# **AMIGO® REAR DRIVE PRODUCTS**

# OWNER'S & OPERATING MANUAL

For Amigo® RT Express, Amigo® RT Express Junior, Amigo® RD, Amigo® EXT350 and Amigo® HD450 Models



| TABLE OF CONTEN                | TS          |
|--------------------------------|-------------|
| Safety First                   | 3           |
| Location of Controls           | 4-5         |
| Adjusting Your Amigo           | 5-6         |
| Operating Your Amigo           | 6-7         |
| Riding Your Amigo              | <i>7</i> -9 |
| Safety Warnings                | 9           |
| Helpful Hints for Everyday Use | 10          |
| Battery Information &          |             |
| Charging Instructions          | 10-13       |
| Cleaning Instructions          | 13          |
| Maintenance                    | 13-15       |
| Troubleshooting                | 16          |
| Electromagnetic Interference   | 1 <i>7</i>  |
| Wiring Diagrams                | 18-19       |
| Exploded Views                 | 20-22       |
| Parts Lists                    | 23-25       |
| Warranty                       | 26          |

Amigo® RT Express Jr.

Amigo® HD450

Amigo® EXT350

A new industry began in 1968, when Amigo revolutionized mobility for people with walking limitations. Amigo Power Operated Vehicles (POVs) quickly became a household name for their ease of operation and maneuverability. Ever since our first creation, Amigo Company has worked hard to bring comfort, freedom and satisfaction to our many thousands of customers.

In 1977, the United States Social Security Act was amended to include the Amigo Power Operated Vehicle as an official medical mobility device, creating new opportunities for accessibility by Medicare clients across the nation. Worldwide, more people than ever are discovering the Amigo lifestyle.

We would like to take this opportunity to thank you for choosing Amigo. Our business will provide you with personalized and innovative electric mobility products and customer satisfaction, today and in the future.

Sincerely,

Amigo Mobility International, Inc. (AMI)

Welcome to the Amigo family of active and independent people. For thousands of individuals around the world,

Amigo provides the opportunity to enjoy life more fully.

We are confident that the following instructions and helpful hints will make your Amigo an extremely useful and reliable "friend." Because we are concerned about your health and safety, please read this manual carefully before operating your vehicle. Once you've learned to use your Amigo properly, you will discover a world of enjoyment and independence.



Wishing you happiness and good health from all of us at Amigo Company

## SAFETY FIRST

For your convenience and understanding, signal words are defined below:



WARNING IS USED TO INDICATE THE PRESENCE OF A HAZARD, WHICH CAN CAUSE SEVERE PERSONAL INJURY, DEATH OR SUBSTANTIAL PROPERTY DAMAGE IF THE WARNING IS IGNORED.



CAUTION IS USED TO INDICATE THE PRESENCE OF A HAZARD WHICH WILL OR CAN CAUSE MINOR PERSONAL INJURY OR PROPERTY DAMAGE IF THE WARNING IS IGNORED.

## **Safety Suggestions**

Use the following guidelines for the safe operation and use of your Amigo. Should you have any questions about the safe operation of your vehicle, please contact your Amigo Dealer. If you are in doubt about your ability to operate your Amigo, consult your personal physician.

#### DO

- Read the operating manual before using your Amigo.
- Always turn the key switch OFF before getting on or off your Amigo.
- When transferring off your Amigo, do make sure the Seat Lock is in the locked position.
- Always remain seated while the vehicle is in operation.
- Keep legs on the platform while driving.
- Drive to a complete stop before attempting to reverse.
- Always drive in a slow, sensible manner while pedestrians are around.
- Drive slowly while turning and on inclines.
- Always drive straight up and down inclines.
- Always be careful when maneuvering on inclines or ramps. Not all ramps are constructed according to Federal standards. The Federal standard for wheelchair ramps is one-inch (2.5 cm) rise per foot (30 cm).
- Do avoid sudden starts while the handle is turned sharply.
- Always approach obstacles at a low speed if you are to drive over them.
- Be aware of mechanical pinch points, especially when assembling and disassembling your Amigo.
- Always drive with the Power Seat Lift in its lowest position.

## CAUTION

TURNING THE KEY OFF WHILE IN MOTION WILL BRING THE AMIGO TO AN ABRUPT STOP.

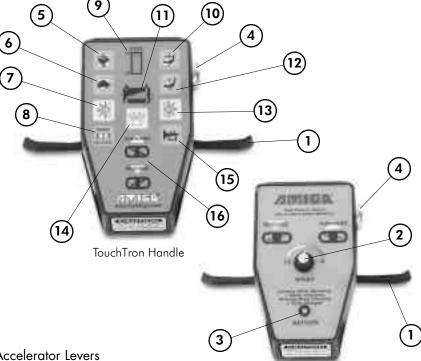
#### DO NOT

- Do not exceed the maximum weight capacity. Exceeding the weight capacity voids your warranty and may result in personal injury and damage to your Amigo. Amigo will not be responsible for injuries and/or property damage resulting from failure to observe weight limitations.
- Do not drive over or off obstacles more than 1 inch (2.5 cm) high. This could be unsafe and could damage your Amigo.
- Do not turn your Amigo at high speeds, as this could result in tipping.
- Do not reverse down a steep hill or incline.
- Do not park on inclines or declines.
- Do not sit on the unit in a moving vehicle.
- Do not allow anyone to ride with you.
- Do not operate your Amigo near stairs, steps, curbs or terraces where you might accidentally drop a wheel off the edge.
- Do not operate your Amigo on streets or other areas with vehicular traffic.
- Do not disengage your motor brake on a slope.
- Do not leave the manual brake release on.
- Do not disengage the motor brake while someone is on the vehicle.
- Do not remove handle from steering column when transporting your Amigo. Instead, fold the handle down to the seat.
   Place the handle down so the HI/LO Speed Adjustment Knob or the TouchTron controls will not be damaged.
   Tighten the knob to secure the handle.
- Do not use the handle to assist in transferring.
- Do not lift rear section of platform by holding the rear wheel.
- Do not expose your Amigo to spray-on cleaning solutions and excessive moisture such as spraying it with a garden hose, shower or leaving it uncovered in heavy rain.
- Do not push or force the retractable cord reel into the rear cover. (Amigo® RD, EXT350 and HD450 models only)

AMI is not responsible for any damage or injury incurred due to the improper or unsafe use of the POV. AMI specifically disclaims responsibility for any bodily injury or property damage that may occur during any use, which does not comply with applicable federal, state or local laws or ordinances.

## LOCATION OF CONTROLS

- 1. Accelerator Lever (Right and Left)
- 2. HI/LO Speed Adjusting Knob
- 3. Battery Indicator Light
- 4. Key Extension/Key Switch
- 5. Rabbit Button Press to Increase Speed
- 6. Turtle Button Press to Decrease Speed
- 7. Left Turning Indicator Light Button
- 8. E/M Brake Release Button Press Twice (2)
- 9. Speed Gauge Indicates Level of Speed
- Seat/Directional Arrow Button –
   Press to Raise Seat with Power Seat Lift (PSL)
- 11. Battery Status Gauge
- Seat/Directional Arrow Button –
   Press to Lower Seat with Power Seat Lift (PSL)
- 13. Right Turning Indicator Light Button
- 14. Front Headlight Button and Rear Taillights
- 15. Horn Button
- 16. Forward and Reverse Position Diagrams for Accelerator Levers



#### **HI/LO Speed Control Handle**

Handle controls include: HI/LO Speed Adjusting Knob, Key Extension/Key Switch and Battery Indicator Light. The Key Extension/Key Switch, located on the right side of the Handle Control Cover, will turn the power of the Amigo ON or OFF. Turning it OFF will prevent drainage of batteries and unauthorized use. The speed may be adjusted by turning the HI/LO Speed Adjusting Knob.

#### **TouchTron Handle**

The TouchTron handle controls include: Key Extension/Key Switch, HI/LO Speed Gauge (Rabbit/Turtle Buttons), Battery Status Gauge, Horn, Headlight, Directional Lights, Electromagnetic Brake Release and Power Seat Lift.

To turn power ON, insert the Key and turn it counterclockwise to the ON position. The Key Extension/Key Switch is on the right side of the Control Cover. When the power is ON, the Battery Indicator and Speed Gauge Displays will light up, showing the level of charge contained in your batteries and the last recorded speed setting prior to the Amigo being turned off. Regulate your maximum speed with the Rabbit and Turtle Buttons. To increase your top speed, press the Rabbit Button. To lower the top speed, press the Turtle Button. Each segment in the Speed Gauge corresponds with approximately 15 to 20 percent of the maximum speed. Every time a button is activated on the touchpad, you will hear a "chirp." The speed setting has approximately 200 possible increments, so you may have to press the Turtle or Rabbit Button several times to see a change on the Speed Gauge. Continuous "chirping" sounds indicate highest and lowest speed settings.

The Horn Button should be used to avoid confrontation with pedestrians or other mobile entities. When using your Amigo at night, turn the Headlight ON, by pressing the Light Button. If you purchased the optional Lighting Package you will also have a Taillight and Turn Signals. Refer to the "High Intensity Light Package Operation" on page 7 for specific details on using these features.

The Electromagnetic Brake Release allows you to engage the "Freewheeling" mode, enabling you to push the unit, if necessary. Additional information on using the Electromagnetic Brake Release can be found in the "Operating Your Amigo" section on page 6.

Units with an optional Power Seat Lift can raise or lower the seat height by pressing the Seat Button. Please refer to the "Power Seat Lift Operation" on page 7, for specific instructions on using this feature.

## **ADJUSTING YOUR AMIGO**

To adjust your Amigo to a comfortable driving position, you can alter the Handle, Seat and Armrests as follows:

## **EZ-Tilt Handle Adjustment**

To adjust the angle of the Handle, turn the Adjustment Lever counterclockwise. Move the Handle to the desired position. Tighten the Adjustment Lever by turning it clockwise (Figure 1A). The placement of the spring-activated Adjustment Lever, itself, can be moved out of the way for your comfort. Pull the Adjustment Lever straight out. Turn in either direction. Release Adjustment Lever at desired placement (Figure 1B).



Figure 1A

# CAUTION

DO NOT USE THE ADJUSTMENT LEVER FOR A FOOT REST. SUCH USE MAY CAUSE THE ADJUSTMENT LEVER TO LOOSEN THE HANDLE AND CAUSE PERSONAL INJURY.

#### **Seat Installation**

- 1. Unlock the Seat Lock.
- 2. Insert the Upper Seat Post into the opening of the Lower Seat Post.
- 3. Spin Seat around to make sure it rotates freely.
- 4. To lock the Seat, pull the Seat Lock Lever toward the rear of the Seat.



Figure 1B

# Adjusting Seat Height Without a Power Seat Lift

To raise or lower your seat height, remove the nut and screw that holds the Seat Collar in place on the Seat Post, then adjust and reinstall in the desired hole on the Seat Post (Figure 2).



IT IS RECOMMENDED THAT THE SEAT LOCK BE INSTALLED IN THE SECOND HOLE POSITION FROM THE SEAT ON A FOLDING SEAT AND THE PREMIER II SEAT.



Figure 2

#### **Seat Lock Lever**

This allows the Seat to rotate 360 degrees and lock in any position desired. The Seat Lock Lever is a bar with a vinyl cap on its end, located under the right or left side of the Seat. Push the Lever forward to rotate to any position.

## **Adjustable Armrest Width**

The Armrest width is determined by loosening the Armrest Knobs and tightening them when the arms are at the desired width.

## Flip Up Armrest

By pulling up on the end of either Armrest, the Armrest will flip back for easy transfer in and out of the Amigo.

# **OPERATING YOUR AMIGO**

To operate your Amigo, use the following procedures:

- For all Amigo Rear Drive models, the Key Switch is located on the top of the Handle. Insert and turn the Key provided.
- Adjust the Speed Adjusting Knob to minimum. (Turn counterclockwise).
- Press the Forward Accelerator Lever or the Reverse Accelerator Lever to move the Amigo.
  To move forward, pull the right side of the Accelerator Lever toward you (Figure 3).
  You can also move forward by pushing the left side of the Accelerator Lever away from you. To operate in reverse, pull the left side of the Accelerator Lever toward you (Figure 4) or push the right side of the Accelerator Lever away from you.

Note: For optional "Reverse Polarity" Handles, Accelerator Lever operation will be the opposite – to move forward, pull the left side of the Accelerator Lever toward you or push the right side Accelerator Lever away from you. To move in reverse, pull the right side of the Accelerator Lever toward you or push the left side Accelerator Lever away from you.

- To stop, just release the Accelerator Lever and the vehicle will come to a gradual stop within a few seconds after release.
- When the Amigo is used at night, you can turn the lights on by pressing the Light Button.
- All models are equipped with a Manual Brake Release Lever.
   To engage the "Freewheeling" mode, push the Brake Lever forward. The "Freewheeling" mode will allow you to push the unit, if necessary. To terminate the "Freewheeling" mode, pull the Brake Lever toward the rear of the Amigo (Figure 5). When pulled into "Normal," the vehicle will be back into "Drive" mode.



Figure 3



Figure 4



Manual Brake

Lever (Inside)

Figure 5

Models with TouchTron controls have an additional Electromagnetic Brake Release Button located on the Handle (Figure 6). To electronically release the Electromagnetic Brake, push the Brake Release Button twice. The low-speed segment of the Speed Gauge will blink to indicate you are now in the "Freewheeling" mode. To terminate the "Freewheeling" mode when selected electronically, activate any control button (except Horn Button) on the TouchTron Handle.

## **Brake Releases for Manual Pushing**

Note: Do not leave Manual Brake Release on, as it will drain batteries.

**Electromagnetic Brake Release** (located on Handle) – Figure 6 **Manual Brake Lever** (located on Rear Cover) – Figure 5

## **Sleep Mode**

A Battery Indicator and Diagnostic System are incorporated into the Touchpad of all Amigo® Rear Drive models with a TouchTron Handle. The Battery Status Gauge will be lit whenever the Key is in the ON position. However, if the Amigo is inactive for more than 25 minutes, the Amigo automatically switches to "Sleep Mode." This feature substantially reduces power to conserve battery capacity. To reactivate your Amigo, switch it OFF and then ON again to regain full function. It is strongly recommended that you turn the Key to the OFF position each time you are through using the Amigo to insure the power is completely turned off.

## **Power Seat Lift Operation • Optional**

To operate the Power Seat Lift on Amigo models with a TouchTron Handle, press the Seat/Directional Arrow Buttons to raise or lower the Seat (Figure 7). To lift the seat to desired height, press the Seat Button with the arrow pointing up. To lower the seat, press the Seat Button with the arrow pointing down. The Power Seat Lift can be activated only when you are not moving. Always drive with the Power Seat Lift in its lowest position.



TO AVOID DAMAGING THE MOTOR OF THE POWER SEAT LIFT, RELEASE THE SEAT BUTTON AFTER THE SEAT HAS REACHED ITS HIGHEST OR LOWEST POINT.

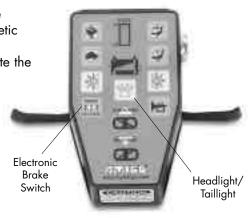


Figure 6



Figure 7

## High Intensity Light Package Operation • Optional

The optional lighting package available with the TouchTron Handle includes a Front Headlight, Rear Taillight and Turn Signals. The power must be ON to operate the Headlight or Taillight. The Headlight and Taillight can be activated by pressing the Headlight Button (Figure 6). Press this Button again to turn the Lights off.

The Turn Signals can be activated by pressing the left or right Turn Signal Buttons. (Figure 7). Indicate a "hazard" condition by pressing both Turn Signals. The power must be ON to operate the lights.

# RIDING YOUR AMIGO

For your first sessions, be sure you are on a level surface. Insert the key in the switch, but leave it turned OFF. Stand behind the seat and reach down to the Seat Lock Lever. It is located on the right side directly under the seat (can be configured on either side of the seat; standard position is on the right side). Grasp the end of the Lever and push forward, releasing the seat. It will now turn easily to meet you. When seat is positioned for transfer, engage Lever to the Locked position to steady the seat before you sit down. When seated, release the Seat Lock and turn forward to driving position. When positioned, re-engage Lever to the Locked position, if desired. Then, turn the Speed Adjustment Knob counterclockwise, and turn the key to the ON position. Pull the Right Accelerator Lever to start off in a Forward motion. To stop, simply let go; this will apply your brake.

## **Basic Driving**

Make sure you are properly seated and that the Speed Adjusting Knob is turned fully counterclockwise.

Note: Reverse movement of vehicle may not occur when Speed Adjusting Knob is turned fully counterclockwise.

Insert key into Key Switch and turn counterclockwise to the ON position. On handle, pull the Accelerator Lever as described earlier. You will gently accelerate. The further you pull the accelerator lever, the faster you will go. Release the Lever and you will gently stop. Please note that reverse speed is slower than forward speed. Practice these two basic functions until you get used to them.

Steering the Amigo is easy and logical. Just be sure to remember to give wide clearance when turning so that the rear wheels clear any obstacle.

Shortcutting a sidewalk corner can cause the back wheel to go off the sidewalk, causing problems if the corner is very rough. Avoid this at all times by steering an exaggerated wide arc around the obstacle. If you must steer in a tight spot, such as entering a doorway or when turning around, stop and then apply power gently. For more on maneuvering through obstacles, see the next section.

#### **Driving Through Doorways**

Approach an unfamiliar door slowly. Does it have a knob or push bar? Does it open toward or away? Think in terms of using the power of the Amigo to do the work for you. Hold the doorknob or bar in one hand and apply the power with the other hand. If it is a self-closing door, you can go through allowing the door to close behind you. If it is not a self-closing door, just stop when you are clear of the door and push it closed. If the door opens toward you, hold the knob or bar with one hand and gently press on your reverse thumb lever and allow the gentle reverse power to do the work. When the door is open wide enough, pull the Forward Accelerator Lever moving forward, leaving your hand on the door to keep it free of the Amigo and letting go as you pass the door jamb.

#### **Driving On Ramps**

With the ADA (Americans with Disabilities Act), buildings require ramps for POV (Powered Operated Vehicle) access. Some have U-turns in the middle where good cornering is required. Take wide swings with your front wheels around any tight corners so the rear wheels follow a wide arc to stay clear of the corner. When you have stopped while facing uphill, starting up again simply requires that you apply forward power. Accelerate gently after stopping on an incline. When proceeding up a ramp or curb, lean forward in your seat for maximum stability and safety. Going down any ramp or hill, drive slowly to ensure a safe descent.

#### **Driving Over Grass, Gravel and Grades**

The Amigo performs admirably in grass, gravel and on hills, but you must NOT exceed the parameters set down in this manual. Please refer to the safety suggestions for use. Safety must come first. If you are unsure about any situation, avoid it. Common sense is your best protection. Always act with caution. Feel free to use your Amigo on lawns or in park areas. Avoid long unkempt grass; otherwise just follow the safety suggestions.

#### **Transport**

Amigos are not designed or tested for use as seats for users in private or public transporting vehicles. AMI advises against transporting POVs in vehicles unless either the unit is dismantled and placed in the trunk of your car, or the assembled unit is placed in the vehicle and strapped down. Any straps should be secured to non-removable parts of the unit, i.e. Platform. Even when strapped down, Amigos should not be used as seats in private or public transporting vehicles.

#### To disassemble and transport your Amigo:

- 1. Turn your Amigo OFF.
- 2. Unlock the seat and remove it completely.
- 3. Remove the batteries.
- 4. Fold handle down to platform by loosening the Handle Adjusting Knob.
- 5. Lift the rear into the trunk of the vehicle and slide the rest of the Amigo into the trunk.
- 6. The Manual Brake Release Lever must be in the "Normal" position.
  - Note: When batteries are removed, the wheels will not rotate as long as the Manual Brake Release Lever is in the "Normal" position.
- 7. Place seat and batteries into the trunk.
- 8. If your Amigo has a Power Seat Lift, we suggest placing a cut out tennis ball or something similar over the Seat Post to protect it.

#### Transport Your Amigo With A Lift-All®

For greater convenience, obtain a Lift-All® to assist you when loading and unloading. For more information on the Lift-All®, contact your Authorized Dealer. We recommend using vans with ramps, not elevating van lifts.

#### **Airline Travel**

"Special Handling" tags are suggested when transporting your Amigo by the Airlines. (Figure 8). Nonspillable, gel cell batteries are approved for travel on airplanes. When you make your reservation, notify the airline that you will be requesting "escort" service. This will assure that your Amigo will be picked up and delivered at the boarding gate. For additional Helpful Hints for Airline Travel, visit our website at www.myamigo.com.

#### **Public Transportation**

Some public transportation systems have accommodations for your Amigo, but you must transfer to a seat. When utilizing public transportation, do not sit on your Amigo while it is being lifted onto the vehicle, or once the vehicle is in motion.



Figure 8

# SAFETY WARNINGS

- The driving performance of your Amigo can be influenced by electromagnetic fields, such as emitted by cellular telephones and other emitting devices. We recommend the power on your unit be switched off when using such a device. (refer to Electromagnetic Interference section for additional information)
- In some extreme circumstances, your Amigo's performance could be affected by the electromagnetic field emitted from alarm systems in shops. (refer to Electromagnetic Interference section for additional information)
- The Amigo is fitted with Anti-Tip Devices, but this still means the maximum safe slope must not be exceeded. In some extreme circumstances, Anti-Tippers may interfere with curb or obstacle climbing.
- The Anti-Tippers prevent the Amigo from tipping over when the user handles the vehicle.
- The Program Settings in the Controller should not be altered as this may give unsafe driving characteristics.

# **HELPFUL HINTS FOR EVERYDAY USE**



WHEN TRANSFERRING OR NOT USING THE AMIGO, WE RECOMMEND TURNING THE AMIGO TO THE OFF POSITION.

#### **BATHROOM**

In the bathroom, maneuvering room is usually limited. Position close to the toilet, swivel the seat, lock it in position and transfer. When using the bathtub, back up parallel to the tub. Swivel the seat and place your feet in the tub. Engage seat lock and carefully transfer.



DO NOT USE YOUR AMIGO WHILE TAKING A SHOWER. WATER MAY GET INTO THE MICROPROCESSING CONTROLLER (MPC) AND CAUSE ELECTRONIC MALFUNCTIONS.

#### **BEDROOM**

To transfer to the bed, back up parallel to it. Swivel, lock seat into position and ease onto the bed. If charging the batteries overnight, it may be easiest to plug in the Battery Charger before transferring. For added ease, when using a Power Seat Lift, raise your seat slightly higher than the surface to which you are transferring.

#### **KITCHEN**

For access to a refrigerator, make a parallel approach or back up to the outside of the refrigerator. Swivel the seat. Approach a table, sink or stove by maneuvering parallel to it. Swivel the seat to the desired position. The handle will be out of the way.

#### CAR

To transfer to a car, make a parallel approach to the side of the car, release the door latch and open the door as you drive forward. Back parallel to the side of the car and into the door opening. Swivel the seat, lock it in position and carefully slide onto the car seat. On the driver's side, you can use the steering wheel for leverage.

#### **USING AN ELEVATOR**

Backing into an elevator allows you to exit forward. Be sure the elevator is level with the floor.

# BATTERY INFORMATION & CHARGING INSTRUCTIONS

## **Battery Information**

For maximum range and life, it is recommended to fully charge the batteries before using. Extended charging is good for the batteries and will not overcharge them. Amigos have an overcharge protection feature so that the batteries can be charged anytime the Amigo is not being used. It is a popular misconception that batteries should be deeply discharged before recharging. This is not the proper procedure for all batteries. They can actually be damaged if they are discharged too deeply before recharging.

Battery range depends on driver weight, terrain and type of battery used. Charge your batteries daily when the Amigo is used. Make sure that the Charger Cord is unplugged from the wall outlet before moving your Amigo.

For Amigo® units with a HI/LO Handle, batteries should be charged if the Battery Indicator Light is blinking while operating. At the beginning of the charging process, the Battery Indicator Light on the Handle will flash for approximately 20 seconds,

then it will turn solid color. The light will remain steady until the batteries are fully charged. At this point, the Battery Indicator Light will flash, indicating a full charge. Your Amigo can be charged with the Key in the ON or OFF position.

For Amigo® units with a TouchTron Handle, batteries should be charged if the shortest segment bar on the Battery Status Gauge is lit and blinking, along with a low, chirping of the Horn, at one-minute intervals. The batteries are fully charged when the tallest bar on the far right is blinking. Your Amigo can be charged with the Key in the ON or OFF position. The indication will display only while in the charging mode (when Power Cord is plugged into AC outlet).

## **Charging Instructions**

- 1. Place your Amigo near an AC outlet.
- 2. Pull gently on the Cord Reel Plug in the Rear Cover near the Rear Bumper.
- 3. Pull as much Cord as needed (up to 10 feet/3 meters) to reach the AC outlet.
- 4. Connect the Cord Reel Plug to the AC wall outlet.
- 5. Upon completion of the charging process, unplug the Cord Reel Plug from the AC wall outlet.
- 6. Gently tug on the Cord to engage the Retraction Reel. Do not push Cord into the hole in the Rear Cover.

## **Charging Frequency**

- Charge batteries daily when the Amigo is used.
- If not in use for a long period of time, charge for 24 hours, every 30 days.
- Extended charging is good for the batteries and will not overcharge them.

## **Universal Charger Option**

A Universal Charger is available on many Amigos sold outside the United States. The Universal Charger uses a range of 90-240 volts AC power input. This makes it possible to charge on any electrical system globally. (The Universal Charger is an option on models in the U.S. for people who travel abroad and want this universal charging flexibility.) Your charger is labeled, identifying which charging system it uses.



DO NOT USE A 24V CHARGER THAT IS CONFIGURED TO A 120V AC POWER INPUT OUTSIDE THE U.S. IN COUNTRIES USING 220V AC POWER INPUT. DAMAGE WILL OCCUR TO THE CHARGER.

## **Charger Standard Precautions**

- Refer to these instructions frequently.
- Each time you use your charger, read and follow instructions exactly. Working in the vicinity of a battery is dangerous. Batteries generate explosive gases during normal battery operation.
- Never smoke or allow an open flame in the vicinity of the battery.
- Use charger for charging a Lead Acid Battery only. It is not intended to supply power to an extra-low-voltage electrical system or to charge dry cell batteries.
- Do not operate charger in a closed-in area or restrict ventilation in any way.
- A spark near the battery may cause explosion.

#### To reduce risk of spark:

- Prevent external damage to AC and DC cords.
- When connecting charger, connect DC charging cord to the battery charge plug before connecting Charger AC cord to electrical outlet.
- When disconnecting charger, always do so in reverse sequence of connecting procedure. Break first connection as far away from battery as possible.
- Be extra cautious not to drop a metal tool onto the battery(ies).
- Remove jewelry.



FAILURE TO FOLLOW THESE SAFETY INSTRUCTIONS MAY RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE.



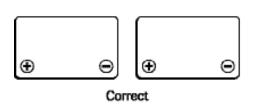
IF YOUR BATTERIES ARE DAMAGED AND A LEAK IS APPARENT, CALL YOUR AUTHORIZED DEALER IMMEDIATELY. UNDER NO CIRCUMSTANCES SHOULD YOU TOUCH THE BATTERIES IF THEY ARE LEAKING.

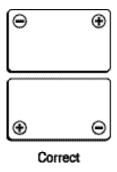
#### **Battery Storage**

All the Amigo Rear Drive models use a battery system that allows the batteries to be removed after they have been disconnected from the platform battery connections. Each battery has a wire assembly with a two-position connector that slides into the connector mounted to the platform. The connection system is designed so that either battery may be placed on either side of the unit. Always turn your Amigo OFF before removing and installing batteries.



TO AVOID DAMAGE TO BATTERIES DURING STORAGE, DO NOT PLACE THEM END-TO-END WITH THE POSITIVE (+) AND NEGATIVE (-) TERMINALS NEXT TO EACH OTHER (FIGURE 9).







Incorrect

Figure 9

If you remove your batteries from your Amigo, put them on a surface that cannot be damaged by acid fumes. Whenever a battery is charged and discharged through a cycle, it breathes. The breathing of the battery emits acid fumes into the cloth strap (used to lift the batteries on Rear Drive models) and may mark surfaces it rests on for long periods of time. Store batteries indoors in a dry environment, away from any open flames. Temperature range is 0°C (32°F) to 40°C (104°F).

# **CLEANING INSTRUCTIONS**

#### **Tires**

The Tires should be cleaned with ordinary kitchen-type cleaners and a damp cloth.

Don't use solvents on Tires as they cause tire material to break down or become too soft.

#### Cover

The Cover of the Amigo is constructed of ABS plastic and coated with a durable automotive type finish. Therefore, the Cover can be cleaned like a car. Use cool water with mild soap to remove dirt and oils. Do not spray the entire vehicle with water. This will damage the electrical parts. The Cover may be waxed with car body wax and buffed by hand with a soft cloth.

#### Seat

The Vinyl Seat can be cleaned with a mild soap or detergent and a damp cloth. A vinyl cleaner can also be used. Cloth Seats can be cleaned with a damp cloth or as any upholstery. Care should be taken not to soak Cloth Seats, as the interior foam rubber will hold water.

#### Floor Mat

The floor mat should be cleaned with ordinary kitchen-type cleaners and a damp cloth. Do not use solvents on the floor mat, as they may cause the floor mat material to break down.



KEEP CLEANING SOLVENTS AWAY FROM ELECTRICAL WIRES AND CONNECTIONS.

# **MAINTENANCE**

Minimum maintenance should prevent unnecessary repairs. You will get years of dependable operation if you follow the suggested maintenance schedule. Check the following:

#### **Daily**

Charge batteries daily when the Amigo is used. Charge the battery until fully charged to ensure proper battery operation. Extended charging is good for the batteries and will not overcharge them.

## Monthly

Check and clean Battery Terminals and the Wire Connections as needed with a light piece of emery cloth or brush and soda water.

- Clean upholstery, plastic and metal with a mild surface cleaner.
- Inspect batteries for any cracks or damage of any kind.
- Check and tighten any exposed Fasteners.
- Make sure all Fasteners are tight on all Battery Connections.
- Check tire pressure on Pneumatic Tires. When air filling tires, always refer to the Manufacturer's Specifications located on the face of the tire. Uneven tire pressure will cause the overheating of the Controller that will lead to failure of the vehicle.



KEEP CLEANING SOLVENTS AWAY FROM ELECTRICAL WIRES AND CONNECTIONS.



DO NOT EXCEED PROPER INFLATION LEVEL SPECIFIED ON TIRE OR TIRES MAY BE DAMAGED.

#### Six Months

- Check all screws and clips (that are holding wheels) for tightness and wear.
- Check all electrical connections for clean contact.
- Charging connection should be inspected for tight connection.
- Check tires for wear.
- Inspect Seat Posts for wear.
- Lubricate Plastic Bearings on Upper Seat Post.

## Yearly

- Have your Authorized Service Center check your Amigo completely.
- Grease Axle and Wheel Hubs.
- Lubricate Steering Column Bearings.

## **Checking the General Condition**

For maintenance operations, consult your Authorized Dealer who has all the necessary information. Once a year have the Authorized Dealer inspect your vehicle thoroughly and carry out in depth maintenance. Regular maintenance allows defective or worn parts to be identified and improves the normal operation of the vehicle and extends its working life.

#### Removing the Rear Cover

The Amigo® RD, EXT350 and HD450 units have a hinged Rear Cover (Figure 10).

**To Open Cover:** Tilt the handle fully forward. Pull Cover off of the Pins in the Rear, lift the Cover over the Seat Post and tilt Cover forward.

Note: It is important to adjust the handle fully forward, to prevent scratching the rear cover on the handle screws.

**To Close Cover:** Reposition the handle to a comfortable position. Simply tilt Cover rearward, guide Cover over the Seat Post, and place Cover on the Pins in the Rear.

Note: It is important to ensure that the Power Cord is fully retracted, and not loose, after the Cover is repositioned back into place.



Figure 10

#### Lighting

The Amigo is equipped with a Headlight, and with optional Taillight and Turn Signals. To replace the Headlight bulb, twist the gray rubber part of the Light Assembly counterclockwise and remove. Bulbs come straight out (do not twist bulbs) of fixture and should be replaced in reverse order. The Rear Turn Signals and Taillight must be completely replaced.

#### **Battery Maintenance**

Gel Cell or VRLA (Valve Regulated Lead Acid) Deep Cycle Batteries are used for operating your Amigo. They are maintenance-free and are transportable on aircraft, buses, trains, etc. as there is no danger of spillage. By following the Charger and Battery procedures, you can expect extended battery life.

#### **Fasteners Replacement**

Use only Grade 8 (US) or 12.9 DIN (metric) in all applications. For service and replacement parts, we recommend Amigo authorized parts.

#### **UNIPAC®** Drive Systems

The UNIPAC® drive is a precision assembly lubricated for long service. Do not attempt to open or service the assembly, this will void the warranty.

#### **Microprocessor Controller**

Do not attempt to service the controller or related electronic components, as this will void the warranty.

#### **Circuit Breaker Replacement Instructions**

An Automatic Resetting Circuit Breaker protects the wiring and battery in the event of a short circuit. If the Amigo stops, check for overloads or short circuits before continuing to operate.

The Circuit Breaker is located under the Rear Cover and attached to the positive terminal on the batteries (Figure 11). If you suspect the Circuit Breaker is defective, use a jumper wire between the two terminals of the breaker. If the Amigo runs now, replace the Circuit Breaker.



DO NOT CONTINUE TO OPERATE THE AMIGO UNTIL THE CIRCUIT BREAKER IS REPAIRED.

NOTE: Tampering with electrical or mechanical parts will invalidate your warranty.

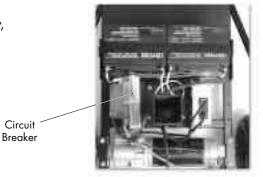


Figure 11

## TROUBLESHOOTING

The Amigo is equipped with an ASIC Controller. This Controller has a Built-In Diagnostic Feature that will cause the Battery Indicator Light LED to flash a numeric code to indicate when there is a service problem.

Under normal operating conditions the Battery Indicator LED will flash to indicate three different situations.

- 1. To indicate a low battery condition when driving.
- 2. To indicate the battery charging cycle has started.
- 3. To indicate when the batteries are fully charged during the charging cycle.

When indicating a service problem, the Battery Indicator Light will flash, hesitate for a moment, and then flash again. Follow the code listings below to determine the problem. If the code indicates a service problem, contact your Authorized Dealer or call the Amigo Service Department at (800) 248-9131 for instructions to verify and correct the problem.

| Code | Description  | Possible Solution  |
|------|--|--|
| 1-1  | EM Brake windings<br>Or connections<br>are Shorted                                 | <ul> <li>(1) Unplug unit and plug back in</li> <li>(2) Check brake wiring and connections</li> <li>(3) Disconnect brake and cycle key, if code changes to 1-2, replace brake</li> <li>(4) Replace MPC controller</li> </ul>  |
| 1-2  | EM Brake windings<br>or connections<br>are open                                    | <ul><li>(1) Unplug unit and plug back in</li><li>(2) Check brake wiring and connections</li><li>(3) Replace brake</li><li>(4) Replace MPC controller</li></ul>   |
| 2-1  | Motor windings or connections are shorted  | <ul> <li>(1) Check motor wiring and connections</li> <li>(2) Check running light (shorts)</li> <li>(3) Disconnect brake and cycle key, if code changes to 2-2, replace motor</li> <li>(4) Replace MPC controller</li> </ul>  |
| 2-2  | Motor windings or connections are open   | <ul><li>(1) Ensure EM brake lever is in drive position</li><li>(2) Check motor wiring and connections</li><li>(3) Replace motor</li><li>(4) Replace MPC controller</li></ul>   |
| 2-3  | Power relay short  | <ul><li>(1) Check / Replace batteries</li><li>(2) Check / Replace MPC controller</li></ul>   |
| 2-4  | PSL Motor short  | <ul> <li>(1) Unplug unit and plug back in</li> <li>(2) Check PSL wiring and connections</li> <li>(3) Disconnect motor and cycle key, if code goes away, replace motor</li> <li>(4) Check / Replace MPC controller</li> </ul> |
| 3-1  | Over temperature condition   | (1) Allow unit to sit idle for 15 minutes, restart and see if code disappears (2) Ensure EM brake and/or motor is not causing excessive amperage draw (3) Replace MPC controller   |
| 4-1  | Charger is supplying<br>too much voltage during<br>the battery charge cycle        | (1) Replace battery charger if voltage is 32 volts or higher (2) If 31 volts or lower, replace MPC controller  |
| 4-2  | Charger not dropping<br>back into "float mode"<br>during battery<br>charging cycle | <ul><li>(1) Replace charger wiring</li><li>(2) Replace battery charger</li><li>(3) Replace MPC controller</li></ul>  |
| 5-1  | MPC drive FETS shorted   | (1) Replace MPC controller   |
| 5-2  | MPC regenerative braking<br>FETS shorted   | (1) Replace MPC controller   |
| 5-3  | Throttle potentiometer or throttle circuitry in fail band fault                    | <ul><li>(1) Check to ensure handle cable is in good condition</li><li>(2) Check that throttle lever moves freely and returns to center</li><li>(3) Replace throttle potentiometer</li></ul>                                  |
| 5-4  | Requires software revision   | (1) Replace MPC controller   |
| 5-5  | MPC not limiting the electrical current to the motor                               | (1) Replace MPC controller   |

## ELECTROMAGNETIC INTERFERENCE



RADIO WAVE SOURCES MAY AFFECT POWERED MOBILE VEHICLE CONTROL.

## Electromagnetic Interference (EMI) From Radio Wave Sources

Powered vehicles may be susceptible to electromagnetic interference (EMI), which is interfering electromagnetic energy (EM) emitted from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios and cellular phones. The interference (from radio wave sources) can cause the powered vehicle to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the powered vehicle's control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each powered vehicle can resist EMI up to a certain intensity. This is called its "Immunity Level." The higher the immunity level, the greater the protection. At this time, current technology is capable of achieving at least a 20 V/m immunity level, which would provide useful protection from the more common sources of radiated EMI. The immunity level of this powered vehicle is not known.

There are a number of sources of relatively intense electromagnetic fields in the everyday environment. Some of these sources are obvious and easy to avoid. Others are not apparent and exposure is unavoidable. However, we believe that by following the warnings listed below, your risk to EMI will be minimized.

## The sources of radiated EMI can be broadly classified into three types:

- 1. Handheld portable transceivers (transmitters-receivers) with antenna mounted directly on the transmitting unit. Examples include: citizens band (CB) radios, "walkie talkie," security, fire and police transceivers, cellular telephones and other personal communication devices.
  - Note: Some cellular telephones and similar devices transmit signals while they are ON, even when not being used;
- 2. Medium-range mobile transceivers, such as those used in police cars, fire trucks, ambulances and taxis. These usually have the antenna mounted on the outside of the vehicle; and
- **3.** Long-range transmitters and transceivers, such as commercial broadcast transmitters (radio and TV broadcast antenna towers) and amateur (HAM) radios.

Note: Other types of handheld devices, such as cordless phones, laptop computers, AM/FM radios, TV sets, CD players and cassette players and small appliances such as electric shavers and hair dryers, so far as we know, are not likely to cause EMI problems to your powered vehicle.

#### Powered Vehicle Electromagnetic Interference (EMI)

Because EM energy rapidly becomes more intense as one moves closer to the transmitting antenna (source), the EM fields from handheld radio wave sources (transceivers) are of special concern. It is possible to unintentionally bring high levels of EM energy very close to the powered vehicle's control system while using these devices. This can affect powered vehicle movement and braking. Therefore, the warnings listed below are recommended to prevent possible interference with the control system of the powered vehicle.

#### **Warnings**

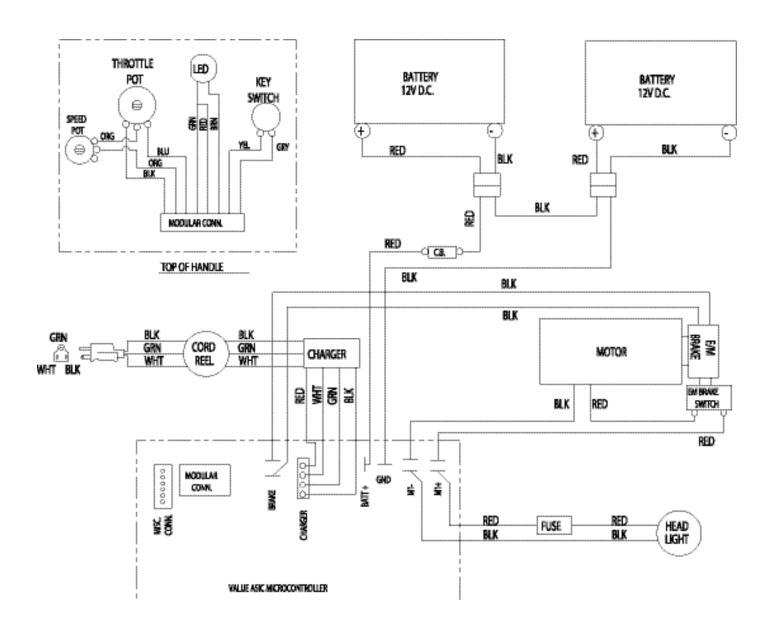
Electromagnetic Interference (EMI) from sources such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios and cellular phones, can affect electric vehicles. Following the warnings listed below should reduce the chance of unintended brake release or mobile vehicle movement, which could result in serious injury.

- 1. DO NOT operate or turn ON handheld personal communication devices, such as Citizens Band (CB) radios and cellular phones while the vehicle is turned on.
- 2. Be aware of nearby transmitters, such as radio or TV stations and try to avoid coming close to them.
- 3. If unintended movement or brake release occurs, turn the vehicle off as soon as it is safe.
- **4.** Be aware that adding accessories or components or modifying the vehicle may make it more susceptible to interference from radio wave sources.
  - Note: There is no easy way to evaluate their effect on the overall immunity of the vehicle.
- **5.** Report all incidents of unintended movement or brake release to the mobile vehicle manufacturer, and note whether there is a source of EMI nearby.

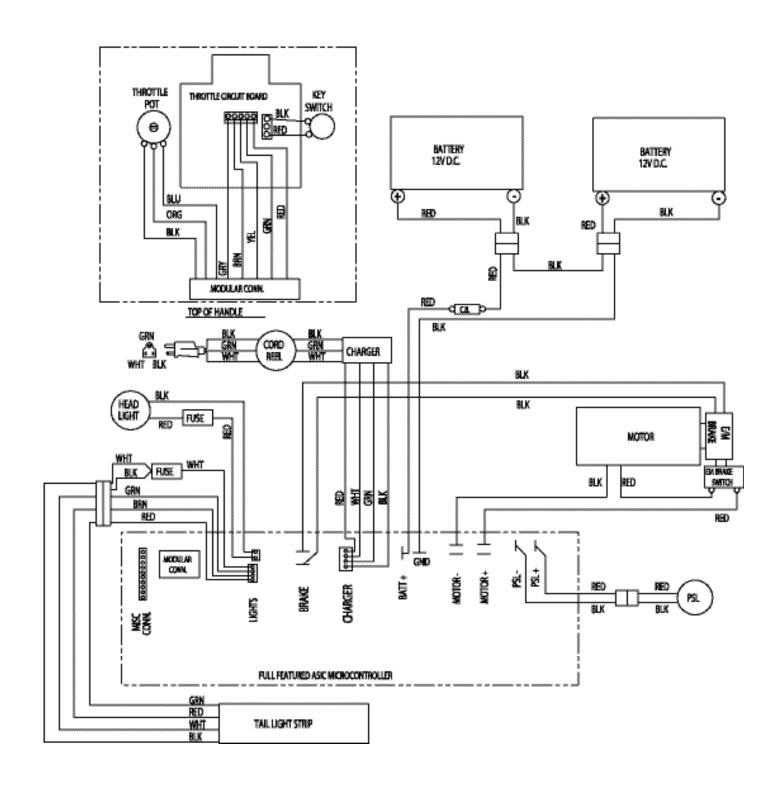
#### **Important Information**

- 1. 20 volts per meter (V/M) is a generally achievable and useful immunity level against EMI (as of May 1994). The higher the level, the greater the protection.
- **2.** The immunity level of this product is not known.

# **WIRING DIAGRAMS**



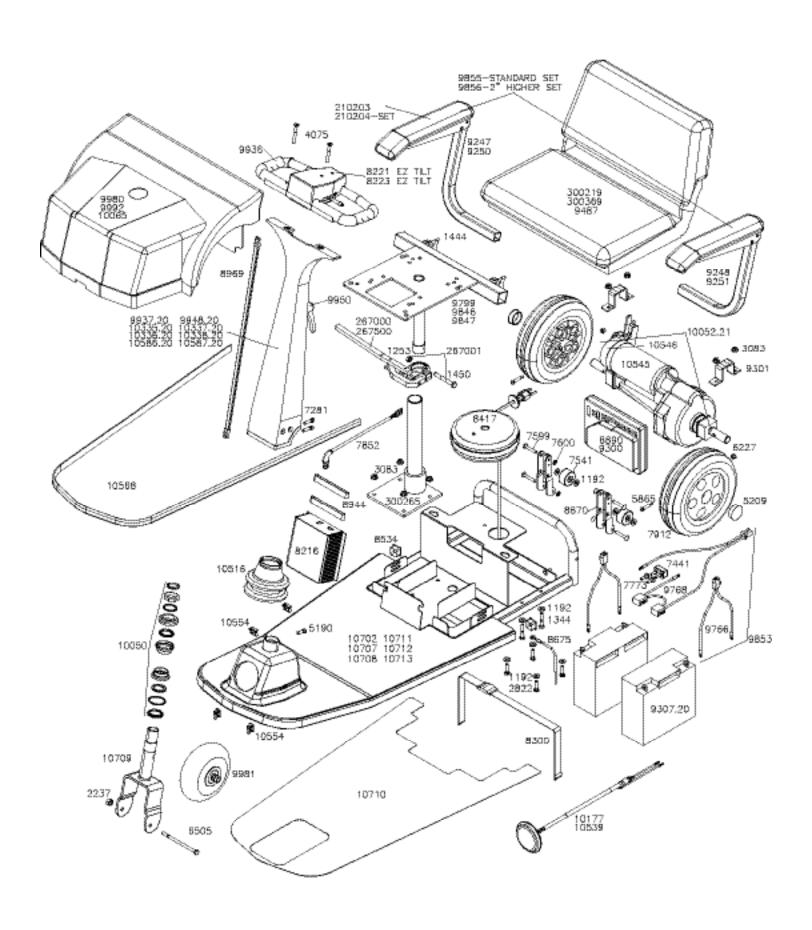
**HI/LO Handle Controls** 



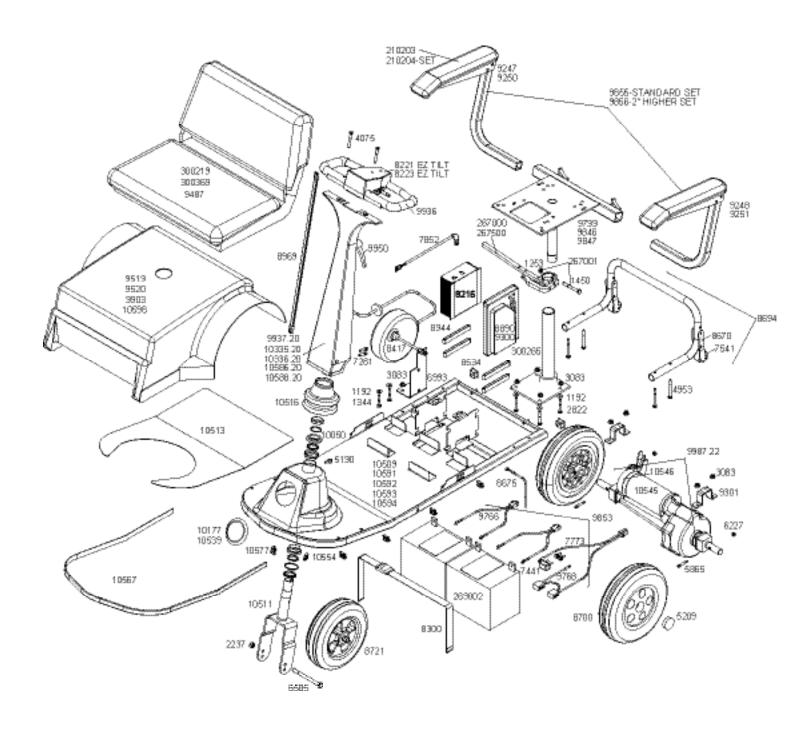
**TouchTron Handle Controls** 

# **EXPLODED VIEWS**

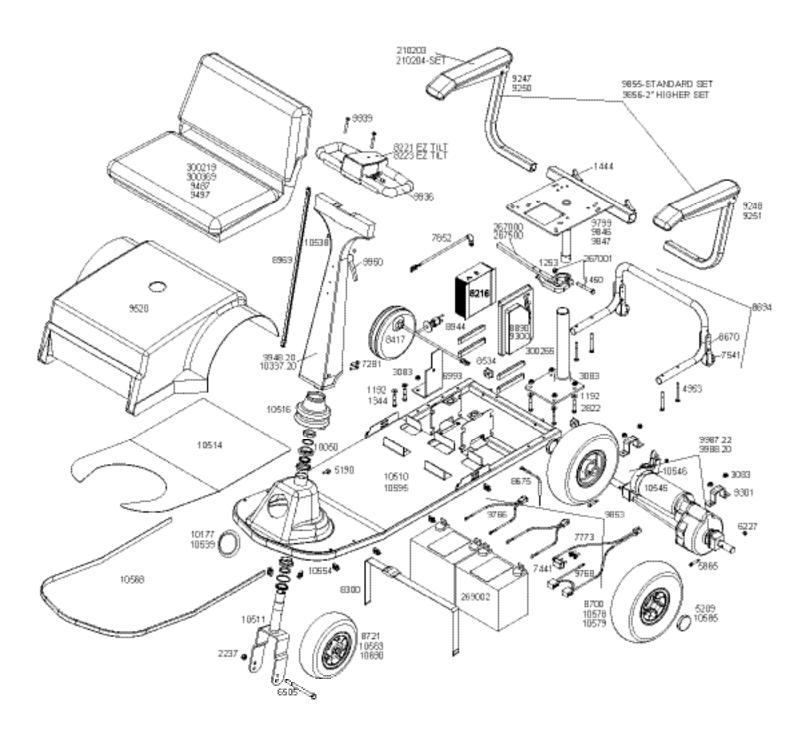
#### RT EXPRESS



#### **REAR DRIVE**



#### **HD450 & EXT350**



# **PARTS LISTS**

## #690000 RT EXPRESS PARTS LIST- AMI0071232 TO PRESENT

| Part#       | Description                              | Qtylunit | Part#    | Description                               | Qty/unit |
|-------------|--|----------|----------|---|----------|
| 1192        | Washer .281 ID .63 OD .06 flat           | 12       | 9846     | Seat post asm upper STD (includes 267001) | 1        |
| 1253        | Nut 5/16-18 hex                          | 1        | 9847     | Seat post asm upper PSL (includes 267001) | 1        |
| 1344        | Screw 1/4-20 x 1.50 hex                  | 4        | 9853     | Wire asm kit quick disconnect             | 1        |
| 1444        | Knob arm adjustment                      | 2        | 9855     | Arm assembly standard (set)               | 1        |
| 1450        | Screw 5/16-18 x 2.50 hex                 |          | 9856     | Arm assembly 2" higher (set)              | 1        |
| 2237        | Nut 3/8-24 hex                           | 1        | 9936     | Handle, upper                             | 1        |
| 2822        | Screw 1/4-20 x 1.00 hex                  | 4        | 9937.20  | Column asm black 2" taller EZ Tilt handle | 1        |
| 3083        | Nut 1/4-20 serrated flanged              | 8        | 9948.20  | Column asm black standard EZ Tilt handle  | 1        |
| 4075        | Screw 1/4-20 x 2.00 FHSC                 | 2        | 9950     | Lever handle adjustment                   | 1        |
| 5190        | Screw 1/4-28 x .75 SHCS                  | 1        | 9980     | Cover asm champagne beige rear            | 1        |
| 5209        | Hub cap black                            | 2        | 9992     | Cover asm scuba blue rear                 | 1        |
| 5865        | Screw 10-24 x :25 x 1.25 SHLD            | 2        | 9981     | Wheel asm 6" front                        | 1        |
| 6227        | Nut 10-24 nylon insert hex               | 2        | 10050    | Bearing set                               | 1        |
| 6505        | Screw 3/8-24 X 4.5 hex                   | 1        | 10052.21 | Narrow transaxie drive                    | 1        |
| 7281        | Screw 1/4-20 x .88 SHCS                  | 2        | 10065    | Cover asm cinnamon red rear               | 1        |
| 7441        | Circuit breaker 25 amp                   | 1        | 10177    | Headlight asm for Touchtron handle        | 1        |
| 7541        | Wheel 1.6" stability                     | 2        | 10335.20 | Column asm red standard EZ Tilt handle    | 1        |
| 7599        | Rivet .25 x 1.50                         | 4        | 10336.20 | Column asm champagne std EZ Tilt handle   | 1        |
| 7600        | Push nut .25 ID                          | 4        | 10337.20 | Column asm red 2" taller EZ Tilt handle   | 4        |
| 7773        | Cap vinyl insulated                      | 2        | 10338.20 | Column asm champagne 2° EZ Tilt handle    | 1        |
| 7852        | Wire asm-charger to MPC                  | 1        | 10516    | Boot handle                               | 1        |
| 7912        | Wheel 9" rear Trimline                   | 2        | 10539    | Headlight asm for Hi/Lo handle            | 1.       |
| B216        | Charger 3 Amp                            | 1        | 10545    | Motor assembly                            | 1        |
| 8221 EZ TIL | T Encl & pot asm Touchtron               | 1        | 10546    | Brake assembly                            | 1        |
| 8223 EZ TIL | T Encl & pot asm Hi/Lo                   | 1        | 10554    | Clip wire guide                           | 4        |
| 8300        | Strap battery retaining                  | 1        | 10568    | Trim molding bumper                       | 1        |
| B417        | Cord reel assembly                       | 1        | 10586.20 | Column asm blue standard EZ Tilt handle   | 1        |
| 8534        | End plugs                                | 2        | 10587.20 | Column asm blue 2" taller EZ Tilt handle  | 4        |
| 8670        | Bumper wheel bracket                     | 2        | 10702    | Platform weldment champagne RT Express    | 1        |
| 8675        | Ground wire asm                          | 1        | 10707    | Platform weldment cinn red RT Express     | 1        |
| 8890        | CPU Value ASIC                           | 1        | 10708    | Platform weidment scuba blue RT Express   | 1        |
| B944        | Band controller & charger mounting       | 2        | 10709    | Fork weldment RT Express                  | 1        |
| 8969        | Cable MPC handle control                 | 1        | 10710    | Mat RT Express platform                   | 1        |
| 9247        | Arm asm right                            | 1        | 10711    | Platform weldment 3' shorter champagne    | 1        |
| 9248        | Arm asm left                             | 1        | 10712    | Platform weldment 3' shorter cinnamon red | 1        |
| 9250        | Arm asm right 2' higher                  | 1        | 10713    | Platform weldment 3' shorter scuba blue   | 1        |
| 9251        | Arm asm left 2" higher                   | 1        | 210203   | Arm pad                                   | 2<br>1   |
| 9300        | CPU Full Featured ASIC                   | 1        | 210204   | Arm pad (set)                             | 1        |
| 9301        | Clamp drive                              | 2        | 267000   | Seat lock asm RH                          | 1        |
| 9307.20     | Battery asm 17AH                         | 2        | 267001   | Stem collar screw & nut                   | 1        |
| 9487        | Cloth & vinyl folding seat (inc. fstnrs) | 1        | 267500   | Seat lock asm LH                          | 1        |
| 9766        | Wire asm battery quick disconnect        | 2        | 300219   | Premier I seat gray (includes fasteners)  | +        |
| 9768        | Wire asm controller quick disconnect     | 1        | 300265   | Seat post lower (includes fasteners)      | 1        |
| 9799        | Seat post asm upper accessory adapter    | 1        | 300369   | Premier I seat black (includes fasteners) | 1        |

# #310000 REAR DRIVE PARTS LIST- AMI0063706 TO PRESENT

| Part#       | Description                              | Qtylunit | Part#    | <u>Description</u>                        | Qtylunit    |
|-------------|--|----------|----------|---|-------------|
| 1192        | Washer .281 ID .63 OD .06 flat           | 6        | 9520     | Cover asm cinnamon red                    | 1           |
| 1253        | Nut 5/16-18 hex                          | 1        | 9766     | Wire asm battery quick disconnect         | 2           |
| 1344        | Screw 1/4-20 x 1.50 hex                  | 2        | 9768     | Wire asm controller quick disconnect      | 1           |
| 1444        | Knob arm adjustment                      | 2        | 9799     | Seat post asm upper accessory adapter     |             |
| 1450        | Screw 5/16-18 x 2,50 hex                 | 1        | 9846     | Seat post asm upper STD (includes 267001) | 1           |
| 2237        | Nut 3/8-24 hex                           |          | 9847     | Seat post asm upper PSL (includes 267001) | 1           |
| 2822        | Screw 1/4-20 x 1.75 hex.                 | 4        | 9853     | Wire asm kit quick disconnect             | 1           |
| 3083        | Nut, 1/4-20 serrated flanged             | 10       | 9855     | Arm assembly standard (set)               | 1           |
| 4075        | Screw 1/4-20 x 2.00 FHCS                 | 2        | 9856     | Arm assembly 2* higher (set)              | 1           |
| 4953        | Screw 1/4-20 x 2.50 hex                  | 4        | 9903     | Cover asm scuba blue                      | 1           |
| 5190        | Screw 1/4-28 x .75 SHCS                  | 1        | 9936     | Handle, upper                             | 1           |
| 5209        | Hub cap black                            | 2        | 9937.20  | Column asm black EZ Tilt handle           | 1           |
| 5865        | Screw, 10-24 x .25 x 1.25 SHLD           | 2        | 9950     | Lever handle adjustment                   | 1           |
| 6227        | Nut, 10-24 nylon insert hex              | 2        | 9987.22  | Standard transaxle drive                  | 1           |
| 6505        | Screw 3/8-24 X 4.5 hex                   | 1        | 10050    | Bearing set                               | 1           |
| 6993        | Cord reel bracket                        | 1        | 10177    | Headlight asm for Touchtron handle        | 1           |
| 7281        | Screw 1/4-20 x 88 SHCS                   | 2        | 10335.20 |   | 1           |
| 7441        | Circuit breaker 25 amp                   | 1        | 10336.20 | Column asm champagne EZ Tilt handle       | 1           |
| 7541        | Wheel 1.6" stability                     | 2        | 10509    | Platform weldment black                   | 1           |
| 7773        | Cap vinyl insulated                      | 2        | 10511    | Fork weldment                             | .1          |
| 7852        | Wire asm-charger to MPC                  | 1        | 10513    | Mat platform                              | 1           |
| 8216        | Charger 3 Amp                            | 1        | 10516    | Boot handle                               | 1           |
| 8221 EZ TIL | T Encl & pot asm Touchtron               | 1        | 10539    | Headlight asm for Hi/Lo handle            | 1           |
| 8223 EZ TIL | T End & pot asm HI/Lo                    | 1        | 10545    | Motor assembly                            | 1           |
| 8300        | Strap battery retaining                  | 1        | 10546    | Brake assembly                            | 1           |
| 8417        | Cord reel assembly                       | 1        | 10554    | Clip wire guide                           | 5           |
| 8534        | End plugs                                | 2        | 10567    | Trim molding bumper                       | 1           |
| 8670        | Bumper wheel bracket                     | 2        | 10577    | Retainer wire guide                       | 1           |
| 8675        | Ground wire asm                          | 1        | 10586.20 | Column asm blue EZ Tilt handle            | 1           |
| 8694        | Bumper sem rear                          | 1        | 10588.20 | Column asm green EZ Tilt handle           | 1           |
| 8700        | Wheel asm Trimline 10.5"                 | 2        | 10591    | Platform weldment cinnamon red            | 1           |
| 8721        | Wheel asm 9" front                       | 1        | 10592    | Platform weldment scubs blue              | 1           |
| 8890        | CPU Value ASIC                           | 1        | 10593    | Platform weldment emerald green           | 1           |
| 8944        | Band controller & charger mounting       | 4        | 10594    | Platform weldment champagne beige         | 1           |
| 8969        | Cable MPC handle control                 | 1        | 10598    | Cover asm champagne beige                 | .1          |
| 9247        | Arm asm right                            | 1        | 210203   | Arm pad                                   | 2           |
| 9248        | Arm asm left                             | 1        | 210204   | Arm pad (set)                             | 1           |
| 9250        | Arm asm right 2" higher                  | 1        | 267000   | Seat lock asm RH                          | 1           |
| 9251        | Arm asm left 2" higher                   | 1        | 267001   | Stem collar with screw & nut              | -1          |
| 9300        | CPU Full Featured ASIC                   | 7        | 267500   | Seat lock asm LH                          | 1           |
| 9301        | Clamp, drive                             | 2        | 269002   | Battery U-1 33-35 AH                      | 1<br>1<br>2 |
| 9487        | Cloth & vinyl folding seat               | 1        | 300219   | Premier I seat gray                       | 1           |
| 9519        | Cover asm emerald green                  | 1        | 300265   | Seat post lower (includes fasteners)      | 1           |
|             | numeraen sizirinset ndestekkil SALITARI. |          | 300396   | Premier I seat black                      | 1           |

# #650000 HD450 / #670000 EXT350 PARTS LIST- AMI0071239 TO PRESENT

| Part#       | Description                              | <b>Qtylunit</b> | Part#    | Description                               | Qtyjunit |
|-------------|--|-----------------|----------|---|----------|
| 1192        | Washer .281 ID .63 OD .06 flat           | 6               | 9766     | Wire asm battery quick disconnect         | 2        |
| 1253        | Nut 5/16-18 hex                          | 1               | 9768     | Wire asm controller quick disconnect      | 1        |
| 1344        | Screw 1/4-20 x 1.50 hex                  | 2               | 9799     | Seat post asm upper accessory adapter     |          |
| 1444        | Knob arm adjustment                      | 2               | 9846     | Seat post asm upper STD (includes 267001) | 1        |
| 1450        | Screw 5/16-18 x 2.50 hex                 | 1               | 9847     | Seat post asm upper PSL (includes 267001) | 1        |
| 2237        | Nut 3/8-24 hex                           | 1               | 9853     | Wire asm kit quick disconnect             | 21       |
| 2822        | Screw 1/4-20 x 1.75 hex                  | 4               | 9855     | Arm assembly standard (set)               | 1        |
| 3083        | Nut, 1/4-20 serrated flanged             | 10              | 9856     | Arm assembly 2" higher (set)              | 1        |
| 4953        | Screw 1/4-20 x 2.50 hex.                 | 4               | 9936     | Handle, upper                             | 1        |
| 5190        | Screw 1/4-28 x .75 SHCS                  | 1               | 9939     | Screw 1/4-20 x 4.00 FHCS                  | 2        |
| 5209        | Hub cap black for Trimline (EXT only)    | 2               | 9948.20  | Column asm black EZ Tilt 2" taller        | 1        |
| 5865        | Screw, 10-24 x .25 x 1.25 SHLD           | 2               | 9950     | Lever handle adjustment                   | 1        |
| 6227        | Nut, 10-24 nylon insert hex              | 2               | 9987.22  | Standard transaxle drive                  | 1        |
| 6505        | Screw 3/8-24 X 4.5 hex                   | 1               | 9988.20  | Heavy duty transaxle drive                | 1        |
| 6993        | Cord reel bracket                        | 1               | 10050    | Bearing set                               | 1        |
| 7281        | Screw 1/4-20 x .88 SHCS                  | 2               | 10177    | Headlight asm for Touchtron handle        |          |
| 7441        | Circuit breaker 25 amp                   | 3               | 10337.20 | Column asm red EZ Tilt 2" taller          | 1        |
| 7541        | Wheel 1.6" stability                     | 2               | 10510    | Platform weldment extended black          | 1        |
| 7773        | Cap vinyl insulated                      | 2               | 10511    | Fork weldment                             | 1        |
| 7852        | Wire asm charger to MPC                  | 1               | 10514    | Mat platform extended                     | 4        |
| 8216        | Charger 3 Amp                            | 1               | 10516    | Boot handle                               | 1        |
| 221 EZ TII  | T Encl & pot asm Touchtron               | 1               | 10538    | Cap black vinyl                           | 2        |
| 3223 EZ TII | T Encl & pot asm Hi/Lo                   | 1               | 10539    | Headlight asm for Hi/Lo handle            | 1        |
| 8300        | Strap battery retaining                  | 1               | 10545    | Motor assembly                            | 1        |
| B417        | Cord real assembly                       | 1               | 10546    | Brake assembly                            | 1        |
| 8534        | End plugs                                | 2               | 10554    | Clip wire guide                           | 4        |
| 8670        | Bumper wheel bracket                     | 2               | 10568    | Trim molding bumper                       | 1        |
| 8675        | Ground wire asm                          | 1               | 10578    | Wheel asm foam filled 10.5" rear          | 2        |
| 8694        | Bumper asm rear                          | 1               | 10579    | Wheel asm pneumatic 10.5" rear            | 2        |
| 8700        | Wheel asm Trimline 10.5" rear (EXT only) | 2               | 10583    | Wheel asm pneumatic 9" front              | 1        |
| 8721        | Wheel asm Trimline 9' front (EXT only)   | 1               | 10585    | Hub cap black                             | 2        |
| 8890        | CPU Value ASIC                           | 1               | 10595    | Platform weldment extended red            | 1        |
| 8944        | Band controller & charger mounting       | 4               | 10690    | Wheel asm foam filled 9" front            | 1        |
| 8969        | Cable MPC handle control                 | 1               | 210203   | Arm pad                                   | 1        |
| 9247        | Arm asm right                            | 3               | 210204   | Arm pad (set)                             | 1        |
| 9248        | Arm asm left                             | 1               | 267000   | Seat lock asm RH                          | 1        |
| 9250        | Arm asm right 2" higher                  | 1               | 267001   | Stem collar with screw & nut              | 1        |
| 9251        | Arm asm left 2' higher                   | 1               | 267500   | Seat lock asm LH                          | 1        |
| 9300        | CPU Full Featured ASIC                   | 4               | 269002   | Battery U-1 33-35 AH                      | 2        |
| 9301        | Clamp, drive                             | 2               | 300219   | Premier I seat gray                       | 1        |
| 9487        | Cloth & vinyl folding seat               | 1               | 300265   | Seat post lower (includes fasteners)      | 1        |
| 9497        | Seat cloth & vinyl 22" wide reinforced   | 1               | 300369   | Premier I seat black                      | 1        |
| 9520        | Cover asm cinnamon red                   | -               |          |   | 0.301    |

## **WARRANTY**

## Amigo® Brand Product Warranty

Effective July 9, 2003

Amigo Mobility International, Inc. (AMI) warranties the original completed unit it manufactures to the original purchaser.

- 1. Structural components including platform, frame and seat post, have a lifetime warranty against defects in materials and workmanship.
- 2. Transaxle, motor, controller and battery charger, are warranted against defects in materials and workmanship for two (2) years.
- 3. Seats and other components have a one (1) year warranty against defects in materials and workmanship. Cuts and tears in seats are not covered by warranty.
- 4. AMI warranties batteries supplied from its factory. AMI factory-supplied batteries carry Amigo brand labels. A six-month battery warranty from the date of purchase applies against the battery manufacturer's defects in workmanship or materials. Damage caused by battery moisture, spillage, or leakage is exclusive of warranty. When removing a battery, always set on cardboard or newspapers to avoid damage.
- 5. Weight Restrictions: Use of a product by persons exceeding the specified load capacity for that model is not recommended and voids warranty.
- 6. After sixty (60) days, labor will be charged on warranty repairs, except where law prohibits.
- 7. Items replaced under warranty, are covered by the original warranty. (Warranty replacement does not extend the warranty period.)
- 8. AMI is obligated to repair or replace products or parts returned by the purchaser, and found to be defective under warranty at its headquarters in Bridgeport, Michigan.
- 9. For unit and parts, this warranty does not cover accidental damage, misuse, normal wear and tear, such as LED lights, electrical and mechanical switches, wires, belts, chains and resistors, or use of products for other than personal purposes. Damage during shipment is not covered by the warranty.
- 10. If inspection determines that a returned part or unit is fully functional, it will be returned at the expense of the owner. Opening sealed components will void the warranty.
- 11. Accessories and parts that are not a part of the original completed unit, or rebuilt units, will have a one (1) year warranty against defects in materials and workmanship.

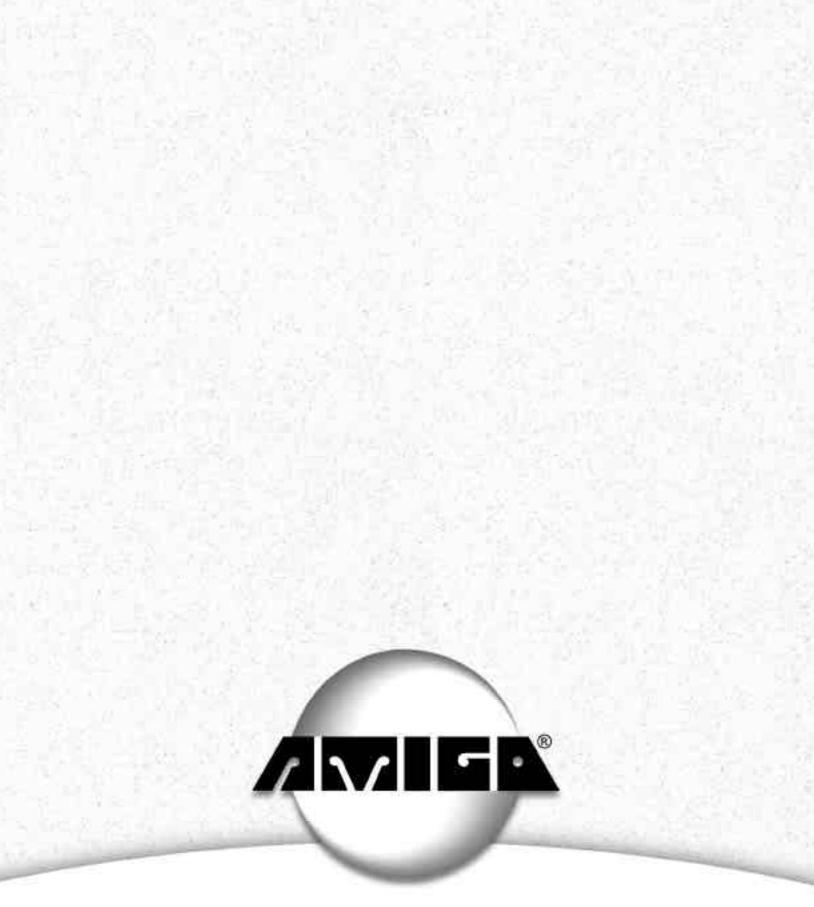
This warranty begins when the unit is sold to the original owner. If warranty information, such as owner's name, serial number or date of purchase is not available, then AMI will use the production date of the unit as the effective warranty date.

This warranty supersedes and is in lieu of all other warranties, expressed or implied, and no person, agent or dealer is authorized to give any warranties on behalf of AMI, nor to assume for AMI any other liability concerning any of its products unless made in writing and signed by an official of AMI. Any unauthorized repair or modification will void this warranty and release AMI from any liability.

This warranty gives you specific rights, with the possibility of other rights, which vary depending upon your locality.

# **NOTES**

| Date | Remark |
|------|--------|
|      |        |
|      |        |
|      |        |
| Date | Remark |
|      |        |
|      |        |
|      |        |
| Date | Remark |
|      |        |
|      |        |
|      |        |
| Date | Remark |
|      |        |
|      |        |
|      |        |
| Date | Remark |
|      |        |
|      |        |
|      |        |
| Date | Remark |
|      |        |
|      |        |
|      |        |
| Date | Remark |
|      |        |
|      |        |
|      |        |



#### AMIGO MOBILITY INTERNATIONAL, INC.

6693 Dixie Highway, Bridgeport, MI 48722-9725 *Phone* (800) 248-9131 • *Fax* (800) 334-7274 • www.myamigo.com

© 2003 Amigo Mobility International, Inc. Amigo® is a registered trademark of Amigo Mobility International, Inc.