

**create
space**
and never
forget



Trailer

Maintenance instruction

Applied systems



EXPANDABLE
movable spaces

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1. Maintenance intervals

The following sections describe the maintenance schedule for Expandable and supplier produced systems such as SAF, LG and GEZE. This information is intended to give customers a quick insight into the maintenance to be carried out of the various systems built by Expandable b.v and suppliers of Expandable b.v. For carrying out maintenance work, Expandable b.v refer to the documentation of the manufacturers of the products.



The documentation of the products built by suppliers such as SAF, LG and GEZE are always leading. Therefore, always consult the relevant documentation or possibly the website of these brands.

1.1 Periodic maintenance schedule

Carry out the following inspections periodically at the interval mentioned.

Check	Daily/ before each journey	every 5,000 km or two weeks	every 5,000 km or monthly	every 30,000 km or every 3 months	every 60,000 km or every 6 months	every 120,000 km or every 12 months	Every 2 years	Instruction	Responsible Party
Exterior light- ing	X								Driver/operator
Oil level			X					Will be developed	Driver/operator
Slide out sup- port beam				X					Driver/operator
Hydraulic fil- ter						X		Will be developed	Service work- shop
Hydraulic oil							X	Will be developed	Service work- shop
Interior light- ing						X ¹			Service work- shop
Air bags: visual inspec- tion	X								Driver/operator

Check	Daily/ before each journey	every 5,000 km or two weeks	every 5,000 km or monthly	every 30,000 km or every 3 months	every 60,000 km or every 6 months	every 120,000 km or every 12 months	Every 2 years	Instruction	Responsible Party
Brake pads: check thick- ness and con- dition				X				Axle sup- plier web- site.	Service work- shop
Tyres: check pressure		X							Driver/operator
Bleed com- pressed air tank			X						Service work- shop
Shock absorber					X				Service work- shop
5 th wheel unit: check bolt tightness					X			Axle sup- plier web- site.	Service work- shop
Air filter EBS						X		Axle sup- plier web- site.	Service work- shop
Periodic inspection by legislation						X			Service work- shop

Check	Daily/ before each journey	every 5,000 km or two weeks	every 5,000 km or monthly	every 30,000 km or every 3 months	every 60,000 km or every 6 months	every 120,000 km or every 12 months	Every 2 years	Instruction	Responsible Party
All mounted parts on axle: bolt tightness check						X		Axle sup- plier web- site.	Service work- shop
Brake cal- liper: check seals						X		Axle sup- plier web- site.	Service work- shop
Axle fixing: check rubber spring bush- ing						X		Axle sup- plier web- site.	Service work- shop
Braking sys- tem: adjust all brakes						X		Axle sup- plier web- site.	Service work- shop

¹ According to NEN 1010

1.1.1 General and additional information for SAF axles type Z9-3020 AR42148H/4300

Attention: Following a wheel change, tighten all wheel nuts to the prescribed tightening torque after 50 km and after 150 km.

- Check the thickness of the disc brake pad at regular intervals, e.g. when checking the tyre pressure. Minimum wear limits*.
- Perform general visual inspections of the brakes, tyres and all chassis parts and check for fastening, wear, leak tightness, corrosion and damage.
- On each disc brake pad change, perform a visual inspection of the wheel bearing unit to check for escaping grease.
- Check the movement of the brake calliper guide system on each disc brake pad change.
- Check the condition of the outer and inner bellows on the brake calliper for cracks and damage and check the correct seating of the adjuster cover cap on each disc brake pad change.
- Check the brake disc for wear* and crack formation on each disc brake pad change.
- Inspect and, if necessary, adjust the air suspension ride height at regular intervals in accordance with the information from the vehicle manufacturer.
- On MODUL units, check that the screwed connections of U-brackets are tightened to the tightening torques prescribed by the vehicle manufacturer.
- General safety inspection in accordance with the legal regulations.
- We recommend use of genuine spare parts from SAF.
- With steered axles, also observe the corresponding setting instructions.

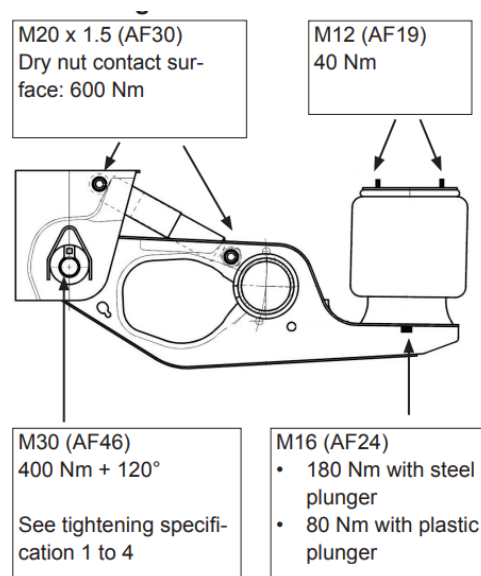
* If the minimum wear limits are reached, we recommend performing a safety inspection.



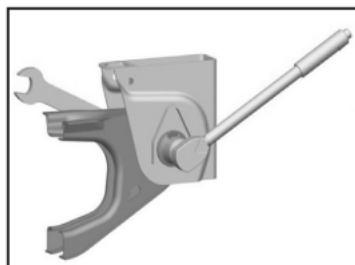
Steel hanger bracket torque

Check	First after 500 km	Every 10.000 km or 6 months
Shock absorber	M20x1.5 600 Nm	M20x1.5 600 Nm
Spring bearing	M30 400 Nm + 120°	M30 400 Nm + 120°
Air bellows	M12 40Nm	M12 40Nm
Steel plunger	180 Nm	180 Nm
Plastic plunger	80 Nm	80 Nm

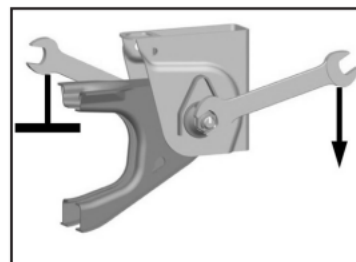
Table 1 Torque tightening specification.



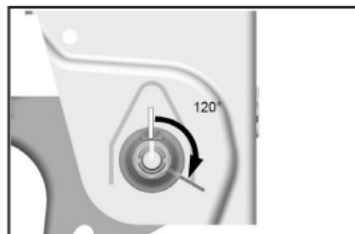
Spring bearing torque specification



1. Pre-tightening
400 Nm



3. Angle tight-
ening 120°
(two sides)



2. Marking for
angle tightening
120° (two sides)



4. Marking for
later visual
inspection

Tightening specification

1. The bearings for the trailing arm must be assembled in accordance with the maintenance and repair instructions.
2. Move the vehicle to the correct ride height.
3. Pre-tighten the nuts M30/AF46 to 400 Nm.
4. Position the eccentric under the screw head.
5. Tighten the nut a further 120° (2 corners) whilst countering the screw head.
6. Perform a visual inspection. Correct the tightening angle if necessary.
7. Once tightening is complete, mark the position of the washer, nut and screw on the hanger bracket.



- Do not oil or grease the thread.
- The steel hanger bracket screwed connections do not require maintenance.
- The paint thickness on the screw contact surfaces between the shock absorber and hanger bracket and between the trailing arm and hanger bracket must not exceed 45 µm.

1.2 LG Airco sytems



Before performing any maintenance, turn off the main power to the system.

1.2.1 Indoor unit

Grille, Case and Remote Control

1. Turn the system off before cleaning.
2. To clean, wipe with a soft, dry cloth.



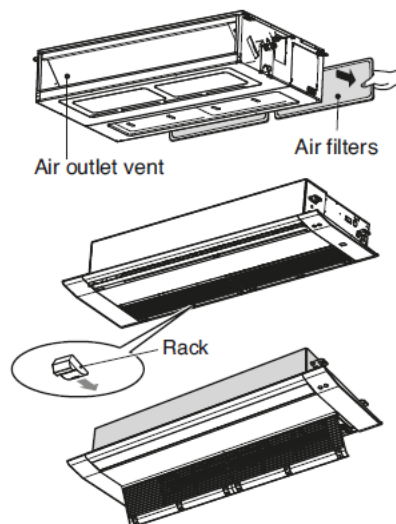
Do not use bleach or abrasives.



Supply power must be disconnected before cleaning the indoor unit.

Air filters

The air filters behind the front grille should be checked and cleaned once every 2 weeks or more often when necessary.



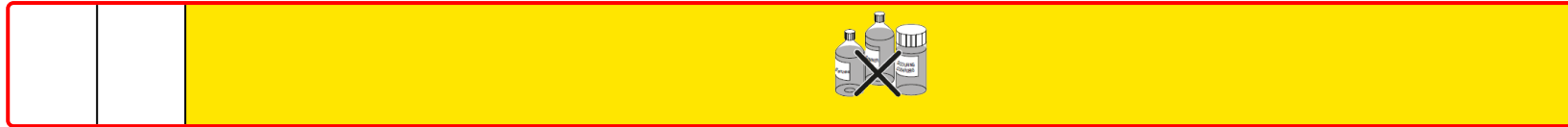
TU chassis : 4 EA Rack



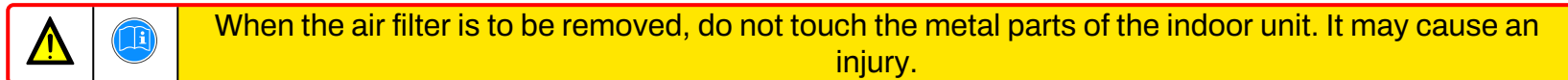
Never use: Water hotter than 40 °C. Water hotter than 40°C could cause deformation and/or discoloration



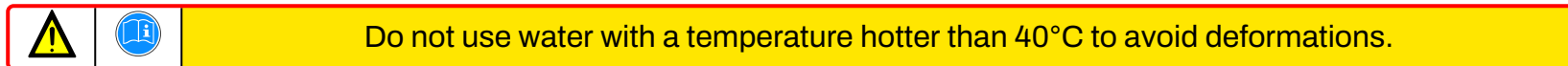
Volatile substances can damage the surfaces of the air conditioner.



1. Remove the air filters.
Take hold of the tab and pull slightly forward to remove the filter.



2. Clean dirt from the air filter using a vacuum cleaner or washing with water.
If dirt is conspicuous, wash with a neutral detergent in lukewarm water.



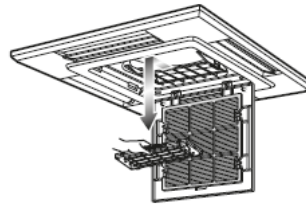
3. Let the filter dry in the shade after washing.



4. Install the air filter.

Purifying filter(Optional)

The PLASMA filter behind the air filters should be checked and cleaned once every 3 months or more often when necessary.



1. After removing the air filters, pull slightly forward to remove the PLASMA filter.
2. Dip the PLASMA filter into the water mixed with neutral detergent, for 20~30 minutes.
3. Dry the PLASMA filter in the shade for a day (Especially, the humidity must be removed perfectly on this parts).



Note the cuts of electric discharge lines.

4. Re-install the PLASMA filter to the original position.

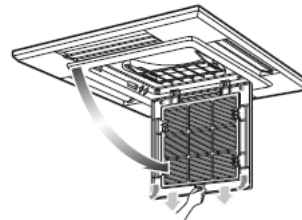


Don't touch this PLASMA Filter within 10 seconds after opening the inlet grille, it may cause an electric shock.

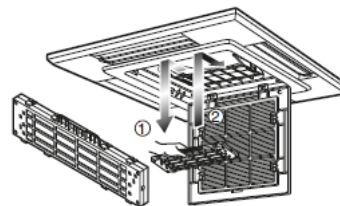
Replacement

Change the filter every 2 years.

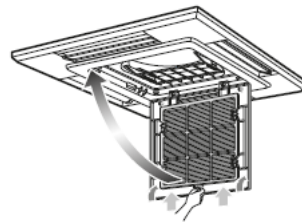
1. Open front panel and remove air filter.



2. Remove air purifying filter.
3. Insert new air purifying filter.



4. Reinsert air filter and close front panel.



Always consult the LG documentation for detailed information. This is always leading.

1.3 Cleaning and maintenance GEZE electrically operated sliding doors

The sliding doors of the manufacturer GEZE should be serviced annually by a GEZE service technician.



Risk of electric shock due to improper cleaning! XX Doors should only be cleaned by trained personnel.



Danger of injury due to impact and crushing!

Set the mode of operation to “Off”.

- Secure door leaves against accidental movement before carrying out cleaning work.
- Cleaning should only be carried out by persons who have been instructed in the safety devices.
- Mark the door accordingly during cleaning.
- During cleaning work, secure the system against unauthorised switching of the mode of operation.

What is to be cleaned

Safety sensor
Glass surfaces
Stainless surfaces
Coated surfaces
Anodised surfaces
Programme switch

How is it to be cleaned

Wipe with moist cloth.
Wipe with a suitable glass cleaner and dry.
Wipe with non-scratching cloth.
Wipe with water and soap.
Wipe with non-alkaline potassium soap (pH value 5.5...7).
Wipe with damp cloth. Do not use a cleaning agent.

Table 1 Cleaning and maintenance GEZE

1.3.1 Maintenance

	□ The owner must ensure that the system is working perfectly. In order to ensure faultless operation, the door system has to be maintained by a service technician when the main tenance indicator lights up. □ Slimdrive SL T30 must be permanently ready to use. The operator is responsible for checking its functioning at least once a month.
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The maintenance displays are located at the programme switches. The version differs depending on the programme switch used:

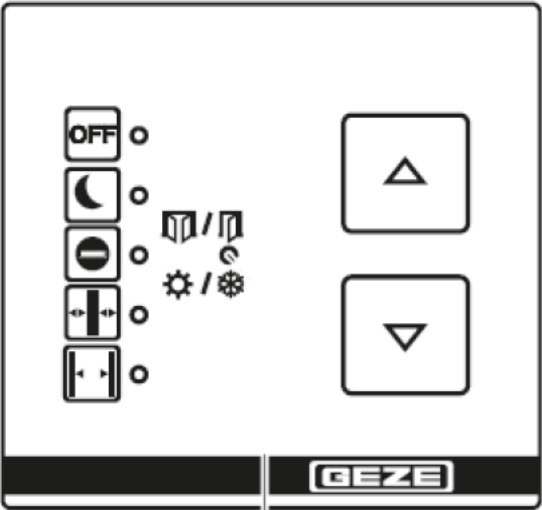


Fig. 1-1

Programme switch Maintenance indicator

Display programme switch	A red dot (17) appears at the bottom right of the display (also refer to Chapter 3.3.1 (GEZE manual).
TPS	“Reduced opening width” LED (18) flashes.
MPS, MPS-ST	LED (19) flashes.

Table 2 Cleaning and maintenance GEZE

The maintenance display lights up after the specified calendar period or number of opening cycles, depending on what occurs first:

Door system	Calendar period	Opening cycles
Standard	1 Year	500.000
FR variant	1 Year	200.000
RD variant	1 Year	200.000
T30 variant	1/2 year	200.000

Table 3 Cleaning and maintenance GEZE

GEZE offers maintenance contracts with the following services:

- ☐ Cleaning and readjustment of roller carriage and tracks
- ☐ Inspection and adjustment of toothed belts
- ☐ Inspection of door suspension plate and floor guide
- ☐ Inspection of fixing elements for firm fit
- ☐ Performance of miscellaneous adjustment work
- ☐ Performance of operational checks
- ☐ Perform function test for SL-RD and SL-T30



Always consult the GEZE documentation for detailed information. This is always leading.

1.4 General periodical check list Trailer

Vehicle data

Chassis Number _____

Registration number _____

Kilometres / Miles ABS-EBS / _____

Customer _____

Date:

Trailer	To access	Check	Condition
Chassis	Check welds and bolted assemblies	☐	☐
Support legs	Check for operability in raised gear and under load	☐	☐
Touchdown	Check for correct attachment and wear	☐	☐

Trailer	To access	Check	Condition
Air suspension	Check bridles according to maintenance manual	☐	☐
Suspension mounting sub-assembly	Check fixing bolts (manufacturer's specifications)	☐	☐
Air bellows	Visual inspection	☐	☐
Dampers	Check for leakage dampers	☐	☐
Lift axle	If fitted, check operation	☐	☐
Tyres	Visual inspection for damage	☐	☐
Tyres	Check wheel rims, tightening	☐	☐
Air tanks	Drain water from the tanks	☐	☐
Brakes	Check the tightness of the pneumatic system	☐	☐
Hose couplings	Tightness check of couplings	☐	☐
Brake chamber	Parking brake check	☐	☐
Brake disk	Check caliper (possibility of repositioning within tolerance limits)	☐	☐

Trailer	To access	Check	Condition
Release valve	Check valve function	☐	☐
Brake drum	Check operation of automatic play reduction due to wear	☐	☐
Brake drum	Lubrication of automatic slack adjustment mechanism due to wear	☐	☐
Brake arm	Check brake camshaft bearing: lubrication	☐	☐
Brake linings	Wear check of linings	☐	☐
Lights	Check for correct operation and faults	☐	☐
Electronics / EBS	Reading fault list	☐	☐
Accessories	Check that attachments such as the mounting bracket spare wheel, toolbox and other items	☐	☐
Surfaces	Painting, Galvanising, Painting KTL	☐	☐
Periodic	Functional check	☐	☐
Steering shaft	Functional check according to manufacturer's specifications	☐	☐
Lifting eyebolt	Check according to manufacturer's specifications and test	☐	☐

Trailer	To access	Check	Condition
	log book.		
Floor	Screw tightening	☐	☐
Floor end	Check for damage to sealing weld, repair if necessary	☐	☐
Superstructure	Visual inspection	☐	☐
Roof	Visual inspection	☐	☐
Door tightness	Visual inspection	☐	☐
Door closing	Visual inspection	☐	☐
Interior of super-structure	Check for defects / leaks repair if necessary. Check tightness welds and repair if necessary	☐	☐
Hydraulic system	Check for leaks in pipes and connections (if damaged - limited lifting force)	☐	☐
Door stop	Check correct operation, repair if necessary	☐	☐
Floor protection seal	Check for damage, repair if necessary	☐	☐
Air pipes	Check air pipes - fastening - check fastening system, repair if	☐	☐

Trailer	To access	Check	Condition
	necessary		
Superstructure	Visual platform check	☐	☐

Table 1 Periodical test report.

Check: ☐ NOT Checked, ☒ Checked. **Condition:** ☒ NOT OK, ☒ OK



Document any existing damage to the semi-trailer before starting to work. For further technical details **always check** the latest operating instructions.

any questions?
contact us

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