

Marine Engines



JOHN DEERE

A NEW ERA IN POWER

Vessel owners and operators have trusted and recommended John Deere marine power since 1991. Now, our next generation JD14 and JD18 marine engines are ushering in a new era in John Deere reliability and durability on the water — taking your high-horsepower marine applications beyond your expectations.

New John Deere marine engines come standard with the added advantage of John Deere Connected Support™ remote monitoring and diagnostics.

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Nothing Runs Like A Deere™

John Deere PowerTech™ engines are as powerful and dependable in the water as they are on the land. Our marine propulsion, generator, and auxiliary engines are built for long life, reliable performance, fuel efficiency, quiet operation, low maintenance cost, and easy access for service.

Meeting regulations around the world

John Deere marine engines comply with international, European, and United States emissions standards for regulated vessels. John Deere meets Environmental Protection Agency (EPA) Marine Tier 3 emissions regulations for vessels flagged in the United States.

Select generator drive engine ratings meet European Union (EU) Stage V requirements for inland waterway applications and China Stage II marine emissions standards for vessels that are registered in China and operate in Chinese territorial waters.

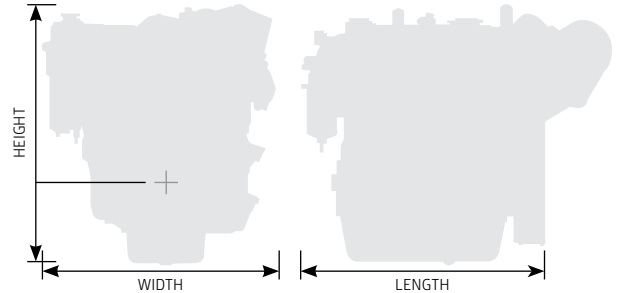
John Deere also offers engines for the non-regulated regions throughout the world.

Marine classification societies

John Deere provides a full line of marine engines and accessories to meet the requirements of various marine classification societies.



Dimensions and weights



Engine dimensions and weights listed in this guide use the following variables:

Length mm (in) = length to rear face of flywheel housing

Width mm (in) = maximum width minus width of elbow

Height mm (in) = crank centerline to top plus crank centerline to bottom

Weight kg (lb) = with oil, no coolant – includes engine, flywheel, and electronics

Dimensions may vary according to options selected. Contact your distributor for more information. All specifications are at rated speed and power with standard options unless otherwise noted.



Marine propulsion

M and H ratings

The M and H rating definitions are provided as a guide to help in the selection of the engine that best fits the application requirements. It is recommended to consult a John Deere marine dealer or engine distributor to verify the optimal rating for the specific application.

M and H rating	Typical load factor	Typical annual usage	Typical full power operation
M1	> 65%	Unrestricted	Uninterrupted
M2	≤ 65%	3,000 – 5,000 hr	16 of each 24 hr
M3	≤ 50%	2,000 – 4,000 hr	4 of each 12 hr
M4	≤ 40%	1,000 – 3,000 hr	1 of each 12 hr
M5	≤ 35%	Up to 1,000 hr	0.5 of each 8 hr
H	≤ 70%	Unrestricted	Uninterrupted

M1

The M1 rating is for marine propulsion applications that may operate up to 24 hours per day at uninterrupted full power and have load factors* greater than 65 percent.

Possible applications: Line haul tugs and towboats, fish and shrimp trawlers/draggers, and displacement hull fishing boats.

M2

The M2 rating is for marine propulsion applications that typically operate 3,000 – 5,000 hours per year and have load factors* up to 65 percent. This rating is for applications that are in continuous use and use full power for no more than 16 hours of each 24 hours of operation. The remaining time of operation is at or below cruising¹ speed.

Possible applications: Short-range tugs and towboats, long-range ferryboats, large passenger vessels, and offshore displacement hull fishing boats.

M3

The M3 rating is for marine propulsion applications that typically operate 2,000 – 4,000 hours per year and have load factors* up to 50 percent. This rating is for applications that use full power for no more than four hours out of each 12 hours of operation. The remaining time of operation is at or below cruising¹ speed.

Possible applications: Coastal fishing boats, offshore crew boats, research boats, short-range ferryboats, and dinner cruise boats.

M4

The M4 rating is for marine propulsion applications that typically operate 1,000 – 3,000 hours per year and have load factors* below 40 percent. This rating is for applications that use full power no more than one hour out of each 12 hours of operation. The remaining time of operation is at or below cruising¹ speed.

Possible applications: Inshore crew boats, charter fishing boats, pilot boats, dive boats, and planing hull commercial fishing boats.

M5

The M5 rating is for marine recreational propulsion and certification for light-duty commercial Tier 3 applications that typically operate up to 1,000 hours per year and have load factors* below 35 percent. This rating is for applications that use full power for no more than 30 minutes out of each eight hours. The remaining time of operation is at or below cruising¹ speed.

Possible applications: Recreational boats, tactical military vessels, and rescue boats.

H

The H rating is for hybrid vessels that require a variable-speed generator drive engine to develop electrical power for any combination of electric propulsion, energy storage, hotel load, and auxiliary electric loads. The engine is designed for load factors up to 70 percent.

Possible applications: Recreational and commercial vessels.

The parameters shown above (typical load factor, typical annual usage, and typical full power operation) consider common applications and are not restrictions, but are guidelines. It is important that an estimated load factor calculation is performed to best approximate how the engine will be used. Please contact your local John Deere dealer to assist in determining the best rating for your application.

**Load factor is the actual fuel burned over a period of time divided by the full-power fuel consumption for the same period of time. For example, if an engine burns 160 liters of fuel during an eight-hour run, and the full-power fuel consumption is 60 liters per hour, the load factor is 160 liters / (60 liters per hour x 8 hours) = 33.3 percent.*

¹Cruising is any operating time where the engine speed is at least 200 rpm less than the maximum attainable engine speed.

PowerTech

4.5L marine engines

- ▶ Keel-cooled or heat exchanger configurations
- ▶ Naturally aspirated, turbocharged non-aftercooled, or turbocharged with air-to-seawater or air-to-coolant aftercooling
- ▶ Feature constant power to 400 rpm below rated speed
- ▶ Excellent choice for launches, workboats, trawler yachts, and patrol craft



Engine model	Emissions			Rated power		Rated speed	Rated fuel consumption	
	IMO	EPA	RCD	kW	hp	rpm	L/hr	gal/hr
IMO exempt and non-certified engines								
4045DFM70								
M2	EX	-	-	60	80	2500	17.5	4.6
4045TFM50								
M2 [†]	EX	-	-	90	120	2400	22.7	6.0
M3 [†]	EX	-	-	101	135	2500	26.3	6.9
M4	EX	-	-	112	150	2600	29.7	7.8
IMO and EPA compliant engines								
4045TFM85								
M1 [†]	EX	Tier 3	RCD 2	75	100	2400	21.4	5.7
M2 [†]	EX	Tier 3	RCD 2	93	125	2500	29	8
4045AFM85								
M1 [†]	Tier 2	Tier 3	RCD 2	119	160	2300	33.2	8.8
M2 [†]	Tier 2	Tier 3	RCD 2	134	180	2400	37	10
M3	Tier 2	Tier 3	RCD 2	149	200	2500	44	12
M4	Tier 2	Tier 3	RCD 2	168	225	2600	49	13
4045SFM85								
M4	Tier 2	Tier 3	RCD 2	205	275	2600	54	14
M5	Tier 2	Tier 3	RCD 2	235	315	2800	62	16

EX = MARPOL Annex VI exempt

*Not available in all countries.

[†]Meets China Stage II.

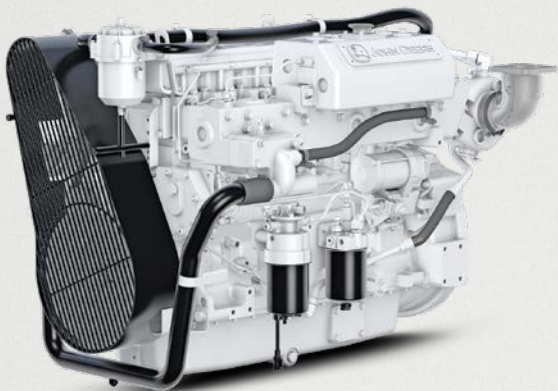
Engine model	Length to rear of block		Width		Height		Weight, dry	
	mm	in	mm	in	mm	in	kg	lb
4045DFM70 [†]	756	30	703 – 731	28 – 29	901	35	437	963
4045TFM50	748	29	703	28	912	36	462	1017
4045TFM85 [†]	739	29	692 – 703	27 – 28	912	36	507	1117
4045AFM85 [†]	752	30	692 – 771	27 – 30	964	38	578	1274
4045SFM85	762	30	820	32	922	36	558	1230

[†]Engine configuration may vary.

PowerTech

6.8L marine engines

- ▶ Keel-cooled or heat exchanger configurations
- ▶ Turbocharged non-aftercooled, or turbocharged with air-to-seawater or air-to-coolant aftercooling
- ▶ Excellent choice for recreational boats, launches, workboats, trawler yachts, and patrol craft



Engine model	Emissions			Rated power		Rated speed	Rated fuel consumption	
	IMO	EPA	RCD	kW	hp	rpm	L/hr	gal/hr
IMO exempt and non-certified engines								
6068TFM50								
M1	EX	-	-	115	154	2300	29.6	7.8
M2	-	-	-	130	175	2400	34.7	9.2
M3	-	-	-	149	200	2500	38.8	10.3
M4	-	-	-	168	225	2600	44.3	11.7
IMO and EPA compliant engines								
6068AFM85								
M1	Tier 2	Tier 3	RCD 2	172	230	2300	50.9	13.4
M2	Tier 2	Tier 3	RCD 2	198	265	2400	58.0	15.0
M3	Tier 2	Tier 3	RCD 2	224	300	2500	65.0	17.0
M4	Tier 2	Tier 3	RCD 2	246	330	2600	71.0	19.0
6068SFM85								
M1	Tier 2	Tier 3	RCD 2	186	249	2400	51.0	13.0
M2	Tier 2	Tier 3	RCD 2	209	280	2500	57.0	15.0
M3	Tier 2	Tier 3	RCD 2	239	321	2600	63.0	17.0
M4	Tier 2	Tier 3	RCD 2	265	355	2700	69.0	18.0
M5	Tier 2	Tier 3	RCD 2	298	400	2800	81.0	21.0

EX = MARPOL Annex VI exempt

Engine model	Length to rear of block		Width		Height		Weight, dry	
	mm	in	mm	in	mm	in	kg	lb
6068TFM50	1004	40	712	28	881	35	730	1609
6068AFM85 [*]	1034	41	806 – 865	32 – 34	935	37	787	1735
6068SFM85	1034	41	872	34	931	37	763	1682

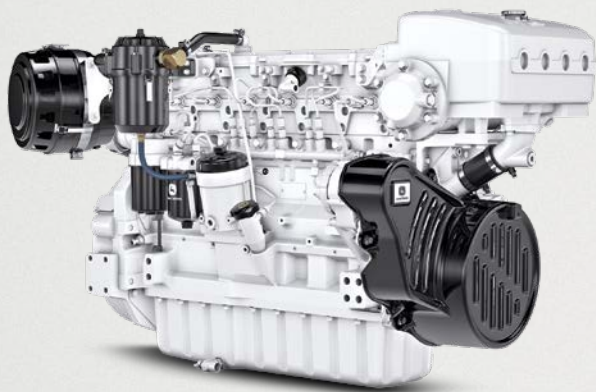
^{*}Engine configuration may vary.

PowerTech

9.0L marine engines

- ▶ Keel-cooled or heat exchanger configurations
- ▶ Turbocharged with air-to-seawater or air-to-coolant aftercooling
- ▶ 4-valve cylinder head
- ▶ Electronically controlled HPCR fuel system
- ▶ Front or side service
- ▶ Excellent choice for patrol craft, launches, workboats, fishing boats, trawler yachts, and sportfishing boats

See your John Deere engine distributor for options to combine the high power density of our 6090SFM marine engines in dual-circuit keel-cooled applications.



Engine model	Emissions			Rated power		Rated speed	Rated fuel consumption	
	IMO	EPA	RCD	kW	hp	rpm	L/hr	gal/hr
IMO and EPA compliant engines								
6090AFM85								
M1	Tier 2	Tier 3	RCD 2	213	285	2100	64.6	17.1
M2	Tier 2	Tier 3	RCD 2	242	325	2200	71.0	19.0
M3	Tier 2	Tier 3	RCD 2	280	375	2300	81.0	21.0
M4	Tier 2	Tier 3	RCD 2	317	425	2400	91.0	24.0
6090SFM85								
M1	Tier 2	Tier 3	RCD 2	242	325	2100	65.4	17.3
M2	Tier 2	Tier 3	RCD 2	280	375	2200	78.0	21.0
M3	Tier 2	Tier 3	RCD 2	317	425	2300	87.0	23.0
M4	Tier 2	Tier 3	RCD 2	373	500	2400	107.0	28.0
M5	Tier 2	Tier 3	RCD 2	410	550	2500	116.0	31.0
H	Tier 2	Tier 3	-	242	325	2000	63.2	16.7

EX = MARPOL Annex VI exempt

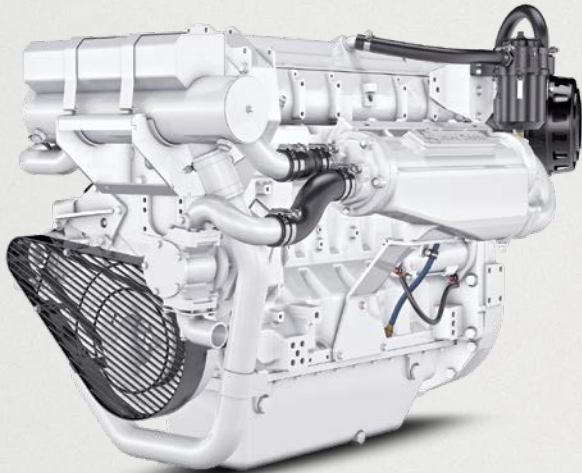
Engine model	Length to rear of block		Width		Height		Weight, dry	
	mm	in	mm	in	mm	in	kg	lb
6090AFM85	1297	51	938	37	983	39	1055	2325
6090SFM85	1297	51	938	37	983	39	1056	2327

PowerTech

13.5L marine engines

- ▶ Keel-cooled or heat exchanger configurations
- ▶ Turbocharged with air-to-seawater or air-to-coolant aftercooling
- ▶ 4-valve cylinder head
- ▶ Feature constant power to 400 rpm below rated speed
- ▶ Excellent choice for patrol craft, launches, workboats, fishing boats, trawler yachts, and sportfishing boats

See your John Deere engine distributor for options to combine the high power density of our 6135FM marine engines in dual-circuit keel-cooled applications.



Engine model	Emissions			Rated power		Rated speed	Rated fuel consumption	
	IMO	EPA	RCD	kW	hp	rpm	L/hr	gal/hr
IMO and EPA compliant engines								
6135AFM85								
M1	Tier 2	Tier 3	RCD 2	272	365	1800	76.7	20.3
M2	Tier 2	Tier 3	RCD 2	317	425	1900	86.0	23.0
M3	Tier 2	Tier 3	RCD 2	373	500	2000	102.0	27.0
M4	Tier 2	Tier 3	RCD 2	429	575	2100	119.0	31.0
6135SFM85								
M1	Tier 2	Tier 3	RCD 2	317	425	1800	79.5	21.0
M2	Tier 2	Tier 3	RCD 2	373	500	1900	94.0	25.0
M3	Tier 2	Tier 3	RCD 2	429	575	2000	111.0	29.0
M4	Tier 2	Tier 3	RCD 2	485	650	2100	124.0	33.0
M5	Tier 2	Tier 3	RCD 2	559	750	2200	146.0	39.0

Engine model	Length to rear of block		Width		Height		Weight, dry	
	mm	in	mm	in	mm	in	kg	lb
6135AFM85	1316	52	990	39	1182	47	1410	3108
6135SFM85	1335	53	990	39	1176	46	1426	3143

Next generation marine engines

Announcing the all-new John Deere JD14 and JD18 marine engines. They're built to take your marine propulsion, auxiliary, and generator applications to the next level.



JD14

JD18

Powerful performance

- ▶ JD14 engines have higher duty cycles and more power than John Deere 13.5L models.
- ▶ JD18 engines are built for heavy-duty commercial marine applications up to 599 kW (803 hp).
- ▶ High-pressure common-rail (HPCR) provides flexible injection timing and excellent efficiency.

Machine availability

- ▶ John Deere Connected Support™ remote monitoring and diagnostics comes standard. It provides protection and efficiency with no subscription fees or ongoing expenses.
- ▶ John Deere JD14 and JD18 engines provide excellent fuel economy.
- ▶ The JD18 has independent cooling for jacket water and aftercooling systems.

Low maintenance

- ▶ Longer oil change service intervals up to 500 hours when you use John Deere Plus-50™ II engine oil.
- ▶ Rigid bronze impeller on seawater pump with up to 10,000-hour life before needing maintenance.
- ▶ Hydraulic automatic valve lash adjustment improves durability and eliminates valve lash maintenance.

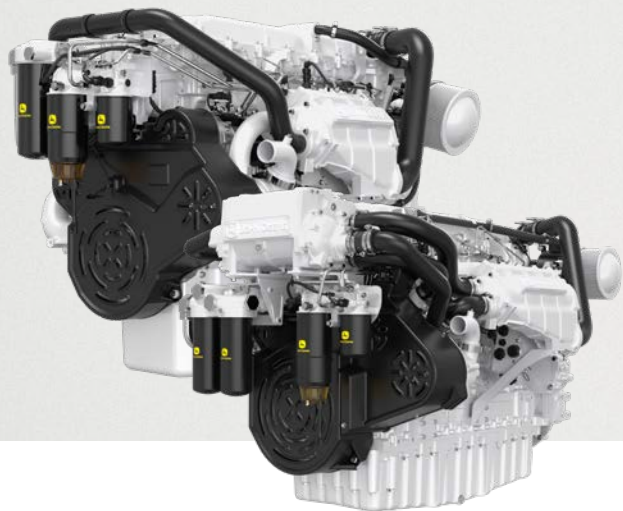
Easy integration

- ▶ The JD14 marine engine features a reduced package size compared to the John Deere 13.5L.
- ▶ The on-board ECU and compact service center box provides easy wiring and integration.
- ▶ Standard front side service for oil and filter maintenance.

JD14 & JD18 marine engines

- ▶ Rated power from 298 – up to 599 kW (400 – up to 803 hp)
- ▶ Keel-cooled or heat exchanger configurations
- ▶ Turbocharged with air-to-seawater or air-to-coolant aftercooling
- ▶ 4-valve cylinder head
- ▶ Excellent choice for heavy-duty marine applications such as tugs and towboats, fish and shrimp trawlers, displacement hull fishing boats, long-range ferryboats, and large passenger vessels

See your John Deere engine distributor for availability and production schedules.



Engine model	Emissions			Rated power		Rated speed
	IMO	EPA	RCD	kW	hp	rpm
IMO and EPA compliant engines						
JD14P						
M1	Tier 2	Tier 3	RCD 2	298	400	1800
M1	Tier 2	Tier 3	RCD 2	336	450	1800
M1	Tier 2	Tier 3	RCD 2	373	500	1900
M2	Tier 2	Tier 3	RCD 2	410	550	2000
M3	Tier 2	Tier 3	RCD 2	448	600	2100
JD14X						
M3	Tier 2	Tier 3	RCD 2	523	700	2100
M4	Tier 2	Tier 3	RCD 2	560	750	2200
M4	Tier 2	Tier 3	RCD 2	599	803	2200
JD18P						
M1	Tier 2	Tier 3	RCD 2	410	550	1800
M1	Tier 2	Tier 3	RCD 2	448	600	1800
M1	Tier 2	Tier 3	RCD 2	485	650	1800
M1	Tier 2	Tier 3	RCD 2	522	700	2000
M2	Tier 2	Tier 3	RCD 2	560	750	2100
M2	Tier 2	Tier 3	RCD 2	599	803	2100

Engine model	Length to rear of block		Width		Height		Weight, dry	
	mm	in	mm	in	mm	in	kg	lb
JD14P	1750	69	1128	44	1192	47	1575	3472
JD14X	1750	69	1095	43	1192	47	1571	3463
JD18P	2063	81	1321	52	1298	51	2274	5013

Marine constant-speed auxiliary and generator engine ratings

The marine generator engine rating is the power available under normal varying electrical load factors* for an unlimited number of hours per year in commercial applications. This rating incorporates a 10% overload capability and conforms to ISO 8528 prime power. Average load over a 24-hour period shall not exceed 67% of the prime rating, of which no more than two hours are between 100% and 110% of the prime rating.

This rating is used for applications that require constant speed in auxiliary applications.

** Load factor is the actual fuel burned over a period of time divided by the full-power fuel consumption for the same period of time. For example, if an engine burns 160 liters of fuel during an eight-hour run, and the full-power fuel consumption is 60 liters per hour, the load factor is 160 liters / (60 liters per hour x 8 hours) = 33.3%.*



Conversions

Generator drive rating (kWe)

[Engine power - Fan power loss] x Generator efficiency

Note:

DFM, TFM, AFM, and SFM generator drive ratings do not have fan power loss.

Power factor (PF)

kWe & kVA = Real power / Apparent power

PF constant = 0.80

Formulas

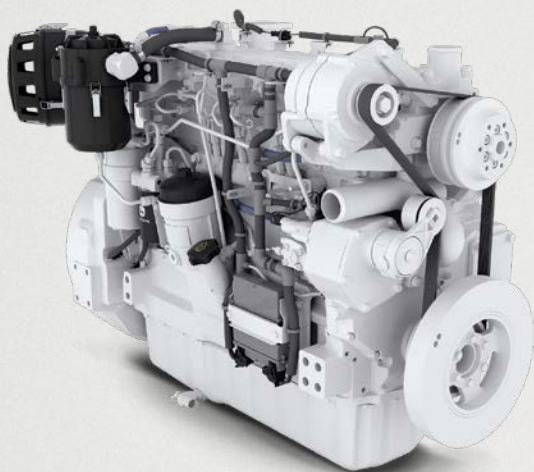
Standby power = Prime power x 110% Overload capacity

kVA rating = kWe rating / 0.80

Estimated electrical power is calculated from the typical generator efficiency and fan power percentages shown. Applications may vary.

Constant-speed auxiliary and generator engines

- ▶ Quiet, smooth operation
- ▶ Trusted provider of generator drive engines worldwide
- ▶ Available in 1500 rpm for 50 Hz and 1800 rpm for 60 Hz configurations
- ▶ This rating capable of a 10% overload capability and conforms to ISO 8528 prime power



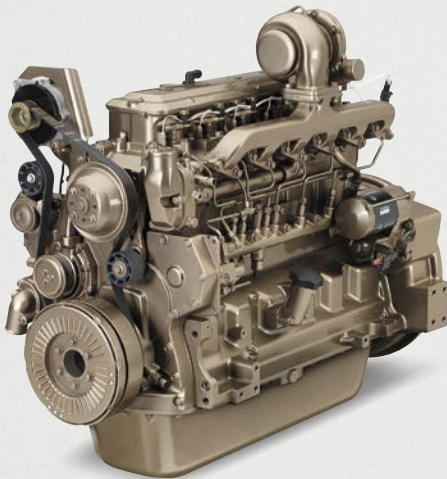
Engine model	Emissions		Prime power ratings			
	IMO	EPA	kW	hp	kVA	kWe
1500 rpm/50 Hz						
IMO exempt and non-certified engines						
4045DFM70	EX	-	40	54	45	36
4045TFM50	EX	-	57	76	64	51
6068TFM50	EX	-	89	119	102	82
6068AFM85*	EX	-	117	157	133	106
IMO and EPA compliant engines						
4045TFM85†	EX	Tier 3	61	82	69	55
4045AFM85†	EX	Tier 3	89	120	102	82
6068AFM85†	EX	Tier 3	129	173	146	117
6068AFM85†	Tier 2	-	139	187	160	125
6068SFM85	Tier 2	-	168	226	188	150
6090AFM85	Tier 2	-	195	261	219	175
6090SFM85	Tier 2	-	222	297	250	200
6135AFM85	Tier 2	-	278	373	313	250
6135SFM85	Tier 2	-	334	447	375	300
JD14P	Tier 2	Tier 3	333	447	375	300
JD18P	Tier 2	Tier 3	427	573	504	404
1800 rpm/60 Hz						
IMO exempt and non-certified engines						
4045DFM70	EX	-	46	62	50	40
4045TFM50	EX	-	71	95	80	64
6068TFM50	EX	-	115	154	124	99
IMO and EPA compliant engines						
4045TFM85	EX	Tier 3	74	99	81	65
4045TF285	Tier 2	Tier 3	71	95	74	60
4045AFM85	Tier 2	Tier 3	110	148	124	99
4045HF285	Tier 2	Tier 3	117	157	123	99
6068AFM85	EX	Tier 3	129	173	146	117
6068AFM85	Tier 2	Tier 3	166	223	188	150
6068SFM85	Tier 2	Tier 3	195	262	218	175
6090AFM85	Tier 2	Tier 3	222	297	250	200
6090HFM85	-	Tier 3	238	319	249	200
6090SFM85	Tier 2	Tier 3	278	373	313	250
6135AFM85	Tier 2	Tier 3	334	447	375	300
6135HFM85	-	Tier 3	416	558	436	350
6135SFM85	Tier 2	Tier 3	416	558	469	375
JD14P	Tier 2	Tier 3	380	510	428	342
JD18P	Tier 2	Tier 3	530	711	626	501

EX = MARPOL Annex VI exempt. *Meets Marine EU Stage V. †Meets China Stage II. Specifications are subject to change.

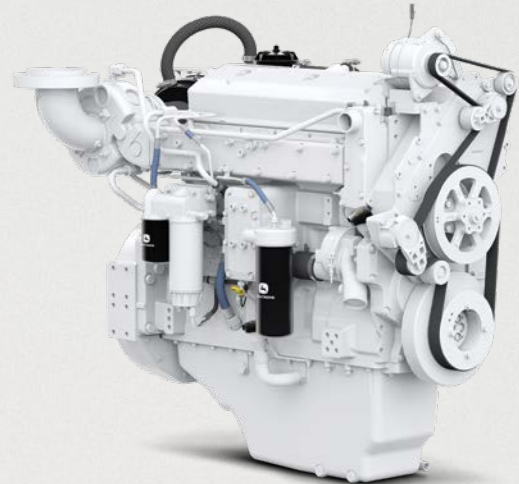
Variable-speed auxiliary engines

John Deere PowerTech radiator-cooled, dry-exhaust manifold engines (TF and HF models) are compliant with EPA Marine Tier 3 emissions regulations* and engineered to run vessel auxiliaries such as pumps, winches, deck cranes, and hydraulics. We also offer a choice of options and accessories.

John Deere PowerTech radiator-cooled, wet-exhaust manifold marine engines (HFM models) are rated to provide dependable auxiliary power for oceangoing vessels and other applications that require type approval for marine classification societies.



Engine model	Emissions		Rated power		Rated speed
	IMO	EPA	kW	hp	rpm
IMO and EPA compliant engines					
4045TF285	Tier 2	Tier 3	74	99	2200
6068HF485	Tier 2	Tier 3	187	251	2200
6090HFM85	-	Tier 3	242	325	2000
6090HF485	Tier 2	Tier 3	280	375	2200
6135HFM85	Tier 2	Tier 3	373	500	2000
6135HF485	Tier 2	Tier 3	448	600	2100
JD14P	Tier 2	Tier 3	410	550	2000
JD18P	Tier 2	Tier 3	559	750	2100



Parts and accessories

Maintenance parts

When you choose John Deere, you get the support of one of the strongest engine and equipment companies in the world. Our global support network has been established to help you complete your journey or your workday in comfort and confidence. With a wide selection of maintenance parts, your John Deere marine dealer or distributor has everything you need to keep your engine up and running.

Easy to maintain

- ▶ Poly-vee belt drive that provides durability
- ▶ Washable, dry-type air filters that can be serviced quickly and easily
- ▶ Replaceable wet liners, precision-joint connecting rod/cap joint, and replaceable valve seats to make rebuilding easy



Reliable accessories

John Deere engine accessories match up perfectly with the performance and reliability of John Deere marine engines. Every John Deere accessory is specially designed to provide easy installation and seamless operation. This complete approach to marine power is why more and more vessels are running with John Deere.

Electronics, instrumentation, and control kits

John Deere electronic kits are engineered to work in harsh marine environments. Instrumentation is easy to read so you always know what is happening with your engine. Harnesses are designed with weatherproof connections and plug-and-play installation to save time and money.

- ▶ Gauges: tachometer, hour meter, voltmeter, engine oil temperature and pressure, transmission oil temperature and pressure, exhaust gas temperature, coolant temperature
- ▶ Easy-to-read backlit analog gauges and electronic information display with multilanguage text



Air Cleaner Kits

Matched to your engine's airflow needs, John Deere washable air filters ensure your engine is getting adequate clean air for maximum performance and long service life. Filters are easily cleaned with power sprayers or commercial parts washers.

PART #	DESCRIPTION/APPLICATION
RE505642	Washable Air Filter, 50.8 mm (2 in) For use with option 1709. 4045 DFM50, DFM70
RE528296	Washable Air Filter, 76 mm (3 in) 4045 TFM50, TFM75, TFM85 6068 TFM50, TFM76 (50 Hz)
RE46837	Disposable Air Filter, 50.8 mm (2 in) 4045 DFM50, DFM70
RE502014	Washable Air Filter, 101.6 mm (4 in) 4045 DFM50, TFM75, TFM85 6068 SFM50, TFM50, TFM75 (propulsion), TFM76 (60 Hz)
RE504585	Filter Cleaning Kit Cleaning solution for all washable air cleaners.



RE528296
Washable Air Filter



RE46837
Disposable Air Filter



RE504585
Filter Cleaning Kit

Auxiliary Drive Gear Kits

John Deere marine engines offer engine-mounted auxiliary drives in many combinations to meet your needs. These auxiliary drives are great for running hydraulic pumps, steering pumps, compressors, and other accessories. Consult your engine option code for current configuration. Use the kits below to add or convert an auxiliary drive gear to meet your needs.

PART #	DESCRIPTION/APPLICATION
RE500883	SAE B Auxiliary Drive Kit Converts 5204 to 5201, rear "B" flange.
RE500884	SAE A Auxiliary Drive Kit Converts 5204 to 5202, rear "A" flange.
RE500885	SAE B Offset Auxiliary Drive Kit Converts 5204 to 5203, rear offset "B" flange. 4045 DFM50, TFM50, DFM70, TFM75, TFM85 6068 SFM50, TFM50, TFM75, TFM76
RE69480	SAE C Auxiliary Drive Kit Converts 5298 to 5201, left-hand side "C" flange.
RE69482	SAE A/B Auxiliary Drive Kit Converts 5298 to 5203, left-hand side, front "A" flange, rear "B" flange.
RE500740	SAE B/B Auxiliary Drive Kit Converts 5298 to 5206, left-hand side, front "B" flange, rear "B" flange. 6135 AFM75, AFM85



RE500883
SAE B Auxiliary Drive Kit

Cooling System Kits

John Deere cooling system kits are designed to integrate the engine with your vessel needs.

PART #	DESCRIPTION/APPLICATION
AT162597	Coolant Overflow Bottle 3.78 L (4 qt)
RE46165	Filler Neck Assembly Can be used when fabricating an auxiliary expansion tank.
4045	DFM50, TFM50, DFM70, TFM75, AFM85, TFM85, SFM85
6068	SFM50, TFM50, AFM75, SFM75, TFM75, TFM76, AFM85, SFM85
6090	AFM75, SFM75, AFM85, SFM85
6135	AFM75, SFM75, AFM85, SFM85
JD14	AFM, SFM
JD18	XFM
R133448	Top Tank Filler Neck Adapter Flange To convert radiator cap connection to an auxiliary expansion tank connection. Requires welding hose bib onto adapter.
4045	DFM50, TFM50, DFM70, TFM75, AFM85, TFM85, SFM85
6068	SFM50, TFM50, AFM75, SFM75, TFM75, TFM76, AFM85, SFM85
6090	AFM75, SFM75, AFM85, SFM85
JD14	AFM, SFM
JD18	XFM
DZ109714	Rigid Impeller Pump Kit DCKC applications only. 6135 SFM85



AT162597
Coolant Overflow Bottle



R133448
Top Tank Filler Neck Adapter Flange



RE46165
Filler Neck Assembly

Exhaust System Kits

Properly route exhaust gas to your vessel's exhaust system with genuine John Deere exhaust system kits.

PART #	DESCRIPTION/APPLICATION
RE58443	Straight Exhaust Adapter 15.24 cm (6 in) long with 8.89 cm (3.5 in) OD exhaust outlet. Comes with Marmon flange clamp.
4045	DFM50, TFM50, DFM70, TFM75, AFM85, TFM85, SFM85
6068	SFM50, TFM50, AFM75, SFM75, TFM75, TFM76, AFM85, SFM85
6090	AFM75, AFM85
T151881	Exhaust Elbow Gasket for Dry Elbow Flange
4045	DFM50, TFM50, DFM70, TFM75, AFM85, TFM85, SFM85
6068	SFM50, TFM50, TFM75, TFM76, AFM85, SFM85
6090	AFM85



RE58443
Straight Exhaust Adapter

Closed Crankcase Ventilation Kits

Keep engine rooms free of crankcase gases and ensure clean closed crankcase ventilation (CCV) with matched John Deere CCV kits.

PART #	DESCRIPTION/APPLICATION
RE532962	Closed Crankcase Ventilation Kit
4045	DFM50, TFM50, DFM70, TFM75, TFM85
6068	SFM50, TFM50, TFM75, TFM76

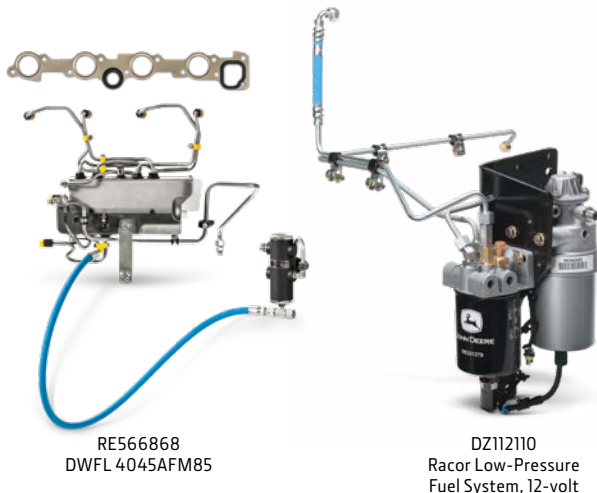


RE532962
Closed Crankcase Ventilation Kit

Fuel and Oil System Kits

For vessels that need to meet stringent requirements, such as type approval, John Deere offers double-wall fuel line (DWFL) kits, duplex filtration, and metal parts kits for fuel and oil systems.

PART #	DESCRIPTION/APPLICATION
RE529063	DWFL 4045TFM75
RE566864	DWFL 4045TFM85
RE528046	DWFL 6068TFM76
RE566868	DWFL 4045AFM85, 4045SFM85 4045AFM85 requires installation of Racor low-pressure fuel system DZ112110 or DZ112111.
RE529556	DWFL 6068SFM50, 6068TFM75
DZ10257	DWFL 6068AFM75/85, 6068SFM75/85 Must select starter option 30AG or 3090.
RE572105	DWFL 6090AFM75/85, 6090SFM75/85
DZ136592	JD14 AFM, SFM
DZ136622	JD18 XFM
DZ112110	Racor Low-Pressure Fuel System, 12-volt
DZ112111	Racor Low-Pressure Fuel System, 24-volt Optional fuel system for 4045AFM85 engines where Marine Classification Society approval is required or when duplex filtration is required.



PART #	DESCRIPTION/APPLICATION
DZ130602	Duplex Fuel Filter Kit Use on 4045AFM85 requires installation of Racor low-pressure fuel system DZ112110 or DZ112111. Use of duplex fuel filter kit on 6135HFM, 6135AFM, or 6135SFM requires adapter DZ101225. Use of duplex fuel filter kit on JD14 and JD18 requires adapter DZ137534. 4045 AFM85, SFM85 6068 AFM85, SFM85 6090 HFM85, AFM85, SFM85 6135 HFM85, AFM85, SFM85
DZ101225	Duplex Fuel Filter Adapter Kit Adapter required when using duplex fuel filter kit DZ130602 on 6135HFM, 6135AFM, or 6135SFM marine engines. 6135 HFM85, AFM85, SFM85
DZ137534	Duplex Fuel Filter Adapter Kit JD14 AFM, SFM JD18 XFM
RE569330	Metal Fuel System Kit For use when required in classed and inspected vessels. 4045 DFM50, TFM50, DFM70, TFM75 6068 SFM50, TFM50, TFM75, TFM76
RE564160	Metal WIF Sensor For use when required in classed and inspected vessels. 4045 AFM85, SFM85 6068 AFM85, SFM85 6090 AFM85, SFM85 6135 AFM85, SFM85 JD14 AFM, SFM JD18 XFM
AR104650	Fuel Return Line 4045 AFM85, TFM85, SFM85 6068 AFM75, SFM75, AFM85, SFM85
RE554935	Metal Oil Filter Cap For use when required in classed and inspected vessels. 6090 AFM75, SFM75, AFM85, SFM85



Insulation Blanket Kits

Keep surface temperatures down for operator comfort, and meet classification requirements, with John Deere exhaust insulation blanket kits.

PART #	DESCRIPTION/APPLICATION
RE527644	Insulation Blanket Kit 4045 DFM70, TFM75
RE527645	Insulation Blanket Kit 6068 SFM50, TFM75, TFM76
RE567214	Insulation Blanket Kit 4045 TFM85
RE567315	Insulation Blanket Kit 4045 AFM85
RE538833	Insulation Blanket Kit 6068 AFM75, SFM75, AFM85, SFM85
DZ117209	Insulation Blanket Kit 6090 AFM75, SFM75, AFM85, SFM85
DZ117211	Insulation Blanket Kit 6135 AFM75, SFM75, AFM85, SFM85
DZ136605	Insulation Blanket Kit JD14 AFM, SFM JD18 XFM



RE567315
Insulation Blanket Kit

Marine Instrumentation Systems

Instrumentation is easy to read, so you always know what is happening with your engine.

PART #	DESCRIPTION/APPLICATION
DZ119769	DG14 Display Must be installed with DG14 Retrofit Harness DZ101719 when replacing a PV101. 4045 DFM70, TFM75, AFM85, TFM85, SFM85 6068 AFM75, SFM75, TFM76 AFM85, SFM85 6090 AFM75, SFM75, AFM85, SFM85 6135 AFM75, SFM75, AFM85, SFM85 JD14 AFM, SFM JD18 XFM
RE555894*	Instrument Panel, Main Station 12-volt
RE555897*	Instrument Panel, Main Station 24-volt 4045 DFM50, TFM50, DFM70 6068 TFM50
RE555893*	Instrument Panel, Flybridge 12-volt
RE555896*	Instrument Panel, Flybridge 24-volt Includes "Y" harness and twin-station gauge senders. 4045 DFM50, TFM50, DFM70 6068 TFM50
DZ135283	Main Station Panel, 12-volt and 24-volt With John Deere Connected Support™
DZ103857	Remote Station Panel, 12-volt and 24-volt 4045 TFM75, AFM85, TFM85, SFM85 6068 AFM75, SFM75, TFM76, AFM85, SFM85 6090 AFM75, SFM75, AFM85, SFM85 6135 AFM75, SFM75, AFM85, SFM85 JD14 AFM, SFM JD18 XFM
DZ113021	Mini-Main Station Panel Kit
DZ113022	Mini-Remote Station Panel Kit 4045 AFM85, SFM85 6068 AFM85, SFM85 6090 AFM85, SFM85 6135 AFM85, SFM85 JD14 AFM, SFM JD18 XFM

*Compatible with legacy wire harness design



DZ135283
Main Station Panel,
12-volt and 24-volt



DZ103857
Remote Station Panel,
12-volt and 24-volt

Universal Electronic Accessories

PART #	DESCRIPTION/APPLICATION
AT157679	Transient Voltage Protection (TVP), 12-volt
AT163022	Transient Voltage Protection (TVP), 24-volt Used on systems without alternators.
RE52665	Kickback Start and Transfer Pump Relay, 12-volt
RE505214	Kickback Start and Transfer Pump Relay, 24-volt
RE503963	Marine Analog Throttle 4045 TFM75, AFM85, TFM85, SFM85 6068 SFM50, AFM75, SFM75, TFM75, TFM76, AFM85, SFM85 6090 AFM75, SFM75, AFM85, SFM85 6135 AFM75, SFM75, AFM85, SFM85 JD14 AFM, SFM JD18 XFM
R528576	Metal ECU Case For use when Marine Classification Certification is required. 4045 TFM75 6068 TFM76 JD14 AFM, SFM JD18 XFM
DZ104169	Power Relay Module, 12-volt
DZ104170	Power Relay Module, 24-volt 4045 TFM75, AFM85, TFM85, SFM85 6068 AFM75, SFM75, TFM76, AFM85, SFM85 6090 AFM75, SFM75, AFM85, SFM85 6135 AFM75, SFM75, AFM85, SFM85 JD14 AFM, SFM JD18 XFM



R528576
Metal ECU Case



DZ104169
Power Relay Module, 12-volt



RE503963
Marine Analog Throttle

Optional Gauges and Sensors

PART #	DESCRIPTION/APPLICATION
DZ104197	Coolant Level Sensor Can screw into any of the top tanks that are sensor-ready. Also comes with both steel and aluminum bungs that can be welded into the steel or aluminum tanks.
DZ104193	Exhaust Gas Temperature Sensor Kit
RE537637	Transmission Temperature Sensor
RE581543	Transmission Pressure Sensor
DZ108503	Exhaust Temperature Gauge, 51 mm (2 in)
DZ108504	Gear Oil Pressure Gauge, 51 mm (2 in)
DZ108505	Gear Oil Temperature Gauge, 51 mm (2 in) 4045 AFM85, TFM85, SFM85 6068 AFM85, SFM85 6090 AFM85, SFM85 6135 AFM85, SFM85 JD14 AFM, SFM JD18 XFM
DZ114406	Propulsion Sensor and Gauges Kit Includes sensors and gauges to measure transmission fluid temperature, transmission fluid pressure, and exhaust gas temperature.
DZ108502	Percent Load Gauge, 51 mm (2 in)
DZ108506	CAN and Analog Fuel Level Gauge, 51 mm (2 in) 4045 TFM75, AFM85, TFM85, SFM85 6068 AFM75, SFM75, TFM76, AFM85, SFM85 6090 AFM75, SFM75, AFM85, SFM85 6135 AFM75, SFM75, AFM85, SFM85 JD14 AFM, SFM JD18 XFM



DZ108502
Percent Load Gauge,
51 mm (2 in)



DZ108503
Exhaust Temperature
Gauge, 51 mm (2 in)



DZ108504
Gear Oil Pressure Gauge,
51 mm (2 in)



DZ108505
Gear Oil Temperature
Gauge, 51 mm (2 in)



DZ108506
CAN and Analog Fuel
Level Gauge, 51 mm (2 in)



RE537637
Transmission
Temperature Sensor

Legacy Wire Harnesses

PART #	DESCRIPTION/APPLICATION
DZ101719	DG14 Retrofit Harness Allows the installation of a DG14 in place of a PV101. 4045 DFM70, TFM75, AFM85, TFM85, SFM85 6068 AFM75, SFM75, TFM76 AFM85, SFM85 6090 AFM75, SFM75, AFM85, SFM85 6135 AFM75, SFM75, AFM85, SFM85
RE502828	Engine Wiring Harness, 12-volt
RE502829	Engine Wiring Harness, 24-volt 4045 DFM50, TFM50, DFM70 6068 TFM50
RE50498	Extension Harness, Engine-to-Instrument Panel, 6 m (20 ft)
RE50499	Extension Harness, Engine-to-Instrument Panel, 9 m (30 ft) 4045 DFM50, TFM50, DFM70 6068 TFM50
RE504936	Wiring Extension Kit, 3 m (10 ft)
RE504937	Wiring Extension Kit, 9 m (30 ft) Main panel to flybridge panel (for use only with RE549094 and RE549485 panels). 4045 DFM50, TFM50, DFM70 6068 TFM50
RE503687	Transition Harness to Main Station Extension Harness, 3 m (10 ft)
RE503688	Transition Harness to Main Station Extension Harness, 9 m (30 ft)
RE534576	Transition Harness, Engine to Main Station, 12-volt, 6 m (20 ft)
RE534577	Transition Harness, Engine to Main Station, 24-volt, 6 m (20 ft) Replaces RE522728.
RE534578	Transition Harness, Engine to Main Station, 12-volt, 12 m (39 ft)
RE534579	Transition Harness, Engine to Main Station, 24-volt, 12 m (39 ft)
RE543998	Transition Harness, Engine to Main Station, 12-volt, 2 m (6 ft)
RE543999	Transition Harness, Engine to Main Station, 24-volt, 2 m (6 ft) 4045 TFM75, AFM85, TFM85 6068 SFM50, AFM75, SFM75, TFM75, TFM76, AFM85, SFM85 6090 AFM75, SFM75, AFM85, SFM85 6135 AFM75, SFM75, AFM85, SFM85



RE543998
Transition Harness,
Engine to Main Station,
12-volt, 2 m (6 ft)

Generation II Wire Harnesses

PART #	DESCRIPTION/APPLICATION
DZ103938	Retrofit Main Panel Harness Allows the installation of the Generation II Marine Panels with Legacy Electronics. 4045 TFM75, AFM85, TFM85, SFM85 6068 AFM75, SFM75, TFM76, AFM85, SFM85 6090 AFM75, SFM75, AFM85, SFM85 6135 AFM75, SFM75, AFM85, SFM85
DZ103869	Panel Interconnect Harness, 4.5 m (15 ft)
DZ103868	Panel Interconnect Harness, 9 m (30 ft)
DZ103870	Panel Interconnect Harness (Cut-to-length), 30.5 m (100 ft) 4045 TFM75, AFM85, TFM85, SFM85 6068 AFM75, SFM75, TFM76, AFM85, SFM85 6090 AFM75, SFM75, AFM85, SFM85 6135 AFM75, SFM75, AFM85, SFM85 JD14 AFM, SFM JD18 XFM
DZ135281	Engine to ECU Interconnect Harness Kit, 1 m (3 ft)
DZ135282	Engine to ECU Interconnect Harness Kit, 3 m (10 ft) Gen II M. E. with John Deere Connected Support™ 4045 AFM85, SFM85 6068 AFM85, SFM85 6090 AFM85, SFM85 6135 AFM85, SFM85
DZ111685	ECU to Panel Interconnect Harness, 1.5 m (5 ft)
DZ111686	ECU to Panel Interconnect Harness, 4.5 m (15 ft)
DZ111687	ECU to Panel Interconnect Harness, 9 m (30 ft)
DZ111688	ECU to Panel Interconnect Harness, 15 m (50 ft)
DZ111689	ECU to Panel Interconnect Harness, (Cut-to-length), 35 m (115 ft)
DZ107498	Generator Drive Adapter Harness 4045 AFM85, SFM85 6068 AFM85, SFM85 6090 AFM85, SFM85 6135 AFM85, SFM85 JD14 AFM, SFM JD18 XFM



DZ107498
Generator Drive Adapter Harness



DZ103938
Retrofit Main Panel Harness



DZ111685
ECU to Main Station Interconnect
Harness, 1.5 m (5 ft)



DZ135281
Engine to ECU Interconnect
Harness Kit, 1 m (3 ft)

John Deere Fuel Filters

John Deere fuel filters have coated media that help keep water out, preventing rust and microbial growth that could contaminate your fuel and lead to reduced fuel economy.

PART #	DESCRIPTION	APPLICATION
RE62425	Primary Fuel Filter, 150 mm (6 in), 150 micron	4045 DFM50, TFM50 6068 TFM50
RE62420	Final Fuel Filter, 150 mm (6 in), 5 micron	4045 DFM50, TFM50 6068 SFM50, TFM50, TFM75
RE503747	Final Fuel Filter, 71 mm (2.8 in), 5 micron	4045 DFM50, TFM50
RE521248	Primary Fuel Filter, 109 mm (4.3 in), 10 micron	4045 DFM70, TFM75
RE520842	Final Fuel Filter, 109 mm (4.3 in), 2 micron	4045 DFM70, TFM75
RE515368	Primary Fuel Filter, 150 mm (6 in), 30 micron	6068 SFM50, TFM75
RE521540	Primary Fuel Filter, 150 mm (6 in), 10 micron	4045 TFM85, AFM85
RE525523	Kit, Primary and Final Fuel Filters, 10 and 2 micron	6068 AFM75, SFM75
RE527961	Kit, Primary and Final Fuel Filters, 10 and 2 micron	4045 SFM85 6068 AFM85, SFM85 6090 AFM85, SFM85
RE532952	Primary Fuel Filter, 10 micron	6135 AFM85, SFM85
RE533910	Final Fuel Filter, 2 micron	
DZ124761	Primary Fuel Filter, 10 micron	JD14 AFM, SFM
DZ124786	Final Fuel Filter, 4 micron	JD18 XFM



RE533910
Final Fuel Filter, 2 micron



RE532952
Primary Fuel Filter, 10 micron

John Deere Engine Oil

Reference the engine operator's manual, or contact your John Deere dealer about the right engine oil for your engine.

PART #	DESCRIPTION	SIZE
TY26800	Torq-Gard™ 15W-40	3.8 L (1 U.S. gal)
TY26801	Torq-Gard 15W-40	18.9 L (5 U.S. gal)
TY26802	Torq-Gard 15W-40	209 L (55 U.S. gal)
TY26673	Plus-50™ II 15W-40	3.8 L (1 U.S. gal)
TY26679	Plus-50 II 15W-40	18.9 L (5 U.S. gal)
TY26677	Plus-50 II 15W-40	113.5 L (30 U.S. gal)



TY26800
Torq-Gard 15W-40



TY26679
Plus-50 II 15W-40

John Deere Oil Filters

Dirty oil will slow you down, leading to less productivity and shorter service intervals.

PART #	DESCRIPTION	APPLICATION
RE504836	Oil Filter	4045 DFM70, TFM75, TFM85, AFM85, SFM85 6068 SFM50, TFM75, SFM75, AFM85, SFM85
RE509672	Oil Filter	6090 AFM75, SFM75, AFM85, SFM85
RE59754	Oil Filter	4045 DFM50, TFM50 6068 TFM50
RE57394	Oil Filter	6090 AFM75, SFM75, AFM85, SFM85
RE561823	Oil Filter	6135 AFM85, SFM85
RE572785	Oil Filter	6135 AFM85, SFM85 JD14 AFM, SFM JD18 XFM



RE57394
Oil Filter



RE59754
Oil Filter

John Deere Antifreeze/Coolant

Cool-Gard™ II is a high-performance, long-life, heavy-duty antifreeze/coolant that protects against corrosion, deposits, and cavitation. Formulated for up to 6 years/6,000 hours* of high thermal and oxidation protection.

PART #	DESCRIPTION	SIZE
TY26573	Cool-Gard II Concentrate	3.8 L (1 U.S. gal)
TY26574	Cool-Gard II Concentrate	209 L (55 U.S. gal)
TY26575	Cool-Gard II Pre-Mix	3.8 L (1 U.S. gal)
TY26576	Cool-Gard II Pre-Mix	9.5 L (2.5 U.S. gal)
TY26577	Cool-Gard II Pre-Mix	209 L (55 U.S. gal)
TY26578	Cool-Gard II Pre-Mix	1,249 L (330 U.S. gal tote)
TY26605	Cool-Gard II Test Strips	
TY26603	Cool-Gard II Extender	
VC76215-005	Cool-Gard II Pre-Mix	5 L (1.3 U.S. gal)
VC76215-020	Cool-Gard II Pre-Mix	20 L (5.3 U.S. gal)
VC76215-200	Cool-Gard II Pre-Mix	209 L (55 U.S. gal)

*Rating applies when complete cooling system flush is performed prior to use.



TY26573
Cool-Gard II, Concentrate

TY26575
Cool-Gard II, Pre-Mix

Zinc Anode

Sacrificial zinc anodes protect your engine's heat exchanger and charge air cooler from galvanic corrosion, which is caused when dissimilar metals are connected electrically in seawater. John Deere recommends inspecting the anode every six months or 250 engine hours and replacing it if necessary. See your operator's manual for more information.

PART #	DESCRIPTION	APPLICATION
RE54993	Fitting Plug with Zinc Anode	All engine models



RE54993
Fitting Plug with Zinc Anode

Fluid Analysis Kits

When used regularly, John Deere fluid analysis kits provide early warning of any changes in the engine or other equipment that may require service.

PART #	DESCRIPTION	APPLICATION
AT346594	Oil Analysis Kit	
TY26873	Coolant Analysis Kit	All engine models
AT180344	Fuel Analysis Kit	



AT346594
Oil Analysis Kit

A lifetime of support



YOU CAN RELY ON US

With installation assistance, standard and extended warranties, and an extensive worldwide parts and service network, John Deere provides ongoing support for the life of your engine.

Find your closest John Deere engine distributor or dealer at JohnDeere.com/Dealer.

Ask them about the parts you need, or visit JohnDeere.com/EngineParts.



JOHN DEERE POWERASSIST™ APP

Retrieve serial-specific information for your John Deere engine. Just scan or enter your John Deere engine serial number to access option codes, manuals, part numbers, ECU information, and much more. Download this free app today!



WARRANTY SUPPORT WHEN YOU NEED IT

Every John Deere marine engine comes with a 2-year/2,000-hour standard warranty.* Registering your engine at JohnDeere.com/OEMWarranty gives us the information needed to stock the right service parts, maintenance products, and servicing tools.‡

*When sold and installed by John Deere or its authorized dealers and distributors.
‡See specific OEM product warranty language for applicable terms and conditions.
Note: The 2-year/2,000-hour standard warranty and OEM engine registration may not be available in all countries.



JOHN DEERE CONNECTED SUPPORT™

Unlock proactive engine support and help avoid unplanned downtime with John Deere Connected Support remote monitoring and diagnostics.* This technology allows John Deere service experts to maximize the customer experience and support engines remotely.



POWERGARD™ PROTECTION PLAN

Avoid unexpected repair costs with the protection of a John Deere PowerGard™ Protection Plan — up to five years or 5,000 hours for marine engines through M5 power ratings.* Our extended warranty plans protect the engine as well as components and accessories installed by an authorized John Deere dealer or distributor.



OEM ENGINE MAINTENANCE PLANS

Whether you have a new or used John Deere marine engine, you can get peace of mind, protect your investment, and lock in your maintenance costs.

*Contact your John Deere dealer or distributor for availability in certain countries and on specific engine models.



JOHN DEERE



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DSWT59 (25-10)

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