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SAF-HOLLAND Australia

Smoothing out suspension issues
SAF-HOLLAND INTRA Range Suspension



Suspension maintenance starts very early – at first 5,000km

IMPORTANCE OF THE 1st SERVICE:

- “Bed in” period is over – components are in their operating position
- Verify the work of the “last man touch”, check all the bolts
- Start your maintenance record keeping

PERIODIC SERVICE – WHY?

- Be proactive – not reactive
- Be safe on the road
- Protect your investment, maintain your warranty
- Reduce downtime, get your return on investment



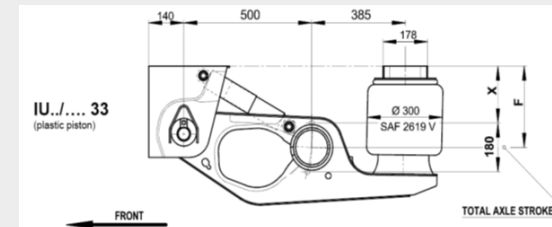
1st Service - SAF INTRA range suspension



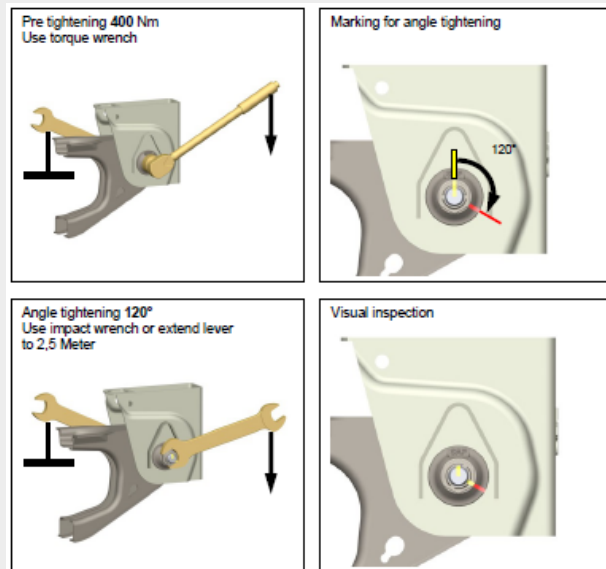
1. Starts with adjusting the correct ride height

Why is important to set the ride height?

- Suspension is designed to work on the correct ride height
- Rubber components have their neutral position on the ride height
- If necessary – release the tension in bolts and re-torque



2. Checking the pivot bolt torque



Alternative: nut to 1200Nm

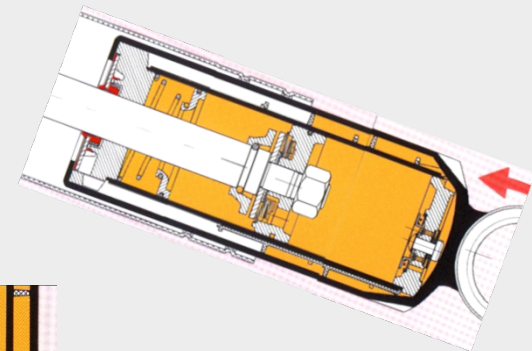
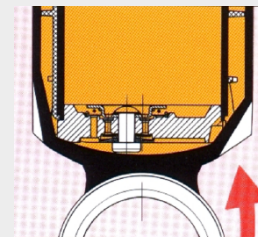
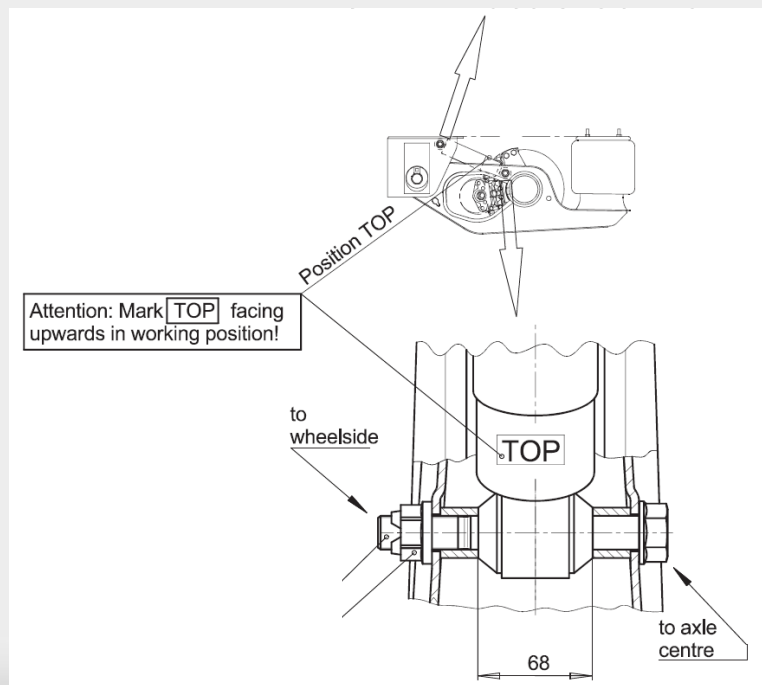
Mark it for easier visual inspection



Just in case – the correct torque is stamped on the hanger



3. Checking the shock absorber orientation and shock bolts torque



TOP position due to special valve design

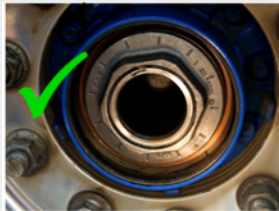
BOLTS TORQUE SETTING:
600Nm – upper and lower bolt



4. Checking the wheel end and spindle nut

- The three simple hub/bearing tests

1. Visual - Grease leak check



2. Audible – Hub noise test



3. Physical – Wheel rock test



movement: 0.25mm max

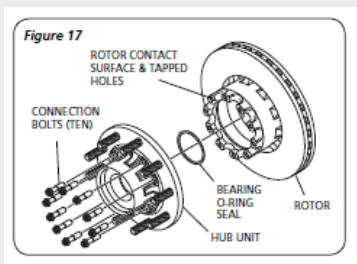
- Spindle nut check



Left hand side – LH thread
Right hand side – RH thread
Torque: 900Nm



5. Checking the rotor bolts



200Nm – check torque

6. Checking the air bag installation



Top bolt nuts – 40Nm
Bottom bolt nut – 80Nm

Check the correct offset
installation (30mm or 60mm).



Paperwork is important – it is a record of a job well done

Make sure that the torque settings label and service decal are affixed to the trailer chassis

FIRST SCHEDULED MAINTENANCE (@ 5000km) - WORKSHOP

PLEASE NOTE: All contact surfaces of the pivot bolts and shock absorber bolts must not have additional primer. If additional primer applied, warranty will be void.
All bolts to be torque dry.

BRAKE BALANCE: To obtain maximum performance from the disc brakes, brake balance between truck and trailer must be carried out before going into service and again at 5000k service, and then at every 12 months thereafter. Maximum lead to trailer must not exceed 0.14 Bar (2 psi). If the balance is outside of these values, there is no warranty on parts or labour. Ride height must be set correctly.

Forward completed document to **SAF-HOLLAND Australia**. (email: service@saftolland.com.au)

Customer: _____

Customer address: _____

Fleet No _____ Rego No _____ Date of Rego _____ Build date _____ Vehicle manufacturer _____ VIN _____

km's travelled _____ Ride height _____

Service provider: _____ Service date _____ Job No _____

Service provider's address _____

Suspension type	TORQUE REQUIREMENTS (Nm)																HUB CHECKS	
	A	B	C	D	E	F	G	H	Alloy hanger (A)	Alloy hanger (B)	WHEEL ROCK	NOISE						
INTRADISC	1200 Nm on nut	600	600	40	Plastic plunger - 80 Steel plunger - 100	Not applicable	200	900 whilst rotating hub	1200	400	Play no greater than 0.25mm	<input type="checkbox"/> If no noise	<input type="checkbox"/> If noisy					
INTRADRUM					M16 bolt - 80 Self tapering bolt - 20	580	200		Not applicable	Not applicable								
GERMAN AXLE/MODULE		400	400															

TORQUE & HUB CHECKS ☐ To indicate checked and correct

Axle position: 1, 2, 3, 4, 5, 6

Axle serial No: _____

Comments: _____

Service person: (Print name) _____ Sign: _____

Authorized by: Engineering Manager _____

UNCONTROLLED IF PRINTED

Issue date: 18/3/11

1st Service form – record your work and send it back to SAF-HOLLAND for our records

INTRADISC / INTRADRUM SUSPENSION MAINTENANCE **SAF-HOLLAND**

TORQUE SETTINGS AND PROCEDURES - STEEL HANGERS

M20x1.5 (38 mm Soc.)
Nut contact surface greased: 500 Nm
Nut contact surface dry: 600 Nm

M12 (19 mm Soc.)
40 Nm

M30 (48 mm Soc.)
400 Nm + 120°

M16 (24 mm Soc.)
180 Nm with steel plunger
80 Nm with plastic plunger

1*. Pre-tighten to : 400 Nm.
Use torque wrench with socket size of 46mm.

2*. Mark the angle of 120° (two flats) for the final tightening.

3*. Perform the final tightening of 120° (two flats)
Use impact wrench or extend lever to 2.5 m. Hold hexagon bolt head to prevent it from turning during the final tightening.

4. Clearly mark with counterpunch and line marker relative position of the bolt, nut and hanger after the final tightening for the future visual inspections (to be easily visible)!

***Note 1:** As an alternative to points 1-3, the pivot bolt can be tightened to 1200Nm if the appropriate torque wrench is available.

***Note 2:** The pivot connection **MUST** be marked by the **OEM**, otherwise there will be no warranty.

The First Service Provider is responsible for the shock absorber bolts and axle spindle nuts re-torque/marking for the regular visual inspection as required in the "Repair and Maintenance Manual".

Warranty on SAF Intradisc/Intradrum suspension would be void if the prescribed maintenance procedures were not performed as per "Repair and Maintenance Manual". If the Manual has not been delivered with the trailer, please call **SAF-HOLLAND - Customer Service** on 03 9743 6799.

Suspension Service / Maintenance Decal **SAF-HOLLAND**

Service Register: _____


Service Interval: _____ Date: _____ Next Service Due: _____ Service Centre: _____

151 High Street, Melbourne, VIC 3007
Ph: 03 9743 6799 Fax: 03 9743 6763
E-Mail: service@saftolland.com.au

PO Box 616, Melbourne, VIC 3007
Customer Service Fax: 03 9747 3895



To have a piece of mind – continue with regular servicing



SAF-HOLLAND Group

Maintenance instructions

Z19-19 W
SK RZ 9019W
with WABCO Disc Brake type PAN 19-1

MAINTENANCE INTERVALS WHICHEVER COMES FIRST	DISTANCE INTERVALS>	PERIODIC CHECK			
	AFTER FIRST 5,000 KM	EVERY 30,000KM	EVERY 75,000KM	EVERY 150,000KM	
	TIME INTERVALS >	AFTER FIRST MONTH	EVERY 3 MONTHS	EVERY 6 MONTHS	EVERY 12 MONTHS

MECHANICAL CHECK

Attention: Torque check wheel nuts after the first 50km and 150km to recommended torque setting, also after any removal of the wheel.

VISUAL AND SAFETY INSPECTION

Hub unit maintenance-free. Visual inspection for grease leakage, bearing noise and end play check.	•	•		
Inspect hub nuts and make sure they are not loose. If loose, retighten as per prescribed procedure.	•	•		
Check rubber dust covers for cracks and damages. Check adjuster cap for correct setting.	•			•
Inspect the brake pad thickness at regular intervals (eg. whenever tyre pressure is checked) but at least every 3 months.		•		
Inspect the brake disc for cracks.		•		
On aluminium hanger brackets inspect the pivot-bush assembly bolts and shock absorber bolts with the recommended torque setting.	•		•	
Inspect suspension for correct ride-height setting, readjust if required.	•		•	
Perform general annual inspection (brakes, air bags, tyres, pivot and shock absorber bolts etc.)	•			•
Perform general annual safety check (tractor/semi) trailer brake compatibility balance, ABS, etc.]	•			•

SPECIAL SERVICE CONDITIONS

Vehicles with long standing periods	Service at specified intervals
Vehicles used under extreme conditions	Service at suitably reduced intervals, e.g. Trailer operating in continuous multi-shifts or in off-road construction sites.

Warranty claims will only be accepted as long as the operating and maintenance instructions have been completed and SAF spare parts have been fitted.

Remember – we are just a phone call away...

