Preventative Maintenance

STEERABLE LIFT AXLE

Daily/Pre-trip Operator 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 safely 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 adjustment 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, Mfg. 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 – Preventive 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

W&C230 05-2017
Watson & Chalin is a brand of Hendrickson

Preventative Maintenance

STEERABLE LIFT AXLE

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 endplay 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 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 lubrication or 3 months whichever comes first.	Check for wear and excessive movement, verify adjustments; grease. (ref. 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