

Zero Tail Swing Type
Mini EXCAVATOR



AX40u-5F

ΔX27U-5F
ΔX30U-5F
ΔX35U-5F
ΔX40U-5F
ΔX50U-5F

SAFETY

- Operate safely in accordance with proper operation manual.
- To prevent trouble and accidents, perform daily and preventive maintenance checks without fail.

AIRMAN®

HOKUETSU INDUSTRIES CO., LTD.

8th Floor Shinjuku San-Ei Bldg.,
22-2 Nishi-Shinjuku 1-Chome, Shinjuku-ku, Tokyo 160-0023 Japan
Tel : +81-(0)3-3348-7281 Fax : +81-(03)-3348-7289
e-mail : oversea@airman.co.jp
URL : <http://www.airman.co.jp>

HOKUETSU INDUSTRIES EUROPE B.V.

Aalsmeerderdijk 156 unit J, 1438 AX, OUDE MEER, The Netherlands
Tel : +31-(0)20-646-2636 Fax : +31-(0)20-646-2191
e-mail : info@hokuetsu.nl
URL : <http://www.hokuetsu.eu>

DISTRIBUTOR



AX35u-5F

HOKUETSU INDUSTRIES CO., LTD.

Easy Maintenance, Toughness and Durability

Daily and periodical maintenance / inspection can be carried out easily and efficiently even on tight jobsites without having to move the machine to a bigger area.

Sliding Engine Cover

The newly designed engine cover can slide up and down in order to allow maintenance and servicing in confined space.



Removable engine side cover to allow easy access to the engine. This cover is made of steel to allow easy repair when damaged.

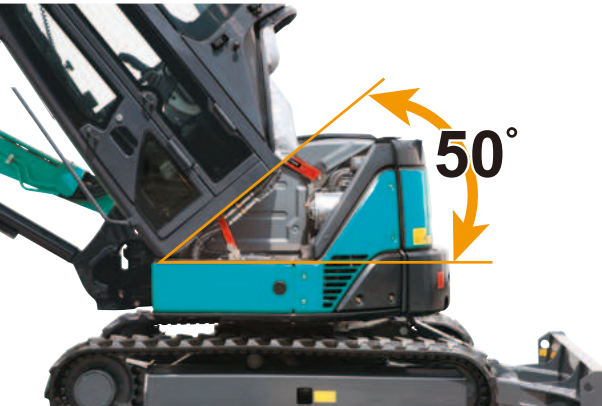
Finned Radiator and Oil Cooler for Effective Cooling



The radiator and oil cooler, made of rust-resistant aluminum, are integrated with wavy fins for effective cooling. Fins are easy to clean and hard to be packed with dirt.

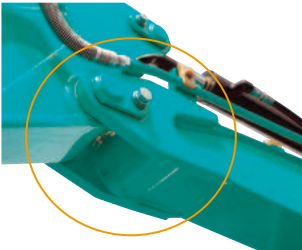
Tilt-up Canopy / Cabin

The cabin or canopy floor can be tilted up to 50 degrees to provide easy access to the excavators inner parts such as the swing motor, engine starter motor, control valve and other key components to reduce valuable inspection and maintenance time.



Reinforced Boom End New

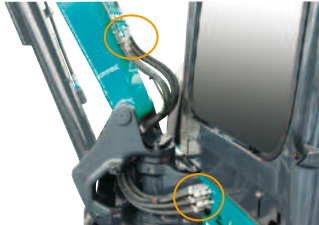
The boom end is made out of high tensile steel to reduce wearing of the pin that holds the arm.



Auxiliary Piping New

Auxiliary piping size has been increased to reduce back pressure also a larger capacity selector valve has been used. (For model AX40u/50u)

Split-Type Front Hoses



Split-Type Front Hoses are being used between the machine's cover ports and the bottom side of the boom to allow easy replacement in case of damage to one or more of the hoses.

Reinforced Angle-Steel type Boom Cylinder Guard New

The boom cylinder guard is reinforced as it is now constructed from angle steel to prevent damages to the boom cylinder.



Single Swing Pin



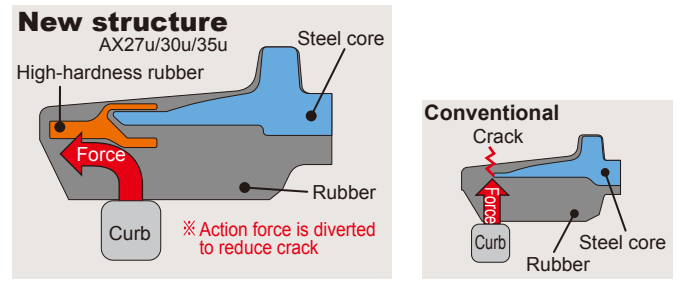
A large single swing pin is used for ease of operation with exceptionally smooth movement.

Easy Operation / Ecological Atmosphere

Increased swing speed and travel pulling force to allow more efficient operation.

New-Structure Rubber Crawlers

The Original-developed rubber crawlers are highly durable, featuring a steel-cored structure that protects shoe edges from being damaged even when riding on curbs.



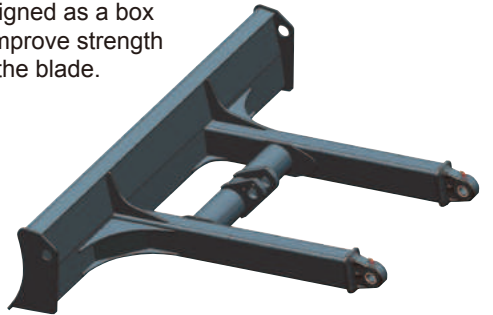
State of The Art Bushes

Hard wearing bushes are used for the front pins to reduce wear and tear and also make movement very smooth. Also longer lubrication intervals.

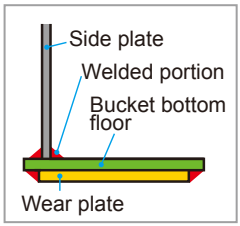


Reinforced Blade New

The blade is designed as a box construction to improve strength and reliability of the blade.



Durable Flat-Bottom Bucket



The flat-bottom bucket has wide wear plates welded to the bucket bottom to increase the durability.

Grease-Bathed Type Swing Gear

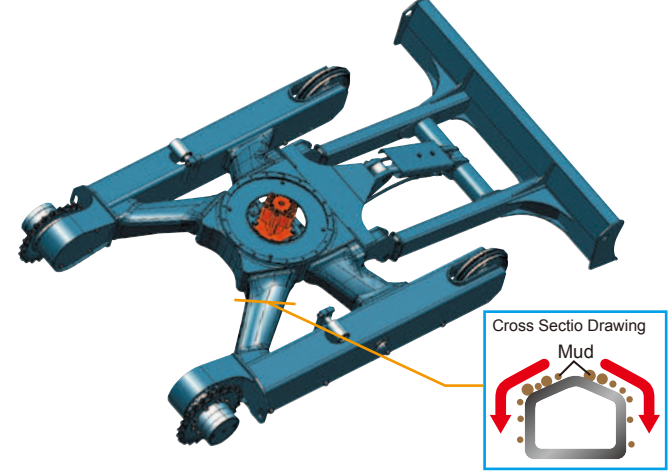
Grease-Bathed Type Swing Gear, allowing longer lubrication interval times.

WC (Tungsten Carbide) Thermal Spraying

The bush is sprayed with tungsten carbide to reduce friction between the bucket bush and arm bush which reduces wear and makes it more efficient.

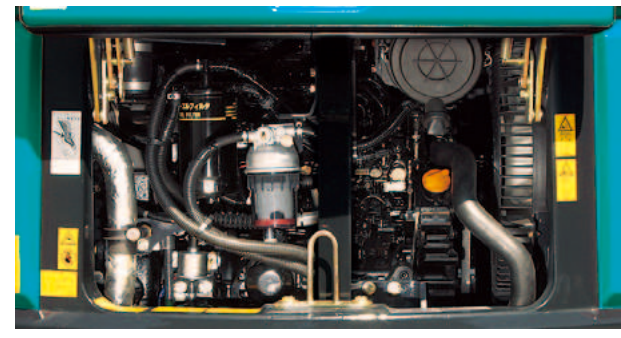
X-Beam Track Frame

Rounded X-beam track frame will minimize mud packing on the frame, which shortens washing time of the machine.



Powerful High Displacement Engine

New-generation ECO-powered engine with more power and higher efficiency.



Smooth and Speedy Combined Operation of Functions

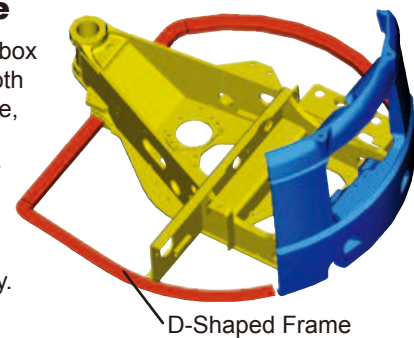
The matching between the 3 hydraulic pumps system on the AX27u / 30u and 35u and the arm recovery circuit is improved. On the AX40u and 50u, the matching between the original hydraulic circuit (AHCS) and the arm recovery circuit is also improved.

Hydraulic Pilot Control

The control levers are hydraulic pilot type for ease of operation and smooth movement.

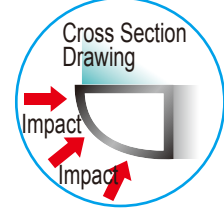
Enlarged Counterweight and Box Type Frame

The newly developed box type frame which is both lightweight and durable, the enlarged counterweight and the more heavy undercarriage give a lower center of gravity thus improving stability.



Reinforced D-Shaped Frame

The machine is reinforced with a strong D-shaped frame to protect the machine against damages and shocks.



Automatic Travel Speed Control

During high speed travel, the speed is automatically switched down to low speed when the load increases due to steering and it is automatically resumed when the load decreases again.

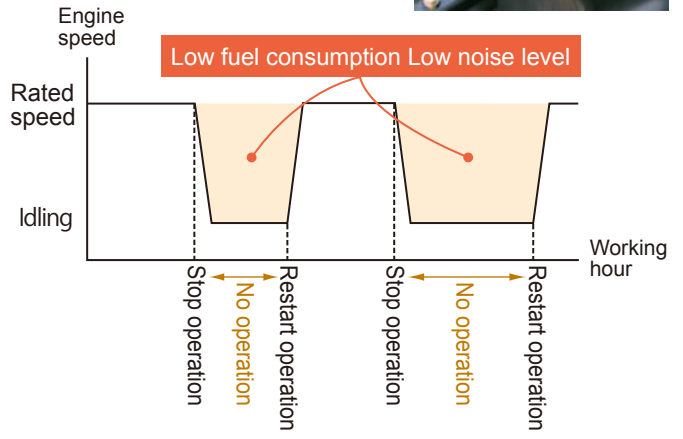
High Fuel Efficiency (Eco Zone) New

The new setting of the Eco Zone results in more production with lower fuel consumption due to the optimal control of the engine speed and torque as well as the hydraulic pressure settings.

Auto-Idle Device as Standard

AX30u ~ 50u

The engine speed is automatically lowered to idling speed to reduce fuel consumption when the control levers are at neutral position for 4 seconds.



Hydraulic Oil Circulation Type Swing Reduction Gear

The swing reduction gear is a hydraulic oil circulation type that does not require troublesome gear oil change. Long-life hydraulic oil extends replacement interval up to 2000 hours. (This is depending on country and working conditions)



ROPS/OPG Canoy and Cabin

Both canopy and cabin are compliant to the latest ROPS/TOPS and OPG top guard Lv.1 as standard.

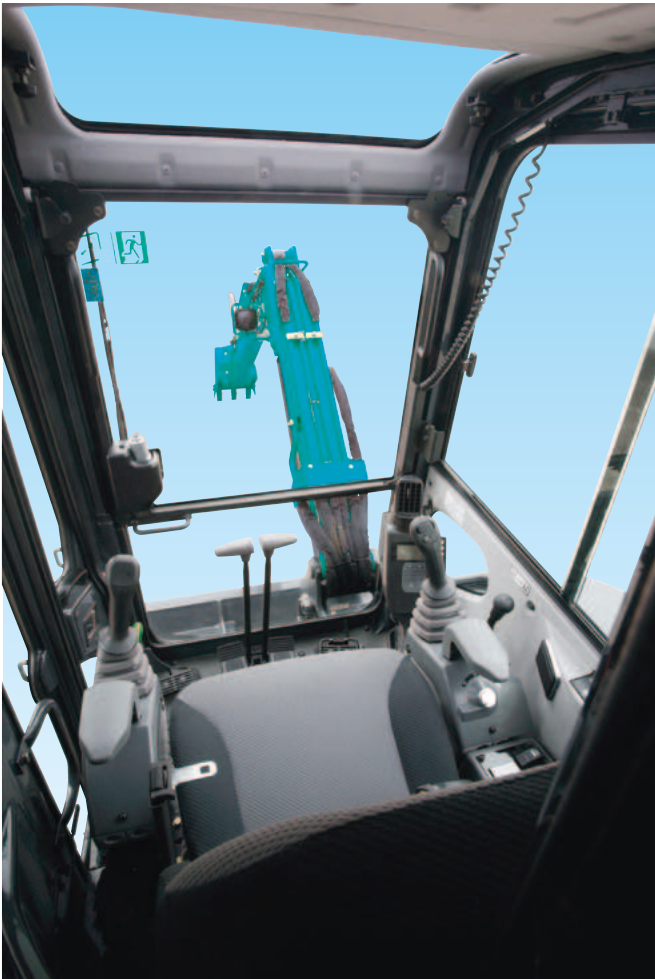


Operator Comfort and Safety

Sufficient space and convenient options are offered to enlighten the operator’s job.

Largest Cabin Space in It’s Class

The cabin space, conforming to the international standards, is the largest among the mini excavators for comfort and efficient operation.



Renewed Cabin Interior Color New

The consol and cab interior are painted with a new color ensuring comfortable atmosphere for an operator.



Comfortable Operator’s Seat New

The operator’s seat is designed for more comfort with a higher and more spacious back of the seat. The fabric seat is also available for the cabin model.



Canopy
(Semi high backrest)



Cabin (High backrest)

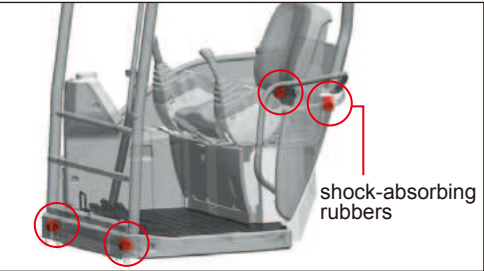
Clear Roof Sun Visor (4 Pole Canopy)

A clear sun visor is mounted at the front of the roof to secure the visibility for upper operation.



Shock-Absorbing Rubber Mounted Cabin / Canopy Floor

The cabin / canopy floor is mounted on 4 shock-absorbing rubbers to ensure comfortable operation.



Easy-to Read Monitor

The large LCD monitor placed in the front right position, clearly shows fuel level, coolant temperature and the status of various indicators to the operator.



Storage Space

Seat backrest box



Tool box for canopy spec



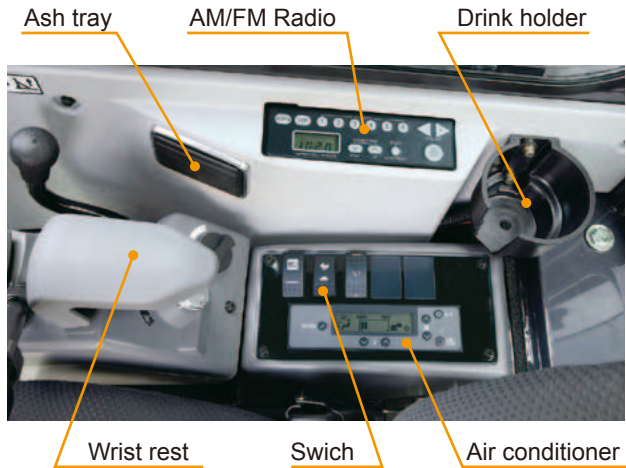
The tool box is provided behind the operator’s seat as standard for AX40u/50u only.

Pilot Control Shut-Off Lever and Neutral Engine Start System

All operations such as front swing, travel and blade are shut off when the pilot control lever is up. It prevents accidental movement. The engine can start only when the pilot control shut-off lever is locked. This is called the neutral engine start system. It eliminates unexpected operation.



Brakes on Both The Swing and Travel Operation are equipped as Standard for Safety



Equipment

Standard Equipment

- Auto-idling system(AX30u~50u)
- Reclining seat
- Seat belt
- Wrist rests
- Drink holder
- Electric horn
- Cigarette lighter (12V outlet)
- Floor mat
- Rearview mirror
(AX40u/50u canopy)
- Two work lights

Option

- Suspension seat
- Retractable seat belt
- Rearview mirror(AX27u/30u/35u canopy)

Standard Equipment for Cabin

- Air conditioner
- AM/FM radio
- Window washer
- Defroster
- Ash tray
- Rearview mirror

Cabin Option

- Suspension seat
- Retractable seat belt
- Spare power supply (outside 12V outlet)

SPECIFICATIONS AX27u-5F

ENGINE

Model..... Yanmar 3TNV88
Type..... 4-cycle water-cooled, direct injection
No. of cylinders..... 3
Rated power
ISO 9249, net 19.7 kW (26.4 HP) at 2 200 min⁻¹ (rpm)
EEC 80/1269, net 19.7 kW (26.4 HP) at 2 200 min⁻¹ (rpm)
SAE J1349, net 19.7 kW (26.4 HP) at 2 200 min⁻¹ (rpm)
DIN 6271, net 19.5 kW (26.1 HP) at 2 200 min⁻¹ (rpm)
Gross 20.2 kW (27.5 HP) at 2 200 min⁻¹ (rpm)
Maximum torque..... 107 Nm (10.9 kgf m) at 1 000 min⁻¹ (rpm)
Piston displacement 1.642 L
Bore and stroke 88 mm x 90 mm
Electric system
Voltage 12 V
Batteries 55 Ah
Alternator 40 A
Starter motor 1.7 kW

HYDRAULIC SYSTEM

Main pumps 2 variable displacement axial piston pumps
..... 1 gear pump
Maximum oil flow..... 2 x 35.2 L/min
..... 1 x 17.6 L/min
Pilot pump 1 gear pump
Maximum oil flow..... 9.9 L/min

Hydraulic Motors

Travel..... 2 variable displacement axial piston motors
Swing..... 1 axial piston motor

Relief Valve Settings

Implement circuit 24.5 MPa (250 kgf/cm²)
Swing circuit 18.6 MPa (190 kgf/cm²)
Travel circuit 24.5 MPa (250 kgf/cm²)
Pilot circuit 3.9 MPa (40 kgf/cm²)
Auxiliary circuit..... 24.5 MPa (250 kgf/cm²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinder to absorb shock at stroke ends.

Dimensions

	Quantity	Bore	Rod diameter	Stroke
Boom	1	75 mm	45 mm	567 mm
Arm	1	65 mm	40 mm	549 mm
Bucket	1	55 mm	35 mm	437 mm
Blade	1	80 mm	45 mm	135 mm
Boom swing	1	75 mm	40 mm	525 mm

CONTROLS

Hydraulic pilot control levers for all operations.

UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is lubricated by hydraulic oil. Swing circle is single-row, shear-type ball bearing with inductionhardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed 9.1 min⁻¹ (rpm)
Swing torque 3.83 kN·m (390 kgf·m)

Operator's Cab

Independent spacious cab, 960mm wide by 1,520mm high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) can be opened. Reclining seat.
* International Standardization Organization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame.

Numbers of Rollers and Shoes on Each Side

Upper rollers 1
Lower rollers 4

Travel Device

Each track driven by 2-speed axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are replaceable.

Parking brake is spring-set/hydraulic-released disc type.

Travel speeds High : 0 to 4.5 km/h
..... Low : 0 to 2.6 km/h

Maximum traction force 27.3 kN (2,790 kgf)
Gradeability 58 % (30 degree) continuous

WEIGHTS AND GROUND PRESSURE

AX27u-5F Equipped with 2.10m boom, 1.17m arm and 0.08m³ bucket (ISO heaped).

	Operating weight	Ground pressure
4-Pillars Canopy version		
300 mm rubber shoes	2,840 kg	28 kPa
300 mm steel shoes	2,930 kg	30 kPa
Cabin version		
300 mm rubber shoes	3,010 kg	30 kPa
300 mm steel shoes	3,100 kg	31 kPa

* Operating weight with 0.08m³ bucket if fully serviced +80kg operator ISO 6016.

SERVICE REFILL CAPACITIES

Fuel tank 40.0 L
Engine coolant 5.0 L
Engine oil 7.2 L
Travel device (each side) 0.6 L
Hydraulic system 56.0 L
Hydraulic oil tank 32.0 L

FRONT ATTACHMENTS

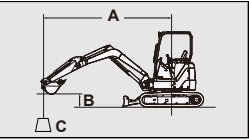
BACKHOE BUCKETS

ISO 7451 capacity	Width		No. of teeth	Weight	Front Attachment	
	Without side cutters	With side cutters			AX27u-5F	
					1.17m arm	1.47m arm
0.05 m³	300 mm	350 mm	3	53 kg	A	A
0.06 m³	350 mm	400 mm	3	55 kg	A	A
0.07 m³	400 mm	450 mm	3	58 kg	A	A
0.08 m³	450 mm	500 mm	3	61 kg	A	B
0.09 m³	500 mm	550 mm	4	66 kg	B	B
0.10 m³	550 mm	600 mm	4	70 kg	B	C
Arm crowd force					15.5 kN	13.4 kN
Bucket digging force					22.6 kN	22.6 kN

A: General digging B: Light-duty digging C: Loading

LIFTING CAPACITIES

- Notes: 1. Ratings are based on SAE J1097.
2. Lifting capacity of the AX Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. The load point is a hook (not standard equipment) located on the back of the bucket.
4. *Indicates load limited by hydraulic capacity.
5. 0 m = Ground.



A: Load radius

B: Load point height

C: Lifting capacity

AX27u-5F Canopy Version, Blade above Ground























Rating over-side or 360 degrees













Rating over-front










Unit: 1,000 kg

Conditions	Load point height	Load radius								At max. reach		
		1.0 m		2.0 m		3.0 m		4.0 m				
												meter
Arm 1.17 m Rubber shoes 300 mm	3.0 m					0.49	*0.54			0.30	0.34	3.98
	2.0 m					0.48	0.54	0.29	0.33	0.24	0.28	4.40
	1.0 m					0.44	0.51	0.28	0.32	0.23	0.26	4.48
	0 (Ground)					0.42	0.48	0.27	0.31	0.25	0.28	4.22
	-1.0 m	*1.58	*1.58	0.79	0.94	0.41	0.48			0.33	0.38	3.53
	-2.0 m			0.83	*0.91							

Conditions	Load point height	Load radius								At max. reach		
		1.0 m		2.0 m		3.0 m		4.0 m				
												meter
Arm 1.17 m Rubber shoes 300 mm Additional counterweight 190 kg	3.0 m					*0.54	*0.54			0.36	*0.40	3.98
	2.0 m					0.56	0.64	0.35	0.39	0.29	0.34	4.40
	1.0 m					0.53	0.60	0.34	0.38	0.28	0.32	4.48
	0 (Ground)					0.50	0.58	0.33	0.37	0.30	0.35	4.22
	-1.0 m	*1.58	*1.58	0.94	1.11	0.50	0.57			0.40	0.46	3.53
	-2.0 m			*0.91	*0.91							

AX27u-5F Canopy Version, Blade on Ground

Conditions	Load point height	Load radius								At max. reach		
		1.0 m		2.0 m		3.0 m		4.0 m				
												meter
Arm 1.17 m Rubber shoes 300 mm	3.0 m					0.49	*0.54			0.30	*0.40	3.98
	2.0 m					0.48	*0.65	0.29	*0.65	0.24	*0.39	4.40
	1.0 m					0.44	*0.98	0.28	*0.73	0.23	*0.41	4.48
	0 (Ground)					0.42	*1.19	0.27	*0.79	0.25	*0.49	4.22
	-1.0 m	*1.58	*1.58	0.79	*1.65	0.41	*1.11			0.33	*0.70	3.53
	-2.0 m			0.83	*0.91							

Conditions	Load point height	Load radius								At max. reach		
		1.0 m		2.0 m		3.0 m		4.0 m				
												meter
Arm 1.17 m Rubber shoes 300 mm Additional counterweight 190 kg	3.0 m					*0.54	*0.54			0.36	*0.40	3.98
	2.0 m					0.56	*0.65	0.35	*0.65	0.29	*0.39	4.40
	1.0 m					0.53	*0.98	0.34	*0.73	0.28	*0.41	4.48
	0 (Ground)					0.50	*1.19	0.33	*0.79	0.30	*0.49	4.22
	-1.0 m	*1.58	*1.58	0.94	*1.65	0.50	*1.11			0.40	*0.70	3.53
	-2.0 m			*0.91	*0.91							

SPECIFICATIONS

AX40u/50u-5F

●ENGINE

Model.....	Yanmar 4TNV88
Type.....	4-cycle water-cooled, direct injection
No. of cylinders.....	4
Rated power	
ISO 9249, net	28.4 kW (38.1 HP) at 2 400 min ⁻¹ (rpm)
EEC 80/1269, net	28.4 kW (38.1 HP) at 2 400 min ⁻¹ (rpm)
SAE J1349, net	28.4 kW (38.1 HP) at 2 400 min ⁻¹ (rpm)
DIN 6271, net	28.2 kW (37.8 HP) at 2 400 min ⁻¹ (rpm)
Gross.....	29.5 kW (39.5 HP) at 2 400 min ⁻¹ (rpm)
Maximum torque.....	141 Nm (14.4 kgf m) at 1 100 min ⁻¹ (rpm)
Piston displacement	2.189 L
Bore and stroke	88 mm x 90 mm
Electric system	
Voltage	12 V
Batteries	72 Ah
Alternator.....	55 A
Starter motor	2.3 kW

●HYDRAULIC SYSTEM

Main pumps.....	1 variable displacement axial piston pumps
Maximum oil flow.....	1 x 120 L/min
Pilot pump	1 gear pump
Maximum oil flow.....	12.0 L/min

Hydraulic Motors

Travel.....	2 variable displacement axial piston motors
Swing.....	1 axial piston motor

Relief Valve Settings



Implement circuit	24.5 MPa (250 kgf/cm ²)
Swing circuit	18.1 MPa (185 kgf/cm ²)
Travel circuit	24.5 MPa (250 kgf/cm ²)
Pilot circuit	5.9 MPa (60.2 kgf/cm ²)
Auxiliary circuit.....	24.5 MPa (250 kgf/cm ²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinder to absorb shock at stroke ends.
--


Dimensions

	Quantity	Bore	Rod diameter	Stroke
Boom	1	90 mm	55 mm	702 mm
	1	95 mm	55 mm	702 mm
Arm	1	80 mm	50 mm	698 mm
	1	80 mm	50 mm	731 mm
Bucket	1	70 mm	40 mm	551 mm
	1	75 mm	45 mm	551 mm
Blade	1	105 mm	50 mm	140 mm
	1	105 mm	50 mm	140 mm
Boom swing	1	90 mm	50 mm	140 mm
	1	90 mm	50 mm	664 mm

Figure in  are data on the AX40u-5F
Figure in  are data on the AX50u-5F

●CONTROLS

Hydraulic pilot control levers for all operations.
--


UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is lubricated by hydraulic oil. Swing circle is single-row, shear-type ball bearing with inductionhardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed	9.0 min ⁻¹ (rpm)
Swing torque	8.92 kN·m (910 kgf·m)

Operator's Cab

Independent spacious cab, 960mm wide by 1,520mm high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper and lower) can be opened. Reclining seat.
* International Standardization Organization

●UNDERCARRIAGE

Tracks
Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame.

Numbers of Rollers and Shoes on Each Side

Upper rollers.....	1
Lower rollers.....	4

Travel Device

Each track driven by 2-speed axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are replaceable.

Parking brake is spring-set/hydraulic-released disc type.

Travel speeds	High : 0 to 4.2 km/h
.....	Low : 0 to 2.7 km/h
Maximum traction force	38.3 kN (3,905 kgf)
Gradeability	58 % (30 degree) continuous

WEIGHTS AND GROUND PRESSURE


AX40u-5F Equipped with 2.68 m boom, 1.38 m arm and 0.14 m³ bucket (ISO heaped). AX50u-5F Equipped with 2.85m boom, 1.38m arm and 0.16m³ bucket (ISO heaped).

	AX40u-5F		AX50u-5F	
	Operating weight	Ground pressure	Operating weight	Ground pressure
4-Pillars Canopy version				
400 mm rubber shoes	4,570 kg	26 kPa	4,900(5,180) kg	28(29) kPa
400 mm steel shoes	4,640 kg	26 kPa	4,970(5,250) kg	28(29) kPa
Cabin version				
400 mm rubber shoes	4,730 kg	27 kPa	5,060(5,340) kg	29(30) kPa
400 mm steel shoes	4,800 kg	27 kPa	5,130(5,410) kg	29(30) kPa

* AX40u-5F Operating weight with 0.14m³ bucket if fully serviced +80kg operator ISO 6016.
 * AX50u-5F Operating weight with 0.16m³ bucket if fully serviced +80kg operator ISO 6016.
 The figure in () shows the machine equipped with long arm and add. counterweight.

●SERVICE REFILL CAPACITIES

Fuel tank	70.0 L
Engine coolant	6.5 L
Engine oil	8.6 L
Travel device (each side)	0.9 L
Hydraulic system	77.0 L
Hydraulic oil tank	50.0 L


FRONT ATTACHMENTS

BACKHOE BUCKETS

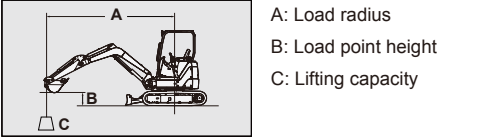
ISO 7451 capacity	Width		No. of teeth	Weight	Front Attachment			
	Without side cutters	With side cutters			AX40u-5F		AX50u-5F	
					1.38m arm	1.69m arm	1.38m arm	1.69m arm
0.10 m³	400 mm	450 mm	3	92 kg	A	A	A	A
0.11 m³	450 mm	500 mm	3	96 kg	A	A	A	A
0.13 m³	500 mm	550 mm	4	104 kg	A	A	A	A
0.14 m³	550 mm	600 mm	4	109 kg	A	C	A	A
0.16 m³	600 mm	650 mm	4	113 kg	C	C	A	B
0.17 m³	650 mm	700 mm	4	120 kg	C	C	B	C
Arm crowd force					24.0kN	21.0kN	24.0kN	21.0kN
Bucket digging force					32.1kN	32.1kN	36.8kN	36.8kN

A: General digging B: Light-duty digging C: Loading

A: General digging B: Light-duty digging C: Loading











LIFTING CAPACITIES











- Notes: 1. Ratings are based on SAE J1097.
2. Lifting capacity of the AX Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
3. The load point is a hook (not standard equipment) located on the back of the bucket.
4. *Indicates load limited by hydraulic capacity.
5. 0 m = Ground.













AX40u-5F Canopy Version, Blade above Ground, 1.38m Arm











 Rating over-side or 360 degrees  Rating over-front Unit: 1,000 kg

Conditions	Load point height	Load radius								At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m				meter
												
Arm 1.38 m Rubber shoes 400 mm	4.0 m									0.52	0.65	4.56
	3.0 m					0.65	0.80			0.40	0.50	5.20
	2.0 m			1.01	1.27	0.62	0.77	0.41	0.51	0.34	0.44	5.49
	1.0 m			0.90	1.15	0.58	0.73	0.39	0.50	0.33	0.42	5.51
	0 (Ground)			0.85	1.10	0.55	0.70	0.38	0.49	0.35	0.45	5.26
	-1.0 m	1.75	2.39	0.85	1.10	0.54	0.69			0.43	0.55	4.69
	-2.0 m	1.80	*1.91	0.88	1.13							











Conditions	Load point height	Load radius								At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m				meter
												
Arm 1.38 m Rubber shoes 400 mm Additional counterweight 220 kg	4.0 m					0.74	*0.89			0.60	*0.68	4.56
	3.0 m					0.46				0.46	0.57	5.20
	2.0 m			1.14	*1.34	0.71	0.88	0.48	0.59	0.41	0.51	5.49
	1.0 m			1.03	1.31	0.67	0.83	0.46	0.58	0.39	0.49	5.51
	0 (Ground)			0.99	1.26	0.64	0.80	0.45	0.56	0.42	0.53	5.26
	-1.0 m	1.99	*2.47	0.99	1.26	0.63	0.79			0.51	0.64	4.69
	-2.0 m	*1.91	*1.91	1.01	1.29							

AX40u-5F Canopy Version, Blade on Ground, 1.38m Arm

Conditions	Load point height	Load radius								At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m				meter
												
Arm 1.38 m Rubber shoes 400 mm	4.0 m					0.65	*0.89			0.52	*0.68	4.56
	3.0 m					0.40				0.40	*0.65	5.20
	2.0 m			1.01	*1.34	0.62	*1.04	0.41	*0.93	0.34	*0.66	5.49
	1.0 m			0.90	*2.00	0.58	*1.26	0.39	*0.99	0.33	*0.71	5.51
	0 (Ground)			0.85	*2.16	0.55	*1.39	0.38	*1.01	0.35	*0.82	5.26
	-1.0 m	1.75	*2.47	0.85	*1.95	0.54	*1.32			0.43	*0.88	4.69
	-2.0 m	1.80	*1.91	0.88	*1.41							

Conditions	Load point height	Load radius								At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m				meter
												
Arm 1.38 m Rubber shoes 400 mm Additional counterweight 220 kg	4.0 m					0.74	*0.89			0.60	*0.68	4.56
	3.0 m					0.46				0.46	*0.65	5.20
	2.0 m			1.14	*1.34	0.71	*1.04	0.48	*0.93	0.41	*0.66	5.49
	1.0 m			1.03	*2.00	0.67	*1.26	0.46	*0.99	0.39	*0.71	5.51
	0 (Ground)			0.99	*2.16	0.64	*1.39	0.45	*1.01	0.42	*0.82	5.26
	-1.0 m	1.99	*2.47	0.99	*1.95	0.63	*1.32			0.51	*0.88	4.69
	-2.0 m	*1.91	*1.91	1.01	*1.41							

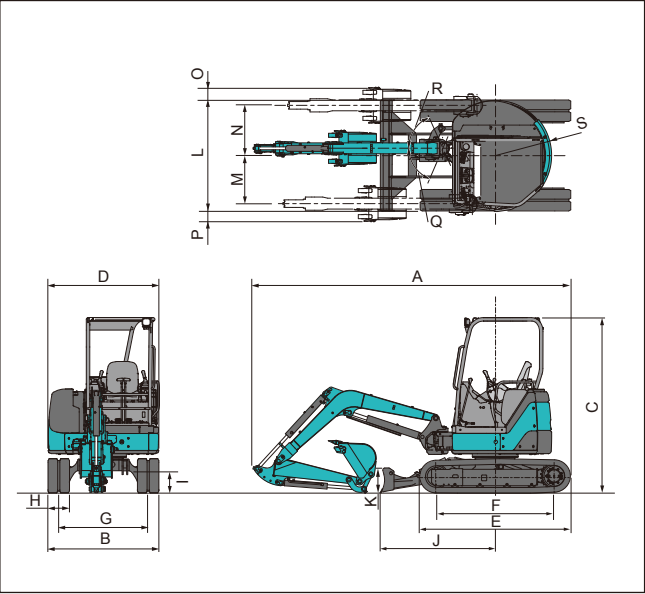
AX50u-5F Canopy Version, Blade above Ground, 1.38m Arm

Conditions	Load point height	Load radius								At max. reach		
		2.0 m		3.0 m		4.0 m		5.0 m				meter
												
Arm 1.38 m Rubber shoes 400 mm	4.0 m					0.79	*0.80			*0.56	*0.56	4.82
	3.0 m					0.79	*0.93			0.46	*0.53	5.42
	2.0 m			1.20	1.45	0.75	0.90	0.51	0.61	0.41	0.49	5.69
	1.0 m					0.71	0.85	0.49	0.59	0.39	0.47	5.71
	0 (Ground)			1.05	1.28	0.68	0.82	0.48	0.58	0.42	0.50	5.48
	-1.0 m	*2.04	*2.04	1.05	1.29	0.67	0.81			0.50	0.60	4.94
	-2.0 m	2.19	*2.43	1.07	1.31	0.68	0.83					

Conditions	Load point height	Load radius		
------------	-------------------	-------------	--	--

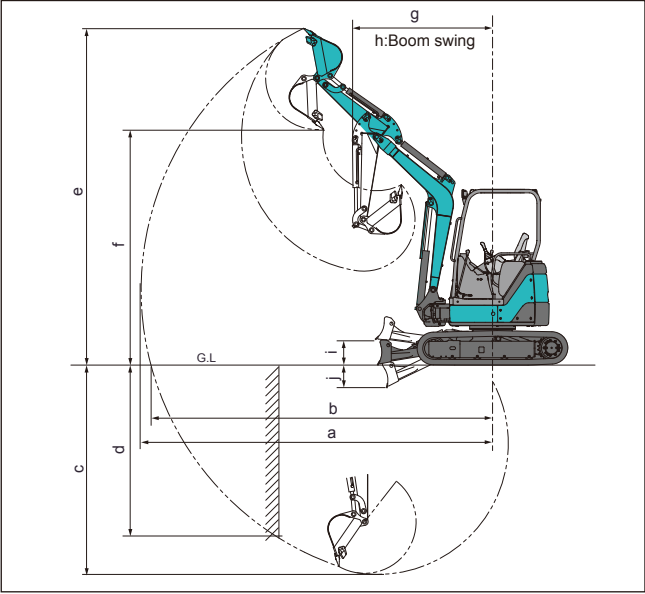
DIMENSIONS & WORKING RANGES

DIMENSIONS



Note:
The illustration shows the AX30u-5F canopy version equipped with 1.17m arm and 300mm rubber shoes.

WORKING RANGES



Note:
The illustration shows the AX30u-5F canopy version equipped with 0.09m³ bucket, 1.52m arm and 300mm rubber shoes.

DIMENSIONS & WORKING RANGES

Unit: mm

Item			Model		ΔX27u-5F		ΔX30u-5F		ΔX35u-5F		ΔX40u-5F		ΔX50u-5F	
Shoe type														
Roof type			Canopy		Cabin		Canopy		Cabin		Canopy		Cabin	
DIMENSIONS	A: Max. transport length (with long arm)	mm	4,200(4,280)		4,450(4,560)		4,650(4,780)		5,340(5,380)		5,460(5,520)			
	B: Undercarriage width	mm	1,550		1,550		1,740		1,990		2,000			
	C: Overall height	mm	2,460	2,500	2,460	2,500	2,460	2,500	2,510	2,550	2,510	2,550		
	D: Upper structure width	mm	1,550		1,550		1,550		1,960		1,850			
	E: Undercarriage length	mm	1,950		2,100		2,100		2,500		2,500			
	F: Sprocket center to ider center	mm	1,490		1,650		1,650		1,990		1,990			
	G: Distance between undercarriage center	mm	1,250		1,250		1,440		1,560		1,600			
	H: Track shoe width	mm	300		300		300		400		400			
	I: Min. ground clearance	mm	320		280		280		340		340			
	J: Parallel blade distance	mm	1,530		1,610		1,610		1,720		1,720			
	K: Blade height	mm	320		355		355		360		360			
	L: Blade width	mm	1,550		1,550		1,740		1,960		2,000			
	M: Left offset distance	mm	605		605		605		695		695			
	N: Right offset distance	mm	740	700	740	700	740	700	860		860			
	O: Right over width	mm	215	175	215	175	215	130	180		185			
P: Left over width	mm	80		80		35		15		20				
Q: Left max. boom swing angle	deg	72	62	72	62	72	62	80		80				
R: Right max. boom swing angle	deg	62		62		62		60		60				
S: Rear edge swing radius	mm	775		775		870		980		1,000				
WORKING RANGES	a: Max. digging reach (with long arm)	mm	4,670(4,920)		4,890(5,170)		5,210(5,520)		5,740(6,030)		5,940(6,240)			
	b: Max. digging reach at ground	mm	4,530(4,780)		4,760(4,890)		5,080(5,390)		5,590(5,880)		5,800(6,100)			
	c: Max. digging depth (with long arm)	mm	2,590(2,890)		2,780(3,130)		3,050(3,450)		3,340(3,650)		3,550(3,860)			
	d: Max. vertical wall (with long arm)	mm	2,200(2,390)		2,340(2,540)		2,590(2,800)		2,550(2,900)		2,820(3,160)			
	e: Max. cutting height (with long arm)	mm	4,450(4,550)	4,280(4,350)	4,620(4,700)	4,430(4,470)	4,870(4,950)	4,710(4,60)	5,600(5,840)	5,480(5,700)	5,760(6,010)	5,630(5,870)		
	f: Max. dumping height (with long arm)	mm	3,190(3,300)	3,030(3,120)	3,210(3,310)	3,040(3,100)	3,470(3,570)	3,320(3,390)	3,920(4,160)	3,810(4,040)	4,080(4,330)	3,960(4,200)		
	g: Min. swing radius (with long arm)	mm	1,960(2,040)	2,040(2,100)	1,950(2,080)	2,140(2,180)	2,070(2,170)	2,230(2,300)	2,190(2,330)	2,270(2,390)	2,150(2,260)	2,300(2,320)		
	h: Max. boom swing (with long arm)	mm	1,580(1,640)	1,750(1,790)	1,580(1,660)	1,730(1,730)	1,670(1,730)	1,810(1,970)	1,710(1,820)	1,780(1,880)	1,680(1,770)	1,790(1,820)		
	i: Blade bottom highest position (above ground)	mm	360		360		370		430		430			
	j: Blade bottom lowest position (under ground)	mm	315		320		390		335		335			

The figure in () shows the machine equipped with long arm.

EQUIPMENT

STANDARD EQUIPMENT

Standard equipment may vary by country, so please consult your AIRMAN dealer for details.

ENGINE

- Water-separator for engine fuel
- Radiator reserve tank
- Electrical fuel feed pump
- Cartridge-type engine oil filter
- Fuel filter

HYDRAULIC SYSTEM

- Hydraulic pilot type control levers
- Pilot control shut-off lever with neutral engine start system
- Swing parking brake
- Travel parking brake
- Two-speed travel system
- Auto idling system (AX30u~50u)
- Suction filter
- Full-flow filter
- Pilot filter
- Boom anti-drift valve (AX30u~50u)

4-PILLARS CANOPY

- ROPS/OPG canopy
- Reclining seat
- Seat belt
- Wrist rests
- Drink holder
- Electric horn
- Cigarette lighter (12V outlet)
- Floor mat
- Rearview mirror (AX40u/50u)
- Two work lights

UPPERSTRUCTURE

- Utility box

UNDERCARRIAGE

- 300mm rubber shoes(AX27u/30u/35u)
- 400mm rubber shoes(AX40u/50u)

FRONT ATTACHMENTS

- Original bushing
- 1.17m arm(AX27u/30u)
- 1.32m arm(AX35u)
- 1.38m arm(AX35u/40u)

OPTIONAL EQUIPMENT

Optional equipment may vary by country, so please consult your AIRMAN dealer for details.

ENGINE

- Air cleaner inner element

HYDRAULIC SYSTEM

- Valve for extra piping
- 2-way control lever pattern selector valve

CABIN

- ROPS/OPG cab
- Air conditioner
- AM/FM radio
- Window washer
- Defroster
- Reclining seat
- Seat belt
- Wrist rests
- Wiper
- Drink holder
- Electric horn
- Cigarette lighter (inside 12V outlet)
- Ashtray
- Floor mat
- Rearview mirror
- Two work lights

CABIN OPTIONAL EQUIPMENT

- Suspension seat
- Retractable seat belt
- Spare power supply (outside 12V outlet)

UPPERSTRUCTURE

- Suspension seat
- Retractable seat belt
- Rearview mirror(AX27u~35u for canopy)
- Accumulator
- Additional counterweight
- Theft deterrent system
- AFL(AUX Function lever)
- Auxiliary overload relief valve
- Travel motion alarm device
- Protective mesh screen for radiator and oil cooler

UNDERCARRIAGE

- Grouser shoes
- Pad crawler shoes

FRONT ATTACHMENTS

- Auxiliary piping
- Long arm
- Backhoe buckets(refer to specification page)