



# MAGNUM GC (HOUSEKEEPING) GOLF CART

OWNERS MANUAL

VERSION | 2.0 - 2025

⑦ ◎ | ecargolf.com.au



# **TABLE OF CONTENTS**

Thank you for purchasing an ECAR Golf or Commercial Cart.

We have adopted to utilise technological advancements from Europe and the United States as our main imported components. Our carts have been manufactured for ECAR for almost 20 years and are known in the local market for their innovative design, robust reliability and affordable packages.

The notable features include being lightweight; performs well on all terrain; eco-friendly; low noise; easy-to-charge and easy to maintain. We are proud to say our carts are the most advanced in the field of electric carts and continue to develop each and every year.

We have created this operation manual in order for us to help users correctly operate and maintain the carts as they are designed. In order to ensure your ECAR is in the best working condition and can be kept in a good working order for a long time; please read this manual carefully and adhere to any suggestions and requirements.

#### IMPORTANT NOTICE: Electric Cart Usage

Our electric carts are specifically designed for golfing and commercial use in suitable environments where legally permissible. These carts are not classified as public road vehicles and are intended solely for their designed purposes. It is strictly prohibited to operate these carts outside of legally permissible designated use unless you have obtained explicit authorisation from your local governing body.

Please refrain from using these carts on highways and any public roads without the necessary conditional authorisation. ECAR Golf Pty Ltd disclaims any responsibility for any damage, liabilities, or consequences arising from the operation of our carts in a manner that lacks the required authority.

While some state authorities may allow limited public road usage under certain conditions, please be aware that our carts are primarily designed for non-public road use. It is your responsibility to verify and adhere to local regulations and obtain the appropriate permissions where applicable.

By using our golf carts, you acknowledge and agree to abide by these usage guidelines and any relevant local laws and regulations. ECAR Golf Pty Ltd reserves the right to update or modify this policy as necessary to comply with changing regulations.

Thank you for your co-operation and safe operation of our carts.

SAFETY GUIDELINES	4
SAFE OPERATION GUIDELINES	5
VEHICLE IDENTIFICATION	5
GETTING STARTED	6
DIGITAL SPEED & ODOMETER PANEL	9
DRIVING INSTRUCTIONS	9
BATTERY & CHARGING INFORMATION	10
MAINTENANCE	
BRAKING SYSTEM	16
TROUBLESHOOTING	16
RATINGS AND GENERAL SPECIFICATIONS	
ACCESSORIES AND SPARE PARTS	20
WARRANTY INFORMATION	
CONTACT INFORMATION	
LEGAL DISCLAIMER	
GLOSSARY OF TERMS	25

#### SAFETY GUIDELINES

#### **Important Safety Precautions**

- Read the Manual: Before operating any ECAR Golf cart, always read and understand the operations manual. Familiarize yourself with the controls and proper usage.
- Inspect Before Use: Always inspect the golf cart before use. Check for any visible damages, ensure brakes are functioning, and that the tires are properly inflated.
- Avoid Overloading: Never exceed the recommended weight capacity of the cart. Overloading can affect the cart's balance and operation. The model capacity can be found on the cart specification sheet at ecargolf. com.au or within this manual.
- Stay on Designated Pathways: Always use designated golf cart paths or routes and avoid excessively rough terrain where possible. Avoid operating the carts perpendicular to steep inclines and declines and drive with caution when operating on sloped ground and the cart has at capacity with passengers or goods.

#### **Operating Restrictions and Supervision**

To operate an ECAR Golf cart or any of our ECAR Commercial models, a valid driver's license is a minimum requirement.

Training: If you're a licensed driver unfamiliar with electric golf carts, ensure you receive adequate training from a competent licensed individual. You must demonstrate your understanding and competence before operating the cart without supervision.

Golf carts are not toys. Children should never be allowed to play in or around them, even when they're not in use.

#### Recommendations for the Use of Safety Equipment

Seatbelts: If your ECAR Golf cart is equipped with seatbelts, always buckle up before moving. Ensure all passengers do the same.

Helmets (optional): While not commonly used in golf cart operations, if you're using the cart in a non-traditional setting or rough terrains, consider wearing a helmet for added safety.

Lighting: If operating the cart during low light conditions ensure to always turn on the lights to maintain good visibility for yourself and others. If fitted with a Roof mounted warning light, always operate the cart with this light turned on.

#### SAFE OPERATION GUIDELINES

Speed: Always maintain a safe speed, especially in crowded areas. Remember, golf carts are designed for leisurely or convenient travel, not speed. All ECAR model golf carts can be governed to a maximum speed if required. Please speak with your dealer to make any required changes.

Braking: Always come to a complete stop at intersections of pathways and check both ways before proceeding. Be cautious of the braking capability of the model you are driving and allow enough distance to stop safely without causing harm.

**CAUTION:** Always ensure the vehicle comes to a complete stop before changing the intended direction of the cart via the Forward/Reverse switch. Failing to do so will cause harm to the cart and potentially any person/s onboard.

Parking: The Magnum Series carts are fitted with an electromagnetic automatic parking brake (EM Brake). This feature will engage once the cart is detected to come to a complete stop. The driver must not rely on this brake to stop the cart. Always apply the foot brake to come to a complete stop. For older manual braking models, you will need to engage the park brake by pressing on the small section of the brake pedal firmly. This will engage a latch to hold the brake on. To release, gently press the large section of the foot brake only. Do not use the accelerator pedal to release the park brake, this will wear out the latch.

Weather Conditions: Avoid using the golf cart during adverse weather conditions like heavy rain, thunderstorms, or high winds. Wet or slippery surfaces can affect the cart's traction and stability. Be sensible and be responsible.

Stay Seated: Always remain seated and keep hands, arms, and legs inside the cart at any time that it is in motion. Ensure all passengers do the same.

No Distractions: Avoid using mobile phones or other distracting devices while operating the cart. Abide by the same laws you would as if driving your car.

#### VEHICLE IDENTIFICATION

All ECAR golf carts possess what we call a serial number or a chassis number. This is the carts unique identifier. Each number will begin with LT-.

For the Magnum Series golf carts, you will find this number on a metal plate behind your foot pedals.

When contacting your place of purchase or ECAR directly you will need this

chassis number to receive the most accurate support. If you cannot locate a number, ensure to supply a photo of the cart and the support team will be able to provide and indication of model and age of the cart.

#### **GETTING STARTED**

# Run/Off/Manual Switch

Each cart has what is called a 'Run/Off/Manual' switch. This will disable the cart if required and will not operate in any position other than 'Run'.



Before driving your cart for the first time, check under the seat on the passengers side for this switch. It is a black 3-position rocker style switch.

- 1. Shift the switch to RUN position to turn on the power supply to the cart.
- 2. Shift the switch to OFF position then turn off the power supply to the cart. The EM brake will still be engaged and your cart will not move.
- 3. Your cart is fitted with an EM Brake. The MANUAL position applies voltage to this device, releasing the park brake from the motor. Allowing the cart to be wheeled freely or pushed safely. Only ever engage this when instructed and if the environment is suitable. Always ensure to never leave the switch in this position for an extended period of time as it will flatten the battery in the cart.

# **Key Ignition Switch**

Each cart comes standard with a set of 2 x keys. The ignition on this model is conveniently mounted on the steering column.

- Insert the key and turn only about 30 degrees clockwise. With the previously mentioned Run/Maintenance switch in the RUN position. This will allow your cart to activate and turn on. You may hear a clicking noise, this is the components engaging and getting ready. Always allow up to 2 seconds when turning your ignition on for the controller to complete intialisation checks. Pressing the accelerator pedal too soon may cancel this process and your cart will fail to drive. If this happens, turn key off, wait a moment and then turn back on. This is all designed your for own safety to avoid accidental operation of the cart.
- 2. Turn the key anti-clockwise about 30 degrees to turn off the cart. They key can be removed only at this state. The EM brake will automatically engage in either position, so don't be afraid the cart will roll away. Only ever turn off the key when in a stationary position.

Note: All ECAR models are universal ignition keys. Unique key barrels and key can be purchased separately but keys cannot be re-cut if lost or damaged.

# Forward/Reverse Switch

The Forward/Reverse Switch is used to shift the cart into 'gear'. This switch is conveniently mounted on the steering column. It will look like a flat toggle and is the only switch on right hand side of this column when seated within the cart. The switch is marked with the an arrow facing upwards (Forward) and an arrow facing downwards (Reverse).



The central position will not put your cart into a true neutral position as the EM Brake is designed to engage at all times when the cart is not in operational motion.

When the Reverse function is selected, you will hear the reverse warning buzzer sounding. The forward function will not cause any sounds so only select this function when you are prepared to commence driving forward.

Without a 'gear' being selected, e.g. the center position, the cart will fail to drive.

# Lighting, Indicators and Dash Controls

Unless ordered specifically, all ECAR models come standard with head/ tail lights, indicators and a horn. You will operate these features via the automotive style stalk mounted on your steering column to the left hand side when seated within the cart. The center dash will also house your USB Charger outlet and hazard lights.

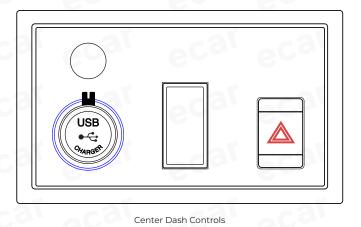
#### Operating these features:

- Horn: The end button will sound your horn when pressed.
- Lights: Twisting the outer half of the stalk two clicks will engage the vehicles head/tail lights. This is the standard head/tail lights. Pull the indicator stalk towards you until you feel a click and the high beam headlights will be turned on. Pull towards you again to turn high beam off.
- Indicators: The indicators are operated by pushing the stalk in an upward motion to activate the 'turn right' signal. The 'turn left' signal is operated by pulling the stalk in a downward motion. Please note, very little force is required to activate this function. Excessive force may damage the internal mechanisms.

Hazard Lights: Incase of a breakdown or a need to stop the cart in a

potentially dangerous location, always turn on your hazard lights. This can be found in the center dash panel and shown as a red triangle symbol. A single push will turn the hazard lights on. Both head lights and both tail lights will begin to flash amber in colour. A single push will then turn the hazard lights off.

USB Charging Port: The Magnum series has a dual port USB Charging outlet mounted in the center dash panel. This can be used to charge phones and small mobile devices. Each port contains 1 x USB-A (max 18W) standard charging port and 1 x USB-C (max 45W) Fast Charging port and is suitable for all modern mobile devices. Your mobile phone will only charge at its maximum rated wattage as modern devices have a built in charging protocol that will only enable charging up to its maximum rated power (e.g. iPhone 16 Pro Max will have a maximum charging power rating of 28-29W). The cart USB charging port outlets are rated to a maximum of 18W for the USB-A and 45W for the USB-C port. Note: the USB charging port in all ECAR Magnum models is for PD (power delivery) only and will not allow the transmission of data.



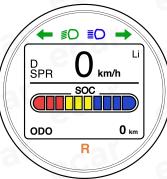
The ECAR Magnum Series of carts has daytime running headlights. This means that every time the cart is turned on via the ignition switch the daytime running lights will be activated. They cannot be switched and turned off without rewiring the headlights through an approved dealer (charges apply as this is a substantial task to complete). The lights are designed to be unobtrusive and should not cause issues when driving or playing golf. On a golf course these lights are designed to ensure other golfers are aware of your presence.

#### Headlight Beam Angle Adjustment

The standard LED headlights on the Magnum series of carts can be adjusted by an authorised dealer or technician. The rear of the headlight unit can be accessed via the service hatch. On the rear of the headlight units there are 2 hand bolts that can be turned clockwise and anti-clockwise to adjust the beam angle.

#### **DIGITAL SPEED & ODOMETER PANEL**

The small round gauge is mounted on the steering column. Along the top row of this gauge you can see your vehicle speedometer. Based on the battery installed in the cart, the voltages and percentage State of Charge (SOC) will reflect be shown in the center. Drive time will be based on the battery capacity installed in your cart. Note: Do not drive the cart below 20% SOC for a prolonged period of time.



The speed is shown in km/h. Carts can be (Mounted on the steering column)

programmed to suit your use. Speak with your local dealer or ECAR Golf directly for more information.

The odometer is shown at the bottom of the screen. This will be accurate to the default wheel/tyre size installed on the cart. If you have custom wheels this may require additional controller adjustments in order to show accurately.



Above are indications of what each symbol means on the panel.

#### **DRIVING INSTRUCTIONS**

The accelerator pedal must only be pressed >2 seconds after the ignition key switches is turned on. Refer to *"Key Ignition Switch" information for an explanation about this operation.* 

The brake pedal stops or decelerates the vehicle. Always ensure to use the brake pedal to bring the cart to a stop. Do not allow the cart to roll to a stop in order to avoid excessive wear or damage to the electrical components of the EM Automatic Parking Brake.

This model golf cart is designed for both on and off-road use. Driving this cart on no more than a maximum slope of up to 35 degrees is necessary to ensure there is a reduced risk of rollover or harm.

Refer to your carts individual specification sheet to find the information on your carts turning radius. Sudden turns shall be limited to speeds of 20km/h or less.

Always ensure the steering wheel is visually aligned with the direction of the wheels prior to use. If there is a considerable difference, there may be damage to your carts steering.

It is the cart operators responsibility to ensure the cart is in good working order prior to use and that it is only used within the above limitations.

# **BATTERY & CHARGING INFORMATION**

Your cart comes fitted with an ECAR factory Standard Lithium Battery System that is designed for the intended purpose of your cart. This is not a partnered brand or a third party system ensuring maximum safety and quality control of the cart.

To ensure the safety of all ECAR owners, the Lithium Battery system installed in ECAR Golf carts are certified to AS/NZS 3001.2:2022 and have exceeded the requirements outlined in the Australian Standards. This ensures the batteries can confidently be used for the expected lifespan with no risk of fire, mechanical damage or damage to the cart. The system is the official ECAR system.

It is strictly advised that the cart is not operated for any extended period of time with the SOC of equal to or less than 20%. Ensure to always drive the cart with the maximum practical possible charge to ensure maximum lifespan of the battery.

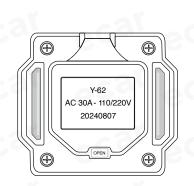
Do not run the battery flat until <10% before charging each time if it can be avoided. You will not be extending the lifespan of the battery by completing less charge cycles. You could potentially be damaging the cells and shortening the lifespan by maintaining the battery in this manor.

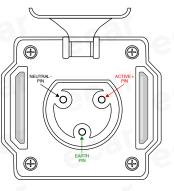
# Charging

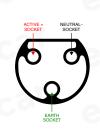
The charger for your battery system is mounted on-board the cart. You have been provided with a specific 240V Rated Charging cable (gun) with a standard 3 pin mains plug. This can charge off any standard residential or commercial Australian 3 pin 10A power point.

For commercial models, your cart may have a direct power lead socket. For this plug any heavy duty extension power lead from a 10A power point into your cart. (Special orders only) The cart charging receptacle is located on the drivers side mounted in the body work below the seat.

Ensure any plug is secure and inserted all the way in before applying power. A loose connection can cause charger faults and generate dangerous heat.







CLOSED RECEPTACLE SOCKET

OPEN RECEPTACLE SOCKET

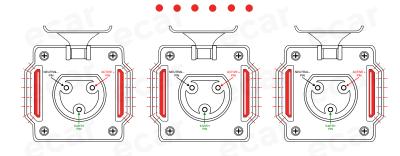
Australian standard Type 2 (220-240V Mains Rated) 10A maximum (input) cart charging inlet. RECEPTACLE PLUG A 5 meter charging cord compliant to AS/NZS 3112.

# **Battery Charger Lights**

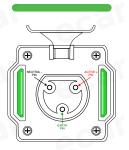
The ECAR PRO-Li Lithium Battery install will have built-in charging indicator lights seen by looking at the receptacle.

The standard light sequence can be viewed as follows:

Flashing Red = The battery is charging.

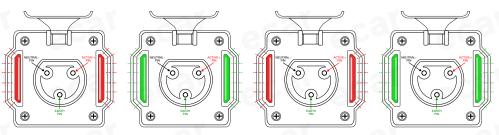


#### Green solid = The battery is 100% charged and ready for use.



Green/Red Flashing = Battery (load) not detected. (The battery may be turned off, see Troubleshooting section of this manual. Alternately there may be an issue with the charging system wiring and you should contact an authorised dealer or ECAR Golf for assistance). The charger will not be charging the battery if the Green/Red flashing light sequence is present and poses no risk to the battery or the cart.





It is recommended to charge your cart after every single use or after the daily use has been completed. The chargers are designed to only provide enough charge to the batteries that is required.

The ECAR PRO-Li Chargers are RCM certified and programmed with an ECAR algorithm to safely charge the ECAR PRO-Li battery without overcharging. It will always stop the charge cycle once the programmed voltage is reached. This process is fully automatic, and the charger should not be unplugged until a solid green light appears at the receptacle to ensure battery lifespan. The charger poses no risk of fire or damage to the cart or property if left plugged in.

Warranty will be voided for any users that choose to run the batteries to a very low state of charge before charging each time. The correct method recommended by ECAR is to charge after every single use or every single days use.

### Infrequent Cart Use (1 to 2 weeks)

If you use your cart only once every 1 to 2 weeks, charge it after use and leave the charger plugged in. The charger will charge the battery to 100% and automatically turn off. Over this short period, it will remain in a stable communication state with the battery management system but will not restart or activate under any circumstance.

For peace of mind, leaving the charger plugged in poses no risk of fire or damage. It is designed to safely manage the battery without overcharging, ensuring longevity and reliability.

#### Short Term Storage of the Cart (3 weeks to 4 months)

For general storage of the cart, we recommend securing your cart in a parked location that is undercover and protected from the weather

Complete a full charging cycle, then lift the seat and switch your Run/Off/ Manual switch to the 'OFF' position only. This will ensure any accessory that may be installed in the cart will not draw any power or remain on whilst being stored.

When returning to the cart, lift the seat where the battery is and press the battery power button once to activate the battery (see 'Troubleshooting' for more details) and switch the Run/Off/Manual Switch to 'RUN'.

#### Long Term Storage of the Cart (Greater than 4 months)

For extended storage periods exceeding 4 weeks, fully charge your cart, switch the Run/Off/Manual switch to 'MANUAL', and leave the charger plugged in. The charger's automatic Vacation Mode will maintain communication with the battery's management system and, if needed, initiate a charge cycle. This ensures the battery remains in optimal condition during prolonged non-use.

A charge cycle will only activate if the battery voltage drops below 44V, which typically requires more than 5–6 months of storage. This process is 100% safe and reliable, consuming minimal power (just 1–2W) unless charging is required.

Leaving the charger plugged in poses no risk to your cart or property. Our battery system is certified to the highest safety standards and is designed to charge the battery only when necessary. Unlike super-fast charging, which can degrade battery health and increase risks, our system charges at an optimal level to ensure both long-term performance and complete safety. You can store your cart with confidence, knowing it is protected and always ready for use.

### MAINTENANCE

In order to maintain your golf cart to extend the life of the cart we suggest following these regular steps.

We strongly recommend you complete a full mechanical service on your cart every 6 months for commercial or constant use, 12 months for intermittent personal use. Consult your authorised dealer for clarification. This will keep the wear and tear of components to a minimum and result in little to no breakdowns.

Our carts are known for being robust and reliable above all if maintained at consistent intervals.

The following general component service or replacement intervals is recommended:

COMPONENT	REPLACE	SERVICE
Brake Fluid (DOT#4)	12 months	
Mechanical Brake Pads	1mm remaining	6 months
Lubricate & Check Knuckles	If excessive lateral movement detected	6 months
Lubricate steering Universal & Assembly		6 months
Lubricate A-Arm Bushes	If excessive lateral movement detected	6 months
Check/Tighten camber bolt		6 months
Lubricate Panard Bar Joints		6 months
Motor/Battery Cables	If insulation is damaged	Check/Tighten
Lubricate and Check Front End Ball Joints	If cracked/unable to mechanically pivot	6 months/Check & Tighten
Lubricate Rain Curtain Studs (if applicable)		1 month
Lubricate AC motor spline		Max. every 2 years
Roof & Body Bolts	If bent or damaged	12 months
Box Hinges & Seals		Tighten/Lubricate (Silicone Spray)

#### A full service will involve the below minimum items:

- Lubricating the wheel knuckles, check & adjust the steering components.
- Completing a wheel alignment to ensure good tyre wear. Replace any tyres with less than 1mm tread left.
- Check and lubricate any bushings (Front/Rear Suspension & A-Arms)

- Adjust the disc brake system. This will involve checking all hydraulic components. A fluid flush is recommended every 12 months or if the pedal has become loose. Brake fluid type is DOT#4.
- Check wheel bearings & Hubs for any lateral movement. Replace bearings if required.
- · Check Gearbox (Diff) oil level and check the seals. (SAE 90, 700ml)
- Check Shock Absorber Seals & Springs.
- Check tyres pressures. (See Tyre Maintenance section for correct pressures)
- Test headlights, tail lights, brake lights, indicators and horn operation.
- Replace any bulbs or repair any switches or wiring, if required.
- Check any and all battery leads, ensure terminals are not cracked and are tightened.
- Update any controller software only if recommended by ECAR Golf Pty Ltd. This will only be required if a press release has been sent regarding updated controller settings to improve performance and increase longevity of the cart.

The recommended Gear Oil is SAE 90. Replaced only after 8000km. When filling, ensure to use no more than 700ml OR until the oil level is approximately two thirds (2/3) full.

After the above (minimum) work has been completed, the cart should be thoroughly test driven to check steering, braking and performance is adequate and safe.

A report and invoice of the service being conducted will need to be maintained for any warranty claim made within the valid period.

#### Cleaning

Clean the body work of your cart routinely with soapy water only. This will remove contaminants on the paintwork and maintain your clear coat for longer. Ensuring the glossy surface of your bodywork remains.

Most areas of the cart can withstand water however, when hosing during cleaning, avoid spraying the seats, dash area or directly in any areas were cable connections may be present. If connections become soaked, ensure they are dry before operating the cart.

#### **Recommended Tyre Pressures:**

205/65-10 = 22-25 PSI
This is the standard tyre found on all Magnum GC (Housekeeping) carts.

DO NOT operate the cart with over inflated or under inflated tyres. This can cause unnecessary wear on the cart and effect the safety and performance of the cart. We recommend checking the tyre pressures a maximum of every 2 weeks.

#### BRAKING SYSTEM

Your ECAR Magnum GC (Housekeeping) cart comes standard with 4 wheel hydraulic disc brakes.

Use: This system is most suited for medium to heavy duty commercial and industrial use. It will provide guaranteed stopping power in all conditions. These brakes require accurate adjustment but will last longer between pad replacements.

When servicing the hydraulic disc brake system always check for no leaks in any of the lines or connections. This would indicated the potential for moisture to enter the system causing corrosion and failure.

We strongly recommend a brake fluid flush every 12 months as a minimum.

The hydraulic system can have a build up of pressure and if not adjusted properly in hot conditions the pressure can increase causing the brake pads to drag or make a noise on the disk. Refer to our brake adjustment guide. This can be obtained from an authorised dealer or from ECAR Golf.

#### TROUBLESHOOTING

#### Cart not operating when turning on the ignition key:

- Check the Run/Off/Manual switch is the in the RUN position.
- Turn the key off, then turn on the key, wait 2-3 seconds before pressing the accelerator pedal.
- Ensure the battery main terminals are clean, tight and correct.
- Ensure the Lithium Battery is turned on at the battery. (Varies based on battery manufacturers recommendations, consult your dealer for more information)
- Ensure there is adequate charge in the battery. (Above 44V is a minimum recommendation before driving the cart).

- Check Run/Off/Manual cable connections are tight and the switch is operating correctly.
- Check Run/Off/Manual fuse. This is found behind the switch in a black molded inline casing. Replace with the same Ampere rated blade fuse only.
- Contact your nearest Dealer for further assistance.
- Visit <u>https://www.ecargolf.com.au/pages/dealer-locator</u> to find your nearest dealer.

#### Headlights or Tail Lights not working:

- Check the switches are operating correctly and all cables behind the switches are plugged in.
- Check the lighting fuses found near the DC-DC converter. This is located under the rear seat near the controller box and is black in appearance. (Only replace the fuses for the same Ampere rating.)
- Check any LED panels. It is recommended to access the light fittings via the wheel well. You will be required to remove some plastic rivets and create separation of the wheel well plastic and the carts bodywork. (Replacement rivets can be purchased from your nearest dealer)

# Steering Wheel not aligned to the direction of the Tyres OR the cart is pulling to one side:

- You may have damage to your steering rack. Consults your nearest dealer for repairs and do not drive the cart.
- Check the tyre pressures and ensure all tyres are adequately inflated.
- Check there is no lateral movement of the wheel assembly. If movement is found, the wheel bearings may be worn and will need immediate replacement.

#### Battery has turned off OR Cart is not turning on at all:

The battery will switch off after 21 days (14 days for carts purchased prior to November 2024) to preserve energy and enhance safety if no current draw is detected. This will only occur if the charger is not plugged in and turned on at the power point. If the charger is plugged in and the power point is on, vacation mode will automatically engage.

Vacation mode maintains communication with the battery's computer and, if required, completes a charging cycle. This ensures the battery remains functional during extended periods of non-use. A charging cycle will only be

triggered if the battery falls below 44V, which typically requires the cart to be stored for more than 5–6 months. This process is 100% safe and reliable, consuming very little power (1–2W) unless a charge cycle is needed.

If your battery pack has switched off and your cart will not turn on, simply lift the seat where the battery is located. On the side with the cables, you will find a power button in the middle. Press this button briefly to reactivate the battery. You should hear a quiet beep, and the button will illuminate blue. The battery is now reactivated, and the cart is ready to drive or complete a charging cycle without any damage or harm to the pack.

### RATINGS AND GENERAL SPECIFICATIONS

# Magnum GC (Housekeeping) General Commercial Cart Specifications:

(refer to the model specification sheet for more details)

- Total load capacity inc. passengers: 650kg
- Total Box Load Capacity: 500kg
- Tare Weight: 472kg (with no batteries installed)
- Total Cart Length: 3630mm
- Total Cart Width: 1230mm
- Total Cart Height: 1890mm (not including roof lighting accessories)
- Ground Clearance: Approximately 150mm
- Trans-axle: Gear Ratio 16:1
- Motor: 4kW 48V AC Brushless
- Box Dimensions: 1845mm (L) x 1150mm (W) x 1200mm (H) (external)
- Total towing capacity = 350kg (on level terrain if applicable)
- Total tow ball vertical load = 50kg (if additional component fitted)

This cart is compliant for conditional use only and not for public road use unless authorisation is given by your local governing body.

# Cart Speed & Controller Settings:

The default speed your cart is set at is 25km/h. This is regarded as a safe operating speed whilst maintaining the carts ability to handle hilly terrain or to carry loads. A cart that is to be operated on steep or hilly terrain is advised to not be limited to less than 15km/h to ensure the cart does not draw a high current load to critical components.

The controller used in your model cart is fully programmable, please discuss your use and environment with your local dealer to ensure the cart will be set in a way that is suitable to you. By default an ECAR set of parameters are installed to operate the cart as we have designed it.

Your authorised dealer or an approved ECAR service technician will have access to the ECAR Live controller software. To access the controller a specific CAN USB device will need to be used to correctly communicate with the cart.

This controller cannot be accessed by any unauthorised person/s.

ECAR carts are engineered and built for reliability. The ECAR 350A controller is designed to handle high loads and is fully programmable to solve any suitable challenge. We advise speaking with your service technician or local dealer about any adjustments that may make your driving experience more suited to your needs.

**NOTE:** Our controller parameters will not overcharge the Lithium Batteries on sloping ground and will ensure there is no danger to you or the cart. The cart will shut off automatically in critical fault conditions.

#### ACCESSORIES AND SPARE PARTS

Having been present in Australia and globally for over 18 years, the ECAR brand of Golf Carts stands as one of the most endorsed brands in our nation. Our expertise lies not only in our deep understanding of these carts but also in ensuring their smooth operation, even when challenges emerge.

All requisite spare parts can be sourced either from your nearest authorised dealer or directly from ECAR Golf. Our primary dispatch warehouse, strategically located in Molendinar on the Gold Coast, QLD, facilitates both national and international shipping. In the rare instance that a part isn't readily available, we prioritize its order and provide a timely estimated arrival.

For expert advice on spare parts, please visit ecargolfparts.com.au. Our comprehensive part catalogue's are available for browsing, and they're consistently updated to reflect the ongoing mechanical and design enhancements to our carts.

With an extensive inventory of over 2,000 parts, we may not list everything on our website, but rest assured, the part you need is available for purchase. Should you struggle to locate a particular component, do not hesitate to submit an online enquiry or drop an email to <u>parts@ecargolf.com.au</u>. Our dedicated team is always eager to assist.

Our ECAR golf cart accessory selection is continuously advancing to cater to diverse needs. From standard to luxury seat covers, innovative storage solutions, weatherproofing covers or curtains, to marine-grade entertainment systems, we can offer the solution.

For inquiries or specific accessory preferences, please consult our sales team or your nearest authorised dealer.

#### WARRANTY INFORMATION

This ECAR golf cart when purchase new from your authorised dealer comes with the following warranty period:

#### Residential/Personal Use:

- Chassis & Structural: 5 years
- Mechanical & Electrical Components: 3 years
- Lithium Battery System:
  - 5 years on ECAR PRO-Li Battery System
  - · 3 years on ECAR PRO-Li Battery System Charger

#### Commercial/Industrial Use:

- · Chassis & Structural: 2 years
- Mechanical & Electrical Components: 2 years
- Lithium Battery System:
  - 5 years on ECAR PRO-Li Battery System
  - 3 years on ECAR PRO-Li Battery System Charger

#### WARRANTY CLAIMS

All warranty claims should be made by contacting your authorised Dealer's specific phone number or email: <a href="mailto:sales@ecargolf.com.au">sales@ecargolf.com.au</a>

#### WARRANTY COVERAGE

During the warranty period, an authorized ECAR Dealer will reserve the right to repair or replace any part adjudged defective due to faulty workmanship or material failure, free of charge at the manufacturer's discretion. Parts used in warranty repairs will be warranted for the balance of the golf carts warranty period and the period will not reset upon repair or replacement.

Travel & Transport costs accrued to replace/repair your claim are not covered under the ECAR Golf Warranty.

#### WARRANTY LIMITATIONS AND EXCLUSIONS

The warranty may be voided under various conditions such as abnormal strain, neglect, lack of proper maintenance, accident or collision damage, installation of non-original parts without authorisation, modifications or alterations performed that are not authorised by ECAR Golf Pty Ltd, damage due to improper transportation, and damage caused by naturally occurring incidents like lightning, hail damage, flood, or fire.

#### CUSTOMER'S RESPONSIBILITY

It's the customer's responsibility to operate and maintain the golf cart as specified in this owner's/operator's manual. This includes but is not limited to; not overloading the utility tray; operating the cart within the parameters of the stated incline/declines and suitable terrain; maintaining adequate battery voltage at all times and regular (6-12 month interval) mechanical servicing.

You are to give notice to an authorised ECAR dealer of any defects within ten (10) days after discovery. It is then the responsibility of the person/s in possession of the cart, to make the cart available for inspection and repairs by a dealer's authorised representative.

Travel & Transport costs accrued to replace/repair your claim are not covered under the ECAR Golf Warranty.

#### WARRANTY REGISTRATION

When a ECAR Golf cart is purchased from an authorised dealer, the warranty period is registered. ECAR Golf Pty Ltd will be notified and any warranty claim will need to have a purchasing invoice presented at the time of the claim as well as any and all supporting evidence.

#### WARRANTY TRANSFER

The warranty can be transferred from one owner to another when the cart is purchased from an authorised dealer, provided the machine is inspected prior to the transfer of ownership by an authorised dealer or person. This will then need to be recorded as a transfer of ownership by the authorised dealer the new cart was originally purchased from. This process must be finalised and approved within ten (10) days of the transfer of ownership taking place. Without this, the balance of the new cart warranty will be void.

#### CONTACT INFORMATION

Company Name: Email:

Head Office: Website: Contact Number: sales@ecargolf.com.au parts@ecargolf.com.au 5 Energy Crescent, Molendinar QLD 4214 www.ecargolf.com.au (07) 5619 8700

ECAR Golf Pty Ltd.

#### DEALER CONTACT INFORMATION

Company Name: Phone: Email: Address:

#### ECAR AUTHORISED BRANDING

All golf carts bearing the ECAR brand are produced under a stringent manufacturing partnership, adhering our defined guidelines. These guidelines encompass a range of crucial elements including, but not limited to, the endorsement of specified battery systems, the tailoring of controller parameters to promote optimal longevity, and the enhancement of key mechanical components aimed at bolstering reliability and extending the lifespan of the carts.

Beyond the final assembly phase, we enforce rigorous pre-delivery procedures that all our authorised dealers are obliged to uphold.

Should you encounter any discomfort or observe any driving anomalies while operating our carts, we strongly recommend reaching out to your nearest dealer and/or ECAR Golf Pty Ltd for assistance. Our golf carts have undergone years of iterative refinement and we staunchly stand behind the performance they deliver.

Be advised that any cart lacking the ECAR logos, as depicted below, is not affiliated with nor comparable to our range of golf carts.

# ecar e-car ecar

#### LEGAL DISCLAIMER

For the purposes of this manual, the term "Manufacturer" shall refer to ECAR Golf Pty Ltd, its successors and permitted assigns.

This manual serves to affirm that golf carts distributed by ECAR Golf Pty Ltd are intended solely for private use under specified conditions ("Conditional Private Use", "Conditional Use").

Under no circumstances are these golf carts to be operated on public roads, footpaths, or any other public thoroughfare without the explicit authorisation from the respective local government authority.

Conditional Private Use of golf carts as stipulated in this manual shall be strictly adhered to by all purchasers and operators of golf carts from ECAR Golf Pty Ltd. Any deviation from the stipulated use without obtaining the necessary permissions from local government authorities may result in legal penalties, and will be deemed a violation of the terms of sale and may void any applicable warranties.

ECAR Golf Pty Ltd disclaims any and all liability for unauthorized use of golf carts on public roads and footpaths and will not be held responsible for any legal consequences or damages that may arise from such unauthorized use.

We hereby advise all purchasers and operators of ECAR Golf Pty Ltd golf carts to comply with the above-stated conditions and to obtain any necessary permissions from local government authorities prior to operating golf carts in public areas.

This manual also serves to inform that the golf carts distributed by the Manufacturer are programmed to have a maximum speed that does not exceed 25 kilometers per hour (25 km/h). The operation of these golf carts at speeds exceeding the programmed maximum speed is strictly prohibited and may be unlawful.

Any alteration to the golf cart to enable operation at speeds exceeding the programmed maximum speed, or any operation of the golf cart at speeds exceeding the programmed maximum speed, is at the sole risk of the operator, and the Manufacturer hereby disclaims any and all liability for any damages, injuries, or other consequences that may arise from such alteration or operation.

By purchasing or operating a golf cart distributed by manufacturer, the purchaser and/or operator acknowledges and agrees to abide by the programmed speed limitation, and further agrees to hold ECAR Golf Pty Ltd harmless from any and all liability arising from any alteration to or operation of the golf cart at speeds exceeding the programmed maximum speed.

#### **GLOSSARY OF TERMS**

Accessories and Spare Parts - Additional items or replacement components available for the golf cart.

**Battery & Charging** - The system that provides electric power to the golf cart and the method by which the battery is recharged.

**Braking System** - The mechanism by which the golf cart is slowed down and brought to a stop.

**Controller** - The device that regulates the power delivered to the golf cart's motor, affecting its speed and functionality.

**Designated Golf Cart Paths** - Predefined routes or tracks laid out for the safe operation of golf carts.

**Electromagnetic Automatic Parking Brake (EM Brake)** - A type of brake that engages automatically when the cart comes to a complete stop, preventing it from rolling away.

Forward/Reverse Switch - A switch used to change the cart's gear to either forward or reverse.

Helmets - Protective headgear that can be worn for added safety, especially in non-traditional settings or rough terrains.

Key Ignition Switch - A switch that activates or deactivates the cart's engine with a turn of a key.

License and Registration Requirements - Legal documentation needed to operate the golf cart, if applicable.

**Lighting** - The system of lights used to ensure visibility during low light conditions.

**Lighting and Indicators** - System that includes headlights, tail lights, brake lights, and turning signals to communicate the driver's intentions to others and maintain visibility.

Minimum Age Requirement - The lowest age at which an individual is permitted to operate the ECAR golf cart.

**Operations Manual** - A booklet or document that provides instructions and information on how to use and maintain the ECAR golf cart.

Run/Off/Manual Switch - A switch that disables the cart when required, and ensures it operates only in the 'Run' position.

Seatbelts - Safety harnesses designed to secure the occupants of the golf cart in their seats.

State of Charge (SOC) - Indicates the current battery level as a percentage of its capacity.

**Steering Wheel Alignment** - The adjustment of the angles of the wheels to the manufacturer's specifications for optimal tire wear, vehicle handling, and safe operation.

Tyre Pressures - The measure of air pressure within the tires, crucial for the safe and efficient operation of the cart.

Vehicle Identification Number (VIN) or Chassis Number - A unique code used to identify individual motor vehicles.

Warranty Information - Details regarding the coverage and process for claiming warranty on the golf cart.

Weight Capacity - The maximum amount of weight the golf cart can carry safely.

NOTES



ecargolf.com.au @ ©

5 Energy Crescent, Molendinar, QLD, 4214, Australia