

ÖZKOÇ

AXLE INDUSTRY AND TRADING CO.LTD.

Produced for great expectations...

MANUEL AND WARRANTY



www.ozkocaxle.com

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1. PREFACE

Trax axles are manufactured according to international standards and before the delivery they are controlled in detail .

To be able to get maximum efficiency from the vehicle which has high standards , the controls and maintenance must be done according to instructions in the manual .

*Warranty cover is based on conditions and exceptions that explained in this manual Therefore it must be read carefully and always conditions that must be followed that mentioned .To be seen by **Özkoc İlave Dingil San.ve Tic.Ltd.Şti** authorised services this manual must be kept in the vehicle .In warranty period this manual will be demanded at repair and periodic maintenance by authorised services*

ÖZKOÇ İLAVE DİNGİL SAN TİC. LTD. ŞTİ.

AFTER SALES SERVICES

Attention must be paid for the stock codes of the original spare parts that ordered from Trax .

Non- original parts effect the function of the product negatively ,duration of use is shorter and they contains unpredictable risks and dangers.Furthermore they raise the maintenance cost .

You can order your spare parts from www.ozkocaxle.com or www.trax.com.tr

To take support for after sales services or information you can sen e mail to teknik@ozkocaxle.com

2. WARRANTY

2.1. WARRANTY PERIOD AND COVER

*1. Hereinafter **Özkoc İlave Dingil San.ve Tic.Ltd.Şti** will be named as Trax , the warranty period of the axles that manufactured by Trax is determined as (2) years for on road and one year for off road usage.ON ROAD:Described as asphalt and concrete surfaces. OFF ROAD: Described as gravelly ,sandy stabilized roads.*

2. This warranty includes only the cost parts and which occurs because of product ,labour and design mistakes.

3. The decision of the defected part is to be changed or repaired , is taken by Trax.

4. The changed parts and labours does not extend the guarantee period.

5. The repair or the change of the parts under warranty does not mean any acceptance of mistake or responsibility by Trax.

2.2. WARRANTY RULES

1. *The axle must be used in accordance with this manual and specification of the product .*
2. *Changes on the standard specification of the axles will cause disclaimer of warranty unless a written consent taken from Trax.*
3. *These terms of warranty are valid if the first and annual periodic maintenance are made by authorized services .The first maintenance must be made after the first loaded voyage and in first 2000 km.*
4. *The faults which occur because of the parts that are not ensured by authorized services or not approved by Trax are out of warranty*
5. *User always goes by the warranty and service manual which is given manufacturer while delivering the vehicle.Maintenances such as greasing ,cleaning must be done at stated time .*
6. *To be able to evaluate the faults in the scope of warranty ,the user must apply to authorised services in warranty period.*
7. *The repairment of the parts under warranty must be made in authorised services.*

2.3. EXCEPTIONS (NONWARRANTABLES)

1. *Faults which occur because of user mistakes. Attentions should be paid to overheating which occurs because of using brakes continuously. Overheating on brakes of drum brake axles can cause reduction on effect of brakes dangerously.It can cause damages or disabled of bearings.In case of overheating o brakes ,should be waited for cooling to pull handbrake.Otherwise the discs and drums can be damaged because of tension while cooling.The tightness of hub caps and orings must be checked.In case driving without hub caps the axles are out of warranty.*
2. *Faults or damages which occur because of external factors or accidents ,actions such as crashings,scratch, crashing of rocks or hard objects,icing,hail,strike of lightning ,industrial waste,acid rain, terror and each kind of fire,flood,shivering,earthquake.*
3. *Faults that occurs because of overload and improper loads such as overloading the vehicle more than load limit or exceeding the limit of the axis load and loadings which ignores the safety rules.*
4. *Not using the axle according to speed limit that mentioned on brake test certificate is a reason of acception the product nonwarrantable.*
5. *Using the axles and systems not according to directions of trax in OFF ROAD coditions, is a reason of acception the products nonwarrantable. The description of OFF ROAD which used by Trax is drivings on unpaved ,sandy, gravelly,wooded and stabilized roads.*

6. All faults because of using spare parts which are not supplied from a authorised services or not approved by Trax.

7. Pecuniary loss and intangible damages (profit loss, customer loss, loss of expected profit, rights and demands of third persons)

8. As a result of usage, wearings in the consuming parts such as especially brake linings, disc brakes, brake drums, brake chambers, s-cam stays, shock absorbers, suspension and axle lifting airsprings.

9. Faults caused by external forces and bad road conditions.

10. Violation of service and maintenance instructions.

11. Continuing use of the damaged part.

12. Continuing use of the damaged part.

3. MEINTENANCE AND CONTROLS

3.1. DAILY CONTROLS THAT MUST BE MADE

Before using the vehicle air pressure of the tyres and nuts must be checked if there is loosening or not. The vehicle must not be used unless if the needed adjustments are made.

General control must be made on tyres and walking axles for durability, wear, tightness, corrosion and damage. (Also in air suspension systems missing air pressure in airbags can cause damages, therefore the air pressure must be checked.)

3.2. FIRST MEINTANANCE AND CONTROLS

After first loading at least 2000 km, U-bolts, pin nuts, shock absorber and axle connections, axle lift nuts, air spring bottom and top connection nuts, must be checked according to the specified torque that shown in the picture.

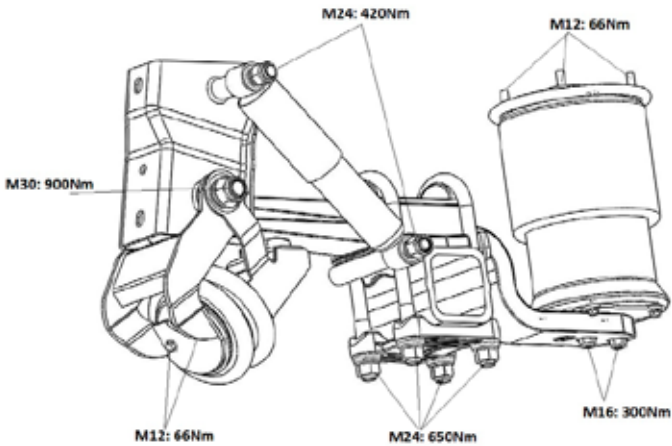
3.3. PERIODIC MEINTANANCE AND CONTROLS

3.3.1. TORQUE CONTROLLS

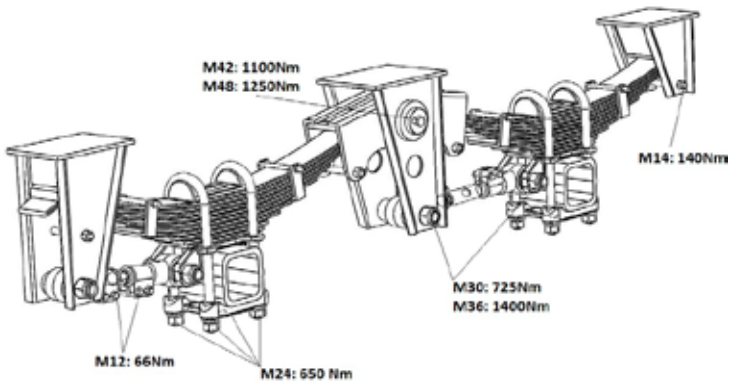
As mentioned in 3.2 connection nuts should be controlled according to specified torque in picture below In case of meeting different specified torque they must be retightened properly.

The nuts and pins which are not retightened properly can cause problems such as deforming, tearing and rupture while using the vehicle. It is important to control for long usage. These controls are responsibility of user, faults that occurs because of disruption of controls are accepted unwarrantable.

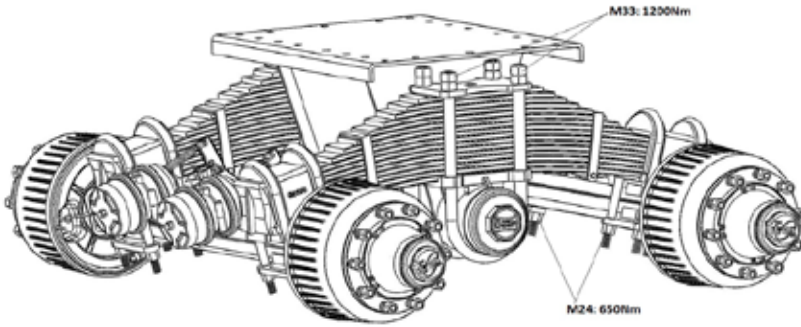
- AIR SUSPANSION



- MECHANICAL SUSPANSION



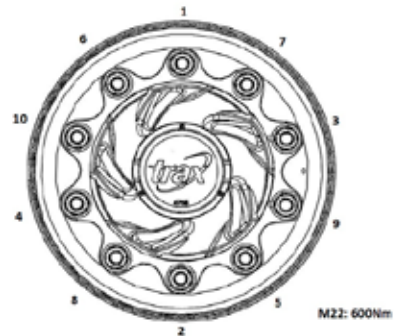
- TANDEM SUSPANSION



- BOLT NUT

Bolt nuts must be tightened in order that mentioned in mounting rim. Bolts must torqued and after first loading ,torque controll must be made when the vehicle is unloaden.

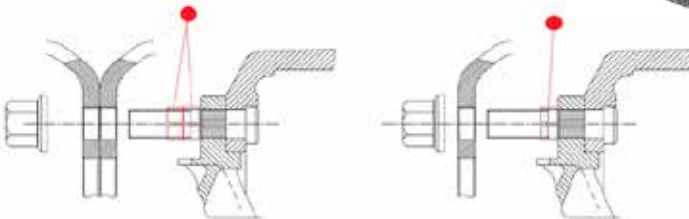
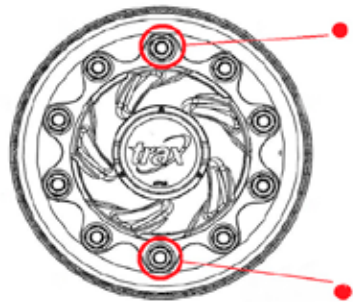
Foutls that accrues beacuse of loose nuts are accepted as unwarrantable.



Rim centering ring must be used in mounting double tyres and single tyres.

The rims must be mounted by using centering ring regardless of how many bolts rims have.

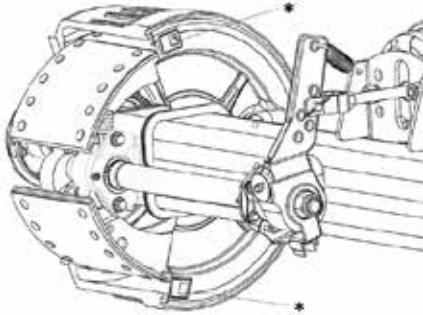
The mounting without centering ring will couse disproportionate load on hub center.In double tyre mounting double ring must be used and both rims must be centered.



3.3.2. CONTROL OF THE BRAKE LINING THICKNES

The brake linings can be consumed up to 5 mm thickness. (up to dusky colored area that shown in picture

Thinner brake lining damages brake drum . If the thickness of the linings becomes less than 5 mm ,the linings must be changed without waiting the time of periodic maintainance.



3.3.3. GREASING

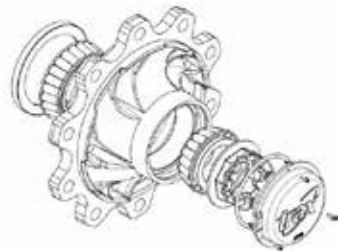
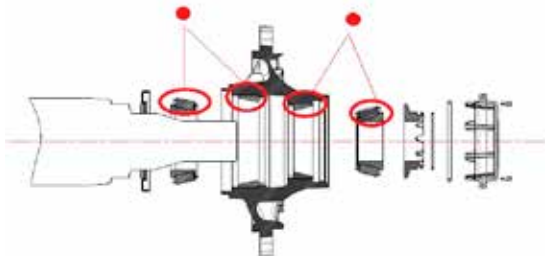
The axles and suspension parts must be greased from oil inlets that shown in picture .

Lubrication period of continuous running vehicles must be determined as 2 months .S-cam shafts and sluck adjusters semi annually greased and also greased up to new lubricant is seen at sides of stays when brake linings are changed by using Lityum Kompleks Soap Bease Special Grease .

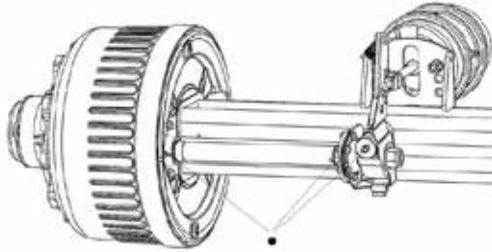
All greasing areas must be greased when the vehicle is unloaden.

3.3.3.1 LUBRICATING HUB AND BEARING: Grease must be impregnated inside and outside of bearings and Grease must be put iner bowls of hub.

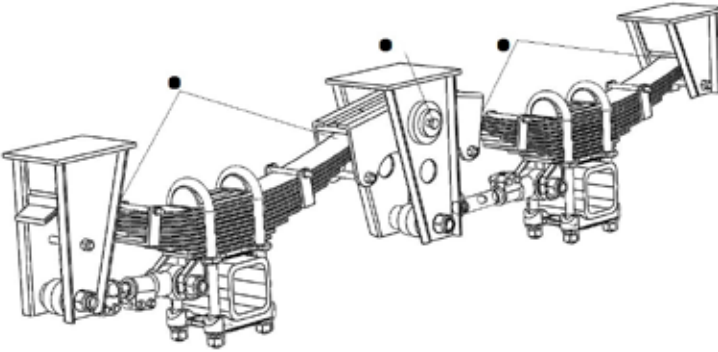
Oil seal must be greased and also extra Grease must be added to the gap between bearings .



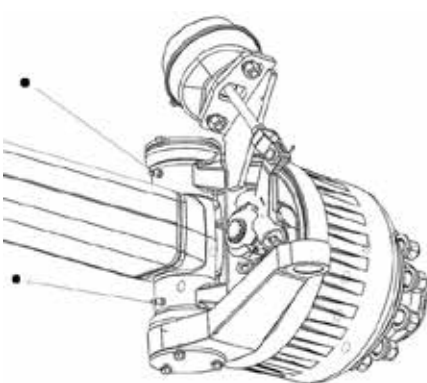
3.3.3.2 GREASING AXLE: *Grease nipple of s-cam shaft and sluck adjuster.*



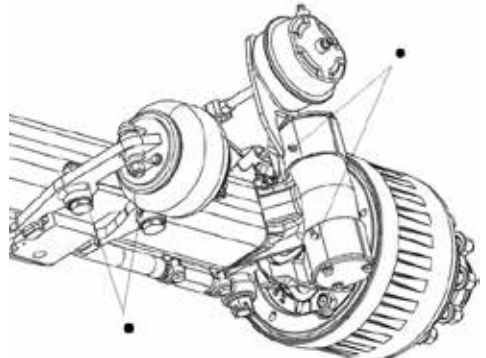
3.3.3.3 GREASING MECHANICAL SUSPANSION: *Slots of leaf spring and pin stays*



3.3.3.4 GREASING STEERING AXLE : *Axle steering body bushing and bearings,adding mechanizm bushing .*

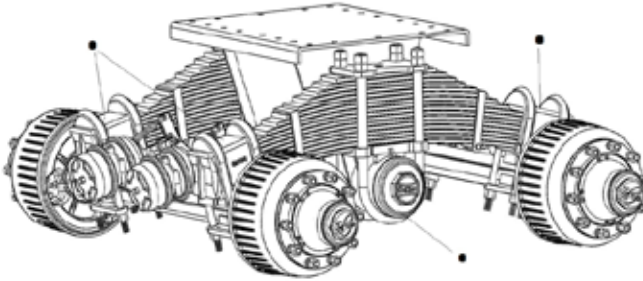


HYDROIC STEERING AXLE



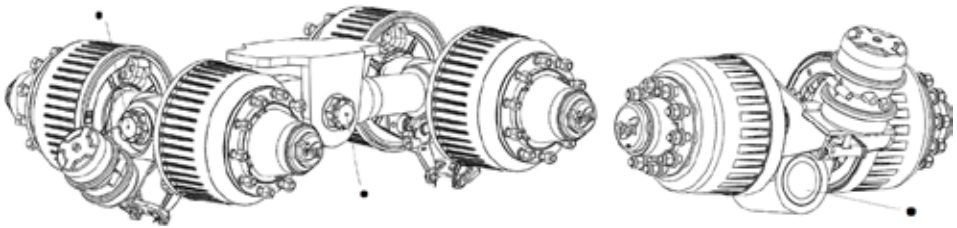
SELF STEERING AXLE

3.3.3.5 GREASING TANDEM: *Tandem stays bushing and leaf spring slots .*



SWINGING AXLE

PENDLE AXLE



3.3.3.6 HUB BEARING MEINTENANCE

Hub bearing maintenance and adjustment must ne made in each maintenance and if needed it should be changed.The oil condition must be checked in each maintenance. Bearing must not be used without oil and must not be exposed to over heating.

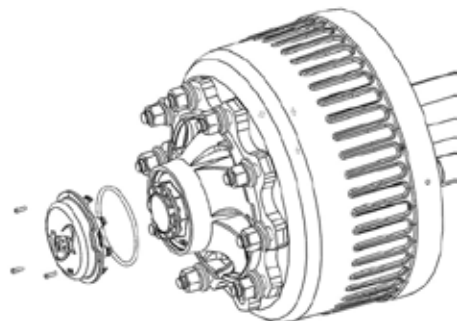
- CONTROL OH HUB CAP

Hup cap mounting is made toothed and pronged .Metal caps are mounted by screwing and plastic caps are mounted by bead seats.

In case of any crash of any prong or defromation of oring they must be replaced immediatly.

Plastic caps must be checked daily in case of any oil leakage or crack.

Driving must not be made if the cap is cracked or has any deformation. The faults that occures because of these driving are accepted nonwarrantable.



4- MANUAL OF STEERING AXLE

Locking sytem of steering axle works with air.To fasten up air must be given to picking bellow and locking piston.The air that coming to piston must be less than the air coming to picking air bellow.

Locking piston:1 bar Picking air bellow : 5 bar (are suitable values)

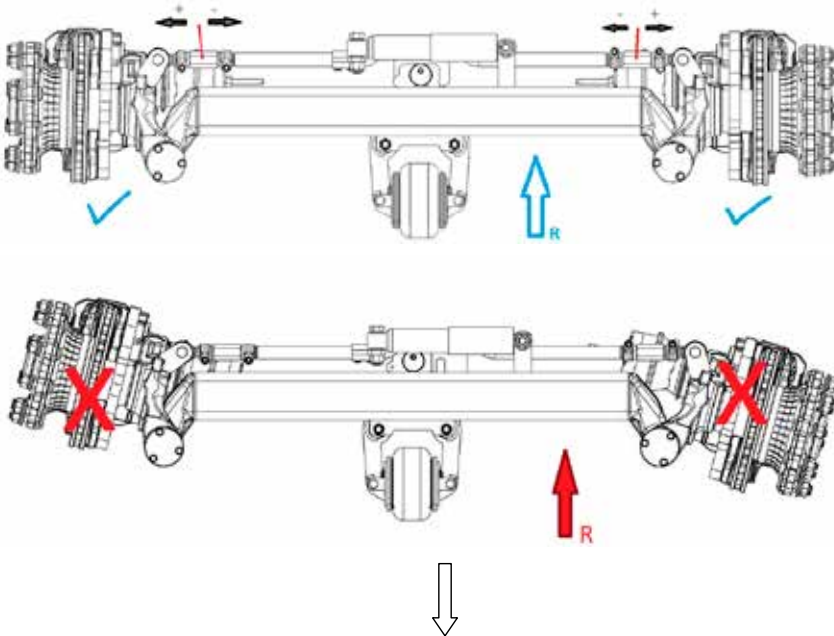
Axle rot adjustments are made by left and right collars on the axle.While making this adjustment axle must be at locked position. Turning(steering angle) is adjusted by stop bolts .

If the rot adjustment is not correct and the angle of steering is spoilt ,it causes faults on axle. In maintenance these controlls must be made without interruption.The faults because of these reasons are accepted as unwarrantable.

The axle turns with the movement of the vehicle according to driving direction .While driving the air of locking piston must be release.

Before back movement the tha axle must be fastened by givin air to locking piston.


Cerertainly back movement must not be made before locking the axle . The foultls while back movement without locking are accepted nonwarrantable.



MOVEMENT SIDE

5. INFORMING OF THE LABEL

It is seen in picture below what the parts mean in the lable over the axle. The labels or directions over the axle are as a part of security specifications. These must not be removed or covered. The labels must be on the products in all usage life and readable. Damaged or non readable labels of directions must be changed or repaired immediatly.

 www.trax.com.tr MADE IN TURKEY	Serial no	190165355	
	ID1/Type	PLT4220 / 1222	
	ID2/Brake	420x200	
	ID3/Capacity	12500 kg	
	ID4/Test Report Number	TSS389117	
	Production Date	01 - 19	105	km/h

-----SERIAL NO

-----TYPE / MODEL NO

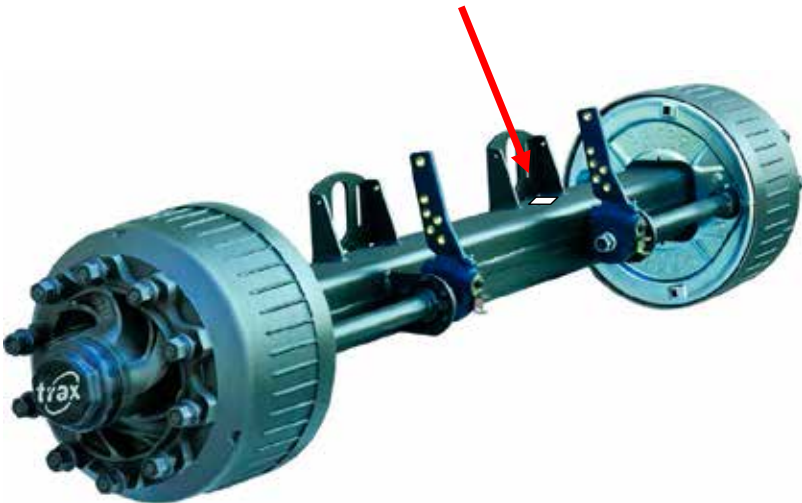
-----BRAKE / FREN

-----CAPACITY / KAPASİTE

-----TEST RAPOR NO

-----SPEED / HIZ

----- MONTH - YEAR / AY-YIL



* Lable is located on the axle beam .

6. AXLE REGISTER

TRAILER AXLE INFORMATION		
AXLE NO	AXLE PRODUCT CODE	AXLE SERIAL NUMBER
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

TRAILER INFORMATIONS

TRAILER CHASSIS NUMBER	
TRAFFIC REGISTRATION DATE	...../...../20....
MANUFACTURER SEAL	

** It will be filled by trailer manufacturer while delivering the vehicle.*

7. PERIODIC CONTROL TABLE

<i>NEEDED CONTROLS</i>	<i>DAILY</i>	<i>1.MNTC 2000 KM</i>	<i>3 MTH 30.000 KM</i>	<i>6 MTH 75.000 KM</i>	<i>12 MTH 150.000 KM</i>	<i>18 MTH 225.000 KM</i>	<i>24 MTH 300.000 KM</i>
<i>CONTROL OF HUB CAP</i>	X						
<i>CONTROL OF BOLT NUTS</i>	X						
<i>CONTROL OF THE TORQUE OF U BOLTS NUTS</i>		X		X	X	X	X
<i>CONTROL OF AIRBAGS CONNECTION</i>		X		X	X	X	X
<i>EYE CONTROL OF SUSPANSION SYSTEM</i>	X						
<i>CONTROL OF BEARING GAP</i>		X		X	X	X	X
<i>CONTROL OF BEARING GREASE</i>		X		X	X	X	X
<i>CONTROL OF AUTOMATIC SLUCK ADJUSTER</i>		X		X	X	X	X
<i>CONTROL OF BRAKE CHAMBER</i>		X	X	X	X	X	X
<i>CONTROL OF THICKNES OF BRAKE LININGS</i>			X	X	X	X	X
<i>CONTROL OF BRAKE ADJUSTMENT</i>		X		X	X	X	X
<i>CONTROL OF WEAR ON DISC AND BRAKE DRUM</i>			X	X	X	X	X
<i>LUBRRICATION OF S-CAM STAYS</i>			X	X	X	X	X
<i>LUBRICCATION OF STEERING STAYS</i>		X	X	X	X	X	X
<i>LUBRICATION OF LEAF SPRING SLOTS AND TANDEM STAYS</i>		X	X	X	X	X	X
<i>CONTROL OF STEERING AXLE ROT ADJUSTMENT</i>		X		X	X	X	X
<i>CONTROL OF STEERING AXLE SYSTEM</i>		X	X	X	X	X	X
<i>CONTROL OR CHANGE OF HUB AND BEARING</i>					X		X
<i>CONTROL OF AIR INTAKE CONNECTIONS</i>		X	X	X	X	X	X
<i>CONTROL OF ABS SENSOR</i>		X	X	X	X	X	X
<i>CONTROL OF AIR PRESURE OF TYRE</i>	X						

The controls that signed X must be made by user ..
 CONNECTION PARTS MUST BE CHECKED BY CALIBRATED TORQUE SWITCH.

8. MEINTENANCE ACTIVITIES

Axle meintenance reports and service informations must be added. In next service former maintenance must be falloved.

MEINTENANCE DATE	...../...../20.....	SERVICE STATION
KM	.....KM	SEAL
AUTHORITATIVE		
ACTIVITIES / NOTES:		
MEINTENANCE DATE	...../...../20.....	SERVICE STATION
KM	.....KM	SEAL
AUTHORITATIVE		
ACTIVITIES / NOTES:		

MEINTENANCE DATE	...../...../20.....	SERVICE STATION
KM	.....KM	SEAL
AUTHORITATIVE		
ACTIVITIES / NOTES:		
MEINTENANCE DATE	...../...../20.....	SERVICE STATION
KM	.....KM	SEAL
AUTHORITATIVE		
ACTIVITIES / NOTES:		
MEINTENANCE DATE	...../...../20.....	SERVICE STATION
KM	.....KM	SEAL
AUTHORITATIVE		
ACTIVITIES / NOTES:		

MEINTENANCE DATE	...../...../20.....	SERVICE STATION
KM	.....KM	SEAL
AUTHORITATIVE		
ACTIVITIES / NOTES:		
MEINTENANCE DATE	...../...../20.....	SERVICE STATION
KM	.....KM	SEAL
AUTHORITATIVE		
ACTIVITIES / NOTES:		
MEINTENANCE DATE/...../20.....	SERVICE STATION
KMKM	SEAL
AUTHORITATIVE		
ACTIVITIES / NOTES:		

NOT: _____

NOT: _____



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