

Kubota

KUBOTA HORIZONTAL WATER-COOLED DIESEL ENGINE



RK/ER/KND Series

Displacement: 305 cc~1,181 cc

Maximum Output: 5.0 HP~25.0 HP

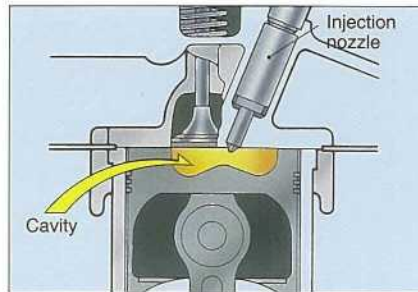
A Wide Range of Diesel Engines to Satisfy Any Need, Anywhere.

RK80-1, 95-1, 105-2, 125-2, ER(KND)1900DI, 2200DI, 2500DI

■ Direct-Injection System

Save 20% on Your Monthly Fuel Bill with a Direct-Injection Engine

Many of Kubota's diesel engines incorporate an advanced direct injection combustion system that can reduce fuel consumption by as much as 20% compared with conventional swirl combustion and precombustion chamber systems. This highly-efficient direct-injection combustion system places the combustion chamber in a cavity in



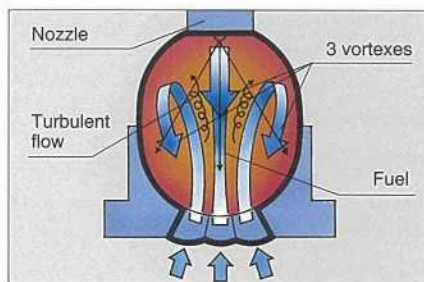
the top of the piston itself in order to minimize power-robbing gas leakage and to prevent heat loss. It also has a swirl-type design inlet ports for more efficient mixing of air and fuel. Add it all up, and you have a highly-efficient diesel engine with powerful performance and superior fuel economy.

RK50, 60, 70

■ TVCS System

TVCS for Steady, Efficient Operation

Kubota's TVCS (Three-Vortex Combustion System) is a revolutionary system that creates three vortices within the combustion chamber in order to produce an air/fuel mixture with a uniform spray and an optimum average particle size. This ideal air/fuel mixture, in turn, ensures complete

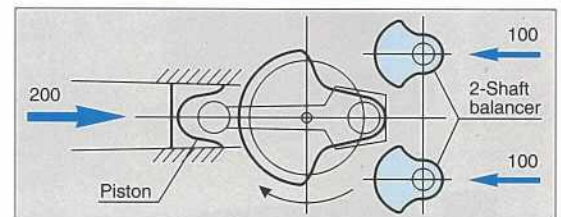


combustion for greater power output and more steady operation. As a result, Kubota's compact, lightweight engines are just as powerful and efficient as much larger conventional engines.

RK105-2,125-2

■ Comes with a Built-in Balancer

Both noise and vibration, caused by the piston's to-and-fro movement, are suppressed with the standard built-in balancer.



RK50,60,70,80-1,95-1,105-2,125-2

■ Increased Lighting

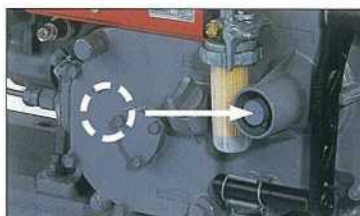
Lighting is increased from 6V-25W to 12V-45W. Increased lighting makes it easy to see as well as adds safety to working at night.



RK80-1,95-1,105-2,125-2

■ New Handle-Start Position

The new handle-start position is in the front of the engine. This makes it much easier to start up the engine.



*All engines on this catalog are built in Kubota's quality assured, ISO 9002 certified engine plant.

RK50 RK50-N RK50H RK50-NB

SPECIFICATIONS

RK70-N



RK80-1



RK95-1-NB



RK105H-2



RK125-2



ER2200DI-N

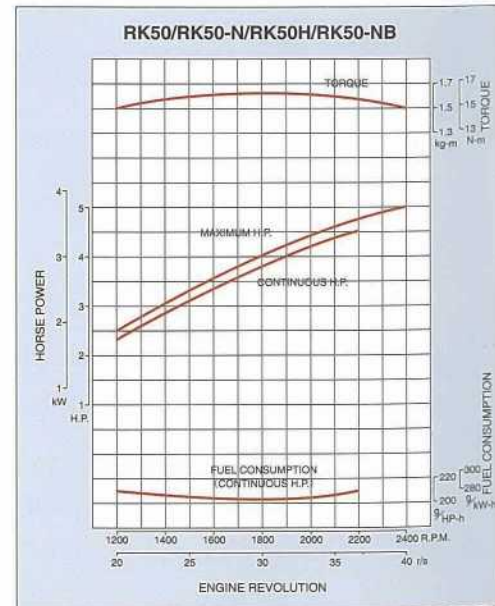


ER2500DI-N



Model		RK50	RK50-N	RK50H	RK50-NB
Type		Horizontal water-cooled, 4-cycle diesel engine			
Number of cylinders		1			
Bore x stroke	[mm (in.)]	72 x 75 (2.83 x 2.95)			
Displacement	[cc (cu.in.)]	305 (18.61)			
Maximum output	(HP/r.p.m.)	5.0/2400			
	(kW/r.p.m.)	3.73/2400			
Continuous rated output	(HP/r.p.m.)	4.5/2200			
	(kW/r.p.m.)	3.36/2200			
Maximum torque	(kgf·m/r.p.m.)	1.62/1800			
Specific fuel consumption (at continuous rated output)	(g/HP-hr)	208			
Combustion system		Three vortex combustion system			
Compression ratio		24			
Direction of revolution		Counter-clockwise (facing flywheel)			
Starting system		Manual speed-doubling handle		Cell start	
Lubricating system		Forced lubrication with trochoid pump			
Cooling system		Radiator		Hopper Radiator	
Fuel		Light diesel oil (SAE No.2-D)			
Lubricating oil		API service CB-CC class (SAE #30, 20, 10W-30)			
Cooling water capacity	[L (US gal.)]	1.3 (0.34)		8.5 (2.25) 1.3 (0.34)	
Fuel tank capacity	[L (US gal.)]	7.5 (1.98)			
Crankcase oil capacity	[L (US gal.)]	2.0 (0.53)			
Dry weight	[kg (lbs.)]	64 (141.1)		62 (136.7) 72 (158.8)	
Lamp and dynamo output		with lamp		without lamp	
	(V-W)	12-45		—	
Charge output	(V-A)	—		12-1.6	
Starter power	(V-kW)	—		12-1.0	
		—			

PERFORMANCE CURVES



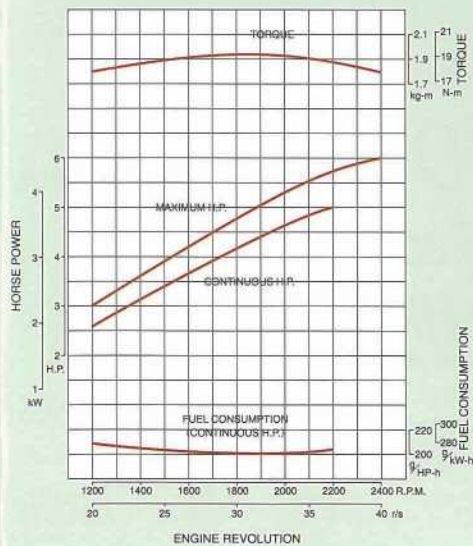
**RK60
RK60-N
RK60H
RK60-NB**

**RK70
RK70-N
RK70H
RK70-NB**

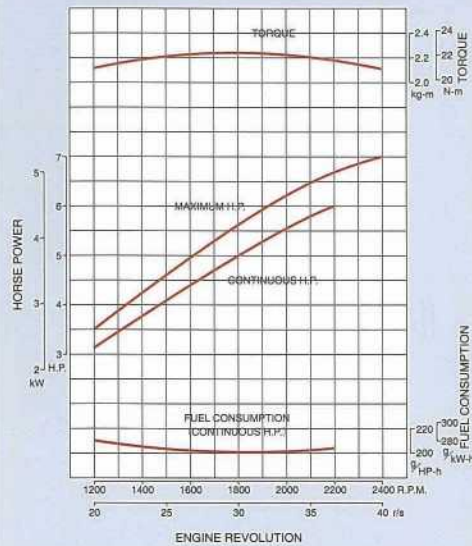
**RK80-1
RK80-1-N
RK80H-1
RK80-1-NB**

RK60	RK60-N	RK60H	RK60-NB	RK70	RK70-N	RK70H	RK70-NB	RK80-1	RK80-1-N	RK80H-1	RK80-1-NB
Horizontal water-cooled, 4-cycle diesel engine				Horizontal water-cooled, 4-cycle diesel engine				Horizontal water-cooled, 4-cycle diesel engine			
1				1				1			
76 x 75 (2.99 x 2.95)				80 x 75 (3.15 x 2.95)				82 x 84 (3.23 x 3.31)			
340 (20.75)				376 (22.94)				443 (27.03)			
6.0/2400				7.0/2400				8.0/2400			
4.48/2400				5.22/2400				5.97/2400			
5.0/2200				6.0/2200				7.0/2200			
3.73/2200				4.48/2200				5.22/2200			
1.95/1800				2.26/1800				2.63/1800			
202				203				170			
Three vortex combustion system				Three vortex combustion system				Direct injection system			
24				24				18			
Counter-clockwise (facing flywheel)				Counter-clockwise (facing flywheel)				Counter-clockwise (facing flywheel)			
Manual speed-doubling handle			Cell start	Manual speed-doubling handle			Cell start	Manual speed-doubling handle			Cell start
Forced lubrication with trochoid pump				Forced lubrication with trochoid pump				Forced lubrication with trochoid pump			
Radiator		Hopper	Radiator	Radiator		Hopper	Radiator	Radiator		Hopper	Radiator
Light diesel oil (SAE No.2-D)				Light diesel oil (SAE No.2-D)				Light diesel oil (SAE No.2-D)			
API service CB-CC class (SAE #30, 20, 10W-30)				API service CB-CC class (SAE #30, 20, 10W-30)				API service CB-CC class (SAE #30, 20, 10W-30)			
1.3 (0.34)		8.5 (2.25)		1.3 (0.34)		8.5 (2.25)		1.6 (0.42)		11.0 (2.91)	
7.5 (1.98)				7.5 (1.98)				9.5 (2.51)			
2.0 (0.53)				2.0 (0.53)				2.4 (0.63)			
65 (143.3)		63 (138.9)		72 (158.8)		67 (147.7)		65 (143.3)		72 (158.8)	
82 (180.8)		80 (176.4)		91 (200.6)							
with lamp 12-45	without lamp —			with lamp 12-45	without lamp —			with lamp 12-45	without lamp —		
—		12-1.6		—		12-1.6		—		12-1.6	
—		12-1.0		—		12-1.0		—		12-1.4	
—				—				—			

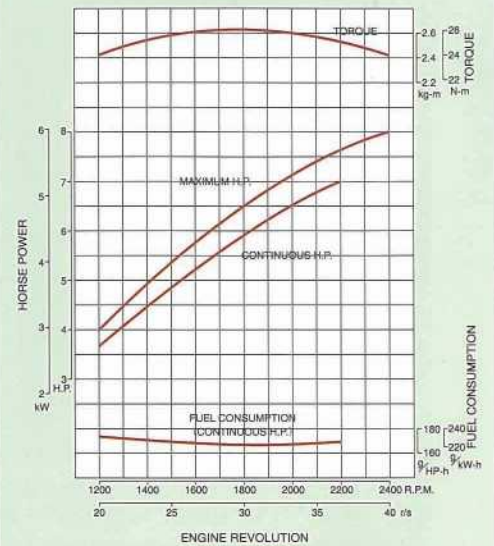
RK60/RK60-N/RK60H/RK60-NB



RK70/RK70-N/RK70H/RK70-NB



RK80-1/RK80-1-N/RK80H-1/RK80-1-NB

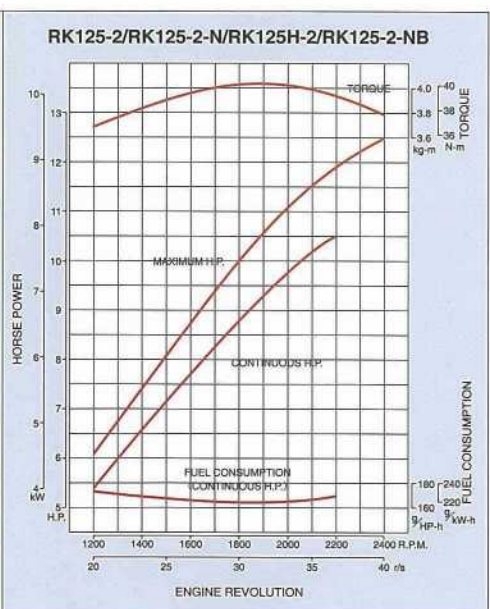
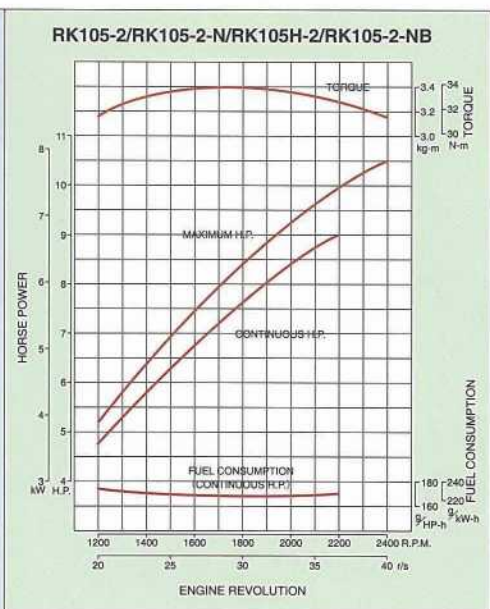
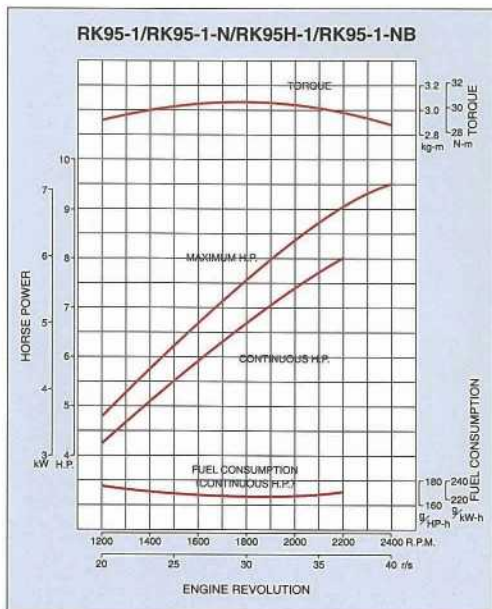


RK95-1
RK95-1-N
RK95H-1
RK95-1-NB

RK105-2
RK105-2-N
RK105H-2
RK105-2-NB

RK125-2
RK125-2-N
RK125H-2
RK125-2-NB

RK95-1	RK95-1-N	RK95H-1	RK95-1-NB	RK105-2	RK105-2-N	RK105H-2	RK105-2-NB	RK125-2	RK125-2-N	RK125H-2	RK125-2-NB
Horizontal water-cooled, 4-cycle diesel engine				Horizontal water-cooled, 4-cycle diesel engine				Horizontal water-cooled, 4-cycle diesel engine			
1				1				1			
86 x 84 (3.39 x 3.31)				88 x 90 (3.46 x 3.54)				94 x 90 (3.70 x 3.54)			
487 (29.72)				547 (33.38)				624 (38.08)			
9.5/2400				10.5/2400				12.5/2400			
7.09/2400				7.83/2400				9.33/2400			
8.0/2200				9.0/2200				10.5/2200			
5.97/2200				6.71/2200				7.83/2200			
3.08/1800				3.40/1800				4.04/1800			
170				170				170			
Direct injection system				Direct injection system				Direct injection system			
18				18				18			
Counter-clockwise (facing flywheel)				Counter-clockwise (facing flywheel)				Counter-clockwise (facing flywheel)			
Manual speed-doubling handle			Cell start	Manual speed-doubling handle			Cell start	Manual speed-doubling handle			Cell start
Forced lubrication with trochoid pump				Forced lubrication with trochoid pump				Forced lubrication with trochoid pump			
Radiator		Hopper	Radiator	Radiator		Hopper	Radiator	Radiator		Hopper	Radiator
Light diesel oil (SAE No.2-D)				Light diesel oil (SAE No.2-D)				Light diesel oil (SAE No.2-D)			
API service CB-CC class (SAE #30, 20, 10W-30)				API service CB-CC class (SAE #30, 20, 10W-30)				API service CB-CC class (SAE #30, 20, 10W-30)			
1.6 (0.42)		11.0 (2.91)		1.6 (0.42)		2.1 (0.55)		14.0 (3.70)		2.1 (0.55)	
9.5 (2.51)				10.5 (2.77)				10.5 (2.77)			
2.4 (0.63)				2.8 (0.74)				2.8 (0.74)			
85 (187.4)		83 (183.0)		91 (200.6)		101 (222.67)		99 (218.3)		111 (244.7)	
with lamp 12-45		without lamp —		with lamp 12-45		without lamp —		with lamp 12-45		without lamp —	
—		—		—		—		—		—	
—		12-1.6		—		12-1.6		—		12-1.6	
—		12-1.4		—		12-1.4		—		12-1.4	
—				with two-shaft dynamic balancer				with two-shaft dynamic balancer			



ER1900DI
ER1900DI-N
KND1900DI
ER1900DI-NB1

ER2200DI
ER2200DI-N
KND2200DI
ER2200DI-NB1

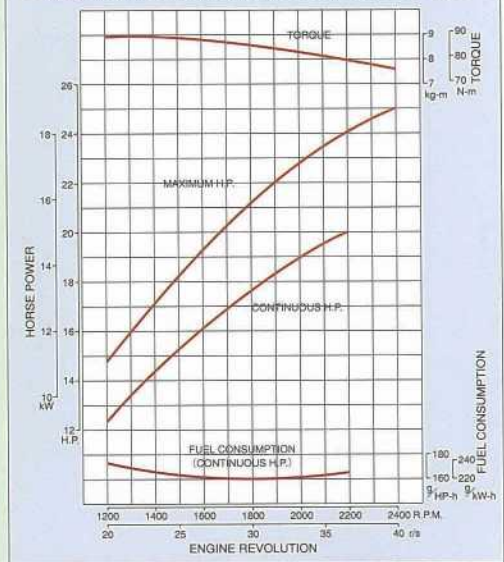
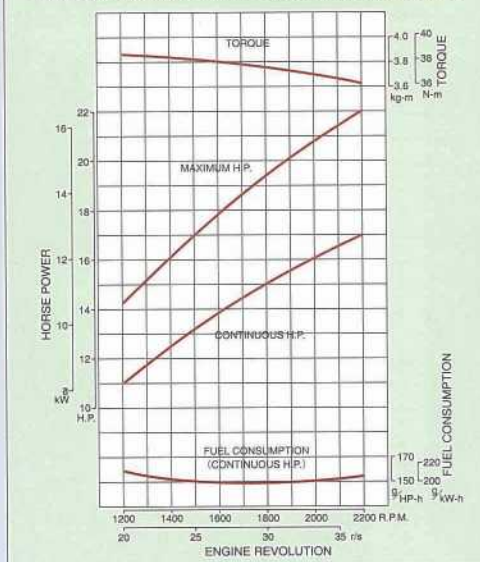
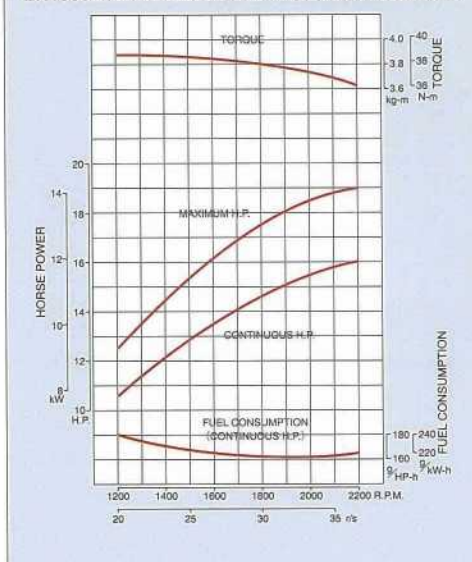
ER2500DI
ER2500DI-N
KND2500DI
ER2500DI-NB1

ER1900DI	ER1900DI-N	KND1900DI	ER1900DI-NB1	ER2200DI	ER2200DI-N	KND2200DI	ER2200DI-NB1	ER2500DI	ER2500DI-N	KND2500DI	ER2500DI-NB1
Horizontal water-cooled, 4-cycle diesel engine				Horizontal water-cooled, 4-cycle diesel engine				Horizontal water-cooled, 4-cycle diesel engine			
1				1				1			
110 x 105 (4.33 x 4.13)				116 x 105 (4.57 x 4.13)				118 x 108 (4.65 x 4.25)			
997 (60.83)				1109 (67.66)				1181 (72.06)			
19.0/2200				22.0/2200				25.0/2400			
14.17/2200				16.41/2200				18.65/2400			
16.0/2200				17.0/2200				20.0/2200			
11.94/2200				12.68/2200				14.92/2200			
7.42/1200				8.3/1200				8.92/1400			
163				155				155			
Direct injection system				Direct injection system				Direct injection system			
16.5				17				16.5			
Counter-clockwise (facing flywheel)				Counter-clockwise (facing flywheel)				Counter-clockwise (facing flywheel)			
Manual speed-doubling handle		Cell start		Manual speed-doubling handle		Cell start		Manual speed-doubling handle		Cell start	
Forced lubrication with trochoid pump				Forced lubrication with trochoid pump				Forced lubrication with trochoid pump			
Radiator	Hopper	Radiator		Radiator	Hopper	Radiator		Radiator	Hopper	Radiator	
Light diesel oil (SAE No.2-D)				Light diesel oil (SAE No.2-D)				Light diesel oil (SAE No.2-D)			
API service CB-CC class (SAE #30, 20, 10W-30)				API service CB-CC class (SAE #30, 20, 10W-30)				API service CB-CC class (SAE #30, 20, 10W-30)			
4.7 (1.24)	24.0 (6.34)		4.7 (1.24)	24.0 (6.34)	4.7 (1.24)		4.7 (1.24)	24.0 (6.34)		4.7 (1.24)	
16.0 (4.23)				16.0 (4.23)				16.0 (4.23)	24.0 (6.34)		16.0 (4.23)
5.0 (1.32)				5.0 (1.32)				5.0 (1.32)			
185 (407.9)	182 (401.24)	175 (385.8)	190 (418.9)	192 (423.3)	189 (416.7)	182 (401.2)	197 (434.3)	193 (425.5)	190 (418.9)	183 (403.4)	198 (436.5)
with lamp 12-25 x 3	without lamp —			with lamp 12-25 x 3	without lamp —			with lamp 12-25 x 3	without lamp —		
—			12-1.0	—			12-1.0	—			12-1.0
—			12-2.0	—			12-2.0	—			12-2.0
with two-shaft dynamic balancer				with two-shaft dynamic balancer				with two-shaft dynamic balancer			

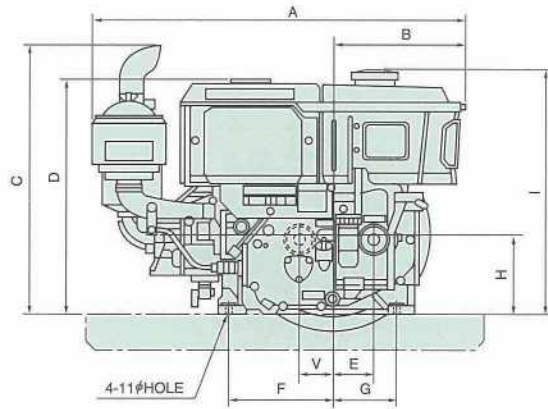
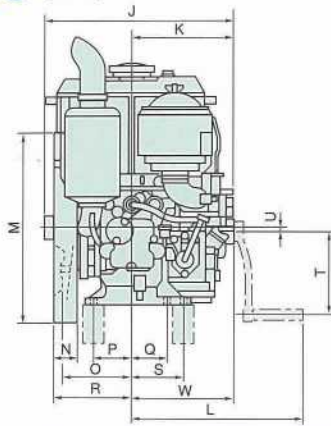
ER1900DI/ER1900DI-N/KND1900DI/ER1900DI-NB1

ER2200DI/ER2200DI-N/KND2200DI/ER2200DI-NB1

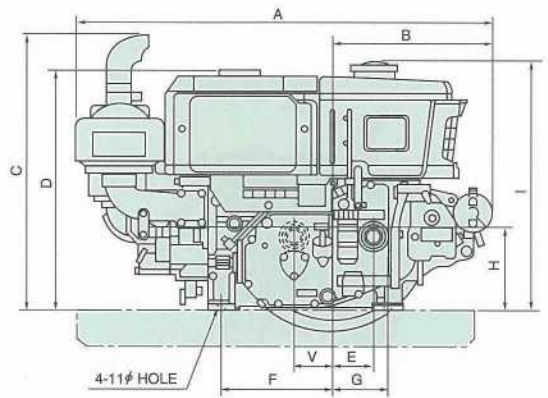
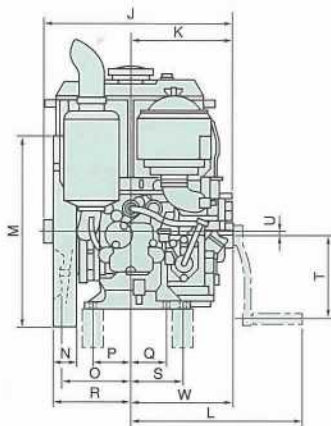
ER2500DI/ER2500DI-N/KND2500DI/ER2500DI-NB1



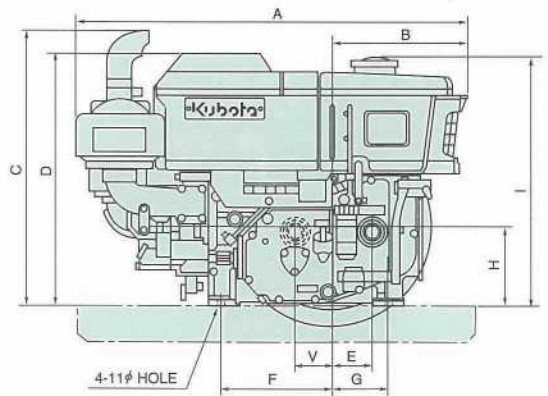
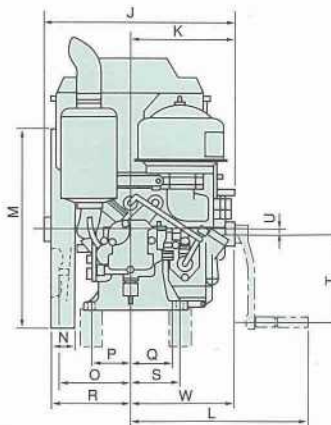
DIMENSIONS (mm)



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
RK50(N)	650	236	492	419	—	182	103	140	435	322.5	175.5	306	Ø355	29	120	70	70	124	—	154	12	64.4	171
RK60(N)	650	236	492	419	—	182	103	140	435	322.5	175.5	306	Ø355	36	120	70	70	131	—	154	12	64.4	171
RK70(N)	650	236	492	419	—	182	103	140	435	322.5	175.5	306	Ø355	43	120	70	70	138	—	154	12	64.4	171
RK80-1(N)	715	251	516	448.5	77.6	199	124	150	467	358	196	334	Ø362	36	132.5	72	68	140	98	160	8	—	—
RK95-1(N)	715	251	516	448.5	77.6	199	124	150	467	358	196	334	Ø370	43	132.5	72	68	147	98	160	8	—	—
RK105-2(N)	755.5	259	521	458.5	80.5	212	111	155	474	369.5	201.5	341.5	Ø380	45	135.5	75	95	152	—	170	10	—	—
RK125-2(N)	755.5	259	521	458.5	80.5	212	111	155	474	369.5	201.5	341.5	Ø380	50	135.5	75	95	157	—	170	10	—	—

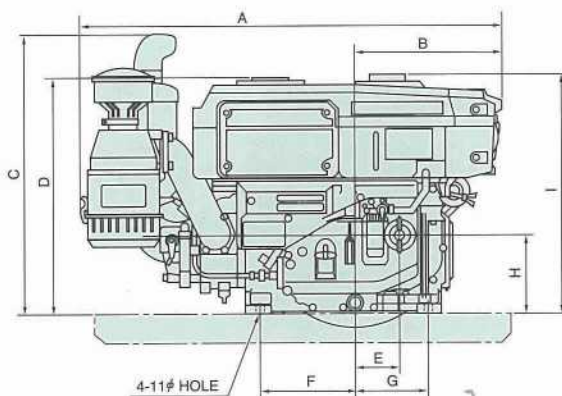
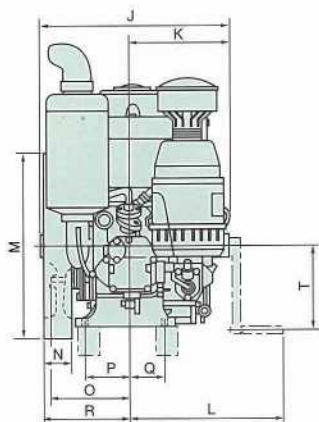


Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
RK50NB	664.5	250.5	492	419	—	182	103	140	435	322.5	175.5	306	Ø350	42	120	70	70	144	—	154	12	64.4	171
RK60NB	664.5	250.5	492	419	—	182	103	140	435	322.5	175.5	306	Ø350	42	120	70	70	144	—	154	12	64.4	171
RK70NB	664.5	250.5	492	419	—	182	103	140	435	322.5	175.5	306	Ø350	42	120	70	70	144	—	154	12	64.4	171
RK80-1NB	763	299	516	448.5	77.6	199	124	150	467	358	196	334	Ø370	40	132.5	72	68	147	98	160	8	—	—
RK95-1NB	763	299	516	448.5	77.6	199	124	150	467	358	196	334	Ø370	40	132.5	72	68	147	98	160	8	—	—
RK105-2-NB	802	306	521	458.5	80.5	212	111	155	474	369.5	201.5	341.5	Ø380	45	135.5	75	95	150	—	170	10	—	—
RK125-2-NB	802	306	521	458.5	80.5	212	111	155	474	369.5	201.5	341.5	Ø380	45	135.5	75	95	150	—	170	10	—	—

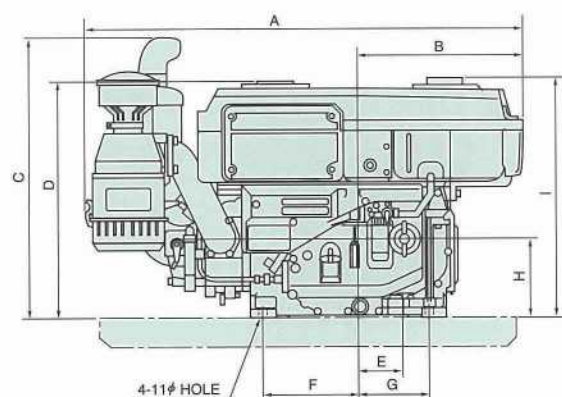
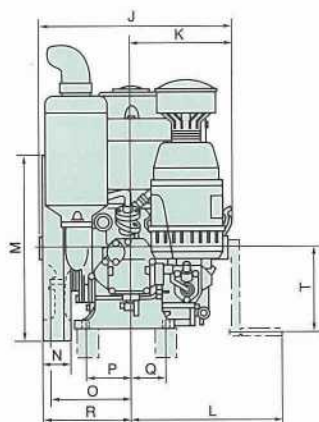


Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
RK50H	645	231	492	452	—	182	103	140	436	322.5	175.5	306	Ø355	29	120	70	70	124	—	154	12	64.4	171
RK60H	645	231	492	452	—	182	103	140	436	322.5	175.5	306	Ø355	36	120	70	70	131	—	154	12	64.4	171
RK70H	645	231	492	452	—	182	103	140	436	322.5	175.5	306	Ø355	43	120	70	70	138	—	154	12	64.4	171
RK80H-1	710	246	516	471	77.6	199	124	150	467	358	196	334	Ø362	36	132.5	72	68	140	98	160	8	—	—
RK95H-1	710	246	516	471	77.6	199	124	150	467	358	196	334	Ø370	43	132.5	72	68	147	98	160	8	—	—
RK105H-2	750.5	254	521	481	80.5	212	111	155	474	369.5	201.5	341.5	Ø380	50	135.5	75	95	157	—	170	10	—	—
RK125H-2	750.5	254	521	481	80.5	212	111	155	474	369.5	201.5	341.5	Ø380	50	135.5	75	95	157	—	170	10	—	—

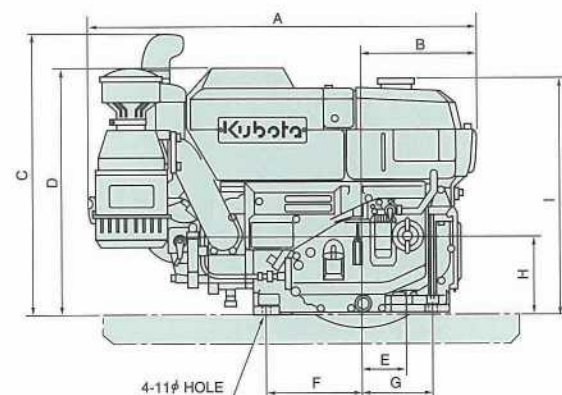
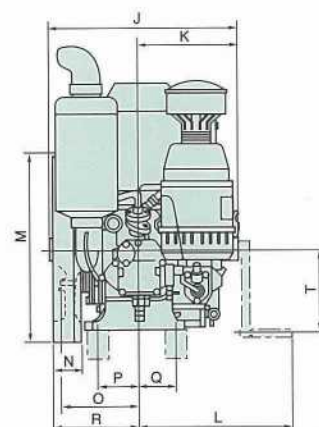
DIMENSIONS (mm)



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	T
ER1900DI	1015.5	357	676	568	107.6	225	175	190	572	453	241	368	Ø442	63	188	112	88	207	200
ER1900DI-N	971.5	313	676	568	107.6	225	175	190	572	453	241	368	Ø442	63	188	112	88	207	200
ER2200DI	1015.5	357	676	568	107.6	225	175	190	572	453	241	368	Ø442	63	188	112	88	207	200
ER2200DI-N	971.5	313	676	568	107.6	225	175	190	572	453	241	368	Ø442	63	188	112	88	207	200
ER2500DI	1015.5	357	676	568	107.6	225	175	190	572	453	241	368	Ø442	63	188	112	88	207	200
ER2500DI-N	1051.5	393	676	568	107.6	225	175	190	572	453	241	368	Ø442	63	188	112	88	207	200



Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	T
ER1900DI-NB1	1051.5	393	676	568	107.6	225	175	190	572	453	241	368	Ø442	63	188	112	88	207	200
ER2200DI-NB1	1051.5	393	676	568	107.6	225	175	190	572	453	241	368	Ø442	63	188	112	88	207	200
ER2500DI-NB1	1051.5	393	676	568	107.6	225	175	190	572	453	241	368	Ø442	63	188	112	88	207	200

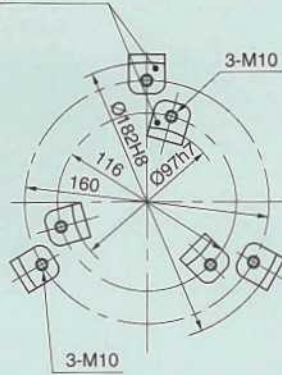


Model	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	T
KND1900DI	959.5	301	676	591	107.6	225	175	190	572	453	241	368	Ø442	63	188	112	88	207	200
KND2200DI	959.5	301	676	591	107.6	225	175	190	572	453	241	368	Ø442	63	188	112	88	207	200
KND2500DI	1039.5	381	676	591	107.6	225	175	190	572	453	241	368	Ø442	63	188	112	88	207	200

RK SERIES

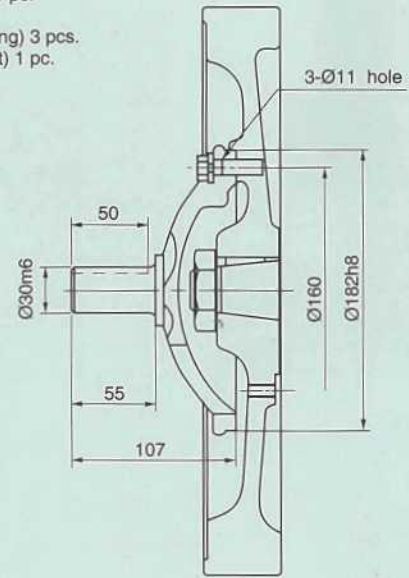
Detail of Flywheel

Surface to which flywheel adaptor is attached



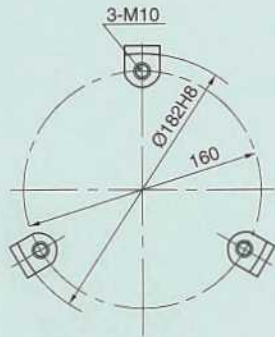
Optional PTO (Optional at extra cost)

- 14912-84514 (PTO shaft) 1 pc.
- 01153-51035 (Bolt) 3 pcs.
- 04512-50100 (Washer spring) 3 pcs.
- 05919-00750 (Key gradient) 1 pc.



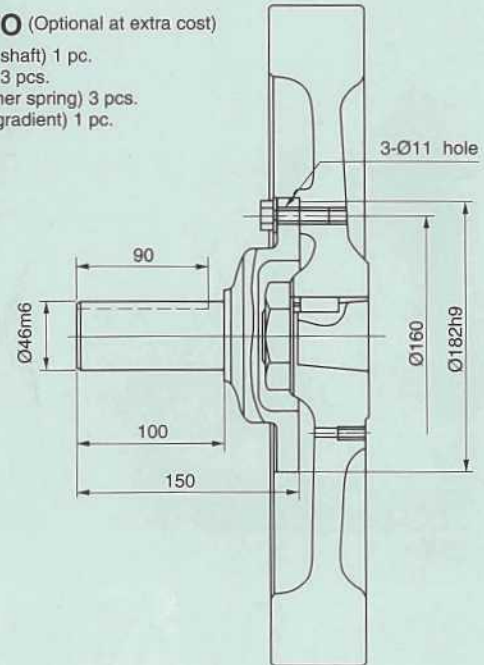
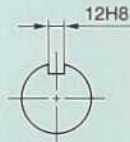
ER/KND SERIES

Detail of Flywheel



Optional PTO (Optional at extra cost)

- 14943-84413 (PTO shaft) 1 pc.
- 01153-51040 (Bolt) 3 pcs.
- 04512-50100 (Washer spring) 3 pcs.
- 05919-01280 (Key gradient) 1 pc.



Standard Accessories

Model	RK SERIES	ER/KND SERIES
Fuel tank	1	1
Air cleaner	1	1
Muffler (silencer)	1	1
Engine eye bolt	1	1
Instruction manual	1	1
Maintenance tool bag	1	1
12-14mm box spanner	1	1
10-12mm spanner	1	1
14-17mm spanner	1	1
19-22mm spanner	1	1
+,- driver	1	1

Applications



Power Tiller



Water Pump



Generator



Corn Sheller



Bar Bender



Concrete Mixer



Rice Thresher



Water Pump



Marine Propulsion

*Specifications and dimensions are subject to change without prior notice.

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