



# RECREATIONAL VEHICLE CHASSIS

## Maintenance Manual

STI-425-6  
A24-00788-000



# RECREATIONAL VEHICLE CHASSIS MAINTENANCE MANUAL

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**Models: MC  
MCL  
XCL  
XCM  
XCP  
XCR  
XCS**

## Foreword

Scheduled maintenance provides a key element for safe operation of your vehicle. A proper maintenance program also helps to minimize downtime and to safeguard warranties. This maintenance manual provides information necessary for years of safe, reliable, and cost-efficient vehicle operation.

**IMPORTANT:** The maintenance operations in this manual are **not all-inclusive**. Also refer to other component and body manufacturers' instructions for specific inspection and maintenance instructions.

Perform the pretrip inspection and daily/weekly/monthly maintenance as outlined in the vehicle operator's manual. Perform the operations in this maintenance manual at scheduled intervals based upon distance traveled or months of operation. Your authorized servicing dealer has the qualified technicians and equipment to perform this maintenance for you. Your dealership can also set up a scheduled maintenance program tailored specifically to your needs. Optionally, your dealership can assist you in learning how to perform the maintenance procedures in this manual.

**IMPORTANT:** Descriptions and specifications in this manual were in effect at the time of printing. Freightliner Custom Chassis Corporation (FCCC) reserves the right to discontinue models and to change specifications or design at any time without notice and without incurring obligation. Descriptions and specifications contained in this publication provide no warranty, expressed or implied, and are subject to revision and editions without notice.

Refer to [www.Daimler-TrucksNorthAmerica.com](http://www.Daimler-TrucksNorthAmerica.com) and [www.FreightlinerChassis.com](http://www.FreightlinerChassis.com) for more information, or contact Daimler Trucks North America LLC at the address below.

## Environmental Concerns and Recommendations

Whenever you see instructions in this manual to discard materials, you should attempt to reclaim and recycle them. To preserve our environment, follow appropriate environmental rules and regulations when disposing of materials.

## NOTICE: Parts Replacement Considerations

Do not replace suspension, axle, or steering parts (such as springs, wheels, hubs, and steering gears) with used parts. Used parts may have been subjected to collisions or improper use and have undetected structural damage.

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## Descriptions of Service Publications

Daimler Trucks North America LLC distributes the following major service publications in paper and electronic (via ServicePro®) formats.

<b>Workshop/Service Manual</b>	Workshop/service manuals contain service and repair information for all vehicle systems and components, except for major components such as engines, transmissions, and rear axles. Each workshop/service manual section is divided into subjects that can include general information, principles of operation, removal, disassembly, assembly, installation, and specifications.
<b>Maintenance Manual</b>	Maintenance manuals contain routine maintenance procedures and intervals for vehicle components and systems. They have information such as lubrication procedures and tables, fluid replacement procedures, fluid capacities, specifications, and procedures for adjustments and for checking the tightness of fasteners. Maintenance manuals do not contain detailed repair or service information.
<b>Driver's/Operator's Manual</b>	Driver's/operator's manuals contain information needed to enhance the driver's understanding of how to operate and care for the vehicle and its components. Each manual contains a chapter that covers pre-trip and post-trip inspections, and daily, weekly, and monthly maintenance of vehicle components. Driver's/operator's manuals do not contain detailed repair or service information.
<b>Service Bulletins</b>	Service bulletins provide the latest service tips, field repairs, product improvements, and related information. Some service bulletins are updates to information in the workshop/service manual. These bulletins take precedence over workshop/service manual information, until the latter is updated; at that time, the bulletin is usually canceled. The service bulletins manual is available only to dealers. When doing service work on a vehicle system or part, check for a valid service bulletin for the latest information on the subject.  <b>IMPORTANT:</b> Before using a particular service bulletin, check the current service bulletin validity list to be sure the bulletin is valid.
<b>Parts Technical Bulletins</b>	Parts technical bulletins provide information on parts. These bulletins contain lists of parts and BOMs needed to do replacement and upgrade procedures.
Web-based repair, service, and parts documentation can be accessed using the following applications on the AccessFreightliner.com website.	
<b>ServicePro</b>	ServicePro® provides Web-based access to the most up-to-date versions of the publications listed above. In addition, the Service Solutions feature provides diagnostic assistance with Symptoms Search, by connecting to a large knowledge base gathered from technicians and service personnel. Search results for both documents and service solutions can be narrowed by initially entering vehicle identification data.
<b>PartsPro</b>	PartsPro® is an electronic parts catalog system, showing the specified vehicle's build record.
<b>EZWiring</b>	EZWiring™ makes Freightliner Custom Chassis Corporation, Freightliner, Sterling, Thomas Built Buses, and Western Star products' wiring drawings and floating pin lists available online for viewing and printing. EZWiring can also be accessed from within PartsPro.

## Descriptions of Service Publications

Warranty-related service information available on the AccessFreightliner.com website includes the following documentation.

### **Recall Campaigns**

Recall campaigns cover situations that involve service work or replacement of parts in connection with a recall notice. These campaigns pertain to matters of vehicle safety. All recall campaigns are distributed to dealers; customers receive notices that apply to their vehicles.

### **Field Service Campaigns**

Field service campaigns are concerned with non-safety-related service work or replacement of parts. All field service campaigns are distributed to dealers; customers receive notices that apply to their vehicles.



<b>Group No.</b>	<b>Group Title</b>
00 .....	General Information
01 .....	Engine
09 .....	Air Intake
15 .....	Alternators and Starters
20 .....	Engine Cooling/Radiator
26 .....	Transmission
30 .....	Throttle Control
32 .....	Suspension
33 .....	Front Axle
35 .....	Rear Axle
40 .....	Wheels and Tires
41 .....	Driveline
42 .....	Brakes
46 .....	Steering
47 .....	Fuel
49 .....	Exhaust
54 .....	Electrical
83 .....	Heater and Air Conditioner

<b>Title of Maintenance Operation (MOP)</b>	<b>MOP Number</b>
15,000 Mile or 12 Month Maintenance. . . . .	00-04
30,000 Mile or 24 Month Maintenance. . . . .	00-05
45,000 Mile or 36 Month Maintenance. . . . .	00-06
60,000 Mile or 48 Month Maintenance. . . . .	00-07
6000 Mile or 6 Month Initial Maintenance . . . . .	00-03
General Maintenance Schedule Information. . . . .	00-01
Metric/U.S. Customary Conversion Tables. . . . .	00-10
Noise Emission Controls Maintenance. . . . .	00-08
Torque Specifications Tables. . . . .	00-11
Vehicle Maintenance Schedule Table . . . . .	00-02
Verification of Inspections Log. . . . .	00-09



## General Maintenance Schedule Information

### General Maintenance Schedule Information

Performing regular maintenance on your vehicle will help ensure that your vehicle delivers safe reliable service and optimum performance for years to come. Failure to follow a regular maintenance program can result in inefficient operation and unscheduled down time.

When the vehicle reaches the distance or time (whichever comes first) given for a maintenance interval, see the Vehicle Maintenance Schedule Table for a list of the maintenance operations to be performed at that maintenance interval. Use the maintenance operation reference numbers to find detailed instructions in the manual for each operation.

**NOTE:** Maintenance instructions in this manual are based on average vehicle use and normal operating conditions. Unusual vehicle operating conditions may require service at more frequent intervals.

For specific engine maintenance information, see the *Cummins Operation and Maintenance Manual*.

**IMPORTANT:** Maintenance operations appearing in italics in the following tables are for emission control components. Numbers in the table are reference numbers matching those in the text of this manual.

## Camp Freightliner Owner Training

Owners who want to learn more about their vehicle can attend a two-day training class, offered at the Freightliner Custom Chassis Service Center in Gaffney, South Carolina. Some of the items covered during the training include the air brake system, electrical system, vehicle storage, weight distribution, and maintenance intervals.

To learn more about the class or to register, go to [www.freightlinerchassis.com](http://www.freightlinerchassis.com). After entering the website, click "Motorhomes" and select "Owner Info". A class description and the registration form are located under the "Camp Freightliner" tab.

If needed, service work can be scheduled for your vehicle at the service center during your stay.

## Tear-Out Checklists

**IMPORTANT:** Additional copies of the checklists should be made before giving this to a dealer, as they may not be returned to you. The correct number of checklists are included to cover the warranty period, however, if you want copies of the checklists for future maintenance after the warranty expires, you will need to make them. Freightliner Custom Chassis Corporation (FCCC) will not be able to send you additional copies.

At the back of the maintenance manual, there are checklists for each maintenance interval up to 60,000 miles (96 540 km). When a maintenance interval needs to be performed, take the vehicle to an authorized Freightliner dealer, remove the appropriate checklist, and give it to the dealer. These are the items that will be inspected for maintenance.

# 00

## General Information

### Vehicle Maintenance Schedule Table: 00-02

Maintenance Operation Procedures and Schedule																				
Maintenance Operation Number and Description	Maintenance Interval in Miles x 1000																			
	6	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255	270	285
	Maintenance Interval in Kilometers x 1000																			
	9	24	48	72	96	120	145	169	193	217	241	265	290	314	338	362	386	410	434	458
	Maintenance Interval in Months																			
	6	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228
<b>01-01</b> Engine Drive Belt Inspecting	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>01-02</b> Engine-Support Fasteners Checking	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>09-01</b> Air Cleaner Inspecting and Replacing*	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>09-02</b> Charge Air Cooler (CAC) Inspecting and Cleaning	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>15-01</b> Alternator, Battery, and Starter Checking	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>20-01</b> Radiator Cap Checking	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>20-02</b> Radiator Inspecting and Cleaning	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>20-03</b> Coolant Replacing	The coolant replacement interval is every 100,000 miles (160 900 km) or 60 months, whichever comes first. You must check and, if necessary, recharge the supplemental coolant additive (SCA) levels and freeze point every 25,000 miles (40 225 km) or 6 months, whichever comes first. See the applicable engine operation and maintenance manual for further information.																			
<b>20-04</b> Mechanical Fan Drive Gearbox Oil Changing	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>20-05</b> Mechanical Fan Drive Gearbox Lubricating	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>26-01</b> Transmission Breather Checking	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>26-02</b> Allison MD/MH Series Transmission Fluid Level Checking	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>26-03</b> Allison Transmission Fluid and Filter Changing (internal/external filter)	For oil and filter change intervals, see the applicable Allison Operator's Manual.																			
<b>30-01</b> Throttle Pedal Pivot Pin Lubricating	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>32-01</b> Suspension Fastener Torque Checking	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>32-02</b> Suspension Height Control Valve Checking	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>32-03</b> Neway Suspension Inspecting	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>32-04</b> ZF IFS Lubricating	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•