

DAILY / PRE-TRIP OPERATION INSPECTION

Daily or before each trip, inspect lift axle and all adjacent components for proper operating condition. Identify and repair any loose or damaged components.

NOTE: Replace any safety decals that are faded, torn, missing, illegible or otherwise damaged. Contact Watson & Chalin to order replacement labels.

GENERAL INSPECTION

Following appropriate inspection procedures is important to help ensure the proper maintenance and operation of the suspension system and component parts function to their highest efficiency.

Fasteners

Inspect for any loose or damaged fasteners on the entire lift axle suspension. Make sure all fasteners are tightened to the specified torque. Refer to Torque Requirement Procedures if fasteners are supplied by W&C. For non-W&C fasteners, refer to the vehicle manufacturer's specifications. Use a calibrated torque wrench to check torque in a tightening direction. As soon as the fastener starts to move, record the torque value. Correct the torque if necessary. Replace any worn or damaged fasteners.

Air Springs

Visually inspect suspension for debris rubbing against air springs or chaffing. Clear debris and / or replace as necessary.

Brake Components

Visually inspect for damage to any components and to ensure all mounting fasteners are tight and properly aligned. Brake adjustments should be checked weekly. Brake operational check interval and component inspection interval with drum removed should never exceed 3 months of service. All brake service should be performed according to the brake manufacturer's specifications or TMC Recommended Practices.

Air Plumbing and Components

Visually inspect for damage to any components, loose fasteners or kinked or rubbing air lines.

RECOMMENDED PRACTICES

Watson & Chalin encourages all maintenance professionals to refer to TMC Recommended Practices (RP's) that pertain to vehicle suspensions and their components. The following are some of the referenced recommended practices (current revision designations not shown).

RP607	Preventative Maintenance and Inspection of S-Cam Foundation Brakes
RP609	Self-adjusting and Manual Brake Adjuster Removal, Installation and Maintenance
RP618	Wheel Bearing Adjustment Procedures
RP622	Wheel Seal and Bearing Removal, Installation and Maintenance
RP631	Recommendations for Wheel-End Lubrication
RP640	Alternate Wheel Bearing Adjustment Systems
RP645	Tie Rod Inspection and Maintenance Procedure
RP651	Steer Axle Maintenance Guidelines
RP652	Service and Inspection of Air Disc Brakes



RECOMMENDED MAINTENANCE INTERVALS

NOTE: The following intervals are recommended minimums based on harsh service applications (logging, oil field, construction, heavy-haul, residential refuse). Severe applications will require more aggressive maintenance intervals.

COMPONENT	INITIAL BREAK-IN	INTERVALS AFTER INITIAL BREAK-IN	PROCEDURE
Wheel Bearings	5,000 mi.	8,000 mi. or every 2 months, whichever comes first	Check for excessive end-play at wheel-end (criteria is between 0.001" and 0.005") adjust as required; grease or oil
Tie Rod Ends		10,000 mi. or monthly, whichever comes first	Verify torque, inspect for leaking or damaged boots; grease
Kingpin Bushings		10,000 mi. or every 6 months, whichever comes first	Check for wear; grease
Pivot Connections		5,000 mi. or as needed, whichever comes first	Verify torque
Stabilizer Shocks			Verify torque, check for oil leaks and adequate return
Brake Camshafts and Adjusters		During normal chassis lubrications or 3 months, whichever comes first	Check for wear and excessive movement, verify adjustments; grease (reference manufacturer's documentation for service specifics)

RECOMMENDED LUBRICATION SPECIFICATIONS

COMPONENT	PROCEDURE
Kingpins	NLGI-1 or NLGI-2 grease
Tie Rod Ends	NLGI-1 or NLGI-2 grease
Wheel Bearings	NLGI-1 or NLGI-2 grease; GL-5 gear lubricant; NLGI-00 Semi-fluid grease. (Reference original spec)
Brake Camshafts, Anchor Pins, Roller Journals and Adjusters	NLGI-1 or NLGI-2 grease

KINGPIN INSPECTION SPECIFICATIONS

	CRITERIA	READINGS	ACTION
Vertical End-Play (In-Service Axles)	0.001" - 0.030"	If 0.0"	Remove shims to achieve 0.001" - 0.010"
		0.001" - 0.010"	No action necessary
		0.011" - 0.030"	Add shims to achieve 0.001" - 0.010"
		If over 0.030"	Inspect thrust bearing, replace if necessary, add shims as required to achieve 0.001" - 0.010"
Kingpin Bushings	Less than 0.010"	If 0.010" or greater	Replace kingpin bushings

Actual product performance may vary depending upon vehicle configuration, operation, service and other factors.
 All applications must comply with applicable specifications from Watson & Chalin and the respective vehicle manufacturer.
 Contact Watson & Chalin for additional details regarding specifications, applications, capacities, and operation, service and maintenance instructions.

Contact Watson & Chalin at 972.547.6020 for additional information.



Watson & Chalin
 725 E. University Drive, McKinney, Texas 75069
 972.547.6020 • 800.445.0736 • Fax 972.542.0097
www.watsonsuspensions.com

