

For Models:

- Amigo FD
- Amigo Centra
- Amigo Deluxe
- Amigo J9™
- Amigo Baja
- Amigo MC
- Amigo Grand Tour

- COMPLETE AND RETURN YOUR WARRANTY CARD
- ► DO NOT OPERATE YOUR AMIGO UNTIL YOU HAVE COMPLETELY READ THIS OWNER'S MANUAL

Serial No	
Date of Purchase	H _{II}

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SAFETY FIRST

Amigo Mobility
International,
Inc. (AMI)
disclaims any
responsibility
for personal
injury or property damage
resulting from
the improper or
unsafe use of its
products.



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 Amigo, please contact AMI. If you are in doubt about your ability to operate your Amigo, consult your personal physician.

DO

- Do avoid sudden starts while the handle is turned sharply.
- When driving over bumps, dips or inclines, do approach them at a 90-degree angle.
- When operating under low-light conditions, do equip the Amigo with proper lighting.
- Do operate your Amigo only when the power seat lift is in its lowest position.
- If you have a two-speed handle, always do place thumb control lever at a 90-degree angle to handle and apply parking brake when stopped or transferring. (Always turn the key switch OFF when stopped or transferring on models with keys).
- When transferring off your Amigo, do make sure the seat lock is in the locked position.
- If you own an Amigo RD, you have access
 to an optional safety brake. Do use the
 safety brake to stop in emergency situations
 only. To disengage the brake, reverse the
 direction of your Amigo. Note: Repeated use
 of the safety brake will result in excessive tire wear.

A CAUTION

 Turning the key OFF while in motion will bring the Amigo to an abrupt stop.

DON'T

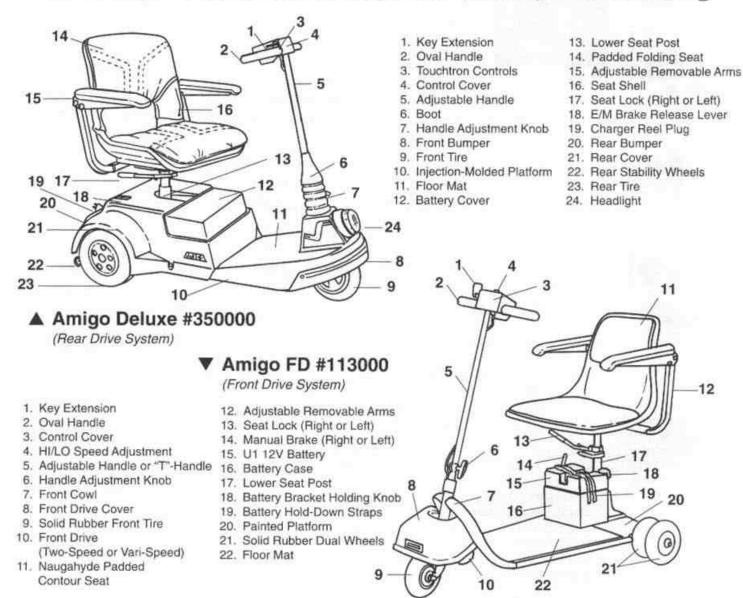
- Don't drive over or off obstacles more than 1 inch (2.5 cm) high. This could be unsafe and could damage your Amigo.
- Don't operate on streets or other areas with vehicular traffic.
- Don't sit on the Amigo in a moving vehicle.
- Don't remove handle from steering column when transferring to transport the Amigo.
 Instead, loosen the handle adjustment knob near the bottom of the handle so you can fold the handle down to the platform. Place the handle down so that the HI/LO speed adjustment knob or the Touchtron controls will not be damaged. Tighten the knob to secure the handle.
- Don't push or force the cord reel into the rear cover.
- Don't leave the manual brake release on.
- Don't 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.

PERSONAL SAFETY INSTRUCTIONS!

- Keep legs on the platform while driving the Amigo.
- Drive slowly while turning and on inclines.
- Do not make sharp, abrupt turns at high speed or going down an incline.
- · Drive straight up and down inclines.
- · Do not park on inclines/declines.
- 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 not back down inclines nor onto any changes in surface or grade.
- Your Amigo is restricted to one occupant.
- Occupant must remain seated while Amigo is in operation.
- Lock seat in forward position before operating Amigo.
- Maximum load capacity is 250 pounds (112.5 kg) for Amigo FDs, J9s, and aluminum platforms and 350 pounds (157.5 kg) for all other Amigos.

Basic Amigo Platform Mobility Aids (PMAs) Parts Listing*



Other PMAs Included in this Manual:



*For further detail, see the Exploded View and Parts List for your model included with this manual in your Owner's Packet of Information.



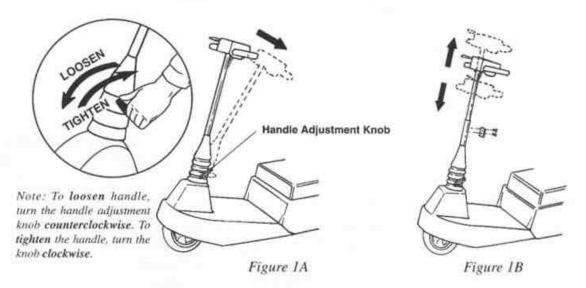


Assembly Instructions

HANDLE ADJUSTMENT

Oval Handle: To adjust the angle of the handle, loosen the lower knob to separate the meshed teeth. Move the handle into the desired position and tighten the knob (Figure 1A).

Telescopic Oval Handle (Optional): The Amigo telescopic handle can be adjusted from 19 inches (48.3 cm) to 23 inches (58.4 cm). It is factory set to 23 inches (58.4 cm). If adjustment is needed, please see your local Amigo dealer or call Amigo Mobility International, Inc. (Figure 1B).



SEAT INSTALLATION

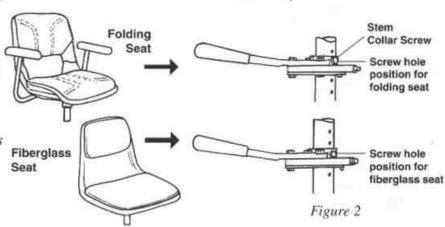
- 1. Unlock the seat lock.
- Insert the upper seat post into the opening of the lower seat post.
- Spin seat around to make sure it rotates freely.
- To lock the seat, pull the seat lock lever toward the rear of the seat.

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.

△ CAUTION

It is recommended that the seat lock be installed in the second hole positioned from the seat on a folding seat and the third hole on a fiberglass seat (Figure 2).



Repositioning the Power Seat Lift Switch (on Amigo FD and Amigo RD models without Touchtron controls)

To change the location of your power seat lift switch bracket to a more convenient side, follow these steps:

- Loosen the holding set screws on the switch bracket using a 1/8" (3 mm) allen wrench.
- 2. Lower the seat lift to the lowest position.
- Rotate switch bracket around the seat post until the most convenient position is located.
- Tighten the holding set screws securely on the switch bracket.
- Check the clearance between the seat lock casting and switch bracket. Make sure there is no interference between the seat lock casting and switch bracket when the seat is swiveled.

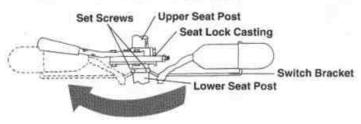
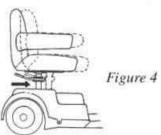


Figure 3

• SEAT POSITIONING (For Amigo RD Models Only)

For comfort and convenience, the seat can be moved closer to or away from the handle (Figure 4). The rear cover must be removed and the lower seat post must be reversed (two different sets of mounting holes in the platform are used). It will move the post approximately three inches (7.6 cm) to the front or rear, depending on the direction it is turned.



DUAL WHEELS

Dual wheels are standard on Amigo FDs and optional on RDs.

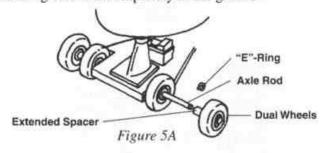
Amigo FD - Standard

Parts list:

- (3) Dual wheel clips (two are extra)
- (3) "E"-rings can be used in place of wheel clips. ("E"-rings are more difficult to put on, but hold better than clips.)
- (1) Dual wheel rod
- (2) Dual wheels No tools needed

Installation - See Figure 5

- 1. Put one dual wheel on the axle rod.
- Slide it all the way over to the permanently installed "E"-ring. When placing wheel on rod, the side with extended spacer should be facing inward.
- Slide dual wheel rod all the way through the axle opening in platform.
- Put dual wheel on other side with extended spacer facing inward.
- Secure wheel with dual wheel clip or "E"-ring, making sure it is completely in the groove.



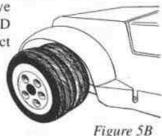
Removal of Dual Wheels (Amigo FD)

Dual wheels are recommended on the Amigo FD for use outdoors and on uneven surfaces or terrain. If dual wheels must be removed for narrow spaces, here's how:

- 1. Remove dual wheel clip from end of rod.
- 2. Remove wheel.
- Pull rod and other wheel completely out of axle opening.
- Replace wheels and clips on rod for storage.

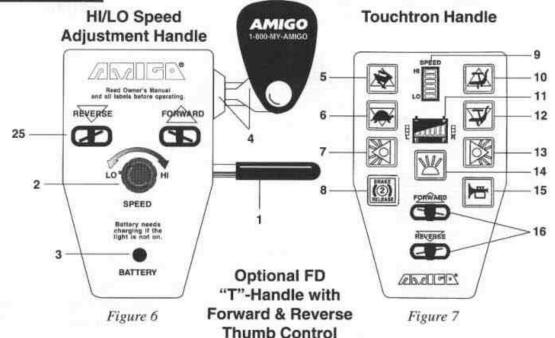
Removal of Optional Dual Wheels (RD Models)

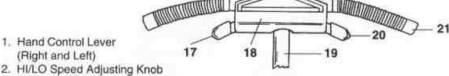
To install or remove optional dual wheels on RD models (Figure 5B), contact your Amigo representative.



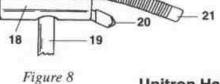


Operating Your Amigo





- Battery Indicator Light(s) 4. Key Extension/Key Switch
- 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 (HI/LO)
- 10. Seat/Directional Arrow Button Press to Raise Seat with Power Seat Lift (PSL)
- 11. Battery Status Gauge
- 12. 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 Running Lights
- 15. Horn Button
- Forward and Reverse Position Diagrams for Hand Control Levers
- 17. Left Thumb Tab Press to Go in Reverse
- 18. Thumb Control
- 19. "T" Handle
- 20. Right Thumb Tab Press to Go Forward
- 21. Handgrip
- 22. Rabbit (Fast) and Turtle (Slow) Symbols for HI/LO Speed Knob Adjustment
- 23. Red Symbol for Key Switch "OFF" Position
- 24. White Symbol for Key Switch "ON" Position
- 25. Hand Control Lever Diagrams Reverse & Forward Positions



Unitron Handle

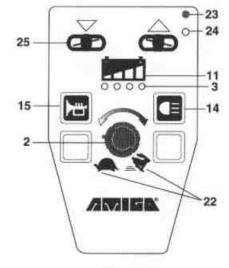


Figure 9

• HANDLE

To adjust the position of your handle, see "Handle Adjustment" on page 4.

Optional "T"-Handle:

When not using the Amigo, place the thumb control at a 90-degree angle to the handle. This turns the Amigo OFF and is a safety feature.

Note: If you have a two-speed (not variable), you can use the spring coil which is included in your owner's package.

By placing this spring under the thumb control, the dynamic brake will be in effect as soon as you let go of it. Without this spring, lift the thumb control for dynamic braking.

HI/LO Speed Control Handle:

Handle controls include: HI/LO speed adjusting knob, key extension and battery indicator light (Figure 6). The key extension (Figure 10), 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 top speed may be adjusted by turning the HI/LO speed adjusting knob (Figure 6, No. 2). By turning the knob to the HI position, your Amigo's top speed will be between 3.5 mph/5.6 kph and 5.3 mph/8.5 kph depending on the Amigo model and tire size. When the knob is set to LO position, the speed will be reduced to a slow creep, ideal for less experienced drivers and operating indoors.

Unitron Handle:

Hand controls include HI/LO speed adjusting knob, key extension, battery indicator lights, horn, headlight and taillights. The key extension (Figure 10) on the right side of the handle control cover, will turn the power of the Amigo ON and OFF. Turning it OFF will prevent drainage of batteries and unauthorized use. The top speed may be adjusted with the HI/LO speed adjusting knob in the middle of the top of the control cover. By turning the knob to the HI position, your Amigo's top speed will be between 4.5 mph/7.3 kph and 5.3 mph/8.5 kph depending on the Amigo model. When the knob is set to LO position, the speed will be reduced to a slow creep, ideal for less experienced drivers and operating indoors. The horn button can be used to avoid confrontation with pedestrians and other mobile entities.

Touchtron Handle:

The Touchtron controls include: HI/LO speed settings (rabbit/turtle buttons), key lock, power seat lift (up/down), headlight, directional lights, horn, electromagnetic brake release and a battery status gauge (See Figure 7).

The Key Extension

To turn power ON, insert the key and turn it counterclockwise to the ON position. The key extension is on the right side of the control cover (Figure 10). When the power is ON, the battery and speed indicator displays will light up showing the level of charge contained in your battery and the last recorded speed setting prior to the Amigo being turned off.



Top Speed

Regulate your maximum speed with the rabbit and turtle buttons (Figure 7, Nos. 5 and 6). 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 (Figure 7, No. 9). Continuous "chirping" sounds indicate highest and lowest speed settings.

Horn

The horn button can be used to avoid confrontation with pedestrians or other mobile entities (Figure 7, No. 15).

DRIVING YOUR AMIGO

To move forward, pull the right side of the hand control lever toward you (Figure 11). You can also move forward by pushing the left side of the control lever away from you. By releasing the control lever, you will come to a stop smoothly and within two seconds after release on RD models. To operate in reverse, pull the left side of the hand control lever toward you or push the right side control lever away from you.

Forward & Reverse Control Levers

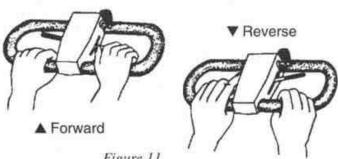


Figure 11

MANUAL PUSHING

Amigo FD models:

In case of power failure, when it is necessary to push by hand, remove the belt in the drive head to make it roll easier.

Amigo RD models:

All RD models with a UNIPAC® drive system are equipped with a manual brake release lever. RD models with a PowerPak II drive system are equipped with a brake release switch. To engage the freewheeling mode, push the brake lever or switch forward. To terminate the freewheeling mode, pull the brake lever or switch toward the rear of the Amigo (Figure 12). If the Amigo has a brake release switch, the Amigo must be turned ON and have battery power for the brake release to operate. Models with Touchtron controls have an additional electronic brake release button located on the handle (Figure 12). To electronically release the electromagnetic brake, push the Brake Release (2) 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 on the Touchtron handle (Figure 7).

Brake Releases for Manual Pushing

Note: Do not leave manual brake release on as it will drain batteries.





Brake Switch

(located on handle)



(located on rear cover)

POWER SEAT LIFT OPERATION – OPTIONAL

Amigo models without a Touchtron Handle:

The power seat lift switch is located below your seat. This switch allows lifting or lowering of the seat. The seat can be stopped in any position to facilitate transferring. The seat must be in its lowest position when your Amigo is in motion.

Note: Your power seat lift must be in the lowest position before tightening the set screws on the switch bracket. Failure to do so may cause damage to your seat lift.

Amigo models with a Touchtron Handle:

To operate the power seat lift, press the seat/directional arrow buttons to raise or lower the seat (Figure 13). 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.

Seat Lift

Up





Down

Figure 13

△ CAUTION

To avoid damaging the motor of the power seat lift, release the switch after the seat has reached its highest or lowest point.

POWER SEAT LIFT MAINTENANCE

Approximately every 1 to 2 months, remove the seat and activate seat lift to the highest position. Using a dry cloth, wipe inner tube of accumulated grease and dirt. Then, apply a very thin coating of grease to inner tube, except for the top inch of the tube.

Note: Mobilith SHC PM synthetic grease is recommended and can be purchased at your local hardware store.

OPTIONAL EQUIPMENT

Touchtron Handle:

The lighting package includes a front headlight mounted on the handle and rear red and yellow turning indicator lights. The red operational lights and the front light can be activated by pressing the headlight button (Figure 7, No. 14 also Figure 14). Press this switch again to turn the lights off.

The rear yellow turning indicator lights can be activated by pressing the left or right turn signal buttons. Indicate a "hazard" condition by pressing both turn signals. The power must be ON to operate the lights (Figure 7, Nos. 7 and 13 also Figure 14).

Unitron Handle:

The lighting package includes a front headlight mounted on the front of the Amigo and a rear light bar. Both the headlight and rear light bar can be activated by pressing the light button.

> Taillight and **Headlight Buttons**







Figure 14

TRANSPORTING YOUR AMIGO QUICKLY AND EASILY

Your Amigo can be disassembled and transported in most car trunks (Figure 15).

- Turn OFF your Amigo.
- 2. Unlock the seat and re move it completely.
- 3. Remove the batteries.



Disassembly

(Note: When batteries are removed, the wheels will not rotate for safety purposes.)

- 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. Place seat and batteries into the trunk.
- 7. 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. If you have a rear drive model, the electromagnetic brake must be in the "normal" position.

*When disassembled, the Amigo J9 fits in most vehicles. The heaviest component is the platform, weighing 44 pounds (19.8 kg). Refer to your Owner's Packet of Information for instructions.



LOAD YOUR AMIGO INTO YOUR CAR WITH A LIFT•ALL®

Note: For greater convenience, obtain a Lift*All[®] to assist you when loading and unloading. For more information on the Lift. All. contact your local Amigo Mobility Center®

or call toll-free:1-800-248-9130. We do not recommend using the Amigo with elevated van lifts.

AIRLINE TRAVEL

An Airline Travel Kit (Item #300116) is available from Amigo Mobility International, Inc. It contains a battery holding strap, three "Special Handling" tags and a "Helpful Hints for Airline Travel" booklet. Nonspillable, gel cell batteries are approved for travel on airplanes. When you make your reservation, notify the airline that you will be requesting an "escort" service. This will assure that your Amigo will be picked up and delivered at the boarding gate.

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.



Helpful Hints for Everyday Use

▲ WARNING

When transferring or not using the Amigo, the "T"-handle thumb control should be at a 90-degree angle, the OFF position for safety.

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.

A WARNING

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.

RAMPS AND INCLINES

- Lean forward and carefully maneuver your Amigo up a ramp or incline. Be aware that not all ramps are constructed according to the Federal

standards. (Federal standards for wheelchair ramps are one inch (2.5 cm) rise per one foot (30 cm).)

- Engage your seat lock when traveling up ramps or inclines.
- Lower the speed setting to the slowest speed.

USING AN ELEVATOR

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

OPENING DOORS

When a door opens toward you, approach at an angle and just off to one side. Grasp the door knob, reverse and pull the door open. For doors that open away from you, position the bumper against the door, close to the door jam on the doorknob side of the door. After you release the latch, use the bumper to push the door open.

A WARNING

Be careful with glass doors to avoid personal injury!

KEEP YOUR AMIGO SHINING

Clean a fabric seat with upholstery cleaner or wash with mild soap and water. Wipe a naugahyde seat clean with a damp cloth. Protect the covers and painted parts with a coat of auto wax.

△ WARNING

Excessive moisture around the microprocessing controller (MPC) or electrical connections may cause contamination of electrical circuitry, damage and malfunction as well as personal injury.

SPEED CONTROLS

Always operate your Amigo at a reasonable speed for your personal safety and others.

STOPPING

- Dynamic braking will gradually bring your Amigo to a stop on a level surface.
- Amigo FD Emergency Only quick stopping with your Amigo can be accomplished by reversing the handle control lever in order to reverse the direction the Amigo is traveling.

△ CAUTION

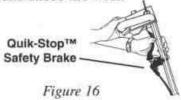
This procedure is not recommended.

Amigo RD Models -

The electromagnetic brake will stop your Amigo one to two seconds after releasing the handle control lever.

(Optional) Quik-Stop™ Safety Brake System -

Quick stopping your Amigo when moving forward in your Amigo can be accomplished by pushing on the safety brake lever (Figure 16). Use the safety brake for emergency stops only. The brake causes the Amigo to stop suddenly. To disengage the brake, reverse the direction of the Amigo. In order for the safety brake system on Amigo RDs with pneumatic tires to function properly, the tires must have the recommended tire pressure of 50 psi (3.5 kg/cm2). Deviation from this tire pressure will result in reduced stopping ability and undue tire wear.



△ CAUTION

Braking action in reverse is minimal and will not cause the Amigo to come to a sudden stop.

BATTERY INFORMATION AND CHARGER INSTRUCTIONS

Amigos are designed to use nonspillable, maintenancefree, 12V batteries. Always turn your Amigo OFF before removing and installing batteries.

To properly secure the battery on the Amigo FD, make sure the battery holding bracket is attached over the battery top and tightened with the utility knob (Figure 17).

Amigo RD model batteries need to be positioned correctly in the battery box

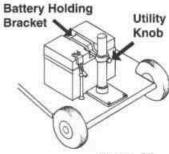
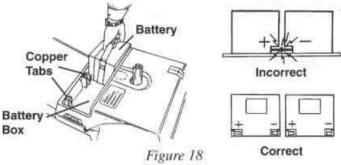


Figure 17

of the rear cover and covered with the battery cover top. Correct placement of the batteries are positioned so the battery contacts face forward (toward the handle) to align with and touch the copper tabs in the front of the battery box. Do not place batteries where positive and negative terminals come in contact with each other (Figure 18).



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. Each time you plug in your charger you begin a charge cycle. Do not recharge your battery(ies) if the Amigo has not been used for 30 minutes of continued use.

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.

OPERATING INSTRUCTIONS (Amigo FD)

- 1. Turn your Amigo OFF.
- Connect the charger cord to the charger plug on the battery. Plug charger into electrical outlet. Your charger should now be charging your battery. The red indicator light confirms this.
- When charging is complete, disconnect AC cord from electrical outlet, then disconnect charger cord from battery.

Charger LED Monitor Displays

Continuous Red	Proper connection
Continuous Green	Battery 90% charged
Blinking Green	Battery is fully charged

Troubleshooting Guide

- If there isn't a red light when the charger is connected to the battery and the electrical outlet, check that the cord fits snugly in the battery receptacle and that the battery has at least four volts.. Ensure the outlet works by plugging in an appliance. If power is being supplied to the charger, then return the charger for service.
- If green LED does not come on within 12 hours and charger is warm, something is wrong with the battery; have it checked.
- If green LED comes on but does not flash after six hours, return the charger for service.
- If the green LED does not turn on immediately after the charger is removed from the battery while still plugged into outlet, return the charger for service.

Touchtron Handle

Level of Charge in the Battery:

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, batteries should be charged soon.

Charging Procedures:

To charge your batteries, place your Amigo near an AC outlet. Pull gently on the plug in the rear cover near the rear bumper. Pull as much cord as needed (up to 10 feet/3 meters) to reach to the AC outlet. Connect the reel cord plug to the outlet or attach AC cord to Amigo, connecting AC plug to outlet. Observe the illuminated bar on the battery status gauge. It will drop down to the shortest segment on the far left and blink, after approximately 20 seconds the light will stop blinking. Gradually the shorter segment

bars on the battery status gauge will move to the tallest bar as the battery charge increases.

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.

Two small, circular lights, on each side of the battery status gauge, will illuminate only if the left or right battery is defective and unable to maintain a desirable charge. This indication will display only while in the charging mode (when power cord is plugged into AC outlet). Gently tug on the cord to engage the retraction reel. **Do not** push cord into the hole in the rear cover.

Charging Procedure for Batteries on Amigos with HI/LO Speed Control Handles:

Park near an AC outlet. Connect the AC charging cord to the socket in the rear cover near the rear bumper and the other end to the wall outlet. Observe the battery indicator light on the handle control cover. When the charger is plugged in the battery indicator light will blink for a short period of time (approximately 20 seconds) and then glow continuously until the batteries are fully charged.

The charging cycle is completed and your batteries are fully charged when the battery indicator light is blinking while still in the charging mode.

Unitron Handle

Level of Charge in the Battery:

When the light under the shortest bar on the battery status symbol is the only one lit and it starts to blink, the batteries should be charged soon.

Charging Procedure for the Batteries on Amigos with the Unitron Handle:

Park near an AC outlet. Connect the cord reel plug to the outlet or AC charging cord to the Amigo, connecting the AC plug to the outlet. Observe the battery indicator lights on the handle control cover. All four lights will blink for a short period of time (approximately 20 seconds) and then glow continuously until the batteries are fully charged.

The batteries are fully charged when all four battery indicator lights are blinking while still in the charge mode.

Universal Charger Option

A Universal Charger is available on many Amigos sold outside of 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.

An electrical conversion kit is also available for global travelers accessing foreign electrical outlets. Order kit #335000 and be ready to charge your Amigo anywhere and anytime. Call your service representative for further information and pricing.

△ CAUTION

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.

Amigo RD Models with Touchtron Controls

A battery indicator and diagnostic system are incorporated into the touchpad of your Amigo. The battery status gauge (Figure 7, No. 11) will be lit whenever the key is in the ON position. However, if the Amigo is inactive for more than 23 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.

BATTERY STORAGE

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 RD models) and may mark surfaces it rests on for long periods of time.

Store batteries indoors in a dry environment.

Storage temperature range:

-20° C (-4° F) to 40° C (104° F)

Discharge temperature range:

-20° C (-4° F) to 50° C (122° F)

Charging temperature range:

0° C (32° F) to 40° C (104° F)

For battery maintenance, refer to the Maintenance Section.

FD Charger Storage (For Offboard Chargers)

- · Always store in a dry place.
- · Coil up cords when not in use.
- Clean case and cords with slightly damp cloth to keep free of acid, grease and dirt.
- · Clean any corrosion from plug.
- · Examine cords periodically for cracking or damage.

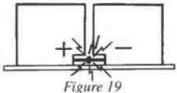
△ CAUTION

Failure to follow these safety instructions may result in personal injury or property damage.

- A. Refer to these instructions frequently.
- B. 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.
- D. 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.
- E. Never charge a frozen battery.
- F. Never place the charger directly above or below the battery being charged. Locate the charger as far away from the battery as the charging cord permits.
- G. Do not operate charger in a closed-in area or restrict ventilation in any way.
- H. Disconnect DC output charge cord only after removing AC cord from electrical outlet.
- A spark near the battery may cause explosion. To reduce risk of spark:
 - 1) Prevent external damage to AC and DC cords.
 - Connect DC charging cord to the battery charge plug before connecting charger AC supply 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 practical.
- Someone should be within range of your voice or close enough to come to your aid.
- K. Be extra cautious not to drop a metal tool onto the battery(ies).
- L. Remove jewelry.

▲ WARNING

To avoid damage to batteries during storage, do not place them end to end with positive and negative terminals next to each other (Figure 19).



CIRCUIT BREAKER & FUSE REPLACEMENT INSTRUCTIONS

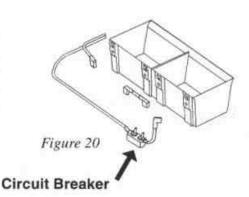
A circuit breaker protects the wiring and battery in the event of a short circuit. If your Amigo stops, check for overloads or short circuits before continuing to operate.

Amigo FD models

Circuit breaker is located inside the battery cover and attached to the positive terminal. Using a screwdriver with an insulated handle, lightly place the tip of the screwdriver between the screws of the circuit breaker on the positive terminal. If a large continuous spark occurs, call a service representative. When the battery indicator light brightens or battery gauge goes up, the circuit breaker is functional.



The circuit breaker is under the rear cover and attached to the positive terminal in front of the battery holder (Figure 20).



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Maintenance

Minimum maintenance should prevent unnecessary repairs. Check the following:

· DAILY

Charge your batteries daily when the Amigo is used. Charge the battery until fully charged to ensure proper battery operation.

MONTHLY

Check and clean battery terminals and the copper connections as needed with a light piece of emery cloth on rear drive models. Lightly pull copper spring tabs out 1/8 inch (.3 cm) to 1/4 inch (.6 cm) to ensure successful connection when battery is replaced.

- Clean upholstery, plastic and metal with a mild surface cleaner.
- Inspect batteries for any cracks or damage of any kind.

∆ CAUTION

Keep cleaning solvents away from electrical wires and connections.

- Check and tighten any exposed fasteners.
- Check front wheel bearings for roughness during rotation. Replace if necessary.
- Make sure all fasteners are tight at all connections on battery box.

Amigo Deluxe (with optional pneumatic wheels):

 Check tire pressure. Optional pneumatic tires on rear wheels should be maintained at 40-50 psi (1.3-3.5 kg/cm2).

A WARNING

Do not exceed 50 psi (3.5 kg/cm2) or tires may be damaged!

THREE MONTHS

- Lubricate steering column and seat post.
- Check all screws and clips (that are holding wheels) for tightness and wear.

SIX MONTHS

- Check the brass barrels (battery contacts) on your batteries (if applicable).
 - If a flat spot has developed, rotate the barrel for better contact.
- Check all electrical connections for clean contact.
- Charging connection should be inspected for tight connection.
- Check tires for wear.
- Inspect seat posts for cracks or breaks due to wear.

· YEARLY

- Have your authorized service center check your Amigo completely.
- Replace the foam in your padded, fold-down seat if applicable.

MICROPROCESSING CONTROLLER (MPC)

Do not attempt to service the MPC or related electronic components as you will void your warranty (Figure 20).

If your Amigo is equipped with the ASIC MPC (a controller enclosed entirely in a metal case), follow the instructions below:



The ASIC MPC has a built-in diagnostic feature that will cause the battery gauge LED to flash a numeric code to indicate when there is a service problem(See page 19 for detailed information).

A continuously flashing LED light indicates different information in the following situations:

- When driving the Amigo, it means the battery charge is low and you should recharge soon.
- When beginning to charge your Amigo, it signifies the charging cycle has begun.
- When ending the charging cycle, it means the batteries are fully charged.

When indicating a service problem the battery gauge LED will flash, hesitate for a moment, and then flash again. If the code pattern develops and indicates a service problem, contact the Amigo Service Department at 1-800-248-9131 for instructions to verify the problem.

To get an understanding of how the flashing code will look, push the manual electromagnetic brake release lever forward into the "freewheeling" position with the Amigo turned off. Turn the Amigo ON and the battery gauge LED will flash a "motor-open" code. When you pushed the manual release lever forward, you opened the motor windings. Now, turn the Amigo OFF and pull the manual release lever back to the "normal" position and your Amigo will function properly.

UNIPAC® DRIVE

Your UNIPAC® drive system is a precision assembly lubricated for long service (Figure 21). Do not attempt to open and service the assembly. Drive Drive Warranty.

Figure 21



Service

You will get years of dependable operation if you follow the suggested maintenance schedule. If you experi-

ence a problem and have to write in or call an authorized service center, be sure to provide your serial number. If you own an Amigo FD, the serial number is located on the front cover and under the fork. On any other Amigo, you will find the serial number on the front cover and right hand side of the battery box. Model numbers and serial numbers will help us provide efficient service. Call your local Amigo Mobility Center®, Amigo representative, or 1-800-248-9131.

Note: When replacing fasteners, use only Grade 8 (U.S.) or 12.9 DIN (metric) in all applications. For service and replacement parts, we recommend using Amigo authorized parts.

BELT ADJUSTMENT – AMIGO FD

- 1. Remove the seat, handle and battery.
- Tip the Amigo up and let it rest on the lower seat post.
- Loosen the two screws at the terminal block and detach head wires.
- Remove retaining screw and collar and then the drive head.

△ CAUTION

Examine the steering bushings before reinstallation. If the drive head has a lot of play or is wobbly, the bushings may need to be replaced.

 Loosen nuts holding motor in place just enough to allow movement of motor. Using a big screwdriver, pry motor away from head frame until belt has 1/4-inch (6.4 mm) (Figure 22) deflection in tightest position. Note: Do not place screw driver on center of motor.

6. To reinstall drive head, reverse directions.

CHAIN ADJUSTMENT – AMIGO FD

- Loosen axle nut enough that a tap is required to move wheel assembly.
- Tap wheel forward until there is approximately 1/4-inch (.6 cm) play in the chain.
 Do not tighten the chain completely.
- Check that the axle is square in the frame.
 Alignment is very important.
- Tighten axle nut securely and recheck alignment.
- Lubricate chain for quieter and smoother operation.

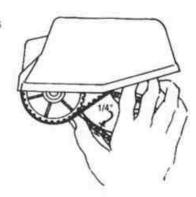


Figure 22

Electromagnetic Interference

Attachment A

WARNING: Radio wave sources may affect powered wheelchair control

Radio wave sources, such as radio stations, TV stations, amateur radio (HAM) transmitters, two-way radios, and cellular phones, can affect powered wheelchairs and motorized scooters (in this text, both will be called powered wheelchairs). Following the warnings listed below should reduce the chance of unintended brake release or powered wheelchair movement which could result in serious injury.

 Do not turn ON hand-held personal communication devices, such as citizens band (CB) radios and cellular phones, while the powered wheelchair is turned ON;

Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them;

 If unintended movement or brake release occurs, turn the powered wheelchair OFF as soon as it is safe;

4) Be aware that adding accessories or components, or modifying the powered wheelchair, 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 powered wheelchair); and

Report all incidents of unintended movement or brake release to the manufacturer, and note whether there is a radio wave source nearby.

Important Information

 20 volts per meter (V/m) is a generally achievable and useful immunity level against interference from radio wave sources (as of May 1994) (the higher the level, the greater the protection);

2) The immunity level of this product is not known.

CAUTION: It is very important that you read this information regarding the possible effects of electromagnetic interference on your powered wheelchair.

Electromagnetic Interference (EMI) From Radio Wave Sources

Powered wheelchairs and motorized scooters (in this text, both will be referred to as powered wheelchairs) 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 wheelchair to release its brakes, move by itself, or move in unintended directions. It can also permanently damage the powered wheelchair's control system. The intensity of the interfering EM energy can be measured in volts per meter (V/m). Each powered wheelchair 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 wheelchair model 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:

 Hand-held 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;

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 hand-held 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 wheelchair.

Powered Wheelchair Electromagnetic Interference (EMI)

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

Warnings

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

 Do not operate hand-held transceivers (transmitters-receivers), such as citizens band (CB) radios, or turn ON personal communication devices, such as cellular phones, while the powered wheelchair is turned ON;

Be aware of nearby transmitters, such as radio or TV stations, and try to avoid coming close to them;

 If unintended movement or brake release occurs, turn the powered wheelchair OFF as soon as it is safe;

4) Be aware that adding accessories or components, or modifying the powered wheelchair, may make it more susceptible to EMI (Note: There is no easy way to evaluate their effect on the overall immunity of the powered wheelchair); and

 Report all incidents of unintended movement or brake release to the powered wheelchair manufacturer, and note whether there is a source of EMI nearby.

Important Information

- 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.

Warranty

AMIGO MOBILITY INTERNATIONAL, INC. LIMITED THREE-YEAR WARRANTY Effective May 1, 1997

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

 Structural components warranted against defects in materials and workmanship for three (3) years are limited to the following components:

Platform, fork, lower seat post and upper seat post.

 The UNIPAC* (differential, motor, and brake), controller, handle assembly, potentiometer assembly, and charger are warranted against defects in materials and workmanship for two (2) years.

Warranty exception: UNIPAC® - In cases of operational noise, the warranty does not apply. (This usually occurs due to abusive and excessive strain on the Amigo.)

- 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. Amigo warranties batteries supplied from its factory. Amigo factor-supplied batteries carry Amigo 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:

PLATFORM: Use of this product by persons exceeding 350 lbs. (157.5 kg) is not recommended and limits warranty to six (6) months.

J9TM and FD MODELS: Use of this product by persons exceeding 250 lbs. (112.5 kg) is not recommended and limits warranty to six (6) months.

POWER SEAT LIFT (PSL): Use of this product by persons exceeding 250 lbs. (112.5 kg) is not recommended and limits warranty to six (6) months.

LIFT•ALL®: Use of this product with a load in excess

- of 200 lbs. (90 kg) is not recommended and limits this warranty to six (6) months.
- After sixty (60) days, labor will be charged on warranty repairs, except where law prohibits.
- Items replaced under warranty, on the model, are covered by the original warranty. (Warranty replacement does not extend the warranty period.)
- AMI, Inc. is obligated to repair or replace products or parts returned and found to be defective under warranty.
 (A Returned Merchandise Authorization number (RMA) is required prior to returning any component to AMI).
- This warranty does not cover accidental damage, misuse, normal wear and tear, or use of Amigo products for other than personal purposes. Damage during shipment is not covered by the warranty.
- 10. If inspection determines that a returned part or Amigo model is fully functional, the part will be returned. If failure was due to abuse or wear, the warranty is void. Opening sealed components will void the warranty.
- Accessories and parts are not a part of the original completed model, or rebuilt models, will have a one-year warranty against defects in materials and workmanship.

This warranty begins when the Amigo model 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, Inc. will use the manufacturer's date on the model as the effective warranty date.

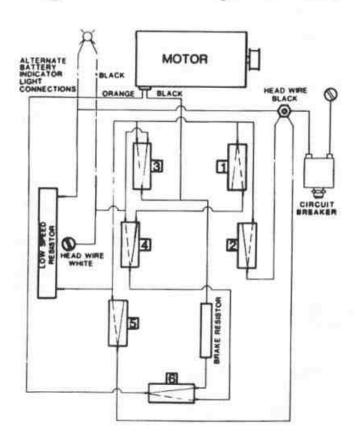
This warranty supersedes and is in lieu of all other warranties, expressed or implied, and no person, agent or dealer is authorized to give any warranties on behalf of the Manufacturer, not to assume for the Manufacturer any other liability concerning any of its products unless made in writing and signed by an official of the Manufacturer. Any unauthorized repair or modification will void this warranty and release Amigo from any liability.

This warranty gives you specific legal rights, with the possibility of other rights, which vary depending upon your locality. Effective May 1, 1997.

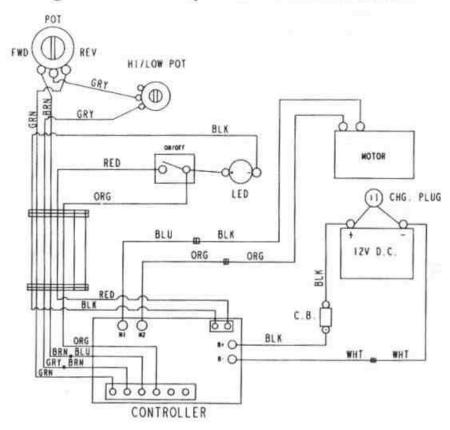
For warranty service, contact an Amigo dealer or mobility center where the Amigo was purchased. If unable to find an Amigo representative in the area, contact the factory at 1-800-248-9131 for assistance.

WIRING DIAGRAMS

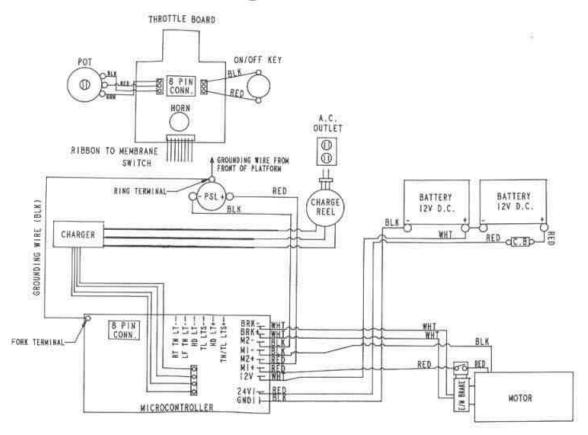
Amigo FD w/"T"-Style Handle



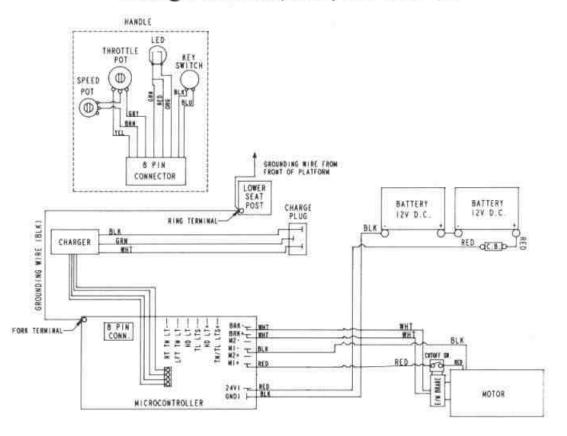
Amigo FD Vari-Speed w/Oval Handle



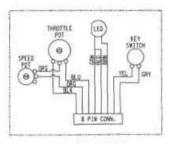
Amigo Deluxe



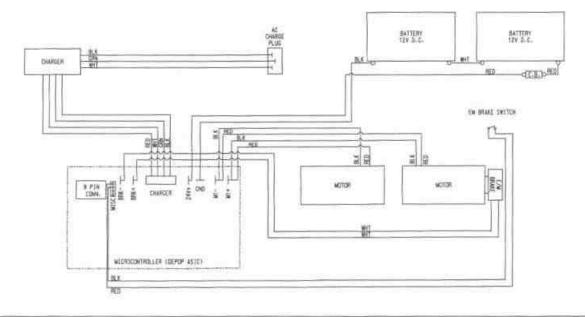
Amigo Centra, MC, GT and J9™



Amigo Baja



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ASIC MPC Diagnostic Code Chart

Some Amigo models are equipped with an ASIC MPC. This controller has a built-in diagnostic feature that will cause the battery gauge LED to flash a numeric code to indicate when there is a service problem.

Under normal operating conditions, the battery gauge LED will flash continuously to indicate three different situations:

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

When indicating a service problem, the battery gauge LED 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 the Amigo Service Department at 1-800-248-9131 for instructions to verify the problem. To get an understanding of how the flashing code will look, push the manual electromagnetic brake (E/M) release lever forward into the "freewheeling" position with the Amigo turned off. Turn the Amigo on and the battery gauge LED will flash a 2-2 code or "motor open." When you pushed the manual release lever forward, you opened the motor winding. (This is a safety precaution to prevent the Amigo from being driven while the E/M brake is manually released.)

CODE and CAUSE

- 1-1 E/M brake windings or connections are shorted.
- 1-2 E/M brake windings or connections are open.
- 2-1 Motor windings or connections are shorted.
- 2-2 Motor windings or connections are open or E/M brake release lever is in "freewheeling" position.
- 3-1 MPC not limiting the electrical current to the motor.
- 3-3 MPC chip is not operating properly.
- 4-1 Charger is supplying too much voltage during the battery charge cycle.
- 4-2 Charger not dropping back into "float mode" during battery charging cycle.
- 5-1 MPC regenerative braking FETS shorted.
- 5-3 Throttle potentiometer or throttle circuitry reading fail band fault.

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Mr. M.T. Hussein PO Box 772 Dubai, United Arab Emirates Phone: 011-971-4-725161 Fax: 011-971-4-725162

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