



OWNERS MANUAL

Tuatara Machinery Limited

Version 01042024

Owner's Manual

**READ THIS MANUAL CAREFULLY. IT CONTAINS IMPORTANT SAFETY
INFORMATION.**

MINIMUM RECOMMENDED: OPERATOR AGE: 16

TUATARA E1500/2 – 12kwh

TUATARA E1500/3 – 21kwh

TABLE OF CONTENTS

Owner's Manual	5
1. Foreword	5
2. Warning Signs and Important Safety Information	5
2.1 Warning Signs	6
2.2 Important Safety Information	8
3. Specifications	16
4. Operating Instructions	18
4. Primary Battery Charging Procedure	37
5. Driving Procedure	40
6. Primary Maintenance and Service	46
7. Preventive Maintenance and Service Log	53
8. Warranty	57

Owner's Manual

1. Foreword

Thank you for choosing our market leading, fully electric, Ultra Terrain Vehicle (UTV). This manual covers both E1500/2 & E1500/3 models. We are sure that you will enjoy your new UTV. The electric version of the **eTUATARA** UTV comes with the same no nonsense robustness and “go anywhere” capability as our combustion engine powered **eTUATARA** but with the simplicity and high torque characteristics of an electrically powered vehicle.

Before operating your new **eTUATARA** UTV, please thoroughly read this manual as it contains important safety and maintenance information. Failure to follow the warnings contained in this manual could result in damage to the vehicle or even serious injury or death to the operator.

Be sure to follow the recommended maintenance schedule and service your UTV accordingly. Preventative maintenance is extremely important to the life of your UTV. And in the interests of conservation and protection of earth's natural resources, every **eTUATARA** owner is encouraged to recycle, trade in, or properly dispose of, as appropriate, used motor oil, coolant, and other fluids, batteries and tyres.

2. Warning Signs and Important Safety Information

Before you drive your UTV for the first time, we urge you to do following:

- Read this owner's manual and the labels on your **eTUATARA** UTV
- Make sure you understand all the safety messages.
- Totally familiarise yourself with all of the controls.
- Never drive the **eTUATARA** UTV if you are under 16 years of age.

Before driving, be sure:

- That you are of good physical and mental health.
- That you are not affected by alcohol or drugs.

2.1 Warning Signs

Foreword about safety

In order to keep everyone safe, it is important to understand the warning signs on the UTV. We have provided operating procedures and warning sign labels in this manual. These include:

Warning Signs

This section contains some of the most important information and recommendations to help you drive your UTV safely. Please take a few moments to read these pages. The labels are considered permanent parts of the UTV. If a label comes off or becomes hard to read, contact your dealer for warning label replacements.



Safety Symbol - A Safety Alert Symbol



WARNING

- Operator warning message

CAUTION:

- Operator special care required



WARNING

SEAT BELTS MUST BE WORN BY DRIVER AND ALL OTHER PASSENGERS.
FAILURE TO DO SO COULD RESULT IN INJURY OR DEATH.



WARNING

Always bring the UTV to a complete stop before changing between 2WD & 4WD or High / Low gear. Failure to do so could result in damage to the differential and / or components within the drive train.



WARNING

Improper tyre pressure or overloading can cause a loss of control.
Loss of control could result in a serious accident which may lead to serious injury or death.

THE RECOMMENDED OPERATING TYRE PRESSURE IS:

FRONT & REAR – 15 - 20psi.

Never set the tyre pressure below the recommended operating pressure.
This could result in tyres being dislodged from their rims. Tyre pressure should be set when tyres are cold.



WARNING

Serious INJURY or DEATH could result if you ignore the following:

- **The maximum capacity of the rear cargo tray is 550kg.**
- **All cargo must be adequately secured. Unsecured cargo could move suddenly and affect handling and stability.**
- **All cargo should be centred and stowed as far forward and as low as possible.**
- **Top heavy and / or unbalanced loads increase the risk of rollover.**
- **Passengers should not be carried on the cargo tray.**
- **When loaded with cargo and / or towing a trailer, reduce speed and allow more time for stopping. Pay more attention when travelling up steep hills and over rough terrain.**

[2.2 Important Safety Information](#)

Driving Off-Road only

Your new UTV and its tyres are designed and manufactured for off-road use only, not for sealed roads. Driving on sealed roads can affect handling and control.

When driving off-road, also remember to always obey local off-road driving laws and regulations. Obtain permission to drive on private property. Avoid posted areas and obey “no trespassing” signs.



WARNING

- **Operating this Off Road UTV on paved surfaces may seriously affect handling and control and could result in the loss of control.**
- **Extreme care must be exercised when driving on any paved surfaces such as roads, footpaths, and concreted areas.**

Age Recommendation

It is strongly recommended that no one under the age of 16 be permitted to operate this UTV and never without proper adult supervision.



WARNING

- **It is not recommended that this UTV be operated by a person under 16 because inexperience and / or immaturity could result in a loss of control resulting in severe injury or death.**
- **A child under 16 must be supervised by a qualified adult when operating this UTV.**

Driver Training & Practice

Practice driving the UTV in a safe area to improve your skills. Do not drive in rough terrain until you become accustomed to the controls of the UTV, and are comfortable with its size, weight and handling characteristics. Check with your dealer for more information on training courses.



WARNING

Operating this UTV without proper instruction could increase the risk of an accident, which could lead to serious injury or death.



WARNING

In the event of a rollover, ensure that you keep your hands and other parts of your body inside the vehicle. Failure to do so could result in serious injury or death.

No Alcohol or Drugs

Alcohol, drugs and the operation of an UTV doesn't mix. Even a small amount of alcohol can impair your ability to operate the UTV safely. Likewise, drugs, even if prescribed by a doctor, can be dangerous while operating a UTV. Consult your doctor to be sure it is safe to operate an UTV after taking medication.



WARNING

- **Operating this UTV after consuming alcohol or drugs can seriously affect your judgment, causing the operator to react more slowly, affect your balance and perception, and could result in serious injury or death.**
- **Never consume alcohol or drugs before or while operating this UTV.**

Is Your Vehicle Ready to Drive?

Before driving, it is important to inspect your UTV and ensure that any problems discovered are corrected. A pre-drive inspection is a must, not only for safety, but because having a breakdown, or even a flat tyre, can be a major inconvenience.

If the UTV has overturned or has been involved in a collision, do not drive the vehicle until it has been inspected by an authorised dealer. There may be serious underlying damage to the vehicle that may make it dangerous to operate.



WARNING

- **Improperly maintaining the UTV or failing to correct a problem before driving can cause an accident that could result in serious injury or death.**
- **Always perform a pre-drive inspection before every drive and correct any problems discovered.**

Pre-Drive Inspection

Check the following items before you operate the UTV:

1) **SOC**

Check the State of Charge – should be sufficient to cover proposed journey and return. It is not good practise to allow the SOC to drop below 20%

2) **Coolant**

Check the coolant and add coolant if needed. Check for the leaks.

3) **Tyres**

Use a tyre pressure gauge to check the air pressure. Adjust if necessary. Also look for signs of damage or excessive tyre wear.

4) **Nuts & Bolts**

Check the wheels to see that the wheel nuts are tighten. Use a wrench to make sure all accessible nuts, bolts, and fasteners are tight.

5) **Underbody**

Check for, and remove any dirt or other debris that could be a fire hazard or interfere with the proper operation of the UTV.

6) **Leaks, Loose Parts**

Walk around your UTV and look for anything that appears unusual, such as a leak or loose cable.

7) **Lights**

Make sure the headlights, brake lights and taillights are working properly.

8) **Accelerator**

Check the free play and adjust if needed. Press the accelerator pedal to make sure it

moves smoothly without sticking, and “snaps” back automatically when its released.

9) **Brakes**

Press the brake pedal several times. Make sure that the pedal is not “spongy” and that there is increased resistance as more pressure is applied. Check the level of the brake master cylinder. Top up as necessary. Make sure there is no fluid leakage.

10) **Steering**

Check that the wheels turn smoothly as you turn the steering wheel and that the steering linkages are tight and without any play.

Keep Hands and Feet on Controls

Always keep both hands on the steering wheel and your feet on the foot controls. When driving your UTV, it is important to maintain your balance and control of the UTV. Removing hands or feet from the controls will reduce your ability to react and control the vehicle



WARNING

- **Removing a hand/s from the steering wheel or feet from foot controls during operation will reduce your ability to control the UTV. This could affect your ability to operate the UTV safely.**
- **Always keep both hands on the steering wheel and your feet on the foot controls of your UTV during operation.**

Control Speed

Driving at excessive speed increases the chance of an accident. In choosing an appropriate speed, the operator must consider the capability of the UTV, the terrain, visibility and other operating conditions, plus his / her own skills and experience.



WARNING

- **Operating this UTV at excessive speeds increases your chances of losing control of the UTV, which could result in an accident.**
- **Always drive at a speed that is appropriate for the terrain, visibility, your experience and other operating conditions.**
- **Use care on unfamiliar or undulating terrain**

Before driving in an unfamiliar area, always check the terrain thoroughly. Don't drive fast on unfamiliar terrain or when visibility is limited. It is sometimes difficult to see obstructions, such as hidden rocks, bumps, or holes, in time to react. Never drive past the limit of visibility. Maintain a safe distance between your UTV and other off-road vehicles. Always exercise caution and use extra care on rough, slippery or loose terrain.



WARNING

- **Failure to use extra care when Operating this UTV on unfamiliar terrain could result in the UTV overturning or a loss of control.**
- **Drive slowly and be extra careful when operating on unfamiliar terrain.**
- **Always be alert to changing terrain when operating the UTV.**



WARNING

- Failure to use extra care when operating on excessively rough, slippery or loose terrain could cause loss of traction or vehicle control, which could result in an accident, including a rollover.
- Do not operate on excessively rough, slippery or loose terrain until you have learned and practiced the skills necessary to control the UTV on such terrain. Always use extra caution when driving on these types of terrain.

Do Not Perform Stunts!

You should always operate your UTV in a safe and reasonable manner. When driving, always keep all four wheels on the ground.



WARNING

- Attempting “wheelies” and other stunts increases the chance of an accident, including a rollover.
- Never attempt stunts, such as “wheelies” or jumps. Do Not try to show off.

3. Specifications

3.1 DIMENSIONS

Overall Length-----	3580mm
Overall Width -----	1550mm
Overall Height -----	2110mm
Wheelbase-----	2480mm
Turning circle-----	8600mm
Ground Clearance -----	310mm
Rear cargo deck (Internal dimensions)(L x W x H)-----	1,600mm x 1390mm x 300mm

3.2 MOTOR: 15KW

Type -----	AC-PM (Permanent magnet)
Rate voltage -----	75VAC
Rate power-----	15kW
Peak power-----	30kW
Rated speed-----	4000 rpm
Max. speed -----	5500 rpm
Number of pole-pairs-----	3
Rated torque -----	35.8N.M
Max. torque -----	130N.M
Regenerative braking-----	Yes
Cooling-----	water, with radiator and thermo fan
Waterproof rating-----	IP67
Wiring insulation grade -----	H
Rated current -----	150A
Peak current-----	400A
Weight -----	42kg

3.3 PRIMARY BATTERY

Battery type	Lithium Iron Phosphate Battery
Rated voltage (V)	115/125
Rated capacitance (Ah)	160
Total Watt-hour	20
Operating temperature	20°C - 55°C
Maximum charging current	10A or 15A
Weight	102.7kg
Maximum range per single battery pack	12kWh. /100kms.*
Maximum range per single battery pack	21kWh. / 170kms.*

** Estimates are based on a battery charged from 10% to 100% capacity, on a flat testing surface at 15 km/h with driver only and no load. Results will vary considerably depending on the conditions of use.*

3.4. CAPACITIES

Maximum load (Rear cargo tray)	550kg
Transfer box oil	0.80L
Front differential	0.45L
Rear differential	0.85L
Coolant	3.0L

3.5 SUSPENSION & BRAKES

Front Suspension	Independent single A-Arm with MacPherson Strut
Rear Suspension	Independent dual A-Arm with double coil springs
Tyres (Front & Rear)	CU68 All terrain 26x11-12
Tyre Pressure (Front & Rear)	15-30 psi
Brakes	Hydraulic disc, with booster

3.6 STRUCTURE

Chassis	All steel ladder design
Anti Corrosion Treatment	Electrophoresis – chassis & all steel panels
Net Weight	1,080kg

4. Operating Instructions

Before operating your **eTUATARA** UTV, ensure that you familiarise yourself with the operating switches. The **eTUATARA** is Equipped with two dashboard switch banks – see **Figure 1** and **Figure 2** below.



Windscreen Wiper Washer Fog lights Roof light Headlights 2wd / 4wd

Figure 1 (Left Hand Side)

Windscreen Wiper

The Tuatara 1500E UTV are equipped with an operating switch and wiring for a windscreen wiper in the event that the glass windscreen accessory is selected by the customer as shown in **Figure 1** above.

Windscreen Washer

The **eTUATARA** 1500E UTV are equipped with a switch and wiring for a windscreen washer in the event that this accessory is selected by the customer as shown in **Figure 1** above.

Fog Lights

In addition to headlights, the **eTUATARA** 1500E UTV is also equipped with front mounted LED fog lights, which can be activated by the dashboard switch as indicated in **Figure 1** above.

Roof Light

The **eTUATARA** 1500E is fitted with a very powerful roof mounted LED light bar which is operated by a dashboard mounted switch – see **Figure 1** above.

Headlight Switch

The **eTUATARA** 1500E UTV are fitted with powerful LED, waterproof headlights that are operated from a dashboard switch as indicated in **Figure 1** above.

2WD / 4WD Drive Switch

- The Tuatara 1500E UTV can be operated in either 2WD or 4WD, which is selected via the dashboard switch as indicated in **Figure 1** above.
- **DO NOT SWITCH between 2WD & 4WD while the UTV is in motion. Bring the UTV to a complete stop before selecting 4WD.**
- Check the instrument gauge (ie. **Figure 8** -) to confirm the 4WD lock is engaged. Failure to perform this procedure will cause damage to the 4WD system & front diff.



High /Low
Ratio

Rear Cargo
Deck Hoist

High/Low
Beam

Indicators

Hazard

Horn

Winch

Figure 2 (Right Hand side)

Transmission Hi / Low

- The **eTUATARA** UTV is fitted with a transfer case which channels power to the two differentials on the rear axle when the UTV is in 2WD and also to the front axle when the **eTUATARA** UTV is in 4WD. The transfer case also incorporates a two speed transmission (ie. high and low ratio) which maximises battery economy when the **eTUATARA** UTV is used on steep inclines or other demanding terrain. High and low ratio gear selection is achieved through the use of this switch – see **Figure 2** above.
- To shift between high or low ratio, first bring the UTV to a **complete stop and move the forward/reverse lever to the neutral position**. Then operate the switch to the desired ratio. Wait until the shift motor has stopped operating before selecting forward or reverse and proceeding. Check the instrument gauge (ie. **Figure 8 - A**) to confirm that the High or Low Ration has is engaged. Failure to perform this procedure will cause damage to the selector mechanism and/or transfer case.

Rear Cargo Deck Hoist

The rear cargo tray fitted to the Tuatara 1500E can be elevated with an electric worm-drive hoist, which is operated via the dashboard switch as indicated in **Figure 2** above.

High / Low Beam

An operator can switch the headlights between high and low beam by operating the rocker switch on the dashboard as indicated in **Figure 2** above.

Turn Indicators

The left and right turn signal indicators are operated by moving the dashboard rocker switch according to the direction of the arrows indicated on the switch as shown in

Figure 2.

Hazard Lights Switch

Depress the hazard lights switch to activate all four turn signal lights simultaneously to warn other vehicles of the presence of a hazard – see **Figure 2.**

Horn Switch

Activate the horn switch to warn other vehicle operators of an impending emergency situation – see **Figure 2.**

Winch

The **eTUATARA** 1500E comes equipped with a front mounted electric winch, which has a pulling capacity of 1,350kg. This is operated from the dashboard switch shown in **Figure 2** above.



Trailer hoist

Spare

Spare

Trailer Hoist

The Tuatara 1500E is fitted with a hoist switch to allow the cargo deck on an accessory trailer to be elevated and lowered by operating the dashboard switch – see **Fig above**

Default Speed Settings

The default maximum speed settings for the **eTUATARA** on level terrain are as follows:

Low ratio (Forward) – 20kph

Low ratio (Reverse) – 10kph

High ratio (Forward) – 40kph

High ratio (Reverse) – 15kph

Brake Pedal Lock

The **eTUATARA** 1500E comes equipped with a Brake Pedal Lock, which is supplementary to the hand brake. To operate the Brake Pedal Lock, the operator must first apply the foot brake. With the brake pedal fully depressed, the operator then engages the Brake Pedal Lock Lever on the dashboard (ie. see **Figure 3 & 4** below) by pressing the release button

on the end of the lever and pulling the lever downward to its fullest extent (ie. see **Figure 4** below). The button can now be released and the operator's foot removed from the brake pedal. This operation will lock the brake pedal in the fully depressed position without any need for the operator to use any foot pressure and the brakes will remain fully activated. The purpose of the Brake Pedal Lock is to provide enhanced braking when the **eTUATARA** is parked on a steep incline in circumstances where the handbrake may not provide sufficient braking to hold the **eTUATARA** in a fully stationary position. However, the Brake Pedal Lock is not intended to be used in place of the hand brake, and should not be activated for extended periods of time. Whenever, the **eTUATARA** is to be parked with no operator in attendance, the hand brake must first be applied and the ignition turned to the off position. The Brake Pedal Lock may also be applied if the steepness of the terrain makes this prudent.



Brake Pedal Lock Lever – Unengaged

Figure 3



Brake Pedal Lock Lever - Engaged

Figure 4

Ignition Switch

The function of the Ignition Switch is to allow an operator to start and stop the motor of the **eTUATARA** UTV. The switch is operated with the use of the ignition key, which must be moved through three positions while undertaking the start and stop procedure – see

Figure 5 – 7 below:



Figure 5



Figure 6



Figure 7

OFF:

When the ignition key is in the OFF position, all electrical circuits are disabled except for the turning indicator lights and hazard flashers. The key can be removed in this position.

ACCESSORY:

All electrical circuits are supplied with power, except the ignition system. The radio can be operated.

ON:

The ignition system is supplied with power and the motor is on and will operate once pressure is applied to the accelerator pedal.

Primary Instrument Gauge

Please refer to **Figure 8** below for a description of the digital readings on the Primary Instrument gauge mounted in the centre of the dashboard of the **eTUATARA** UTV.



Figure 8

- A** – Speedometer;
- B** – Motor temperature;
- C** – Charging voltage for 12V secondary battery;
- D** - Hour metre – total time that the vehicle has operated;
- E** – Current draw (AMPS) from the primary battery;
- F** – Left turn indicator;
- G** – Parking brake activated;
- H** – Current gear selector position (**D**rive, **N**eutral, **R**everse);
- I** – Headlights on / High beam;

- J** – 4WD activated;
- K** – Differential lock activated – front / rear;
- L** – Right turn indicator;
- M** – Tripmeter – Kilometres travelled on a selected journey;
- N** – Total kilometres travelled;
- O** – State of Charge – percentage of battery power remaining;
- P** – Primary battery temperature;
- Q** – Change imperial to metric;
- R** – Change metric to imperial;
- S** – Tripmeter reset;



WARNING

- **The primary gauges show the status of various primary components and must be closely observed by the UTV operator.**
- **Before operating the UTV ensure that status indicators on the Primary gauge are functioning correctly.**

Fuses and Relays

The fuse box is located in the glove compartment in the dashboard of the **eTUATARA** UTV – see **Figure 9** below.

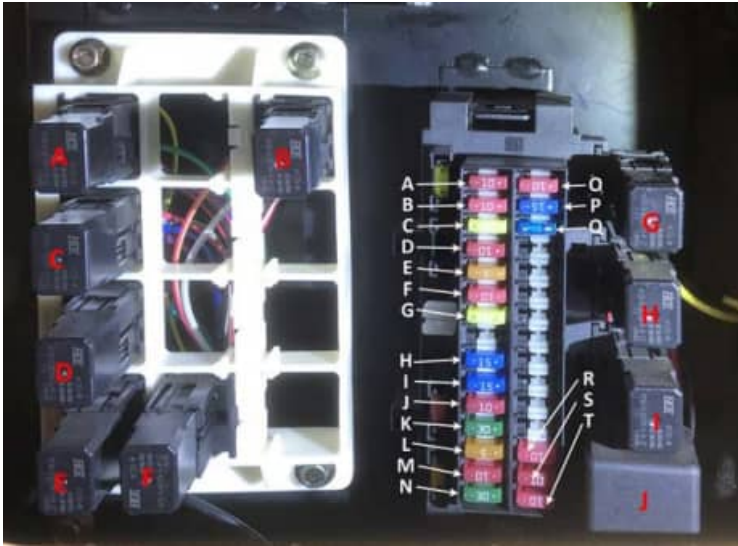


Figure 9

Fuses

A = Fog / Reverse lights (10A); **B** = Roof light (10A); **C** = Cooling fan / Heater (20A);
D = Spare (10A); **E** = Radio (5A); **F** = High beam (10A); **G** = Cig. Lighter (20A);
H = Water pump (15A); **I** = 4WD (15A); **J** = Power steering (10A); **K** = Cargo Hoist (30A);
L = Winch (5A); **M** = Wiper (10A); **N** = Brake pump (30A); **O** = Instrument Panel (10A);
P = BMS (15A); **Q** = MCU (15A); **R** = Horn (10A); **S** = Indicators (10A); **T** = Ignition (10A);

Relays

A – 4WD; **B** – High beam; **C** – 2WD; **D** – Brake pump; **E** – Wiper; **F** – Cooling fan;

Differential Lock

The **eTUATARA** UTV is equipped with both front and rear differential locks (see **Figure 10** below), which can be applied together or individually. In the event of a loss of traction, or in circumstances where the terrain is such that loss of traction is anticipated, the differential lock(s) can be applied to lock the axles to allow the UTV to regain full wheel traction. Before engaging the differential lock:

- Bring the **eTUATARA** UTV to a complete stop;
- Ensure that 4WD is engaged;
- Press the release button on the top of the differential lock lever(s) and pull downward until the lever(s) are fully extended – see **Figure 10 B (always try the rear diff lock first, thus avoiding unnecessary overloading the front CV shafts);**
- Check the instrument gauge (ie. **Figure 8 - K**) to confirm the differential lock(s) is engaged;
- Do not exceed 10kph. When the differential lock(s) have been engaged;
- Keep the wheels as straight as possible to avoid outside wheel drag;
- Disengage the differential lock(s) as soon as traction is restored or the terrain no longer presents a likelihood of traction loss;
- Failure to comply with this operating procedure could result in damage to the Differentials / CV shafts

A = Front differential lever in the locked position.

B = Rear differential lever in the unlocked position.



Figure 10



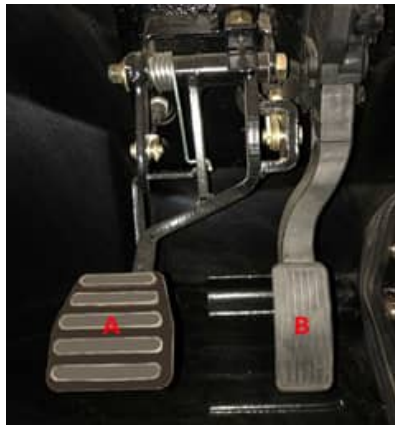
WARNING

Never engage 4WD with the rear differential locked or while the UTV is travelling at high speed as serious damage to the differential could occur.

Foot Pedals

The **eTUATARA** UTV is fitted with two driver controlled foot pedals – see **Figure 11**. The righthand pedal controls the accelerator. Depressing the pedal increases the motor speed relative to the amount that the pedal is depressed. Reducing the pressure on the pedal reduces the speed, with full removal of the foot will bring the motor to a complete stop.

The lefthand foot pedal controls the brake. The more foot pressure that is applied to the brake pedal will result in the application of more stopping force. More foot pressure will be required on steep inclines, or when the **eTUATARA** is fully loaded, to bring the vehicle to a complete stop.



A - Brake pedal;

B - Accelerator pedal;

Figure 11

Primary Brakes

The primary brakes fitted to the **eTUATARA** UTV are foot operated hydraulic disc brakes on each wheel, with an air assisted booster.

Handbrake

The handbrake lever is located between the driver's and middle passenger's seats. To engage the hand brake, press the release button on the top of the lever (ie. See **Figure 12** below) and pull the lever upward, keeping the release lever depressed. Once the lever encounters moderate resistance, release the button and the handbrake is now engaged (see **Figure 13** below). If the **eTUATARA** UTV is to be held on a steep incline, more upward pressure may be required to hold the vehicle in a stationery position. It is a good practice to hold the footbrake down firmly while applying the handbrake. This will maximize the effectiveness of the handbrake. On steep inclines, it is also recommended that the wheels are chocked as a further safeguard. To release the handbrake, depress the footbrake, press the handbrake release button and move the handbrake lever downward to its unengaged position (see **Figure 12**) and release the button. The handbrake is now released and the **eTUATARA** UTV may be driven forward or backward.



Figure 12

Handbrake in unengaged position



Figure 13

Handbrake in engaged position

Regenerative Braking

The electric motor installed in the **eTUATARA** UTV is fitted with regenerative braking. This system captures kinetic energy during deceleration, storing it in the battery so it can be used as electricity to power the electric motor. It also provides a very effective form of engine braking that supplements the primary brakes and is particularly useful when traversing steep inclines. An operator can maximise the recharge available to the primary battery through regenerative braking by managing his / her driving habits. The highest rates of return are achieved when operators slow down well in advance of stopping, to open a gate for instance, so that the maximum usage is made of the regenerative braking to bring the vehicle to a halt rather than use of conventional brakes where all the energy is dispersed through the brake discs in the form of heat.

Operators should avoid travelling on anything more than minor inclines when the eTUATARA UTV has a fully charged primary battery as the regenerative braking may cause an over-charging situation which could cause damage to the battery. To avoid such a situation, it is strongly recommended that the primary battery is only charged to 98% capacity in these circumstances.

Default Speed Settings

The default maximum speed settings for the **eTUATARA** on level terrain are as follows:

Low ratio (Forward) – 20kph;

Low ratio (Reverse) – 10kph;

High ratio (Forward) – 40kph;

High ratio (Reverse) – 15kph;

Drive Selector

The **eTUATARA** UTV is equipped with a drive selector to the right of the steering wheel – see **Figure 15** below. The drive selector has three positions – **Drive**, **Neutral** and **Reverse**. Before selecting Drive or Reverse, the **eTUATARA** UTV must first be brought to a complete stop. Failure to do so may result in damage to the transmission. It is also a good practice to apply the footbrake before moving the drive selector. Once the drive has been selected, the accelerator pedal may be depressed to move the **eTUATARA** UTV either forward or backward.



Figure 15

Primary Lithium Battery Packs

E1500/2 - 12kwh

The **eTUATARA** UTV 1500/2 is fitted with a lithium iron phosphate battery pack, mounted under the passenger seat. See **Figure 16** below. The battery pack is housed in waterproof heavy duty case. It has been fully sealed and opening it is forbidden. If the seal is broken and the battery pack is opened, the warranty will be immediately voided.



Figure 16

E1500/3 – 21kwh

The **eTUATARA** UTV 1500/3 is fitted with two lithium iron battery packs, mounted under the driver and passenger seat. See **Figure 17** below. The battery packs are housed in waterproof heavy duty cases. They have been fully sealed and opening it is forbidden. If the battery packs are opened, the warranty will be immediately voided.



Figure 17

Secondary 12V Lead Acid Battery

The **eTUATARA** UTV is also fitted with a 12 volt lead acid secondary battery (see **Figure 18** below). The electrical componentry on the **eTUATARA** UTV operates a standard 12 volt system and this is supplied by the secondary battery. Charging of the secondary battery is accomplished via the primary battery through a DC to DC converter. It is important to check that the charging circuit is operating correctly as part of the start-up process. This can be achieved by checking the V.IN voltage readout (see **Figure 8 – C** on the Primary Instrument Gauge). When the ignition key is first turned to the “ON” position, the voltage reading should be no less than 13 volts. If it is below this level, this indicates that the secondary battery is not being recharged and the battery may discharge to a level where the **eTUATARA** UTV will not continue to operate. Note that this check should only be carried out on initial startup before the transmission is engaged and the vehicle is moving forward or reversing. Once the **eTUATARA** UTV is being driven, the V.IN voltage will drop below 13 volts and this is completely normal. However, if V.IN voltage is below 13 volts on initial startup, this needs to be reported to your Tuatara dealer for corrective action to be taken. **It is also a good practice to undertake a top-up charge of the secondary battery on a monthly basis with a standard 12 volt charger. This can be undertaken in parallel with the charging of the primary battery.**



Figure 18

Steering Column Height Adjuster

The **eTUATARA** UTV is fitted with a pneumatic strut that allows the steering column height to be adjusted for individual preference. Simply press down on the lever (see **Figure 19 - A** below and move the steering wheel up or down to your requirements. Then release the lever and the steering column will be locked in your selected position.

Figure 19

A = Steering column release lever.



Seat Belts

The **eTUATARA** UTV is equipped with retractable sash type seat belts for the driver and passengers – see **Figure 19** below. It is anticipated that the UTV will be operated on uneven ground and in circumstances where passengers may be at increased risk of injury or even death if the vehicle is involved in a collision with a solid object or experiences a rollover. For this reason, seatbelts **must be worn at all times**.



*Figure
Figure 20*



19



Figure 21

The procedure for the correct fitment of your seat belt is as follows (see **Figures 19 – 21** above):

1. From a seated position, extend the seatbelt by pulling it from the retractor and draw it across your abdomen and insert the latch **(A)** into the latch receiver **(B)**, making sure that the belt is not twisted and is not obstructed by any part of the vehicle, your clothing, or any equipment that you are carrying.
2. Pull on the latch to ensure that it is in the locked in the latch receiver. Also tug on the belt and pull it quickly forward to ensure that the belt will hold firm in the event of a sudden stop of the vehicle.
3. To release the seatbelt, simply press the Red Button **(B)** and pull on seatbelt latch.
4. Note – the drivers latch is wired to ignition. The vehicle will not drive without the seatbelt correctly latched.

5. Primary Battery Charging Procedure

Before operating your **eTUATARA** for the first time, check the State of Charge (SOC) of the primary battery by turning the ignition key to the “ON” position and the reading the main instrument gauge (Figure 8 – **O**).

If the charge is less than 100%, you may wish to charge it to full capacity. This can be achieved by plugging the supplied charger cable (see **Figure 22** below) into a suitable power supply. The power connector plug on the charger cable is either **10 or 15 amp**, three pin, single phase plug connector – see **Figure 23** below. It is plugged into a wall mounted, female, mains connected power socket – see **Figure 24** below.

Figure 23



Figure 22

Figure 24

Once the charger cable is connected to the mains supply, the other end (ie. the Charge Gun) is connected to the OBC (On Board Charger) socket, which is mounted on the black plastic shrouding immediately to the left of the driver's seat – see **Figure 25**. To connect the charger cable, simply lift the spring-loaded cover on the OBC socket and align the Charge Gun (see **Figure 26** below) with the male post terminals on the OBC socket. Press the white button on the Charge gun, push the Charge Gun fully home and release the button. This will lock the Charge Gun in position. The electricity supply may now be turned on at the wall supply, and charging of the primary battery will now commence.



← Figure 25



Figure 26 →

Confirmation that the charging process is proceeding normally can be confirmed by raising the rear cargo deck and examining the OBC, which is mounted under the middle passengers seat – see **Figure 27** below. The sound of the OBC cooling fan operating should be apparent and a red flashing light will be seen on the righthand corner of the rear of the OBC. The colour of the light will change to a constant green once the battery is fully charged. The light will extinguish over time and the cooling fan on the OBC will also stop. A full outline of the charging process warning light indicators is outlined in the table displayed at **Figure 28** below. Charging can be undertaken with the ignition on or off but it is necessary to turn it on to monitor the

SOC (ie. State Of Charge) reading on the primary instrument gauge. Continue charging until the SOC reads 100% and the OBC cooling fan is no longer operating. If the cooling fan is still operating, even if the SOC is displaying 100%, this indicates that some of the battery cells within the battery pack may not yet be fully charged.

Continuing to charge until the fan stops operating will ensure that all cells are fully balanced and will prolong the life of the battery pack. Once charging is completed, removal of the Charge Gun is the reverse of the installation process.

Figure 27



OBC Charging Process Warning Light Indicators	
Serious battery depletion	Red (3 flashes)
Battery level below 80%	Red (Single flash)
Battery level 80%-90%	Yellow (Single flash)
Battery level 90%-100%	Green (Single flash)
End of charging process	Green steady light

Figure 28

Note that it is good practice to avoid immediately charging your **eTUATARA** UTV following a particularly rigorous drive. Give the primary battery a chance to cool down first. Also don't charge the battery in direct sunlight or in a hot environment. Charging should be done in the shelter of a garage or shed or in a shaded area. Charging once a day, preferably overnight, is the preferred option and will provide the best battery longevity.

Once the primary battery is fully charged, turn the ignition key to the start position and note the V.IN (ie. voltage in) reading on the primary gauge. This should read at least 13V to confirm that the charging circuit to the secondary battery is operating correctly.

It is highly recommended, for the sake of the longevity of the primary battery, that it is **not discharged beyond 20% SOC.**

6. Driving Procedure

Once the battery is fully charged, the **eTUATARA** UTV may now be driven. The operator, and any passengers, must first put on their seat belt(s) in accordance with **Figure 20** above. The operator then applies holding pressure to the foot brake pedal, turns the ignition key to the "On" position (see **Figure 7** above), selects either High or Low ratio gear (see **Figure 14** above), then selects either **Drive** or **Reverse**, releases the foot brake while applying gradual pressure to the accelerator pedal to move the **eTUATARA** UTV either forward or backward. The operator must thoroughly familiarise himself / herself with the handling capabilities of the **eTUATARA** UTV before travelling at speed and or negotiating steep and / or demanding terrain.



WARNING

- Before starting the electric motor, ensure that the driver is seated correctly and that their seatbelt is fitted and firmly fastened.
- A new operator must first familiarise his / her self with the controls as well as the handling capabilities of the **eTUATARA** UTV by first testing it on open and level terrain.
- Operate your vehicle slowly until you are confident that you have the ability to operate it safely at a faster speed.
- Remember that centrifugal force is very high when turning the UTV at high speed. Slow down to a more controllable speed when turning to prevent a rollover.



WARNING

Never change between high or low ratio, or low to high ratio without coming to a complete stop and selecting neutral.

Motor Stopping Procedure

1. It is strongly recommended that the vehicle be brought to a complete stop before shutting off the motor.
2. Ensure that the gearshift lever is in the neutral position.
3. Engage the handbrake.
4. Turn the key anti-clockwise to the “Off” position to stop the motor.

CAUTION!

- **Don’t attempt to start or operate the motor until completely familiar with all of the instruments and controls necessary to operate this vehicle. The operator must know how to stop the eTUATARA UTV before starting and driving.**
- **Prior to starting the motor, check that the throttle pedal functions correctly when the pedal is depressed and released. Do not operate the vehicle if a fault is detected.**
- **Engage the handbrake before starting the motor and ensure that the gear shift lever (see *Figure 13*) and the drive selector lever (see *Figure 14*) are both in the neutral position.**
- **Turn the ignition switch to the “On” position (see *Figure 7* above) and move the gear shift lever to either the H or L position and the drive selector lever to either D or R.**
- **The handbrake may now be released and pressure applied to the accelerator pedal to move the eTUATARA UTV either forward or reverse.**

Enclosed Cabin

This model Tuatara UTV has the ability to install a modular fully enclosed cabin, which is in addition to our standard configuration and comprises the following items:

- (a) Glass windscreen with wiper and wash bottle. The windscreen has a central lever that locks it closed against the ROPS frame but the lever can also be repositioned to allow the windscreen to be held in vented position so that it is open approximately 5 cm. to allow air to circulate within the cabin while the Tuatara UTV is in motion – see **Figure 29** below. The windscreen can also be opened to a near horizontal position where it is supported by two pneumatic struts – see **Figure 30** below. However, it is not recommended that the Tuatara UTV is operated with windscreen in its fully opened position as flexing caused by travelling over undulating terrain may result in damage to the windscreen including breakage of the glass. **The windscreen should only be fully opened when the Tuatara UTV is in a stationary position.**
- (b) Full length doors with a sliding windows and door locks. The structure comprises a steel tubular frame with a clear, hardened polycarbonate skin that gives excellent viewing for the operator and passenger – see **Figure 31** below. However, operators should consider that hardened polycarbonate is very strong but it's also brittle.



Figure 29

Windscreen in the vented position & with
wiper retracted



Figure 30



Figure 31

Full length door in the open position

For this reason, it is NOT recommended that the doors are “slammed” shut as this is likely to cause cracking of the polycarbonate around the door striker area. The correct procedure for closing the door is to keep hold of the door handle during the closing process, and once the door latch makes contact with the striker, firmly push the door latch against the striker and release the hand only when the door is fully closed. This will avoid damage to the polycarbonate.

- (c) Rear passenger cabin rear enclosure with window – see **Figure 32** below. The enclosure is fabricated of light weight steel and completes the full enclosure of the cabin, providing excellent protection from the elements during wintertime or inclement weather. The cabin is modular, so any of the components can be relatively easily removed for summertime use for example.



Figure 32

Tuatara 1500E with rear passenger enclosure fitted

7. Primary Maintenance and Service

Transmission Oil Level – Checking / Replacing

It is essential that the transmission oil level of the **eTUATARA UTV** is checked regularly and replaced as required in accordance with the **Preventative Maintenance & Service Log** – see Page 54 of this Manual. To check the oil level, locate the transmission on the front of the electric motor (**Figure 33** below) and remove the oil filler plug. Confirm that the oil level is level with the bottom of the oil filler plug. If not, top it up. Also check the condition of fibre sealing washers on both the filler plug and the drain plug as well as any seals between the transmission and the electric motor. If the washers or sealing gaskets are damaged and / or leaking, they must be replaced.

Figure 33



Transmission Oil Replacement Procedure

You must replace the transmission oil after the first 50 hours of operating of your new **eTUATARA** UTV and after 200 hours or 3000 kilometres of use thereafter, whichever first occurs. This will ensure proper lubrication of internal parts and prevent costly repairs due to excessive wear.

The replacement procedure is as follows:

1. Park the vehicle on the level ground.
2. Stop the motor. Remove the drain plug (see **Figure 33** above) and allow all oil to drain from the transmission.
3. Clean the drain plug and reinstall it in the base of the transmission, making sure not to over tighten it.
4. Fill with 800 mls. of Fully Synthetic 75W-140 Gear Oil. Check for leaks.

Differential Oil Level – Checking / Replacing

The **eTUATARA** UTV is fitted with a front and a rear differential. To check the oil level, remove the oil drain plug – see **Figure 34** below, and confirm that the oil level is slightly lower than the level of the filler hole. If the oil level is below the recommended level, top it up to the correct level. Also check the condition of the oil. In particular, note any changes to the colour of the oil. If it appears “milky” or brown in colour, the oil should be replaced.

Also check the oil breather tube to ensure that it is not cracked or damaged and that it is not obstructed. If oil is expelling from the breather tube once the differential has warmed, check to ensure that the differential has not been over-filled. And if the differential has been submerged, while travelling through water, it is recommended that the oil be checked to ensure that water has not entered through the breather tube. Water will compromise the lubricating properties of the oil and can result in serious damage to the differential.

Differential Oil Replacement Procedure

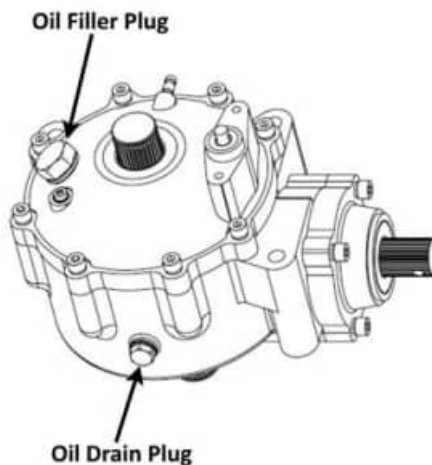
You must change the oil in both differentials in accordance with the intervals as indicated in the **Preventative Maintenance & Service Log** at **Page 54** of this manual.

Complying with this requirement will ensure proper lubrication of internal parts and prevent costly repairs due to excessive wear.

The replacement procedure is as follows:

1. Park the vehicle on the level ground.
2. Stop the motor. Remove the drain plug (see **Figure 34** below) and allow all oil to drain from the differential.
3. Clean the drain plug and reinstall it, making sure not to over tighten it.
4. Fill with **850mls.** (ie. rear differential) and **400mls.** (ie. front differential) of 75W-140 Fully Synthetic Oil. Check for leaks.

Figure 34



Cooling System Checking

The cooling system comprises a front mounted radiator with a thermostatically controlled, shrouded, cooling fan and an electric water pump that circulates the coolant between the 15 kW primary motor and the radiator. The fan operates once the coolant reaches 65°C and will turn off again once the temperature drops below this level.

The procedure for checking the cooling system is as follows:

1. Park the vehicle on a level surface.
2. Once the top of the radiator is cool to touch, remove the radiator cap – see **Figure 35** below, and check the coolant level. Remove the cap carefully as the cooling system may be pressurised and it may be necessary to slowly remove the cap so that the pressure can be completely relieved before the cap is actually removed.
3. The coolant level should be approximately 20mm. below the base of the filler spout. If it is below this level, add coolant to restore it to the maximum level. Monitor the level on at least a weekly basis to ensure that coolant is not being regularly lost. If this is the case, check the entire cooling system for leaks. Also check the radiator cap to ensure that the rubber sealing rings are in good condition with no evidence of wear that could lead to coolant leak. Repair any leaks that are found.

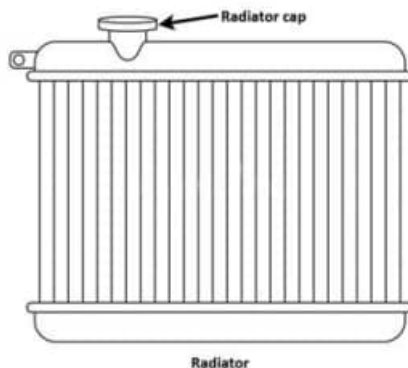


Figure 35



WARNING

- Removing the radiator cap while the motor is hot risks serious scalding.
- Avoid direct skin contact with coolant as this could be hazardous to your health. Wear waterproof gloves at all times while handling coolant, and wash any skin with soap and water that does come in contact with coolant.
- Properly dispose of any used coolant.

Brake Fluid Checking

The brake fluid reservoir can be found beneath the front cargo tray, mounted in the cross-member immediately behind the radiator - see **Figure 36**. Unscrew the cap from the reservoir and check the brake fluid level each day before operating the eTuatara. The level should be approximately 5mm. from the base of the filler spout. Top-up with high quality DOT 4 brake fluid as required.

Windscreen Washer Reservoir

The windscreen washer reservoir can also be found mounted on the cross-member immediately behind the radiator assembly - see **Figure 36**. Top-up the washer fluid as and when necessary.



Figure 36

Hand Brake Adjustment

Over time and use, the hand brake cable may stretch and / or need adjustment. Access to the adjustment mechanism is achieved by elevating the rear cargo deck. The mechanism is mounted on the left side of the sub-chassis – see **Figure 37** below

A = Handbrake primary adjustment nut;

B = Handbrake equalizer;

C = Left handbrake cable - secondary adjustment nut;

D = Right handbrake cable - secondary adjustment nut;



Figure 37

Drive the vehicle on to level ground and move the Gearshift Lever (**Figure 14**) and the Drive Select Lever (**Figure 15**) into the neutral position. Then jack the rear wheels off the ground and disengage the handbrake. Remove any free play in the handbrake cables by first loosening the lock nut at **A** above (ie. smaller of the two nuts) and then turn the adjuster nut in a clockwise direction until all free play has been removed. Rotate both rear wheels in turn to ensure that they turn freely without any resistance. If resistance only exists on one wheel, adjust the secondary adjustment nut on the side that the resistance is occurring until the situation is corrected. Retighten the lock nuts on both the primary and secondary adjustment nuts and test the handbrake operation. Move the handbrake approximately four clicks and rotate the rear wheels. It should not be possible to rotate the wheels manually. The handbrake is now correctly adjusted. Lower the wheels to the ground and test run the vehicle to confirm that the handbrake is operating correctly.

Greasing

The **eTUATARA** UTV needs to have its Suspension points, Tipper back tray hinge, and Front Drive shaft, centre moving spline joint, greased and checked on a regular basis, to prevent premature wear of these shafts.

There are 2 grease nipples at the top and bottom of the front suspension on each side of the UTV. See **Figure 38** below. (looking down from top)

There are 2 grease nipples at the top and bottom, on the outside, of the back suspension on each side of the UTV. See **Figure 39** Below.

There are 3 grease nipples in the inside of the back suspension on each side of the UTV. See **Figure 40** below



Figure 38.



Figure 39.



Figure 40.

The electric back tipper tray, also has 2 grease nipples on the hinge pins, these will need greasing at much lower frequency, and the front drive shaft is two piece shaft with a mid point spline to allow for movement. It is good practice to keep this spline greased when completing the scheduled maintenance services.

8.Preventive Maintenance and Service Log

The following pages contain your vehicle **Preventive Maintenance and Service Log**. It is recommended that you review this checklist with your Dealer at the time of your purchase. You should return your vehicle to your Dealer for service as recommended below. If you choose to service your vehicle yourself, keep accurate records of the service activities. Failure to do so may void your warranty. If you require technical assistance you can call or email your Authorized Distributor for further Technical Support.

Preventative Maintenance & Service Log

Page 1 of 3	Operators Responsibility		Service Provider		
COMPONENT	Daily	Weekly	First 50hrs or 1000km	200hrs or 3000km	400hrs or 6000km
ELECTRIC MOTOR					
1. Check electrical connections	I	I	I	I	I
2. Motor mounts		I	T	I	T
TRANSMISSION					
3. Transmission oil level - Leaks	I	I	I/R	I	I/R
4. Gear shift cable & mounts			I/A	I	I/A
5. Transmission function		I	I	I	I
6. Transmission breather tube			I	I	I
7. All nuts & bolts		I/T	I/T	I/T	I/T
COOLING SYSTEM					
8. Radiator	I/C	I/C	I/C	I/C	I/C
9. Radiator coolant leaks - Level	I	I/A	I/A	I/A	I/A
10. Radiator cap		I	I	I	I
11. Radiator hoses & clamps		I	I/T	I/T	I/T
12. Coolant - Anti freeze	Replace every 2 years				
13. Thermo fan		I	I	I	I
14. Radiator mounting bolts			I/T	I/T	I/T
15. All nuts & bolts		I/T	I/T	I/T	I/T
DRIVE TRAIN					
16. Front differential oil level - Leaks	I	I	I/R	I	I/R
17. Rear differential oil level - Leaks	I	I	I/R	I	I/R
18. Axles		I	I	I	I
19. CV joints & boots	I	I	I	I	I
20. Drive shafts		I	I/L/T	I/L	I/L/T
21. Wheel bearings		I	I	I	I
22. Oil seals	I	I	I	I	I
23. Differential cables			I	I	I
24. Differential breathers			I	I	I
25. Ball joints		I	I	I	I
26. Wheel nuts	I	I/T	I/T	I/T	I/T
27. All nuts & bolts		I/T	I/T	I/T	I/T

I = Inspect, C = Clean, L = Lubricate, R = Replace, T = Tighten, A = Adjust

Preventative Maintenance & Service Log

Page 2 of 3	Operators Responsibility		Service Provider		
COMPONENT	Daily	Weekly	First 50hrs or 1000km	200hrs or 3000km	400hrs or 6000km
BRAKING SYSTEM					
28. Brake fluid leaks – Level	I	I/A	I/A	I/A	I/A
29. Brake fluid	Replace every 2 years				
30. Brake pads		I	I	I	I
31. Brake rotors			I	I	I
32. Brake calipers			I	I	I
33. Master cylinder		I	I	I	I
34. Brake lines		I	I	I	I
35. Brake pedal	I	I/A	I/A	I/A	I/A
36. Handbrake	I	I/A	I/A	I/A	I/A
37. Brake pedal lock	I	I/A	I/A	I/A	I/A
38. All nuts & bolts		I/T	I/T	I/T	I/T
SUSPENSION					
39. Tyres condition – Pressures	I/A	I/A	I/A	I/A	I/A
40. A-Arms		I	I	I	I
41. Ball joints		I	I	I	I
42. Front suspension struts	I	I	I	I	I
43. Rear suspension springs/shocks	I	I	I	I	I
44. All suspension bushes		I	I/L	I/L	I/L
45. All nuts & bolts		I/T	I/T	I/T	I/T
ELECTRICAL SYSTEM					
46. Primary battery		I	I	I	I
47. Secondary battery (12v)		I	I	I	I
48. MCC (Motor Controller)			I	I	I
49. OBC (Onboard Charger)			I	I	I
50. Instruments/Gauges	I	I	I	I	I
51. Switches and connectors	I	I	I	I	I
52. Lights	I	I	I	I	I
53. Horn	I	I	I	I	I
54. All safety devices and switches	I	I	I	I	I
55. All nuts & bolts		I/T	I/T	I/T	I/T

I = Inspect, C = Clean, L = Lubricate, R = Replace, T = Tighten, A = Adjust

Preventative Maintenance & Service Log

Page 3 of 3	Operators Responsibility		Service Provider		
COMPONENT	Daily	Weekly	First 50hrs or 1000km	200hrs or 3000km	400hrs or 6000km
STEERING					
56. Steering shaft universal		I	I	I	I
57. Power steering motor		I	I	I	I
58. Tie rod ends		I	I	I	I
59. Steering rack		I	I	I	I
60. Steering rack boots		I	I	I	I
61. All nuts & bolts		I/T	I/T	I/T	I/T
FRAME					
62. Welds			I	I	I
63. ROPS bolts		I/T	I/T	I/T	I/T
64. Skid plates		I/T	I/T	I/T	I/T
65. Winch mount			I/T	I/T	I/T
66. Tow bar mount		I/T	I/T	I/T	I/T
67. Seat belt condition & operation	I	I	I	I	I
68. Seat belt mounts & bolts	I	I	I	I	I
69. Cargo tray hoist mounts		I	I	I	I
70. All nuts & bolts		I/T	I/T	I/T	I/T
I = Inspect, C = Clean, L = Lubricate, R = Replace, T = Tighten, A = Adjust					
NOTE - In extreme conditions, service schedules must be halved.					
(ie. 200hr interval becomes every 100hrs and 400hr interval becomes every 200hrs.)					
Extreme conditions includes - Constant muddy, dusty or extreme heat conditions.					

8. Warranty

As the UTV owner, you are responsible for the performance of the required maintenance listed in your Owner's Manual. **TUATARA** recommends that all receipts covering maintenance on a UTV are kept, but **TUATARA** will not deny warranty solely for the lack of receipts or for failure to ensure the performance of all scheduled maintenance.

You are responsible for presenting your UTV to the **TUATARA** Distributor or Dealer or an authorised repairer as soon as a problem exists. The warranty repairs should be completed within a reasonable time not exceeding 30 days. As the UTV owner, you should be aware that **TUATARA** may deny warranty coverage if the UTV or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

If you use your vehicle in any type of competitive event, this warranty is immediately and completely void. If you have any questions regarding your warranty rights and responsibilities, you should contact: **TUATARA** or one of its Authorised Distributors.

Limited Manufacturer's Vehicle Warranty

The manufacturer hereby warrants that all new **eTUATARA** 1500E UTVs purchased from an authorised **TUATARA** dealer will be free from defects in material and workmanship for the period of time stated herein, subject to certain stated limitations. However, no warranty will apply to the purchase of a **eTUATARA** UTV from a non-authorised **TUATARA** dealer.

Warranty & Quality Assurance:

The **eTUATARA** UTV is warranted to be free from defects in materials and workmanship for a period of **one year** or **800 hours** or **8,000 kilometres** of operation, whichever first occurs, from the date of purchase by the customer. In the event of any material defect or component failure occurring within the warranty period, the customer must contact the **TUATARA** Dealer from which the machine was purchased to confirm acceptance of the warranty claim.

During the Period of the Warranty

Any authorised **TUATARA** dealer will evaluate, repair or replace any part adjudged defective by **TUATARA** due to faulty workmanship or material from the factory. Parts used in warranty repairs will be warranted for the balance of the product's warranty period. All parts replaced under warranty become the property of **TUATARA**. The warranty will cover defective parts and their replacement. The warranty does not cover any cost associated with the removal and / or installation of any defective part, nor any transport charges with the delivery of the **eTUATARA** UTV to a place of repair or for the cost of travel by a serviceman to affect repairs. The warranty also does not cover any freight costs associated with the delivery of replacement parts under this warranty.

General Exclusions

Any use of the **TUATARA** UTV in the following circumstances and / or activities will result in the complete voidance of the warranty cover:

1. Competition or racing use.
2. Installation of parts or accessories that are not qualitatively equivalent to genuine **TUATARA** parts.
3. Abnormal strain, neglect, or abuse.
4. Lack of proper maintenance.
5. Accident or collision damage.
6. Modification of original parts.
7. Modification of original design.
8. Discharging the lithium battery below 10% SOC.
9. Repeatedly discharging the lithium battery at a discharge rate above the maximum specified rate for the battery fitted to the operator's **eTUATARA**.
10. Failure to operate the **TUATARA** UTV in a reasonable manner that would likely avoid damage to the UTV and / or unnecessary strain or wear to any of the components.

11. Operating the UTV in water that is more than 300mm deep.
12. Operating the UTV at any time in salt water.
13. “Jumping” the UTV in any manner.
14. Failure to operate the UTV in compliance with all applicable laws and safety regulations.
15. Materially altering the UTV in any manner.
16. Installing additional seating.
17. Failure to regularly check the tightness and integrity of all bolts and nuts.
18. Failure to properly clean and remove any corrosive material after use of the UTV and / or before any new use.

Warranty Repairs & Servicing:

In order to validate the warranty offered by **TUATARA** all UTVs must be serviced in strict accordance with the **Preventative Maintenance & Service Log** as outlined in this manual. And any warranty claims must first be assessed by the **TUATARA** dealer from where the UTV was purchased or by an authorised repairer authorised by Tuatara. It will also be permissible for UTV owners to undertake some servicing and repairs themselves in circumstances where they possess the necessary competence and facilities to undertake the work themselves. In such circumstances, the UTV owner must first nominate a preferred serviceman, who must be a qualified motor mechanic, and who must first complete and return a **TUATARA NOMINATED SERVICEMAN DECLARATION** (ie. see *APPENDIX A*). The completed Tuatara Nominated Serviceman Declaration will be considered by **TUATARA**, and once approved, the UTV owner will then be able to arrange his / her own servicing and repairs of their UTV.

Primary Battery Warranty

TUATARA hereby guarantees that the battery pack(s) supplied with its **eTUATARA** UTV will be of high quality and will meet the American UL2580 test standard.

The battery pack(s) is guaranteed for a period of **Three years** or **1000 full charge cycles**, whichever first occurs, from the date of purchase of the **eTUATARA** UTV. In the event that the capacity of a battery pack(s) drops below **70%** of the rated capacity during the warranty period, the battery manufacturer undertakes to repair the battery pack to bring it within the rated capacity or to replace it in the event that a repair can not be achieved.

This warranty is subject to the following exclusions:

1. Any breaking of the battery pack seal without the specific approval of **TUATARA** will result in the immediate voiding of the warranty;
2. Damage caused by exceeding any of the specifications of the battery;
3. Damage caused by abuse of any nature;
4. Damage caused by misuse of any nature;
4. Damage caused by fire or excessive heat unrelated to the battery itself;
5. Damaged caused as a result of a collision, roll-over or submersion of the **eTUATARA** UTV;
6. Damaged cause by force majeure;
7. Failure to comply with the instructions relating to the Primary Battery contained within this Owner's Manual;

TUATARA NOMINATED SERVICEMAN DECLARATION

I, _____,
(Name)

(Address)

TUATARA UTV owner, VIN = _____

Purchase date / /

Wish to undertake some limited repairs and / or servicing myself, namely
the following: _____

The servicing that I wish to undertake will be in strict compliance with the
requirements of the **Preventative Maintenance & Service Log** as detailed in this
User Manual.

(Signature) (Date)

I also wish to nominate the following person / company to undertake repairs and / or servicing on my **TUATARA** UTV, being servicing and / or repairs that I don't have the competence and / or wish to do myself.

Nominated Servicing Person / Company

(Person name / Company name)

(Address)

(Telephone) (Email)

I wish to confirm that I would like to undertake servicing and repairs to the **TUATARA** UTV owned by _____. I am a qualified motor mechanic.

I agree that I will undertake all servicing work in strict accordance with the requirements of the **Preventative Maintenance & Service Log**, a copy of which has been provided to me. I also undertake to complete in full, a **Warranty Claim Form** (ie. see *APPENDIX B*) and forward it to Tuatara Machinery Limited for approval prior to carrying out any warranty repairs on the said **TUATARA** UTV.

I also agree to strictly comply with any credit requirements agreed between myself and Tuatara Machinery Limited in relation to payment for spare parts supplied by Tuatara Machinery Limited for the repair of the said **TUATARA** UTV.

(Signature) (Date)

WARRANTY CLAIM FORM



Date: / /		Repairer / Company Details	
Name:		Address:	Telephone: 1.
			Telephone: 2.
Customer Details			
Name:		Address:	Telephone: 1.
			Telephone: 2.
Vehicle Details			
Chassis No.	Speedo:	km.	Hour metre:
Vehicle Fault Description*			
Replacement Part(s) Required:	Part No(s).	Action Taken	

1. Note that the warranty provided on Tuatara UTVs covers defective parts only and does not extend to labour or travel charges by servicing staff. Before any parts will be supplied under warranty, this Warranty Claim Form must first be fully completed and emailed to info@tuataramachinery.co.nz. A decision as to whether part(s) will be supplied under warranty will be provided by TUATARA MACHINERY LTD in writing. Any parts requested that are not covered by warranty must be paid for in full before dispatch.

TUATARA SERVICE RECORDService date: / / Service Interval: **50hrs. or 1,000kms.**

Model: _____ Motor No: _____

Chassis No: _____ Hours: _____ Kms: _____

Owner: _____

Address: _____

Tel. _____ Email: _____

Component	Code(s) *	Customer / Serviceman initials
Transmission oil	RC	
Differential oil	RC	
Radiator Coolant level	LF	
Coolant hoses & clamps	TA	
CV Joints & boots	IC	
Wheel bearings	TA / LF	
Oil seals	IC	
Ball joints	IC / TA	
Wheel nuts	TA	
Brake fluid level	LF	
Suspension bushes	TA / LF	
Secondary battery (12V)	IC / LF	
All nuts & bolts	TA	

***Codes: IC=Inspect & clean, TA=Tighten & adjust as required, LF=Lubricate &/or refill; RC=Replace/change**

Servicing undertaken by: _____ (Name)
Company: _____ (Name)
Address: _____
Telephone: _____

Signed: _____

WARRANTY VALIDATION

Note that in order to validate the **TUATARA** Warranty, all of the actions referred to in the Preventative Maintenance & Service Log recorded in the **TUATARA** User Manual must be undertaken at the required intervals. In addition, the applicable Tuatara Service Record must be completed and emailed to:

craig@tuatarautv.au

TUATARA SERVICE RECORD

Service date: / / Service Interval: **200hrs. or 3,000kms.**

Model: _____ Motor No: _____

Chassis No: _____ Hours: _____ Kms: _____

Owner: _____

Address: _____

Tel. _____ Email: _____

Component	Code(s)*	Customer / Serviceman initials
Transmission oil	LF	
Differential oil	LF	
Radiator Coolant level	LF	
Coolant hoses & clamps	TA	
CV Joints & boots	IC	
Wheel bearings	TA / LF	
Oil seals	IC	
Ball joints	IC / TA	
Wheel nuts	TA	
Brake fluid level	LF	
Suspension bushes	TA / LF	
Secondary battery (12V)	IC / LF	
All nuts & bolts	TA	

***Codes: IC=Inspect & clean, TA=Tighten & adjust as required, LF=Lubricate &/or refill; RC=Replace/change**

Servicing undertaken by: _____ (Name)
Company: _____ (Name)
Address: _____
Telephone: _____

Signed: _____

WARRANTY VALIDATION

Note that in order to validate the **TUATARA** Warranty, all of the actions referred to in the Preventative Maintenance & Service Log recorded in the **TUATARA** User Manual must be undertaken at the required intervals. In addition, the applicable Tuatara Service Record must be completed and emailed to:

craig@tuatarautv.au

TUATARA SERVICE RECORD

Service date: / / Service Interval: **400hrs. or 6,000kms.**

Model: _____ Motor No: _____

Chassis No: _____ Hours: _____ Kms: _____

Owner: _____

Address: _____

Tel. _____ Email: _____

Component	Code(s)*	Customer / Serviceman initials
Transmission oil	LF	
Differential oil	LF	
Radiator coolant level	LF	
Coolant hoses & clamps	TA	
CV Joints & boots	IC	
Wheel bearings	TA / LF	
Oil seals	IC	
Ball joints	IC / TA	
Wheel nuts	TA	
Brake fluid level	LF	
Suspension bushes	TA / LF	
Secondary battery (12V)	IC / LF	
All nuts & bolts	TA	

***Codes: IC=Inspect & clean, TA=Tighten & adjust as required, LF=Lubricate &/or refill; RC=Replace/change**

Servicing undertaken by: _____ (Name)
Company: _____ (Name)
Address: _____
Telephone: _____

Signed: _____

WARRANTY VALIDATION

Note that in order to validate the **TUATARA** Warranty, all of the actions referred to in the Preventative Maintenance & Service Log recorded in the **TUATARA** User Manual must be undertaken at the required intervals. In addition, the applicable Tuatara Service Record must be completed and emailed to:

craig@tuatarautv.au

TUATARA SERVICE RECORD

Service date: / / Service Interval: **600hrs. or 9,000kms.**

Model: _____ Motor No: _____

Chassis No: _____ Hours: _____ Kms: _____

Owner: _____

Address: _____

Tel. _____ Email: _____

Component	Code(s)*	Customer / Serviceman initials
Transmission oil	LF	
Differential oil	LF	
Radiator coolant level	LF	
Coolant hoses & clamps	TA	
CV Joints & boots	IC	
Wheel bearings	TA / LF	
Oil seals	IC	
Ball joints	IC / TA	
Wheel nuts	TA	
Brake fluid level	LF	
Suspension bushes	TA / LF	
Secondary battery (12V)	IC / LF	
All nuts & bolts	TA	

***Codes: IC=Inspect & clean, TA=Tighten & adjust as required, LF=Lubricate &/or refill; RC=Replace/change**

Servicing undertaken by: _____ (Name)
Company: _____ (Name)
Address: _____
Telephone: _____

Signed: _____

WARRANTY VALIDATION

Note that in order to validate the **TUATARA** Warranty, all of the actions referred to in the Preventative Maintenance & Service Log recorded in the **TUATARA** User Manual must be undertaken at the required intervals. In addition, the applicable Tuatara Service Record must be completed and emailed to:

craig@tuatarautv.au