since1972
ALTINORDU
Machine - Vehicle - Measurement

* Maintenance and User Manual *

ALTINORDU TREYLER SANAYİ VE TİC. LTD. ŞTİ.

(TRAILER LTD. CO.)



TYPE: ALT-3S1

3 AXLE SEMI TRAILER

2022

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1- INTRODUCTION

Altınordu Trailer is committed to providing quality in both our Products and support services. We are grateful to have you as a customer and thank you for choosing our operation product.

Your Altınordu Trailer was designed and manufactured with you, our customer, in mind. Through years of listening and working with customers,Altınordu Trailer has sought to continually improve our products with respect to safety,ease of maintenance and reliability.We will continue to build on this strategy and look forward to your comments regarding our products and services.

Safe, efficient operation and maintenance of your Altınordu Trailer requires that you, and anyone involved in operating or maintaining the trailer, read and understand this manual. You will find that using the safety,operation,maintenance and troubleshooting information contained within the manual will reduce the chance of injury and repairs.

2- ALTINORDU TRAILER QUALITY POLICY

To be the best value supplier of superior products, services and solutions to our customers in the transportation industry.

The objectives of the quality managment system are:

1) To provide ‘Best Fit’ products of real value meeting customer expectations and regulatory requirements.

2) To promote ‘First Time Quality’ through the use of preventive and corrective action.

3) To maintain a quality managment system of ‘Continuous Improvement’ that enhances customer satisfaction and company performance.

3- WARRANTY

NEW EQUIPMENT WARRANTY:

3.1 Warranty Statement

NOTICE- This document limits the liability of Altınordu Trailer to you, the customer.

Altınordu Trailer warrants directly to you, the registered owner only that each new Trailer manufactured by us is free from defects in material and workmanship at the time of manufacture and will remain free from defects under normal use and service.

Components manufactured by other manufacturers and installed on a new Altınordu Trailer shall be subject to the various component manufacturers own warranties.

This warranty does not expand, enlarge upon,or alter in any way, the warranties provided by the original manufacturers and suppliers of component parts and accessories. All other warranties, if any,extended by the makers and suppliers of components, parts, accessories,or other goods included in the manufacture of Altınordu Trailers will be assigned,if contractually permitted,to the purchaser. This warranty excludes such parts or accessories which are not defective,but may wear out and have to be replaced during the warranty period including,but not limited to, light bulbs, sealed beam lights, paint, brake linings, brake drums, wood pieces and the like.

*****WARRANTY IS VOID IF TRAILER IS NOT REGISTERED WITH ALTINORDU TRAILER INDUSTRIES***

3.2 Registration

Warranty claims will be subject to the followind conditions:

1)We will not accept invoices for warranty under circumstances that have not received our prior authorization (including a warranty authorization number).

2)We are to supply all warranty parts unless agreed otherwise.

3)Any invoices covering warranty parts and/or labor that we consider excessive will be paid on the basis of our cost such parts and/or labor as if the work had been done at our factory.

4)No warranty on parts will be paid for until faulty parts have been returned repaied for our inspection if so requested.

3.2.1 Time Limit on commencing legal action

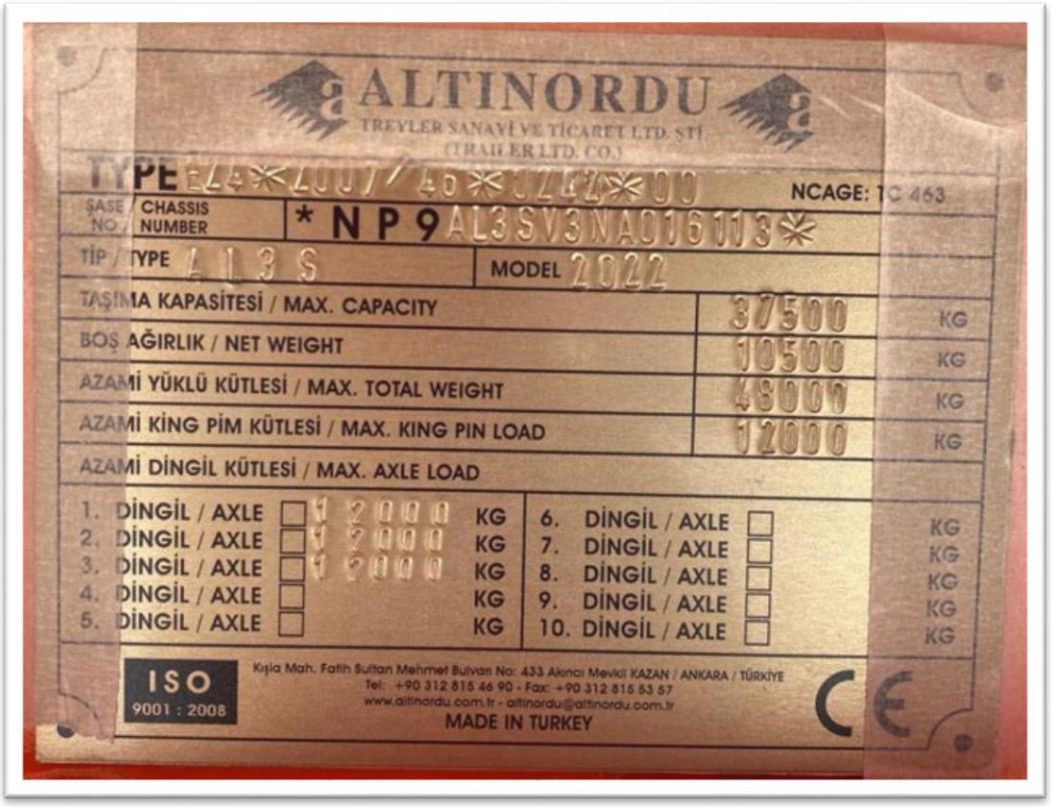
It is agreed that you, the original purchaser, have two year from accrual of the cause of action to commence any legal action arising from the purchase or use of the vehicle.

4- TRAILER TYPE AND IDENTIFICATION

The plate of the Semi Trailer is located on the right side of your Semi Trailer on the Chassis

This plate shows this items:

(EXAMPLE)



5- SAFETY

5.1 General Safety

1)Read and understand all the information provided in the operator's manuel regarding maintenance, adjusting and operating of the Altınordu Trailer unit.

2)Stop the engine, remove ignition key and set the park brake before adjusting, servicing or maintaining any part of the trailer unit.

3)Review the operator's manuel and all related maintenance, operating and safety information annually with the personnel who will be maintaining or operating the Altınordu Trailer.

5.2 Travel Safety

1)Read and understand all information in the operator's manuel regarding procedures and safety when operating the Altınordu Trailer unit.

2)Make sure all lights and reflectors required by local highway and transport authorites are in place, are clean and can be clearly seen by all overtaking and oncoming traffic.

3)Drive carefully and defensively at all times and especially when negotiating uneven or hilly terrain.

4)Do not allow riders and any part of the trailer units during field operation or road and highway travel.

5)Make sure you comply with all local regulations with regards to transporting on public roads and highways. Consult your local law enforcement agency for futher details.

5.3 Safety Decals

1) Always maintain safety decals and signs so that they are clean and legible.

2) Replace all safety decals and signs that are missing or have become illegible.

3) Replaced parts that displayed a safety decal or sign should also display the current decal or sign.

6- OPERATION OF YOUR ALTINORDU TRAILER

6.1 General Guidelines

1) Read and understand the operator's manual and all of the safety signs before operating or adjusting the Altınordu Trailer.

2) Do not allow riders on any part of the trailer during field operations or road and highway travel.

3) Drive very carefully when negotiating hilly or uneven terrain.

4) Keep hands, feet, clothing and hair away from all moving parts.

5) Place all controls in neurtal, stop engine, set the park brake, remove the ignition key and wait for all moving parts stop before servicing, adjusting, repairing or maintaining.

6) Tie load securely before moving or transporting trailer.

7) Check tie-downs frequently during transport to prevent shifting or movement.

8) Clear the area of all bystanders, especially children, before starting up and operating the truck and trailer.

9) Ensure the lamps are functioning.

10) Before disconnecting the truck from the trailer unit(s) make sure that truck and trailer are on level ground and that the trailer wheels are securely blocked.

11) Before disconnecting the truck make sure that landing gear **(If any)** is down. If the ground area below the landing gear is so soft or of a questionable soil type, make sure that additional pad area is provided so that the landing gear will not sink. **Do not use landing gear When the trailer is loaded.**

12) Review the operator's manual including all related operating, maintenance and safety information annually with all personel who will be operating or maintaining the Altınordu Trailer.

6.2 Recommended Break-In

The normal break-in procedure for Altınordu trailer is specified by time and distance:

1) Your Altınordu trailer is factory equipped with slack adjusters. For the first three weeks of operation the movement of the slacks should be checked daily to ensure they are functioning correctly. Correct slack movement during brake applicationis should. If travel is too small, the brakes will drag, leading to over heating and possible brake failure. Slack travel that is too small may indicate the slack is malfunctioning. Slack travel that is too large may reduce the amount braking force available to stop yout truck/trailer combination. Slack travel that is too large may indicate that the self-adjusting slack is malfunctioning. In either case, slack travel too small or too large means maintenance is required.

2) Check hub oil level daily.

100 km Inspectıon:

1) Retorque hub nuts.

800 km Inspectıon:

After the first 800 km of service some 'settling' in will have occured, particularly in the suspension components. At this time:

1) Retorque all bolts and fasteners paying particular attantion to the, axle U-bolts (If so equipped),rim bolts,hub studs,and the suspension system.Refer to values in maintenance section when retorquing.

2) Check tires for proper inflation pressures and rim alignment. Retorque rim clamps and/or wheel nuts. Jack up the axle and spin the wheels. Check for brake drag and adjustment of the wheel bearings.Check slack adjuster travel.

Attention: **Tire Size is 245 70R 17.5 and Air Pressure 125 PSI**

3) Check oil levels in the hubs and top up as required.

4) Check axle aligment. See the maintenance section for procedure.

5) Check the air system for leaks. Drain moisture from all air tanks.

6) Check all lights for proper function.

16,000 km Inspection:

1) Check the function and adjustment of the brakes on each axle. No shoes drag on the drum when the brakes are not applied.

2) Check the tire inflation pressures and tread wear. If unusal or excessive tire wear occurs, it indicates something is wrong. Check further to determine the cause and correct it.

3) Retorque all bolts and bolted connections.

4) Visually check all weld and adjacent areas for cracks.

5) Ensure all suspension hangers and related members are tight and secure.

6) Check the bushing inside the suspension hanger brackets for excessive wear or movement. Failure is rare but if a problem is detected, contact your dealer. Check for wear on nylon or steel washers on either side of the bushing.
7) Check the axle alignment. See the maintenance section for procedure.
8) Check air system leaks. Drain moisture from all air tanks.

9) Check all lights for proper function.

10) Check brake slacks for proper travel.

32,000 km Inspection:

1) Check each brake lining for wear. Replace if worn beyond acceptable limits.

2) Check the wheel bearing adjustment. See the maintenance section for procedure.

3) Check the axle alignment. Refer to the maintenance section for procedure.

4) Replace the gear oil lubricant in each hub.

5) Check for air system leaks. Drain moisture from all air tanks.

6) Check all lights for proper function.



6.3 Pre-Operation Inspection

6.3.1 Order of Action

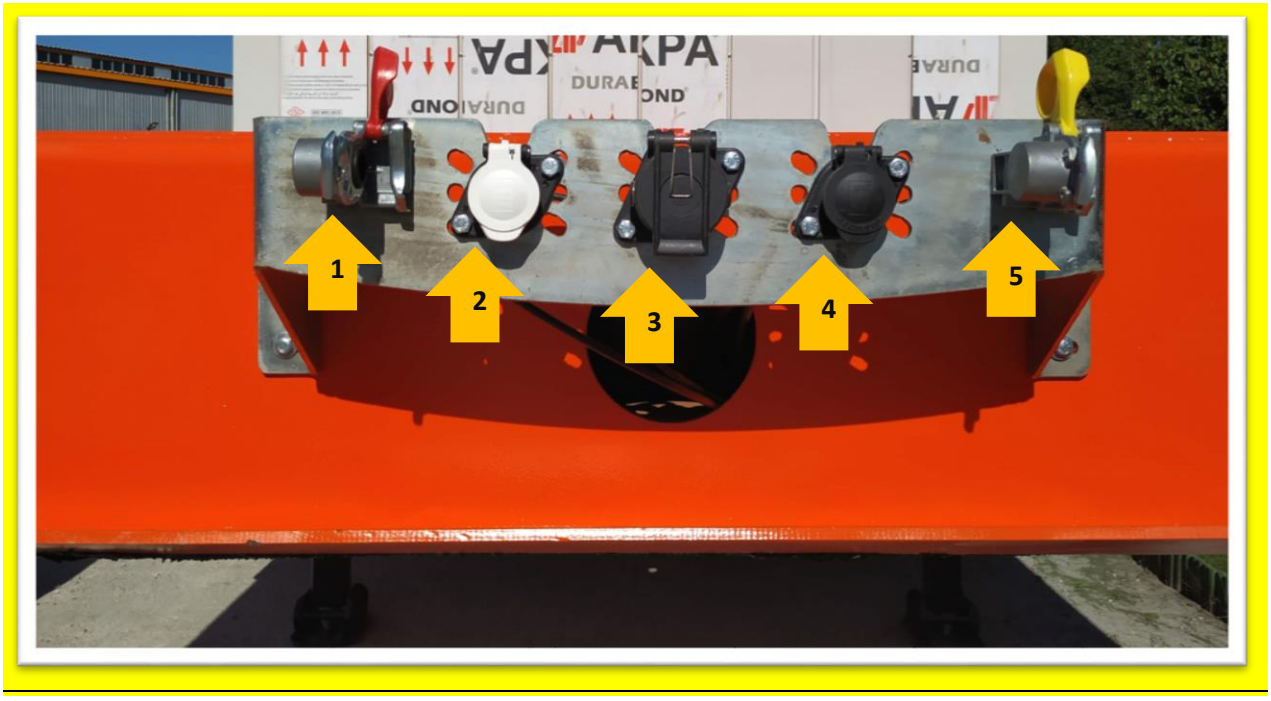
Step 1-Trailer Frontal Area:

1) Air and Electrical Connections

a) Gladhands properly mounted, free of damage, not leaking and not worn.

b) Electrical line receptacles are properly mounted, free of damage and plug adequately seated with safety catch engaged in order to prevent accidental disconnections.

c) Air and electrical lines properly secured against tangling, snagging and chafing with sufficent slacks for turns.



1- Red Air Connection (feedback)

2- reverse gear - 24V socket with 7

3- EBS Connection (Wabco)

4- 24V socket with 7s

5- Yellow Air Connection (Brake)

2) Lights

a) Front trailer clearance and identification lights-clean, operating and proper color.

b) Reflectors-clean and proper color.



Step 2-Coupling System Area

1) King Pin

a) King pin is not worn, bent or damaged.



2) Fifth Wheel

a) Mechanism not worn, bent, damaged or parts missing.

b) Properly lubricated.

c) All locking pins present and locked in placed.

d) Check that fifth wheel is not so far forward that tractor frame will strike or rear semi trailer during turns.

3) Visible Air and Electrical Lines

a) Properly secured against tangling, snagging and chafing.

b) Free of damage, oil and grease.

Step 3- Semi Trailer Area

1) Frame Body

a) Frame and cross members not bent, cracked, damaged or missing.

b) Body parts not damaged or missing.

c) Proper identification of semi trailer's load.

2) Wheels/Axles:

a) Conditions of the wheels and rims-no cracked or bent rims, broken spacers, studs, clamps or lugs.
b) Conditions of tires-properly inflated, valve stems not touching wheel rims or brake drums, valve caps in place, no serious cuts, bulges, tread wear or any signs of misalignment and no depris stuck between the tires.
c) Tires all same type.
d) Wheel bearing and hub-no obvious leaking.

e) Mud flaps in place and in good condition. (If any)

f) Flexible air lines-not cracked, cut, crimped or otherwise damaged, secured against tangling, snagging or chafing.





3) Suspension:

a) Visually check the condition of spring(s), spring hangers, equalizers an U bolts.

b) Check the condition of torque rod arms and bushing.

Step 4-Brakes:

a) Check conditions of hoses, lines and valves.

b) Check slack adjusters.

c) Check air chamber mounting.



d) Check spring brakes.

e) Drain moisture from air tank, close petcock.

Step 5-Rear of Semi Trailer

1) Lights

a) Rear clearance and identification lights-clean, operating and proper color.



2) Cargo Securement

a) Ensure cargo is properly loaded-side to side and back to front.

b) Check cargo tie-downs and ensure they are tight.

c) Ensure concentrated load is positioned over structual beams.

Step 6-Semi Trailer(s) Functional Check (Truck Attached)

a) Check for proper connection of the air brake glad-hands and secure contact of electrical connection.

b) Start engine.

c) Build up air pressure in the truck-trailer system.

d) Turn on the lights and inspect for proper functions.

e) Check the Function of the brakes.

1- Apply service brakes

2- Apply parking brakes

3- Apply trailer brakes in emergency

4- Stop engine.

i. Release trailer emergency brakes

ii. Apply service brakes.

6.4 Coupling/Uncoupling Procedures

A. COUPLING

1) Check out the equipment before coupling.

a. Make sure fifth wheel is properly lubricated, that locks are open and that the ramps are tilted down in the proper position.

b. Make sure that mounting of the fifth wheel to the truck is in good condition and tight.

c. If using a sliding fifth wheel make sure the side locking plugers are engaged.

2) Back up close to the semi trailer, centering the kingpin on the throat of the fifth Wheel. STOP.

3) Block the trailer wheels, connect the light cord and the brake lines and be sure any slack in the lines is supported and the brake lines do not become tangled. Set the semi trailer brakes.

4) Check to see that the semi trailer is at the proper height for coupling. The leading edge of the trailer plate should initially contact the fifth wheel top bearing surface behind its pivot axis as the truck backs under the semi trailer. Raise or lower the semi trailer landing gears as required to obtain this position.

5) Back under the semi trailer, keeping the trailer kingpin centered in the crotch of the fifth wheel.

6) After picking up the semi trailer with the fifth Wheel –STOP- then continue backing until the fifth wheel locks firmly on the kingpin.

7) Back up tight to the kingpin. The pull forward to test the completeness of the coupling as an initial check.

8) Visiually check to see that the kingpin is in the fifth wheel locks, not overhanging the fifth wheel or caught in a grease groove.

9) Crank up the landing gear their full distance. Fold down or remove crank handle and place it in the crank handle holder.

10) Check the brake lights and light cord.

11) Remove the wheel blocks and continue with the pre-trip inspection

B) UNCOUPLING PROCEDURE:

1) Set the emergency brake on the truck.

2) Set the semi trailer brakes with the truck or trailer protection switch.

3) BLOCK THE SEMI TRAILER WHEELS!

On a semi trailer with air or hydraulic ride suspension it is necessary to dump the air or hydraulic pressure out of the suspension before lowering the landing gear. Failure to do so can result in bent landing gear as the trailer will walk forward later as the air bags or hydraulic cylinders deflate.

4) Crank down the landing gear until they touch the ground and give a few extra turns in low gear. Do not raise the semi trailer off the fifth wheel.

5) Fold down the crack handle and place it in the crank holder provided.

6) Disconnect the light cord and brake lines.

7) Unlock the fifth wheel, including the manual secondary lock if so equipped.

8) Release the truck emergency brake and pull out slowly from under the semi trailer. Let the trailer slide down the fifth wheel and pick up ramps with minimal impact of the semi trailer landing gear with the ground.

6.5 Loading/Unloading

It is the responsibility of the operator to review and be familiar with the semi trailer loading capacity spesification and be sure all loading limitations and/or restriction are complied with in the operating jurisdication. Exceeding the semi trailer weight spesification can result in damage to the structure. Exceeding the road restrictions is illegal.

Loading/Unloading procedures and instructions are covered but not limited to the ones that have been summarized below:

6.5.1 LOADING:

1) Do not drop the load on the semi trailer. Place it on the floor at the position desired.

2) Determine the load carrying capacity of your semi trailer and the position of the load before you start loading.

3) Load must be placed to achieve a legal weight distirbution.

4) Do not exceed the load carrying spesification for the semi trailer.

NOTE:

Loading without the semi trailer being coupled to a truck is not recommended. Dynamic loaded encountered during loading can damage the landing gear structure.

NOTE:

The semi trailer air or hydraulic ride suspension should be inflated to full operating pressure while after loading.

6.5.2 Semi Trailer Weight Distribution

1) Semi trailers are designed for uniform load distribution. The load should be distributed equally between the front and the rear of the trailer.

2) The load should be equally distributed. A heavy load should not be loaded on one side because this will overload springs and tires on that side. Please load so that weight will be equal on rear tires, eliminating possible twisting of the frame and overloading of axle housings and wheel bearings.

1) **Inspection frequnecy**

2) **<u>Inflation pressure:</u>** Tires should always be operated at their specified pressure. The tire is designed to run with the full width of the tread flat on the contact surface. Operatingat other than specified pressures will change the tread contact patterns and this can dramatically shorten tire life. In addition, the tires will run hotter which can lead to blow-outs.

Attention:

Check tire pressure when the tire is cold. A hot tire can read as much as 20 psi higher than a cold tire. If tires are over inflated, check for poor load distribution, uneven surface contact, over-loading or poor operating conditions.

Refer to manufacturer spesification.

7 SERVICE AND MAINTENANCE

This section provides information and recommendations on daily and periodical maintenance, which if followed, will result in safe and dependable operation of the Altınordu Trailer.

Maintenance Safety:

1) Read and understand all the information in the operator's manual regarding maintaining, adjusting and operating the Altınordu Trailer unit.

2) Stop the engine, remove ignition key and set the park brake before adjusting, servicing or maintainingany part of the semi trailer unit.

3) Review the operator's manual and all related maintenance, operating and safety information annually with the personnel who will be maintaining or operating the Altınordu Trailer unit.

4) Stop and shut down all drivers to and on unloading systems before attempting to maintain, adjust or unplug the hopper components.

7.1 Service

7.1.1 Lubrication

Fifth Wheel- Keep a water resistant lithium based grease applied to the semi trailer contact surface of the fifth Wheel plate if using a fifth wheel that requires greasing. If your semi trailer equipped with the jost low lube fifth wheel then grease the fifth wheel kingpin lock through the grease with provided approximately every 3 months.

Landin Gear- Lubricate the landing gear grease fittings on a periodic basis (at least every 3 months) with a good lithium based artic grease.

Wheel Bearing Oil- For bearings lubricated with oil, changes are recommended whenever the seals are replaced or at brake reline time. Fill hub with oil to indicated level on the hub cap.

Brakes- Lubricate brake actuating components at 70,000km or at time of brake reline. Replace oil(If applicable) in wheel bearing.

7.1.2 Servicing Intervals

Daily, 10 hours or 800km,

1) Grease fifth wheel pivot pins and lock.

2) Lubricate Suspension system with gearbox oil on spring hanger surface.

3) Drain moisture from the air tank on trailer.

4) Lubricate All Parts of the Steering System and Suspension System with Grease. **(Periodic)**

Every 3 months

1) Grease landing gear gearbox and screw.

2) Grease Jost lube lower fifth kingpin lock.

3) Inspect lower fifth for damage, wear, and for lock adjustment.

Every 8,000km,

1) Check oil level in wheel hubs. Change oil if it is contaminated. Replace seals and, brake linings changed annully.

2) Grease brake components.

Every 150,000km

1) Check brake linings for wear.

7.2 Periodic Mintenance and Adjustments

The safe and efficent operation of your Altınordu Trailer depends on following the maintenance and adjustment procedures outlined in this section.

Maintenance Safety

1) Set the park Brake.Stop Engine, remove ignition key before adjusting, servicing or maintaining any component on a trailer unit.

2) Clear the area of bystanders especially children, when carrying out any maintenance or making adjustment on the system or components.

3) Stop and shut down all drivers to and on unloading systems before attempting to maintain, adjustment on the system or components.

4) Keep hands, feet, clothing and hair from moving and/or rotating parts.

7.2.1 Kingpin and Upper Coupler

Inspect the kingpin and its structure on the trailer at regular intervals to be sure they have not suffered damage or undue wear. Kingpin should not be bent.

The Kingpin Should be checked for excessive wear, looseness, chipped out areas or cracks. Any kingpin bent or showing defects should be replaced at once.

To check the king pin for wear, use a gauge that can measure the diameters of the kingpin. Your trailer will be equipped with a 2 inch kingpin. If the diameter is less then 0.13 inch of those values, then the kingpin will need to be replaced.

To check the kingpin for straightness use a straight, and if the kingpin is over 1 degree from 90 degree in any direction the kingpin should be replaced.

Inspect the upper coupler assembly for any excessive bowing or cracks. Ensure the entire assembly is safely secured to the trailer by checking the conditions of the welds, bolts or rivets, as used in the original construction.

7.2.2 Fifth Wheel

IMPORTANT

All maintenance must be performed with the rear semi trailer uncoupled from the fifth wheel.

Note

All of the following must be performed every 50,000 km or 3 months, whichever comes first.

Inspection-General

a. Thoroughly clean the entire area using steam or pressure washer.

b. Inspect the fifth wheel mounting. Check bolt torque and replace any missing or damaged bolts. Check for broken or distorted components and repair or replace as needed.

c. Inspect the fifth Wheel assembly for bent, worn and broken parts. Replace with original manufacturer's part only.

d. Inspect low lube plates and replace if damaged or when the plate wears down to the mounting bolts.

e. Check adjustment of the kingpin lock with a lock tester to see if it is too loose or too tight

7.2.3 Axles

1 Suggested Preventative Maintenance Scheduled for Axle and Components

30,000 km to 40,000 km

* Check brake lining wear and reline as required.

* Check brake adjustment and inspect roller, shaft, anchor pins and bushings.

* Inspect brake pot, camshaft bushing, camshafts brackets and camshaft bracket bushing for any wear.

* Lubricate actuating brake components

10,000 km or at time of brake reline

* Overhaul and lubricate all brake actuating components.

* Check all brake chambers.

* Replace oil in wheel bearings.

150,000 km or a minimum of twice a year:

* Inspect wheel bearings.

* Check all seals signs of wear.

2 Axle Alignment

Improper axle alignment with the vehicle frame or chassis will cause excessive tire wear and vehicle dog-tracking.

Proper axle alignment is a vital part of your operation and should be checked on a regular basis.

Each Altınordu trailer is checked for correct alignment before it leaves the factory, but settlement of suspension may necessitate realignment after first 800 km.

The drawbar eye has a dead-center mark on the bottom side. To assure proper alignment a steel tabe measure should be run from center part of the drawbar eye to an identical location on either side of the front axle.

150,000 km or a minimum or twice a year

* Inspect wheel bearings.

* Check all seals for signs of wear.

7.2.4 Wheels

Your tariler may be equipped with either steel or aluminium wheels. Check for damage(bent) and loose wheels. Studs,bolts and nuts be checked regularly.

7.2.5 Suspension System

The axles are attached to and carried by the suspension system. The suspension must be kept tight and in good working order to obtain maximum performance and life.Review the section that applies to your trailer to familiarize yourself with the service and maintenance procedures.

Inspection

1. Frequency

-During pre-delivery inspection.

-After first 800km of operation.

-Periodically.

2. Action

* Check that all fasteners are tightened to their spesific torque.

* Check for damaged or broken components.

* Check all suspension system and axle welds for crack.

* Eveluate tire wear patterns. Use the wear patterns as a guide to determine if maintenance or adjustments are required on the suspension system.

* Check the alignment of the axles.

IMPORTANT: Repair or replace any components as required.

7.2.6 Air Ride

Maintenance

1. Air Springs

Problems seldom occur with the air springs unless they are rubbeds cuffed or punctured. If they fail, the chassis will setle down onto the rubber bump stop inside the air bag. In this case, the unit maybe driven to the next service depot for repairs. If it becomes necessary to drive the trailer with no air in the suspension, check to ensure that the tires have not come in contact with the winches, side rails, or securing device. Identify and correct the cause of this problem before continuing.



To replace air spring:

***** Exhaust air from system.

* Raise vehicle and support on safety stands.

* Remove air spring.

* Install new air spring and tighten fasteners to their specific torque.

2.Shock Absorbers

Shock absorbers absorb vibration energy from the system and act as rebound stops for the suspension.

To replace shock absorber:

a. Remove end fasteners.

b. Install new shock absorbers using new mounting hardware.

c. Tighten fasteners to their specified torque.



3. Pivot Bushing

The pivot bushing is a very durable, long lasting component. Failures are rare and replacement should be undertaken only when all other potential problem causes have been eliminated.If replacement is required,obtain the removal/installation tool and replacement kit from Altınordu Trailer.

4. Pivot Connection

The pivot fastener and nut must clamp the pivot bushing securely to provide stability for the suspension system. Failure to reach the required torque can result in a loose pivot connection and potentially damage the suspension and other components.

5. Air Control System

Air is supplied to the air springs by the air supply system from the tractor. A single height control valve monitors the chassis height from one axle and adds or exhausts air from the system as required to maintain a constant distance.The dimension is fixed for your trailer and should not be changed.

6. Height Control Valve

This valve controls the adding or exhausting of air from the air springs. Air is added when the distance between the axle and chassis is decreased. Air is exhausted when the distance increases. Replace the valve if it does not function properly.

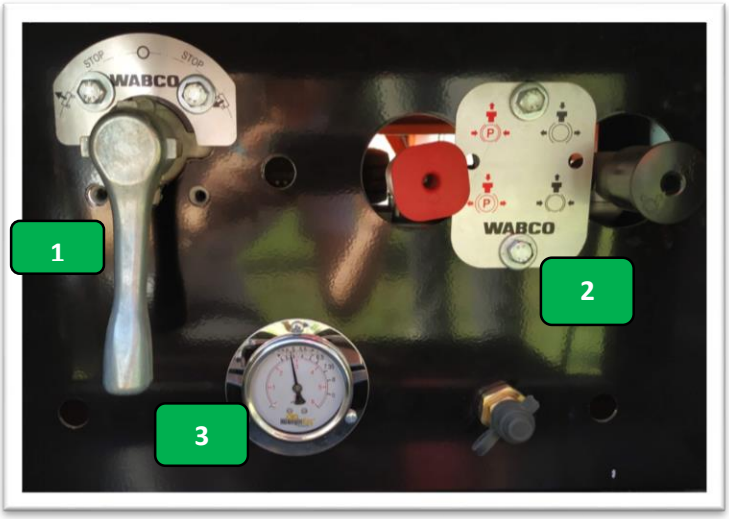
7. Air Dump Valve

All air control systems are equipped with a dump valve that allows the operator to exhaust the air from the system in the following situations:

a. Parking trailer (Loaded or unloaded.)

b. Prior to loading or unloading trailer, when supported by landing gear.

c. Before uncoupling from towing unit.



NOTE

1: Platform Height Adjustment Lever (Wabco)

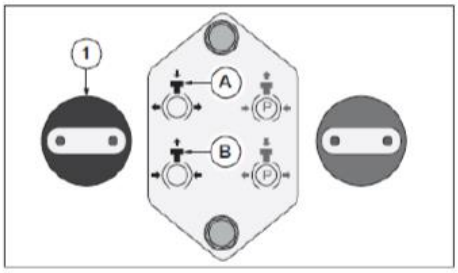
2: Park & Release Emergency Valve (Wabco)

3: Air Pressure Watch (Wabco)

Park&Release Emergency Valve

A- Brake-Releasing Valve

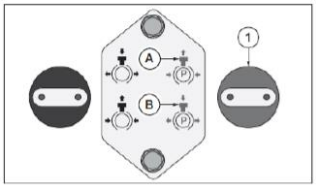
It allows applying or releasing the service brakes of a disconnected vehicle. When the red coupling between the tractor and the trailer is disconnected, the vehicle applies the automatic brakes. When the red coupling is disconnected, push the button (A, ⬇) shown in the picture to release the trailer brakes and to manoeuvre the trailer. When the manoeuvre is completed, pull the button (B, ⬆) for the brakes of the semi-trailer to be re-applied. This button cannot be used when the red coupling between the tractor and the trailer is connected.



⚠ **WARNING!**	Long-term parking is not safe with the service brake. In this case, parking brake should be used.

A- Parking Brake

The parking brake allows the Lowbed to remain motionless on flat and inclined surfaces. When the parking brake is activated, the Lowbed cannot be moved. To move the Lowbed, release the parking brake.
To apply parking brake: Pull red activation button to the direction specified with an arrow in the pictogram (⬆, A). In this case, parking brake is activated and semi-trailer cannot be moved.
To release the parking brake: Push red activation button (1) to the direction specified with an arrow in the pictogram (⬇, B). At this moment, the parking brake is released and there is no braking in the semi-trailer.



1- Air Suspension System

Level Valve

Level valve stabilise the vehicle level by adjusting

the pressure at suspension bellows according to the load.

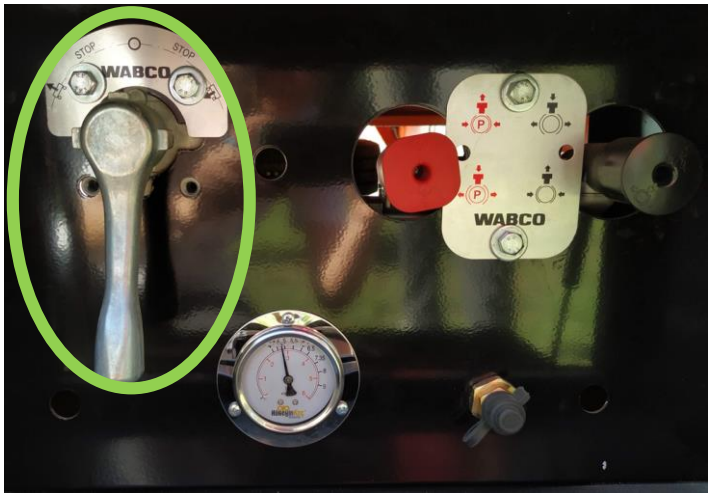
✓ Conventional level valve

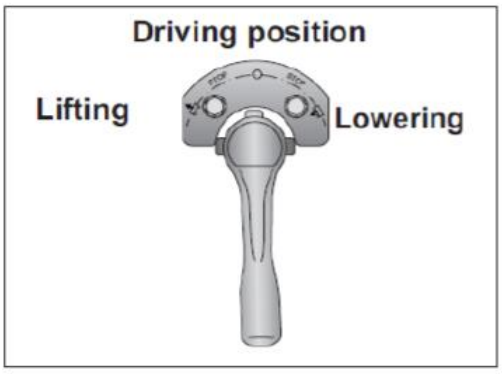
Lifting-Lowering Control

Lifting/lowering valve is used to manually change the level of the trailer during

operations such as loading and unloading.

✓ Lifting-lowering valve





NOTE!	Before starting the vehicle, the lifting-lowering valve must be in the driving position to operate the level valve.

7.2.7 Brakes

Altınordu Trailers that equipped with SERTEL axles are available with various combinations of slack adjusters, brake chambers and spring brakes.

Brake Prevetative Maintenance

A schedule for the periodic cleaning, adjustment and inspection of brake equipment should be established by the operator based on the past experience and severity of operation. Drums and linings are particularly subject to wear.

The air brake system needs to be inspected, cleaned, lubricated and adjusted on a regular basis as well as each time the hubs are removed.

Brake Drums

Inspect brake drums. Any accumulation of mud,dirt or rust on the drums should be removed.Any broken or cracked drums should be removed from service.Altınordu does not recommend re-boring of brake drums because of the resulting reduced strength of refaced drums.

Brake Lining

Check and determine how much the lining has been worn. Replace linings as required by current safety legislation.



Disassembly procedure of the brake:

* Remove brake drum.

* Remove lock rings and washers from anchor pins.

* Remove anchor pin locks.

* Remove anchor pins and brake shoe assemblies.

* Remove slack adjuster lock ring and washer.

* Remove slack adjuster.

* Remove camshaft lock ring and spacer washer, located towards the inside of the spider.

* Remove camshaft.

* Remove camshaft washer located under camshaft head.

* Remove roller shaft lock ring (in case of the cat shoe, remove roller shaft set screw and roller assembly), roller shaft, anchor pin bushings from shoes, spider seals and bushings and camshaft seals.

WARNING !

DO NOT ATTEMPT TO REPAIR OR DISASSEMBLE AIR BRAKE CHAMBER.A SPRING BRAKE CONTAINS A VERY POWERFUL COMPRESSION SPRING.INCORRECT HANDLING MAY RESULT IN FORCEFUL RELEASE OF THE PIGGY BACK OR SPRING CHAMBER AND ITS CONTENTS THAT COULD CAUSE DEATH, SEVERE PERSONAL INJURY AND/OR PROPERTY DAMAGE.IF SERVICE IS REQUIRED TAKE THE AIR CHAMBER TO ALTINORDU OR AUTHORIZED ALTINORDU SERVICE CENTRE.

NOTE:

FIRST, THE MAINTENANCE-USE INSTRUCTIONS OF THE MANUFACTURERS OF THE PARTS USED ON THE TRAILER MUST BE FOLLOWED.

since1972
ALTINORDU
Machine - Vehicle - Measurement

* PARTS CATALOG *

ALTINORDU TREYLER SANAYİ VE TİC. LTD. ŞTİ.

(TRAILER LTD. CO.)



TYPE: ALT-3S1

3 AXLE SEMI TRAILER

2022

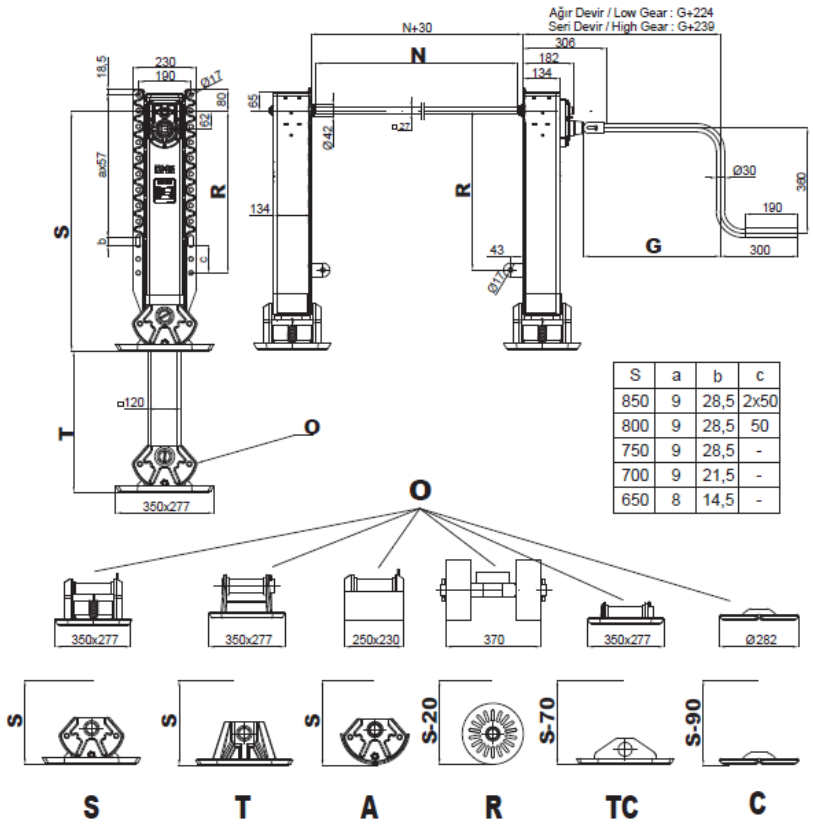
SPARE PARTS CATALOG

1-LANDING GEAR





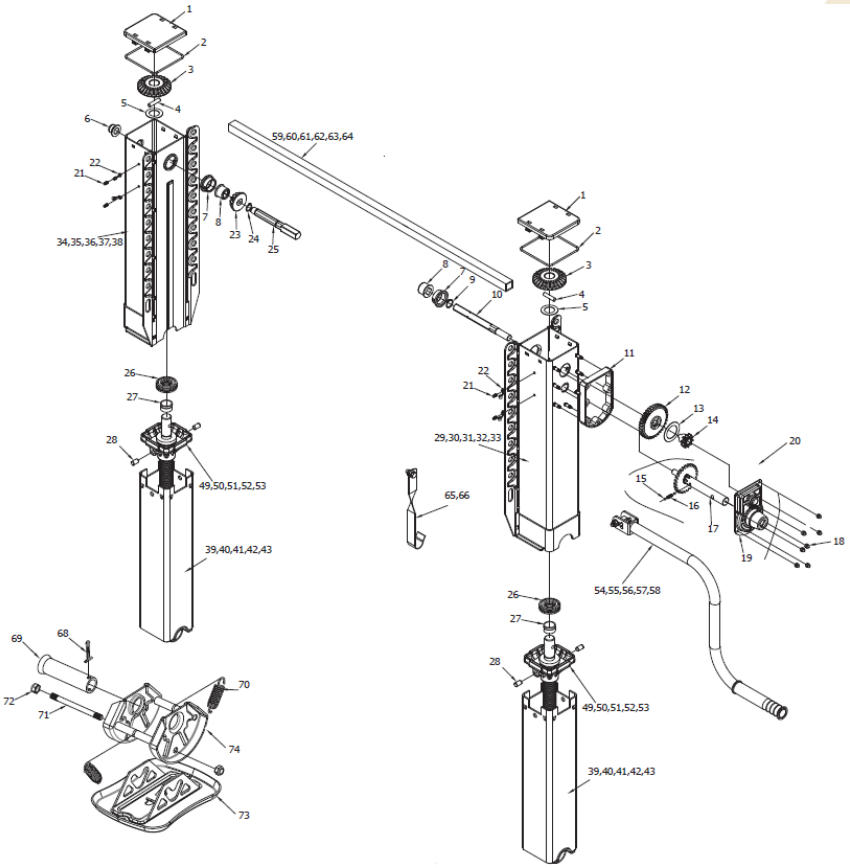
1-LANDING GEAR

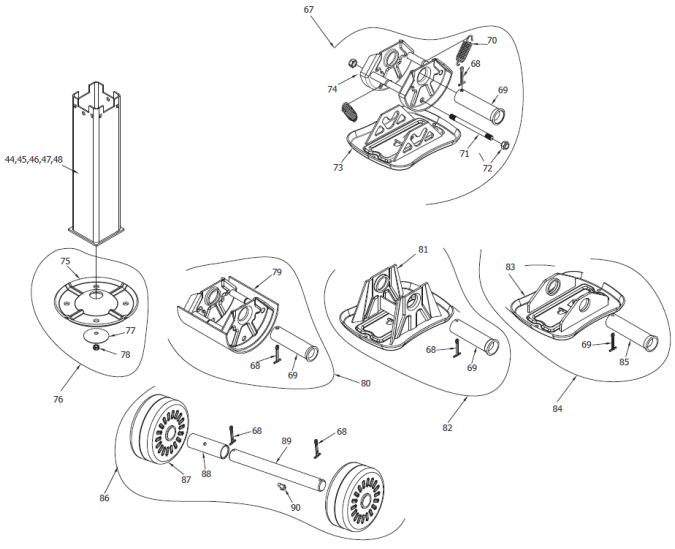


S	a	b	c
850	9	28,5	2x50
800	9	28,5	50
750	9	28,5	-
700	9	21,5	-
650	8	14,5	-

Kaldırma Kapasitesi *(Dynamic Lift Capacity)*		24 Ton	Ağır Devir *(Low Gear)*		0,93 mm / rev
Taşıma Kapasitesi *(Static Lift Capacity)*		50 Ton	Seri Devir *(High Gear)*		11,4 mm / rev
Maksimum Kol Gücü *(Max Rotating Force)*		210 N	Sipariş Kodu Örneği *(Sample Order Code)*		MJS-850-S-1450-450
S	**T**	**R**	**O**	**N**	**G**
850	510	580	S	1350	285
800	460	530	T	1450	350
750	410	480	TC	1470	450
700	360	430	A	1600	535
650	310	380	R	1700	605
			C	1790	

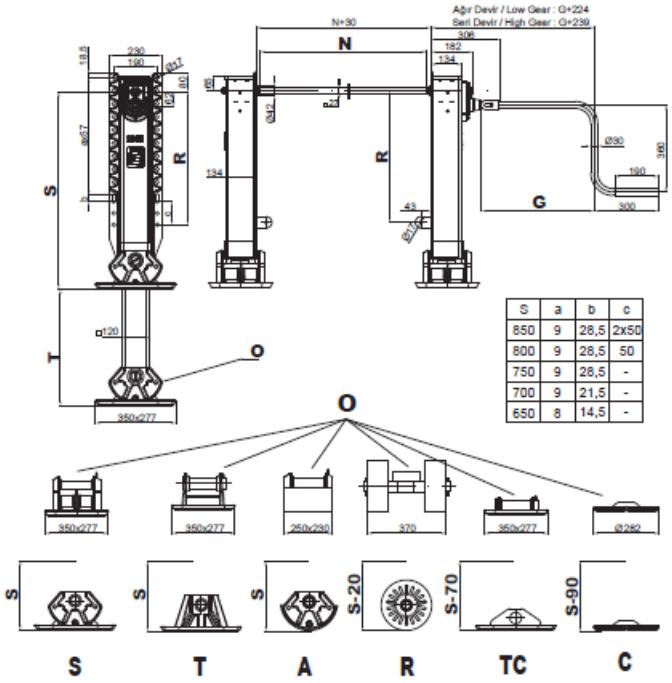
- Ölçüler S pabuça göre verilmiştir. Diğer uygulamalar için lütfen Ar-Ge departmanımıza başvurun.
- Dimensions are given according to S shoe. For other applications please consult our R&D department.


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S	a	b	c
850	9	28,5	2x50
800	9	28,5	50
750	9	28,5	-
700	9	21,5	-
650	8	14,5	-

Kaldırma Kapasitesi *(Dynamic Lift Capacity)*		24 Ton	Ağır Devir *(Low Gear)*		0,93 mm / rev
Taşıma Kapasitesi *(Static Lift Capacity)*		50 Ton	Seri Devir *(High Gear)*		11,4 mm / rev
Maksimum Kol Gücü *(Max Rotating Force)*		210 N	Sipariş Kodu Örneği *(Sample Order Code)*		MJS-850-S-1450-450
S	**T**	**R**	**O**	**N**	**G**
850	510	580	S	1350	285
800	460	530	T	1450	350
750	410	480	TC	1470	450
700	360	430	A	1600	535
650	310	380	R	1700	605
			C	1790	

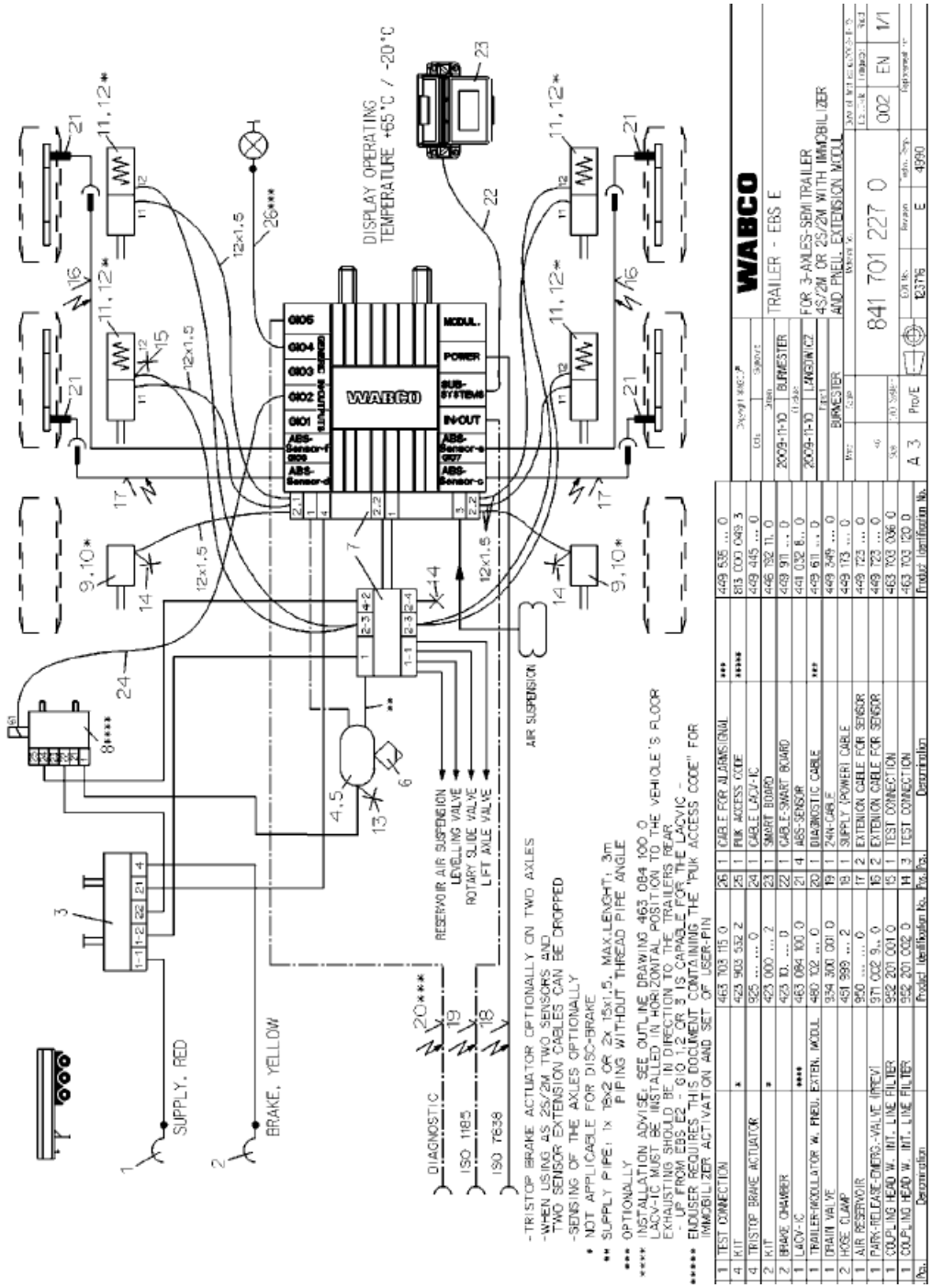
Teknik Bilgiler / Technical Data

No	Description	Order No	Qua.
1	Plastik Üst Kapak	124301	2
2	Plastik Üst Kapak Contası	124611	2
3	MJS Büyük Konik Dişli	124405	2
4	Ø10 Pim	124211	2
5	50'lik Raynel Pul	124602	2
6	Plastik Kapalı Burç	124312	2
7	Arka Açık Burç	124305	2
8	Kare Burç	124309	2
9	Ø24 Segman	124618	1
10	MJS Sağ Grup Dişli Mili	124218	1
11	Şanzuman Kapak Contası	124306	1
12	MJS Sağ Grup Dişli	124404	1
13	Ø63 Raynel Pul	124606	1
14	10 Dişli	124503	1
15	Vites Bilyası	124612	2
16	Vites Yayı	124608	1
17	MJS 7 Dişli	124801	1
18	M6 Kör Somun	124607	7
19	MJS Ön Kapak Grubu	124803	1
20	MJS Ön Kapak Grubu Komple	124804	1
21	Gresörlük	124603	5
22	Gresörlük Tapası	124604	5
23	MJS Sol Grup Dişli	124407	1
24	Ø20 Segman	124617	1
25	MJS Sol Grup Dişli Mili	124215	1
26	Alın Bilya	124110	2
27	Dört Köşe Burcu	124310	2
28	Ø12 Pim	124212	4
29	MJS Sağ Dış Kovan (850)	124739	1
30	MJS Sağ Dış Kovan (800)	124740	1
31	MJS Sağ Dış Kovan (750)	124741	1
32	MJS Sağ Dış Kovan (700)	124742	1
33	MJS Sağ Dış Kovan (650)	124743	1
34	MJS Sol Dış Kovan (850)	124744	1
35	MJS Sol Dış Kovan (800)	124745	1
36	MJS Sol Dış Kovan (750)	124746	1
37	MJS Sol Dış Kovan (700)	124747	1
38	MJS Sol Dış Kovan (650)	124748	1
39	MJS İç Kovan (850)	124701	2
40	MJS İç Kovan (800)	124707	2
41	MJS İç Kovan (750)	124711	2
42	MJS İç Kovan (700)	124712	2
43	MJS İç Kovan (650)	124723	2
44	MJS İç Kovan C Pabuç (850)	124725	2
45	MJS İç Kovan C Pabuç (800)	124726	4

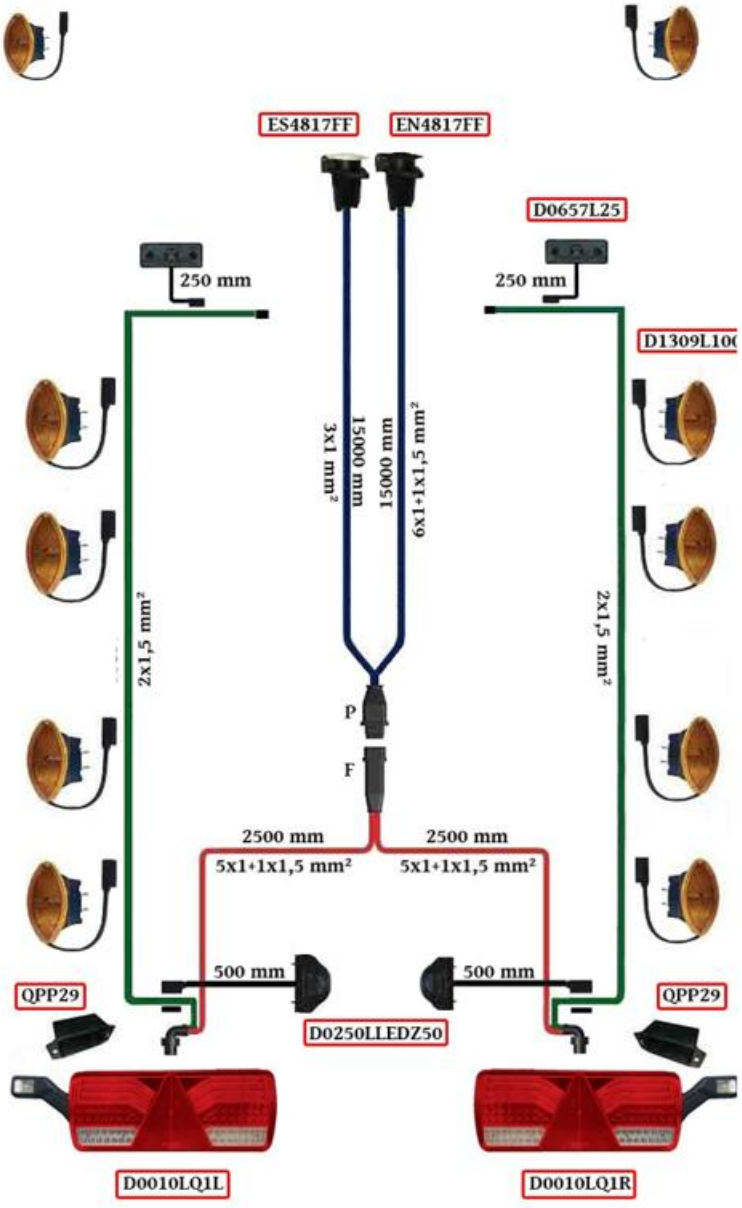
No	Description	Order No	Qua.
46	MJS İç Kovan C Pabuç (750)	124727	2
47	MJS İç Kovan C Pabuç (700)	124728	2
48	MJS İç Kovan C Pabuç (650)	124729	2
49	MJS Trapez Vida Mili (850)	124707	2
50	MJS Trapez Vida Mili (800)	124711	2
51	MJS Trapez Vida Mili (750)	124712	2
52	MJS Trapez Vida Mili (700)	124713	2
53	MJS Trapez Vida Mili (650)	124724	2
54	Çevirme Kolu (605)	123902	1
55	Çevirme Kolu (535)	123903	1
56	Çevirme Kolu (450)	123904	1
57	Çevirme Kolu (350)	123905	1
58	Çevirme Kolu (285)	123906	1
59	Ara Borusu (1790)	124248	1
60	Ara Borusu (1700)	124247	1
61	Ara Borusu (1600)	124246	1
62	Ara Borusu (1470)	124245	1
63	Ara Borusu (1450)	124244	1
64	Ara Borusu (1350)	124243	1
65	Kol Kancası (383)	124126	1
66	Kol Kancası (283)	124113	1
67	S Pabuç	434901	2
68	Pabuç Kopilyası	434601	2
69	Pabuç Pimi	434103	2
70	Çekme Yayı	434602	4
71	M16 Pabuç Saplaması	434202	2
72	M16 Somun	434603	4
73	S Pabuç Taban	434702	2
74	S Pabuç Yan Daire	434701	2
75	C Pabuç Taban	434111	2
76	C Pabuç	434906	2
77	C Pabuç Pulu	434110	2
78	M16 Fiberli Somun	434603	2
79	A Pabuç Taban	434704	2
80	A Pabuç	434903	2
81	T Pabuç Taban	434703	2
82	T Pabuç	434902	2
83	TC Pabuç Taban	434706	2
84	TC Pabuç	434905	2
85	TC Pabuç Pimi	434208	2
86	R Pabuç	434904	2
87	R Pabuç Daire	434705	4
88	R Pabuç Ara Borusu	434203	2
89	R Pabuç Daire Mili	434204	2
90	M10 Civata	434604	2

2- EBS SYSTEM / BRAKE SYSTEM

WABCO

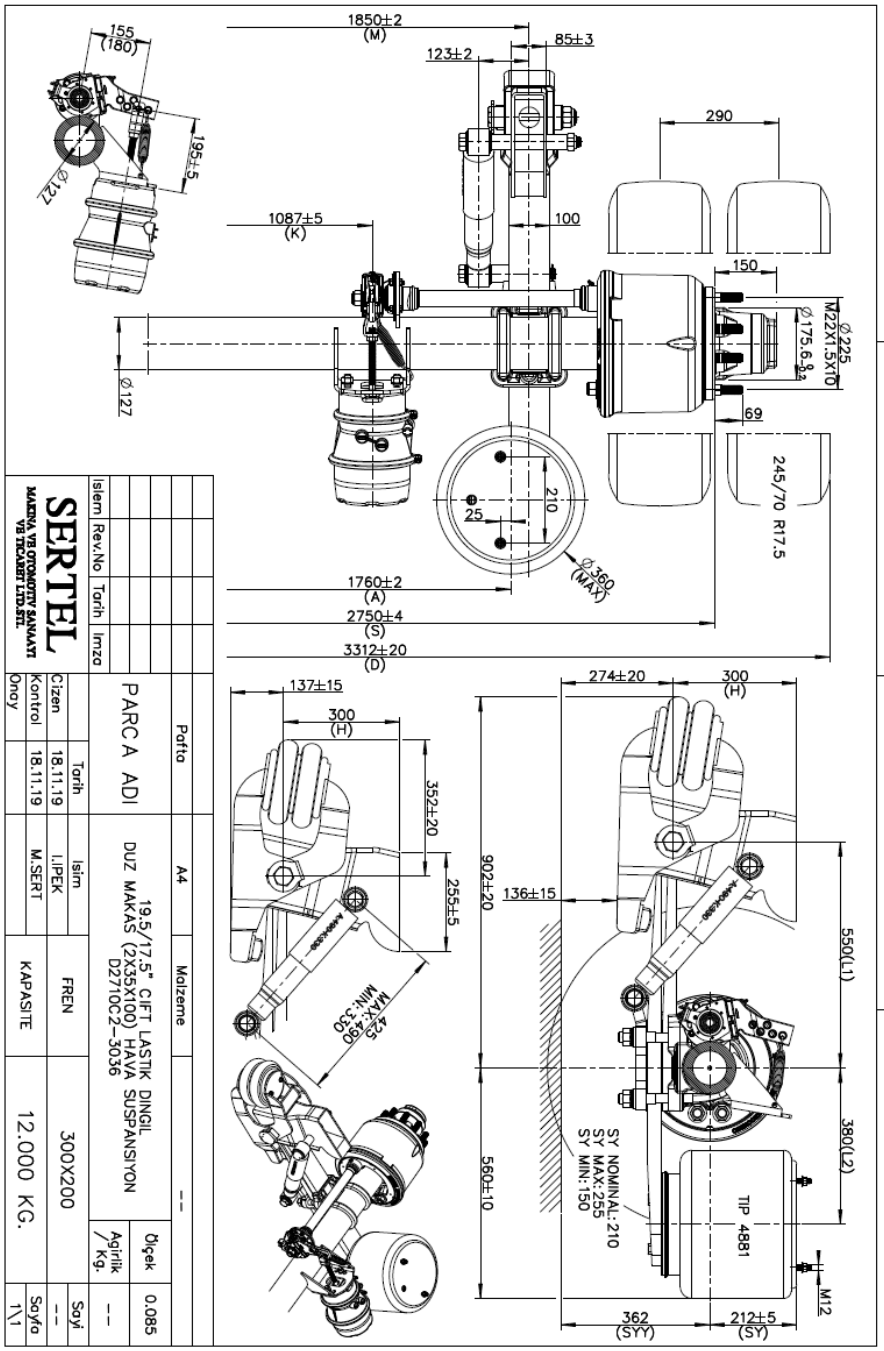


3-LIGHTING SYSTEM



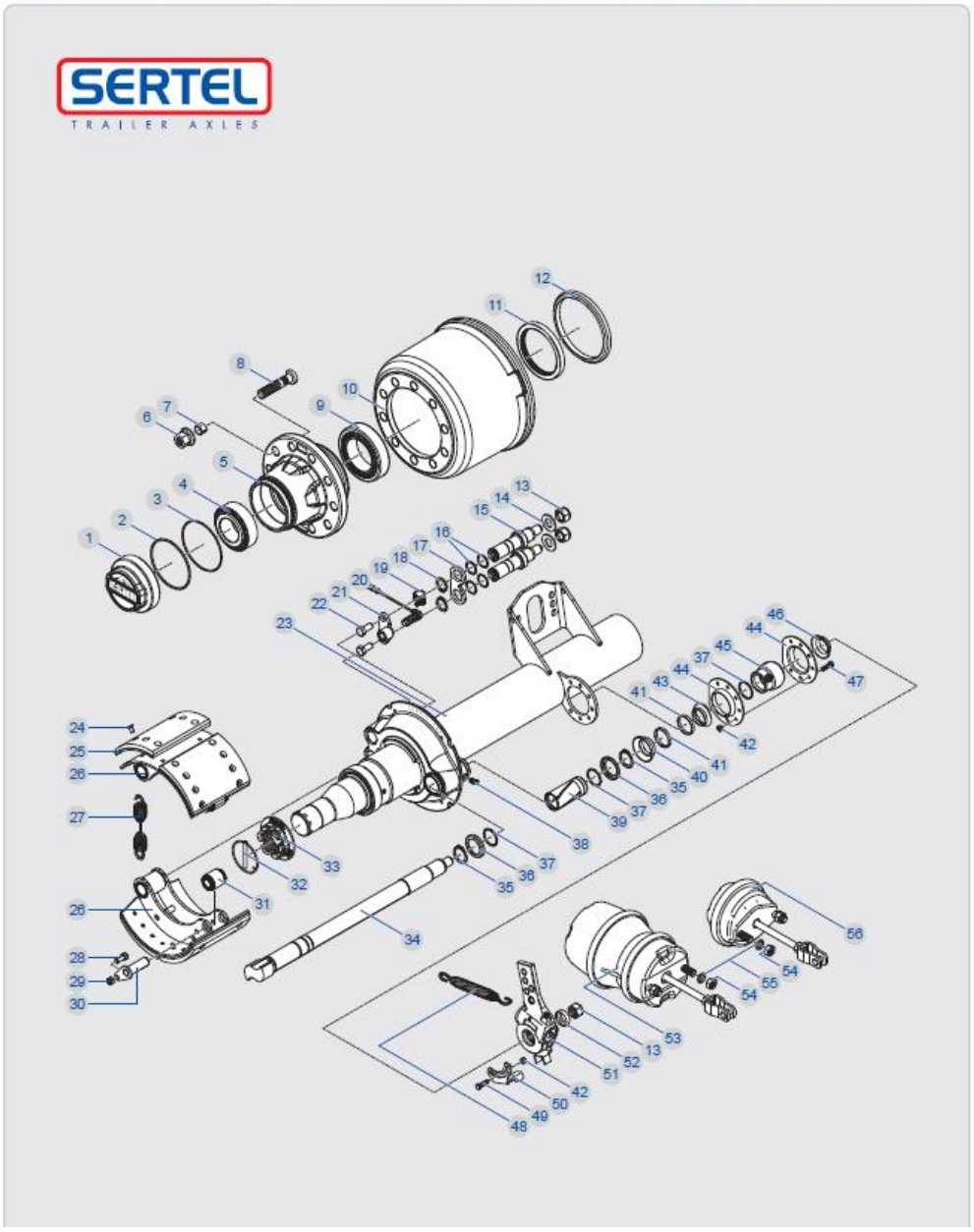
4-AXLES

TECHNICAL DRAWING



AXLES

***JUMBO-T3S3 (RIGID)** • 17.5" • DRUM BRAKE • DOUBLE TYRE AXLE • 12,000 KG.*



AXLES

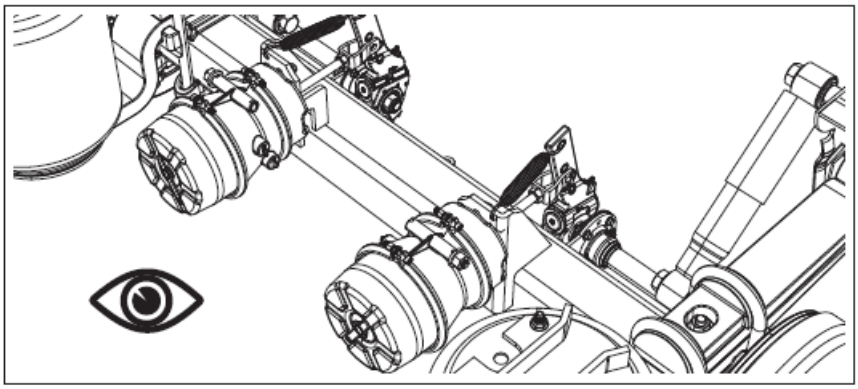
JUMBO-T3S3 (RIGID) • 17.5" • DRUM BRAKE • DOUBLE TYRE AXLE • 12,000 KG.

Pos	Item	Pcs
1	Hub Cap (M136x2)	2
2	O-Ring (125x4)	2
3	O-Ring (128x3)	2
4	Bearing (33213)	2
5	Hub (T3B)	2
6	Wheel Nut (M22x1,5)	20
7	Wheel Bushing	4
8	Wheel Bolt (M22x1,5x105)	20
9	Bearing (33118)	2
10	Brake Drum (S3B)	2
11	Grease Seal (125x152,4x15)	2
12	ABS Ring (168x16)	2
13	Nut (M22x1,5)	6
14	Lock Nut (M22)	4
15	Anchor Pin	4
16	O-Ring (31x2,5)	8
17	Anchor Pin Lock	2
18	Circlip (32x2,5)	4
19	ABS Clamp	2
20	ABS Sensor	2
21	ABS Holder	2
22	Hex. Bolt (M14x1,5x25)	4
23	Axle Beam	1
24	Revit (8x17)	64
25	Brake Lining (300x200)	1
26	Brake Shoe (without Brake Lining)	4
27	Brake Shoe Return Spring (5x182)	2
28	Hex. Bolt (M10x25)	4
29	Nut (M10)	4
30	Camshaft Roller Pin (22x72)	4
31	Camshaft Roller (22x42x48)	4
32	Axle Nut Locking Ring	2
33	Axle Nut (M64x3x44)	2
34	Camshaft (Left - Right)	2
35	Circlip (42x2,5)	2
36	U-Washer (60x8)	4
37	O-Ring (42x3)	6
38	Grease Seal (M10x1x10 - H2)	2
39	Bushing (42x47x102)	2
40	Seal (Inner)	2

Pos	Item	Pcs
41	Clamp (47x7)	4
42	Nut (M8)	10
43	Seal (Middle)	2
44	Spherical Bearing Holder	4
45	Teflon Bearing (42x65x70)	2
46	Seal (Outer)	2
47	Hex. Bolt (M8x1,25x25)	6
48	Slack Adjuster Return Spring (3x24x150)	2
49	Hex. Bolt (M8x1,25x30)	4
50	Automatic Slack Adjuster Lever	2
51	Automatic Slack Adjuster	2
52	Washer (40x14)	2
53	Spring Brake Actuator (24x30")	2
54	Nut (M16x1,5)	4
55	Washer (M16)	4
56	Service Brake Chamber (24")	2
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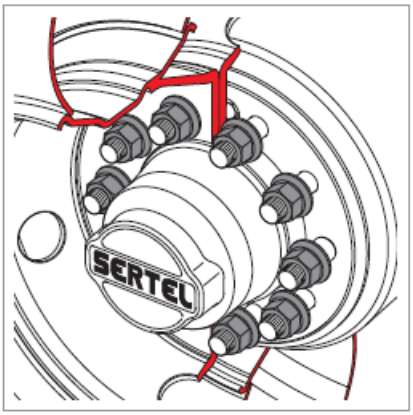
info@sertel.com.tr

4.1- WHEELBASE USAGE

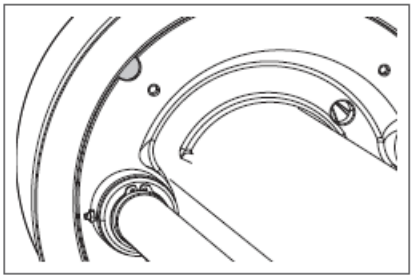


1. To avoid the problems and any malfunctions, inspect the axles and suspension systems at the first 2,000 km after the vehicle takes the road and repeat it every 30,000 km.

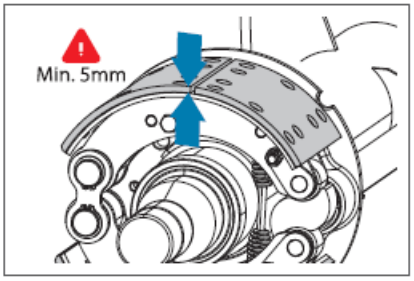
2. Stud nuts that are shown on the fig-ure to be checked for tightness at the first 2,000 km after the vehicle ta-kes the road and their tightness checks must be repeated every 60,000 km. (700 Nm)



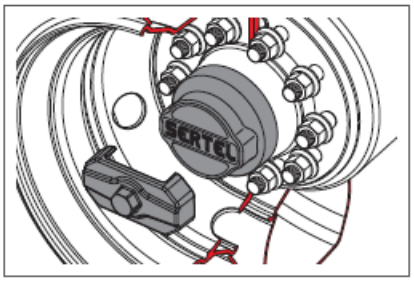
3. The brake linings of the vehicle must be checked from the inspection hole indicated on the figure every 30,000 km.



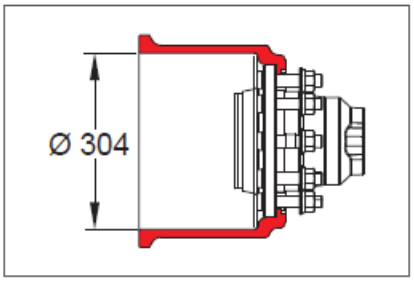
4. The brake lining thickness should be minimum 5 mm. The brake lining with a risky level of thickness must be replaced. Risky brake linings may break into parts and damage the system.



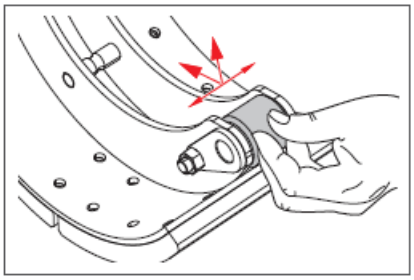
5. Always use an appropriate equipment for untightening the hub cap. Never use an impact wrench. With a broken cap, bearings are exposed the dirt.



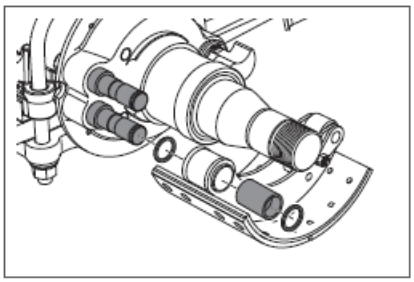
6. Inspect the brake drums while replacing the brake linings. After three replacement, machine the inner sur-faces of the drum. Do not attempt to machine a drum that is damaged or in poor condition. For your safety and brake performance, always change the drum with an inner diameter over than 304 mm.



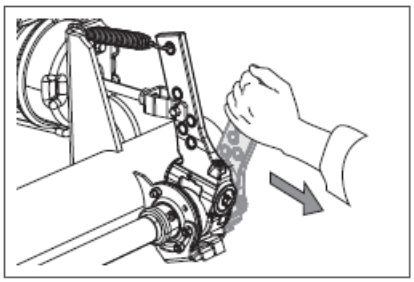
7. Inspect the camshaft rollers as shown on the figure before replacing the lin-ings. Wornout, loose and damaged parts must be replaced.



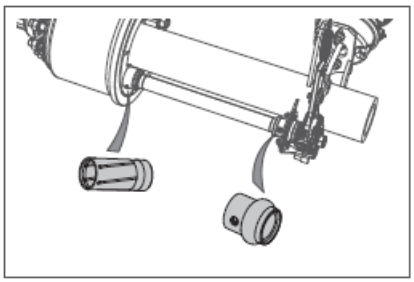
8. Inspect the anchor pin holes of the brake shoes before replacing the linings. Wornout, loose and damaged parts must be replaced.

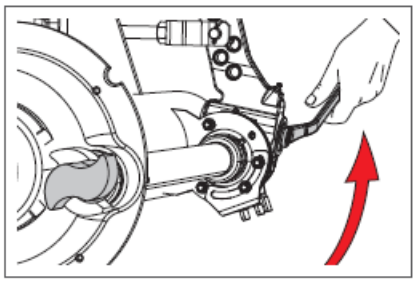


9. Inspect the camshaft by pulling the slack adjuster as shown on the figure before reassembling the brake shoes. Make sure camshafts turns easily.

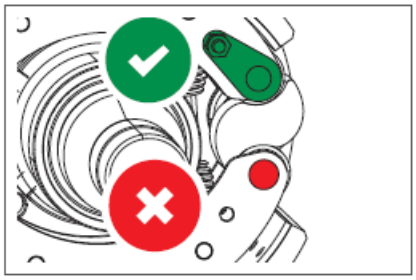


10. If a camshaft does not turn easily or it is too loose, the bearings must be replaced.

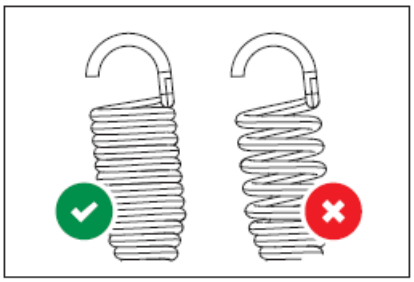




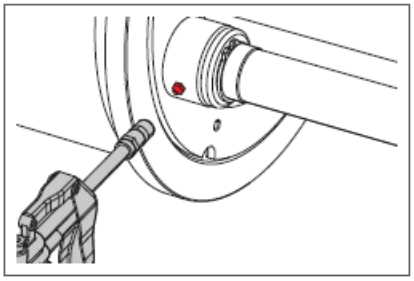
11. Before replacing the brake shoes, make sure camshaft is at the right position as shown on the figure. The camshafts can be adjusted by turning the adjustment bolt on the slack adjuster.



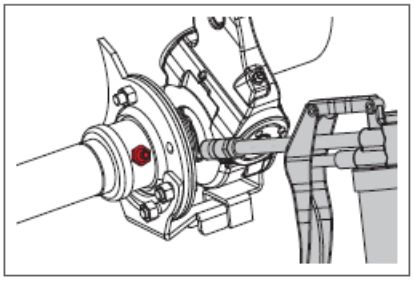
12. After brake lining replacement, the orientation of the brake shoes should be such that the roller fixation pins face outwards as shown on the figure. Wrong assembled brake shoes will affect the brake performance.



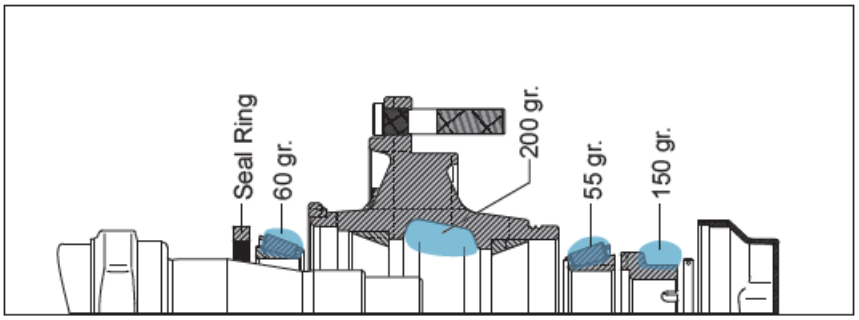
13. Inspect the return springs. Wornout or too loose springs must be re-placed.



14. Camshaft bearings and slack adjusters must be relubricated at every brake lining replacement.

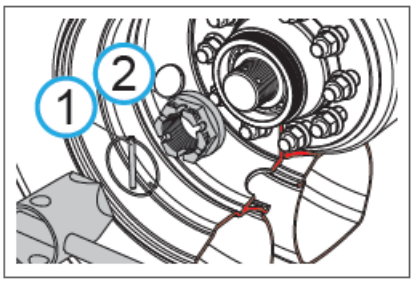


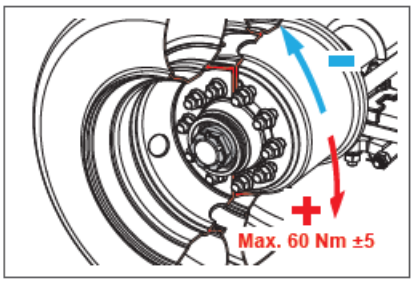
15. Camshaft bearings and slack adjusters must be relubricated at every brake lining replacement.



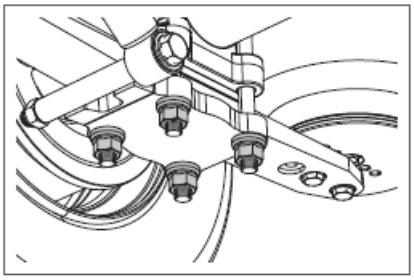
16. Inspect the bearings at every brake lining replacement. Relubricate the bearings if there is not enough grease or if it is contaminated. Before relubricating, remove all the contaminated grease by using kerosene or gasoline. Never use thinner or solvent etc. After cleaning the parts, use sufficient amount of grease as shown on the figure. After reassembling the parts, apply the grease on the axle nut and fill the gabs. Seal Ring must be replaced at every relubrication.

17. Before untightening the axle nut (2) remove the detent pin (1) with an appropriate equipment. After maintenance, tighten the axle nut to 60 nm. While tightening the axle nut, turn the tyre on the minus direction. If the hole on the axle does not align with the hole on the axle nut, turn the axle nut on the minus direction until they are aligned. After tightening the axle nut, reassemble the detent pin!

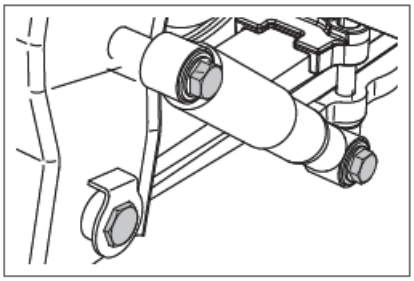




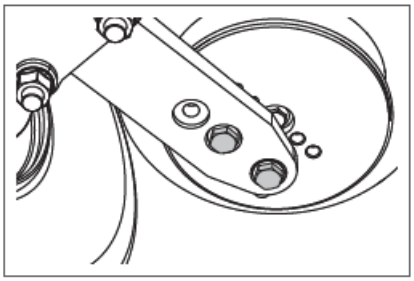
18. Spring connectors need to be checked for tightness at the first 30,000 km after the vehicle takes the road and their tightness checks must be repeated every 50,000 km. In order to tighten the U-Bolt nuts (1), remove the contra nuts. Tighten the U-Bolt nuts to 700 nm. After the U-Bolt nuts, tighten the contra nuts to 400 nm.



19. Spring connectors and anchor pins that are shown on the figure need to be checked for tightness at the first 30,000 km after the vehicle takes the road and their tightness checks must be repeated at every 50,000 km.



20. Air suspension connectors that are shown on the figure need to be checked for tightness at the first 30,000 km after the vehicle takes the road and their tightness checks must be repeated at every 50,000 km.



5-YELLOW WEDGES



Drw No	Part No	Description	Qt.	Note
1	ALT-3AX-001	Axle and Suspension Systems	3	SERTEL
2	ALT-3AX -002	Tire and Rim (245 70R 17,5) Tire - 002A (14 Qt.) Rim - 002B (14 Qt.)	14	GOOD YEAR
3	ALT-3AX -003	Ball Race	1	
4	ALT-3AX -006	Tool Box	2	1000(L)x275(H)x400(W)
7	ALT-3AX -010	Plastic Wheel Chock	2	Yellow Color
8	ALT-3AX -014	Brake System	1	WABCO
9	ALT-3AX -015	Electrical System	1	SERTPLAS