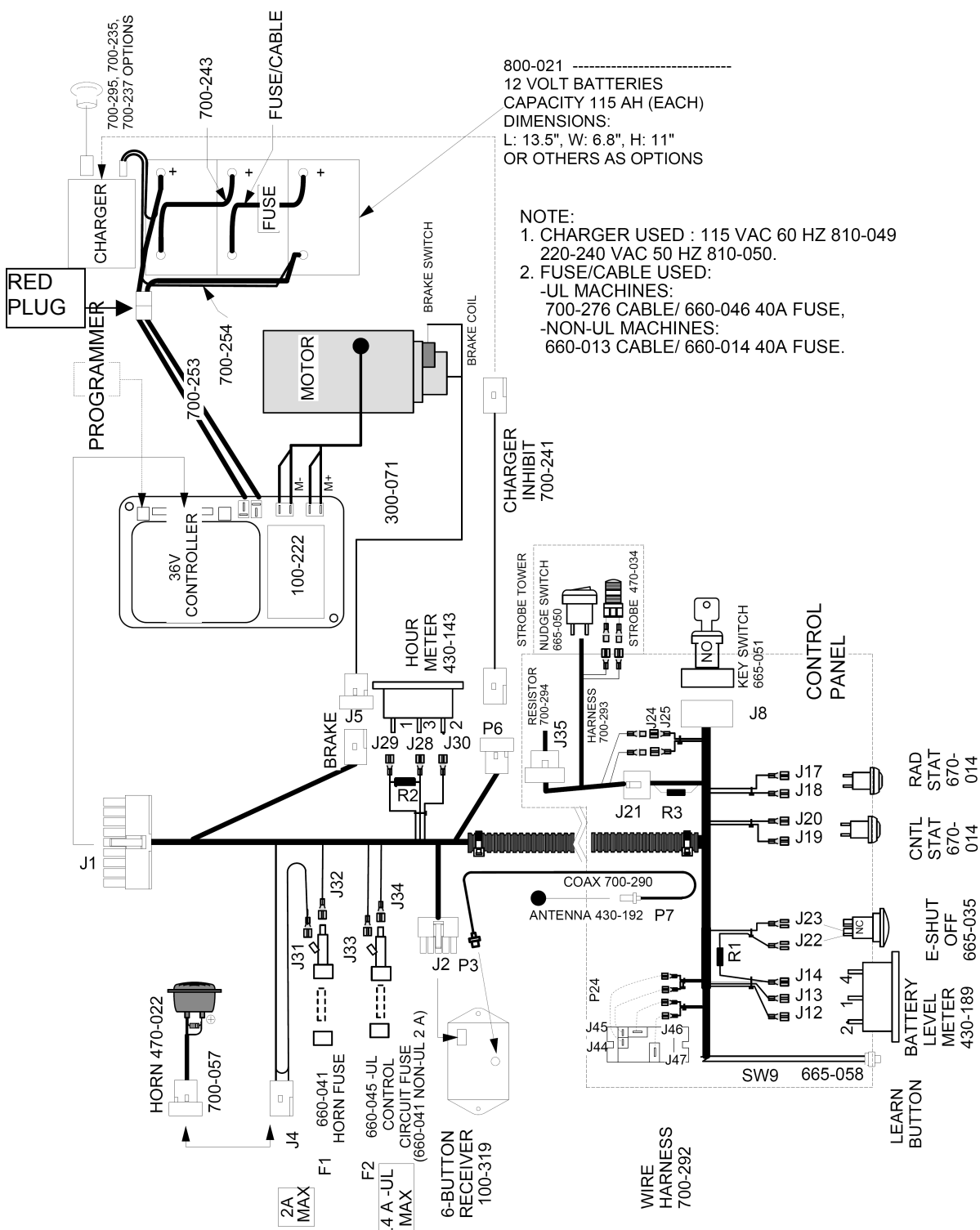
Using the jack, lift the QuickKART off the supporting blocks, remove the blocks then lower the QuickKART to the ground.

Note: Variations in the hardware configuration may occur. Save all hardware and use it as it was removed when replacing wheel.

## M3 – M3 HD SYSTEM WIRING DIAGRAM



## M3 E SYSTEM WIRING DIAGRAM



## TECHNICAL SPECIFICATIONS

Weight (with batteries)	485 pounds (220 kg) [QK M3] 470 pounds (213 kg) [QK M3 E] 500 pounds (227 kg) [QK M3 HD]
Length	50 inches (1.27 meters) [QK M3, M3 HD] 36.8 inches (.93 meters) [QK M3 E]
Width	27.25 inches (.69 meters) [QK M3] 27.5 inches (.70 meters) [QK M3 HD]
Height (to handles)	38.5 inches (.98 meters) [QK M3] 40.5 inches (1.03 meters) [QK M3 HD]
Height (to top of strobe) (with breakaway extended strobe)	45 inches (1.14 meters) [QK M3] 47 inches (1.19 meters) [QK M3 HD] 52 inches (1.32 meters) [QK M3] 48.5 inches (1.23 meters) [QK M3 E] 54 inches (1.37 meters) [QK M3 HD]
Front wheel tread	22 inches (.56 meters) [QK M3] 22.5 inches (.57 meters) [QK M3 HD]
Wheel base	21.5 inches (.55 meters) forward 16 inches (.41 meters) reverse
Inside turning radius	less than 2 feet (.61 meters)
Tires, front 3.50/4.10 x 6 4.80 x 8	12 inches (.30 meters) diameter [QK M3, M3 E] 16 inches (.41 meters) diameter [QK M3 HD]
Tires, rear	8 inches (.20 meters) diameter
Chassis	Welded steel with powder coating
Body	ABS Plastic
Safety:	40 Amp fuse on QK M3, M3 E 70 Amp fuse on QK M3 HD Automobile type horn Strobe warning light Emergency shut-off switch Automatic brake Unique Radio security code
Brakes	Spring applied, electrically or manually released
Electrical system	Three 12-volt batteries, 115 amp hours each
Charger	Input 120 VAC 36 VDC, 15 amperes max.
Speed----- Forward	0 – 3.1 MPH max. (programmable)
----- Reverse	0 – 1.0 MPH max. (programmable)
----- Radio forward <b>FAST</b>	2.7 MPH <b>SLOW</b> .8 mph
----- M3 E only manual forward	2.9 MPH reverse 1.0 MPH
----- M3 E only Radio forward <b>FAST</b>	2.8 MPH <b>SLOW</b> .8 MPH
----- M3 E only Radio reverse <b>FAST</b>	1.4 MPH <b>SLOW</b> .8 MPH
REMOTE CONTROL:	
Power Requirement:	4 Standard 1.5 volt AA radio batteries, Range: 100 feet maximum

# DECLARATION OF CONFORMITY



## Declaration of Conformity

### The EU Directives covered by this Declaration:

Electromagnetic Compatibility Directive, 89/336/EEC Council Directive as amended by Council Directive 92/31/EEC & 93/68/EEC  
Low Voltage Directive 73/23/EEC  
Radio & Telecommunications Terminal Equipment Directive, 1999/5/EC

### The Basis Upon Which Conformity Is Being Declared:

The products identified above comply with the requirements of the above EU directives by meeting the following standards:

CENELEC EN 55022: 2003  
ETSI EN 300 220-3 (2000-09)  
ETSI EN 301 489-1 V1.4.1 (2002-08)  
ETSI EN 301 489-3 V1.4.1 (2002-08)  
ETSI EN 300 220-3 V1.1.1 (2000-09)  
CENELEC EN 50371: 2002  
CENELEC EN60335-1  
BSI BS EN12895:2000

### The Products Covered by this Declaration:

QUICKART M3  
QUICKART M3 HD  
QUICKART M3/M3 HD – INDUSTRIAL

### Date and Place of Issue of Declaration of Conformity:

Dane Technologies  
7105 Northland Terrace  
Brooklyn Park, MN 55428

### Manufacturer:

Same as Above

### Authorized Representative in Europe:

Niels Finsteen Gjørdvad  
Vice President - European Sales and Business Development  
SOPHIENBERGVEJ 6  
DK 2960 RUNGSTED KYST  
Denmark

### Signature

I, the undersigned, hereby declare that the equipment specified above conforms to the above Directives and Standards. The CE mark was first applied in: 2006

A handwritten signature in black ink, appearing to read 'Terry Kanitz', is written over a horizontal line.

Terry Kanitz, Vice President – Manufacturing and Engineering, Dane Technologies.

970-055 B

7105 NORTHLAND TERRACE, BROOKLYN PARK, MN 55428 / 1-888-544-7779 / 763-544-7779 / FAX 763-432-4234  
[www.danetechnologies.com](http://www.danetechnologies.com)



## QUICKART WARRANTY

- 1) **Parts:** One (1) Year Limited Warranty from date of shipment.
- 2) **Labor:** Ninety (90) Day Limited Warranty from date of shipment.
- 3) **Batteries:** Covered by the manufacturer's warranty.

### PARTS – Limited Warranty

All parts except batteries (covered by battery manufacturer's warranty), tires, and circuit breakers needing resetting are warranted by Dane Technologies to be free of defects in material and workmanship for a period of one (1) year from date of shipment. This warranty **does not include** tire wear or wear and tear caused by abuse, negligence, freight damage or damage caused by improper use or care, or by external sources such as fires, floods or other acts of God.

Should any component fail during the first year of ownership except those mentioned as not under warranty, the component in question is to be returned to Dane Technologies or to an authorized Dane Technologies representative for inspection. If the component has failed due to a defect in material or workmanship, it will be exchanged or repaired at the discretion of Dane Technologies at no charge to the QuickKART owner.

Dane Technologies, Inc. will cover the costs of shipping parts covered under warranty to the customer based on UPS standard ground rates.

### 2) LABOR – Limited Warranty

Dane Technologies will cover labor charges for work performed in the field for ninety (90) days from the date of shipment as a result of defects in materials or workmanship. Charges incurred for failure to charge and maintain the batteries in the QuickKART or change the battery in the hand held remote are exempted. Non-warranty service performed during the same visit as for warranty service is not covered by the warranty.

2/20/06





# QuicKART M3, M3 E, M3 HD TRAINING MANUAL

Prepared by Dane Technologies  
Rev. Date: 2-9-09

# QUICKART M3, M3 E, M3 HD OPERATOR TRAINING MANUAL

## BASIC INFORMATION

**Purpose of QuickKART:** The task of collecting shopping carts from the parking lot and returning them to the cart storage area/room is a job that can be time consuming, monotonous and expose associates to injuries such as sprains and strains. The QuickKART is a battery powered machine that assists in the collection of shopping carts. By utilizing the QuickKART to collect shopping carts the collection process becomes more efficient, enjoyable and greatly reduces the need for associates to manually push carts.

**Trainer's Guide:** The Trainer's Guide which follows is designed to provide a step by step approach to presenting a QuickKART Operator Training and Certification Program for employees. This guide will aid you in training associates on the proper operation of the QuickKART.

**Operator Requirements:** Those employees who may be expected to operate the QuickKART must be trained and authorized to operate it before being permitted to use it. Successful completion of the training program and quiz shall qualify as being trained and authorized.

No one under the age of 16 years old may be permitted to operate the QuickKART. Do not operate the QuickKART unless you meet the minimum operator requirements set down by federal and state regulations, and corporate policy.

Any associate involved in an accident or injury involving the QuickKART must be retrained.

**Training:** Training is an important way of making sure all associates understand how the QuickKART operates and how to use it to collect shopping carts from the parking lot.

There are several different ways we can learn. Some people learn more quickly from watching a videotape or DVD, and reading while others may require hands on training and/or more time and attention. Take the time to answer all questions and clarify the material.

**Training Documentation:** The Operator Training Program includes a Quiz and Performance Skills Certification. Those associates who successfully pass both of these sections are permitted to operate the QuickKART. Copies of this documentation are to be kept in the associate's personnel file/training file.

**Maintenance Requirements:** Those associates who may be expected to perform routine maintenance must review the Owner's/Operator's Manual and follow instructions outlined in the manual for each task.

Following Routine Preventative Maintenance Procedures as outlined in the QuickKART Owner's Manual will help prevent mechanical breakdown and costly repairs.

## TRAINER'S GUIDE

**Program Preparation:** The following items should be considered when preparing for the QuickKART Training Program:

1. Obtain a quiet area/room in which to conduct the training. Ensure that the temperature is comfortable and area is well ventilated.
2. Schedule the training session and be sure all participants are notified either in writing or verbally.
3. Assemble the following materials:
  - Color TV/Monitor.
  - VHS Player/DVD player.
  - Dane Technologies QuickKART Training Video / DVD.
  - Pencils.
  - Sufficient copies of Quiz for QuickKART Training
  - Best Cart Collection Route for your store.
  - OPTIONAL: Transparency of Quiz Answer Key
  - OPTIONAL: Overhead.
4. Review the following material:
  - Basic Information regarding QuickKART Operator Training
  - Training Script for QuickKART
  - Dane Technologies QuickKART Training Video / DVD.
5. The trainer needs to be familiar with the QuickKART and comfortable with the actual operation and use of the QuickKART.
6. Practice presenting the program if you have not done it before or if it has been a considerable length of time since you last presented it.

### Presentation:

1. Set-up and test the TV, VCR/DVD and videotape/DVD before the training session is scheduled to begin. Be sure the videotape is rewound.
2. Prepare all materials and set-up chairs and tables so that they are arranged appropriately.
3. Remember to encourage associates to take an active role in their learning.

## CLASSROOM TRAINING SCRIPT:

**Welcome:** I would like to thank you for coming to this training.

**Introduction:** During the next hour you will be learning how to operate the QuickKART, which is an electronically powered shopping cart collection machine.

**Purpose of Machine:** The purpose of the QuickKART is to make the cart collection process easier, more efficient and enjoyable.

**Review of Topics:** As part of this training we will:

1. View a videotape/DVD on the operation of the QuickKART which is approximately 12 minutes long.
2. Briefly discuss some specific operating procedures for the machine.
3. Take a quiz on the proper operation of the machine.
4. Review proper answers to the quiz.
5. Go outside and show you how to run the machine, have each of you operate it and then qualify you on the operation of the QuickKART.

**Videotape Introduction:** To begin, let's view a videotape/DVD that was provided by Dane Technologies, which is the developer of the QuickKART. The video will introduce you to the machine and show you how to properly operate it.

**Play Tape / DVD:** (Dim lights and present videotape/DVD).

**Summarize Important Operating Practices:** The videotape addressed those things you need to know in order to operate the machine properly and safely. However, there are some operating issues we feel are worth repeating as well as some additional operating procedures that need to be addressed.

## QUICKART M3, M3 E, M3 HD IMPORTANT OPERATING PROCEDURES

### **Review of procedures for trainees:**

1. Before operating the QuickKART, check to be sure all tires look in good condition, check that the light is flashing, steering is ok and parking brake works. If any problems are identified, do not operate machine--remove key and notify supervisor.
2. When proceeding down a sloped lot with a chain of carts, walk to the side of the front cart and hold back on the lead cart or use a strap to prevent carts from separating. Proceed at a pace that will allow you to stop carts fairly quickly should the need arise.
3. Never stand or walk in front of carts being pushed or attempt to stop carts by standing in front of a chain of carts.
4. When passing through a narrow area with chain of carts, allow enough room between carts and any fixed object so that you don't become wedged between them.
5. Never allow anyone to ride on shopping carts when collecting carts. Slowly stop the QuickKART and politely ask the person to get off.
6. When approaching employees or customers with a chain of carts, slow down and allow them to pass where possible; otherwise, politely indicate, "Excuse me please, cart collection passing through. Thank you."

7. The person who is directing the chain of carts must always be in possession of the remote control transmitter and in control of the speed of the QuickKART and chain of shopping carts.
8. Never attempt to “steer” a line of carts by using the handlebar on the machine. Always use the remote control and lead from the front when two or more carts are loaded at the front of the QuickKART.
9. If for any reason the QuickKART does not stop properly or is not completely under your control, press the Emergency shut-off button on the control panel, remove key and notify your supervisor immediately.
10. When battery level on the QuickKART control panel indicates 20% or less, drive it to the designated parking area and plug it into the electrical receptacle for recharging. This will help to keep the batteries charged. Parking area must be in a large, well-ventilated area to prevent buildup of explosive hydrogen gas. Do not smoke or permit any open flame or spark sources nearby when charging batteries. The unit may be charged at any time it is not being used.
11. If the remote control unit for the QuickKART does not work, check to be certain the QuickKART mode is set for Remote. If it still does not work the batteries may need to be replaced. Last, make sure that the hand held remote is programmed to the machine.
12. Remember when collecting carts and returning them to the store that you physically have to steer and stop the carts. Adjust your speed so that you maintain control of the carts and can react quickly to pedestrian and vehicle traffic.
13. As you turn corners from the front of the line of carts, make sure that the QuickKART clears objects such as curbs or posts.
14. The speed of the QuickKART in the Manual Mode is determined by the direction and how far you turn the thumb wheel throttle[M3, M3 HD] or the nudge switch [M3 E]. Braking is done by releasing the thumb wheel throttle [M3, M3 HD] or nudge switch [M3 E].The quicker you release the throttle the faster the QuickKART stops.
15. Upon approaching the cart storage room/area with a chain of shopping carts, stop using the QuickKART to push the carts and manually push no more than 10 carts or the corporate policy at a time through the cart room door(s) and into the cart room. Do not use the QuickKART to push the carts through the cart room door as this can be a congested or narrow area.
16. Avoid blocking the drive lane areas with shopping carts. Select an approach to the cart room that won't cause shopping carts and the QuickKART to protrude into the drive lane when stopped and manually pushing carts into the cart room.

- 17 Always use caution on wet or slippery pavement. Stopping distances are greater and the risk of slip and falls increase. In these conditions, reduce the number of carts to a number that can be managed safely.
- 18 Always operate the QuickKART safely and courteously. Do not assume that drivers or pedestrians will see you and stop.

## **QUICKART M3, M3 E, M3 HD WARNINGS AND SAFETY NOTES**

The manufacturer of the QuickKART provides the following warnings and safety notes:

1. When the QuickKART is to be left unattended or in storage, always turn the key to the “off” position and remove the key. Also, do not leave the QuickKART unattended while in Remote Mode.
2. Operate the machine only as fast as safety considerations will allow, taking into consideration the location of store entrances, driveways and parking lot layout.
3. Always take operating conditions, such as wet or slippery pavement, into consideration. Do not push more carts than the individual operator can safely control given those conditions. Do not exceed 30 carts under any conditions.
4. Do not drive off from curbs or edges of hardened surfaces of over 1 inch high.
5. Do not use long extension cords. Use the cord supplied with the machine. Find a location for re-charging that is close to an electrical outlet receptacle. If another cord must be used, it must be 16 gauge or larger and no more than 10 feet in length.
6. Do not plug more than one machine into an extension cord or electrical outlet receptacle, use one outlet for each machine.
7. Only one operator should operate the QuickKART at any time.
8. During Manual operation, the operator of the QuickKART must stand behind the QuickKART. Never ride on the QuickKART.
9. During manual operation, do not attempt to turn the machine from the rear when pushing more than one shopping cart.
10. Always look behind the QuickKART before and while operating in reverse.
11. The QuickKART is intended to push shopping carts. Any other use of the machine is prohibited unless specifically endorsed by the manufacturer.
12. Hydrogen gas is formed when charging the batteries. Use adequate ventilation when charging batteries. Never smoke near batteries. Do not charge batteries in an area

with open flame or around electrical equipment that could cause an electrical arc.

13. **Even though you likely won't be performing maintenance of the QuickKART you should still know that the battery cable, with the red connector, must be disconnected any time maintenance is being performed under the cover!**
14. The electrolyte in a storage battery is an acid that can cause severe burns to the skin and eyes. Treat all electrolyte spills with an extended flushing with clear water. Contact a physician immediately. Always use protective eyewear, (chemical splash goggles or face shield), when handling the batteries.
15. Do not lay any metal objects, wrenches, screwdrivers, etc., on any of the batteries to prevent electrical short circuits.
16. Wear appropriate protective clothing when working with batteries. Electrolyte can cause severe burns to the eyes, skin and clothing.
17. Batteries are heavy. Proper care must be taken when lifting to avoid injury.
18. Improper usage and operation of the QuickKART may void the warranty.

**Question and Answer:**

Are there any questions?

**Collect Handouts:**

(If handouts provided collect them at this time for reuse at next training session).

**Quiz:**

If no other questions, I will pass out a quiz that I would like you to complete. Please be sure to write you name, store location and date on the quiz.

When you are finished with the quiz, please turn it over and wait until everyone is done with it.

**Correct Quiz:**

Since everyone is done with his or her quiz, please switch quizzes with a person next to you or behind you. (If only one associate is being trained, correct the answers as you review them with the associate.) As we review the quiz, please correct the one you have.

**Review Best Answers to Quiz:**

(Use Answer Key).

**Add Score:**

Please add up the number of correct answers and write it at the top of the quiz.

**Collect Quizzes:**

(Collect and keep quizzes at hand for follow-up procedure after hands-on training. Remember to take the quizzes with you for the demonstration and performance training section).

**Review Cart Collection Route for Store:**

This cart collection shows the suggested routes that should be taken for this store for ease of returning carts to cart room and avoid blocking the drive lane. Note the pattern and direction of approach to cart room. As you become proficient with the cart collection process you



**Proceed to Cart Room  
or where the QuickKART  
is stored:**

may find alternative collection routes that work equally  
as well or better.

At this point; I need everyone to proceed to the front cart  
room where I will show you how to run the machine.

## DEMONSTRATION TRAINING SCRIPT:

**Show How To Turn The Machine On:  
Perform Actual Inspection of QuickKART:**

In order to start the machine the key switch located on the control panel is turned clockwise.  
As indicated in our training; check tire wear, check that flashing light works, check charge level, and check braking before moving off.

**Show the Location of The Throttle:**

With the machine set in the Manual Mode by twisting the thumb wheel throttle (nudge switch on M3 E) the machine will move forward.

**Drive Machine to Cart Corral:  
Explain How to Connect Cart to Cart Coupler:**

If you will follow me as I drive over to the cart corral I will continue to show you how the machine operates.

In order to connect a shopping cart to the QuickKART, lift up on the rear of the cart and slide the rear wheels into the cart cups or slide rear legs of the cart into slots on the cart coupler and place the clevis pins or locking pin in the closed position so that it securely holds the shopping cart in place.

**Remote Control Transmitter:**

At this point rotate the keyswitch to "Radio" the QuickKART Control Panel. **Note:** As a safety feature, rotate the keyswitch to "Off" for 1 second before rotating to "Radio". Rotating the keyswitch immediately from "Manual" to "Radio" or back may cause a fault and require the keyswitch be turned "Off" for 1 second.

Collect carts and nest them into the cart/chain of carts on the front of the QuickKART.

**Explain and Physically Direct Carts to Next Cart Corral:**

While standing to the side of the lead cart, put your thumb over the turtle switch on the hand held remote control. Press turtle to start the chain of carts moving forward and quickly slide your finger over to the rabbit switch to increase the speed of the machine as conditions permit. On the M3 E the remote has forward and reverse controls. The reverse slow (single arrow) can be used while pushing the cart chain backward to give clearance to a customer.

**Stopping:**

As you approach your destination, slide your finger back to the turtle button or just let your finger off the button. Remember that you need to hold back the lead cart since you are acting as the brake for the chain of carts.

**Quick Stop:**

To make the QuickKART stop faster you can press the stop button on the remote control. However, you will still need to hold back the carts.

**Collect Maximum of 30 Carts:**

We continue to add up to 30 carts. If the slope of the lot is steep or snow or ice has accumulated, limit the carts to a manageable number.

**Proceed to Cart Room:**

Since we now have a large chain of carts we will proceed back to the cart room.

**Show and Explain How**

Now that we are just outside the cart room, we need to

**To Get Carts Inside:**

stop using the QuickKART and proceed with manually pushing a maximum of ten (10) at time into the cart room. You can still use the QuickKART to advance the chain of shopping carts up to the cart room doors.

**Back-Up Machine:**

To back up the QuickKART, rotate the keyswitch to manual, rotate the RH thumb wheel throttle counter-clockwise to back up [M3, M3 HD]. For the M3 E press the side of the nudge switch toward the strobe tower. Looking backward, back it up until you can proceed forward.

**Explain How to Switch To Forward:**

To go forward, rotate the RH thumb wheel throttle clockwise. [M3, M3 HD]. For the M3 E press the side of the nudge switch toward the carts.

**New Cart Collection Cycle:**

You are now ready to perform another cart collection cycle.

**Disconnect Cart from Cart Coupler:**

Once we have gotten all the carts in the cart room and are done for the shift, disconnect the cart from the cart coupler using the reverse of the procedure used to connect it.

**Charging:**

(Show where QuickKART is parked and how to charge the batteries.)

**PERFORMANCE TRAINING:****Hands-On Training:**

Have each trainee go through an entire cart collection process while you observe to be sure each person can operate the machine properly. If unable to perform the process competently, show them the process once again and then recheck. Use the Performance Training Check-Off on the bottom of the quiz to document results of each trainee's operation of the QuickKART.

**FOLLOW-UP:**

Check the quiz and ensure each associate passed with an 80% score or better. If not, those associates need to repeat the training. Answering 13 or more questions correctly is a score of 80% or better.

Be sure you record on the bottom of the associate's quiz whether they displayed the ability to operate the QuickKART based on their hands-on training. Place quiz in associate's personnel file.

# QuickKART M3, M3 E, M3 HD Preventive Maintenance

Date: \_\_\_\_\_  
 Store: \_\_\_\_\_  
 Location: \_\_\_\_\_

Meter Hours: \_\_\_\_\_  
 Labels Condition: \_\_\_\_\_  
 Serial Number: \_\_\_\_\_

D= Daily, M= Monthly, S-A = Semi-annually, Y=Yearly >>>	D	M	S-A	Y	OK
Inspect throttle, turn keyswitch to "Manual". The cart should not move. Check that the RH thumb wheel throttle moves freely in a CW then CCW direction. The cart should move forward then reverse.	X				
Test the parking brake system. With the keyswitch "Off", try to move the machine. The brake should keep the drive wheels from rotating.	X				
Test the Emergency shut-off button. With the keyswitch in "Manual" or "Remote", pressing the Emergency shut-off will disable all controls and stop the machine.	X				
Strobe Light: Check for damage and proper operation.	X				
Remote: Check for damage. With the keyswitch in "Remote", check operation with all buttons. The remote should operate up to 100' from the machine.	X				
<b>Charge batteries overnight, every night.</b>	X				
Check couplers and yokes for unsafe wear, loose or missing fasteners, and safe connection.	X				
Batteries: Inspect loose connections, frayed insulation, and corrosion. Clean away corrosion. Check charger operation, see page 36.		X			
Wiring: Inspect all wiring and electrical connections for loose connections, frayed or deteriorated insulation, exposed wire, and broken or missing hardware.		X			
Maintenance Type Batteries: Check water levels, add <b>distilled water</b> after charging as necessary.		X			
Check body for damage. Check all bolts, fasteners and connections for tightness and wear.		X			
Check tires and caster wheel for wear, bent rims and missing or loose lug nuts.		X			
Check the antenna for damage.		X			
Check the machine for damaged or missing labels.		X			
Apply grease to rear swivel wheel using a standard grease gun, two places.			X		
Check the AC charger cord for frayed or deteriorated insulation and exposed wire.			X		
Have your authorized service center check your QuickKART completely.				X	

Any other problems, Comments:

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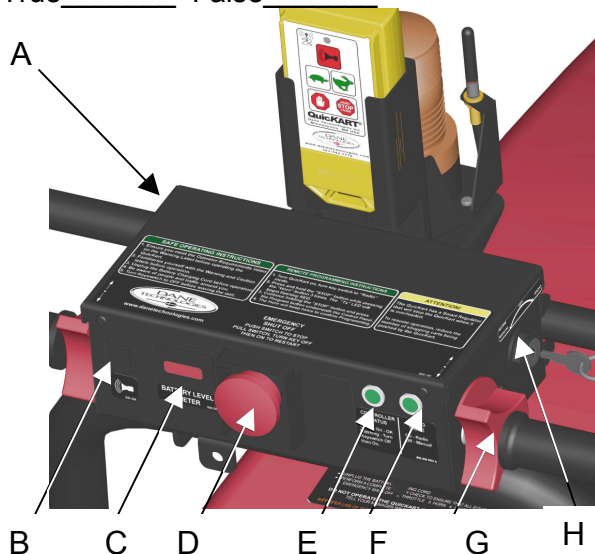


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# QUICKART M3-M3 HD QUIZ

Your Name: \_\_\_\_\_ Date: \_\_\_\_\_ Store Location: \_\_\_\_\_

- The approximate maximum number of shopping carts that should be pushed by the QuickKART is: A. 10 B. 20 C. 30 D. 50
- While directing a chain of carts using the QuickKART, the operator should walk to the side of the lead cart and hold it back to prevent the carts from separating and also enable them to be stopped promptly. True \_\_\_\_\_ False \_\_\_\_\_
- The QuickKART should be used to push a chain of shopping carts into the cart room. True \_\_\_\_\_ False \_\_\_\_\_
- When approaching customers or employees with a chain of carts being pushed by the QuickKART proceed toward them at your normal operating speed. True \_\_\_\_\_ False \_\_\_\_\_
- During manual operation, the brake on the QuickKART is applied by releasing the throttle. True \_\_\_\_\_ False \_\_\_\_\_
- Before beginning to use the QuickKART, be sure to check (select only one)
  - The condition of the tires.
  - Battery charge level is greater than 20%.
  - Brake for proper operation.
  - Flashing light is working.
  - All of the above.
- When manually operating the QuickKART, it's acceptable to operate several carts attached to the front of the machine. True \_\_\_\_\_ False \_\_\_\_\_
- The QuickKART can be driven off curbs and on grass surfaces. True \_\_\_\_\_ False \_\_\_\_\_
- It is OK to leave the QuickKART unattended without removing the key. True \_\_\_\_\_ False \_\_\_\_\_



For each item below, identify its location on the control panel on the left and write the appropriate letter next to the item.

## ITEM DESCRIPTION

- Thumbwheel
- Key Switch
- Battery Level Meter
- Status Light
- Horn
- Emergency Shut-Off
- Programming Button

## Letter

_____
_____
_____
_____
_____
_____
_____

Number Correct: \_\_\_\_\_

## STOP

To be completed by trainer.

## PERFORMANCE TRAINING

Observe the associate perform the following tasks and indicate if he/she displayed acceptable operation. For successful completion of training associate must display ability to properly perform all three operating tasks:

### Control Panel Use

Ok \_\_\_\_\_ Unacceptable \_\_\_\_\_

### Manual Operation of QuickKART

Ok \_\_\_\_\_ Unacceptable \_\_\_\_\_

### Cart Collection in Remote

Ok \_\_\_\_\_ Unacceptable \_\_\_\_\_

Trainer: \_\_\_\_\_ Date: \_\_\_\_\_

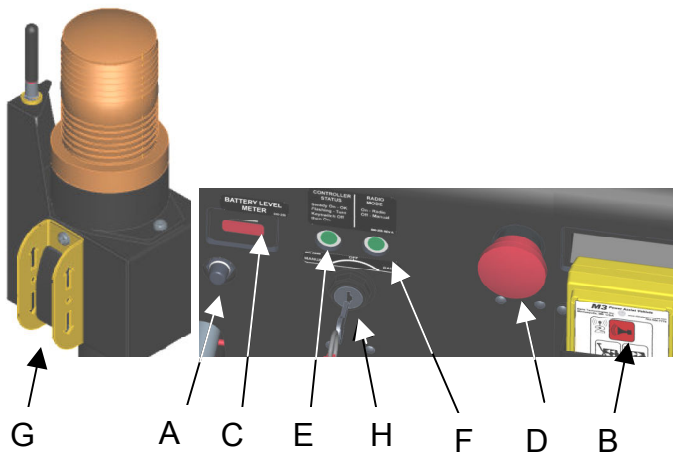
If performance training was not successfully completed, do not allow the associate to operate machine on their own until retrained and re-evaluated. If re-evaluated, make note below.

Note: \_\_\_\_\_

# QUICKART M3 E QUIZ

Your Name: \_\_\_\_\_ Date: \_\_\_\_\_ Store Location: \_\_\_\_\_

10. The approximate maximum number of shopping carts that should be pushed by the QuickART is:  
A. 10      B. 20      C. 30      D. 50
11. While directing a chain of carts using the QuickART, the operator should walk to the side of the lead cart and hold it back to prevent the carts from separating and also enable them to be stopped promptly.      True \_\_\_\_\_ False \_\_\_\_\_
12. The QuickART should be used to push a chain of shopping carts into the cart room.  
True \_\_\_\_\_ False \_\_\_\_\_
13. When approaching customers or employees with a chain of carts being pushed by the QuickART proceed toward them at your normal operating speed. True \_\_\_\_\_ False \_\_\_\_\_
14. During manual operation, the brake on the QuickART is applied by releasing the throttle (nudge switch).      True \_\_\_\_\_ False \_\_\_\_\_
15. Before beginning to use the QuickART, be sure to check (select only one)  
A. The condition of the tires.      D. Flashing light is working.  
B. Battery charge level is greater than 20%.      E. All of the above.  
C. Brake for proper operation.
16. When manually operating the QuickART, it's acceptable to operate several carts attached to the front of the machine. True \_\_\_\_\_ False \_\_\_\_\_
17. The QuickART can be driven off curbs and on grass surfaces. True \_\_\_\_\_ False \_\_\_\_\_
18. It is OK to leave the QuickART unattended without removing the key.  
True \_\_\_\_\_ False \_\_\_\_\_



For each item below, identify its location on the control panel on the left and write the appropriate letter next to the item.

## ITEM DESCRIPTION

## Letter

10. Nudge Switch
11. Key Switch
12. Battery Level Meter
13. Status Light
14. Horn
15. Emergency Shut-Off
16. Programming Button

_____
_____
_____
_____
_____
_____
_____

Number Correct: \_\_\_\_\_

## STOP

To be completed by trainer.

## PERFORMANCE TRAINING

Observe the associate perform the following tasks and indicate if he/she displayed acceptable operation. For successful completion of training associate must display ability to properly perform all three operating tasks:

### Control Panel Use

Ok \_\_\_\_\_ Unacceptable \_\_\_\_\_

### Manual Operation of QuickART

Ok \_\_\_\_\_ Unacceptable \_\_\_\_\_

### Cart Collection in Remote

Ok \_\_\_\_\_ Unacceptable \_\_\_\_\_

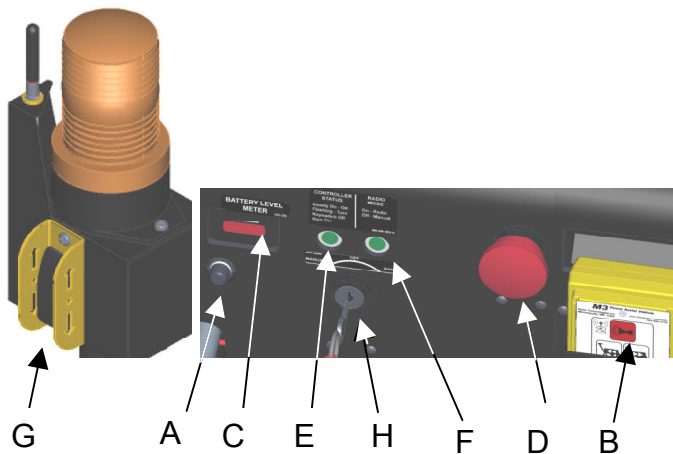
Trainer: \_\_\_\_\_ Date: \_\_\_\_\_

If performance training was not successfully completed, do not allow the associate to operate machine on their own until retrained and re-evaluated. If re-evaluated, make note below.

Note: \_\_\_\_\_

## QUICKART M3, M3 E, M3 HD QUIZ ANSWERS

1. The approximate maximum number of shopping carts that should be pushed by the QuickART is: A. 10 B. 20 **C. 30** D. 50 Check Store Policy max number.
2. While directing a chain of carts using the QuickART, the operator should walk to the side of the lead cart and hold it back to prevent the carts from separating and also enable them to be stopped promptly.  
True **X** False \_\_\_\_\_
3. The QuickART should be used to push a chain of shopping carts into the cart room.  
True \_\_\_\_\_ False **X**
4. When approaching customers or employees with a chain of carts being pushed by the QuickART proceed toward them at your normal operating speed. True \_\_\_\_\_ False **X**
5. During manual operation, the brake on the QuickART is applied by releasing the throttle. True **X** False \_\_\_\_\_
6. Before beginning to use the QuickART, be sure to check (select only one)  
A. The condition of the tires. D. Strobe light is working.  
B. Battery charge level is greater than 20%. **E. All of the above.**  
C. Brake for proper operation.
7. When manually operating the QuickART, it's acceptable to operate several carts attached to the front of the machine. True \_\_\_\_\_ False **X**
8. The QuickART can be driven off curbs and on grass surfaces. True \_\_\_\_\_ False **X**
9. It is OK to leave the QuickART unattended without removing the key. True \_\_\_\_\_ False **X**



For each item below, identify its location on the control panel on the left and write the appropriate letter next to the item.

### ITEM DESCRIPTION

10. Thumbwheel, Nudge Switch
11. Key Switch
12. Battery Level Meter
13. Status Light
14. Horn
15. Emergency Shut-Off
16. Programming Button

Letter
<b>G</b>
<b>H</b>
<b>C</b>
<b>E,F</b>
<b>B</b>
<b>D</b>
<b>A</b>

Number Correct:   > 13



## QUICKART M3, M3 E, M3 HD QUIZ ANSWER KEY

	<u>NUMBER</u>	<u>CORRECT ANSWER</u>
1.	C	(Approximately thirty (30) carts maximum) Always check corporate policy for maximum number.
2.	TRUE	(Always stand to the side, never in front and hold back on the lead cart.)
3.	FALSE	(Upon reaching the cart room doors, manually push a maximum of 10 carts into the cart room.)
4.	FALSE	(Slow down and wait for them to pass and make presence known)
5.	TRUE	(The nudge switch throttle controls speed and braking)
6.	E	(Tires, battery charge, steering and brakes and strobe light)
7.	FALSE	(Only operate manually with one attached cart.)
8.	FALSE	(This could damage machine and is not a safe practice)
9.	FALSE	(Machine must be turned “ <b>OFF</b> ” and remove the key)
10.	G	(Thumbwheel/Nudge Switch)
11.	H	(Key Switch)
12.	C	(Battery Level Meter)
13.	E, F	(Controller Status Light, Radio Mode Light)
14.	B	(Horn)
15.	D	(Emergency Shut-off)
16.	A	(Programming Button)

Thirteen or more correct answers produces a score of 80% or better.