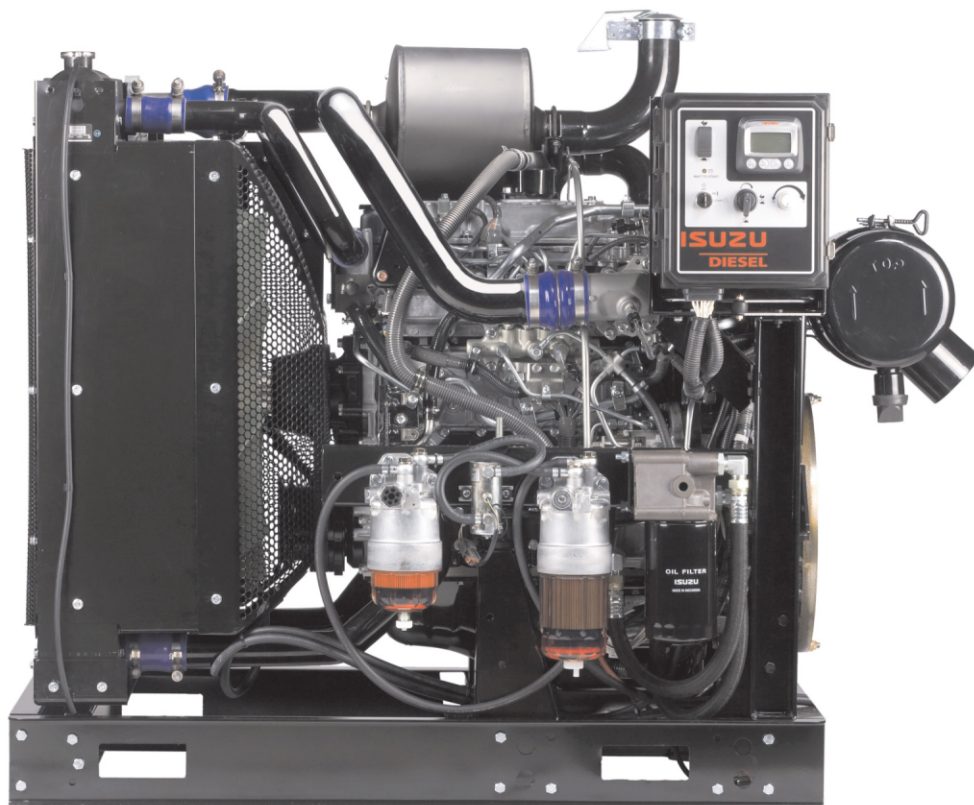


ISUZU

DIESEL

4HK1X **ENGINE** & Turn-Key & Accessories



4HK1X ENGINE



Isuzu Diesel Engines

Data Summary

Off-Highway Diesel Engine Model & Spec

ISUZU
DIESEL

4HK1XYGV01 24V
GV02 12V

4HK1XYBW01 24V
BW03 24V GCPTO
BW02 12V

Performance

US EPA Off-Highway Emission Certification			Tier 3
EC Off-Highway Emission Certification		N/A	Stage 3A
Rated Speed*	RPM	1800	2100
Rated Power (SAE J1995 GROSS)*	KW HP	133 178	151 203
Full-Load Fuel Consumption*	G/KW-HR LB/HP-HR	217 0.357	210 0.345
Alternator Output	V-A	24V-50A (12V-110)	

Size

Height	MM IN	995 39.2	1034 40.7
Width	MM IN	776 30.6	776 30.6
Length	MM IN	947 37.3	1020 40.2

Weight

	KG LB	470 1036	470 1036
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Basic Characteristics

Flywheel Housing / Flywheel		SAE #3 / 11.5
Gear Case PTO Spline / Pad (optional)	(included on BW03)	SAE 7/8" / SAE "B" 2-bolt
Displacement	L CUBIC IN	5.2 317
Number of Cylinders		4
Electronic High Pressure Common Rail Fuel Injection System		YES
Charge Air Cooler System (Required)		YES
Cooled Exhaust Gas Recirculation (EGR) System		YES

Lubricating Oil System

Shipped-loose oil filter to be remotely mounted.

Fuel System

Shipped-loose fuel filters and fuel pump to be remotely mounted.

Control System

	SAEJ1939 CAN BUS
Shipped-loose ECM to be remotely mounted.	

Cooling System

Radiator			
Heat Rejection to Coolant*	MJ/HR BTU/MIN	260 4108	280 4424
Cooling Fan Air Flow Rate @ Restriction	M ³ /MIN CFM	0 0	228 8052
	KPA IN H ₂ O	0 0.0	0.6 2.4
Coolant Flow Rate*	LPM GPM	190 50.2	220 58.1
Max Allowed Engine Coolant Outlet Temp	°C °F	99 210	
Max Allowed Coolant Pump Inlet Restriction	KPA IN HG	10 3.0	
Charge Air Cooler (CAC)			
Heat Rejection to CAC*	MJ/HR BTU/MIN	64 1011	72 1138
Air Flow Rate*	M ³ /MIN CFM	8.9 314	9.2 325
Max Allowed CAC Out Rise Above Ambient	°C °F	25 45	
Max Allowed System Restriction	KPA IN H ₂ O	13.3 53.4	
Fuel Cooler			
Fuel Flow Rate	LPM GPH	1.3 21	
Heat Rejection to Fuel Cooler	KCAL/HR BTU/MIN	800 53	
Max Allowed Engine Fuel Inlet Temp	°C °F	60 140	

Air Cleaner System

Air Flow Rate*	M ³ /MIN CFM	8.9 314	9.2 325
Max Allowed System Restriction	KPA IN H ₂ O	2.5 10.0	

Exhaust System

Exhaust Flow Rate*	M ³ /MIN CFM	18.9 666	21.5 759
Max Allowed System Restriction	KPA IN HG	5 1.5	

Diagnostics

	On-Board Diagnostics
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*Curve available - For curves and additional technical information and details, please go to www.isuzuengines-info.com

If you need assistance with access, navigation, etc., please contact your ISUZU representative.

ISUZU offers turn-key engine accessory kits for the above systems and more to allow quick and easy engine installation, turn-key engine operation, equipment testing, equipment sales and service.

For a list of available kits, please see the next page (Turn-Key Engine Accessories).

4HK1X ENGINE



Turn-Key Engine Accessories

Off-Highway Diesel Engine Model & Spec

ISUZU
DIESEL

4HK1XYGV01 24V GV02 12V
4HK1XYBW01 24V BW03 24V GCPTO
BW02 12V

Kit #

Drive System

Flywheel Pilot Bearing Carrier	6C1-008
Gear Case PTO	(included on BW03) 4H1-001
Air Compressor	4H1-002

Lubricating Oil System

Oil Filter Hoses + Bracket	5C7-028
Remote Oil Drain Hose + Valve	6G4-005

Fuel System

Fuel Filter Hoses + Bracket	5C7-018
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Control System

Supplemental Harness (Short), OR	5Y5-086 24V (5Y5-081 12V)
Supplemental Harness (Long)	5Y5-075 24V (5Y5-085 12V)
Alternator Adapter Harness	5Y5-076 24V (5Y5-080 12V)
ECM Enclosure (with controls), OR	5Y3-093 24V (5Y3-088 12V)
ECM Enclosure (without controls)	5Y3-094 24V (5Y3-089 12V)
Extension Harness	6 FT, OR 5Y5-050
	10 FT, OR 5Y5-051
	20 FT 5Y5-052
Murphy PowerView SAEJ1939 CAN Display, OR	5Y3-091
Remote Control Panel	5Y3-090
Mating Connector Kits (if above Control System kits are not used)	
Master	5Y5-025
Electric Fuel Pump	5Y5-042
Alternator	5Y5-043 24 V (5Y5-044 12V)

Cooling System

Cooling Module (Radiator + CAC + Fuel Cooler)	5F1-141
Cooling Fan	5F1-144 push 5F1-146 pull
Upper Coolant Pipe	5F1-148
Lower Coolant Pipe	5F1-149
Hot (Turbo-to-CAC) Pipe	5M3-056
Cold (CAC-to-Engine) Pipe	5M3-059

Air Cleaner System

Air Cleaner, Bands, Pipes, and Hoses	5M3-065
Mounting Bracket (to flywheel housing)	5M3-056

Exhaust System

Vertical Muffler w/Rain Cap	5L2-084
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Service Diagnostic Tools

EMPS3 Diagnostic Tool (PC based)	X-99960-041-0
ECM Pin-Out Box	X-99960-042-0

For a reference drawing of the above and other kits, please see the next page (Turn-Key Accessories Model Views).

Many other optional kits are available, up to and including assembled power units.

For additional information and details, please go to www.isuzuengines-info.com

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4HK1X ENGINE

Turn-Key Accessories Model Views

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