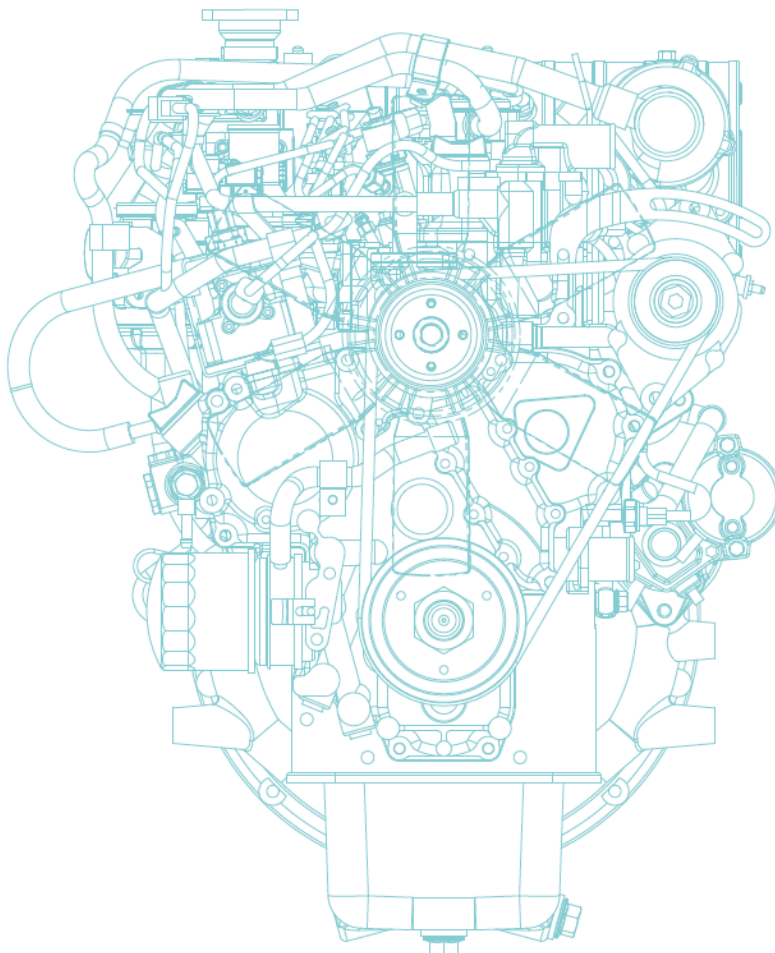


BG

KUBOTA BG Series

Generator Engine and Generator Engine Power Packs



D1105-BG2-SAE-2

D1105-BG1-SAE-2 17592-11000 mech. controlled



Model	Stand-by (SAE J1349) 50 Hz 1500 rpm kW (HP)	Continuous (SAE J1349) 50 Hz 1500 rpm kW (HP)	Stand-by (SAE J1349) 60 Hz 1800 rpm kW (HP)	Continuous (SAE J1349) 60 Hz 1800 rpm kW (HP)
D1105-BG2	9.5 (12.7)	8.4 (11.3)	-	-



KUBOTA Corporation

2-47, Shikitsuhigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
Fax: 06-6648-3521
<http://engine.kubota.co.jp>

KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
63110 Rodgau
Phone: +49 6106 873-113
Fax: +49 6106 873-196
E-mail: motoren@kubota.de
Homepage: www.kubota-motoren.de

Technical specification

Model		D1105-BG	
Number of Cylinders		3	
Type		Vertical, Water-cooled, 4 cycle diesel engine	
Bore × Stroke mm (in.)			
Total Displacement cm ³ (cu.in.)			
STANDBY			
ISO 3046	kW/min-1 (rpm)	9.5 / 1500	11.5 / 1800
SAE J-1349	HP/min-1 (rpm)	12.7 / 1500	15.4 / 1800
NET Continu-			
ous ISO 3046	kW/min-1 (rpm)	8.4 / 1500	10.1 / 1800
SAE J-1349	HP/min-1 (rpm)	11.3 / 1500	13.5 / 1800
Governor Regulation		Less than 5 %	
Combustion Chamber Type		Spherical type (E-T.V.C.S. : Three Vortex Combustion System)	
Fuel Injection Pump Type		PFR	
Governor		Mechanical all speed governor	
Direction of Rotation		Counter-clockwise (viewed from flywheel side)	
Nozzle Type		Throttle Type	
Injection Timing		0.2705 rad (15.50 °) before T.D.C.	
Firing Order		1-2-3	
Injection Pressure		13.73 MPa (140.0 kgf/cm ² , 1991 psi)	
Compression Ratio		24.0 : 1	
Lubricating System		Forced lubrication by trochoid pump	
Oil Pressure Indication		Electrical type switch	
Lubricating Filter		Full flow paper filter (Cartridge type)	
Cooling System		Pressurized radiator, forced circulation with water pump	
Starting System		Electric Starting with Starter	
Starting Motor		12 V, 1.0 kW	
Starting Support Device		By glow plug in combustion chamber	
EGR		NONE	
Battery		12 V, 65 AH, equivalent	
Charging Alternator		12 V, 360 W	
Fuel		Diesel Fuel No. 2-D (ASTM D975)	
Lubricating Oil (API Classification)		CF or other applicable grade	
Lubricating Oil Capacity		5.1 L (1.3 U.S.gals)	
Weight (Dry) kg (lbs)		110 (242)	
Installation data		1500 rpm (50 Hz)	1800 rpm (60 Hz)
Heat rejection	kcal/hr	9930	-
Exhaust gas volume	m ³ /hr	99.9	-
Combustion air requirement	m ³ /hr	44.0	-
Water pump	l/min	31	-
Fan pulley	mm	98	
Fan drive pulley	mm	112	
Pulley ratio		0.875	

1) Specifications are subject to change without notice.

3) Recommended Coolant Capacity : With radiator.

2) Dry weight is according to KUBOTA's standard specification.

4) Lubricating oil capacity : With oil filter cartridge.

When specification varies, the weight will vary accordingly.



KUBOTA Corporation

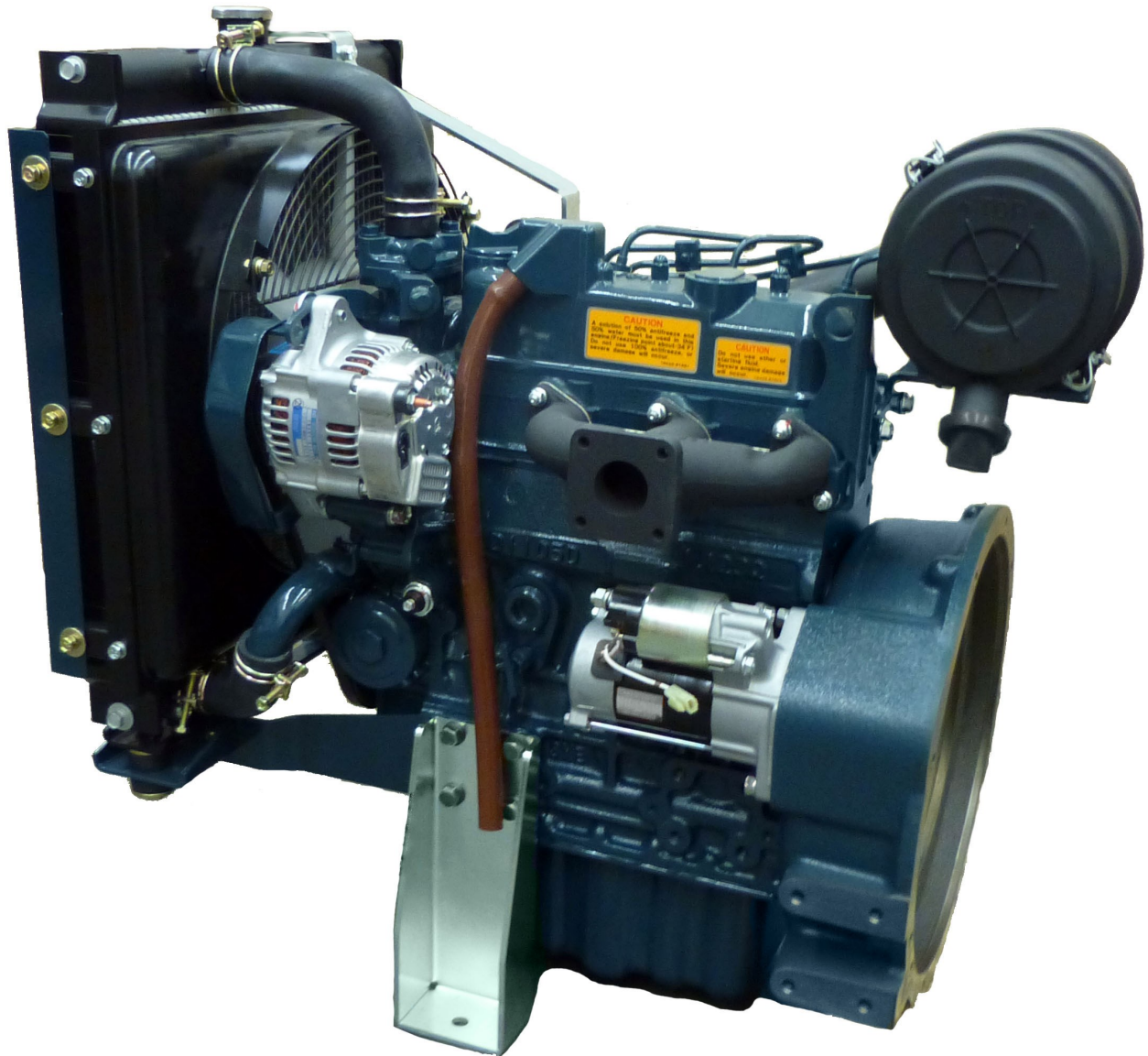
2-47, Shikitsuhigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
Fax: 06-6648-3521
<http://engine.kubota.co.jp>

KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
63110 Rodgau
Phone: +49 6106 873-113
Fax: +49 6106 873-196
E-mail: motoren@kubota.de
Homepage: www.kubota-motoren.de

For Earth, For Life
Kubota

D1105-BG2-SAE-2 Power Pack



Kubota

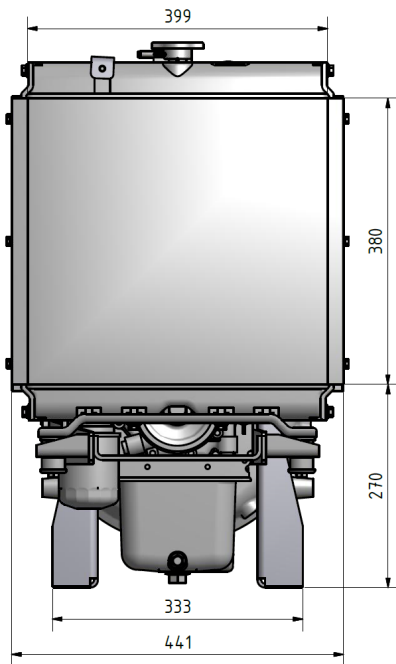
KUBOTA Corporation

2-47, Shikitsuhigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
Fax: 06-6648-3521
<http://engine.kubota.co.jp>

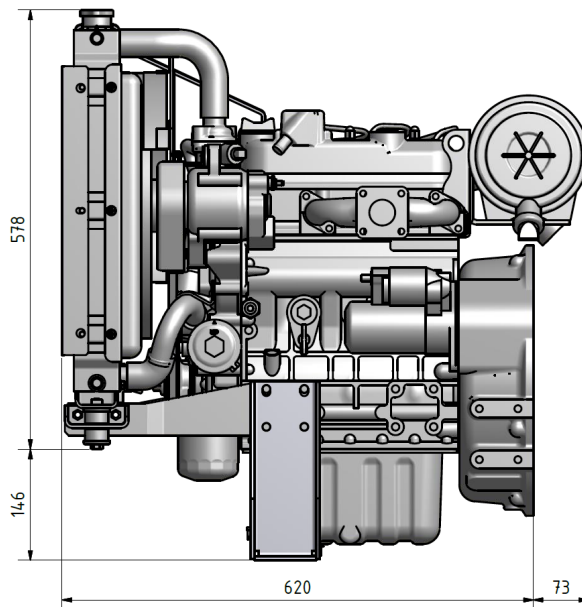
KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
63110 Rodgau
Phone: +49 6106 873-113
Fax: +49 6106 873-196
E-mail: motoren@kubota.de
Homepage: www.kubota-motoren.de

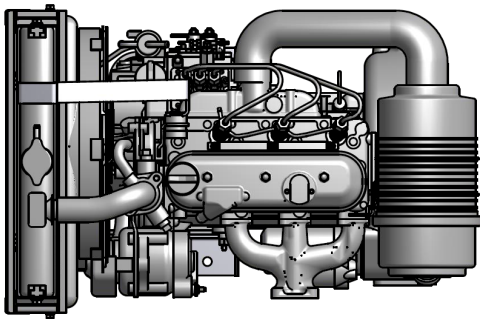
FRONT VIEW



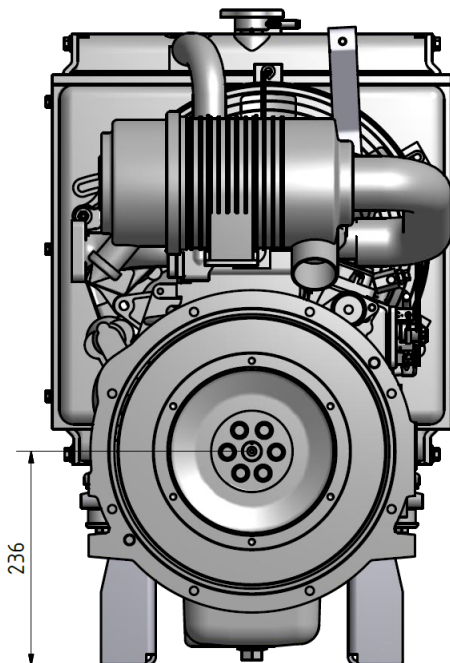
LEFT SIDE VIEW



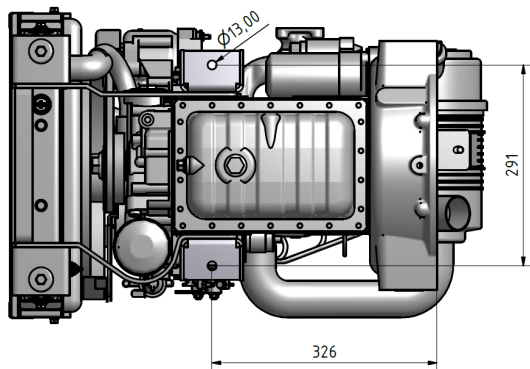
PLAN VIEW



BACK VIEW



UNDERNEATH VIEW



KUBOTA Corporation

2-47, Shikitsu Higashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
Fax: 06-6648-3521
<http://engine.kubota.co.jp>

KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
63110 Rodgau

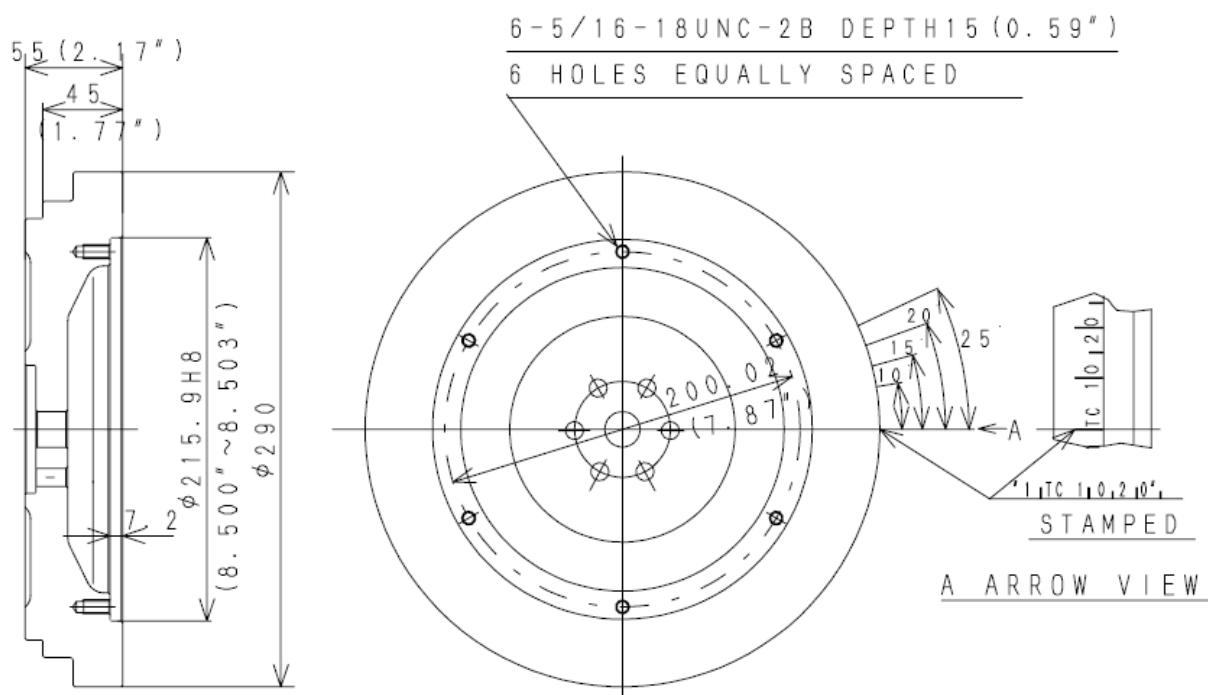
Phone: +49 6106 873-113

Fax: +49 6106 873-196

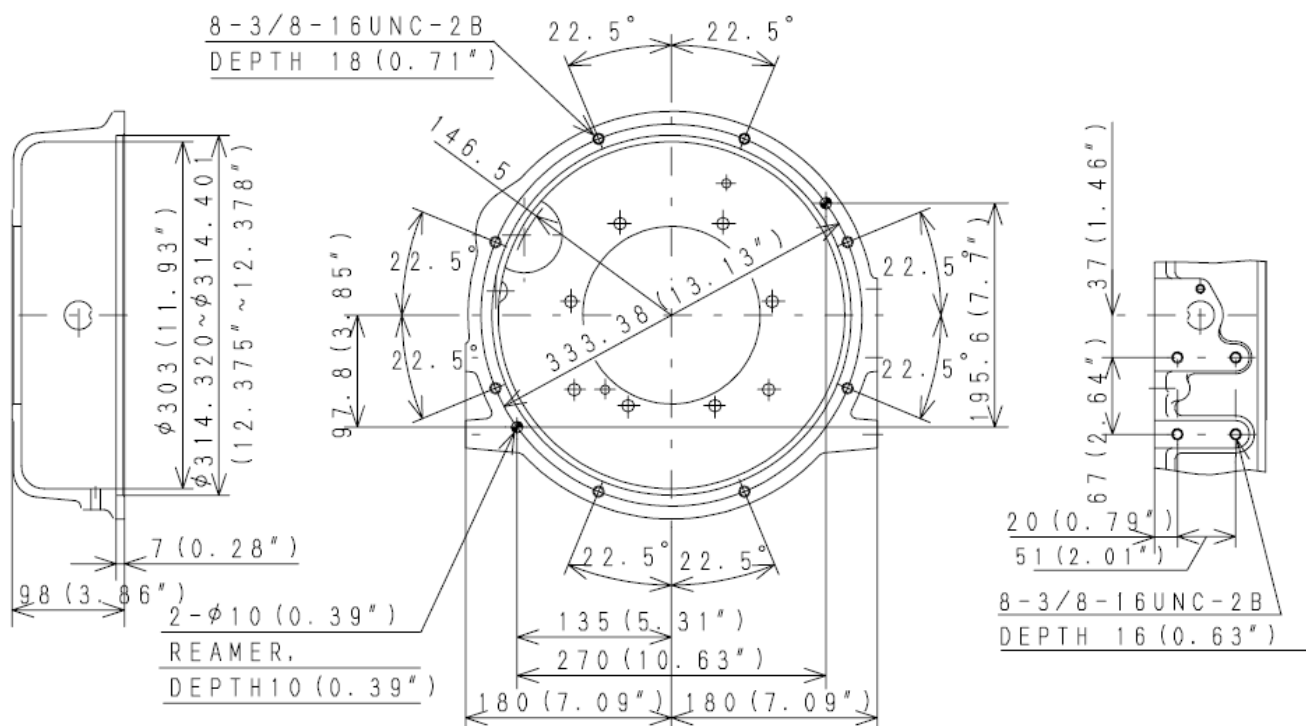
E-mail: motoren@kubota.de

Homepage: www.kubota-motoren.de

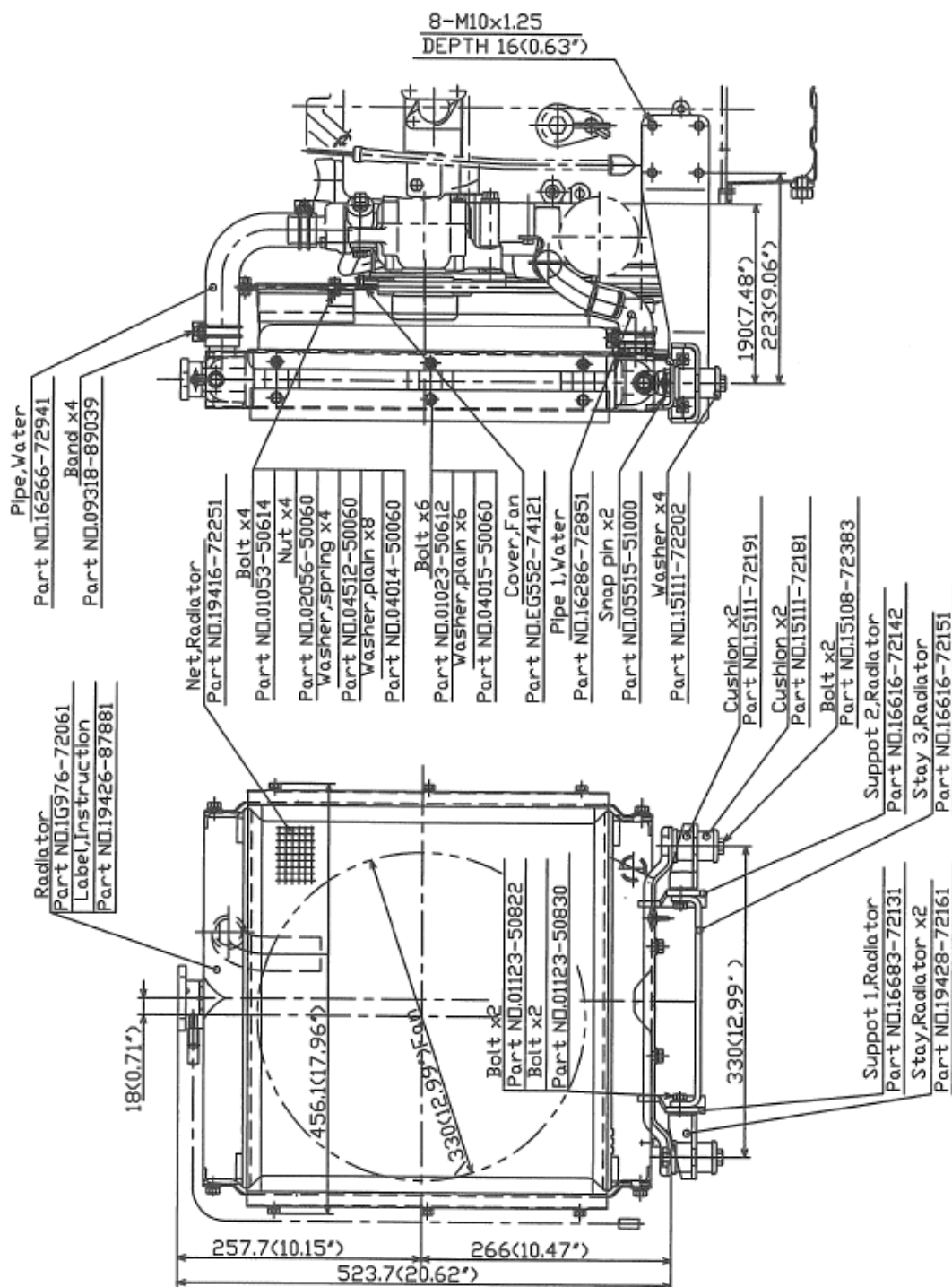
Flywheel 1G680-25010 SAE 6 1/2"



Flywheel housing 16683-04610 SAE No. 5 short



Radiator Kit 518



Reserve Tank Kit 494 - is required



KUBOTA Corporation

2-47, Shikitsuhigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
Fax: 06-6648-3521
<http://engine.kubota.co.jp>

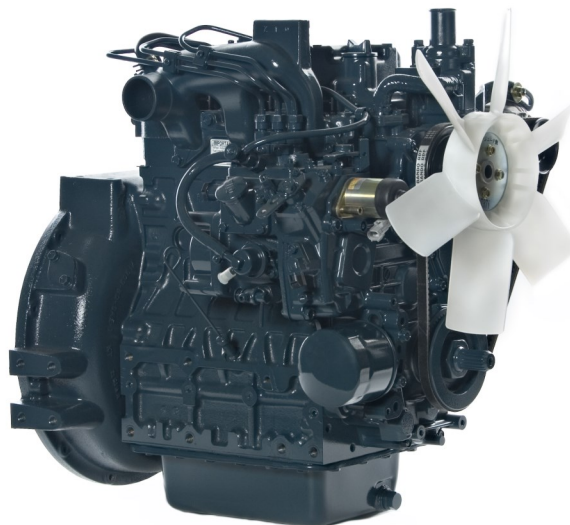
KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
63110 Rodgau
Phone: +49 6106 873-113
Fax: +49 6106 873-196
E-mail: motoren@kubota.de
Homepage: www.kubota-motoren.de

D1703-E2BG-SAE-2

D1703-E2BG-SAE-2 1G982-00000 mech. controlled , high fan

(D1703-M-E3BG-SAE-2 1J982-00000 electr. controlled , low fan)



Model	Stand-by (SAE J1349) 50 Hz 1500 rpm kW (HP)	Continuous (SAE J1349) 50 Hz 1500 rpm kW (HP)	Stand-by (SAE J1349) 60 Hz 1800 rpm kW (HP)	Continuous (SAE J1349) 60 Hz 1800 rpm kW (HP)
	D1105-BG2			
	15.0 (20.1)	12.8 (17.2)	18.1 (24.3)	15.1 (20.2)



KUBOTA Corporation

2-47, Shikitsuhigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
 Fax: 06-6648-3521
<http://engine.kubota.co.jp>

KUBOTA (Deutschland) GmbH

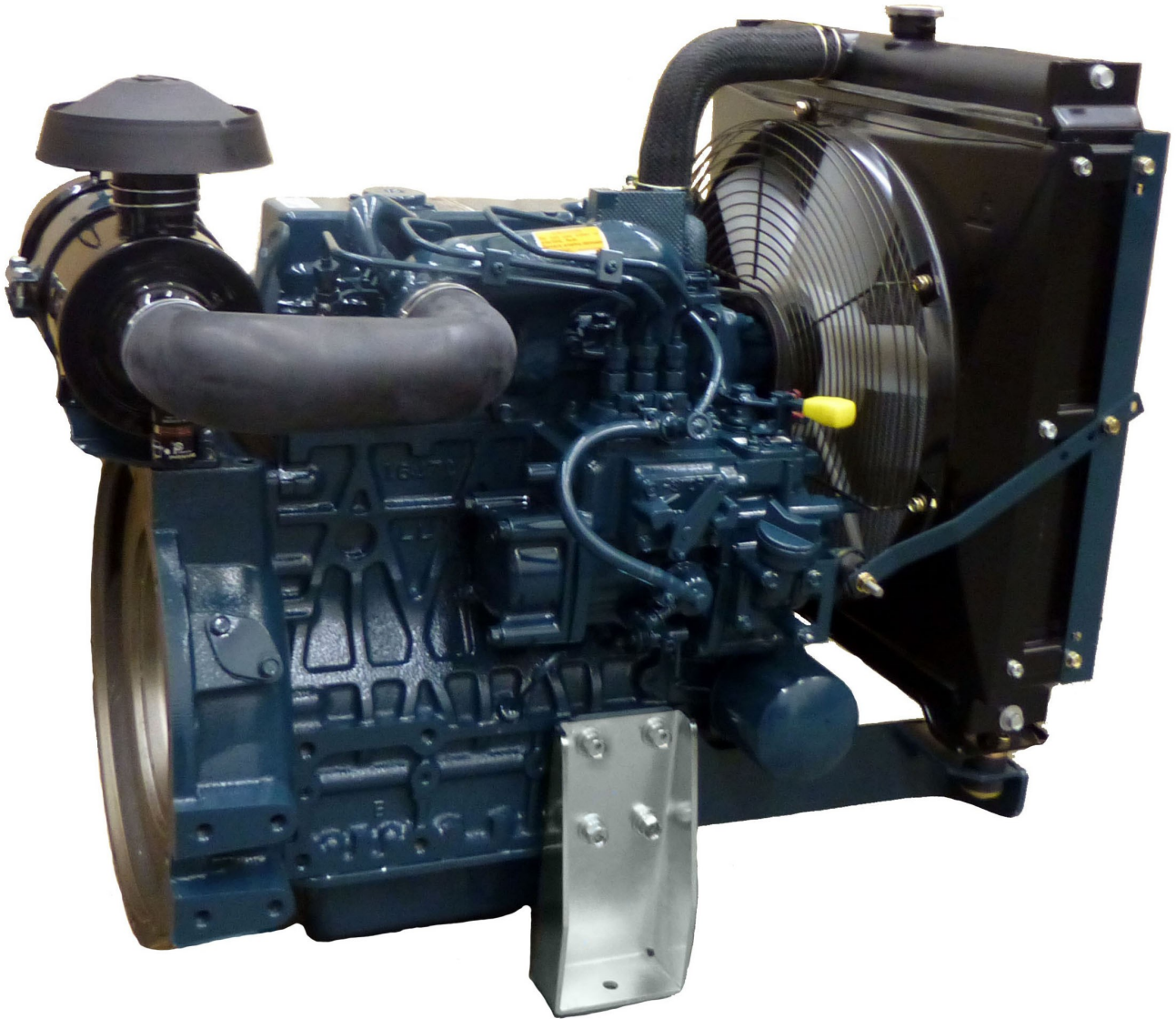
Senefelder Str. 3 - 5
 63110 Rodgau
 Phone: +49 6106 873-113
 Fax: +49 6106 873-196
 E-mail: motoren@kubota.de
 Homepage: www.kubota-motoren.de

Technical specification

Model		D1703-BG	
Number of Cylinders		3	
Type		Vertical, Water-cooled, 4 cycle diesel engine	
Bore × Stroke mm (in.)		87.0 × 92.4 (3.43 × 3.64)	
Total Displacement cm ³ (cu.in.)		1647 (100.5)	
STANDBY			
ISO 3046	kW/min-1 (rpm)	15.0 / 1500	18.1 / 1800
SAE J-1349	HP/min-1 (rpm)	20.1 / 1500	24.3 / 1800
NET Continuous			
ISO 3046	kW/min-1 (rpm)	12.8 / 1500	15.1 / 1800
SAE J-1349	HP/min-1 (rpm)	17.2 / 1500	20.2 / 1800
Governor Regulation		Less than 5 %	
Combustion Chamber Type		Spherical type (E-T.V.C.S. : Three Vortex Combustion System)	
Fuel Injection Pump Type		PFR	
Governor		Mechanical all speed governor	
Direction of Rotation		Counter-clockwise (viewed from flywheel side)	
Nozzle Type		Throttle Type	
Injection Timing		0.2487 rad (14.25 °) before T.D.C.	
Firing Order		1-2-3	
Injection Pressure		13.73 MPa (140.0 kgf/cm ² , 1991 psi)	
Compression Ratio		22.0 : 1	
Lubricating System		Forced lubrication by trochoid pump	
Oil Pressure Indication		Electrical type switch	
Lubricating Filter		Full flow paper filter (Cartridge type)	
Cooling System		Pressurized radiator, forced circulation with water pump	
Starting System		Electric Starting with Starter	
Starting Motor		12 V, 1.4 kW	
Starting Support Device		By glow plug in combustion chamber	
EGR		NONE	
Battery		12 V, 60 AH, equivalent	
Charging Alternator		12 V, 480 W	
Fuel		Diesel Fuel No. 2-D (ASTM D975)	
Lubricating Oil (API Classification)		CF or other applicable grade	
Lubricating Oil Capacity	Oil Pan Depth 90 mm (3.5 in.)	5.6 L (1.5 U.S.gals)	
	Oil Pan Depth 124 mm (4.88 in.)	7.0 L (1.8 U.S.gals)	
Weight (Dry) kg (lbs)		164 (362)	
Installation data		1500 rpm (50 Hz)	1800 rpm (60 Hz)
Heat rejection kcal/hr		14500	16600
Exhaust gas volume m ³ /hr		149.8	189.9
Combustion air m ³ /hr		64.5	77.4
Water pump l/min		54	64
Fan pulley mm		104	
Fan drive pulley mm		102	
Pulley ratio		0.866	

For Earth, For Life
Kubota

D1703-E2BG-SAE-2 Power Pack



Kubota

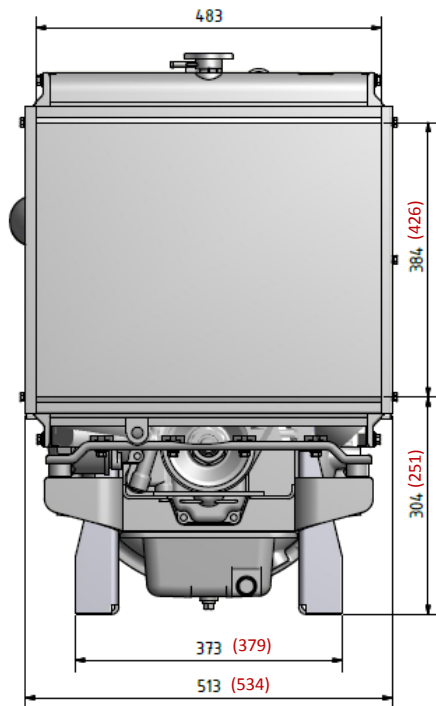
KUBOTA Corporation

2-47, Shikitsuigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
Fax: 06-6648-3521
<http://engine.kubota.co.jp>

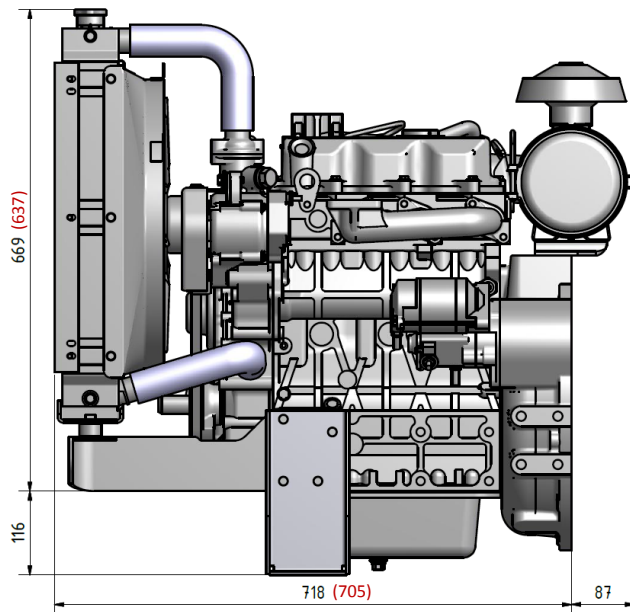
KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
63110 Rodgau
Phone: +49 6106 873-113
Fax: +49 6106 873-196
E-mail: motoren@kubota.de
Homepage: www.kubota-motoren.de

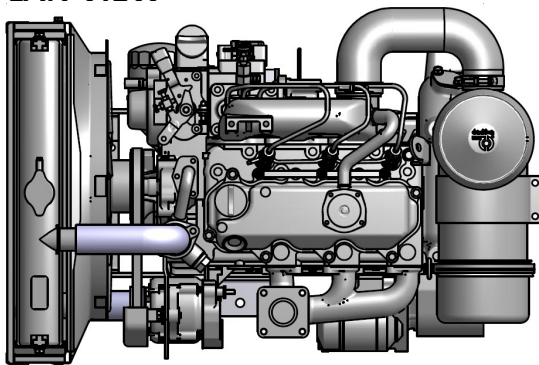
FRONT VIEW



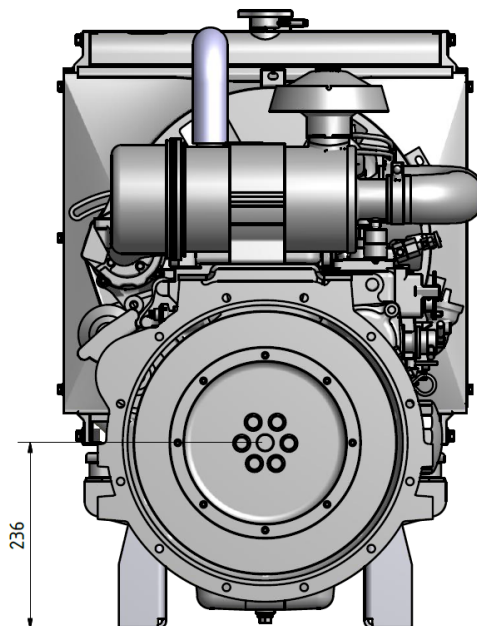
LEFT SIDE VIEW



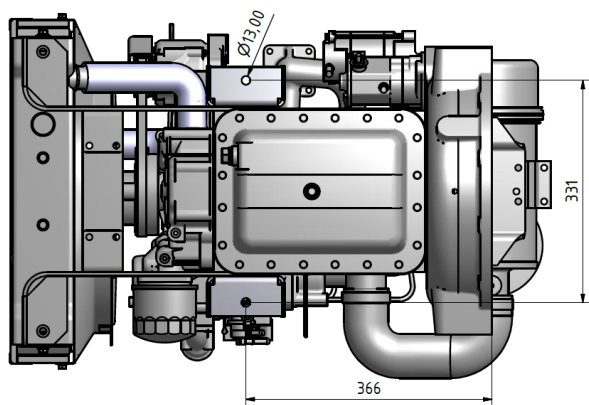
PLAN VIEW



BACK VIEW



UNDERNEATH VIEW



*Kit 472 Low Fan



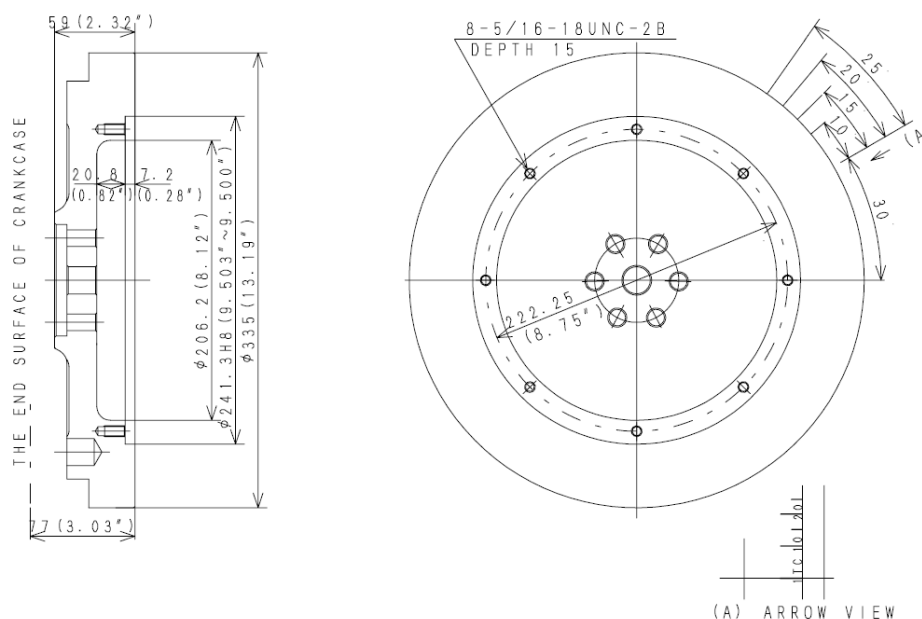
KUBOTA Corporation

2-47, Shikitsuhigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
Fax: 06-6648-3521
<http://engine.kubota.co.jp>

KUBOTA (Deutschland) GmbH

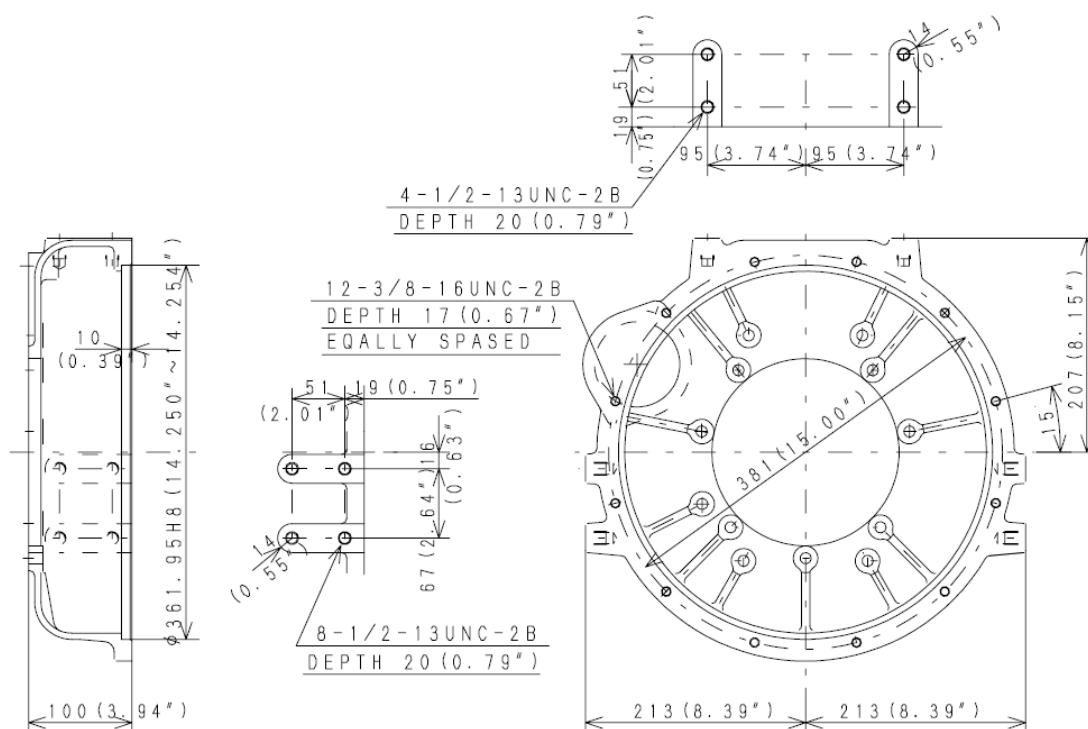
Senefelder Str. 3 - 5
63110 Rodgau
Phone: +49 6106 873-113
Fax: +49 6106 873-196
E-mail: motoren@kubota.de
Homepage: www.kubota-motoren.de

Flywheel 17299-25015 SAE 7 1/2" short



MASS : 22.1 kgf (48.7 lbf)
 MATERIAL : SPECIAL CAST GRAY IRON
 GD² : 1.39 kgf-m² (33.0 lbf-ft²)

Flywheel housing 17158-04610 SAE No. 4 short



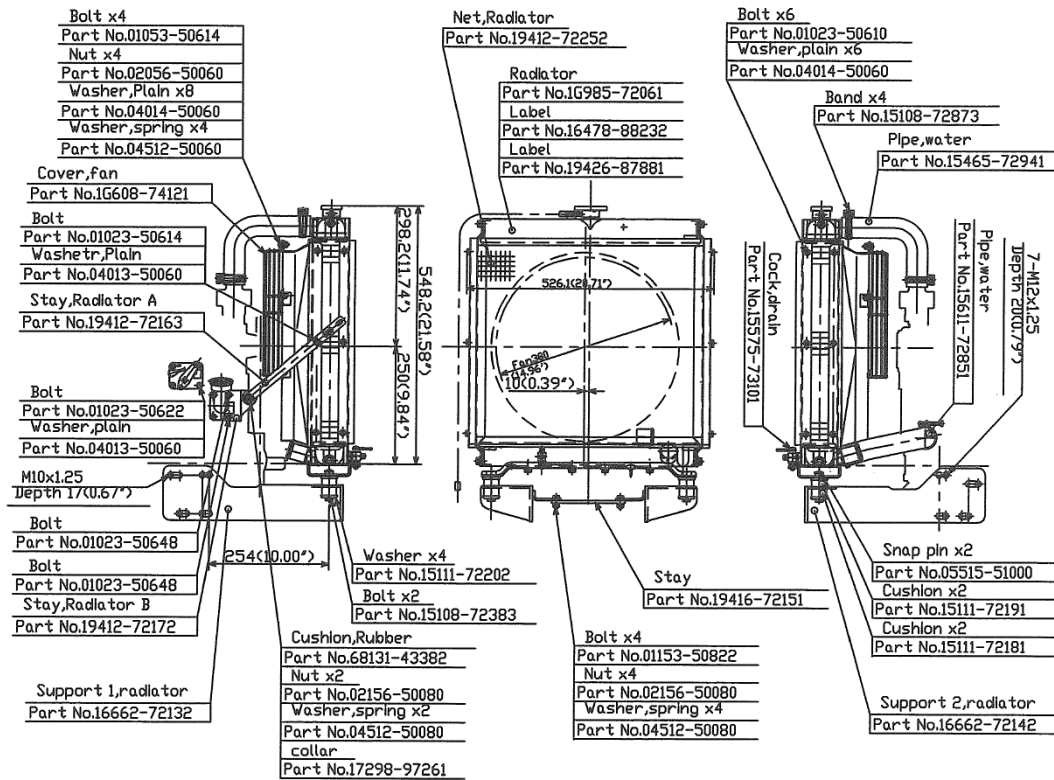
KUBOTA Corporation

2-47, Shikitsuhigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
 Fax: 06-6648-3521
<http://engine.kubota.co.jp>

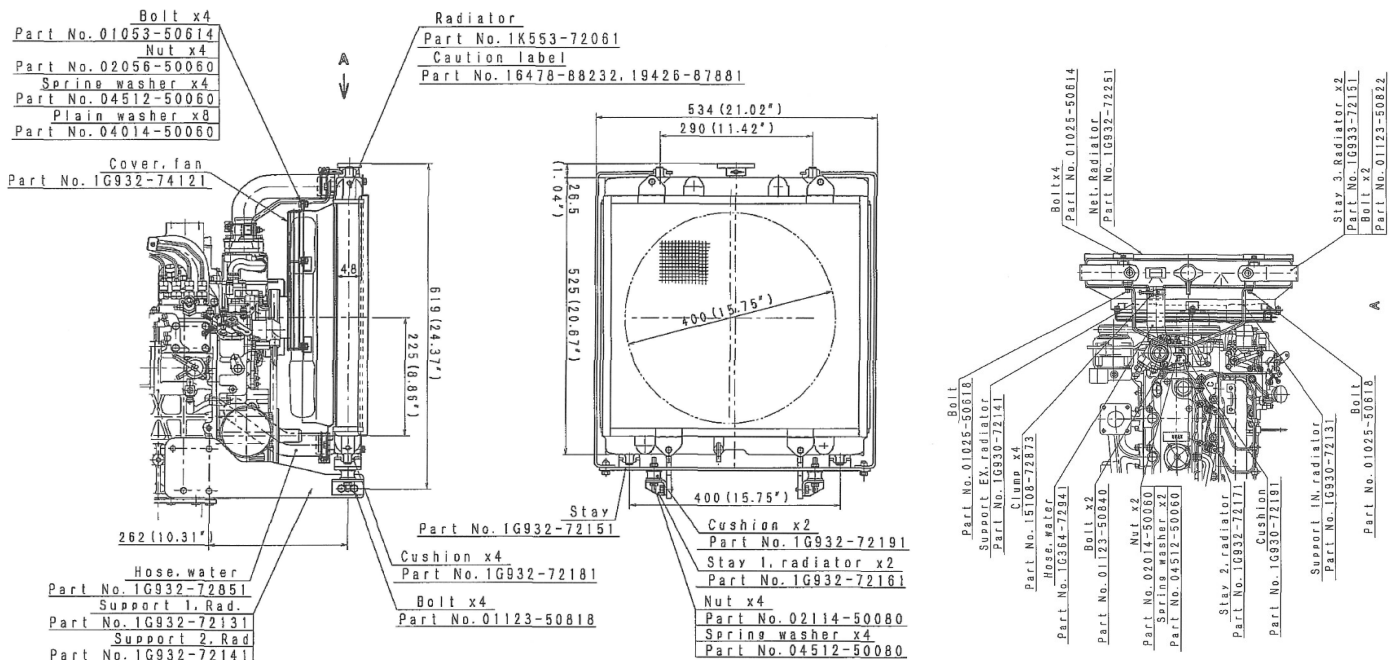
KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
 63110 Rodgau
 Phone: +49 6106 873-113
 Fax: +49 6106 873-196
 E-mail: motoren@kubota.de
 Homepage: www.kubota-motoren.de

Radiator Kit 519 for high fan



Radiator Kit 472 for low fan



Reserve Tank Kit 474 - is required



KUBOTA Corporation

2-47, Shikitsuhigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
 Fax: 06-6648-3521
<http://engine.kubota.co.jp>

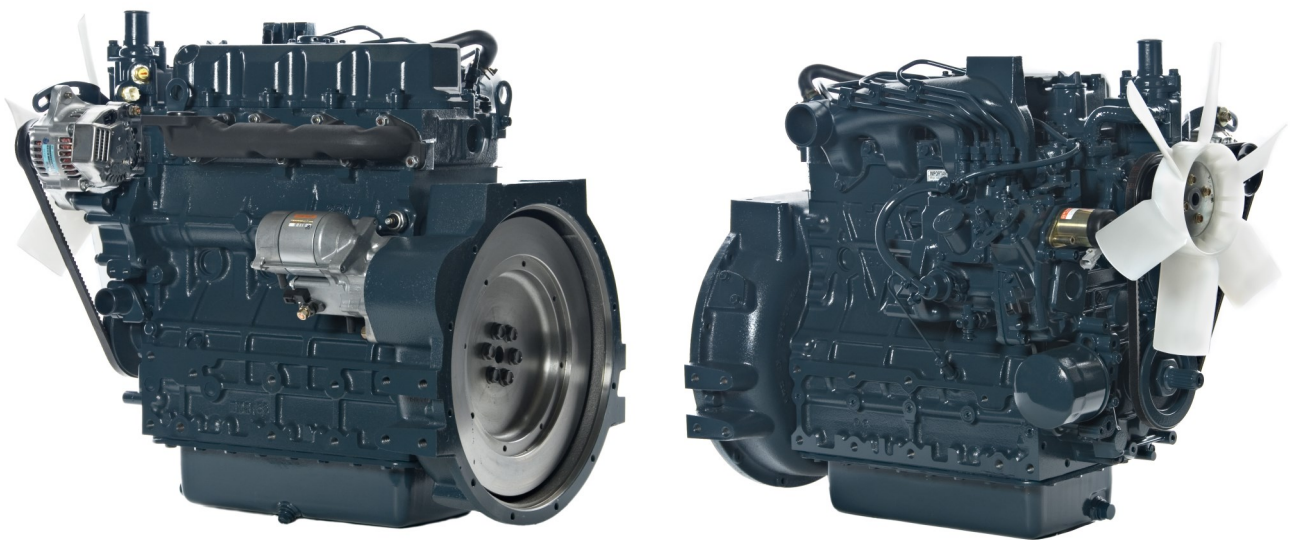
KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
 63110 Rodgau
 Phone: +49 6106 873-113
 Fax: +49 6106 873-196
 E-mail: motoren@kubota.de
 Homepage: www.kubota-motoren.de

V2203-E2BG-SAE-2

V2203-E2BG-SAE-2 1G985-00000 mech. controlled, high fan

(V2203-M-E3BG-SAE-2 1J985-00000 electr. controlled, low fan)



Model	Stand-by (SAE J1349) 50 Hz 1500 rpm kW (HP)	Continuous (SAE J1349) 50 Hz 1500 rpm kW (HP)	Stand-by (SAE J1349) 60 Hz 1800 rpm kW (HP)	Continuous (SAE J1349) 60 Hz 1800 rpm kW (HP)
	20.1 (27.0)	17.2 (23.1)	24.2 (32.5)	20.2 (27.1)
D1105-BG2				



KUBOTA Corporation

2-47, Shikitsu Higashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
Fax: 06-6648-3521
<http://engine.kubota.co.jp>

KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
63110 Rodgau
Phone: +49 6106 873-113
Fax: +49 6106 873-196
E-mail: motoren@kubota.de
Homepage: www.kubota-motoren.de

Technical specification

Model		V2203-BG	
Number of Cylinders		4	
Type		Vertical, Water-cooled, 4 cycle diesel engine	
Bore × Stroke	mm (in.)	87.0 × 92.4 (3.43 × 3.64)	
Total Displacement	cm ³ (cu.in.)	2197 (134.1)	
STANDBY ISO 3046	kW/min-1 (rpm)	20.1 / 1500	24.2 / 1800
SAE J-1349	HP/min-1 (rpm)	27.0 / 1500	32.5 / 1800
NET Continuous ISO 3046	kW/min-1 (rpm)	17.2 / 1500	20.2 / 1800
SAE J-1349	HP/min-1 (rpm)	23.1 / 1500	27.1 / 1800
Governor Regulation		Less than 5 %	
Combustion Chamber Type		Spherical type (E-T.V.C.S. : Three Vortex Combustion System)	
Fuel Injection Pump Type		PFR	
Governor		Mechanical all speed governor	
Direction of Rotation		Counter-clockwise (viewed from flywheel side)	
Nozzle Type		Throttle Type	
Injection Timing		0.2487 rad (14.25 °) before T.D.C.	
Firing Order		1-3-4-2	
Injection Pressure		13.73 MPa (140.0 kgf/cm ² , 1991 psi)	
Compression Ratio		22.0 : 1	
Lubricating System		Forced lubrication by trochoid pump	
Oil Pressure Indication		Electrical type switch	
Lubricating Filter		Full flow paper filter (Cartridge type)	
Cooling System		Pressurized radiator, forced circulation with water pump	
Starting System		Electric Starting with Starter	
Starting Motor		12 V, 1.4 kW	
Starting Support Device		By glow plug in combustion chamber	
EGR		NONE	
Battery		12 V, 88 AH, equivalent	
Charging Alternator		12 V, 480 W	
Fuel		Diesel Fuel No. 2-D (ASTM D975)	
Lubricating Oil (API Classification)		CF or other applicable grade	
Lubricating Oil Capacity	Oil Pan Depth 90 mm (3.5 in.)	7.6 L (2.0 U.S.gals)	
	Oil Pan Depth 124 mm (4.88 in.)	9.5 L (2.5 U.S.gals)	
Weight (Dry)		195 (430)	
Installation data		1500 rpm (50 Hz)	1800 rpm (60 Hz)
Heat rejection	kcal/hr	20200	24000
Exhaust gas volume	m ³ /hr	199.8	253.3
Combustion air	m ³ /hr	86.0	103.2
Water pump	l/min	56	67
Fan pulley	mm	104	
Fan drive pulley	mm	102	
Pulley ratio		0.832	



KUBOTA Corporation

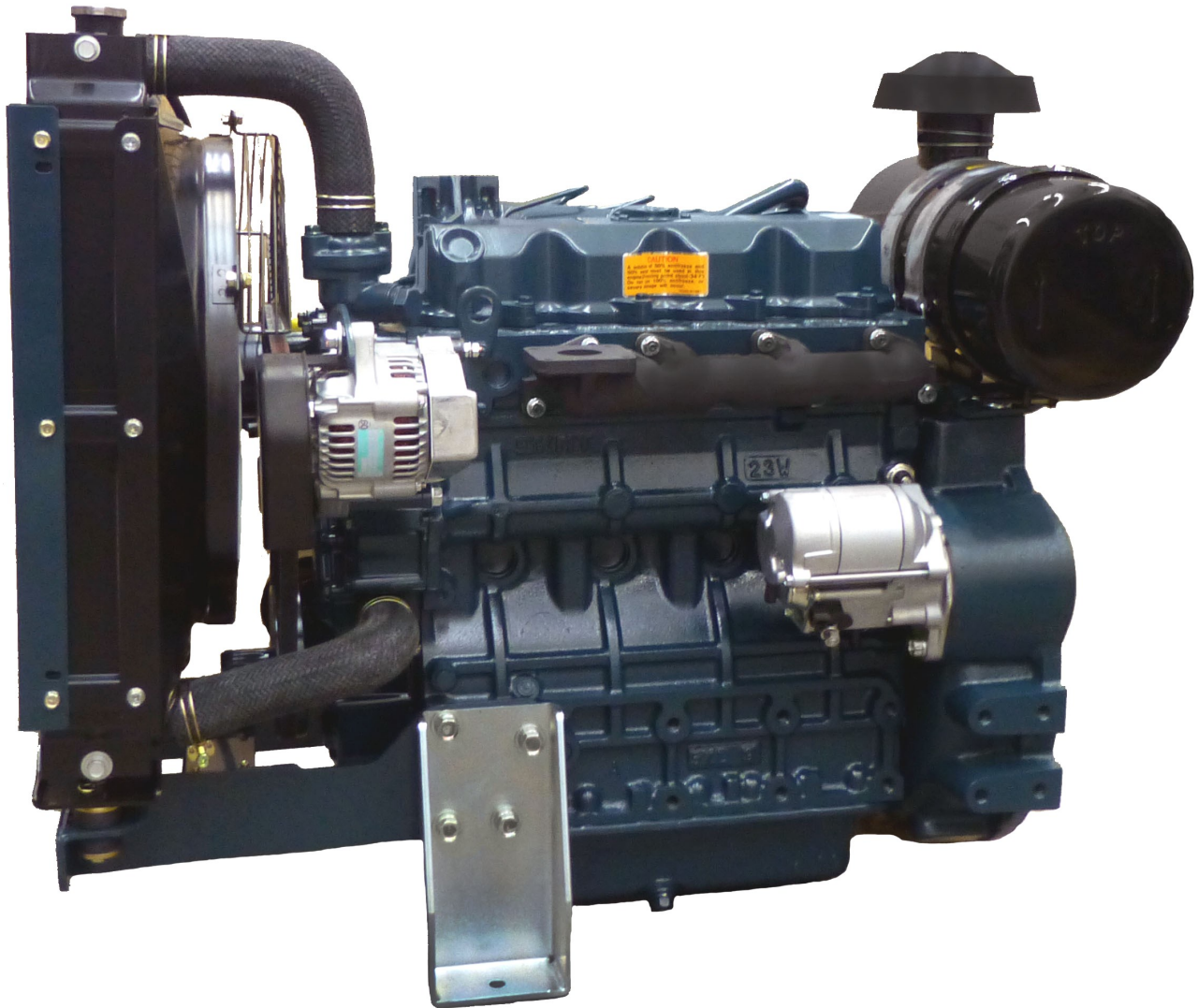
2-47, Shikitsuhigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
 Fax: 06-6648-3521
<http://engine.kubota.co.jp>

KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
 63110 Rodgau
 Phone: +49 6106 873-113
 Fax: +49 6106 873-196
 E-mail: motoren@kubota.de
 Homepage: www.kubota-motoren.de

For Earth, For Life
Kubota

D2203-E2BG-SAE-2 Power Pack



Kubota

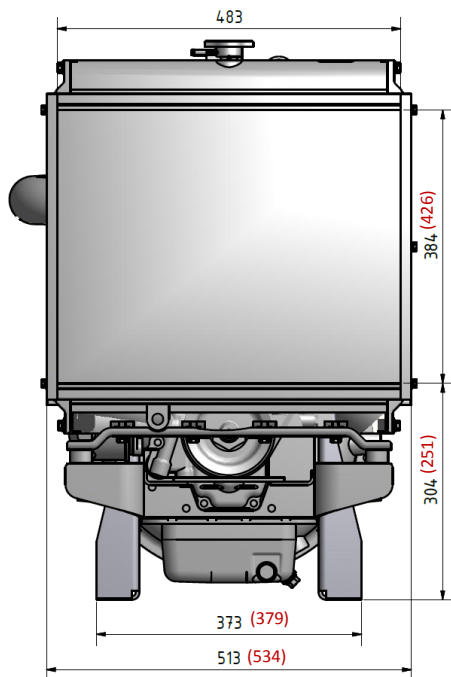
KUBOTA Corporation

2-47, Shikitsuhigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
Fax: 06-6648-3521
<http://engine.kubota.co.jp>

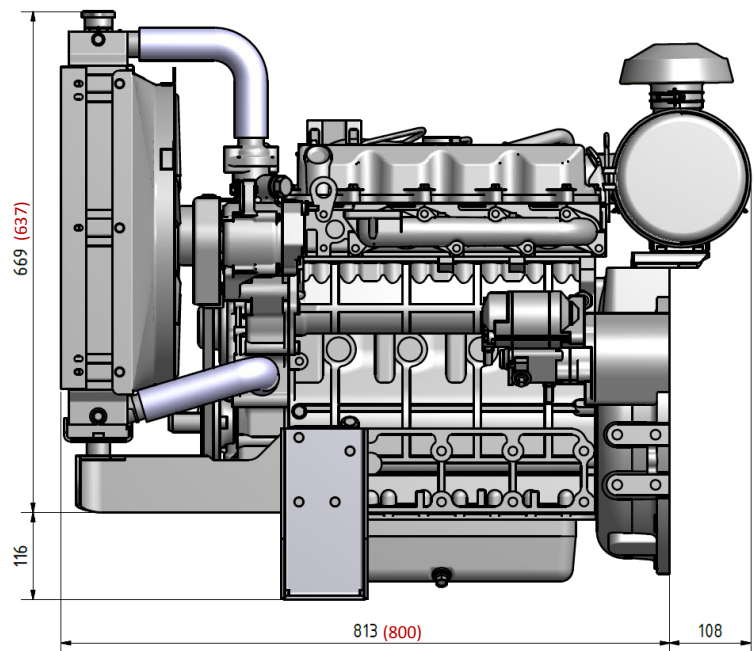
KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
63110 Rodgau
Phone: +49 6106 873-113
Fax: +49 6106 873-196
E-mail: motoren@kubota.de
Homepage: www.kubota-motoren.de

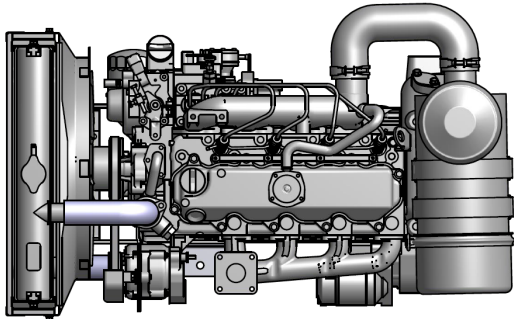
FRONT VIEW



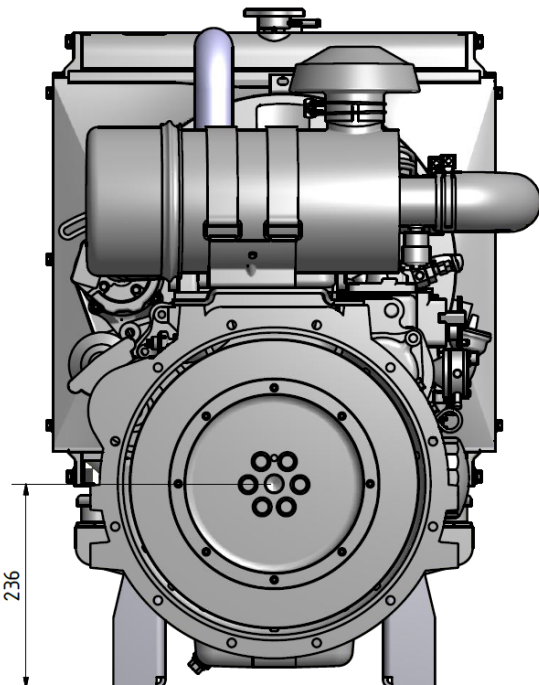
LEFT SIDE VIEW



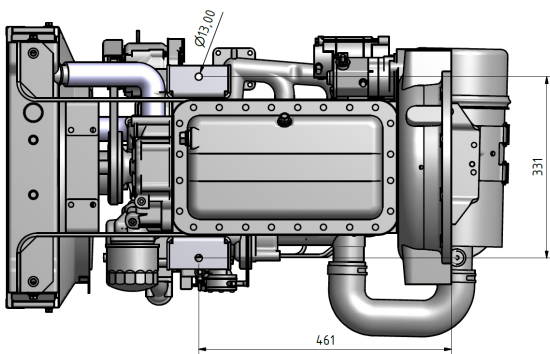
PLAN VIEW



BACK VIEW



UNDERNEATH VIEW



*Kit 472 Low Fan



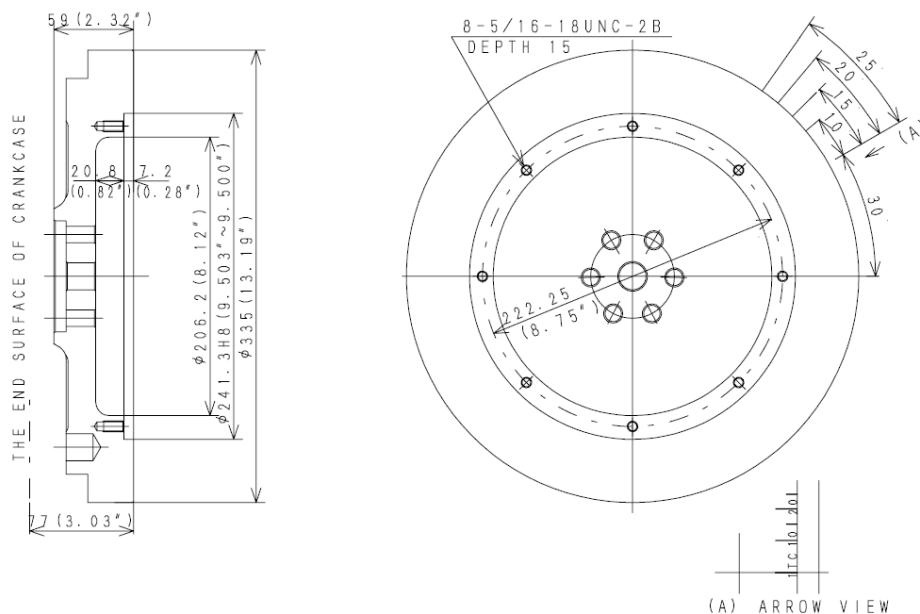
KUBOTA Corporation

2-47, Shikitsuhigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
Fax: 06-6648-3521
<http://engine.kubota.co.jp>

KUBOTA (Deutschland) GmbH

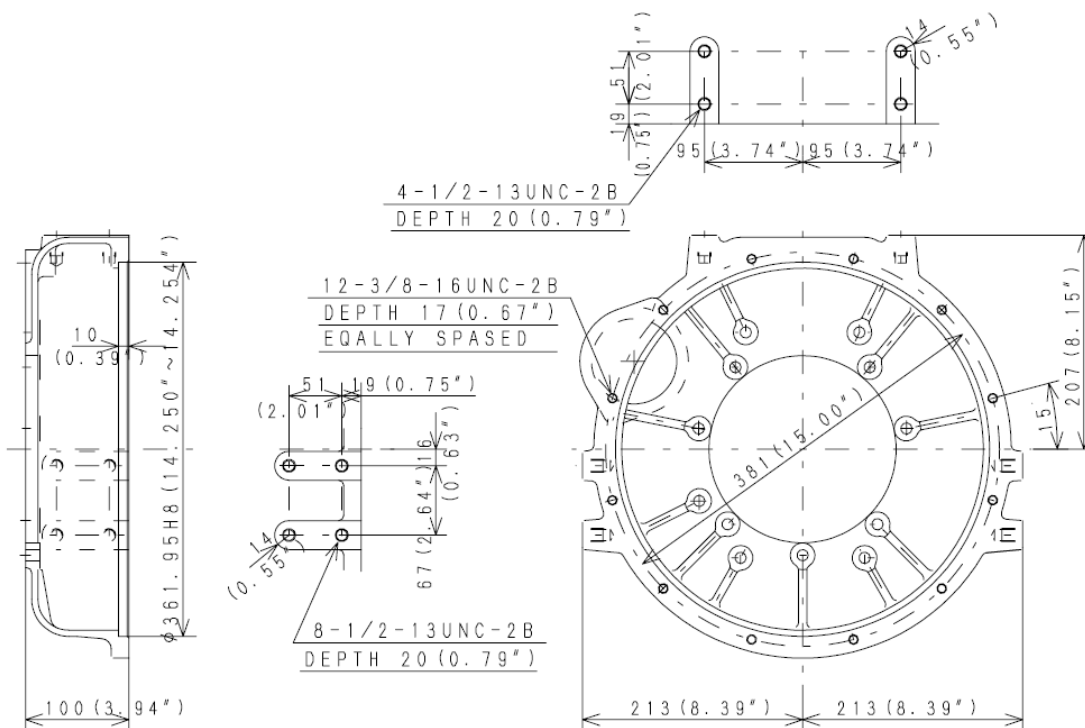
Senefelder Str. 3 - 5
63110 Rodgau
Phone: +49 6106 873-113
Fax: +49 6106 873-196
E-mail: motoren@kubota.de
Homepage: www.kubota-motoren.de

Flywheel 17158-25015



MASS : 22.1 kgf (48.7 lbf)
 MATERIAL : SPECIAL CAST GRAY IRON
 GD² : 1.39 kgf-m² (33.0 lbf-ft²)

Flywheel housing 17158-04610



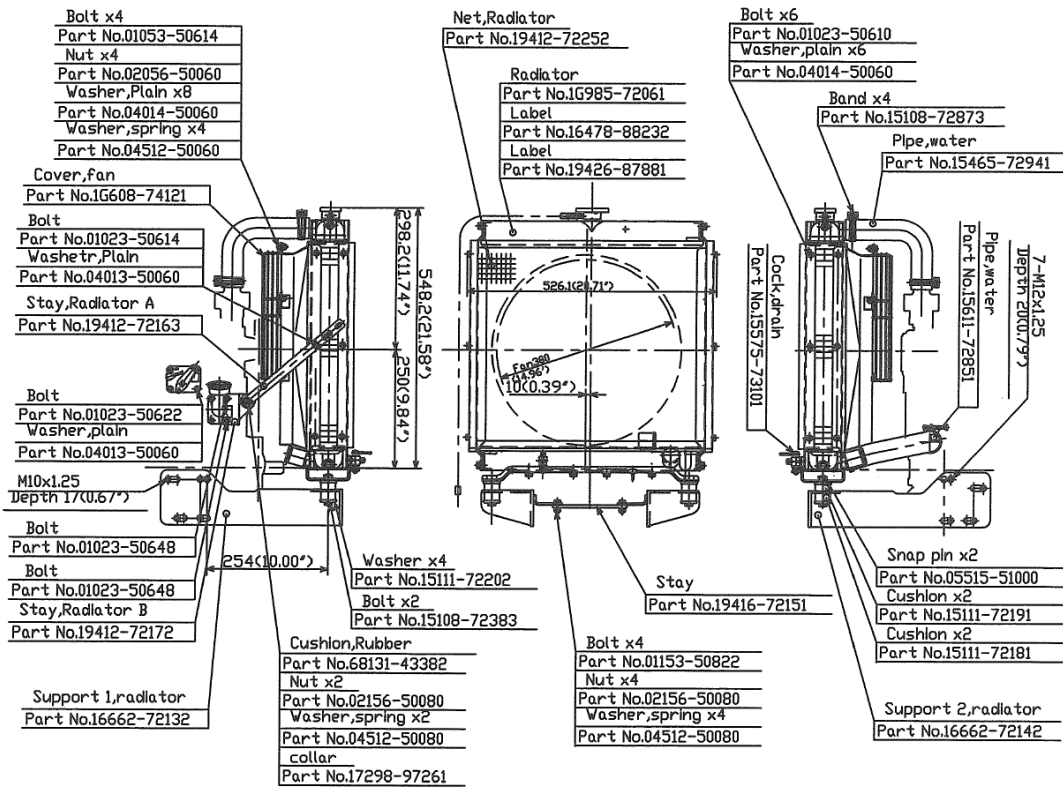
KUBOTA Corporation

2-47, Shikitsu Higashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
 Fax: 06-6648-3521
<http://engine.kubota.co.jp>

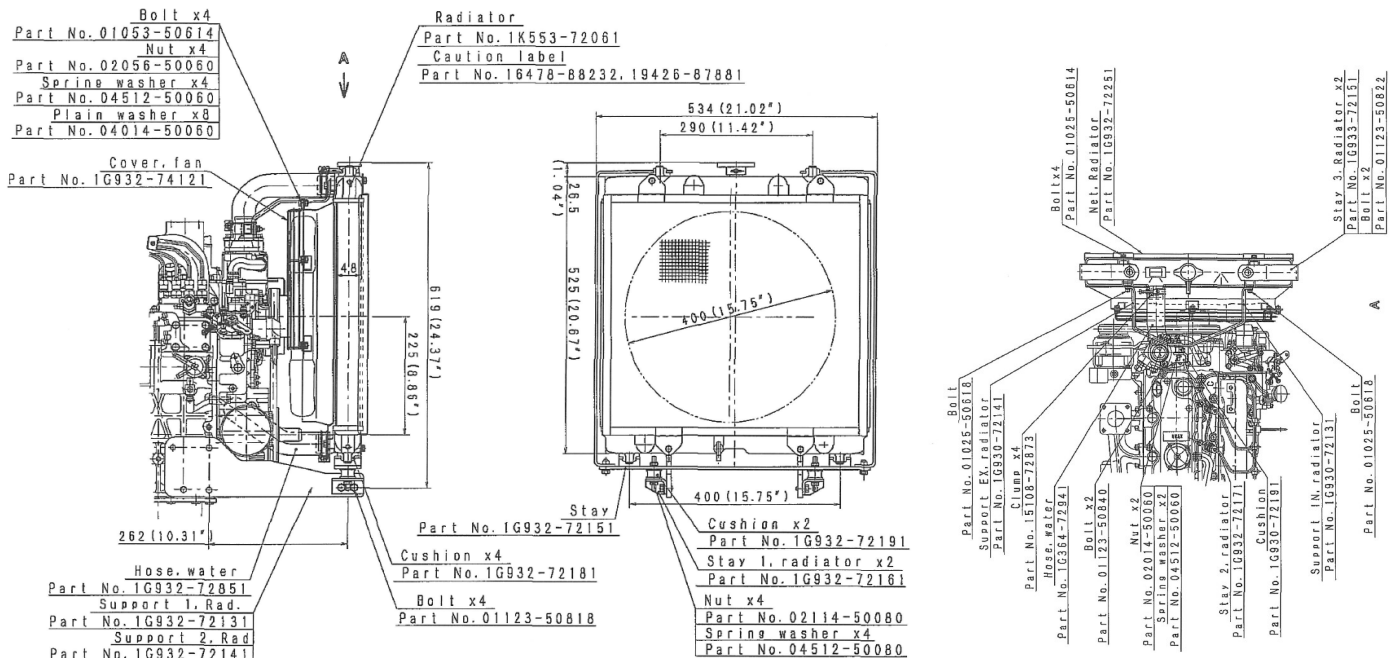
KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
 63110 Rodgau
 Phone: +49 6106 873-113
 Fax: +49 6106 873-196
 E-mail: motoren@kubota.de
 Homepage: www.kubota-motoren.de

Radiator Kit 519 for high fan



Radiator Kit 472 for low fan



Reserve Tank Kit 474 - is required



KUBOTA Corporation

2-47, Shikitsuhigashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
 Fax: 06-6648-3521
<http://engine.kubota.co.jp>

KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
 63110 Rodgau
 Phone: +49 6106 873-113
 Fax: +49 6106 873-196
 E-mail: motoren@kubota.de
 Homepage: www.kubota-motoren.de

EXPERIENCE

With over 80 years of experience in the diesel engine business Kubota is proud to be the number one engine manufacturer of diesel engines below 100 HP. No other “small” engine comes close to offering the advantages that a Kubota engine brings. Trust the industry leader, use Kubota power.

RELIABLE AND DURABLE QUALITY

Kubota Corporation's Quality Inspection Facility is state-of-the-art and is dedicated to meet the high quality expectations of the Kubota name. Kubota engines will provide you with the tried and true quality needed for your generator applications.

EMISSIONS

The Engine Product Environmental Management Section at Kubota Corporation in Osaka, Japan takes all possible measures to ensure that the engines produced by Kubota meet the world's highest level of adaptability to pass future emission regulations.

Kubota's BG Series meets all current emission levels for EPA, CARB, EU and MOC.

GLOBAL DISTRIBUTION NETWORK

Kubota engines are used all over the world. Kubota is committed to supporting its customers on a global basis by continuing to expand its distribution network world wide. Kubota provides all of its distributors with sales support and corporate sponsored service and product training in order to keep everyone up to date on the latest technical information.



KUBOTA Corporation

2-47, Shikitsu Higashi 1-chome, Naniwa-ku, Osaka, 556-8601 Japan
Fax: 06-6648-3521
<http://engine.kubota.co.jp>

KUBOTA (Deutschland) GmbH

Senefelder Str. 3 - 5
63110 Rodgau
Phone: +49 6106 873-113
Fax: +49 6106 873-196
E-mail: motoren@kubota.de
Homepage: www.kubota-motoren.de