Chapter A

General information

A.1 Safety

ALWAYS READ THE WORKSHOP MANUAL BEFORE THE WORK IS STARTED!

A.1.1 Triggering factors

Electrical accidents are usually caused by one or several of the reasons below:
- Defects on equipment or installation
- Not properly secured workstations
- Human being errors

This is why it is important that you read and act according to the safety rules below when working on electrical vehicles.

A.1.2 Safety rules

Specific

- Never work on the car when it is charging.
- Disconnect the batteries, both the 12V and the traction battery before work on the energy components is started.
- Only use isolated tools.
- Avoid working on components with power connected if possible.
- Always wait 60 secunds after the ignition is turned off to be sure the capacitors are discharged.
- Never assume a circuit is open; check!
- Check grounding, isolation (for damages, naked copper) and contactors.
- Do not use adapters ”disabling” ground.
- Perform the work with only one hand if possible.
- Avoid sparks or flames close to the batteries. This is very important when charging.
- Smoking or using electrical tools are not allowed near the batteries.
- Wear safety glasses and gloves when working with batteries.
- Remove jewelry (including piercing) and similar metal or other leading objects.
- Use dry clothes of materials not making static electricity.
- Do not work alone.

General

- Provide the working environment is organized for the work to be executed.
- Always use proper equipment and ensure the equipment is in good condition.
- Do not work if you are tired or are taking medicine make you feeling tired.

A.1.3 Marking of the workstation

When charging in the workshop a safety zone must be established.

A.1.4 Danger with high voltages

Electrical shock

- *Muscle cramps or locking of the mucles can make it impossible to release when holding something or the pector muscle can be paralysed making breeding difficult or impossible.*
- *Fibrillation or disturbacxe of the heart rate* can cause heart stoppage.
- *Body damages like burns.*

Do not directly touch a person who has had electrical shock, he/she can still be contain electricity.

Susceptible to electrical shock vary from person to person. For example hands with moisture increase the danger. See also safety rules.

Flame arc

Flame arcs are en electrical discharge over a circuit gap. The flame arc's temperature is extremely high and can result in damaged isolation, melting capacitors and evaporating of metal!

Shock wave

If the flame arch for example evaporate close to copper the sudden increase in volume of the copper can result in a shock wave.

A.2 Car identification

The car's chassis number (VIN) is stamped in the floor under the passenger seat (right side of the car).

Move the seat forward. Below the seat you'll find a small flap that can be opened. The VIN will now be visible.

You will also find the VIN in the windscreen, in the bottom left corner…..

and on a label on the frame in the motor room.

The VIN can also be read from some of the electrical components.

Several electrical components store the history and other information about the components and the car.To get access to this information a diagnostic tool must be connected. Look in separate handbook/chapter regarding how to use the diagnostic tool and how to read the information.

VIN (Vehicle Identification Number) will typical look like this:
YYCFT26B08J123456 - numbers and characters have different codes according to their position:

POS		Explanation	VIN *
1		Think Global	Y
2		International	Y
3		code	C
4	A	Safety equipment	F
5	A	Market sold to	T
6	N	Body type	2
7	N		6
8	N eller A	Motor and drivetrain	B
9	N eller A	Check digit	0
10	N eller A	Model year	8
11		Plant	J
12	N	Serial number	1
13	N		2
14	N		3
15	N		4
16	N		5
17	N		6 *

A = Alphabetic
N = Numeric
= SAME ON ALL CARS

Front lifting point

A.3 Jacking and lifting

When jacking and lifting the car the foru lifting points must be used:

Front lifting points: Front part of the frame along the edge (picture). The same on the opposite side.

Rear lifting point

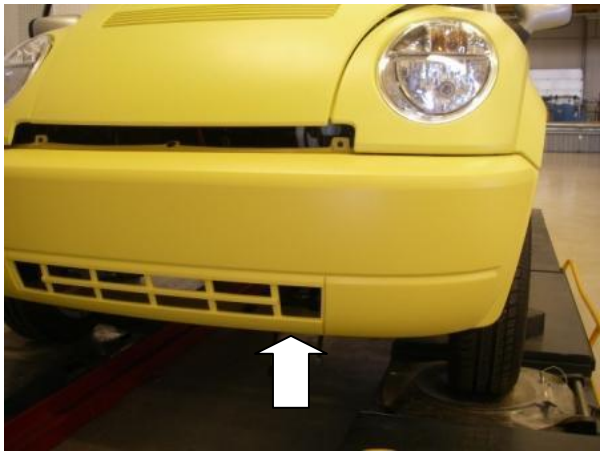
Rear lifting ponts: The front anchor point for the rear suspension. The same on the opposite side.

Rear lifting point when replacing the rear suspension

Rear lifting point when replacing the rear suspension: Rear part of the frame along the edge. The same on the opposite side.

Rear lifting point when replacing the battery tray

Rear lifting point when replacing the battery: On the damper fastening on the control arm ensuring enough space for the battery tray when the tray is lowered. The same on the opposite side.



A.4 Towing

The car has a hook for towing in the front (picture).

IMPORTANT: When towing the gearshift must be in neutral position (position N).

In an emergency the gearshift can be operated like this:

- Remove the gearshift cover.
- Find the switch and push it forward with a screwdriver as indicated in the picture to deactivate the park lock.

The gearshift can then be moved to the desired position.

A.5 Service inspection

A.5.1 General

NOTE that because of regenerating the brakes are not weared as much as in cars with combustion enginges. Because of this it is important to inspect the front brake discs in particular.

Traction battery maintenance depends on the battery model installed.

A.5.2 Every 18. month/20 000 km

The following must be inspected and adjusted every 18. month or after 20 000 driven kilometers (whatever occurs first):

Test drive:
Inspect charging cable and charge inlet
Test drive
Inside the car:
Diagnostic - read data/errors
Check all lights and warning lights
Check all external lights
Check windscreen wiper and washer
Check mirrors - function/damages/regulation
Check windows - electrical windows
Check safety belts - function/wear
Check ventilation and heating
Outside the car:
Check and grease locks and hinges
Check headlamps (glass)
Check under/outside the car:
Tyres - wear/condition/pressure - visual check
Pattern: LF_____ LB_____ RF_____ RB_____
Check brake pads, clean and grease
Check parking brake - function/adjust
Check brake linings/hoses
Check driveshafts and joints
Check suspension, steering, dampers, springs
Check chassis for damages/corrosion protection
Check motor compartment:
Windows wiper fluid - top up
Check all hoses, linings, radiator for leaks
Check anti freeze level and freezing point: _____°C
Check 12V battery – clean
Check brake fluid level
Change pollen filter

A.5.3 Every 36. month/40 000 km

In addition to the work mentioned above
I tillegg til å utføre punktene under avsnittet over (A.5.2) the following must be done every 36. month or every 40 000 driven kilometers whatever occurs first:

In motor compartment:
Replace brake fluid

Replacing brake fluid:
The car is delivered with Valvoline DOT 4 brake fluid. When replacing or topping up always use DOT 4 brake fluid.

A.5.4 Every 54. month/60 000 km

In addition to the work mentioned above (A.5.3) the following must be done every 54. month or every 60 000 driven kilometers whatever occurs first:

Under/outside the car:
Check rear brake linings, clean
Gearbox - change oil
In motor compartment:
Change coolant

Inspection/replacement of rear brake linings
THINK City has brake drums at the rear which ensure long operating time. But after 60 000 kilometers the brake lining wear must be inspected and the brake linings replaced if necessary. After 4,5 years an inspection is necessary regardless of how many kilometers the car has driven.

Replacing gearbox oil
The car is delivered with Valvoline ATF TYPE D/3067 oil. When replacing or topping up always use ATF TYPE D/3067 oil.

Replacing coolant
Because of the low temperatures in the vehicle's cooling system the coolant will have long operating time. To avoid corrosion it should nevertheless be replaced at this interval.