SPECIFICATIONS

BASIC SPECIFICATIONS

Type			2-Piece boom
MASS			
Operating mass	kg (lb)	Machines with outriggers	10410 (22950)*** 10460 (23060)****
		Equipped with a rear blade	10120 (22311)*** 10170 (22421)****
Maximum operating mass**	kg (lb)		11790 (25992)
PERFORMANCE			
Bucket capacity (Standard bucket)	m^3 (cu. ft.)	Heaped	0.245 (8.65)
		Struck	0.185 (6.53)
Slew speed	min^{-1} (rpm)		10.1 (10.1)
Travel speed	km/h (mph)	Low-speed travel 1	0 to 5.3 (3.29) / 0 to 5.3 (3.29)*
		High-speed travel 1	0 to 15.4 (9.57) / 0 to 10.6 (6.59)*
		Low-speed travel 2	0 to 10.3 (6.4) / 0 to 10.3 (6.4)*
		High-speed travel 2	0 to 29.7 (18.46) / 0 to 20.4 (12.68)*
Gradeability	(degrees)		35
Noise level dB (A)	Sound power level		L_{WA} 99
	Emission sound pressure level at the operator's position (ISO 6396,2008:)		L_{pA} 76 *** L_{pA} 75 ****
ENGINE			
Manufacturer and model			DEUTZ TCD3.6L4
Rated output	Net (ISO 14396)	kW/min^{-1} (hp/rpm)	85/2200 (113.9/2200)
Displacement		ml (cu.in.)	3621 (221)
Starter		V-kW	24 - 4.0
Alternator		V-kW	28 - 2.24
Battery (IEC 60095-1)		V-A·h	12 – 90 X 2

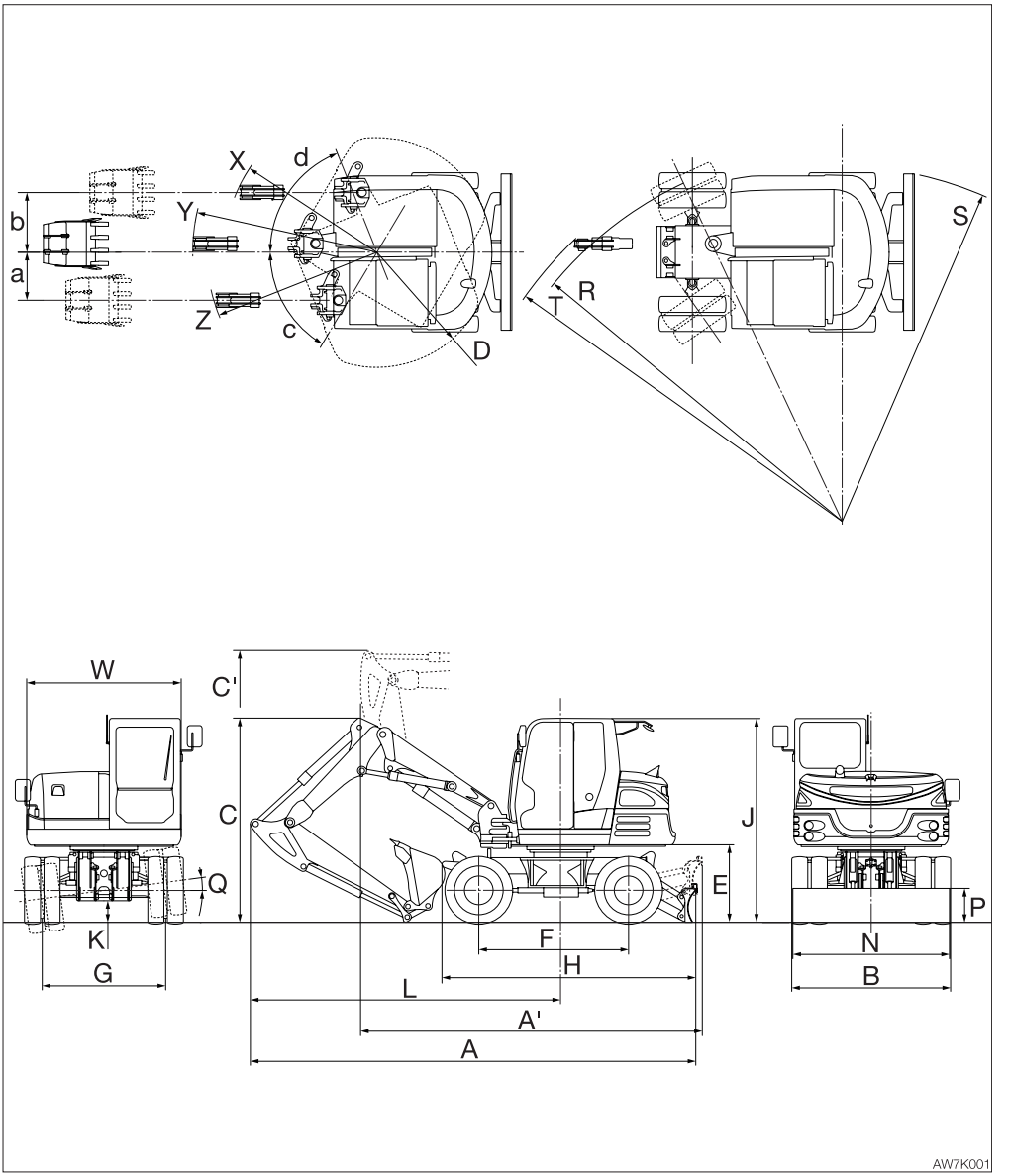
*: for Germany
**: This value is the maximum safe mass for operation specified by the manufacturer. Optional accessories can be added until the operating mass exceeds this value.
***: Applicable machine models 190300003 or later
****: Applicable machine models 190400002 or later

Type			Mono-boom
MASS			
Operating mass	kg (lb)	Machines with outriggers	10055 (22167)*** 10105 (22277)****
		Equipped with a rear blade	9765 (21528)*** 9815 (21638)****
Maximum operating mass**	kg (lb)		11790 (25992)
PERFORMANCE			
Bucket capacity (Standard bucket)	m^3 (cu. ft.)	Heaped	0.245 (8.65)
		Struck	0.185 (6.53)
Slew speed	min^{-1} (rpm)		10.1 (10.1)
Travel speed	km/h (mph)	Low-speed travel 1	0 to 5.3 (3.29) / 0 to 5.3 (3.29)*
		High-speed travel 1	0 to 15.4 (9.57) / 0 to 10.6 (6.59)*
		Low-speed travel 2	0 to 10.3 (6.4) / 0 to 10.3 (6.4)*
		High-speed travel 2	0 to 29.7 (18.46) / 0 to 20.4 (12.68)*
Gradeability	(degrees)		35
Noise level dB (A)	Sound power level		L_{WA} 99
	Emission sound pressure level at the operator's position (ISO 6396,2008:)		L_{pA} 76 *** L_{pA} 75 ****
ENGINE			
Manufacturer and model			DEUTZ TCD3.6L4
Rated output	Net (ISO 14396)	kW/min^{-1} (hp/rpm)	85/2200 (113.9/2200)
Displacement		ml (cu.in.)	3621 (221)
Starter		V-kW	24 - 4.0
Alternator		V-kW	28 - 2.24
Battery (IEC 60095-1)		V-A·h	12 – 90 X 2

*: for Germany
**: This value is the maximum safe mass for operation specified by the manufacturer. Optional accessories can be added until the operating mass exceeds this value.
***: Applicable machine models 190300003 or later
****: Applicable machine models 190400002 or later

MACHINE DIMENSIONS

2-Piece boom (Two cylinders) (Equipped with a rear blade)

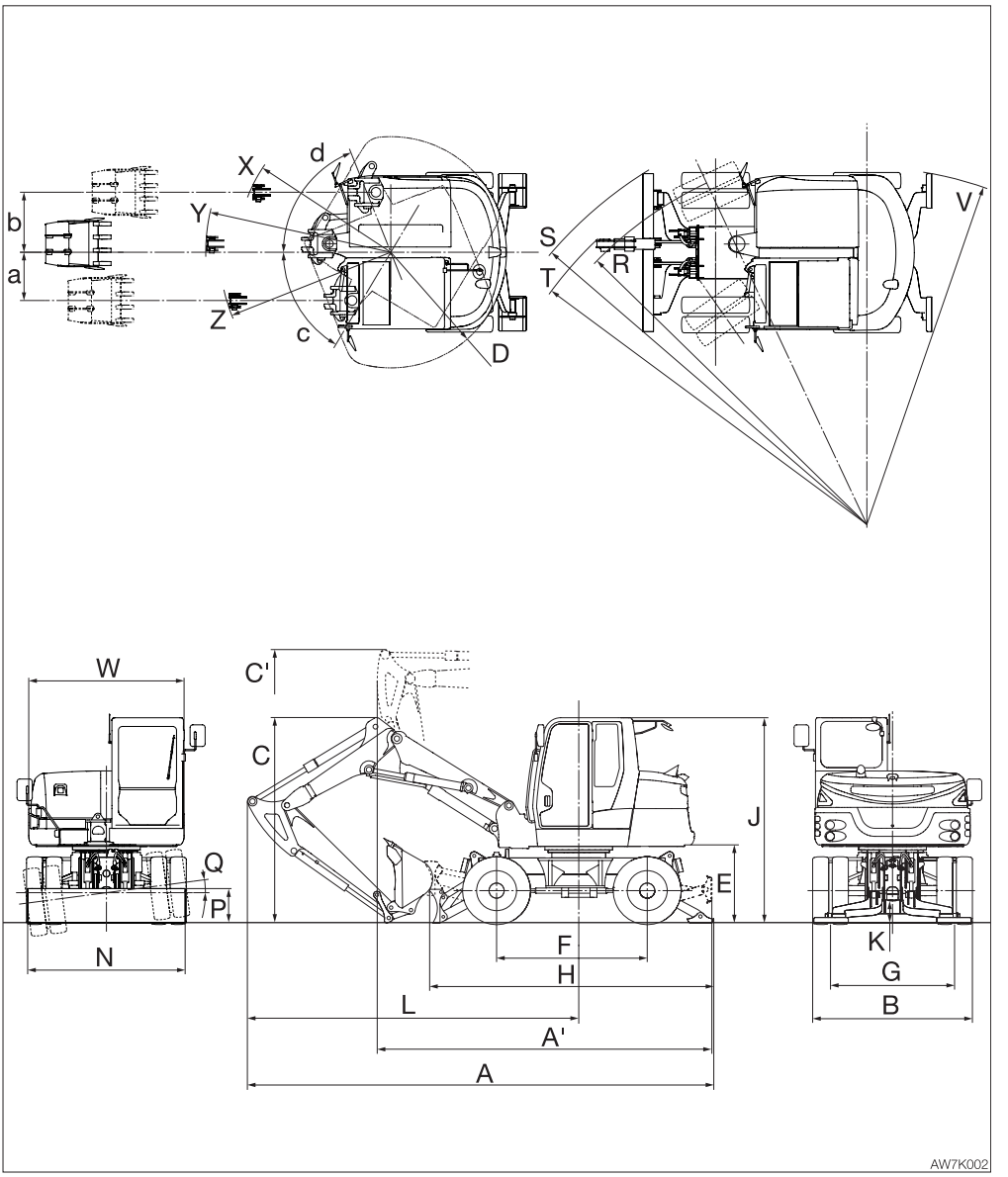


2-Piece boom (Two cylinders) (Equipped with a rear blade)

Unit: mm (inch)

	Item	2-Piece boom
A	Overall length	6565 (2585)
A'	Overall length (Road travel posture)	5020 (197.6)
B	Overall width	2335 (91.9)
C	Overall height	3000 (118.1)
C'	Overall height (Road travel posture)	3995 (157.3)
D	Slew radius	1690 (66.5)
E	Clearance height under upperstructure	1140 (44.9)
F	Wheel base	2200 (86.6)
G	Tread	1810 (71.3)
H	Overall length of undercarriage	3745 (147.4)
J	Overall height of base machine	3010 (118.5)
K	Ground clearance of undercarriage	320 (12.6)
L	Front distance to axis of rotation	4555 (179.3)
N	Dozer blade width	2300 (90.6)
P	Dozer blade height	500 (19.7)
Q	Swing angle of axles	7.5°
R	Minimum turning radius (Tire)	5490 (216.1)
S	Minimum turning radius (Dozer blade)	5215 (205.3)
T	Outside machine clearance radius	5710 (224.8)
W	Overall width of upperstructure	2270 (89.4)
X	Minimum radius of equipment at maximum front offset (Right)	2240 (88.2)
Y	Minimum radius of equipment and attachment	2705 (106.5)
Z	Minimum radius of equipment at maximum front offset (Left)	2500 (98.4)
a	Offset distance of bucket (right swing)	705 (27.8)
b	Offset distance of bucket (left swing)	875 (34.4)
c	Boom swing angle (Right)	60°
d	Boom swing angle (Left)	70°

2-Piece boom (Two cylinders) (Machines with outriggers)

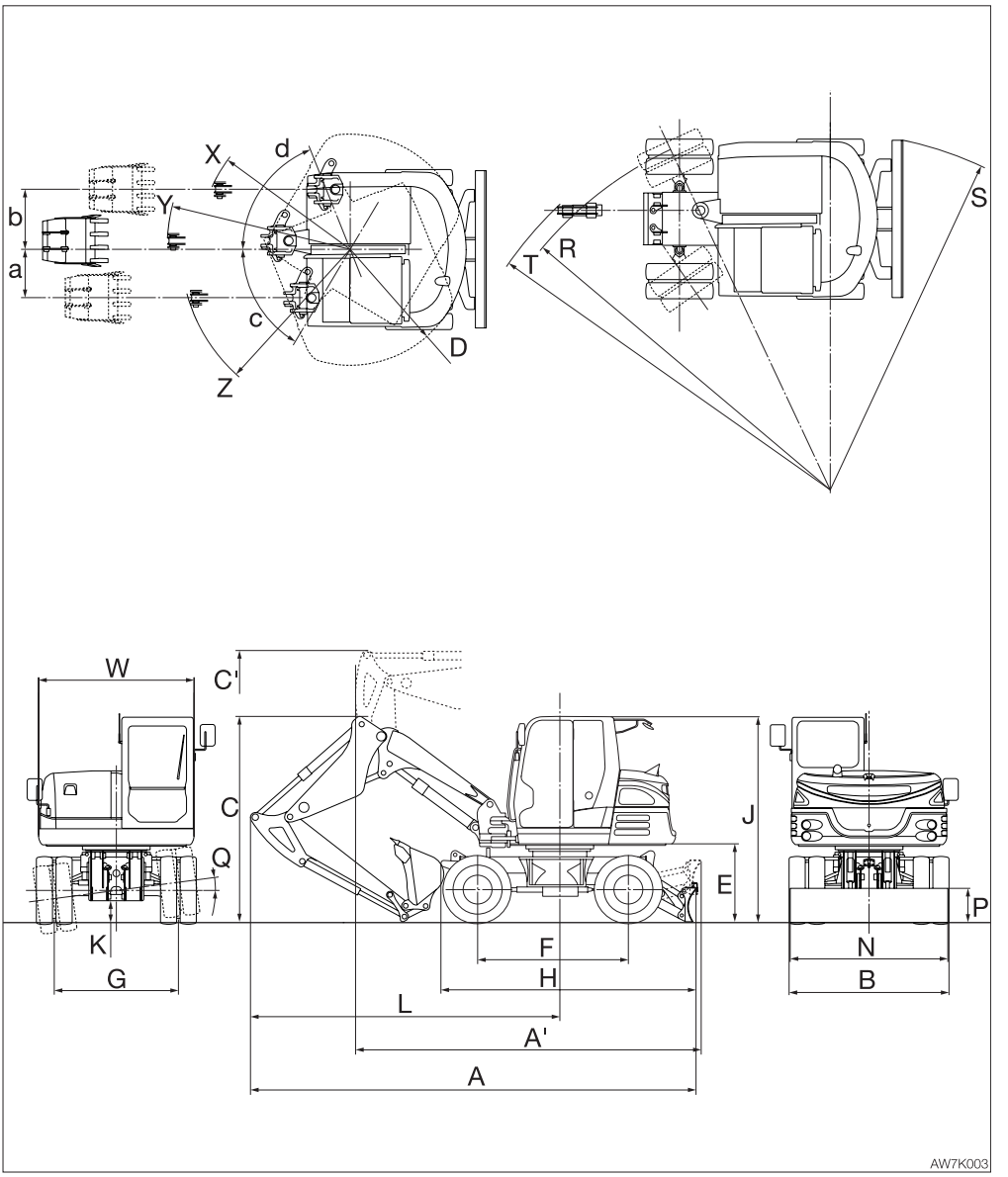


2-Piece boom (Two cylinders) (Machines with outriggers)

Unit: mm (inch)

	Item	2-Piece boom
A	Overall length	6815 (268.3)
A'	Overall length (Road travel posture)	4880 (192.1)
B	Overall width	2335 (91.9)
C	Overall height	3000 (118.1)
C'	Overall height (Road travel posture)	3995 (157.3)
D	Slew radius	1690 (66.5)
E	Clearance height under upperstructure	1140 (44.9)
F	Wheel base	2200 (86.6)
G	Tread	1810 (71.3)
H	Overall length of undercarriage	4165 (164)
J	Overall height of base machine	3010 (118.5)
K	Ground clearance of undercarriage	320 (12.6)
L	Front distance to axis of rotation	4835 (190.4)
N	Dozer blade width	2300 (90.6)
P	Dozer blade height	500 (19.7)
Q	Swing angle of axles	7.5°
R	Minimum turning radius (Tire)	5490 (216.1)
S	Minimum turning radius (Dozer blade)	6060 (238.6)
T	Outside machine clearance radius	5710 (224.8)
V	Minimum turn radius (outrigger)	5195 (204.5)
W	Overall width of upperstructure	2270 (89.4)
X	Minimum radius of equipment at maximum front offset (Right)	2240 (88.2)
Y	Minimum radius of equipment and attachment	2705 (106.5)
Z	Minimum radius of equipment at maximum front offset (Left)	2500 (98.4)
a	Offset distance of bucket (right swing)	705 (27.8)
b	Offset distance of bucket (left swing)	875 (34.4)
c	Boom swing angle (Right)	60°
d	Boom swing angle (Left)	70°

2-Piece boom (One cylinder) (Equipped with a rear blade)

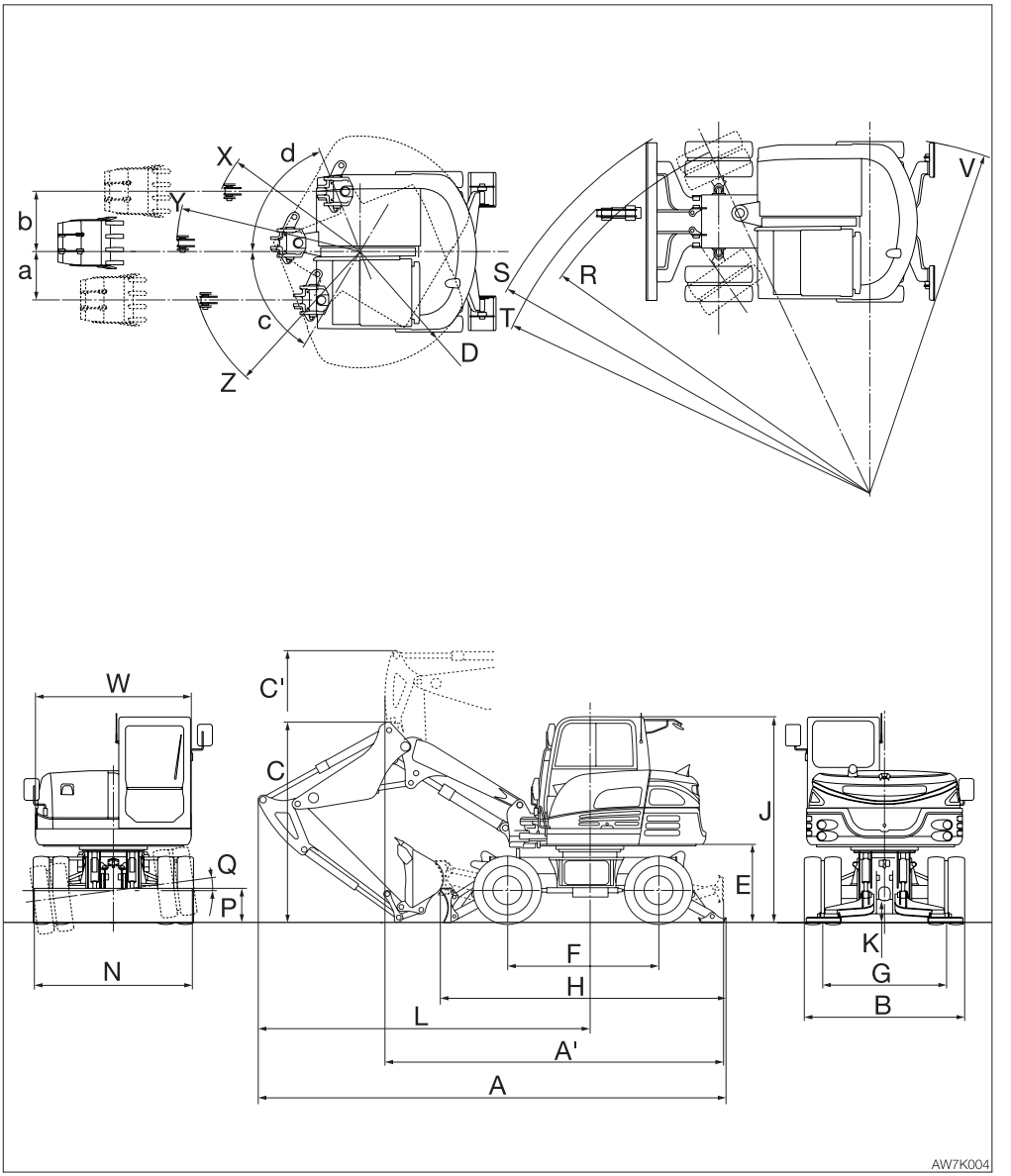


2-Piece boom (One cylinder) (Equipped with a rear blade)

Unit: mm (inch)

	Item	2-Piece boom
A	Overall length	6530 (257.1)
A'	Overall length (Road travel posture)	5065 (199.4)
B	Overall width	2335 (91.9)
C	Overall height	3000 (118.1)
C'	Overall height (Road travel posture)	4000 (157.5)
D	Slew radius	1690 (66.5)
E	Clearance height under upperstructure	1140 (44.9)
F	Wheel base	2200 (86.6)
G	Tread	1810 (71.3)
H	Overall length of undercarriage	3745 (147.4)
J	Overall height of base machine	3010 (118.5)
K	Ground clearance of undercarriage	320 (12.6)
L	Front distance to axis of rotation	4520 (178)
N	Dozer blade width	2300 (90.6)
P	Dozer blade height	500 (19.7)
Q	Swing angle of axles	7.5°
R	Minimum turning radius (Tire)	5490 (216.1)
S	Minimum turning radius (Dozer blade)	5215 (205.3)
T	Outside machine clearance radius	5740 (226)
W	Overall width of upperstructure	2270 (89.4)
X	Minimum radius of equipment at maximum front offset (Right)	2215 (87.2)
Y	Minimum radius of equipment and attachment	2675 (105.3)
Z	Minimum radius of equipment at maximum front offset (Left)	2470 (97.2)
a	Offset distance of bucket (right swing)	705 (27.8)
b	Offset distance of bucket (left swing)	875 (34.4)
c	Boom swing angle (Right)	60°
d	Boom swing angle (Left)	70°

2-Piece boom (One cylinder) (Machines with outriggers)

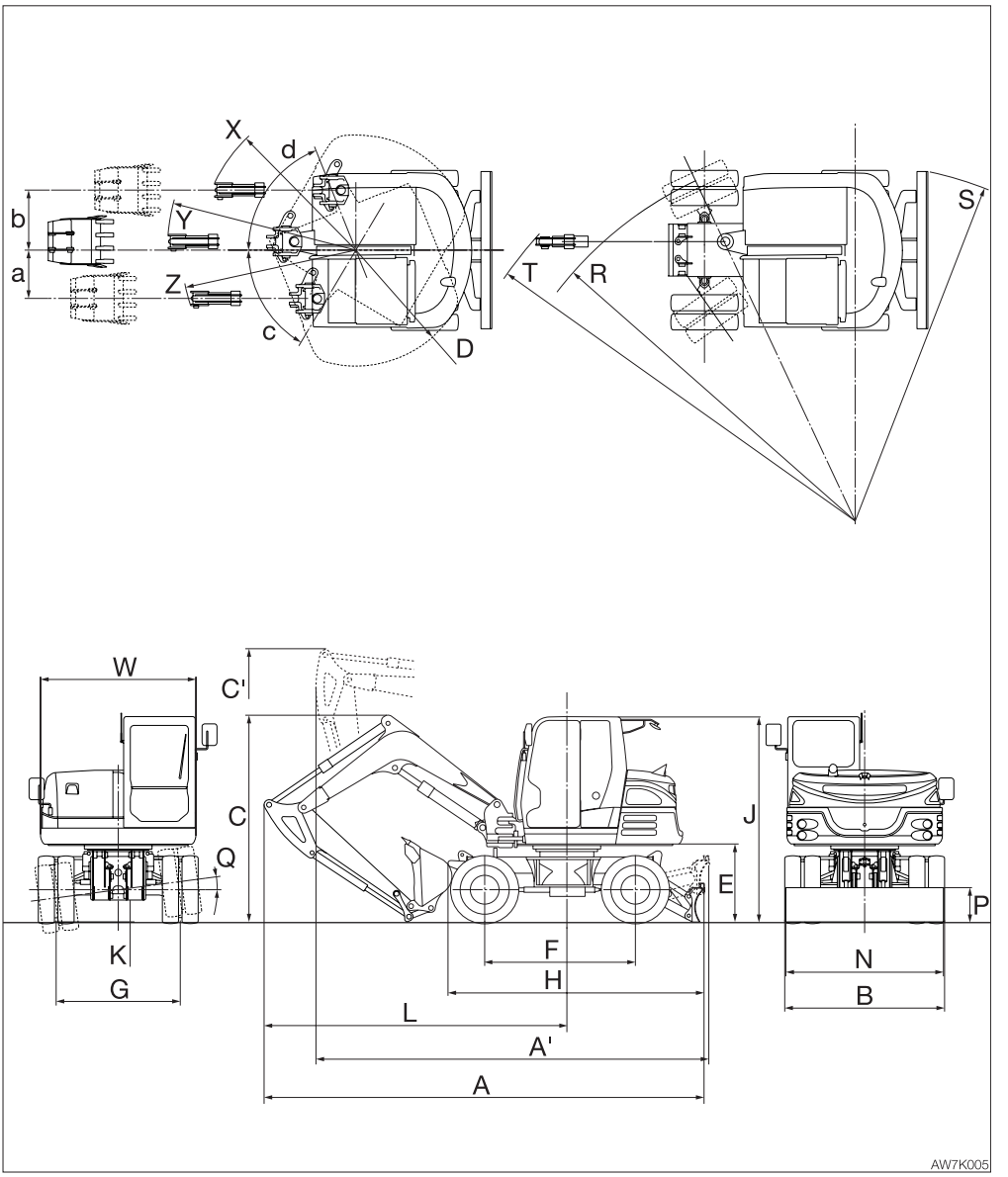


2-Piece boom (One cylinder) (Machines with outriggers)

Unit: mm (inch)

	Item	2-Piece boom
A	Overall length	6815 (268.3)
A'	Overall length (Road travel posture)	4925 (193.9)
B	Overall width	2335 (91.9)
C	Overall height	2925 (115.2)
C'	Overall height (Road travel posture)	4000 (157.5)
D	Slew radius	1690 (66.5)
E	Clearance height under upperstructure	1140 (44.9)
F	Wheel base	2200 (86.6)
G	Tread	1810 (71.3)
H	Overall length of undercarriage	4165 (164)
J	Overall height of base machine	3010 (118.5)
K	Ground clearance of undercarriage	320 (12.6)
L	Front distance to axis of rotation	4835 (190.4)
N	Dozer blade width	2300 (90.6)
P	Dozer blade height	500 (19.7)
Q	Swing angle of axles	7.5°
R	Minimum turning radius (Tire)	5490 (216.1)
S	Minimum turning radius (Dozer blade)	6060 (238.6)
T	Outside machine clearance radius	5740 (226)
V	Minimum turn radius (outrigger)	5195 (204.5)
W	Overall width of upperstructure	2270 (89.4)
X	Minimum radius of equipment at maximum front offset (Right)	2215 (87.2)
Y	Minimum radius of equipment and attachment	2675 (105.3)
Z	Minimum radius of equipment at maximum front offset (Left)	2470 (97.2)
a	Offset distance of bucket (right swing)	705 (27.8)
b	Offset distance of bucket (left swing)	875 (34.4)
c	Boom swing angle (Right)	60°
d	Boom swing angle (Left)	70°

Mono-boom (Equipped with a rear blade)

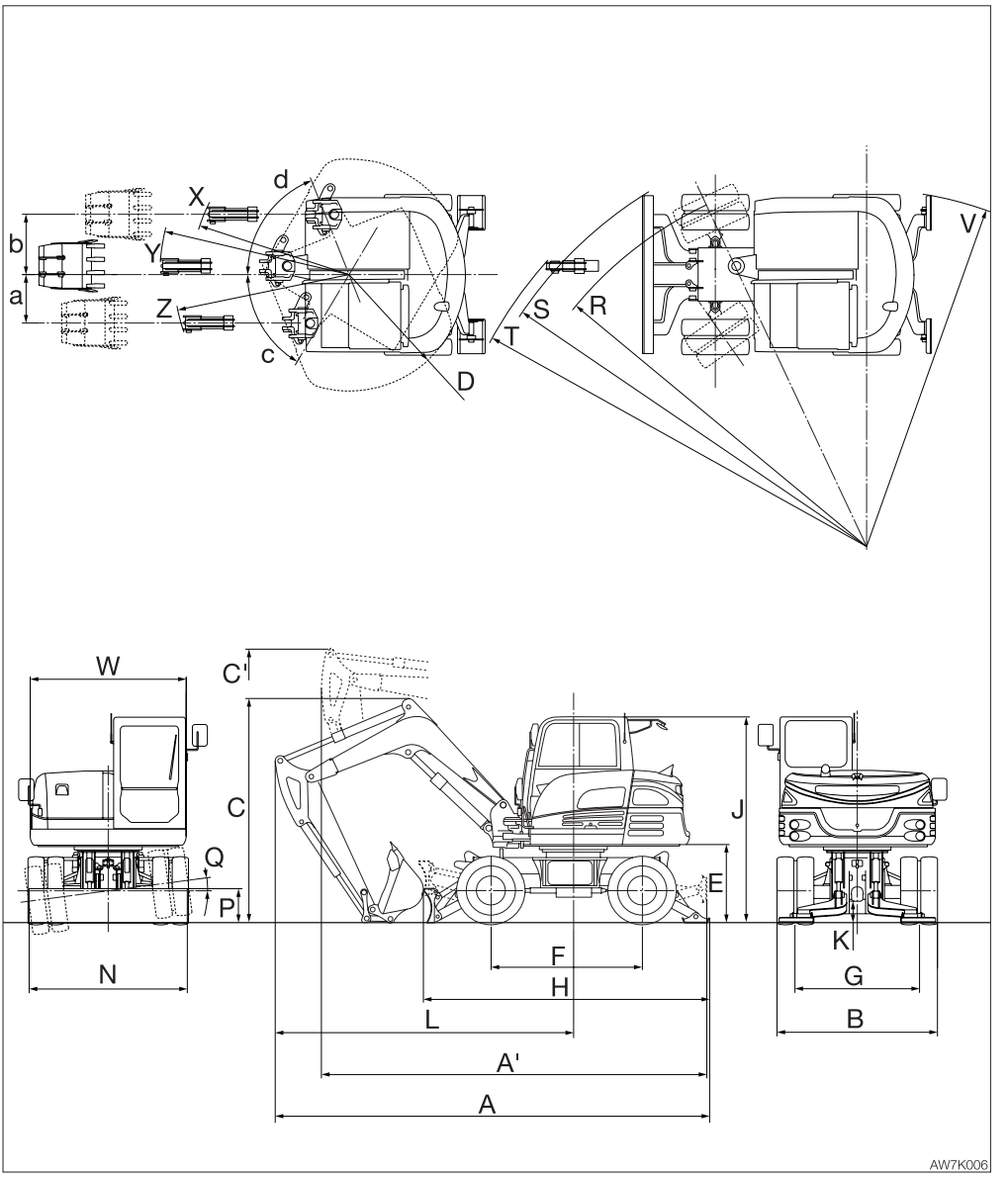


Mono-boom (Equipped with a rear blade)

Unit: mm (inch)

	Item	Mono-boom
A	Overall length	6435 (253.3)
A'	Overall length (Road travel posture)	5745 (226.2)
B	Overall width	2335 (91.9)
C	Overall height	3020 (118.9)
C'	Overall height (Road travel posture)	3990 (157.1)
D	Slew radius	1690 (66.5)
E	Clearance height under upperstructure	1140 (44.9)
F	Wheel base	2200 (86.6)
G	Tread	1810 (71.3)
H	Overall length of undercarriage	3745 (147.4)
J	Overall height of base machine	3010 (118.5)
K	Ground clearance of undercarriage	320 (12.6)
L	Front distance to axis of rotation	4425 (174.2)
N	Dozer blade width	2300 (90.6)
P	Dozer blade height	500 (19.7)
Q	Swing angle of axles	7.5°
R	Minimum turning radius (Tire)	5490 (216.1)
S	Minimum turning radius (Dozer blade)	5215 (205.3)
T	Outside machine clearance radius	6235 (245.5)
W	Overall width of upperstructure	2270 (89.4)
X	Minimum radius of equipment at maximum front offset (Right)	2285 (90)
Y	Minimum radius of equipment and attachment	2750 (108.3)
Z	Minimum radius of equipment at maximum front offset (Left)	2545 (100.2)
a	Offset distance of bucket (right swing)	705 (27.8)
b	Offset distance of bucket (left swing)	875 (34.4)
c	Boom swing angle (Right)	60°
d	Boom swing angle (Left)	70°

Mono-boom (Machines with outriggers)



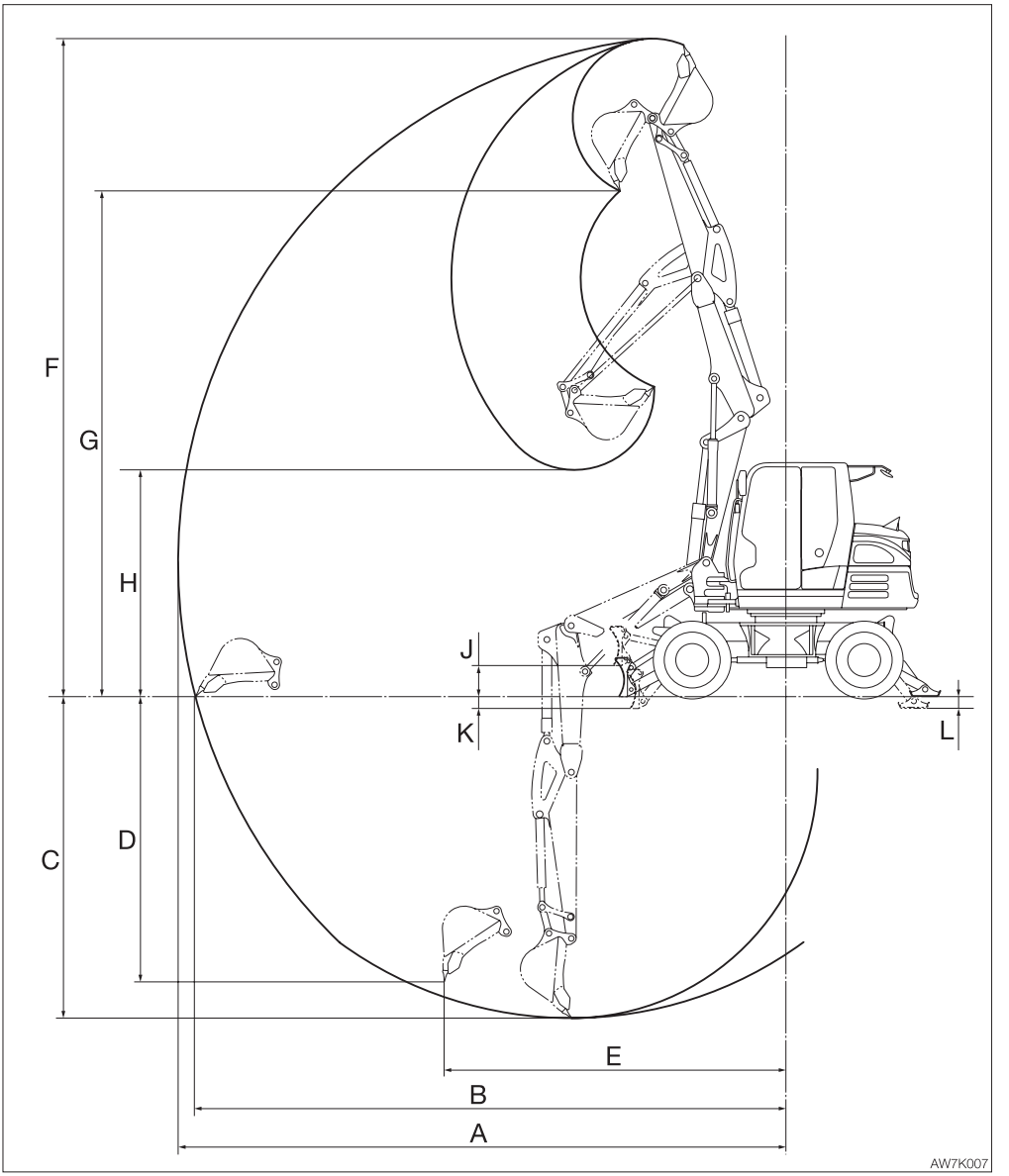
Mono-boom (Machines with outriggers)

Unit: mm (inch)

	Item	Mono-boom
A	Overall length	6320 (248.8)
A'	Overall length (Road travel posture)	5605 (220.7)
B	Overall width	2335 (91.9)
C	Overall height	3265 (128.5)
C'	Overall height (Road travel posture)	3690 (145.3)
D	Slew radius	1690 (66.5)
E	Clearance height under upperstructure	1140 (44.9)
F	Wheel base	2200 (86.6)
G	Tread	1810 (71.3)
H	Overall length of undercarriage	4165 (164)
J	Overall height of base machine	3010 (118.5)
K	Ground clearance of undercarriage	320 (12.6)
L	Front distance to axis of rotation	4340 (170.9)
N	Dozer blade width	2300 (90.6)
P	Dozer blade height	500 (19.7)
Q	Swing angle of axles	7.5°
R	Minimum turning radius (Tire)	5490 (216.1)
S	Minimum turning radius (Dozer blade)	6060 (238.6)
T	Outside machine clearance radius	6235 (245.5)
V	Minimum turn radius (outrigger)	5195 (204.5)
W	Overall width of upperstructure	2270 (89.4)
X	Minimum radius of equipment at maximum front offset (Right)	2285 (90)
Y	Minimum radius of equipment and attachment	2750 (108.3)
Z	Minimum radius of equipment at maximum front offset (Left)	2545 (100.2)
a	Offset distance of bucket (right swing)	705 (27.8)
b	Offset distance of bucket (left swing)	875 (34.4)
c	Boom swing angle (Right)	60°
d	Boom swing angle (Left)	70°

OPERATING RANGES

2-Piece boom (Two cylinders)



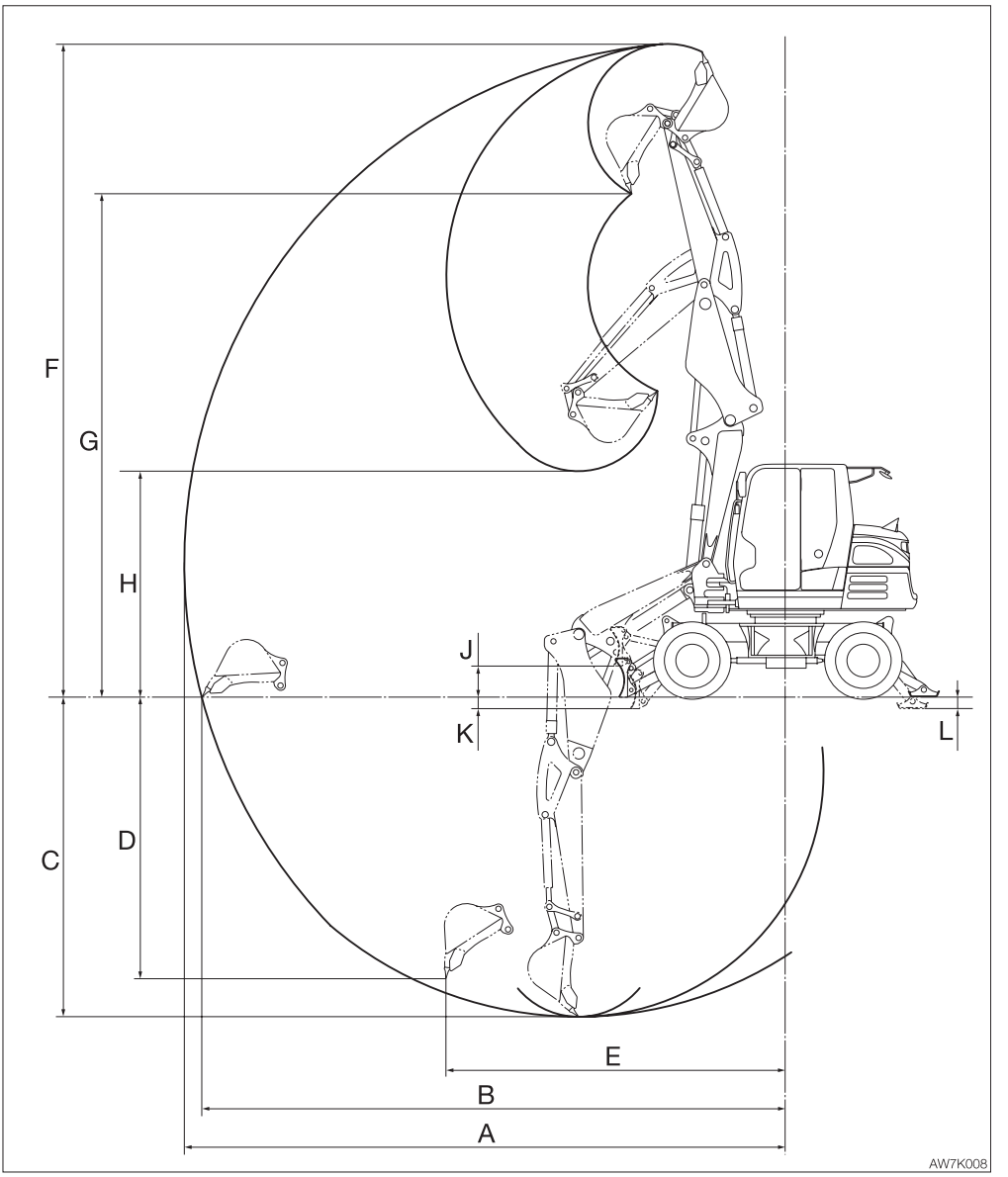
2-Piece boom (Two cylinders)

Unit: mm (inch)

	Item	2-Piece boom
A	Maximum reach	7775 (306.1)
B	Maximum reach at ground reference plane	7555 (297.4)
C	Maximum digging depth	4115 (162)
D	Maximum vertical digging depth	3645 (143.4)
E	Reach at maximum vertical digging depth	4390 (172.9)
F	Maximum height of cutting edge	8430 (331.8)
G	Maximum dumping height	6480 (255)
H	Minimum dumping height	2905(114.4)
J	Dozer blade maximum lifting height	400(15.7)
K	Dozer blade maximum lowering depth	150 (5.9)
L	Outrigger maximum lowering depth*	150 (5.9)

*: Machines with outriggers

2-Piece boom (One cylinder)



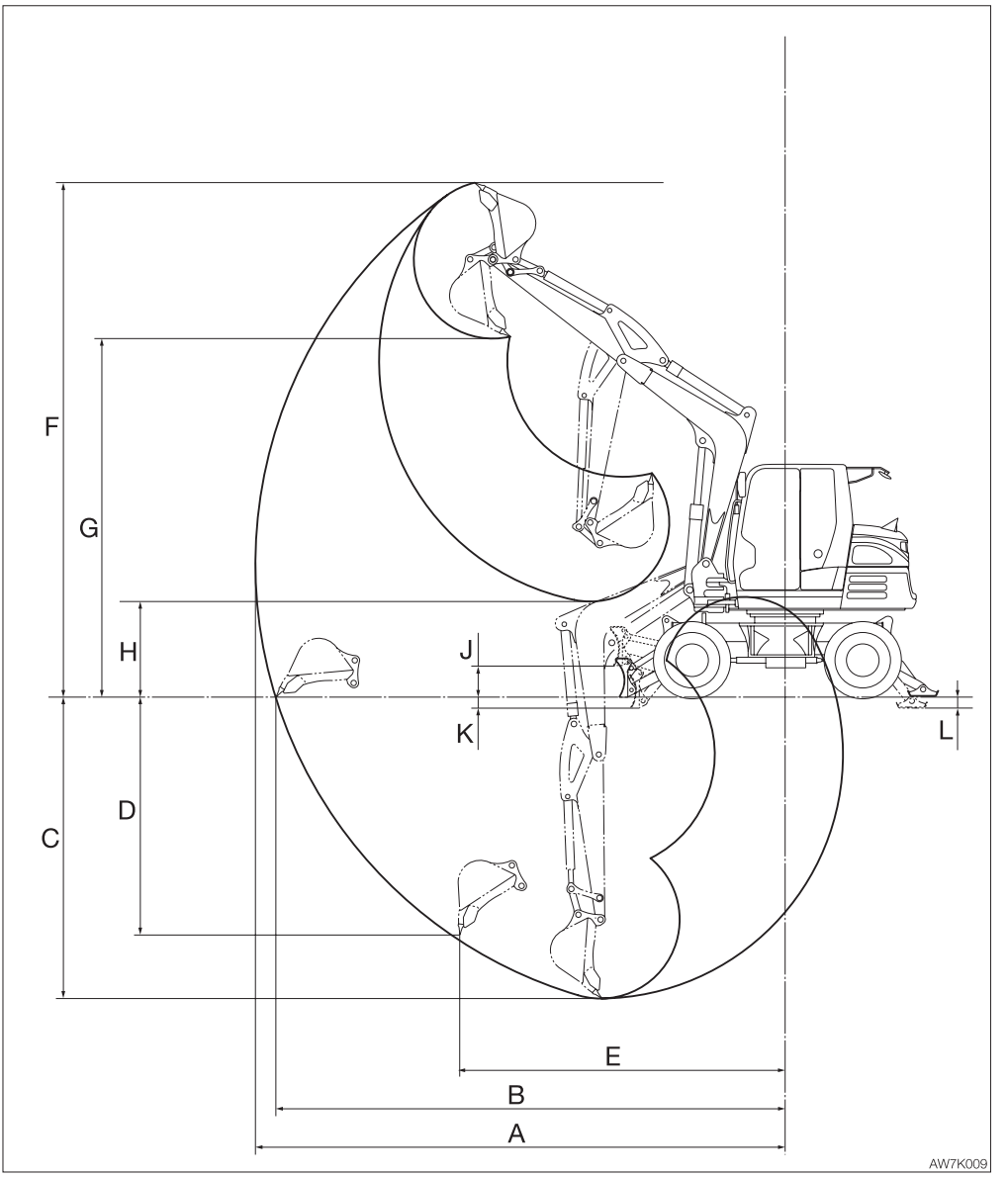
2-Piece boom (One cylinder)

Unit: mm (inch)

	Item	2-Piece boom
A	Maximum reach	7730 (304.3)
B	Maximum reach at ground reference plane	7505 (295.6)
C	Maximum digging depth	4115 (162)
D	Maximum vertical digging depth	3625 (142.7)
E	Reach at maximum vertical digging depth	4385 (172.7)
F	Maximum height of cutting edge	8400 (330.8)
G	Maximum dumping height	6475 (254.9)
H	Minimum dumping height	2905 (114.4)
J	Dozer blade maximum lifting height	400 (15.7)
K	Dozer blade maximum lowering depth	150 (5.9)
L	Outrigger maximum lowering depth*	150 (5.9)

*: Machines with outriggers

Mono-boom



Mono-boom

Unit: mm (inch)

	Item	Momo boom
A	Maximum reach	6830 (268.8)
B	Maximum reach at ground reference plane	6570 (258.7)
C	Maximum digging depth	3895 (153.4)
D	Maximum vertical digging depth	3080 (121.2)
E	Reach at maximum vertical digging depth	4215 (165.9)
F	Maximum height of cutting edge	6630 (260.9)
G	Maximum dumping height	4615 (181.8)
H	Minimum dumping height	1225 (48.2)
J	Dozer blade maximum lifting height	400 (15.7)
K	Dozer blade maximum lowering depth	150 (5.9)
L	Outrigger maximum lowering depth*	150 (5.9)

*: Machines with outriggers

MEMO

LIFTING CAPACITIES

Rated lift capacity chart

- The loads in the charts do not exceed 87% of hydraulic lift capacity or 75% of tipping load.
- Figures marked with an asterisk (※) are hydraulically-limited capacities.
- The mass of slings and any other lifting devices shall be deducted from the rated load to determine the net load that may be lifted.
- The load point is the bucket hinge pin, and the bucket posture is with the standard bucket completely retracted under the arm.
- Unit: daN (lbs)

Load hooking system

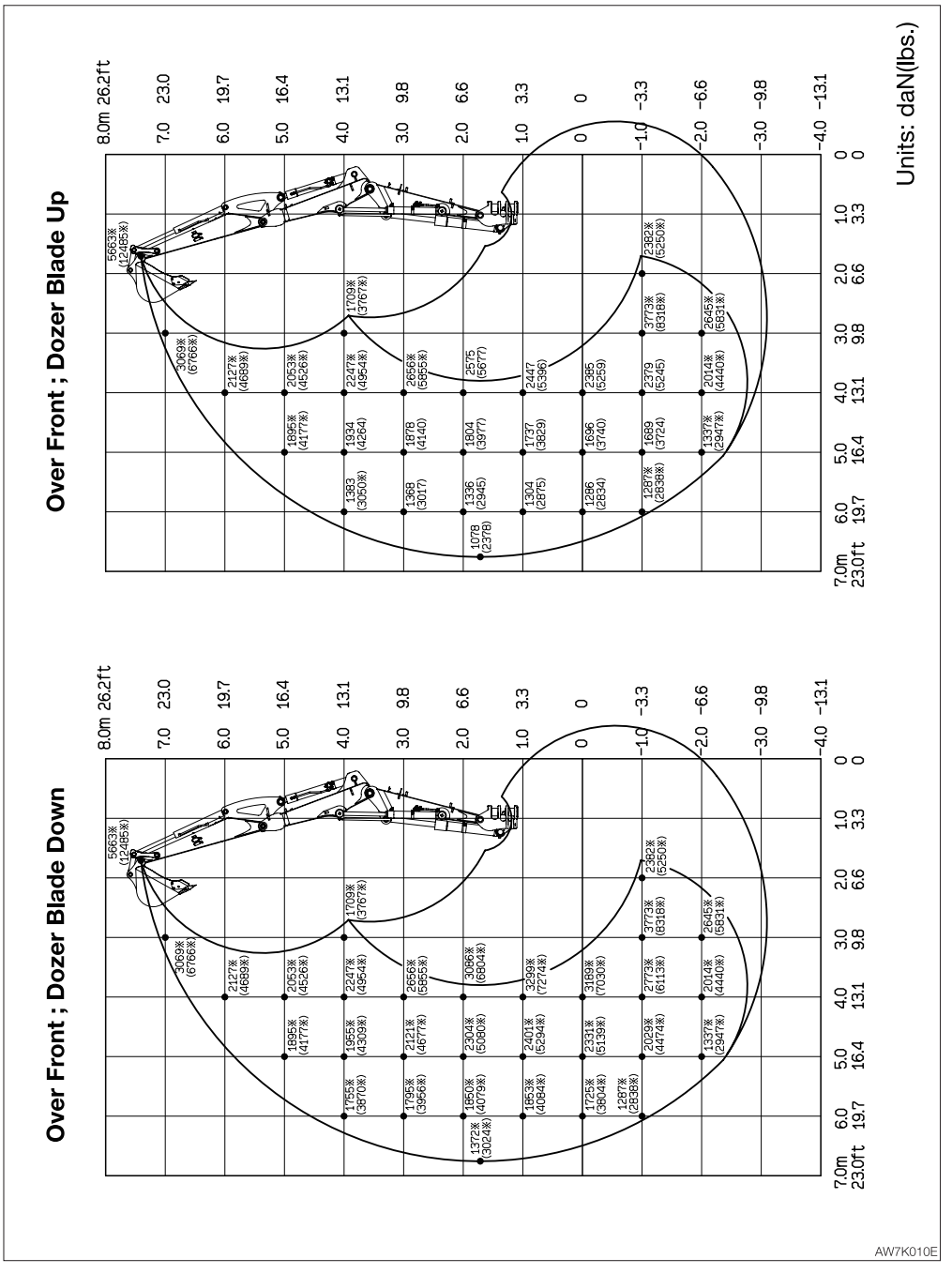
A load hooking system must be provided with the following capabilities.

1. A system which can withstand twice the rated lift capacity no matter at what position the load is applied.
2. A system that poses no risk of the lifted load falling from the hooking device. For example, equipped with a hook slippage prevention device.
3. A system that poses no risk of the hooking system slipping from the hoe attachment.

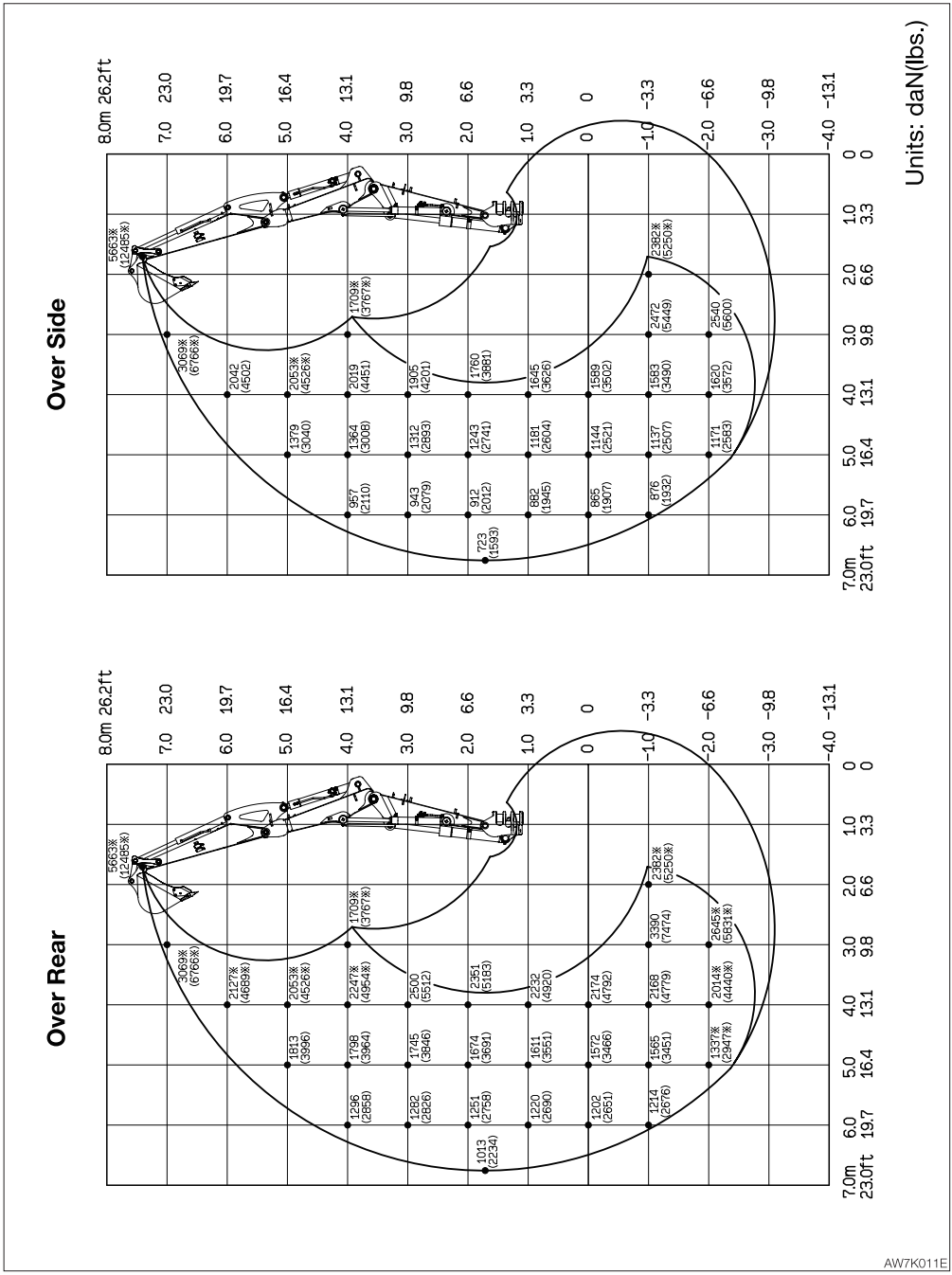
⚠ WARNING

- **Do not attempt to lift or hold any load that is greater than these rated values at their specified load radii and height.**
- **The rated lift capacities are based on the machine being level and situated on a firm supporting surface. For safe lifting, the operator is expected to make due allowance for the particular job conditions such as soft or uneven ground, non-level condition, load to the machine sides, hazardous conditions, experience of personnel, etc. The operator and other personnel should fully acquaint themselves with the operator's manual furnished by the manufacturer before operating this machine. When operating the machine, the safety rules of the equipment must also be followed.**
- **Do not travel while lifting a load; It is very dangerous.**

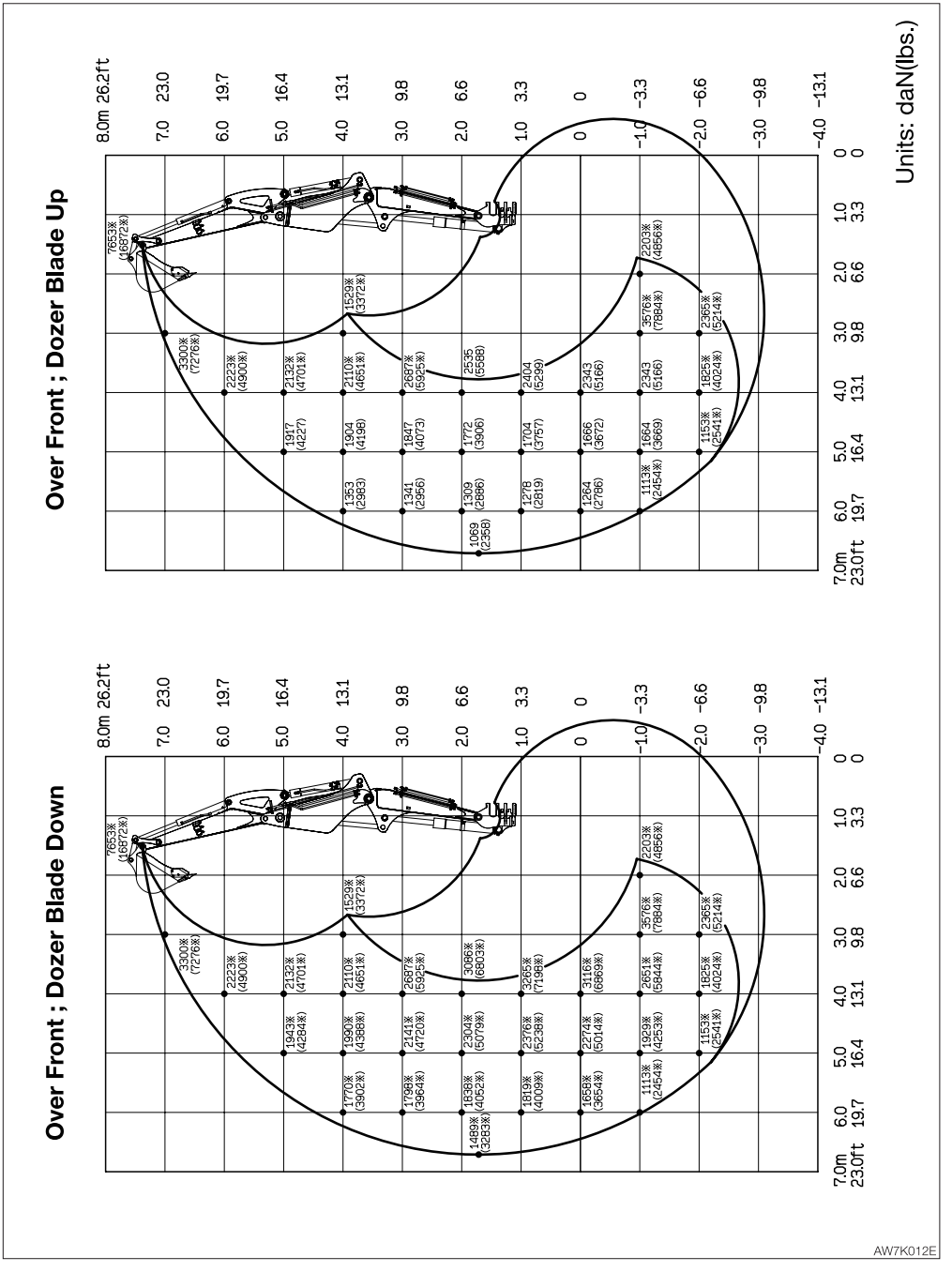
2-Piece boom (Two cylinders)



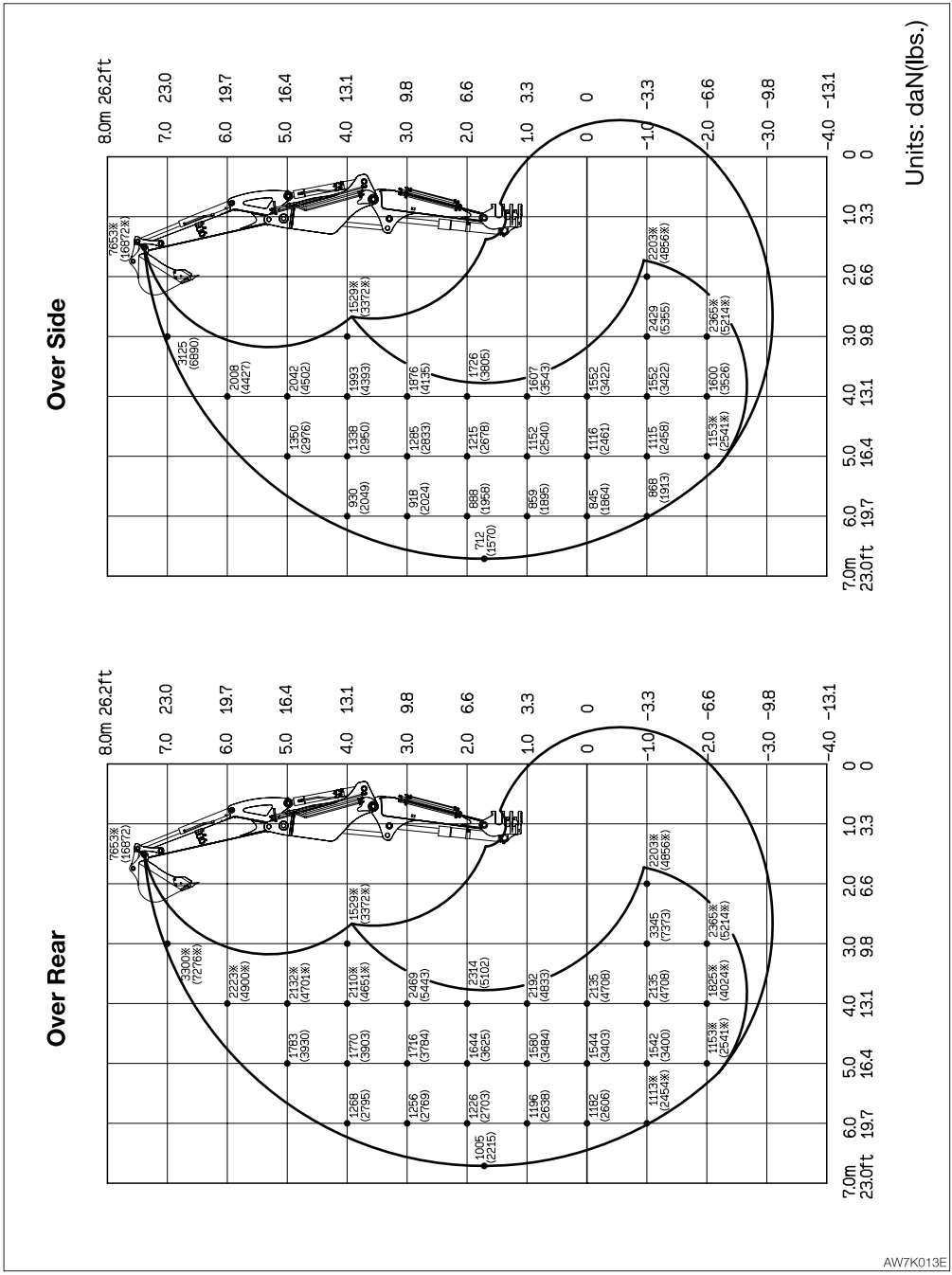
2-Piece boom (Two cylinders)



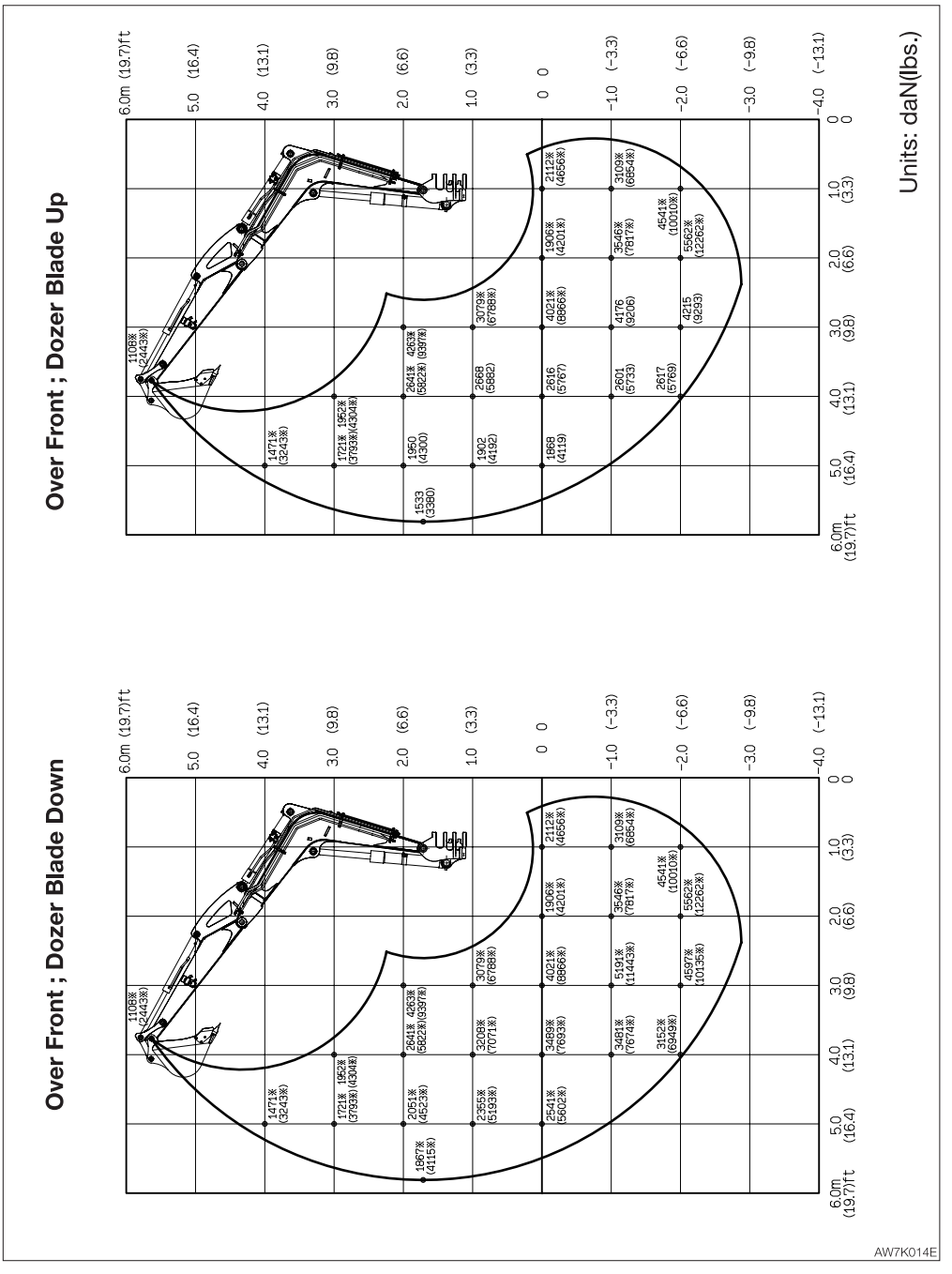
2-Piece boom (One cylinder)



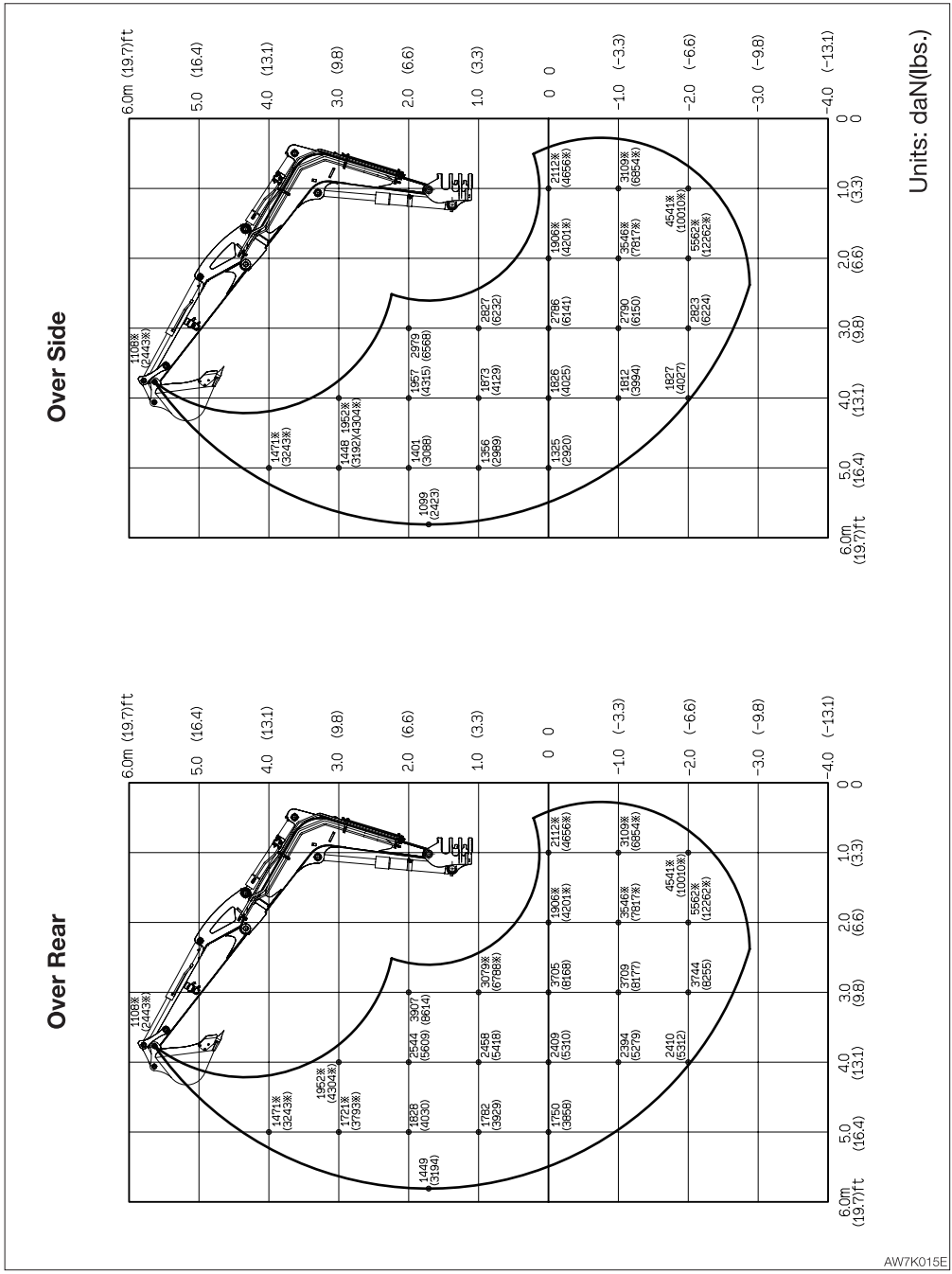
2-Piece boom (One cylinder)



Mono-boom


Over Front ; Dozer Blade Up
Over Front ; Dozer Blade Down
Units: daN(lbs.)
AW7K014E

Mono-boom


Over Rear
Over Side
6.0m (19.7)ft
5.0 (16.4)
4.0 (13.1)
3.0 (9.8)
2.0 (6.6)
1.0 (3.3)
0 0
-1.0 (-3.3)
-2.0 (-6.6)
-3.0 (-9.8)
-4.0 (-13.1)
1108※ (2443※)
1471※ (3243※)
1952※ (4304※)
1721※ (3793※)
1828 (4030)
1449 (3194)
2544 (5609)
3907 (8614)
2458 (5418)
1782 (3929)
3079※ (6788※)
2409 (5310)
1750 (3856)
3705 (8168)
2394 (5279)
2410 (5312)
3709 (8177)
3744 (8255)
1906※ (4201※)
3546※ (7817※)
2111※ (4655※)
3109※ (6854※)
4541※ (10010※)
5562※ (12262※)
1448 (3192)
1401 (3088)
1099 (2423)
1957 (4315)
2979 (6568)
1873 (4129)
1356 (2989)
2827 (6232)
1826 (4025)
1325 (2920)
1812 (3994)
1827 (4027)
2790 (6150)
2823 (6224)
2766 (6141)
Units: daN(lbs.)
AW7K015E