

Industrial Off-Highway Applications

Diesel Engine Ratings



JOHN DEERE



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Questions about John Deere engines?

Check out our Frequently
Asked Questions page.

JohnDeere.com/JDPower



Power Meets Progress

When an unstoppable force meets the latest technologies, great things happen. Like next generation industrial engines from John Deere. They are built from the ground up to deliver new levels of reliability, durability, flexibility, and serviceability.

Off-highway heritage

John Deere specializes in rugged off-highway applications. That's why our engines are built with heavy-duty components, top-liner cooling, steel pistons to maximize reliability, and wet-type cylinder liners for long-haul durability.

Connected Support

John Deere OEM industrial engines can be protected by John Deere Connected Support™ remote monitoring and diagnostic services.* With more than 9,000 John Deere service locations worldwide, you never have far to go to find expert assistance and advice.

*Contact your John Deere dealer or distributor for availability of Connected Support on specific engine models.



Conversions

From English to SI (Metric)

Torque

$\text{Nm} = 1.3558 \times \text{lb-ft}$

$\text{lb-ft} = .73756 \times \text{Nm}$

$\text{Nm} = (9549 \times \text{kW})/\text{rpm}$

$\text{lb-ft} = (5252 \times \text{hp})/\text{rpm}$

Power

$\text{hp} = \text{kW} \times 1.341$

$\text{kW} = \text{hp} \times .746$

$\text{kW} = (\text{torque (Nm)} \times \text{rpm})/9549$

$\text{hp} = (\text{torque (lb-ft)} \times \text{rpm})/5252$

Nm = Newton meters

lb-ft = foot-pounds

kW = kilowatts

hp = horsepower

Torque rise

% torque rise = $\text{max torque} / \text{torque at rated speed}$

Power bulge

Power bulge = $\text{maximum power} / \text{power at rated speed}$



Final Tier 4/Stage V

Industrial engine power ratings

Engine name	Engine model	Power ratings	Turbo	Cooled EGR	Aftertreatment	Exhaust canister size	SCR size	Power range									
EWX 2.9L	3029HI530	36 – 55 kW (48 – 74 hp)	WGT	-	DOC/DPF	2	-										
JD4G	JD4G	63 – 120 kW (84 – 161 hp)	WGT	-	DOC/DPF/SCR	2	2										
EWX 4.5L	4045TI530	55 kW (74 hp)	WGT	-	DOC/DPF	2	-										
EWS 4.5L	4045HI551	74 – 110 kW (99 – 148 hp)	WGT	-	DOC/DPF/SCR	2	2										
PWS 4.5L	4045HI550	74 – 104 kW (99 – 140 hp)	WGT	Yes	DOC/DPF/SCR	2	3										
PSS 4.5L	4045CI550	93 – 129 kW (125 – 173 hp)	Series	Yes	DOC/DPF/SCR	3	3										
PSS 4.5L	4045CI551	116 – 129 kW (156 – 173 hp)	Series	Yes	DOC/DPF/SCR	4	4										
PVS 6.8L	6068HI550	104 – 129 kW (140 – 173 hp)	VGT	Yes	DOC/DPF/SCR	3	3										
PVS 6.8L	6068HI550	138 – 187 kW (185 – 251 hp)	VGT	Yes	DOC/DPF/SCR	4	4										
PSS 6.8L	6068CI550	168 – 187 kW (225 – 251 hp)	Series	Yes	DOC/DPF/SCR	4	4										
PSS 6.8L	6068CI550	187 – 224 kW (251 – 300 hp)	Series	Yes	DOC/DPF/SCR	5	5										
PSS 9.0L	6090CI550	187 – 242 kW (251 – 325 hp)	Series	Yes	DOC/DPF/SCR	5	5										
PSS 9.0L	6090CI550	261 – 317 kW (350 – 425 hp)	Series	Yes	DOC/DPF/SCR	6	6										
JD14P	6136HI550	300 – 410 kW (402 – 550 hp)	WGT	Yes	DOC/DPF/SCR	6											
JD14X	6136CI550	391 – 510 kW (525 – 684 hp)	Series	Yes	DOC/DPF/SCR	7											
JD18X	6180CI510	522 – 677 kW (700 – 908 hp)	Series	Yes	-	-											



Final Tier 4/Stage V Engine technology

PowerTech EWX

EWX engines are compact, powerful, cost-effective, and simple to install without requiring cooled exhaust gas recirculation (EGR) or selective catalytic reduction (SCR). Our straightforward PowerTech™ EWX engines have 2-valve cylinder heads, high-pressure common-rail (HPCR) fuel systems, and full authority electronic controls. They use simple wastegate turbocharging to maintain transient response and peak torque in all operating conditions.

PowerTech EWS

EWS engines meet performance and emissions requirements without requiring cooled EGR. PowerTech EWS engines have 2-valve cylinder heads, high-pressure common-rail fuel systems, and full authority electronic controls. They use simple wastegate turbocharging to maintain transient response and peak torque in all operating conditions.

PowerTech PWS

PWS engines combine advanced combustion technologies, enhanced engine calibration, and simple wastegate turbocharging. PWS engines feature PowerTech Plus technology with a DOC/DPF and an SCR system that reduce emissions while maximizing performance.

PowerTech PVS

PVS engines deliver excellent power, torque, and fluid economy. They utilize our proven PowerTech Plus technology with variable geometry turbocharging, a DOC/DPF, and an SCR system to improve combustion efficiency, reduce emissions, enhance performance, and improve fluid economy.

PowerTech PSS

PSS engines provide a powerful combination of power density, performance, and fluid efficiency. For ultimate performance in off-highway applications, PowerTech PSS engines can handle almost any job. All displacements feature series turbochargers to deliver excellent performance and responsiveness. PSS engines feature proven PowerTech Plus technology that includes a DOC/DPF and an SCR system designed specifically for off-highway applications.

Performance levels

John Deere next generation engines include three performance levels designated by G, P, and X.



Cost-effective power solutions for price-sensitive market applications.



Balance of performance and cost.



Exceptional power, ultimate performance, and leading technology.

Final Tier 4/Stage V 2.9L engines



Engine model	Rated power			Peak power			Peak torque		
	kW	hp	rpm	kW	hp	rpm	Nm	lb-ft	rpm
PowerTech EWX									
3029HI530	36	48	2400	36	48	2400	192	142	1600
3029HI530	36	48	2200	36	48	2200	209	154	1600
3029HI530	48	64	2400	48	64	2400	254	187	1600
3029HI530	48	64	2200	48	64	2200	280	207	1600
3029HI530	55	74	2400	55	74	2400	292	215	1600
3029HI530	55	74	2200	55	74	2200	304	224	1600

Performance				
Engine	Power bulge	Torque rise	Low-speed torque (1000 rpm)	Turbo
EWX 2.9L	-	Up to 34%	Up to 120%	WGT

Emissions technology				
Engine	Cooled EGR	Aftertreatment	Exhaust canister size	SCR size
EWX 2.9L	-	DOC/DPF	2	-

Specifications								
Engine	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
EWX 2.9L	715	28	596	24	956	38	400	882

Final Tier 4/Stage V

JD4 engines



Engine model	Rated power			Peak power			Peak torque			Power bulge	Torque rise	Low-speed torque (1000 rpm)	Turbo
	kW	hp	rpm	kW	hp	rpm	Nm	lb-ft	rpm				
JD4G													
JD4G	63	84	2200	68	91	2000	364	268	1300	Up to 8%	Up to 33%	Up to 119%	WGT
JD4G	75	100	2200	81	109	2000	433	319	1300	Up to 8%	Up to 33%	Up to 118%	WGT
JD4G	86	115	2200	93	125	2000	497	367	1300	Up to 8%	Up to 33%	Up to 119%	WGT
JD4G	93	125	2200	100	134	2000	537	396	1300	Up to 8%	Up to 33%	Up to 119%	WGT
JD4G	105	140	2200	113	152	2200	606	447	1300	Up to 8%	Up to 33%	Up to 118%	WGT
JD4G	120	161	2200	120	161	2200	700	516	1400	-	Up to 34%	Up to 117%	WGT

Compact power

- 20% to 30% reduction in package size compared to John Deere 4.5L single turbo engine
- Rear gear train provides quiet operation
- Maintenance-free hydraulic lash adjustment
- Compliant with U.S. EPA Final Tier 4 and EU Stage V with no EGR

Emissions technology				
Engine	Cooled EGR	Aftertreatment	Exhaust canister size	SCR size
JD4G	No	DOC/DPF/SCR	2	2

Specifications								
Engine	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
JD4G	700	28	680	27	810	32	<460	<1014

Final Tier 4/Stage V

4.5L engines



Engine model	Rated power			Peak power			Peak torque		
	kW	hp	rpm	kW	hp	rpm	Nm	lb-ft	rpm
PowerTech EWX									
4045TI530	55	74	2400	55	74	2400	304	224	1600
4045TI530	55	74	2200	55	74	2200	304	224	1600
PowerTech EWS									
4045HI551	74	99	2100	92	123	1650	551	406	1600
4045HI551	86	115	2100	98	131	1800	562	415	1600
4045HI551	96	129	2100	102	137	1900	574	423	1600
4045HI551	104	140	2100	107	143	1900	585	432	1600
4045HI551	110	148	2100	110	148	2000	586	432	1600
PowerTech PWS									
4045HI550	74	99	2200	80	107	2000	427	315	1600
4045HI550	86	115	2200	88	118	1900	506	374	1600
4045HI550	93	125	2400	93	125	2400	493	364	1600
4045HI550	93	125	2200	94	126	2100	536	396	1600
4045HI550	104	140	2400	104	140	2400	540	398	1600
4045HI550	104	140	2200	104	140	2200	540	398	1600
PowerTech PSS (High Profile)									
4045CI550	93	125	2200	96	128	1900	537	396	1600
4045CI550	93	125	2200	100	134	2000	537	396	1600
4045CI550	104	140	2200	107	143	1900	601	443	1600
4045CI550	104	140	2200	112	151	2000	601	443	1600
4045CI550	116	155	2200	116	155	2200	667	492	1600
4045CI550	116	155	2200	125	168	2000	667	492	1600
4045CI550	129	173	2200	129	173	2200	667	492	1600
PowerTech PSS (Low Profile)									
4045CI551	116	156	2200	116	156	2200	667	492	1600
4045CI551	116	156	2200	125	167	2000	667	492	1600
4045CI551	116	156	2400	116	156	2400	616	455	1600
4045CI551	116	156	2400	125	168	2200	616	455	1600
4045CI551	129	173	2200	129	173	2200	667	492	1600
4045CI551	129	173	2400	129	173	2400	667	492	1600

Performance				
Engine	Power bulge	Torque rise	Low-speed torque (1000 rpm)	Turbo
EWX 4.5L	-	Up to 39%	Up to 119%	WGT
EWS 4.5L	Up to 4%	Up to 19%	Up to 30%	WGT
PWS 4.5L	Up to 8%	Up to 33%	Up to 122%	WGT
PSS 4.5L	Up to 8%	Up to 33%	Up to 117%	Series

Emissions technology				
Engine	Cooled EGR	Aftertreatment	Exhaust canister size	SCR size
EWX 4.5L	No	DOC/DPF	2	-
EWS 4.5L	No	DOC/DPF/SCR	2	2
PWS 4.5L	Yes	DOC/DPF/SCR	2	3
PSS 4.5L HP	Yes	DOC/DPF/SCR	3	3
PSS 4.5L LP	Yes	DOC/DPF/SCR	4	4

Specifications								
Engine	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
EWX 4.5L	870	34	720	28	960	38	510	1124
EWS 4.5L	870	34	663	26	1024	40	506	1116
PWS 4.5L	870	34	650	26	1050	41	550	1213
PSS 4.5L HP	870	34	635	25	1130	45	570	1257
PSS 4.5L LP	870	34	745	29	982	39	570	1257

Final Tier 4/Stage V 6.8L engines



Engine model	Rated power			Peak power			Peak torque		
	kW	hp	rpm	kW	hp	rpm	Nm	lb-ft	rpm
PowerTech PVS									
6068HI550	104	140	2400	104	140	2400	556	410	1600
6068HI550	104	140	2400	112	151	2200	556	410	1600
6068HI550	104	140	2200	106	142	2100	613	452	1600
6068HI550	104	140	2200	112	151	2000	613	452	1600
6068HI550	116	156	2400	117	157	2300	619	457	1600
6068HI550	116	156	2400	125	168	2200	619	457	1600
6068HI550	116	156	2200	119	159	2200	676	499	1600
6068HI550	116	156	2200	125	168	2000	676	499	1600
6068HI550	129	173	2400	129	173	2400	688	508	1600
6068HI550	129	173	2400	139	187	2200	688	508	1600
6068HI550	129	173	2200	132	177	2000	745	550	1600
6068HI550	129	173	2200	140	187	2000	756	558	1600
6068HI550	138	185	2400	138	185	2400	741	547	1600
6068HI550	138	185	2400	152	204	2200	741	547	1600
6068HI550	138	185	2200	152	204	2000	809	597	1600
6068HI550	138	185	2200	152	204	1800	890	657	1600
6068HI550	149	200	2400	149	200	2400	800	590	1600
6068HI550	149	200	2400	164	220	2200	800	590	1600
6068HI550	149	200	2200	164	220	2000	873	644	1600
6068HI550	149	200	2200	164	220	1800	963	711	1600
6068HI550	168	225	2400	168	225	2400	900	664	1600
6068HI550	168	225	2400	185	248	2200	900	664	1600
6068HI550	168	226	2200	185	248	2000	970	716	1600
6068HI550	168	226	2200	185	247	1800	1000	738	1700
6068HI550	187	251	2400	190	255	2200	1000	738	1700
6068HI550	187	251	2200	190	255	2000	1000	738	1700
6068HI550	187	251	2200	187	251	2000	1000	738	1700
PowerTech PSS									
6068CI550	168	225	2400	185	247	2100	1000	738	1600
6068CI550	168	225	2200	182	244	2000	1000	738	1600
6068CI550	187	251	2400	187	251	2400	1026	757	1600
6068CI550	187	251	2200	187	251	2200	1026	757	1600
6068CI550	205	275	2400	207	277	2100	1057	780	1700
6068CI550	205	275	2200	206	277	2200	1057	780	1700
6068CI550	224	300	2400	224	300	2400	1141	842	1600
6068CI550	224	300	2200	224	300	2200	1141	842	1600

Performance				
Engine	Power bulge	Torque rise	Low-speed torque (1000 rpm)	Turbo
PVS 6.8L	Up to 10%	Up to 36%	Up to 128%	VTG
PSS 6.8L	Up to 10%	Up to 49%	Up to 119%	Series

Emissions technology				
Engine	Cooled EGR	Aftertreatment	Exhaust canister size	SCR size
PVS 6.8L	Yes	DOC/DPF/SCR	3,4	3,4
PSS 6.8L	Yes	DOC/DPF/SCR	4,5	4,5

Specifications								
Engine	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
PVS 6.8L	1160	46	720	28	1350	53	770	1698
PSS 6.8L	1160	46	780	31	1205	47	785	1731

Final Tier 4/Stage V 9.0L engines



Engine model	Rated power			Peak power			Peak torque		
	kW	hp	rpm	kW	hp	rpm	Nm	lb-ft	rpm
PowerTech PSS									
6090Ci550	187	251	2200	192	257	2000	1120	827	1600
6090Ci550	187	251	2200	206	276	2000	1120	827	1600
6090Ci550	187	251	2000	207	277	1700	1232	909	1600
6090Ci550	205	275	2200	211	283	1900	1228	906	1600
6090Ci550	205	275	2200	226	302	2000	1228	906	1600
6090Ci550	205	275	2000	227	305	1700	1351	997	1600
6090Ci550	224	300	2200	230	309	1900	1341	990	1600
6090Ci550	224	300	2200	247	331	2000	1341	990	1600
6090Ci550	224	301	2000	248	332	1700	1477	1090	1600
6090Ci550	242	325	2200	248	332	2000	1450	1070	1600
6090Ci550	242	325	2200	266	357	2000	1450	1070	1600
6090Ci550	242	325	2000	267	358	1700	1595	1177	1600
6090Ci550	261	350	2200	268	360	1900	1563	1154	1600
6090Ci550	261	350	2200	287	385	2000	1563	1154	1600
6090Ci550	261	350	2000	287	385	1800	1685	1244	1600
6090Ci550	280	375	2200	287	385	1900	1671	1233	1600
6090Ci550	280	375	2200	308	413	2000	1671	1233	1600
6090Ci550	280	375	2000	301	403	1800	1685	1244	1600
6090Ci550	298	400	2200	299	401	2100	1685	1244	1600
6090Ci550	298	400	2200	316	424	2000	1685	1244	1600
6090Ci550	298	400	2000	301	403	1800	1685	1244	1600
6090Ci550	317	425	2200	317	425	2200	1685	1244	1600

Performance				
Engine	Power bulge	Torque rise	Low-speed torque (1000 rpm)	Turbo
PSS 9.0L	Up to 10%	Up to 38%	Up to 132%	Series

Emissions technology				
Engine	Cooled EGR	Aftertreatment	Exhaust canister size	SCR size
PSS 9.0L	Yes	DOC/DPF/SCR	5,6	5,6

Specifications								
Engine	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
PSS 9.0L	1326	52	879	35	1266	50	1097	2418



Final Tier 4/Stage V JD14 engines

Next generation Integrated Emissions Control system

- Durable in-line aftertreatment for ease of application integration
- Can be mounted horizontally or vertically
- Fewer connection points than the previous generation
- Robust aftertreatment performance



Engine model	Rated power			Peak power			Peak torque		
	kW	hp	rpm	kW	hp	rpm	Nm	lb-ft	rpm
JD14P									
6136HI550	300	402	2100	324	434	1900	1986	1465	1550
6136HI550	336	450	2100	363	486	1900	2192	1617	1550
6136HI550	373	500	2100	403	540	1900	2397	1768	1550
6136HI550	410	550	2100	415	556	2000	2510	1851	1550
JD14X									
6136CI550	391	524	2100	421	565	1900	2495	1840	1550
6136CI550	436	585	2100	446	598	1800	2745	2025	1550
6136CI550	485	650	2100	495	664	1900	3050	2250	1550
6136CI550	510	684	2100	513	688	1700	3050	2250	1550



Exceptional power in a small package

- Multiple gear-driven auxiliary drive locations
- Integrated rear PTO
- Maintenance-free valve lash
- Single- and dual-turbo configurations

Performance				
Engine	Power bulge	Torque rise	Low-speed torque (1000 rpm)	Turbo
JD14P	Up to 8%	Up to 45%	Up to 132%	WGT
JD14X	Up to 8%	Up to 40%	Up to 114%	Series

Emissions technology			
Engine	Cooled EGR	Aftertreatment	Exhaust unit size
JD14P	Yes	DOC/DPF/SCR	6
JD14X	Yes	DOC/DPF/SCR	7

Specifications								
Engine	Length*		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
JD14P	1498	59	890	35	1366	54	1468	3237
JD14X	1498	59	890	35	1366	54	1521	3353

*Engine length without fan drive.

Final Tier 4/Stage V JD18 engines



Extended power range and options

- Power up to 677 kW (908 hp)
- Rear gear train for quiet operation
- Maintenance-free hydraulic lash adjustment
- New combustion technology meets emissions regulations without requiring aftertreatment

Engine model	Rated power			Peak power			Peak torque		
	kW	hp	rpm	kW	hp	rpm	Nm	lb-ft	rpm
JD18X									
6180C1510	522	700	1900	572	767	1700	3317	2448	1400
6180C1510	560	751	1900	600	805	1700	3675	2712	1400
6180C1510	600	805	1900	640	858	1700	3873	2858	1400
6180C1510	640	858	1900	660	885	1700	4070	3004	1400
6180C1510	677	908	1900	677	908	1700	4250	3137	1400

Performance				
Engine	Power bulge	Torque rise	Low-speed torque (1000 rpm)	Turbo
JD18X	Up to 10%	Up to 25%	Up to 118%	Series

Emissions technology				
Engine	Cooled EGR	Aftertreatment	Exhaust canister size	SCR size
JD18X	Yes	-	-	-

Specifications								
Engine	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
JD18X	1750	69	920	36	1507	59	2119	4672



Final Tier 4

Industrial engine power ratings

Engine name	Final Tier 4 engine model	Power ratings	Turbo	Cooled EGR	Aftertreatment	Exhaust canister size	SCR size	Power range								
EWL 4.5L	4045HI440	74 – 110 kW (99 – 148 hp)	WGT	-	DOC/SCR	2	2									
PWL 4.5L	4045HFC04	63 – 104 kW (85 – 140 hp)	WGT	Yes	DOC/SCR	2	3									
PSL 4.5L	4045HFC06	93 – 129 kW (125 – 173 hp)	Series	Yes	DOC/SCR	3	3									
JD14P	6136HI440	300 – 410 kW (402 – 550 hp)	WGT	Yes	DOC/SCR	6	6									
JD14X	6136CI440	391 – 510 kW (524 – 684 hp)	Series	Yes	DOC/SCR	7	7									
								kW	0	75	149	224	298	373	447	522
								hp	0	100	200	300	400	500	600	700



Final Tier 4 Engine technology

PowerTech EWL

EWL engines meet performance and emissions requirements without requiring cooled exhaust gas recirculation (EGR). They have 2-valve cylinder heads, high-pressure common-rail (HPCR) fuel systems, and full authority electronic controls. They pair our proven PowerTech Plus technology with a DOC and optimized selective catalytic reduction (SCR) system to produce near-zero levels of PM without a DPF.

PowerTech PWL

PWL engines combine advanced combustion technologies, enhanced engine calibration, and simple wastegate turbocharging. They pair our proven PowerTech Plus technology with a DOC and optimized SCR system to produce near-zero levels of PM without a DPF.

PowerTech PSL

PSL engines provide exceptional power in a compact package. They feature an optimized engine calibration, a 4-valve cylinder head, a high-pressure fuel system, full authority electronic controls, and series turbocharging consisting of a fixed geometry and wastegate turbocharger. Combining proven PowerTech Plus technology with a DOC and SCR system delivers excellent performance and fluid efficiency without the need for a DPF.

Performance levels

John Deere next generation engines include three performance levels designated by G, P, and X.



Cost-effective power solutions for price-sensitive market applications.



Balance of performance and cost.



Exceptional power, ultimate performance, and leading technology.



Final Tier 4

4.5L engines



Final Tier 4 engine model	Rated power			Peak power			Peak torque		
	kW	hp	rpm	kW	hp	rpm	Nm	lb-ft	rpm
PowerTech EWL									
4045HI440	74	99	2200	75	101	1950	427	315	1600
4045HI440	86	115	2200	88	118	1850	506	374	1600
4045HI440	93	125	2200	94	126	1850	536	396	1600
4045HI440	104	140	2200	104	140	2200	540	399	1600
4045HI440	110	148	2200	110	148	2200	540	399	1600
PowerTech PWL									
4045HFC04	63	84	2400	63	84	2400	333	246	1600
4045HFC04	63	84	2400	68	91	2200	333	246	1600
4045HFC04	63	84	2200	64	86	1900	363	268	1600
4045HFC04	63	84	2200	68	91	2000	363	268	1600
4045HFC04	74	99	2400	74	99	2400	391	288	1600
4045HFC04	74	99	2400	80	107	2200	391	288	1600
4045HFC04	74	99	2200	75	101	2100	427	315	1600
4045HFC04	74	99	2200	80	107	2000	427	315	1600
4045HFC04	86	115	2400	86	115	2400	461	340	1600
4045HFC04	86	115	2200	88	118	1900	506	374	1600
4045HFC04	93	125	2400	93	125	2400	493	364	1600
4045HFC04	93	125	2200	94	126	2100	536	396	1600
4045HFC04	100	134	2400	104	140	2200	540	399	1600
4045HFC04	104	140	2200	104	140	2200	540	399	1600
PowerTech PSL									
4045HFC06	93	125	2200	96	128	1900	537	396	1600
4045HFC06	93	125	2400	95	127	2100	494	364	1600
4045HFC06	104	140	2200	107	143	1900	601	443	1600
4045HFC06	104	140	2400	106	142	2200	552	407	1600
4045HFC06	116	156	2400	116	156	2400	616	454	1600
4045HFC06	129	173	2200	129	173	2200	667	492	1600
4045HFC06	129	173	2400	129	173	2400	667	492	1600

Performance				
Engine	Power bulge	Torque rise	Low-speed torque (1000 rpm)	Turbo
EWL 4.5L	Up to 1.7%	Up to 34.9%	Up to 138%	WGT
PWL 4.5L	Up to 8%	Up to 36%	Up to 123%	WGT
PSL 4.5L	Up to 3%	Up to 34%	Up to 124%	Series

Emissions technology				
Engine	Cooled EGR	Aftertreatment	Exhaust canister size	SCR size
EWL 4.5L	-	DOC/SCR	2	2
PWL 4.5L	Yes	DOC/SCR	2	3
PSL 4.5L	Yes	DOC/SCR	3	3

Specifications								
Engine	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
EWL 4.5L	871	34	663	26	1024	40	506	1116
PWL 4.5L	867	34	680	27	1076	42	540	1191
PSL 4.5L	870	34	635	25	1130	45	570	1257

Final Tier 4 JD14 engines



Final Tier 4 engine model	Rated power			Peak power			Peak torque			Power bulge	Torque rise	Low-speed torque (1000 rpm)	Turbo
	kW	hp	rpm	kW	hp	rpm	Nm	lb-ft	rpm				
JD14P													
6136HI440	300	402	2100	324	434	1900	1986	1465	1550	Up to 8%	Up to 46%	Up to 132%	WGT
6136HI440	336	451	2100	363	486	1900	2192	1617	1550	Up to 8%	Up to 44%	Up to 126%	WGT
6136HI440	373	500	2100	403	540	1900	2397	1768	1550	Up to 8%	Up to 41%	Up to 121%	WGT
6136HI440	410	550	2100	415	557	1900	1864	1375	1550	Up to 1%	Up to 35%	Up to 121%	WGT
JD14X													
6136CI440	391	524	2100	421	565	1900	2495	1840	1550	Up to 8%	Up to 40%	Up to 114%	Series
6136CI440	436	585	2100	446	598	1900	2745	2024	1550	Up to 2%	Up to 38%	Up to 108%	Series
6136CI440	485	650	2100	495	664	1900	3050	2249	1550	Up to 2%	Up to 38%	Up to 102%	Series
6136CI440	510	684	2100	510	684	1900	3050	2249	1550	Up to 0%	Up to 32%	Up to 97%	Series

Emissions technology			
Engine	Cooled EGR	Aftertreatment	Exhaust unit size
JD14P	Yes	DOC/SCR	6
JD14X	Yes	DOC/SCR	7

Specifications								
Engine	Length*		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
JD14P	1498	59	890	35	1366	54	1468	3236
JD14X	1498	59	890	35	1366	54	1521	3353

*Engine length without fan drive.

Tier 3/Stage III A equivalent Industrial engine power ratings

Engine name	Engine model	Power ratings	Turbo	Cooled EGR	Power range							
M 4.5L	4045TF280	56 – 63 kW (75 – 85 hp)	Fixed	-								
M 4.5L	4045HF280	74 kW (99 hp)	Fixed	-								
E 4.5L	4045TF285	63 – 74 kW (85 – 99 hp)	Fixed	-								
E 4.5L	4045HF285	86 – 104 kW (115 – 140 hp)	Fixed	-								
Plus 4.5L	4045HF485	111 – 129 kW (149 – 173 hp)	VGT	Yes								
E 6.8L	6068HF285	104 – 149 kW (140 – 200 hp)	Fixed	-								
Plus 6.8L	6068HF485	134 – 205 kW (180 – 275 hp)	VGT	Yes								
Plus 9.0L	6090HF485	168 – 298 kW (225 – 400 hp)	VGT	Yes								
Plus 13.5L	6135HF485	261 – 448 kW (350 – 600 hp)	VGT	Yes								
					kW	0	75	149	224	298	373	447
					hp	0	100	200	300	400	500	600



Tier 3/Stage III A equivalent Engine technology

PowerTech M

The simplest of the PowerTech family, these engines have 2-valve heads, fixed geometry turbochargers, and mechanical fuel systems. PowerTech M engines are perfect for less demanding applications. Their mechanical controls are simple to operate and maintain.

PowerTech E

These engines also have 2-valve heads and fixed geometry turbochargers, but introduce full authority electronic controls and more sophisticated fuel delivery. These engines use a high-pressure common-rail (HPCR) fuel system.

PowerTech Plus

Utilizing the most advanced engine technology, PowerTech Plus engines have a 4-valve cylinder head, full authority electronic controls, variable geometry turbocharger (VGT), and cooled exhaust gas recirculation (EGR). They are available in larger displacements and provide ultimate performance and fuel economy.



Tier 3/Stage III A equivalent 4.5L engines



Engine model	Rated power			Peak power			Peak torque		
	kW	hp	rpm	kW	hp	rpm	Nm	lb-ft	rpm
PowerTech M									
4045TF280	56	75	2400	56	75	2400	275	203	1700
4045TF280	60	80	2400	60	80	2400	286	210	1700
4045TF280	63	85	2400	63	85	2400	302	223	1700
4045HF280	74	99	2200	74	99	2200	383	282	1600
4045HF280	74	99	2400	74	100	2200	366	270	1600
PowerTech E									
4045TF285	63	85	2200	65	87	2000	353	261	1600
4045TF285	63	85	2400	63	84	2400	313	231	1600
4045TF285	74	99	2400	74	99	2400	353	261	1600
4045HF285	86	115	2200	89	120	2000	481	355	1500
4045HF285	86	115	2400	86	115	2400	430	317	1500
4045HF285	93	125	2200	99	133	2000	525	387	1500
4045HF285	93	125	2400	93	125	1400	481	355	1500
4045HF285	104	140	2400	104	140	2400	525	387	1500
PowerTech Plus									
4045HF485	111	149	2000	116	156	1800	645	476	1400
4045HF485	116	155	2200	125	167	2000	645	476	1400
4045HF485	116	155	2400	116	155	2400	574	424	1400
4045HF485	129	173	2400	129	173	2400	645	476	1400

Performance					
Engine	Power bulge	Torque rise	Low-speed torque (1000 rpm)	Turbo	Cooled EGR
M 4.5L	Up to 1%	-	-	Fixed	-
E 4.5L	Up to 6%	-	Up to 130%	Fixed	-
Plus 4.5L	Up to 9%	-	Up to 123%	VGT	Yes

Specifications								
Engine	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
M 4.5L	860	34	612	24	856	34	387	851
E 4.5L	860	34	612	24	1039	41	491	1083
Plus 4.5L	867	34	623	25	1055	42	517	1140



Tier 3/Stage III A equivalent 6.8L engines



Engine model	Rated power			Peak power			Peak torque		
	kW	hp	rpm	kW	hp	rpm	Nm	lb-ft	rpm
PowerTech E									
6068HF285	104	140	2200	111	149	2000	598	441	1500
6068HF285	104	140	2400	104	139	2400	538	397	1500
6068HF285	116	155	2200	124	166	2000	667	492	1500
6068HF285	116	155	2400	116	156	2400	598	441	1500
6068HF285	129	173	2200	132	177	2000	714	527	1500
6068HF285	129	173	2400	129	173	2400	667	492	1500
6068HF285	138	185	2200	144	193	2000	785	579	1500
6068HF285	138	185	2400	138	185	2400	714	527	1500
6068HF285	149	200	2400	149	200	2400	785	579	1500
PowerTech Plus									
6068HF485	134	180	2000	138	184	1600	838	618	1400
6068HF485	138	185	2000	144	193	2000	744	549	1400
6068HF485	138	185	1800	151	203	1800	838	618	1400
6068HF485	138	185	2400	138	185	2400	690	509	1400
6068HF485	144	193	2000	151	203	1800	838	618	1400
6068HF485	144	193	2000	153	205	1700	934	689	1400
6068HF485	149	200	2200	162	218	2000	838	618	1400
6068HF485	149	200	2200	168	226	1800	934	689	1400
6068HF485	149	200	2400	149	200	2400	744	549	1400
6068HF485	162	217	2000	168	226	1800	934	689	1400
6068HF485	162	217	2000	168	226	1800	1025	756	1400
6068HF485	168	225	2200	181	242	2000	934	689	1400
6068HF485	168	225	2200	185	247	1800	1025	756	1400
6068HF485	168	225	2400	168	225	2400	838	618	1400
6068HF485	181	243	2000	185	247	1800	1025	756	1400
6068HF485	187	251	2200	198	266	2000	1025	756	1400
6068HF485	187	251	2400	187	251	2400	934	689	1400
6068HF485	205	275	2400	206	275	2400	1025	756	1400

Performance					
Engine	Power bulge	Torque rise	Low-speed torque (1000 rpm)	Turbo	Cooled EGR
E 6.8L	Up to 7%	-	Up to 132%	Fixed	-
Plus 6.8L	Up to 13%	-	Up to 145%	VGT	Yes

Specifications							
Engine	Length		Width		Height		Weight
	mm	in	mm	in	mm	in	kg lb
E 6.8L	1123	44	657	26	1036	41	608 1340
Plus 6.8L	1120	44	611	24	1058	42	678 1495

Tier 3/Stage III A equivalent 9.0L engines



Engine model	Rated power			Peak power			Peak torque		
	kW	hp	rpm	kW	hp	rpm	Nm	lb-ft	rpm
PowerTech Plus									
6090HF485	168	225	2000	187	251	1800	1095	807	1500
6090HF485	168	225	2200	187	251	2000	1095	807	1500
6090HF485	168	225	2200	168	225	2200	984	726	1500
6090HF485	187	251	2000	205	275	1800	1201	886	1500
6090HF485	187	251	2200	205	275	2000	1201	886	1500
6090HF485	187	251	2200	187	251	2200	1095	807	1500
6090HF485	205	275	2000	224	301	1800	1313	968	1500
6090HF485	205	275	2200	224	301	1800	1313	968	1500
6090HF485	205	275	2200	205	275	2200	1201	886	1500
6090HF485	224	300	2000	243	325	1800	1421	1048	1500
6090HF485	224	300	2200	243	325	2000	1421	1048	1500
6090HF485	224	300	2200	224	300	2200	1313	968	1500
6090HF485	242	325	2000	261	350	1800	1530	1128	1500
6090HF485	242	325	2200	261	350	2000	1530	1128	1500
6090HF485	242	325	2200	242	325	2200	1421	1048	1500
6090HF485	261	350	2000	279	375	1800	1554	1146	1500
6090HF485	261	350	2200	280	375	2000	1543	1138	1500
6090HF485	261	350	2200	261	350	2200	1530	1128	1500
6090HF485	280	375	2200	280	375	2200	1543	1138	1500
6090HF485	298	400	2200	298	400	2200	1550	1143	1500

Performance					
Engine	Power bulge	Torque rise	Low-speed torque (1000 rpm)	Turbo	Cooled EGR
Plus 9.0L	Up to 11%	-	Up to 150%	VGT	Yes

Specifications							
Engine	Length		Width		Height		Weight
	mm	in	mm	in	mm	in	kg lb
Plus 9.0L	1208	48	630	25	1113	44	901 1986



Tier 3/Stage III A equivalent 13.5L engines



Engine model	Rated power			Peak power			Peak torque		
	kW	hp	rpm	kW	hp	rpm	Nm	lb-ft	rpm
PowerTech Plus									
6135HF485	261	350	1900	298	399	1700	1834	1353	1400
6135HF485	261	350	2100	298	400	1900	1602	1182	1400
6135HF485	261	350	2100	261	350	2100	1602	1182	1400
6135HF485	298	400	1900	335	449	1700	2063	1521	1400
6135HF485	298	400	2100	336	450	1900	1834	1353	1400
6135HF485	298	400	2100	298	400	2100	1834	1353	1400
6135HF485	317	425	2100	336	450	1800	2063	1521	1400
6135HF485	336	450	1900	371	498	1700	2290	1689	1400
6135HF485	336	450	2100	373	500	1900	2063	1521	1400
6135HF485	336	450	2100	336	450	2100	2063	1521	1400
6135HF485	373	500	1900	409	548	1700	2430	1792	1400
6135HF485	373	500	2100	373	500	2100	2290	1689	1400
6135HF485	373	500	2100	400	536	1800	2290	1689	1400
6135HF485	392	525	2100	410	550	1800	2430	1792	1400
6135HF485	410	550	2100	423	567	2000	2430	1792	1400
6135HF485	410	550	2100	410	550	2100	2430	1792	1400
6135HF485	448	600	2100	448	600	2100	2550	1881	1600

Performance					
Engine	Power bulge	Torque rise	Low-speed torque (1000 rpm)	Turbo	Cooled EGR
Plus 13.5L	Up to 14%	-	Up to 138%	VGT	Yes

Specifications							
Engine	Length		Width		Height		Weight
	mm	in	mm	in	mm	in	kg lb
Plus 13.5L	1334	53	855	34	1512	60	1493 3292



Non-emissions certified

Industrial engine power ratings

Engine name	Engine model	Power ratings	Power range						
M 2.9L	3029DF129	43 kW (58 hp)							
M 2.9L	3029TF129	52 kW (70 hp)							
M 4.5L	4045DF270	55 – 60 kW (74 – 80 hp)		■					
M 4.5L	4045TF150	67 – 86 kW (89 – 115 hp)		■					
M 4.5L	4045TF250	85 – 93 kW (114 – 125 hp)		■					
M 4.5L	4045HF150	104 kW (140 hp)							
M 6.8L	6068DF150	93 kW (125 hp)							
M 6.8L	6068TF150	94 – 127 kW (126 – 170 hp)		■					
M 6.8L	6068TF250	106 – 149 kW (142 – 200 hp)		■					
M 6.8L	6068HF150	143 – 157 kW (192 – 210 hp)		■					
E 9.0L	6090HF475	172 – 286 kW (231 – 384 hp)			■				
E 13.5L	6135HF475	294 – 447 kW (394 – 601 hp)				■			

kW

0

75

149

224

298

373

447

hp

0

100

200

300

400

500

600



Non-emissions certified Engine technology

John Deere offers a full range of non-emissions certified engines suitable for applications in countries that currently haven't established emissions regulations.

These simple, straightforward engines provide reliable operation and easy maintenance in rugged off-highway applications.

The PowerTech M platform features a mechanical fuel system, while the PowerTech E platform has a high-pressure common-rail (HPCR) fuel system and full authority electronic controls.



Non-emissions certified 2.9L engines



Engine model	Rated power			Peak torque			VSPU*
	kW	hp	rpm	Nm	lb-ft	rpm	
PowerTech M							
3029DF129	43	58	2500	193	141	1400	■
3029TF129	52	70	2500	239	176	1600	■

*Variable-speed power unit (VSPU) models not available in all countries.

Specifications								
Engine	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
3029DF129	716	28	519	20	819	32	316	697
3029TF129	716	28	519	20	928	37	328	723



Non-emissions certified 4.5L engines



Engine model	Rated power			Peak torque			VSPU*
	kW	hp	rpm	Nm	lb-ft	rpm	
PowerTech M							
4045DF270	55	74	2500	283	209	1200	
4045DF270†	60	80	2500	296	218	1400	■
4045TF150	67	89	2200	374	276	1200	
4045TF150	73	98	2200	406	299	1200	
4045TF150	74	99	2500	372	274	1400	
4045TF150	78	105	2300	401	296	1300	
4045TF250	85	114	2200	446	329	1500	
4045TF150	86	115	2500	395	291	1400	
4045TF250	93	125	2400	450	328	1400	■
4045HF150	104	140	2400	498	367	1400	

*Variable-speed power unit (VSPU) models not available in all countries.
†VSPU model: 4045DF150.

Specifications								
Engine	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
4045DF270	860	34	612	24	846	33	387	853
4045TF150	860	34	612	24	994	39	396	872
4045TF250	860	34	612	24	994	39	396	872
4045HF150	867	34	612	24	1000	39	396	872



Non-emissions certified 6.8L engines



Engine model	Rated power			Peak torque			VSPU*
	kW	hp	rpm	Nm	lb-ft	rpm	
PowerTech M							
6068DF150	93	125	2500	448	330	1200	■
6068TF150	94	126	2200	546	402	1400	
6068TF150	96	129	2100	581	428	1200	
6068TF150	110	148	2100	650	443	1400	
6068TF150	110	148	2300	594	438	1300	
6068TF150	116	155	2500	578	426	1200	
6068TF150	117	157	2200	589	434	1200	
6068TF150	127	170	2500	606	447	1200	■
6068TF250	106	142	2200	614	453	1400	
6068TF250	128	172	2300	668	493	1400	
6068TF250	138	185	2400	656	484	1400	
6068TF250	149	200	2400	793	585	1500	
6068HF150	143	192	2200	749	553	1300	
6068HF150	157	210	2400	771	568	1400	

*Variable-speed power unit (VSPU) models not available in all countries.

Specifications								
Engine	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
6068DF150	1116	44	623	25	1025	40	522	1151
6068TF150	1116	44	623	25	1012	40	551	1215
6068TF250	1116	44	623	25	1012	40	569	1254
6068HF150	1123	44	623	25	1015	40	550	1213



Non-emissions certified 9.0L engines



Engine model	Rated power			Peak torque			VSPU*
	kW	hp	rpm	Nm	lb-ft	rpm	
PowerTech E							
6090HF475	172	231	2200	1200	885	1600	-
6090HF475	219	294	2200	1228	906	1600	-
6090HF475	239	321	2200	1349	995	1600	-
6090HF475	261	350	2200	1474	1087	1600	-
6090HF475	286	384	2200	1474	1087	1600	-

*Variable-speed power unit (VSPU) models not available in all countries.

Specifications								
Engine	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
6090HF475	1211	48	633	25	1260	50	1097	2418



Non-emissions certified 13.5L engines



Engine model	Rated power			Peak torque			VSPU*
	kW	hp	rpm	Nm	lb-ft	rpm	
PowerTech E							
6135HF475	294	394	2100	1870	1379	1575	-
6135HF475	320	429	2100	2007	1480	1575	-
6135HF475	373	500	2100	2290	1689	1575	-
6135HF475	428	574	2100	2550	1881	1575	-
6135HF475	448	601	2100	2550	1881	1575	-

**Variable-speed power unit (VSPU) models not available in all countries.*

Specifications								
Engine	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
6135HF475	1362	54	857	34	1210	48	1334	2941



Always at your side

Warranty support when you need it

John Deere provides one of the best warranties in the business. Our 2-year/2,000-hour standard warranty applies not only to the new OEM engine but also to John Deere parts and accessories added by a John Deere engine distributor.*

Register your John Deere OEM engine and enable your John Deere dealer or engine distributor to respond should you need a warrantable repair.† 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. Refer to the John Deere new engine warranty for complete warranty coverage details.

Note: The 2-year/2,000-hour standard warranty and OEM engine registration may not be available in all countries.





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