

SECTION 23 — MAINTENANCE INTERVALS AND SPECIFICATIONS

Lubrication and Maintenance Intervals

All new vehicles are factory lubricated. Once the vehicle is in operation, regular lubrication and maintenance intervals (based on the type of service and road conditions) must be established and performed. Load weight, vehicle speed, road conditions, and weather conditions all contribute to lubrication frequency. Performing thorough lubrication and maintenance at the specified intervals will ensure an outstanding vehicle life and will reduce overall operating expense.

The Lubrication and Maintenance Intervals Chart contains an extensive list of components and systems. Listed items and systems must be regularly inspected, serviced, and / or replaced to maximize vehicle availability and minimize unexpected failures. Recommended synchronized intervals are shown for each item. This chart can serve as a convenient one-stop reference to research most maintenance needs.

Only lubricants of superior quality, such as Fleetrite® lubricants, should be used. The use of inferior products will reduce the service life of the vehicle or result in failure of its components. The use of Fleetrite® lubricants is recommended for optimum performance.

Maintenance intervals provided in this manual are for normal highway and environmental service conditions.

These intervals may be expressed in miles (kilometers), hours of operation, and / or months of operation. It is important to note that in high duty cycle types of operation and / or where operating

conditions are extremely severe (such as in deep water, mud, or unusually dusty conditions), the vehicle may require lubrication much more frequently than specified in this manual.

The synchronized A and B service intervals are designed to coordinate maintenance activities and to provide the appropriate levels for servicing components. Following the service intervals minimizes the number of times per year that the vehicle must be brought into the shop. In addition to the A and B service intervals, the Special Service Interval column is provided for items that need infrequent servicing. In most cases, these service intervals represent the recommended maximum intervals. For some components, however, the manufacturer's recommended maintenance intervals may have been shortened to allow synchronization with other maintenance tasks.

The maintainer may wish to synchronize engine-related items with other lubrication / maintenance intervals in order to reduce downtime, even though the recommended intervals in the *Engine Operation and Maintenance Manual* may be longer. **Engine Manual maximum intervals (based on the actual operating conditions specified in that manual) must never be exceeded.**

NOTE: For vehicles equipped with Cummins® B engines, refer to Cummins QuickServe® Online, your Cummins Engine Operation Manual, or contact a certified Cummins repair location for specific engine maintenance intervals, capacities, and instructions.

Maintenance Intervals and Specifications

Lubrication and Maintenance Interval Chart Symbols Key

Symbol	Interval Definition
A	A interval: 5,000 miles (8,000 km) / 200 hours / 6 months
B	B interval: 10,000 miles (16,000 km) / 400 hours / 12 months

Lubrication and Maintenance Interval Chart Notes

NOTE 1: A hand-pumped grease gun should be used for optimal grease distribution within the component joint.
NOTE 2: Certain services are performed at Special Intervals or in addition to A or B Service when the interval dictates.

Pre-Trip Inspection

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Check all Items listed in Section 2		

Axle – Front

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Axle U-Bolts – Retorque		At first 1,000 miles (1,600 km) then every 36,000 miles (58,000 km) thereafter
Drag Link – Lubricate (1)	A, B	
Kingpins and Bushings – Lubricate (1,2)	A, B	
Shock Absorbers – Inspect	A, B	
Suspension Fasteners / Components – Check	A, B	
Tie Rod Ends – Lubricate (1)	A, B	
Wheel Bearing Oil Leaks, Level, and Condition – Inspect		60,000 miles (96,000 km) / - / 6

Axle – Rear

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Stable Ride Suspension Fasteners / Components – Check	A, B	
Axle Flange Nuts – Retorque	B	
Ride Height - Check	B	
Air Bag - Inspection		12 months
Axle Breathers Clean and Inspect		30,000 miles
Axle U-Bolts – Retorque		At first 1,000 miles (1,600 km) then every 36,000 miles (58,000 km) thereafter
Rear Axle With Petroleum Oil – Change		60,000 miles (96,000 km) / – / 12
Rear Axle Wheel Ends – Inspect for leaks, lube level / condition.		100,000 miles (160,000 km) / – / 12 Also at brake lining service
Rear Axle With Synthetic Oil – Change		Dana® Spicer®: 180,000 miles (288,000 km) / – / 36 months Meritor: 250,000 miles (400,000 km) / - / 36 months

Body / Components

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Accelerator Pedal – Check Function	A, B	
Air Conditioner (Optional) – Check Performance	B	
All Seat Base Bolts	B	
Body – Check loose, damaged, missing parts	A, B	
Body Mounting Bolts – Inspect Tightness		1 month or 1,500 miles (2,414 km) and then 3 months or 3,000 miles (4,828 km) thereafter

Maintenance Intervals and Specifications

Body / Components (cont.)

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Chassis – Check for loose, damaged, missing, parts	A, B	
Emergency Windows Slides – Lubricate		Every 12 months
Emergency Doors / Exits and Buzzers – Check	A, B	
Entry Door – Check Operation	A, B	
Headlights, Bright / Dim / Daytime – Check	A, B	
Heater Hoses and Connections – Check Condition		Every 12 months. See Heater and Coolant Hose Inspection and Replacement Guide in this section for additional information.
Inspect and Clean Step Well and All Other Heater Cores and Blower Areas	A, B	For units without filter, more frequent cleaning may be required.
Lights Interior / Exterior – Check	A, B	
Optional Components As Equipped – Check	A, B	
Post-Trip Inspection Feature – Check	A, B	
Roof Hatch(es) – Check Operation	A, B	
Safety Equipment As Equipped – Check	A, B	
Stepwell and All Heater Core Air Filters – Inspect / Clean or Replace	A, B	
Seat Belt(s) Bolts – Check Operation / Condition	A, B	
Undercoating Inspection		Inspect the undercoating of school buses annually and recoat as required.
Warning lights, Stop Arm(s), Crossing Gate, Entrance Door / Warning lights Interaction – Check	A, B	

Maintenance Intervals and Specifications

Brakes – Air

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Air Compressor Discharge Line – Inspect		50,000 miles (80,000 km) / 1,500 / 24
Air Dryer Desiccant – Replace		AD-9 Model: 250,000 miles (400,000 km) / –/ 24; Other Models: 125,000 miles (200,000 km) / –/ 12
Air Dryer Heater & Purge Valve – Check		AD-IP: 12; AD-9: 24 60,000 miles max
Air Tanks (all) – Drain Water	A, B	
Brake Chamber Rod Travel – Check	A, B	
Governor Cut-In / Cut-Out Pressure – Check	A, B	
Low Air Pressure Warning Alarm – Check	A, B	
Parking Brake Operation – Check	A, B	
Rotors / Drums, Calipers, Chambers, Hoses, etc – Check for wear / damage	A, B	
S-Cam Bushings – Lubricate	A, B	
Service Brakes Operation – Check	A, B	
Shoes – Check for wear and drag	A, B	

Brakes – Hydraulic

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Brake Pedal Holds Pressure– Check	A, B	
Discs, Calipers, Lines, etc. – Check for wear / damage	A, B	
Hydraulic Brake Fluid – Change		Every 2 years from the date of manufacturing
Master Cylinder – Check Fluid Level	A, B	

Maintenance Intervals and Specifications

Brakes – Hydraulic (cont.)

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Master Cylinder Cap – Check Vent for Obstruction	A, B	NOTE: If obstruction is observed, replace cap.
Parking Brake Operation – Check	A, B	
Parking Brake Cable – Check condition	A, B	
Service Brakes Operation – Check	A, B	

Cooling System

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Coolant – Check Level	A, B	
Fan Blade / Shroud – Check Damage / Contact	A, B	
Fan Clutch – Check	A, B	
Radiator & CAC Fins – Check for Blockage	A, B	
Pressure Relief of Radiator Cap	12 months	
Extended Life Coolant – Add Extender		V8 and I6: 241,000 miles (150,000 km) / 6,000 / 30

Drive Shaft

System	Item	Intervals	Special Interval (3) : miles (km) / hours / months
U-Joints – Inspection and Lubrication	U-Joints, Slip Joint Boot, & Weights – Inspection and Lubrication		20,000 miles (8,000 miles for non booted)

Maintenance Intervals and Specifications

Electrical

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Engine Electrical System Inspection		35,000 miles (56,000 km)
Engine Start and Gauge / Warning Lights – Inspect		20,000 miles (32,000 km) / 600 / 12
Instrument Readings Proper – Inspect		20,000 miles (32,000 km) / 600 / 12
Power Distribution Center: Corrosion throughout case and on pins of fuses and breakers – Inspect		20,000 miles (32,000 km) / 600 / 12
Alternator Starter Battery – Inspect		20,000 miles (32,000 km) / 600 / 12

Engine

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Air Filter Restriction Gauge Reading, Replace Filter as Needed		20,000 miles (32,000 km) / 600 / 12
Fan Belt – Inspect		30,000 miles (48,000 km) / - / 12
Fan Belt Auto Tensioner – Inspect		30,000 miles (48,000 km) / - / 12
Fuel Filter – Drain Water		15,000 (w/sensor)
Air Induction System – Check looseness / leaks		At Oil Change
Engine Oil and Filter(s) – Replace		Refer to <i>Engine Operation and Maintenance Manual</i> . For vehicles equipped with Cummins® B engines, refer to Cummins QuickServe® Online, your Cummins Engine Operation Manual, or contact a certified Cummins repair location for specific engine maintenance intervals, capacities, and instructions.
Fuel Filter – Replace		
Valve Lash Adjustment (I-6 only)		

Maintenance Intervals and Specifications

Exhaust System

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Pipes (all exhaust system piping) – Inspect for leakage / looseness	A, B	
Diesel Exhaust Fluid (DEF) Supply Module Filter – Replace		300,000 miles
Diesel Particulate Filter (DPF) – Service		Refer to Engine Operation and Maintenance Manual.

Fuel Tank

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Fuel Tank(s) – Inspect for chips, cracks, damage, or signs of impact to coating and / or tank		12 months
Fuel Sender, Hose Connections – Check for loose connectors		12 months

Steering

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Power Steering Fluid – Change		40,000 miles (64,000 km) / - / 12
Power Steering Fluid – Check Level	A, B	
Power Steering Filter – Replace		40,000 miles (64,000 km) / - / 12
Steering System – Check Tightness	A, B	
Steering Gear – Lubricate	A, B	ATTN: Install grease slowly at low pressure. Power grease guns may blow out seals.
Steering Intermediate Shaft U-Joints / Slip Joint – Lubricate	A, B	

Tires / Wheels

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Air Pressure – Check	A, B	
Wear and Condition – Check	A, B	
Wheel Stud Nuts – Retorque	A, B	

Transmission

Item	Intervals	Special Interval (3) : miles (km) / hours / months
Automatic Trans Fluid & Filters – Replace	Refer to appropriate <i>Transmission Operation and Maintenance Manual</i> .	
Neutral Start Switch – Check Function	A, B	
Shift Selector / Linkage – Check Function	A, B	

Maintenance Intervals and Specifications

Unit Refill Capacities

Air Conditioner Refrigerant

See air conditioner manufacturer's Service / Operation Manual for aftermarket bus A/C system specifications.

Diesel Exhaust Fluid Tank

Diesel Exhaust Fluid (DEF) tank refill capacity varies depending on the vehicle models. Its total capacity may range from 7–23 gallons (26–87 liters). The tank is typically located on the right side of the bus behind an access door.

Cooling System Refill Capacities

Cooling system capacities vary greatly due to variations in bus length, number of heaters, and engine model. Total capacity may range from 6–22 gallons (23–83 liters).

Engine Crankcase

For specific engine crankcase capacities, refer to separate *Engine Operation and Maintenance Manual* provided with vehicle.

SmartTrac™ Brakes — Brake Fluid

Approximately 1.6 Gallons (6 Liters).

Rear-Axle

Axle	Axle Lube Capacities Pints (Liters)
Dana® Spicer® S16-130	16 (7.5)
Dana® Spicer® S140, S23-172	19 (8.9)
Meritor MS-17-14X-3DFL, MS-19-14X-3DFL, MS-21-14X-4DFR	33.6 (15.9)
Meritor MS-17-13X-3DFL, MS-17-13X-3DFR, Meritor MS-19-13X-3DFL, MS-19-13X-3DFR, MS-21-13X-4DFR	26 (12.3)
Meritor RS-23-160	39.5 (18.7)

Power Steering System

Steering Gear	Power Steering Fluid Volume (pints / liters)
M-100	8.4 / 3.9*
TAS40	7.4 / 3.5*
TAS66	8.4 / 3.9*

* Approximate refill quantity; refer to power steering reservoir for proper fill marks.

Transmission

Transmission Model	Transmission Fluid Volumes Pints (Liters)
Allison Automatic – B-300	29 (14)*
Allison 5 Speed Automatic – 2100 PTS	38 (18)*
Allison Automatic – 2200 PTS	38 (18)*
Allison Automatic – 2500 PTS	38 (18)*
Allison Automatic – 2250 PTS	38 (18)*
Allison Automatic – 2575 PTS	38 (18)*
Allison Automatic, – 3000 PTS	58 (27)*
* Approximate refill quantity (less than initial fill since a portion of the used fluid remains in external circuits and transmission cavities). Check at operating temperature and top off as required.	

Tire and Rim Combinations

Approved Tire and Wheel Combinations

Tire Size	Rim Width (Inches)
9R22.5	6.75, 7.50
10R22.5	6.75, 7.50
11R22.5	7.50, 8.25
12R22.5	8.25, 9.00
225/70R19.5	6.75
235/80R22.5	6.75, 7.50
245/70R19.5	6.75, 7.50
255/70R22.5	6.75, 7.50, 8.25
265/70R19.5	6.75, 7.50, 8.25
275/80R22.5	7.50, 8.25
295/75R22.5	8.25, 9.00

Maintenance Intervals and Specifications

Lubricant and Sealer Specifications

Non-Driving Front Axle

Component	Component Vendor / Lubrication Type	Viscosity / Ambient Temperature / Notes
Front axle wheel bearing oil	Eaton® / Dana® axle (Generic)	75W: -40°F to - 15°F (-40°C to -26°C) 75W-80: -40°F to 80°F (-40°C to 27°C) 75W-90: -40°F to 100°F (-40°C to 38°C) 75W-140: -40°F and above (-40°C and above) 80W-90: -15°F to 100°F (-26°C to 38°C) 80W-140: -15°F and above (-26°C and above) 85W-140: 10°F and above (-12°C and above)
	Eaton® / Dana® axle: multipurpose EP gear lube of API GL-5 quality meeting MIL-PRF-2105E specs including *synthetic lubricants. *Do not mix conventional lube with synthetic lube.	75W: -40°F to 32°F (-40°C to 0°C) 75W-90: -40°F to 100°F (-40°C to 38°C) 75W-140: -40°C and above (-40°F and above) 80W: -15°F to 70°F (-26°C to 21°C) 80W-140: -15°F and above (-26°C and above) 90W: 10°F to 100°F (-12°C to 38°C) 85W-40: 10°F and above (-12°C and above) 140W: 40°F and above (4°C and above)

Non-Driving Front Axle (cont.)

Component	Component Vendor / Lubrication Type	Viscosity / Ambient Temperature / Notes
Front axle wheel bearing oil – (Cont)	Meritor: Synthetic from factory with Cognis Emgard® 75W-90 will have a tag attached to fill plug that reads as follows: Filled with synthetic lube. Do not mix.	75W-90
	Meritor: Petroleum 0-76-A Hypoid Gear Oil 0-76-D Hypoid Gear Oil 0-76-E Hypoid Gear Oil 0-76-J Hypoid Gear Oil Petroleum oil: engine oil API-CK-4 or CJ-4	85W-140: 10°F and above (-12°C and above) 80W-90: -15°F and above (-26°C and above) 75W-90: -40°F and above (-40°C and above) 75W: -40°F to 36°F (-40°C to 2°C) SAE 40 or 50: 10°F and above (-12°C and above) SAE 30: -15°F and above (-26°C and above)
Front axle wheel bearing grease, tie rod ends, drag link, kingpin and bushing	Eaton® / Dana® axle, Meritor axle: Fleetrite® NLGI#2 Lithium Complex Based Moly grease P/N 991044C2 or equivalent GC / LB NLGI #2 Multi-purpose Lithium Complex grease	NOTE: Eaton® / Dana® and Meritor Easy Steer axles: With chassis load on axle, force grease through thrust bearings; then with axle lifted clear of floor, force grease between kingpin and bushing surfaces.

Body Components

Component	Component Vendor / Lubrication Type	Viscosity / Ambient Temperature / Notes
Emergency Window Slides	WD-40 Specialist Dirt & Dust Resistant Dry Lube PTFE Spray or equivalent PTFE lubricant	

Maintenance Intervals and Specifications

Brakes

Component	Component Vendor / Lubrication Type	Viscosity / Ambient Temperature / Notes
Brake Fluid	DOT 3 Brake fluid	

Engine

Component	Component Vendor / Lubrication Type	Viscosity / Ambient Temperature / Notes
Engine Lubricating Oil	Refer to <i>Engine Operation and Maintenance Manual</i> For vehicles equipped with Cummins® B6.7 engines, refer to Cummins QuickServe® Online, your Cummins Engine Operation Manual, or contact a certified Cummins repair location for specific engine maintenance intervals, capacities, and instructions.	

Electrical

Component	Component Vendor / Lubrication Type	Viscosity / Ambient Temperature / Notes
Terminals – Lubricant Sealing Grease	Fleetrite® 472141-C1	
Connectors – Dielectric Grease	NYOGEL® 760 G	

Steering System

Component	Component Vendor / Lubrication Type	Viscosity / Ambient Temperature / Notes
Strg. Gear Ross TAS - Output Seal – Lubricate	Fleetrite® Lithium Complex Based Moly grease P/N 991044C2 or equivalent GC / LB NLGI #2 Multi-purpose Lithium Complex grease	
Strg. Intermediate Shaft U-Joints / Slip Joint – Lubricate	Fleetrite® NLGI #2 Lithium Complex Based Moly grease P/N 991044C2 or equivalent GC / LB NLGI #2 Multi-purpose Lithium Complex grease	

Approved Power Steering Fluids

Component	Component Vendor / Lubrication Type	Viscosity / Ambient Temperature / Notes
Automatic Transmission Fluid (ATF) (Approved for use in Power Steering System)	Fleetrite® P/N FLTPSDX3Q (MPAPS B-6822 Specification) or Equivalent (Must Meet TES 389 / Dexron III Specification)	-40°F to 92°F (-33°C to 32°C)
Power Steering Fluid	Fleetrite® Power Steering Fluid P/N FLTPSF32 (MPAPS B-6811 Specification)	-24°F to 92°F (-33°C to 32°C)
Engine Oil (Approved for use in Power Steering System)	Fleetrite® P/N FLTL15W40G (MPAPS B-21 Specification) or Equivalent API CK-4 15W-40 Motor Oil	18°F to 108°F (-10°C to 43°C) NOTE: Must not be used with Hydraulic Brake Booster System

NOTE: The power steering system is filled with ATF at the factory.



CAUTION

To prevent component / system / property damage, **ONLY** use fluid types listed.

NOTE: Certain fluid types may be better suited for use in your vehicle, dependent on geographic location and temperature. It is recommended to use the Ambient Temperatures listed above to determine what fluid best fits the application of the user's fleet or vehicle.

NOTE: The same type of approved power steering fluid that is present in the system must be used when topping off. When switching to another approved power steering fluid type, the power steering system must be .

Drive Shaft

Component	Component Vendor / Lubrication Type	Viscosity / Ambient Temperature / Notes
U-Joint - Lubricate	Fleetrite® NLGI #2 Lithium Complex Based Moly grease P/N 991044C2 or equivalent GC / LB NLGI #2 Multi-purpose Lithium Complex grease	

Maintenance Intervals and Specifications

Clutch

Component	Component Vendor / Lubrication Type	Viscosity / Ambient Temperature / Notes
Release Bearing / Shafts / Fork - Lubricate	Fleetrite® NLGI #2 Lithium Complex Based Moly grease P/N 991044C2 or equivalent GC / LB NLGI #2 Multi-purpose Lithium Complex grease	

Cooling System

Component	Component Vendor / Lubrication Type	Viscosity / Ambient Temperature / Notes
Coolant	Refer to <i>Engine Operation and Maintenance Manual</i>	

Transmission

Component	Component Vendor / Lubrication Type	Viscosity / Ambient Temperature / Notes
Allison - Synthetic Automatic Transmission Fluid (ATF) Fill / Change (optimal - recommended)	Refer to appropriate <i>Allison Transmission Operation and Maintenance Manual</i> .	
Allison - Conventional Automatic Transmission Fluid (ATF) Fill / Change	Refer to appropriate <i>Allison Transmission Operation and Maintenance Manual</i> .	



CAUTION

To prevent damage to property do not use multi-weight and GL-5 EP gear oils because they may cause transmission failure or damage.

Rear Axle

Component	Component Vendor / Lubrication Type	Viscosity / Ambient Temperature / Notes
Single speed	Gear oil meeting MIL-PRF-2105E, API MT-1, GL-5	75W: -40°F to -15°F (-40°C to -26°C) 75W-80: -40°F to 80°F (-40°C to 27°C) 75W-90: -40°F to 100°F (-40°C to 38°C) 75W-140: -40°F and above (-40°C and above) 80W-90: -15°F to 100°F (-26°C to 38°C) 80W-140: -15°F and above (-26°C and above) 85W-140: 10°F and above (-12°C and above)
	International® axle: multipurpose EP gear lube of API GL-5 quality meeting MIL-PRF-2105E or SAE J2360 specs including synthetic lubricants.	75W: -40°F to 32°F (-40°C to 0°C) 75W-90: -40°F to 100°F (-40°C to 38°C) 75W-140: -40°F and above (-40°C and above) 80W: -15°F to 70°F (-26°C to 21°C) 80W-140: -15°F and above (-26°C and above) 90W: 10°F to 100°F (-12°C to 38°C) 85W-140: 10°F and above (-12°C and above) 140W: 40°F and above (4°C and above)
	Meritor: Synthetic from factory with Cognis Emgard® 75W-90 will have a tag attached to fill plug that reads as follows: Filled with synthetic lube. Do Not Mix.	
	Meritor petroleum: 0-76-A Hypoid Gear Oil 0-76-B Hypoid Gear Oil 0-76-D Hypoid Gear Oil 0-76-E Hypoid Gear Oil 0-76-L Hypoid Gear Oil	GL-5, SAE 85W-140: Above 10°F (-12°C) GL-5, SAE 85W-140: Above -15°F(-26°C) GL-5, SAE 80W-90: Above -15°F (-26°C) GL-5, SAE 75W Max outside temp. 35°F (2°C): Above -40°F (-40°C) GL-5, SAE 75W-140: Above -40°F (-40°C)

Maintenance Intervals and Specifications

Torque Specification Charts

Disc Wheels Torque Chart

Stud Size	Nut Size	Specified Torque	
		lb-ft	N·m
22 mm	Flange Nut – 33 mm Across Flats	450 - 500	610 - 678
NOTE: Do not use lubrication on dry threads. Where excessive corrosion exists, a light coat of lubricant on first three threads of stud bolt is permitted. Keep lubricant away from:			
<ul style="list-style-type: none">• Hex nut• Flange nut washer surface and flat on disc wheel			

Steering Column Pinch Bolts Torque Chart

Bolt Type	Specified Torque	
	lb-ft	N·m
7/16-20	68 - 76	92 - 103

Axle U-Bolt Nut Torque Chart

Feature Code	Rear Suspension Capacity and Type	Torque	
		lb-ft	N·m
14SAE	15,500-lb Capacity, Single Vari-Rate W/ All other axles	260 - 300	353 - 407
	15,500-lb Capacity, Single Vari-Rate W/ 14ARZ, 14ASA, 14ASB, 14ASG, 14ASD	370 - 400	502 - 542
14SAH	18,500-lb Capacity, Single Vari-Rate W/ All other axles	260 - 300	353 - 407
	18,500-lb Capacity, Single Vari-Rate W/ 14ARZ, 14ASA, 14ASB, 14ASG, 14ASD	370 - 400	502 - 542
14SBK	19,800-lb Capacity, 2 Stage Vari-Rate W/ All other axles	260 - 300	353 - 407
	19,800-lb Capacity, Single Vari-Rate W/ 14ARZ, 14ASA, 14ASB, 14ASG, 14ASD	370 - 400	502 - 542
14SBV	21,000-lb Capacity, V-Rate, with 4,500-lb Auxiliary Spring	260 - 300	353 - 407
	21,000-lb Capacity, Single Vari-Rate W/ 14ARZ, 14ASA, 14ASB, 14ASG, 14ASD	370 - 400	502 - 542
14TBH	15,500-lb Capacity, International Air Suspension (IROS) for axles 14ADN, 14ADP, 14AJC, 14AJE, 14ATP, and 14ATR.	260 - 300	353 - 407
	15,500-lb Capacity, International Air Suspension (IROS) for all other axles	370 - 400	502 - 543
14TBT	23,000-lb Capacity, International Air Suspension (IROS) for axles 14ADN, 14ADP, 14AJC, 14AJE, 14ATP, and 14ATR.	260 - 300	353 - 407
	23,000-lb Capacity, International Air Suspension (IROS) for all other axles	370 - 400	502 - 543
14TDL	20,000-lb Capacity, LiquidSpring Suspension W/ All other	370 - 400	502 - 543
	20,000-lb Capacity, LiquidSpring Suspension W/ 14ADN, 14ADP, 14AJE, 14ATP, 14ATR	260 - 300	353 - 407
14TDM	15,500-lb Capacity, LiquidSpring Suspension W/ All other axles	370 - 400	502 - 543
	15,500-lb Capacity, LiquidSpring Suspension W/ 14ADN, 14ADP, 14AJE, 14ATP, 14ATR	260 - 300	353 - 407
14TDN	18,500-lb Capacity, LiquidSpring Suspension W/ All other axles	370 - 400	502 - 543
	18,500-lb Capacity, LiquidSpring Suspension W/ 14ADN, 14ADP, 14AJE, 14ATP, 14ATR	260 - 300	353 - 407

Maintenance Intervals and Specifications

Feature Code	Rear Suspension Capacity and Type	Torque	
		lb-ft	N·m
14TDV	21,000-lb Capacity, International Air Suspension (IROS) W/ 14AJE	260 - 300	353 - 407
	21,000-lb Capacity, International Air Suspension (IROS) W/ 14AKT	520 - 550	705 - 745
	21,000-lb Capacity, International Air Suspension (IROS) W/ 14AJE, 14AKT	370 - 400	502 - 543
14TDZ	18,500-lb Capacity, LiquidSpring Suspension W/ All other axles	370 - 400	502 - 543
	18,500-lb Capacity, LiquidSpring Suspension W/ 14ADN, 14ADP, 14AJE, 14ATP, 14ATR	260 - 300	353 - 407
14TEA	20,000-lb Capacity, LiquidSpring Suspension W/ All other axles	370 - 400	502 - 543
	20,000-lb Capacity, LiquidSpring Suspension W/ 14ADN, 14ADP, 14AJE, 14ATP, 14ATR	260 - 300	353 - 407
14TEB	23,000-lb Capacity, International Air Suspension (IROS) W/ 14AJE	260 - 300	353 - 407
	23,000-lb Capacity, International Air Suspension (IROS) W/ 14AKT	520 - 550	705 - 745
	23,000-lb Capacity, International Air Suspension (IROS) W/ 14AJE, 14AKT	370 - 400	502 - 543
14TEC	15,500-lb Capacity, International Air Suspension (IROS) W/ 14AJE	260 - 300	353 - 407
	15,500-lb Capacity, International Air Suspension (IROS) W/ 14AKT	520 - 550	705 - 745
	15,500-lb Capacity, International Air Suspension (IROS) W/ 14AJE, 14AKT	370 - 400	502 - 543
NOTE: For all other vendor supplied suspensions, refer to vendor's website for proper torque specifications.			

Feature Code	Front Suspension Capacity and Type	Torque	
		lb-ft	N·m
3ADA	8,000-lb Capacity, Parabolic Taper Leaf	353 - 407	260 - 300
3ADB	10,000-lb Capacity, Parabolic Taper Leaf	353 - 407	260 - 300
3ADC	12,000-lb Capacity, Parabolic Taper Leaf	353 - 407	260 - 300

Wiper Arm Torque Chart

	Specified Torque	
	N·m	lb-ft
Wiper Pivot M20 Hex Nut	28	21

Seat Base Bolts

	Specified Torque	
	N·m	lb-ft
All Seat Base Bolts	21.7 to 27	16 to 20

Filter List

Filter part numbers and / or specifications may change during the life-cycle of this vehicle. Current information on the appropriate chassis and engine filters for your vehicle can be obtained by contacting your local IC Bus® or International® dealer parts department. If you need assistance finding a local IC Bus® or International® dealer, use the Dealer Locator icon at www.icbus.com.

