

## Tithe Ultimate in Style & Performance°



## Owner's Manual



### SAFETY GUIDELINES

Read and follow all of the instructions in this manual before you attempt to operate your scooter for the first time. If you are unable to understand any of this information or require additional assistance for set-up, contact your local Pride Provider or call the Pride Tech Service Department at **1-800-800-8586**.

The following will be used throughout this Owner's Manual to identify warnings and cautions. It is very important for you to read and understand them completely.



WARNING! Failure to heed the warnings in this owner's manual may result in personal injury.



CAUTION! Failure to heed the cautions in this owner's manual may result in damage to your mobility vehicle.

Please be sure to fill out and return your warranty card. Also, notify us of any change of address so that we can keep you apprised of important information about safety, new products, and new options that can increase your ability to use and enjoy your scooter.

Your Dynamo:		
Body Color	Serial #	
Purchase Date	Options	
Your authorized Pride Mobility Products C	Corporation provider:	
Name		
Address		
Phone		

INFMANU1006/REV C/APRIL2000

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### COPYRIGHT

Pride cannot be held responsible for any damage or injury incurred due to improper or unsafe use of a Dynamo Scooter. Nor can Pride be held responsible for any damage or injury incurred during or resulting from attempts to follow the instructions and recommendations set forth in this owner's manual or in any of the instructions displayed on or accompanying the product itself. If you do not feel capable of safely following any of the instructions and recommendations pertaining to your Dynamo Scooter, please contact your authorized Pride provider.

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### I. INTRODUCTION

Welcome to Pride Mobility Products Corporation (Pride). Congratulations on the purchase of your new Dynamo Scooter. The Dynamo design combines the most advanced state-of-the-art components with modern, attractive styling. We are certain that the design features and trouble-free operation of your new Dynamo Scooter will add convenience to your daily living.

At Pride, your safety is important to us. **Please read and follow all of the instructions in this manual before you attempt to operate your Scooter for the first time.** These instructions were produced for your benefit. Your understanding of these instructions is essential for the safe operation of your new Dynamo.

This owner's manual is compiled from the latest specifications and product information available at the time of publication. We reserve the right to make changes as they become necessary. Any changes to our products may cause slight variations between the illustrations and explanations in this manual and the product you purchased.

As an owner of a Pride product, you are invited to register your product's warranty and enroll in the Pride Owners Club. You may do so by filling out and returning your enclosed registration card or by visiting Pride's web site at **www.pridemobility.com**. As a registered member, each time you visit our site, you will have access to the most interactive and honest educational venue available today for people with mobility needs, their families, and friends.

From the cover page of our site, click on the button that reads "Owners Club" to enter a page dedicated to current and potential Pride Product Owners. You will gain access to interviews, stories, recreation ideas, daily living tips, product and funding information, and interactive message boards. On these message boards you are invited to speak with other Pride customers as well as Pride representatives who are available to assist you with any questions or concerns you may have. You will receive a free gift simply for registering with the Pride Owners Club.

We want to hear your questions, comments, and suggestions about this manual. We would also like to hear about the safety and reliability of your new Dynamo Scooter, as well as about the service you received from your Pride provider. Also, notify us of any change of address, so we can keep you apprised of important information about safety, new products, and new options that can increase your ability to use and enjoy your Dynamo Scooter. Please feel free to write us at the address below:

Pride Mobility Products Corporation Attn: Technical Service Department 182 Susquehanna Avenue Exeter, PA 18643-2694

If you experience any problems with your Dynamo that you are not able to solve, or if you do not feel confident in your ability to perform any of the instructions contained in this manual, please contact your local Pride provider. Once you understand how to operate and take care of your Scooter, we are certain that it will give you years of trouble-free service and enjoyment.

The Pride Team

### II. SAFETY

As you begin using your Dynamo during your daily activities, you will probably encounter situations for which you will need some practice negotiating on your scooter. Simply take your time as you operate your Dynamo and you will soon be in full and confident control as you maneuver through doorways, on and off of elevators, up and down ramps, and over moderate terrain.

#### **DOORS**

- Determine if the door opens toward or away from you.
- Use your hand to turn the knob or push the handle or push-bar.
- Drive your Dynamo gently and slowly forward to push the door open; or drive your Dynamo gently and slowly backwards to pull the door open.

#### **ELEVATORS**

Modern elevators have a door-edge safety mechanism that, when pushed, will reopen the elevator door(s).

- If you are in the doorway of an elevator when the door(s) begin to close, push on the rubber door edge or allow the rubber door edge to contact the scooter and the door will reopen.
- Use care that pocketbooks, packages, or Dynamo accessories do not become caught in the elevator doors.

#### **RAMPS AND OTHER INCLINES**

More and more buildings have ramps with specified degrees of inclination. These ramps are designed for easy and safe scooter access. Some ramps may have turning switchbacks that require good cornering skills on your Dynamo.

- Take wide swings with your Dynamo's front wheel around any tight corners. If you do that, the Dynamo's rear wheels will follow a wide arc, not cut the corner short, and not bump into or get hung up on any railing corners.
- When driving down a ramp, keep the Dynamo's speed adjustment dial set to the tortoise (slowest speed setting) to ensure a safely controlled descent. See V. "Description."
- Avoid sudden stops and starts.

Other inclines may be natural or, if man-made, not designed specifically for scooters. Figure 1 illustrates your Dynamo's stability and its ability to climb grades under various weight loads and under controlled testing conditions.



FIGURE 1. MAXIMUM RECOMMENDED INCLINE

### II. SAFETY

These tests were conducted with the Dynamo's seat in the highest position and adjusted backward on the seat base to its farthest rearward position. Use this information as a guideline. Your Dynamo's ability to travel up inclines is affected by your weight, your scooter's speed, your angle of approach to the incline, and your scooter setup.

■ When you approach an incline, it is best to lean forward. See figures 2 and 3. This shifts the center of gravity of you and your Dynamo toward the front of the scooter for improved stability.



WARNING! Do not exceed the incline guidelines or any other specifications presented in this manual.



FIGURE 2. NORMAL DRIVING POSITION



FIGURE 3. INCREASED STABILITY DRIVING POSITION

#### **DRIVING SURFACES**

Your Dynamo was designed to provide optimum stability under normal driving conditions. Driving on dry, level surfaces composed of concrete or asphalt will give your scooter the best stability. However, Pride recognizes that there will be times when you will operate your Dynamo on surfaces other than concrete or asphalt. For that reason, we also designed your Dynamo to perform admirably on packed soil, grass, and gravel.

- Feel free to use your Dynamo safely on lawns and in park areas.
- Avoid tall grass that can entangle the running gear.
- Packed soil and gravel, such as driveways or roads, present no problem for your Dynamo.
- Avoid loosely packed gravel and sand.
- If you feel unsure about a driving surface, avoid that surface.

#### **SAFETY PRECAUTIONS**

- Do not operate your new Dynamo for the first time without completely reading and understanding this owner's manual.
- Do not carry passengers on your Dynamo.

### II. SAFETY

- If your scooter is equipped with a reclining seat, do not operate the vehicle with the seat in the reclined position.
- Do not leave the key in the switch when your Dynamo is unattended.
- Make certain that the seat is locked into place and that the key is removed from the key switch before getting on or off of your Dynamo, and make certain that the seat is in a locked position when you operate your Dynamo.
- Reduce your Dynamo's speed when you are operating it on uneven terrain and soft surfaces.
- Reduce your Dynamo's speed when you are driving it around a corner.
- Never drive your Dynamo across the side of a hill or diagonally up or down a hill, and do not stop, if possible, while driving up or down an incline.
- Proceed with extreme caution as you approach the downgrade of a ramp or other incline and when driving near a raised surface or unprotected ledges and drop offs (curbs, porches, stairs, etc.).
- Never remove your Dynamo's anti-tip wheels or modify the Dynamo in any way that is not authorized by Pride.
- Use extreme caution when operating your Dynamo on busy streets and in parking lots or shopping malls and never ride your Dynamo where you cannot safely and legally walk. Consult local municipal or state agencies with regard to operating your Dynamo on public roadways.
- Do not operate your Dynamo while you are under the influence of alcohol.
- Check with your physician if you are taking any medications that may affect your ability to operate your Dynamo safely.
- Keep your hands on the tiller and your feet on the floorboard when you are operating your Dynamo.
- Make certain that the tires are properly inflated (30 psi).
- Never use your Dynamo scooter as a seat in a moving vehicle.
- Make certain that the Dynamo's batteries are properly secured when you transport your scooter in another vehicle.
- Disconnect your Dynamo's batteries if you will not be using the scooter for more than 48 hours.
- Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.



WARNING! Do not expose the electronics to any type of moisture (rain, snow, mist, or washing the scooter) at any time. Such exposure can damage the electronics. Never attempt to ride a scooter that has been exposed to moisture until it has dried thoroughly.



WARNING! Do not operate or store the scooter where it may be exposed to inclement weather conditions such as rain, snow, mist, and below-freezing temperatures (such as storage on an outside car/van lift). Attempting to operate the scooter in such conditions can damage the electronics and potentially result in loss of control.



WARNING! Do not operate a scooter in icy or slippery conditions or on salted surfaces (i.e., walks or roads). Such use may result in an accident, personal injury, or adversely affect the performance and/or safety of your scooter.



WARNING! Always protect batteries from freezing temperatures and never charge a frozen battery. This will damage the battery and may cause personal injury. Attempting to charge a battery in freezing conditions does not prevent a battery from freezing.

### III. EMI/RFI

#### **EMI/RFI WARNINGS**

Laboratory tests performed by the Food and Drug Administration (FDA) have shown that radio waves can cause unintended motion of electric scooters. Radio waves are a form of electromagnetic energy (EM). When electromagnetic energy adversely affects the operation of an electrical device, that adverse effect is called *Electromagnetic Interference (EMI) or Radio Frequency Interference (RFI)*.

#### **EMI/RFI Frequently Asked Questions (FAQs)**

The following FAQs summarize what you should know about EMI/RFI. Use this information to minimize the risk that EMI/RFI will adversely affect your Dynamo.

#### Where do radio waves come from?

Radio waves are emitted from the antennas of cellular phones, mobile two-way radios (such as walkie-talkies and CBs), radio stations, TV stations, amateur radio (HAM) transmitters, wireless computer links, microwave sources, and paging transmitters. Radio waves are a form of electromagnetic energy. Because EM is more intense closer to transmitting antennas (sources of emission), the EM fields from two-way radios are of special concern to electric scooter users.

#### If EMI/RFI affects my Dynamo, what kind of motion should I expect?

This is difficult to predict. The answer would depend on a number of factors:

- The strength of the radio waves
- The construction of your particular Dynamo
- The location of your Dynamo (whether it is level or on an incline)
- Whether or not your Dynamo is in motion

The motion of any electric scooter affected by EMI/RFI can be erratic. The scooter may come to a sudden stop or move in an uncontrolled manner. Also, it is possible for EMI/RFI to release the brakes of an electric scooter. Some intense EMI/RFI can even damage the control system components of an electric scooter.

## Is there any way to know for certain whether or not radio waves are the cause of any unintended motion of my Dynamo?

Unfortunately, EMI/RFI may be difficult to recognize, since the signals from radio sources are invisible and may be intermittent. However, the FDA recommends that you report all incidents of unintended motion or unintended brake release of your electric scooter to the scooter's manufacturer and, if possible, determine whether or not there was a radio wave source nearby at the time of the incident.

One precaution you can take against inadvertent motion of your Dynamo is to make certain that you or someone else is not the cause of the unintended motion.

- Turn off your Dynamo by removing the key from the key switch when you are getting on or off of your Dynamo.
- Never leave the key in the key switch of an unattended Dynamo. By following these steps, you greatly reduce the risk of you or anyone else inadvertently bumping the throttle control levers and causing the Dynamo to move unintentionally.

### III. EMI/RFI

#### Has anyone been injured by the erratic, unintended motion of an electric scooter?

The FDA has reports of injuries that resulted from uncontrolled motion of electric scooters, but it is not clear just how many of those injuries were actually caused by EMI/RFI.

#### Are all electric scooters susceptible to EMI/RFI?

Each make and model of electric scooter differs in its ability to resist EMI/RFI. That is, each scooter has a particular level of resistance to EMI/RFI. This resistance is measured in volts per meter (V/m). A higher resistance level offers greater protection against EMI/RFI. In other words, an electric scooter with a high resistance level is less likely to be affected by a strong radio source than is an electric scooter with a low resistance level.

#### What is the FDA doing about the problem?

The FDA has written to electric scooter manufacturers and requested that they test their new scooter models to be certain that they provide a reasonable degree of resistance against EMI/RFI. The FDA has stated that all newly-manufactured electric scooter models should have a resistance level of at least 20 V/m. This resistance level provides a reasonable degree of protection against the common EMI/RFI sources.

#### THE FDA HAS ALSO REQUESTED OR RECOMMENDED THAT:

- Electric scooter manufacturers clearly label new products with that product's resistance level or state that the resistance level is not known.
- The labeling or informational material supplied with new electric scooters must explain what the resistance level means and warn users about the possibility of EMI/RFI and how to avoid it.
- Electric scooter manufacturers undertake an educational program to inform electric scooter users and their caregivers about the problems associated with EMI/RFI and about the actions they can take to minimize the risk of EMI/RFI.
- While there is no exact way to tell if your scooter is totally safe, an immunity level of 20 V/m (May 1994) is gene Dynamo achievable and useful. This product has been tested and passed at an immunity level of 20 V/m. Adding accessories and components or modifying the unit may change the susceptibility to EMI/RFI.

#### What can I do to find out if my Dynamo is likely to be affected by EMI/RFI?

If you have had your Dynamo for some time and have not experienced any unintended motion, it is not likely that you will have a problem in the future. However, it is always possible that EMI/RFI problems could arise if you are close to a radio wave source. Therefore, it is very important for you to be alert to this possibility. The Dynamo scooter meets or exceeds a resistance level of at least 20 V/m.

### III. EMI/RFI

#### What can I do to reduce the risk of my Dynamo being affected by EMI/RFI?

Here are some precautions you can take:

- Do not turn on or use hand-held personal communications devices, such as citizen's band (CB) radios and cellular phones, while your Dynamo is turned on.
- Be aware of nearby radio wave transmitters, such as radio or TV stations and hand-held or mobile two-way radios. Try not to operate your Dynamo too close to those transmitters. For example, if you are on an electric scooter with a resistance level of at least 20 V/m, you should remain at least three feet from a hand-held two-way radio and at least ten feet from a mobile two-way radio.
- Be aware that adding accessories and/or components, or modifying your Dynamo in any way may change its EMI/RFI resistance level and may make it more susceptible to interference from radio wave sources.

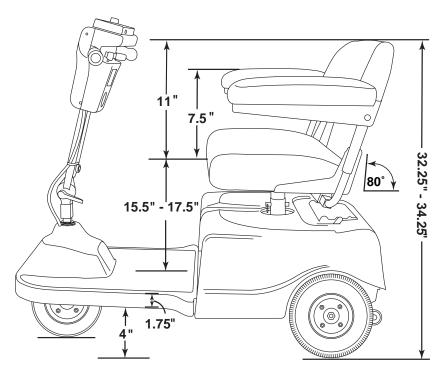
#### What should I do if my Dynamo moves unexpectedly?

If unintended motion or unintended brake release occurs, turn off your Dynamo (by removing the key) as soon as it is safe to do so.

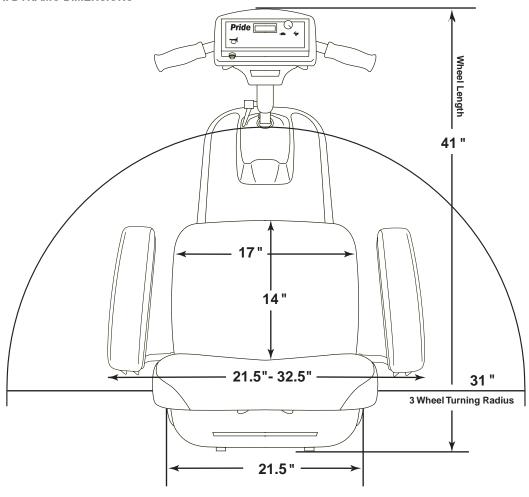
#### If my Dynamo moves unintentionally, where should I report the incident?

Call our headquarters at 1-800-800-8586 to report the incident.

## IV. SPECIFICATIONS



#### FIGURE 4. DYNAMO DIMENSIONS



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## IV. SPECIFICATIONS

Model Numbers	SC-180		
Length	41in.		
Width	21.5in.		
Tires	Type: Pneumatic; Front: 2in. x 8in. , Rear: 2.5in. x 9in.		
Weight Capacity	250 lbs. maximum		
Battery Type (Batteries not included)	Two 12 volt, 32 AH, U-1 type, SLA (sealed lead acid)		
Horsepower	1.0 hp (peak)		
Charger	Onboard 3-amp charger		
Speed (max)	Variable up to 4.75 mph (60% reverse)		
Maximum Grade	Please refer to figure 1		
Range	20 - 25 miles per charge with 32 AH batteries		
Turning Radius	31in.		
Body Colors	Painted: Gray		
Seating	Style: Low Back		
	<b>Dimensions</b> : 17in. width (usable) x 12.5in. height (usable) x		
	14in. depth		
	·		
	Seat Cover Material: Vinyl: Blue or Burgundy		
	Armrests: Match		
	User Adjustable seat height from ground: 21.25in. to 23.25in.		
	User Adjustable seat height from scooter deck: 15.5in. to 17.5in.		
Included Features	Adjustable seat height and positioning		
Brakes	Electronic regenerative braking and electromechanical disc brake		
Rear Wheel Drive	Sealed transaxle, 24 VDC motor differential		
Wheels	Pride Micro-Mag aluminum alloy wheels		
Tiller Type	Multi-position adjustable		
Freewheel Mechanism	Freewheel release lever located on transaxle		
Scooter Weight	TOTAL weight w/batteries: 146 lbs.		
	TOTAL weight w/o batteries: 96 lbs.		
	Component breakdown:		
	Front section w/o batteries:	27 lbs.	
	Rear section (w/o shroud, tray):	43 lbs.	
	Rear plastic shroud: Seat:	3 lbs. 23 lbs.	
	Batteries (2 required):	25 lbs. each (12V, 32 AH)	
Front-to-Rear Lockup	Lock pin	·	
Ground Clearance	4in.		
Optional Accessories	Cane/crutch holder, cup holder, front basket, front bumper,		
	headlight, oxygen holder, power seat assembly, rear basket, rear bumper, rearview mirror, safety flag, taillight, walker holder		
	bumper, rearview mirror, safety flag, t	talliignt, walker nolder	

Your Dynamo is a motorized electric scooter designed to enhance your personal mobility. Your Dynamo is an indoor/outdoor scooter designed to travel primarily on smooth surfaces, such as sidewalks, roads, parking lots, floors, and driveways. For easy transportation or storage, you can disassemble your Dynamo into six (6) components. See figure 5.



FIGURE 5. DYNAMO COMPONENTS

#### **CONTROL CONSOLE ASSEMBLY**

The control console assembly houses all of the controls you need to drive your Dynamo, including the key switch, the speed adjustment dial, the throttle control lever, the battery condition meter, and the horn button. See figure 6.

Do not expose the control console assembly to moisture. In the event that the control console assembly does become exposed to moisture, do not attempt to operate your Dynamo until the control console assembly has thoroughly dried.

#### **Key Switch**

- Fully insert the key into the key switch to power up (turn on) your Dynamo.
- Pull the key out to power down (turn off) your Dynamo.



WARNING! If the key is removed from the key switch while your Dynamo is in motion, the electronic brakes engage and your Dynamo comes to an abrupt stop!

#### **Speed Adjustment Dial**

This adjustment dial enables you to preselect and limit your Dynamo's top speed.

- The image of the tortoise represents the slowest speed setting.
- The image of the hare represents the fastest speed setting.



FIGURE 6. CONTROL CONSOLE ASSEMBLY

#### **Throttle Control Lever**

This lever allows you to control the forward speed and the reverse speed of your Dynamo up to the maximum speed you preset with the speed adjustment dial.

- Place your right hand on the right handgrip and your left hand on the left handgrip.
- Use your right thumb to push the right side of the lever to disengage your Dynamo's brakes and move forward.
- Release the lever and allow your Dynamo to come to a complete stop before pushing the other side of the lever to move in reverse.
- When the throttle is completely released, it automatically returns to the center "stop" position and engages your Dynamo's brakes.

#### **Battery Condition Meter**

Whenever you have the key fully inserted, this meter gives an approximate reading of your Dynamo's battery voltage.

#### **Horn Button**

- The key must be fully inserted into the key switch for the horn to be operational.
- This button activates a warning horn.
- Do not hesitate to use the warning horn when its use could prevent accident or injury.

#### **Light Switch(Optional)**

This switch controls your Dynamo's lighting system.

- Press this switch once to turn on the lights.
- Press it again to turn off the lights.

#### **REAR SECTION**

The onboard battery charger, the charger power cord receptacle, the batteries, the electronic controller assembly, the manual freewheel lever, and the drive assembly are located beneath the shroud on the rear section of your Dynamo. See IX. "Disassembly and Assembly" for instructions on removing the rear shroud. The anti-tip wheels are at the rearmost part of your Dynamo. See figure 8.

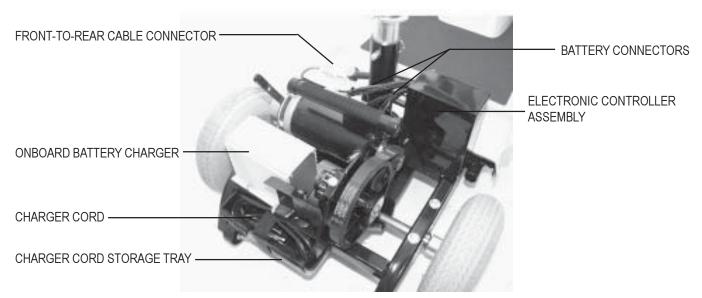


FIGURE 7. ELECTRICAL COMPONENTS

#### **Onboard Battery Charger**

The onboard battery charger converts household current (AC) to direct current (DC) and charges the batteries of your Dynamo. See VI. "Batteries and Charging."

- The charger is located in front of the charger cord storage tray. See figure 7.
- The charger is a silver-colored box with a green and red LED indicator on the exterior of the case.

#### **Batteries**

The batteries store the electrical energy that powers your Dynamo. See VI. "Batteries and Charging."

#### **Electronic Controller Assembly**

The electronic controller assembly is located behind the batteries and at the forward right corner of the Dynamo's rear section. This assembly receives electrical signals from the control console assembly controls and sends power to the motor, the brakes, and the lighting system (optional).

Do not expose the electronic controller assembly to moisture. In the event that the electronic controller assembly does become exposed to moisture, do not attempt to operate your Dynamo until the assembly has thoroughly dried.

#### **Manual Freewheel Lever**

Whenever you need or want to push your Dynamo for short distances, you can put it in manual freewheel mode.



WARNING! Before placing your Dynamo into or taking it out of freewheel mode, make certain that the key is removed from the key switch. Even though the motor of your Dynamo is disengaged from the drive system when your scooter is put in manual freewheel mode, the motor can still run if the throttle lever is pushed. Never sit on a scooter when it is in freewheel mode. Never put a scooter in freewheel mode on any incline.

- The manual freewheel lever is located on the top left rear of the Dynamo. See figure 8.
- Pull the manual freewheel lever rearward to disable the drive system and the brake system.
- You may push your Dynamo.
- Push the manual freewheel lever forward to reengage the drive system and the brake system and take your Dynamo out of freewheel mode.

#### **Anti-Tip Wheels**

The anti-tip wheels are an integral and important safety feature of your Dynamo. Do not, under any circumstances, remove the anti-tip wheels from your Dynamo. See figure 8.



FIGURE 8. REAR SECTION

Your Dynamo uses two long-lasting, 12-volt, deep-cycle batteries that are sealed and maintenance free. They are recharged by an onboard 3 amp charging system designed for ease of use and convenience. See figure 7.

- Charge your Dynamo's batteries prior to using it for the first time.
- Keep your batteries fully charged to keep your Dynamo running trouble free.

## FOLLOW THESE EASY STEPS TO CHARGE YOUR BATTERIES SAFELY:

- 1. Position your scooter close to a standard wall outlet.
- 2. Remove the key from the control console assembly.
- 3. Make certain that the freewheel lever is pushed to the drive (forward) position.
- 4. Extend the charger power cord and plug it into the wall outlet. See figure 9.

NOTE: There is a charger inhibit on your scooter. The scooter will not run and the battery condition meter will not operate while the batteries are charging.

- 5. It is recommended that you charge your batteries for 8 to 14 hours. You can check this periodically by the battery condition meter on the control console assembly. However, you must first unplug the battery charger and then insert the key. The battery condition meter on the control console assembly indicates the approximate strength of your batteries. When fully charged, the meter reads 24 volts. See figure 10.
- 6. When the batteries are fully charged, unplug the charger power cord from the wall outlet and place it back in the charger cord storage tray.

# BATTERIES AND CHARGING FREQUENTLY ASKED QUESTIONS (FAQS)

#### How does the charger work?

When your Dynamo's battery voltage is low, the charger works harder and sends more electrical current to the



FIGURE 9. CHARGER POWER CORD



FIGURE 10. BATTERY CONDITION METER INDICATES
BATTERY STRENGTH

batteries to bring up their charge. As the voltage of the batteries approaches a full charge, the charger sends less and less electrical current to the batteries. When the batteries are fully charged, the current sent to them from the charger is at nearly zero amperage. Therefore, when the charger is plugged in, it maintains the

charge on your Dynamo's batteries but does not overcharge them. We do not recommend that you charge your Dynamo's batteries for more than 24 consecutive hours.

#### What do the LEDs on the onboard battery charger indicate?

The onboard battery charger is equipped with two LEDs (*Light Emitting Diodes*) that indicate the charging status of your scooter's batteries. The red LED lights up to indicate the battery charging is in progress. The green LED lights up when your scooter's batteries are fully charged.

#### Can I use a different charger?

For the safest, most efficient, and balanced charging of your Dynamo's batteries, we prefer and highly recommend the simultaneous charging of both batteries by using the onboard battery charger.

#### How often must I charge the batteries?

Two major factors must be considered when deciding how often to charge your Dynamo's batteries:

- All day scooter use on a daily basis.
- Infrequent or sporadic scooter use.

With these considerations in mind, you can determine just how often and for how long you should charge your Dynamo's batteries. We designed the onboard charger so that it will not overcharge your scooter's batteries (do not charge them for more than 24 consecutive hours). However, you may encounter some problems if you do not charge your batteries often enough and if you do not charge them on a regular basis. Following the five guidelines below will provide safe and reliable battery operation and charging.

- ✓ If you use your Dynamo daily, charge its batteries as soon as you finish using it for the day. Your Dynamo will be ready each morning to give you a "full day" of service. We recommend that you charge your Dynamo's batteries for 8 to 14 hours after daily use.
- ✓ If you use your Dynamo once a week or less, charge its batteries at least once a week for 12 to 14 hours at a time.
- ✓ Keep your Dynamo's batteries fully charged.
- ✓ Avoid deeply discharging your Dynamo's batteries.
- ✓ Do not charge your Dynamo's batteries for more than 24 consecutive hours.

#### How can I get maximum range or distance per charge?

Rarely will you have ideal driving conditions - smooth, flat, hard driving surfaces with no wind or curves. You will often face hills, sidewalk cracks, uneven and loosely packed surfaces, curves, and wind. All of these driving conditions affect the distance or running time per battery charge. Below are a few suggestions for obtaining the maximum range per battery charge.

- Always fully charge your Dynamo's batteries prior to your daily use.
- Maintain 30 psi (pounds per square inch) in all of your Dynamo's tires.
- Plan your route ahead to avoid as many hills, cracked, broken, or soft surfaces as possible.
- Limit your baggage weight to essential items.

- Try to maintain an even speed while your Dynamo is in motion.
- Avoid stop-and-go driving.

#### What type and size of battery should I use?

We recommend deep-cycle batteries that are sealed and maintenance free. Both Sealed Lead Acid (SLA) and Gel Cell are deep-cycle batteries that are similar in performance in your Dynamo. Do not use wet-cell batteries, which have removable caps.

NOTE: Do not remove the caps from sealed batteries. Water cannot be added to sealed batteries. Cap removal voids the battery warranty and may cause damage to the batteries and to your Dynamo.

#### Use these specifications to reorder deep-cycle batteries:

Type: deep-cycle (sealed lead-acid or gel cell)

Size: U-1

Voltage: 12 volts each

Amperage: 32 AH (amp hours)

#### To change a battery in your Dynamo:



WARNING! Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

- 1. Remove the seat and the rear shroud. See IX. "Disassembly and Assembly."
- 2. Disconnect the battery cables from the electronic controller assembly.
- 3. Disconnect the battery cables from the battery terminals.
- 4. Remove the old battery.
- 5. Place a new battery in the battery well.
- 6. Connect the red battery cable to the positive (+) battery terminal.
- 7. Connect the black battery cable to the negative (-) battery terminal.
- 8. Reconnect the battery cables to the electronic controller assembly.
- 9. Reinstall the rear shroud and the seat.

#### Why do my new batteries seem weak?

Deep-cycle batteries employ a different chemical technology than is used in car batteries, nickel-cadmium batteries (nicads), or in other common battery types. Deep-cycle batteries are specifically designed to provide power, drain down their charge, and then accept a relatively quick recharge.

We work closely with our battery manufacturer to provide batteries that best suit your Dynamo's specific electrical demands. Fresh batteries arrive daily at Pride and are shipped fully charged to our customers. During shipping, the batteries may encounter temperature extremes that may influence their initial performance. Heat diminishes the charge on the battery; cold slows the available power and extends the time needed to recharge the battery.

It may take a few days for the temperature of your Dynamo's batteries to stabilize and adjust to their new room or ambient temperature.

More importantly, it takes a few charging cycles (a partial drain followed by a full recharge) to establish the critical chemical balance that is essential to a deep-cycle battery's peak performance and long life.

Please follow these steps to properly break in your Dynamo's new batteries for maximum efficiency and service life.

- 1. Fully recharge any new battery prior to its initial use. This charging cycle brings the battery up to about 88% of its peak performance level.
- 2. Operate your new Dynamo in familiar and safe areas. Drive slowly at first, and do not travel too far from your home or familiar surroundings until you have become accustomed to your Dynamo's controls and have properly broken in your scooter's batteries.
- 3. Fully recharge the batteries. They should be at over 90% of their peak performance level.
- 4. Operate your Dynamo again.
- 5. Fully recharge the batteries again.
- 6. After four or five charging cycles, the batteries are able to receive a charge of 100% of their peak performance level and are able to last for an extended period of time.

#### How can I ensure maximum battery life?

Fully charged deep-cycle batteries provide reliable performance and extended battery life. Keep your Dynamo's batteries fully charged whenever possible. Batteries that are regularly and deeply discharged, infrequently charged, or stored without a full charge may be permanently damaged, causing unreliable performance and limited service life.

#### How should I store my Dynamo and its batteries?

If you plan on not using your Dynamo for an extended period of time, it is best to:

- Fully charge its batteries prior to storage.
- Disconnect the battery harnesses from the electronic controller assembly.
- Store your Dynamo in a warm, dry environment.
- Avoid storing your Dynamo where it will be exposed to temperature extremes.



WARNING! If your Dynamo's batteries do become frozen, do not attempt to charge them. Cold or frozen batteries should be allowed to warm up for several days prior to recharing.

For prolonged storage, you may wish to place several boards under the frame of your Dynamo to raise the scooter off of the ground. This takes the weight off of the tires and reduces the possibility of flat spots developing on the areas of the tires contacting the ground.

#### What about public transportation?

If you intend to use public transportation while using your scooter, you must contact in advance the transportation provider to determine their specific requirements.

### VII. OPERATION

#### **GETTING ON YOUR DYNAMO**

- Make certain that the key is removed from the key switch.
- Stand at the side of your Dynamo.
- Push down on the seat lock lever and rotate the seat until it is facing you.
- Make certain that the seat is locked securely in position.
- Position yourself comfortably and securely in the seat.
- Push down on the seat lock lever and rotate the seat until you are facing forward.
- Make certain that the seat is locked securely in position.
- Make certain that your feet are safely on the floorboard.
- Follow the checklist below. Familiarize yourself with this checklist, since some of the checks must be performed before you get on your Dynamo.

#### PRE-RIDE ADJUSTMENTS AND CHECKS

- ✓ Have you fully charged the batteries? See VI. "Batteries and Charging."
- ✓ Is the manual freewheel lever in the drive (forward) position? Never leave the manual freewheel lever pushed rearward unless you are manually pushing your Dynamo. See V. "Description."
- ✓ Is your proposed path clear of people, pets, and obstacles?
- ✓ Have you planned your route to avoid adverse terrain and as many inclines as possible?
- ✓ Are you positioned comfortably in the seat? See "Getting On Your Dynamo" above.
- ✓ Is the seat at the proper height? See VIII. "Comfort Adjustments."
- ✓ Is the seat locked securely in place? See VIII. "Comfort Adjustments."
- ✓ Is the tiller handle at a comfortable setting and locked securely in place? See VIII. "Comfort Adjustments."
- ✓ Is the key fully inserted into the key switch? See V. "Description."
- ✓ Is the speed adjustment dial set to a lower setting? See V. "Description."
- ✓ Are you grasping the handgrips with a thumb resting on each side of the throttle lever? See V. "Description."
- ✓ Does your Dynamo's horn work properly?

#### **OPERATING YOUR DYNAMO**

After planning your route:

- Adjust the speed adjustment dial on the control console assembly to your desired speed.
- Press your thumb against the appropriate throttle lever.
- The electric brake automatically disengages and the Dynamo accelerates smoothly to the speed you preselected with the speed adjustment dial.

#### WHETHER YOU ARE DRIVING FORWARD OR IN REVERSE:

- Pull on the left handgrip to steer your Dynamo to the left.
- Pull on the right handgrip to steer your Dynamo to the right.
- Move the tiller to the center position to drive straight ahead.
- Release the throttle lever to decelerate and come to a complete stop.
- The electric brake automatically engages when your Dynamo comes to a stop.

Dynamo Dynamo

### VII. OPERATION

NOTE: The rear-wheel-drive system gives your Dynamo maximum traction with minimal steering effort on your part.

#### **GETTING OFF OF YOUR DYNAMO**

- Bring your Dynamo to a complete stop.
- Make certain that the key is removed from the key switch.
- Push down on the seat lock lever and rotate the seat until you are facing toward the side of your Dynamo.
- Make certain that the seat is locked securely in position.
- Carefully and safely get out of the seat and stand to the side of your Dynamo.
- You may, if you wish, leave the seat facing to the side to facilitate boarding your Dynamo the next time you are going to operate it.

### VIII. COMFORT ADJUSTMENTS

#### TILLER ANGLE ADJUSTMENT



WARNING! Remove the key before adjusting the tiller. Never attempt to adjust the tiller while the scooter is in motion.

You can adjust the tiller to any number of positions between the forward stop and the scooter deck. The tiller lock lever keeps the tiller in position.

- 1. To loosen, turn the tiller adjustment lever counterclockwise. See figure 11.
- 2. Move the tiller to a comfortable position.
- 3. To tighten, turn the tiller adjustment lever clockwise. The tiller will remain in the position you've selected.

NOTE: In order to lower the tiller to the scooter deck, you must first remove the seat and both batteries. See IX. "Disassembly and Assembly."

#### **SEAT HEIGHT ADJUSTMENT**

The seat can be repositioned to one of three different heights.

- 1. Remove the seat and shroud from your Dynamo. See IX. "Disassembly and Assembly."
- 2. Use the attached ring to pull and remove the ball detent pin from the lower seat post. See figure 12.
- 3. Raise or lower the seat pedestal to the desired seat height.
- 4. While holding the seat pedestal at that height, match up the holes in the seat pedestal and in the lower seat post.
- 5. Fully insert the ball detent pin.
- 6. Reinstall the seat.

#### **POWER SEAT (OPTIONAL)**

Your Dynamo may be equipped with a power seat actuator. The actuator raises and lowers the seat automatically. See figure 14.



WARNING! The power seat actuator is intended for operation only while the vehicle is stationary and on a level surface. Its purpose is to aid you in reaching objects. Strict adherence to the following safety rules is vital to your safety:

Do not attempt to raise or lower the seat while in motion! Do not operate your scooter with the power seat elevated. It is recommended that the vehicle be driven only with the seat in the lowest position.

#### FRONT-TO-BACK SEAT ADJUSTMENT

You can change the Dynamo front-to-back seat position.

- 1. Remove the seat.
- 2. Use a 7/16-in. wrench to remove the seat position adjustment screws. See figure 13.
- 3. Reposition the seat base on the seat and reinstall the seat position adjustment screws.
- 4. Reinstall the seat.

## VIII. COMFORT ADJUSTMENTS

#### **ARMREST WIDTH ADJUSTMENT**

The Dynamo armrest width can be adjusted inward or outward.

- 1. Loosen the armrest adjustment knobs at the back of the seat frame. See figure 13.
- 2. Slide the armrests in or out to the desired width.
- 3. Tighten the armrest adjustment knobs.

The armrests can also be lifted upward to allow getting on and off of your Dynamo more easily.

#### **SEAT ROTATION**

The seat lock lever locks the seat in one of four positions.

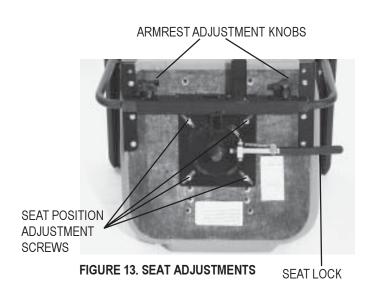
- 1. Push down on the seat lock lever to unlock the seat. See figure 13.
- 2. Rotate the seat to the desired position.
- 3. Release the seat lock lever to lock the seat securely in place.



FIGURE 11. TILLER ADJUSTMENT



FIGURE 12. SEAT HEIGHT ADJUSTMENT



POWER SEAT ACTUATOR

FIGURE 14. POWER SEAT ACTUATOR (OPTIONAL)

Dynamo 25

**LEVER** 

### IX. DISASSEMBLY AND ASSEMBLY

No tools are required to disassemble or assemble your Dynamo. Always disassemble or assemble your Dynamo on a level, dry surface with sufficient room for you to work and move around your scooter. Keep in mind that the disassembled sections of the Dynamo take up more floor space than the assembled Dynamo.

#### DISASSEMBLY

You can disassemble the Dynamo into six pieces: the seat, the front frame, the rear frame, the rear shroud, and the batteries. Place the scooter in an area where you have sufficient clearance to move the parts around. You need about four or five feet in all directions. You may need assistance to lift some of the scooter components. See IV. "Specifications" for individual component weights.

- 1. Place the manual freewheel lever in the drive (forward) position.
- 2. Coil the cord and store it in the rear compartment.
- 3. Gently lift the seat up and off of the Dynamo. See figure 15.
- 4. Gently lift the rear shroud off of the Dynamo. See figure 16.
- 5. Unplug the front-to-rear harness (large white 9-pin connector) that connects the front control console harness to the electronic controller assembly. See figure 17.
- 6. Disconnect both 2-pin battery harnesses. See figure 18.
- 7. Lift both batteries off of the Dynamo. See figures 19.



CAUTION! Failure to unplug both battery harnesses and the front-to-rear harness prior to disassembly could result in permanent damage to the Dynamo.

- 8. Loosen the tiller adjustment lever and lower the tiller down to the center of the Dynamochassis until it is fully lowered. Tighten the tiller adjustment lever.
- 9. Pull the locking pin upward and remove it from its locking slot. See figure 20.
- 10. Grab the handle grip from the front section, and place a hand on the seat pedestal. See figure 21.
- 11. Gently slide the two sections of the scooter apart. See figure 21.



FIGURE 15. SEAT REMOVAL



FIGURE 16. SHROUD REMOVAL

## IX. DISASSEMBLY AND ASSEMBLY

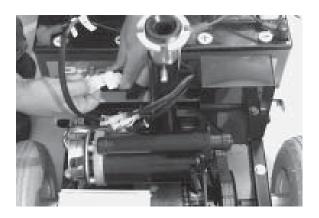


FIGURE 17. DISCONNECTING THE FRONT-TO-REAR HARNESS

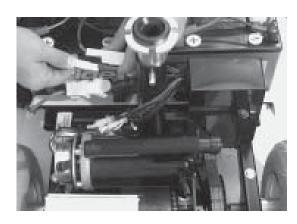


FIGURE 18. DISCONNECTING THE BATTERY HARNESSES



FIGURE 19. BATTERY REMOVAL



FIGURE 20. REMOVE BALL DETENT PINS WITH RING



FIGURE 21. SEPARATING THE FRAME SECTIONS

### IX. DISASSEMBLY AND ASSEMBLY

#### **ASSEMBLY**

- 1. Place the manual freewheel lever in the drive (forward) position.
- 2. Position the front and rear sections next to each other.
- 3. Tilt the rear end to a horizontal position and insert the longer tube of the rear end into the front section first.
- 4. Slide the two sections of the unit together until the front half reaches its insertion limit and the locking pinholes are aligned.
- 5. Secure the front and rear sections with the locking pin.
- 6. Plug the front-to-rear harness (large white 9-pin connector) from the front section of the Dynamo into the mating plug found on the electronic controller assembly at the rear of the Dynamo. The two orange dots present on both plugs should be adjacent to each other and enable quick plug mating.
- 7. Put the batteries in place and plug the 2-pin battery harnesses into the adjoining harnesses that are also located on the control assembly.
- 8. Gently place the rear shroud over the seat pedestal.
- 9. Connect the rear light harness (if so equipped).
- 10. Slide the shroud down in place. Make sure that the rear plastic shroud does not make contact with the rear wheels.
- 11. Carefully lift the seat and slide the small seat post (on the seat bottom) into the seat pedestal.
- 12. Rotate the seat until it locks into place.

## X. OPTIONAL ACCESSORIES

#### **OPTIONAL ACCESSORIES**

For information concerning optional accessories, see your authorized Pride provider, or call Pride Mobility Products Corporation at 1-800-800-8586



### XI. BASIC TROUBLESHOOTING

Any electromechanical device occasionally requires some troubleshooting. However, most of the problems that may arise can usually be solved with a bit of thought and common sense. Many of these problems occur because the batteries are not fully charged or because the batteries are worn down and can no longer hold a charge.

#### What if all the systems on my Dynamo seem to be "dead"?

- Make certain that the key is fully inserted in the key switch.
- Check that the batteries are fully charged. See VI. "Batteries and Charging."
- ■Make certain that both battery harnesses are firmly connected to the electronic controller assembly and to the battery terminals. See IX. "Disassembly and Assembly."
- Make sure that the front-to-rear harness connector is firmly connected. See IX. "Disassembly and Assembly."

#### What if the motor runs but my Dynamo does not move?

- Your Dynamo was probably left in manual freewheel mode.
- When the manual freewheel lever is pushed rearward, the brakes are disengaged and all power to the drive system is cut.
- Push the manual freewheel lever forward to restore normal operation to your Dynamo. See V. "Description."

## What if the battery condition meter dips way down and the motor surges or hesitates when I press my Dynamo's throttle control lever? See V. "Description."

- Fully charge your Dynamo's batteries. See VI. "Batteries and Charging."
- Have your authorized Pride provider load test each battery.
- Or, battery load testers are available at most automotive parts stores.
  - ✓ Follow the directions supplied with the load tester.
  - ✓ See VI. "Batteries and Charging" or IV. "Specifications" for information about your Dynamo's battery type.

If you experience any problems with your Dynamo that you are not able to solve, immediately contact your authorized Pride provider for information, maintenance, and service.

### XII. CARE AND MAINTENANCE

Your Dynamo requires a minimal amount of care and maintenance. If you do not feel confident in your ability to perform the maintenance listed below, you may schedule inspection and maintenance at your authorized Pride dealer. The following areas require periodic inspection and/or care and maintenance.

#### **TIRE PRESSURE:**

■ We recommend that the tire pressure be maintained at 30 psi. For optimum scooter performance, do not exceed that pressure; overinflating a tire can cause it to explode.

#### TIRE CONDITION AND TREAD WEAR:

- Regularly inspect your Dynamo's tires for signs of wear.
- Use a rubber conditioner on your Dynamo's tires to help to preserve them.
- Do not put rubber conditioner on tire tread; this may cause the tires to become dangerously slippery.

#### **EXTERIOR SURFACES:**

- Bumpers also benefit from an occasional application of rubber or vinyl conditioner.
- Do not use a rubber or vinyl conditioner on the Dynamo's floormat or vinyl seat; they may become dangerously slippery.

#### **BATTERY TERMINAL CONNECTIONS:**

- Make certain that the terminal connections remain tight and uncorroded.
- The batteries must sit flat in the battery wells.
- The battery terminals should face the rear of the Dynamo.

#### **WIRING HARNESSES:**

- Regularly check all wiring connections.
- Regularly check all wiring insulation, including the charger power cord, for wear or damage.
- Repair or replace any damaged connector, connection, or insulation that you find before using your Dynamo again.
- These items are all prelubricated, and require no subsequent lubrication.

#### **CONSOLE, CHARGER, AND ELECTRONIC CONTROLLER ASSEMBLY:**

- Keep these areas free of moisture.
- If any of these items do become exposed to moisture, let them dry thoroughly before operating your Dynamo again.

#### **STORAGE:**

See VI. "Batteries and Charging." and reefer to "How should I store my Dynamo and its batteries?"

#### **AXLE BEARINGS:**

■ These items are all prelubricated, and require no subsequent lubrication.

### XII. CARE AND MAINTENANCE

#### **PERIODIC INSPECTIONS:**

- Regularly inspect the drive chain for wear and proper tightness. The chain should be tight. A chain that is too tight may cause damage to the motor bearings and chain. The chain should deflect 1/4in. when pushed in the center.
- Once every year or so the chain should be lightly lubricated with wheel bearing grease. If the chain begins to grind and rumble in its path between the motor and differential sprockets, see your Pride provider for minor alignment.
- Inspect the drive belt for wear and proper tightness. The belt should deflect about 1/8in. when pushed in the center. If the belt is too loose, it may slip.

### XIII. WARRANTY

#### **Three-Year Limited Warranty:**

Structural frame components; including platform, fork, seat post, and frame.

Drive train; including differential, motor, and brake.

First year: 100% replacement of parts cost Second year: 67% replacement of parts cost Third year: 50% replacement of parts cost

#### **Three-Year Warranty Exceptions**

**Differential:** In cases where there is an increase in the operational noise level, the warranty does not apply. (The increase in operational noise level usually occurs due to abusive and excessive strain on the scooter.)

**Motor:** If damage occurs to the motor commutator as a result of not replacing the motor brushes after heavy wear to the brushes. Motor brushes are wear items and are not warranted.

**Motor brake:** Three-year warranty for the electrical function of the motor brake. Brake pads are a wear item and are not warranted.

#### **One-Year Limited Warranty**

For one (1) year from the date of purchase, Pride will repair or replace, at our option, to the original purchaser, free of charge, any part found upon examination by an authorized representative of Pride to be defective in material and/or workmanship.

The battery is warranted by the battery manufacturer. The battery is not warranted by Pride.

Warranty service can be performed by a provider authorized by Pride or by Pride. Do not return faulty parts to Pride without prior consent. All transportation costs and shipping damage incurred while submitting parts for repair or replacement are the responsibility of the original purchaser.

#### **Warranty Exclusions**

- ABS plastic shrouds and footrest covers (wear items and not warranted)
- Batteries (the battery manufacturer provides a 6-month limited warranty)
- Tires and tire tubes (wear items and not warranted)
- Upholstery and seating (wear items and not warranted)
- Repairs and/or modifications made to any part of the scooter without specific and prior consent from Pride
- Circumstances beyond the control of Pride
- Damage caused by:
  - ✓ Battery fluid spillage or leakage
  - ✓ Abuse, misuse, accident, or negligence
  - ✓ Improper operation, maintenance, or storage
  - ✓ Commercial use or use other than normal
- Labor, service calls, shipping, and other charges incurred for repair of the product

### XIII. WARRANTY

There is no other express warranty.

Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to one year from the date of original purchase and to the extent permitted by law. Any and all implied warranties are excluded. This is the exclusive remedy. Liabilities for consequential damages under any and all warranties are excluded.

Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion of limitation of incidental or consequential damages. So, the above limitation or exclusion may not apply to you.

The warranty gives you specific rights, and you may also have other rights, which vary from state to state.

Please fill out the warranty card and mail it to Pride. Doing so will aid Pride in providing you with the best possible technical and customer service.