



Service Information Bulletin

NUMBER: 9–11–10 Rev **S.M. REF.:** Listed in Table **ENGINE:** EPA07 MBE 4000 **DATE:** December 2010

SUBJECT: ATD INTERVALS

ADDITIONS, REVISIONS, OR UPDATES

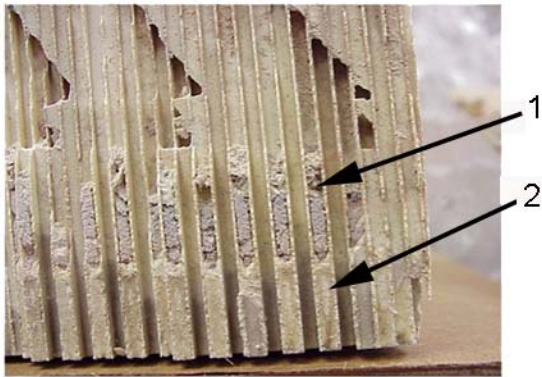
Publication Number	Platform	Section Title	Change	Page Number(s)
DDC-SVC-MAN-0036	EPA07 MBE 4000	4.1 Requirements	These sections include new ATD service interval information.	Insert as stated.
DDC-SVC-MAN-0026	EPA07 MBE 4000	14.1.1.1 Scheduled Intervals	These sections include new ATD service interval information.	Insert as stated.
DDC-SVC-MAN-0041	EPA07 MBE 4000	Maintenance Tables	These sections include new ATD service interval information.	Insert as stated.

NOTE: Page numbers are based on the most recent version of the individual publication and may be adjusted throughout the annual print cycle.

THE FOLLOWING INFORMATION APPLIES TO DDC-SVC-MAN-0036

REQUIREMENTS

There is a need to periodically remove accumulated ash (1), derived from engine lube oil, from the DPF (2). See Figure 1 for an example of accumulated ash. Ash does not oxidize in the filter during the regeneration process. Remove the ash through the cleaning procedure as described in this section.



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Figure 1 Ash Accumulation in Particulate Filter

The 2007 Detroit Diesel and MBE engines are equipped with Aftertreatment Technology that will require maintenance (accumulated ash removal) for successful operation and performance over the life of the system.

Several key parameters are critical to properly operating vehicles equipped with Aftertreatment Devices. Not following these guidelines will impact the system operation, may increase the frequency of maintenance above Detroit Diesel recommendations and result in additional repair incidents, and may impact warranty coverage of the component.

The following are **requirements** for successful operation.

- Use Ultra Low Sulfur Diesel (ULSD) fuel with less than 15 ppm Sulfur content.
- Follow the proper engine maintenance guidelines found in the appropriate workshop manual.
 - *EPA07 Series 60 Engine Operator's Guide DDC-SVC-MAN-0006*
 - *EPA07/10 DD Platform Engine Operator's Guide DDC-SVC-MAN-0075*
 - *EPA07 MBE 900 Engine Operator's Guide DDC-SVC-MAN-0040*
 - *EPA07 MBE 4000 Engine Operator's Guide DDC-SVC-MAN-0041*
- Do not add used or new engine oils to your fuel (this promotes rapid ash creation).
- Do not use fuel additives containing chemicals such as lead, sulfur, or sulfated ash.

The following is **recommended** for successful operation.

Genuine Detroit Diesel engine oil, available at authorized Detroit Diesel service outlets, should always be used. If not available, be sure the substitute meets the CJ-4, CI-4/SM or CI-4 PLUS API index specifications, with less than 1.0% sulfated ash content. Using oils with greater than this level of ash content will result in a need to remove ash from the filter more frequently.

The recommended maintenance interval related to Diesel Particulate Filter ash removal is listed in Table 1.

NOTE:

The DDEC VI engine control system monitors and controls the Aftertreatment Device for collected ash volume. In the event that maintenance is not performed or maintenance is required due to unforeseen issues, the Amber Warning Lamp (AWL)/Check Engine will be illuminated to notify the user that service is needed. Refer to section .

Engine Model	Duty cycle (Miles)		
	Severe	Short - Haul	Long - Haul
EPA07 Series 60	550,000	550,000	550,000
EPA07 MBE 900	150,000	150,000	150,000
EPA07 MBE 4000	450,000	450,000	450,000
EPA07/10 DD Platform	300,000	300,000	300,000

Table 1 Maintenance Requirements

Detroit Diesel recommends using an authorized Detroit Diesel service outlet when completing or scheduling DPF maintenance. Authorized service outlets are properly trained and equipped to inspect, evaluate and handle the DPF. DPF cleaning is considered critical emission-related maintenance.

Authorized Detroit Diesel locations will be utilizing a Remanufactured DPF core exchange program. All plugged or ash loaded diesel particulate filters are returned to a Detroit Diesel Remanufacturing location for cleaning and qualification. This program ensures that the DPF is evaluated and cleaned using state of the art technology to provide the best assurance that your aftertreatment system is functioning properly following a maintenance event. All DPFs purchased through parts distribution centers will be sold as remanufactured exchange units. This product will be shipped in returnable containers that must be used for safe return of your old core.

Detroit Diesel has evaluated many other types of cleaning equipment including pressurized air cleaning devices for in-shop utilization. These devices have not provided consistent cleaning results above the specified efficiency. As a result, Detroit Diesel does not recommend or endorse any equipment or process for cleaning other than the aforementioned Remanufacture Exchange Program.

NOTE:

Improper cleaning or care of the Diesel Particulate Filter or the Aftertreatment System may damage the system.

SERVICE RECORD

It is recommended that customers or distributors maintain a proper record of the particulate filter servicing and cleaning. This record is an agent to warranty considerations. The record must include information such as:

- Date of cleaning or replacement
- Vehicle mileage at the time of cleaning or replacement
- Particulate filter part number and serial number

NOTE:

For warranty replacement of the DPF, DOC or both, the Detroit Diesel warranty system will require input of the information noted above.

THE FOLLOWING INFORMATION APPLIES TO DDC-SVC-MAN-0026

MAINTENANCE INTERVALS

Miles (X 1000)	10	12	20	24	30	36	40	48	50	60	70	72
Km (X 1000)	17	19	32	38	50	57	68	77	84	100	113	116
Item	Procedure											
1. Lubricating Oil/Filter	R	—	R	—	R	—	R	—	R	R	R	—
2. Cooling System	Intervals are based on type of coolant used as listed in Table , Coolant Maintenance Intervals.											
3. Valve Lash Checking and Adjustment	First adjustment at 20,000 mi. (32,000 Km) and then every 40,000 mi. (68,000 Km)											
4. Drive Belts	I	—	I	—	I	—	I	—	I	I	I	—
5. Fuel/Water Separator	Inspect at every fuel fill. Replace when fuel level is at top of filter.											
6. Fuel Filters	—	R	—	R	—	R	—	R	—	R	—	R
7. Air System	I	—	I	—	I	—	I	—	I	I	—	—
8. Exhaust System	I	—	I	—	I	—	I	—	I	I	I	—
9. Air Compressor	I	—	I	—	I	—	I	—	I	I	I	—
10. Aftertreatment Device	Inspect same as exhaust system interval, ash removal at 450,000 Miles (724,000 Km)											
11. Vibration Damper	Replace at major overhaul or earlier if dented or leaking.											
12. REPTO torsional damper checking	10,000 mi. (16,000 Km) or 300 hours or 1 year, whichever comes first.											

I – Inspect, service, test, correct or replace as necessary. R – Replace.

Table 2 Maintenance Intervals (Severe Service)

Miles (X 1000)	15	30	45	60	75	90	105	120	135	150	165	180
Km (X 1000)	25	50	75	100	125	150	169	193	217	241	266	290
Item	Procedure											
1. Lubricating Oil/Filter	R	R	R	R	R	R	R	R	R	R	R	R
2. Cooling System	Intervals are based on type of coolant used as listed in Table , Coolant Maintenance Intervals.											
3. Valve Lash Checking and Adjustment	First adjustment at 30,000 mi. (50,000 Km) and then every 60,000 mi. (100,000 Km)											
4. Drive Belts	I	I	I	I	I	I	I	I	I	I	I	I
5. Fuel/Water Separator	Inspect at every fuel fill. Replace when fuel level is at top of filter.											
6. Fuel Filters	—	R	—	R	—	R	—	R	—	R	—	R
7. Air System	I	I	I	I	I	I	I	I	I	I	I	I
8. Exhaust System	I	I	I	I	I	I	I	I	I	I	I	I
9. Air Compressor	I	I	I	I	I	I	I	I	I	I	I	I
10. Aftertreatment Device	Inspect same as exhaust system interval, ash removal at 450,000 Miles (724,000 Km)											
11. Vibration Damper	Replace at major overhaul or earlier if dented or leaking.											
12. REPTO torsional damper checking	First inspection at 60,000 mi. (100,000 Km) or 3000 hours and then every 30,000 mi (50,000 Km) or 1500 hours.											

I – Inspect, service, test, correct or replace as necessary. R – Replace.

Table 3 Maintenance Intervals (Short Haul)

Miles (X 1000)	15	30	45	60	75	90	105	120	135	150	165	180
Km (X 1000)	25	50	75	100	125	150	169	193	217	241	266	290
Item	Procedure											
1. Lubricating Oil/Filter	R	R	R	R	R	R	R	R	R	R	R	R
2. Cooling System	Intervals are based on type of coolant used as listed in Table , Coolant Maintenance Intervals.											
3. Valve Lash Checking and Adjustment	First adjustment at 30,000 mi. (50,000 Km) and then every 60,000 mi. (100,000 Km)											
4. Drive Belts	I	I	I	I	I	I	I	I	I	I	I	I
5. Fuel/Water Separator	Inspect at every fuel fill. Replace when fuel level is at top of filter.											
6. Fuel Filters	—	R	—	R	—	R	—	R	—	R	—	R
7. Air System	I	I	I	I	I	I	I	I	I	I	I	I
8. Exhaust System	I	I	I	I	I	I	I	I	I	I	I	I
9. Air Compressor	I	I	I	I	I	I	I	I	I	I	I	I
10. Aftertreatment Device	Inspect same as exhaust system interval, ash removal at 450,000 Miles (724,000 Km)											
11. Vibration Damper	Replace at major overhaul or earlier if dented or leaking.											
12. REPTO torsional damper checking	First inspection at 60,000 mi. (100,000 Km) or 3000 hours and then every 30,000 mi (50,000 Km) or 1500 hours.											

I – Inspect, service, test, correct or replace as necessary. R – Replace.

Table 4 Maintenance Intervals for Schedule III, Long Haul

THE FOLLOWING INFORMATION APPLIES TO DDC-SVC-MAN-0041

MAINTENANCE TABLES

Miles (X 1000)	10	12	20	24	30	36	40	48	50	60	70	72
Km (X 1000)	17	19	32	38	50	57	68	77	84	100	113	116
Item	Procedure											
1. Lubricating Oil/Filter	R		R		R		R		R	R	R	
2. Cooling System	Intervals are based on type of coolant used as listed in Table in the How to Select Coolant section of this guide.											
3. Valve Lash Checking and Adjustment	First adjustment at 20,000 mi. (32,000 Km) and then every 40,000 mi. (68,000 Km)											
4. Drive Belts	I		I		I		I		I	I	I	
5. Fuel/Water Separator	Inspect at every fuel fill. Replace when fuel level is at top of filter.											
6. Fuel Filters		R		R		R		R		R		R
7. Air System	I		I		I		I		I	I		
8. Exhaust System	I		I		I		I		I	I	I	
9. Air Compressor	I		I		I		I		I	I	I	
10. Aftertreatment Device	Inspect same as exhaust system interval, ash removal at 450,000 Miles (724,000 Km)											
11. Vibration Damper	Replace at major overhaul or earlier if dented or leaking.											
12. REPTO torsional damper checking	10,000 mi. (16,000 Km) or 300 hours or 1 year, whichever comes first.											

All items are described in refer to section "I" – Inspect, service, test, correct or replace as necessary. R – Replace.

Table 5 Maintenance Intervals (Severe Service)

Miles (X 1000)	15	30	45	60	75	90	105	120	135	150	165	180
Km (X 1000)	25	50	75	100	125	150	169	193	217	241	266	290
Item	Procedure											
1. Lubricating Oil/Filter	R	R	R	R	R	R	R	R	R	R	R	R
2. Cooling System	Intervals are based on type of coolant used as listed in Table in the How to Select Coolant section of this guide.											
3. Valve Lash Checking and Adjustment	First adjustment at 30,000 mi. (50,000 Km) and then every 60,000 mi. (100,000 Km)											
4. Drive Belts	I	I	I	I	I	I	I	I	I	I	I	I
5. Fuel/Water Separator	Inspect at every fuel fill. Replace when fuel level is at top of filter.											
6. Fuel Filters		R		R		R		R		R		R
7. Air System	I	I	I	I	I	I	I	I	I	I	I	I
8. Exhaust System	I	I	I	I	I	I	I	I	I	I	I	I
9. Air Compressor	I	I	I	I	I	I	I	I	I	I	I	I
10. Aftertreatment Device	Inspect same as exhaust system interval, ash removal at 450,000 Miles (724,000 Km)											
11. Vibration Damper	Replace at major overhaul or earlier if dented or leaking.											
12. REPTO torsional damper checking	First inspection at 60,000 mi. (100,000 Km) or 3000 hours and then every 30,000 mi (50,000 Km) or 1500 hours.											

All items are described in refer to section “.”**I** – Inspect, service, test, correct or replace as necessary.**R** – Replace.

Table 6 Maintenance Intervals (Short Haul)

Miles (X 1000)	30	60	90	120	150	180	210	240	270	300	330	360
Km (X 1000)	50	100	150	198	241	290	338	386	435	483	531	579
Item	Procedure											
1. Lubricating Oil/Filter	R	R	R	R	R	R	R	R	R	R	R	R
2. Cooling System	Intervals are based on type of coolant used as listed in Table in the How to Select Coolant section of this guide.											
3. Valve Lash Check and Adjustment	First adjustment at 60,000 mi. (100,000 Km) and then every 120,000 mi. (198,000 Km)											
4. Drive Belts	I	I	I	I	I	I	I	I	I	I	I	I
5. Fuel/Water Separator	Inspect at every fuel fill. Replace when fuel level is at top of filter.											
6. Fuel Filters		R		R		R		R		R		R
7. Air System	I	I	I	I	I	I	I	I	I	I	I	I
8. Exhaust System	I	I	I	I	I	I	I	I	I	I	I	I
9. Air Compressor	I	I	I	I	I	I	I	I	I	I	I	I
10. Aftertreatment Device	Inspect same as exhaust system interval, ash removal at 450,000 Miles (724,000 Km)											
11. Vibration Damper	Inspect at oil changes. Replace at major overhaul or earlier if dented or leaking.											
12. REPTO Torsional Damper Checking	First inspection at 60,000 mi. (100,000 Km) or 3000 hours and then every 30,000 mi (50,000 Km) or 1500 hours.											

All items are described in refer to section “I – Inspect, service test, correct or replace as necessary.R – Replace.

Table 7 Maintenance Intervals (Long Haul)

ADDITIONAL SERVICE INFORMATION

Additional service information is available in *Power Service Literature*.

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