FREIGHTLINER
Run Smart™

BUSINESS CLASS M2 MAINTENANCE MANUAL

Models: M2 100
M2 106
M2 106V
M2 112
M2 112V

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Foreword

Performing scheduled maintenance operations is important in obtaining safe, reliable operation of your vehicle. A proper maintenance program will also help to minimize downtime and safeguard warranties.

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 operations in this maintenance manual at scheduled intervals. Perform the pretrip and post-trip inspections, and daily/weekly/monthly maintenance, as outlined in the vehicle driver's manual. Major components, such as engines, transmissions, and rear axles, are covered in their own maintenance and operation manuals, that are provided with the vehicle. Perform any maintenance operations listed at the intervals scheduled in those manuals. Your Freightliner Dealership has the qualified technicians and equipment to perform this maintenance for you. They can also set up a scheduled maintenance program tailored specifically to your needs. Optionally, they can assist you in learning how to perform these maintenance procedures.

IMPORTANT: Descriptions and specifications in this manual were in effect at the time of printing. Freightliner Trucks 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** and **www.FreightlinerTrucks.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.

Workshop/Service Manual

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.

Maintenance Manual

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.

Driver's/Operator's Manual

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 pretrip 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.

Service Bulletins

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.

IMPORTANT: Before using a particular service bulletin, check the current service bulletin validity list to be sure the bulletin is valid.

Parts Technical Bulletins

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.

ServicePro

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.

PartsPro

PartsPro® is an electronic parts catalog system, showing the specified vehicle's build record.

EZWiring

EZWiring™ makes Freightliner, Sterling, Western Star, Thomas Built Buses, and Freightliner Custom Chassis Corporation 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

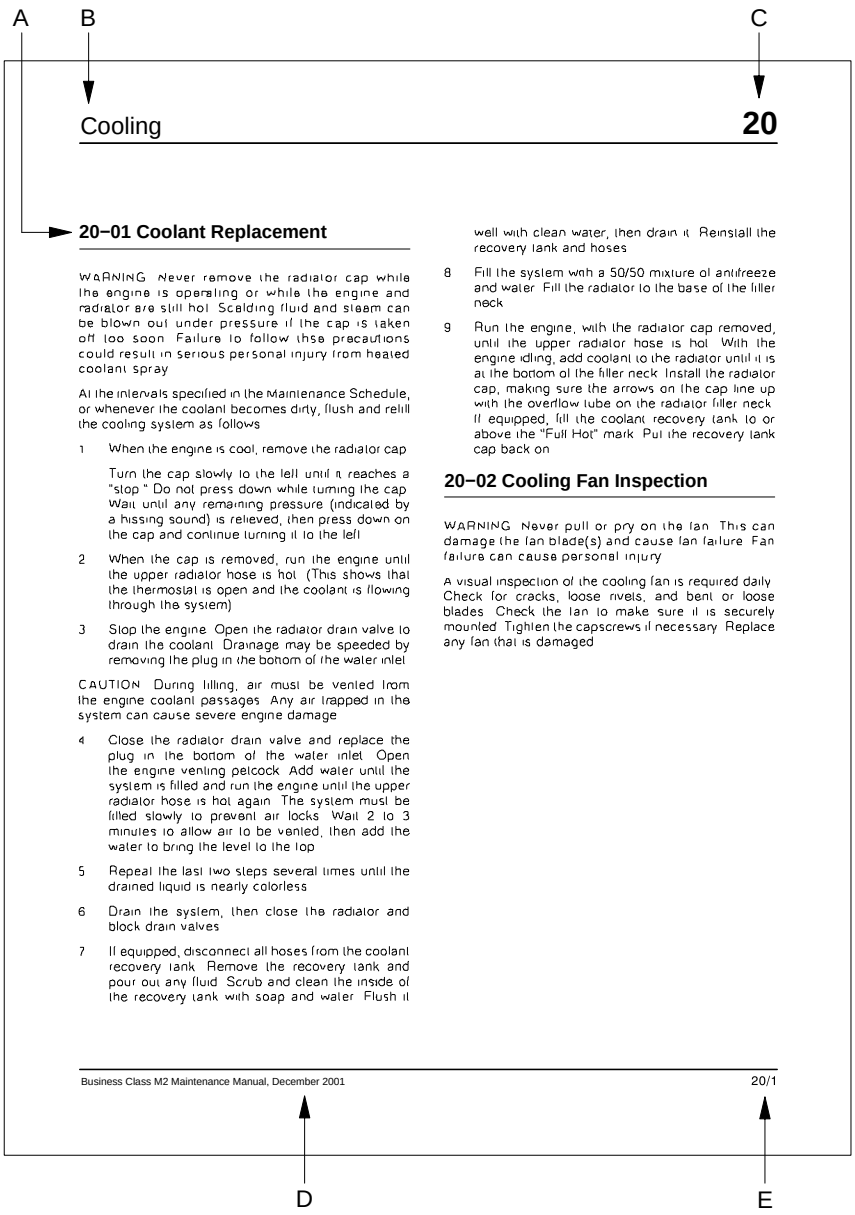
Warranty-related service information available on the AccessFreightliner.com website includes the following documentation.

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.

Page Description

For an example of a *Business Class M2 Maintenance Manual* page, see **Fig. 1**.



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A. Maintenance Operation Number consists of the Group Number followed by the Sequence Number
B. Group Title
C. Group Number
D. Release Date
E. Group Number/Page Number

Fig. 1, Example of a Business Class M2 Maintenance Manual Page

Maintenance Manual Contents

Index, Alphabetical

Determining Scheduled Maintenance Intervals

Performing regular maintenance will help ensure that your vehicle delivers safe, reliable service and optimum performance. A proper maintenance program will also help to minimize downtime and safeguard warranties.

To determine the correct maintenance intervals for your vehicle, you must first determine the type of service or conditions the vehicle will be operating in. Most vehicles operate in conditions that fall within one of the three schedules. Before placing your vehicle in service, determine whether Schedule I, II, or III applies to your vehicle.

Schedules I-III

Schedule I (severe service) applies to vehicles that travel up to 6000 miles (10 000 kilometers) annually or that operate under severe conditions. Examples of Schedule I usage are:

- operation on extremely poor roads or where there is heavy dust accumulation
- constant exposure to extreme hot, cold, salt air, or other extreme climates
- frequent short-distance travel
- construction-site operation
- city operation such as fire truck and garbage truck.
- farm operation

Schedule II (short-haul transport) applies to vehicles that travel up to 60,000 miles (100 000 kilometers) annually and operate under normal conditions. Examples of Schedule II usage are:

- operation primarily in cities and densely populated areas
- local transport with infrequent freeway travel
- high percentage of stop-and-go travel

Schedule III (long-haul transport) is for vehicles that travel more than 60,000 miles (100 000 kilometers) annually with minimal city or stop-and-go operation. Examples of Schedule III usage are:

- regional delivery that is mostly freeway miles
- interstate transport
- any road operation with high annual mileage

Maintenance Schedules

After determining the schedule appropriate to your vehicle, refer to the Maintenance Schedules to determine when to perform the Initial Maintenance (IM) and the frequency of performing subsequent maintenance intervals for each schedule.

Maintenance Intervals

Refer to Maintenance Intervals for Schedule I, Schedule II, and Schedule III to determine which maintenance interval(s) should be performed when your vehicle reaches the mileage or hours of operation listed in these tables.

Maintenance Operations

Groups 01 through 83 in this manual have an index at the beginning of each Group. The index lists the Title of Maintenance Operations and the maintenance Operation (MOP) Numbers for that Group. Follow the instructions under the MOP number to perform the required maintenance.

In addition to the maintenance operations required for the maintenance interval, perform all the daily maintenance procedures in **Chapter 11**, "Pretrip Inspection and Daily Maintenance," in the *Business Class® M2 Driver's Manual*.

Maintenance Schedules: 00–02

Maintenance Schedules					
Schedule	**Maintenance Intervals**				
	Maintenance Interval	**Frequency**	**Mileage**	**km**	**Hours**
Schedule I* (severe service) for vehicles that travel up to 6000 miles (10 000 km) annually	Initial Maintenance (IM)	first	1000	1600	100
	Maintenance 1 (M1)	every	1000	1600	100
	Maintenance 2 (M2)	every	4000	6400	400
	Maintenance 3 (M3)	every	8000	12 800	800
	Maintenance 4 (M4)	every	16,000	25 600	1600
	Maintenance 5 (M5)	every	32,000	51 200	3200
Schedule II (short-haul transport) for vehicles that travel up to 60,000 miles (100 000 km) annually	Initial Maintenance (IM)	first	8000	12 000	—
	Maintenance 1 (M1)	every	8000	12 000	
	Maintenance 2 (M2)	every	16,000	24 000	
	Maintenance 3 (M3)	every	32,000	48 000	
	Maintenance 4 (M4)	every	64,000	96 000	
	Maintenance 5 (M5)	every	128,000	192 000	
Schedule III (long-haul transport) for vehicles that travel over 60,000 miles (100 000 km) annually	Initial Maintenance (IM)	first	10,000	16 000	—
	Maintenance 1 (M1)	every	10,000	16 000	
	Maintenance 2 (M2)	every	20,000	32 000	
	Maintenance 3 (M3)	every	40,000	64 000	
	Maintenance 4 (M4)	every	80,000	128 000	
	Maintenance 5 (M5)	every	160,000	256 000	

* For Schedule I vehicles equipped with an hourmeter, use maintenance intervals based on hours of operation rather than mileage.

Table 1, Maintenance Schedules

Maintenance Intervals for Schedule I: 00–03

Maintenance Intervals for Schedule I					
Maintenance Sequence	**Maintenance Interval**	**Service Date**	**Miles**	**km**	**Hours**
1st	IM and M1		1000	1600	100
2nd	M1		2000	3200	200
3rd	M1		3000	4800	300
4th	M1 and M2		4000	6400	400
5th	M1		5000	8000	500
6th	M1		6000	9600	600
7th	M1		7000	11 200	700
8th	M1, M2, and M3		8000	12 800	800
9th	M1		9000	14 400	900
10th	M1		10,000	16 000	1000
11th	M1		11,000	17 600	1100
12th	M1 and M2		12,000	19 200	1200
13th	M1		13,000	20 800	1300
14th	M1		14,000	22 400	1400
15th	M1		15,000	24 000	1500
16th	M1, M2, M3, and M4		16,000	25 600	1600
17th	M1		17,000	27 200	1700
18th	M1		18,000	28 800	1800
19th	M1		19,000	30 400	1900
20th	M1 and M2		20,000	32 000	2000
21st	M1		21,000	33 600	2100
22nd	M1		22,000	35 200	2200
23rd	M1		23,000	36 800	2300
24th	M1, M2, and M3		24,000	38 400	2400
25th	M1		25,000	40 000	2500
26th	M1		26,000	41 600	2600
27th	M1		27,000	43 200	2700
28th	M1 and M2		28,000	44 800	2800
29th	M1		29,000	46 400	2900
30th	M1		30,000	48 000	3000
31st	M1		31,000	49 600	3100
32nd	M1, M2, M3, M4, and M5		32,000	51 200	3200

Table 2, Maintenance Intervals for Schedule I