CHANGES	DETAILS	DATE	WRITTEN	APPROVED
Rev 02	엔진 Type 수정, BORE DIA. & STROKE 수정	2015-03-27	YH.Kim	TW.KIM
Rev 03	Modify Engine Power, Engine Dry weight, Fan Pulley Ratio	2020.02.10	K.M.MOON	S.J.KWON

For Marketing Dept. Use Only

DX 210WA

CONTENTS **PAGE**

1. GENERAL SPECIFICATION

ITEMS		UNIT	DX210W(1)	DX210W(2)	DX210W(3)	DX210W(4)
OPERATING WEIGHT		*ton*	*19.90/*20.0**	*20.8/*20.91*	*20.60/ *20.71/**20.31*	*20.4/ *20.51/**20.11*
BUCKET CAPACITY (PCSA)		*M^3*	*0.86*			
ENGINE	RATED POWER	*PS/rpm*	*163 / 2,000*			
	MAX. TORQUE	*kg.m/rpm*	*70 / 1,400*			
SYSTEM PRESSURE (WORK/TRAVEL)		*MPa*	*32.4(34.2)/34.2*			
SWING SPEED		*rpm*	*11*			
TRAVEL SPEED (High/Low/Creep)		*m/h*	36/9/4			
GRADEABILITY		*%(deg)*	*65(33)*	*60(31)*	*60(31)*	*62(32)*
TIRE SIZE		*mm*	*8 x 10.00 – 20 - 14PR*			
DIGGING FORCE(SAE)	BUCKET	*ton*	*12.5*	*12.5*	*12.5*	*12.5*
	ARM	*ton*	*9.7*	*9.3*	*10.8*	*12.1*
WORKING RANGE	MAX. DIGGING REACH	*mm*	*9,730*	*10,000*	*9,405*	*9,005*
	MAX. DIGGING DEPTH	*mm*	*6,010*	*6,255*	*5,625*	*5,225*
	MAX. DIGGING HEIGHT	*mm*	*9,800*	*10,050*	*10,560*	*10,210*
	REAR SWING RADIUS	*mm*	*2750*			
TRANSPORT DIMENSION	OVERALL LENGTH	*mm*	*9,420*	*9,400*	*9,210*	*9,275*
	OVERALL WIDTH	*mm*	*2,530*	*2,530*	*2,530*	*2,530*
	OVERALL HEIGHT	*mm*	*3,200*	*3,490*	*3,140*	*3,140*
	GROUND CLEARANCE	*mm*	*350*			
	WHEEL BASE	*mm*	*2,850*			
	TREAD	*mm*	*1,914*			
DOZER WIDTH x HEIGHT		*mm*	*2,500 x 620*			
MIN. TURNING RADIUS		*M*	*7.2*			
OPTION ATTACHMENT			● ONE-PIECE BOOM : 5.6M ● TWO-PIECE BOOM : 5.4M(1.92M LOWER, 3.84M UPPER) ● ARM : 2.0M, 2.4M, 2.75M, 3.0M ● BUCKET : STD: 0.86M3 OPT: 0.51M3,(NARROW), 0.81M3, 1.05M3: 1.17M3,, 1.28M3 HD: 0.73M3,, 0.9M3: 1.07M3: 1.24M3,, 1.32M3, 1.49M3 ● FRONT and REAR BOLT ON DOZER / OUTRIGGER INDEPENDENT CONTROLLED OUTRIGGER			

● DX210W(1) : ONE-PIECE BOOM(5.6M), SHORT ARM (2.75m), STANDARD BUCKET(0.86M^3),
FRONT DOZER & REAR OUTRIGGER
● DX210W(2) : ONE-PIECE BOOM(5.6M), STANDARD ARM(3.0m), OPTION BUCKET(0.86M^3),
FRONT DOZER & REAR OUTRIGGER
● DX210W(3) : TWO-PIECE BOOM(5.4M), STANDARD ARM (2.4m), STANDARD BUCKET(0.86M^3),
FRONT & REAR OUTRIGGER.
● DX210W(4) : TWO-PIECE BOOM(5.4M), SHORT ARM(2.0m), OPTION BUCKET(1.05M^3),
FRONT DOZER & REAR OUTRIGGER

[NOTE] * : for ROPS ** : axle load < 12t

2. SPECIFICATION COMPARISON

ITEMS		UNIT	HYUNDAI R210W-9S	CAT M322D	KOMATSU PW200-7	HITACHI ZX210W-3
OPERATING WEIGHT		*ton*	*20,600*	*20,280*	*20,960*	*20,800*
BUCKET CAPACITY		*m^3*	*0.80*	*0.86*	*0.78*	*0.80*
ENGINE	RATED POWER	*PS/rpm*	*165 / 2,000*	*167 / 2,000*	*170 / 2,000*	*166 / 2,000*
	MAX. TORQUE	*kgf.m/rpm*	*72.2 / 1,500*	*76 / 1,400*		*66.8 / 1,500*
SYSTEM PRESSURE (WORK/TRAVEL)		*MPa*	*34.3(37.3)/37.3*	*35(37.5)/35*	*38/38*	*34.3/34.3*
SWING SPEED		*rpm*	*10.5*	*9*	*12.4*	*12.2*
MAX. TRAVEL SPEED		*km/h*	*30*	*25*	*35*	*27.5*
GRADEABILITY		*%(deg)*	*61 (31.5)*	*60 (31)*		*70 (35)*
TIRE SIZE		*mm*	*10-20-14PR*	*11-20*	*10-20-14PR*	
DIGGING FORCE	BUCKET	*ton*	*13.6*	*15.7*	*14.2*	*13.2*
	ARM	*ton*	*10.4*	*11.7*	*10.3*	*10.4*
WORKING RANGE	MAX. DIGGING REACH	*mm*	*9,960*	*10,320*	*10,060*	*10,170*
	MAX. DIGGING DEPTH	*mm*	*6,380*	*6,300*	*5,917*	*6,290*
	MAX. DIGGING HEIGHT	*mm*	*10,000*	*9,760*	*10,003*	*10,190*
	MIN SWING RADIUS	*mm*	*3,580*		*3,143*	*3,430*
TRANSPORT DIMENSION	OVERALL LENGTH	*mm*	*9,520*	*9,650*	*9,427*	*9,700*
	OVERALL WIDTH	*mm*	*2,490*	*2,750*	*2,550*	*2,530*
	OVERALL HEIGHT	*mm*	*3,440*	*3,200*	*3,912*	*3,170*
	GROUND CLEARANCE	*mm*	*345*	*380*	*330*	*325*
	WHEEL BASE	*mm*	*2,800*	*2,750*	*2,750*	*2,750*
	TREAD	*mm*	*1,874*		*1,914*	
DOZER WIDTH x HEIGHT		*mm*	*2,490 x 610*	*2,750 x*	*2,550 x*	*2,530 x 600*
MIN. TURNING RADIUS		*m*	*6.69*	*6.8*	*6.85*	*7.2*
MACHINE CONFIGRATION.			*5.65M BOOM 2.92M ARM 0.8m^3 BUCKET STABILIZER& BLADE*	*Mono BOOM 2.9M ARM 0.8m^3 BUCKET STABILIZER& BLADE*	*5.7M BOOM 2.9M ARM 0.8m^3 BUCKET STABILIZER& BLADE*	*Mono BOOM 2.91M ARM 0.8m^3 BUCKET STABILIZER& BLADE*

3. ENGINE SYSTEM

1) ENGINE

RATED HORSE POWER (Net)	:	*163 PS @2,000 rpm (KS R1004)*
		120 kW (163 PS) @2,000 rpm (DIN 6271)
		120 kW (160 HP) @2,000 rpm (SAE J1349)
MAX. TORQUE	:	*70 kgf.m @ 1,400 rpm*
FUEL CONSUMPTION	:	*160 g/ps.hr @ RATED SPEED*
TYPE	:	*TURBO CHARGED, DIRECT INJECTION*
DISPLACEMENT	:	*5,785 cc*
No. OF CYLINDER	:	*6*
BORE DIA. & STROKE	:	*Φ102 x 118 mm*
HIGH IDLE SPEED	:	*2,200 ± 25 rpm*
LOW IDLE SPEED	:	*1,200 ± 25 rpm*
STARTING MOTOR	:	*24 V x 4.5 Kw*
DRY WEIGHT	:	*505kg*

2) ALTERNATOR

VOLTAGE	:	*24 V*
RATING AMPERES	:	*60 A*

3) BATTERY

SYSTEM VOLTAGE	:	*24 V*
QUANTITY	:	*12 V x 2*
CAPACITY (AMP)	:	*150 AH*

4) PUMP DRIVE

DRIVE TYPE	:	*FLEXIBLE COUPLING JOINT*
PERMISSIBLE TORQUE & RPM	:	*160 kgf.m, 4000 rpm*

5) AIR CLEANER

TYPE	:	*DOUBLE ELEMENT*
FILTRATION AREA	:	*7.6 m^2 (OUTTER) / 1.4 m^2 (INNER)*
SIZE (DIA. x LENGTH)	:	*Φ 279.4 mm x 489.5 mm*

6) MUFFLER

DESCRIPTION	:	*SIDE INLET, VERTICAL TAIL PIPE*
SIZE (DIA. x LENGTH)	:	*Φ 310 mm x 680 mm*

7) FAN

TYPE	:	*SUCKER, 9-DOZER, PLASTIC*
SIZE	:	*Φ660.4 mm*
RPM AT RATED ENGINE RPM	:	*2,000rpm*
PULLEY RATIO	:	*1:1.1*
FAN PULLY	:	*Φ155 mm*

8) RADIATOR

TYPE	:	*CORRUGATED WAVE FIN*
HEAT REJECTION CAPACITY	:	*MIN. 53,287 Kcal/h*

9) OIL COORER

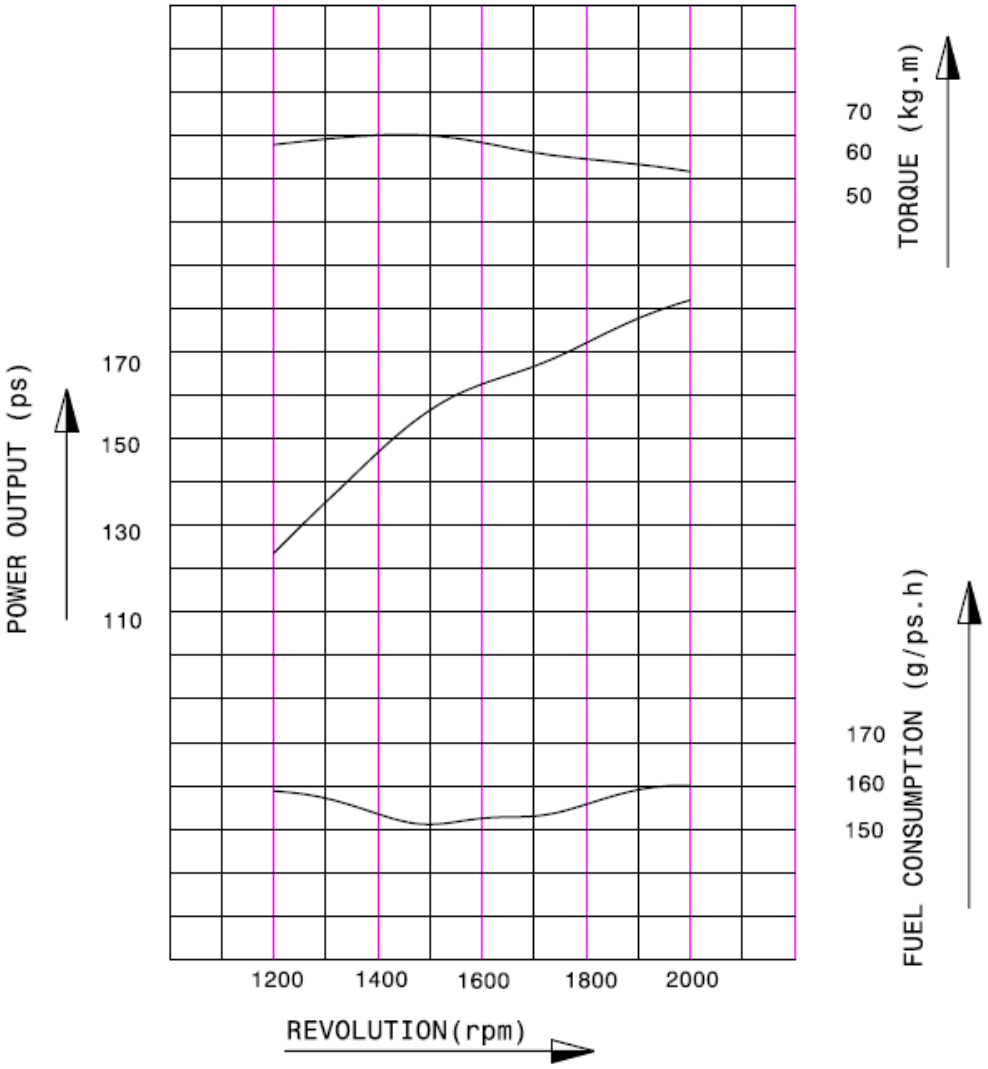
TYPE	:	*CORRUGATED WAVE FIN*
HEAT REJECTION CAPACITY	:	*MIN. 47,112 Kcal/h*

10) CHARGE AIR COOLER

TYPE	:	*CORRUGATED WAVE FIN*
HEAT REJECTION CAPACITY	:	*MIN.16,174 Kcal/h*

- ENGINE PERFORMANCE CURVE

TEST CONDITION	SPECIFICATION
ATMOSPHERIC PRESS	*760 mmHg*
COOLING FAN	*NOT INSTALLED*
ALTERNATOR	*24V x 50A*
AIR CLEANER	*INSTALLED*
MUFFLER	*INSTALLED*



PERFORMANCE STANDARARD	KS-R1004
POWER (MAX. RATED)	*172 PS / 2,000 rpm*
MAX. TORQUE	*70kgf.m / 1,400 rpm*
FUEL CONSUMPTION (MAX , RATED)	*160 g/ps.h*

4. HYDRAULIC SYSTEM

1) MAIN PUMP

TYPE	:	*TENDEM, AXIAL PISTON*
QUANTITY	:	*2*
DISPLACEMENT	:	*115.9 cc/rev*
MAX. FLOW RATE	:	*2 - 231.7 liter/min @ 2,000 rpm*
FLOW REGULATOR TYPE	:	*NEGATIVE CONTROL*
TANK PRESSURIZING DEVICE	:	*SEMI PRESSURISED (AIR BREATHER)*

2) PILOT PUMP

TYPE	:	*GEAR*
DISPLACEMENT	:	*10.7 cc/rev*
REDUCTION RATIO	:	*1:0.78*
MAX. FLOW RATE	:	*27.4 liter/min @2,000RPM*
RELIEF VALVE PRESSURE	:	*3.9MPa*

3) STEER & BRAKE PUMP

TYPE	:	*GEAR*
DISPLACEMENT	:	*34.5cc/rev (STEER), 11.2cc/rev (BRAKE)*
MAX. FLOW RATE	:	*69liter/min(STEER),22.4liter/min(BRAKE)@2,000RPM*
RELIEF VALVE PRESSURE	:	*17.5MPa (STEER), 15.7MPa (BRAKE)*

4) CONTROL VALVE; MAIN

TYPE	:	*PILOT CONTROL*
NO. OF SPOOLS	:	*9*
SPOOL DIA.	:	*Φ28 mm*
SPOOL ARRANGEMENT	:	*TRV, OPT, BUCKET, BOOM1, ARM2*
		DOZ, SWING, BOOM2, ARM1
RELIEF VALVE PRESSURE	:	*32.4MPa (WORK) / 34.2MPa (TRAVEL)*
PORT RELIEF VALVE PRESSURE	:	*35.3MPa (BOOM, ARM, BUCKET, DOZ)*
ACCESSARY VALVES	:	*FOOT RELIEF, ARM HOLDING VALVE*
		BOOM HOLDING VALVE
WEIGHT	:	*172 kg*

5) CONTROL VALVE; ARTI. BOOM

TYPE	:	*PILOT CONTROL*
PORT RELIEF VALVE PRESSURE	:	*29.4MPa*

6) REMOTE CONTROL VALVE; IMPLEMENT

TYPE	:	*PILOT (2-STAGE JOYSTICK)*
PRESSURE/STROKE CHARACTERISTIC	:	*0.54MPa (@ 1.0mm STROKE) ~* *(1, 3) 1.72MPa (@ 5mm STROKE)* *(2, 4) 1.86MPa (@ 6.2mm STROKE)* *2.75MPa (@ 6.5mm (1, 3), 7.5mm (2, 4) STROKE)*
WEIGHT	:	*4.8 kg*

7) REMOTE CONTROL VALVE; TRAVEL

TYPE	:	*PILOT*
PRESSURE/STROKE CHARCTEISTIC	:	*1.18MPa (@ 1.2mm STROKE) ~* *2.75MPa (@ 3.76mm STROKE)* *3.92MPa (@ 6.8mm STROKE)*

8) REMOTE CONTROL VALVE; DOZER & O/R

PRESSURE/STROKE CHARACTERISTIC:		*2.75MPa (@6.5±0.5 mm STROKE)*

9) REMOTE CONTROL VALVE; ARTI.BOOM

PRESSURE/STROKE CHARACTERISTIC:		*2.12MPa (@ 4.8 mm STROKE)*

10) SOLENOID VALVE

RATED CAPACITY	:	*DC 24V, 22W @25 ℃*
FUNCTION	:	*TRAVEL FWD, REV, PRESSURE UP, CRUISE* *SWING PRIORITY, BREAKER OPERATING*

11) TRANSMISSION & PILOT SUPPLY VALVE

SOLENOID VALVE Q'TY	:	*4ea* *(PILOT CUT-OFF, CHOCK, INCHING, TRAVEL HIGH-LOW)* *5ea (PILOT CUT-OFF, CHOCK, INCHING, SELECT, TRAVEL HIGH-LOW)*
ELECTRIC RATED VOLTAGE	:	*DC 24V*

12) BRAKE SUPPLY VALVE

LOADING-UNLOADING PRESSURE	:	*10.1 ~ 12.3MPa*
PRESSURE RELIEF VALVE	:	*15.7MPa*
LOW PRESSURE WARNING	:	*6.5MPa*
ELECTRIC RATED VOLTAGE	:	*DC 24V*

13) BY-PASS VALVE (1)

CRACKING PRESSURE	:	*0.2MPa @ 10 liter/min*

14) BY-PASS VALVE (2)

CRACKING PRESSURE	:	*0.25MPa @ 10 liter/min*

15) AIR BREATHER

CRACKING PRESSURE	:	*0.046 ± 0.004MPa*
FILTER	:	*10μ , 590 cm^2*

16) ACCUMULATOR (FOR PILOT)

NITROGEN CHARGE PRESSURE	:	*1MPa*
VOLUME	:	*0.75 liter*

17) ACCUMULATOR (FOR BRAKE)

NITROGEL CHARGE PRESSURE	:	*3MPa*
VOLUME	:	*0.75 liter*

18) PILOT FILTER

TYPE	:	*GLASS FIBER ELEMENT*
SIZE	:	*10 μ, 340 cm2*
BY-PASS VALVE SETTING	:	*0.17MPa @ 5 liter/min*

19) BRAKE FILTER

TYPE	:	*GLASS FIBER ELEMENT*
SIZE	:	*10μ, 560 cm^2*
BY-PASS VALVE SETTING	:	*0.35MPa @ 5 liter/min*

20) RETURN FILTER

SIZE	:	*10μ , 1.6 m^2 (Φ150 x 450 mm)*
BY-PASS VALVE SETTING	:	*0.15MPa @ 40 liter/min*

21) SUCTION FILTER

TYPE	:	*WIRE MESH ELEMENT*
SIZE	:	*177μ (80 mesh),*
		0.296 m^2 (Φ150 x 139 mm)

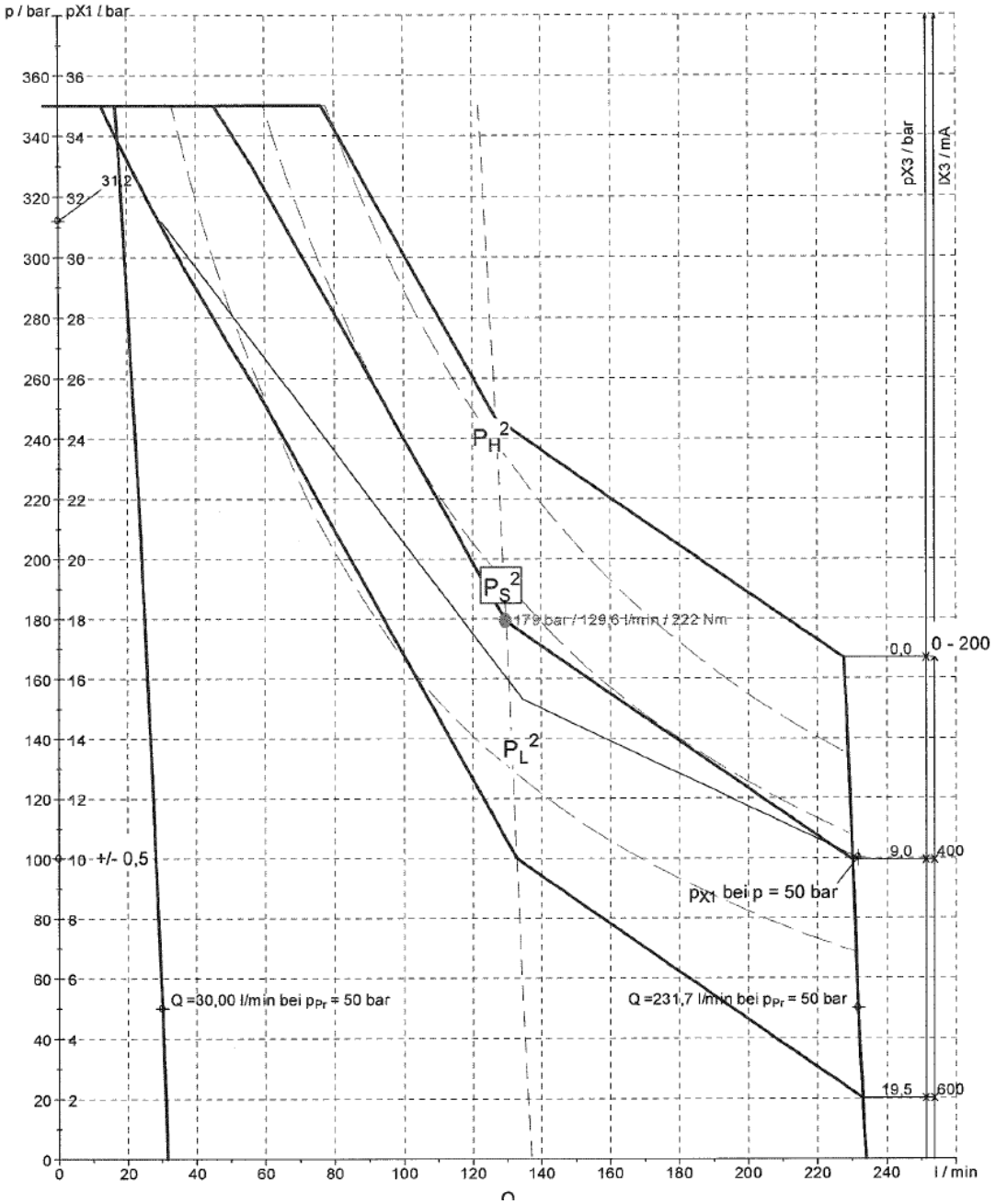
- PUMP PERFORMANCE CURVE

[STANDARD MODE]

INPUT SPEED ; *2,000 rpm*

INPUT POWER : *164PS*

INPUT TORQUE : *72 kgf.m*



MODEL	DX 210WA	DWG No.		10/63

5. SWING MECHANISM

1) SWING MOTOR

TYPE	:	*AXIAL PISTON*
DISPLACEMENT	:	*128 cc/rev*
RELIEF VALVE SETTING PRESSURE	:	*26.5MPa*
MAX. SUPPLY FLOW (@1900 RPM)	:	*201 liter/min*
MOTOR SHAFT SPEED	:	*1,570.3 rpm*
MOTOR SHAFT TORQUE	:	*55kgf.m*
ACCESSARY VALVES	:	*SWING REACTIONLESS VALVE*
WEIGHT	:	*63 kg*

2) SWING REDUCTION GEAR

DRIVE TYPE	:	*2-STAGE PLANETARY GEAR*
REDUCTION RATIO	:	*21.581*
MAX. OUTPUT SPEED	:	*72.7 rpm*
MAX. OUTPUT TORQUE	:	*1,187kgf.m*
WEIGHT (INCLUDED MOTOR)	:	*253 kg*

3) PINION GEAR (BUILT IN RED.GEAR)

TYPE	:	*SPUR GEAR*
GEAR P.C.D.	:	*Φ156 mm*
No. OF TEETH	:	*13*
MODULE	:	*12*

4) SWING BEARING

TYPE	:	*BALL BEARING, INTERNAL GEAR*
GEAR P.C.D.	:	*Φ1,220 mm*
No. OF TEETH	:	*92*
BALL DIA.	:	*Φ31.75 mm*
RACE O.D.	:	*Φ1,327 mm*
RACE HEIGHT	:	*111.5 mm*
STATIC THRUST LOAD	:	*39,500kgf*
WEIGHT	:	*279kg*

5) SWING PERFORMANCE

MAX. SWING SPEED (EFF.=0.98)	:	*11 rpm*
MAX. SWING TORQUE (EFF.=0.76)	:	6,387*kgf.m*

6) PARKING BRAKE

CONTROL TYPE	:	*PILOT PRESSURE, MECHANICAL*
BRAKE TORQUE	:	*63kgf.m*
BRAKE RELEASE PRESSURE	:	*2.3MPa*
SELECT V/V CRACKING PRESSURE	:	*1.3MPa*

7) SWING SAFETY LOCK

TYPE	:	*MANUAL PIN LOCKING*

8) MOTOR ACCESSARY

BRAKE TIME DELAYER	:	*5 ($^{+3}/_{-0}$) sec*

6. TRAVEL SYSTEM

1) TRAVEL MOTOR

TYPE	:	*BENT AXIS PISTON*
DISPLACEMENT	:	*64 ~ 160 cc/rev*
CROSSOVER RELIEF VALVE SETTING	:	*37MPa*
MAX. SUPPLY FLOW	:	*240 liter/min*
MAX. OPERATING SPEED	:	*3,750 rpm*
MAX. OUTPUT TORQUE	:	*89.1kgf.m*

2) TRANSMISSION

TYPE	:	*2 SPEED, POWER-SHIFT*
REDUCTION RATIO	:	*4.868 / 1.196*
POWER SHIFT CONTROL PRESSURE	:	*Min 3MPa, Max 5MPa*
MAX. INPUT TORQUE	:	*97kgf.m*
MAX. ROTATING SPEED	:	*3,500 rpm*

3) FRONT AXLE

TYPE	:	*FULLY FLOATING PLANETARY DRIVE*
OVERALL REDUCTION RATIO	:	*16 : 1*
AXLE LOAD (TRAVEL CONDITION)	:	*16,200kgf*
AXLE LOAD (WORKING CONDITION)	:	*39,250kgf*
WHEEL BOLT P.C.D	:	*Ø335 mm*
BRACKET TYPE	:	*WET DISC*
BRAKE TORQUE	:	*3,272kgf .m at 8MPa*
STEERING ANGLE	:	*35 ˚(INNER), 24.5 ˚(OUTER)*
STEERING CYLINDER (BORE SIZE-ROD DIA-STROKE & MAX. PRESSURE)	:	*Ø100mm–Ø50mm-Ø86mm, 18MPa*
KING PIN INCLINATION	:	*0 ˚*

4) REAR AXLE

TYPE	:	*FULLY FLOATING PLANETARY DRIVE*
OVERALL REDUCTION RATIO	:	*16 : 1*
AXLE LOAD (TRAVEL CONDITION)	:	*16,200kgf*
AXLE LOAD (WORKING CONDITION)	:	*39,250kgf*
WHEEL BOLT P.C.D	:	*Ø335 mm*
BRAKE TYPE	:	*WET DISC*
BRAKE TORQUE	:	*3,272kgf.m at 8MPa*

5) PROPELLER SHAFT

5-1) FRONT & REAR

MAX. ALLOWABLE TORQUE	:	*425kgf.m*
MAX. JOINT ANGLE	:	*22.5 °*
MAX. PHASE MISALIGNMENT	:	*±1 °*
MAX. ROTATING SPEED	:	*3,800 rpm*

5-2) CENTER

MAX. ALLOWABLE TORQUE	:	*357kgf.m*
MAX. RUN OUT	:	*0.8mm*
MAX. ROTATING SPEED	:	*5,000 rpm*

6) TYRE & WHEEL ; STANDARD

TYPE	:	*DOUBLE*
TYRE SPEC.	:	*10.00-20-14PR, OTR, TUBE*
RIM SPEC.	:	*7.5V x 20*
DISC OFFSET	:	*155 mm*

7) TYRE & WHEEL ; OPTION

TYPE	:	*DOUBLE*
TYRE SPEC.	:	*10.00-20-16PR, OTR, TUBE*
RIM SPEC.	:	*7.5V x 20*
DISC OFFSET	:	*155 mm*

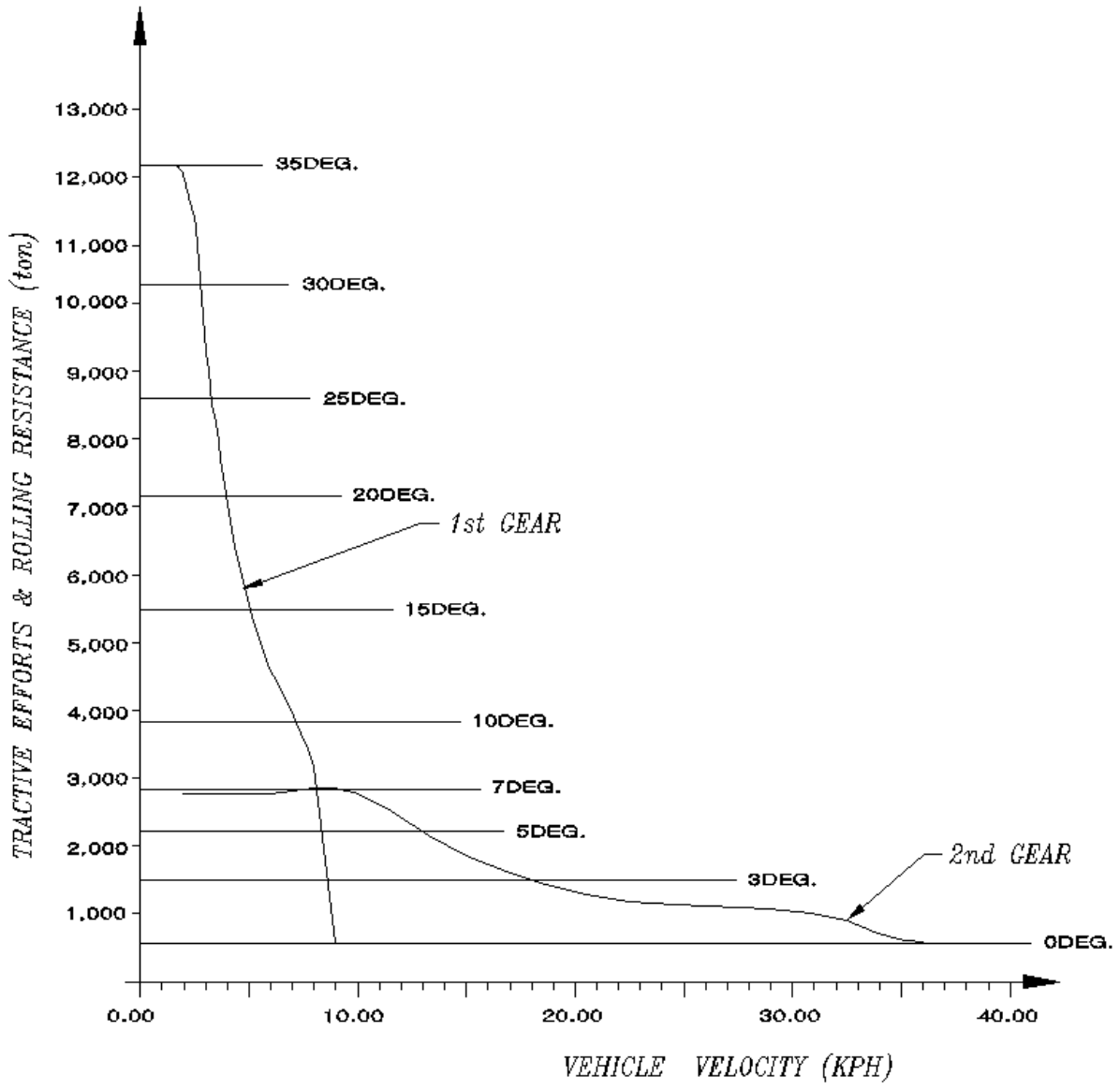
8) TYRE & WHEEL ; OPTION

TYPE	:	*WIDE SINGLE*
TYRE SPEC.	:	*18-19.5-16PR, TUBELESS*
RIM SPEC.	:	*14.00 x 19.5*
DISC OFFSET	:	*90 mm*

9) TRAVELLING PERFORMANCE

MAX. SPEED : *36 km/h*

MAX. TRACTIVE EFFORT : *12.13 TON*



10) BRAKE PUMP

TYPE	:	*GEAR*
DISPLACEMENT	:	*11.2 cc/rev*
MAX. FLOW RATE	:	*22.4 liter/min @ 2,000 rpm*

11) BRAKE SUPPLY VALVE

LOADING-UNLOADING PRESSURE	:	*10.1 ~ 12.3MPa*
PRESSURE RELIEF VALVE	:	*15.7MPa*
ELECTRIC RATED VOLTAGE	:	*DC 24V*

12) ACCUMULATOR

NITROGEL CHARGE PRESSURE	:	*30kgf/cm ^{2}*
VOLUME	:	*0.75 liter*

13) SERVICE BRACK VALVE

MAKER	:	*DUKIN INDUSTRIES*
MAX. OUTPUT PRESSURE	:	*7.8 ± 0.3MPa*

14) BRAKE FILTER

MAKER & MODEL	:	*DONGYANG FILTER, DYF-H00061*
SIZE	:	*10μ, 560 cm^2*
BY-PASS VALVE SETTING	:	*0.35MPa @ 5 liter/min*

15) SYSTEM & PRESSURE

SYSTEM	:	*FULL HYDRAULIC, DUAL LINE*
SERVICE BRAKE PRESSURE	:	*7.8MPa*
BRAKE DISTANCE	:	*6.56m at 24 km/h*

16) STEER PUMP

TYPE	:	*GEAR*
DISPLACEMENT	:	*34.5 cc/rev*
RATED FLOW	:	69 *liter/min @ 2,000 rpm*

17) STEER UNIT;

TYPE	:	*OPEN CENTER, NON REACTION*
DISPLACEMENT	:	*315 cc/rev*
RELIEF VALVE SET PRESSURE	:	*17.5MPa*
OVERLOAD RELIEF VALVE SET PRESS	:	*22.5MPa*

18) PRIORITY VALVE

TYPE	:	*LOAD SENSING DYNAMIC, NON REACTION*
CONTROL SPRING PRESSURE	:	*0.7MPa*
ORIFICE DIAMETER (Pp / LS / Dyn)	:	*0.8mm / 1.2mm / 0.9mm*

19) STEER CYLINDER (BUILT IN FRONT AXLE, SEE 4 FRONT AXLE)

20) CHOCKING VALVE

MAX. WORKING PRESSURE	:	*39.2MPa*
CHECK VLAVE CRACKING PRESSURE	:	*0.2MPa*

21) CHOCKING CYLINDER (SEE 7 HYDRAULIC CYLINDERS)

22) OSCILLATIONG ANGLE : ±8 °

7. HYDRAULIC CYLINDERS

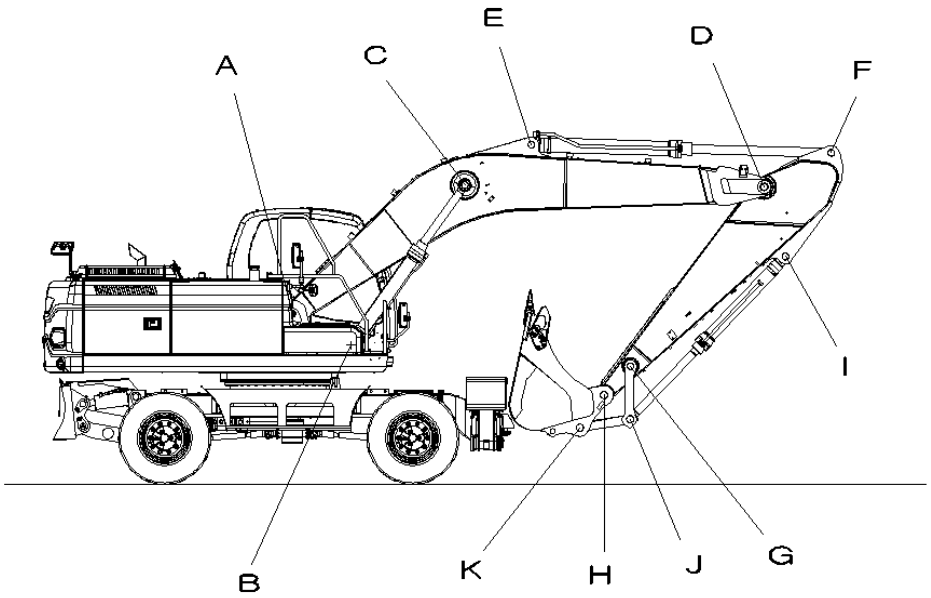
	BOOM	ARM (for ONE-PIECE BOOM)	BUCKET
QUANITIY	*2*	*1*	*1*
BORE	*120*	*135*	*120*
STROKE	*1,225*	*1,450*	*1,060*
ROD DIA.	*85*	*95*	*80*
CLOSED LENGTH	*1,800*	*2,010*	*1,630*
RETACT. CUSHION	*X*	*O*	*X*
EXTEND. CUSHION	*O*	*O*	*O*

	TWO-PIECE BOOM	BOOM (for TWO-PIECE)	ARM (for only TWO-PIECE BOOM & 2.4M ARM)	ARM (for only TWO-PIECE BOOM & 2.0M ARM)
QUANTITY	*1*	*2*	*1*	*1*
BORE	*170*	*120*	*135*	*135*
STROKE	*748*	*1,045*	*1,538*	*1,440*
ROD DIA.	*105*	*85*	*95*	*95*
CLOSED LENGTH	*1,253*	*1,550*	*2,105*	*2,105*
RETRACT. CUSHION	*X*	*X*	*O*	*O*
EXTEND. CUSHIDN	*X*	*O*	*O*	*O*

	DOZER	OUTRIGGER	CHOCKING
QUANTITY	*2*	*2*	*2*
BORE	*130*	*130*	*150*
STROKE	*160*	*397*	*153*
ROD DIA.	*80*	*80*	*100*
CLOSED LENGTH	*595*	*857*	*267*
RETRACT. CUSHION	*X*	*X*	*X*
EXTEND. CUSHIDN	*X*	*X*	*X*

8. FRONT

1) FRONT LINKAGE PIN SIZES



POINT	DIA(mm)	LENGTH(mm)
A	*90*	*801*
B	*80*	*215*
C	*80*	*762*
D	*90*	*538*
E	*80*	*236*
F	*80*	*266*
G	*71*	*435*
H	*80*	*517*
I	*80*	*221*
J	*80*	*443*
K	*80*	*517*

2) WORKING ATTACHMENT

2-1) BOOM

		LENGTH (*mm*)	WEIGHT (*kg*)
ONE-PIECE BOOM (STANDARD)		*5,600*	*1,335*
TWO-PIECE BOOM	UPPER	*3,840*	*950*
	LOWER	*1,920*	*554*

2-2) ARM

	LENGTH (*mm*)	WEIGHT (*kgf*)	DIGGING FORCE (TON-SAE)
STANDARD	*3,000*	*675*	*9.3*
SHORT	*2,750*	*632*	*9.7*
SHORT	*2,400*	*570*	*10.8*
SHORT	*2,000*	*522*	*12.1*

2-3) BUCKET

	CAPACITY (m^3)		BUCKET WIDTH *(mm)*		WEIGHT (Kg)	DIGGING FORCE (TON-SAE)
	CECE	SAE	W/CUTTER	W/O CUTTER		
OPT.	*0.47*	*0.51*	*778*	*722*	*549*	*12.5*
OPT.	*0.72*	*0.81*	*1134*	*1065*	*683*	
STD	*0.76*	*0.86*	*1180*	*1117*	*695*	
OPT	*0.92*	*1.05*	*1378*	*1309*	*776*	
OPT	*1.0*	*1.17*	*1499*	*1430*	*835*	
OPT	*1.10*	*1.28*	*1613*	*1544*	*872*	

3) OPTION PIPINGS

3-1) ONE-WAY PIPING

MAIN & PILOT PIPING	:	*OPTION*
FRONT SUPPLY PIPING	:	*OPTION*
AVAILABLE ATTACHMENT	:	*BREAKER*

3-2) PE3C PIPING

MAIN & PILOT PIPING	:	*OPTION*
FRONT SUPPLY PIPING	:	*OPTION*
AVAILABLE ATTACHMENT	:	*BUCKET TILT CYLINDER, CLAMSHELL CRUSHER*

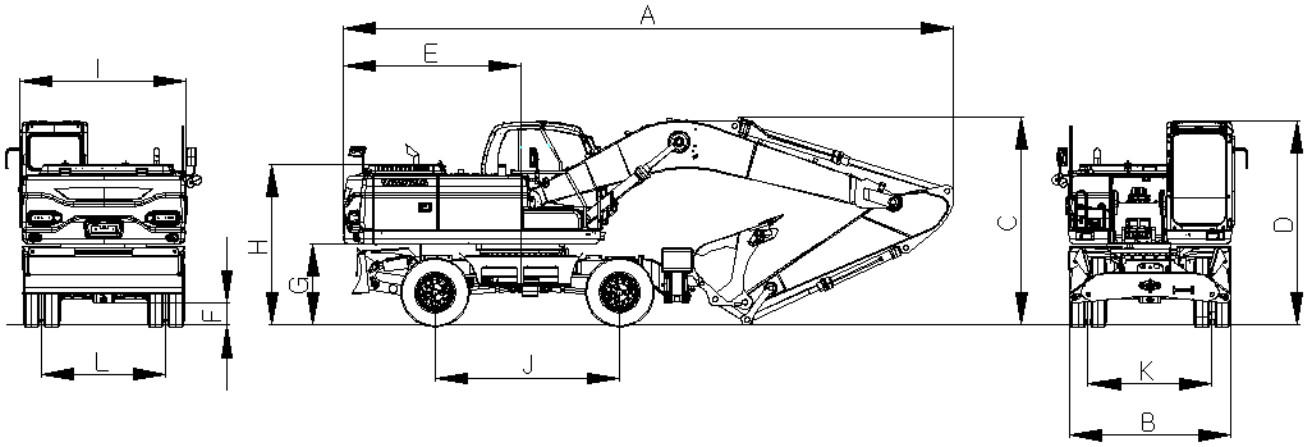
3-3) PERO PIPING

MAIN & PILOT PIPING	:	*OPTION*
FRONT SUPPLY PIPING	:	*OPTION*
AVAILABLE ATTACHMENT	:	*ROTATING GRAPPLE*

9. DIMENSIONS AND WORKING RANGE

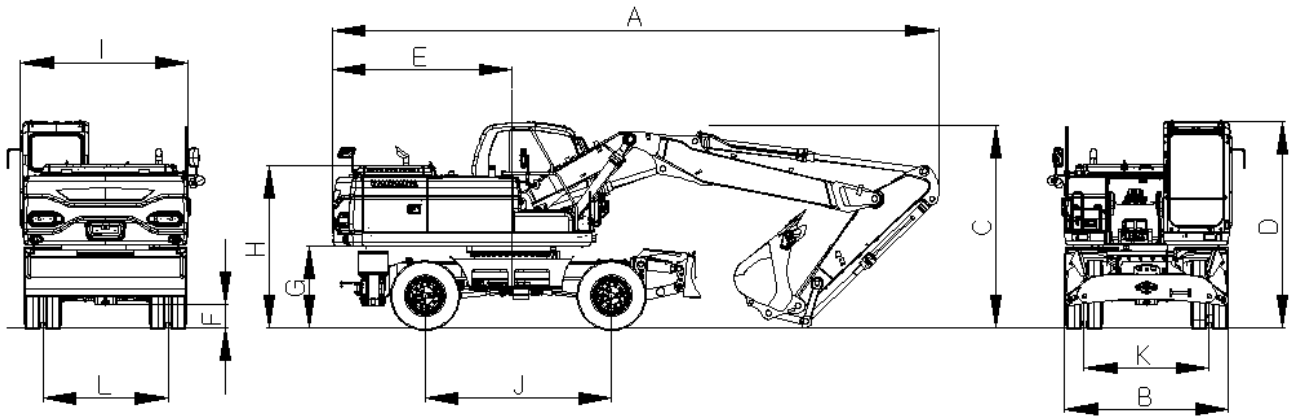
1) DIMENSION

1-1) ONE-PIECE BOOM



REFERENCE	DESCRIPTION	DIMENSION		
		5.6m ONE-PIECE BOOM		
		3.0m ARM	2.75m ARM	2.4m ARM
A	Shipping Length	9400mm	9420mm	9470mm
B	Shipping Width	2500mm	←	←
C	Shipping Height(Boom)	3490mm	3200mm	3200mm
D	Height Over Cab	3140mm	←	←
E	Counter Weight Swing Clearance	2750mm	←	←
F	Ground Clearance	350mm	←	←
G	Counter Weight Clearance	1259mm	←	←
H	Engine Cover Height	2485mm	←	←
I	Upper Housing Width	2530mm	←	←
J	Wheel Base	2850mm	←	←
K,L	Tread Width	1914mm	←	←

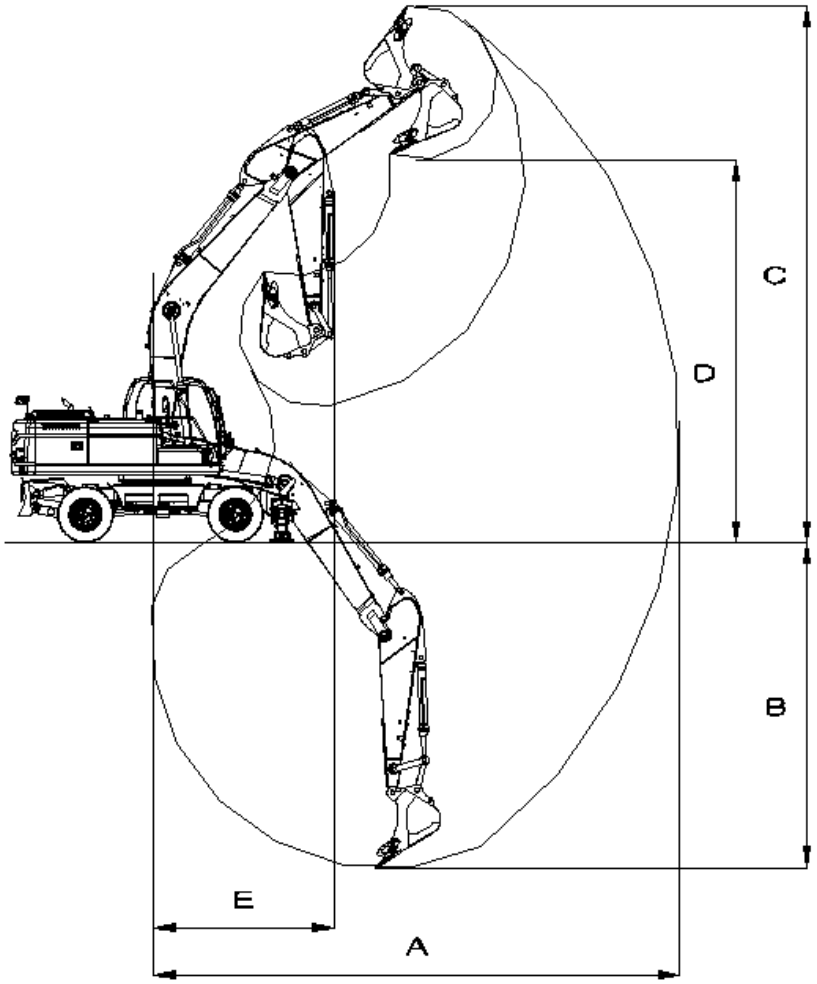
1-2) TWO-PIECE BOOM



REFERENCE	DESCRIPTION	DIMENSION	
		5.4m TWO-PIECE BOOM	
		2.4m ARM	2.0m ARM
A	Shipping Length	9210mm	9275mm
B	Shipping Width	2500mm	←
C	Shipping Height(Boom)	3140mm	←
D	Height Over Cab	3140mm	←
E	Counter Weight Swing Clearance	2750mm	←
F	Ground Clearance	350mm	←
G	Counter Weight Clearance	1259mm	←
H	Engine Cover Height	2485mm	←
I	Upper Housing Width	2530mm	←
J	Wheel Base	2850mm	←
K,L	Tread Width	1914mm	←

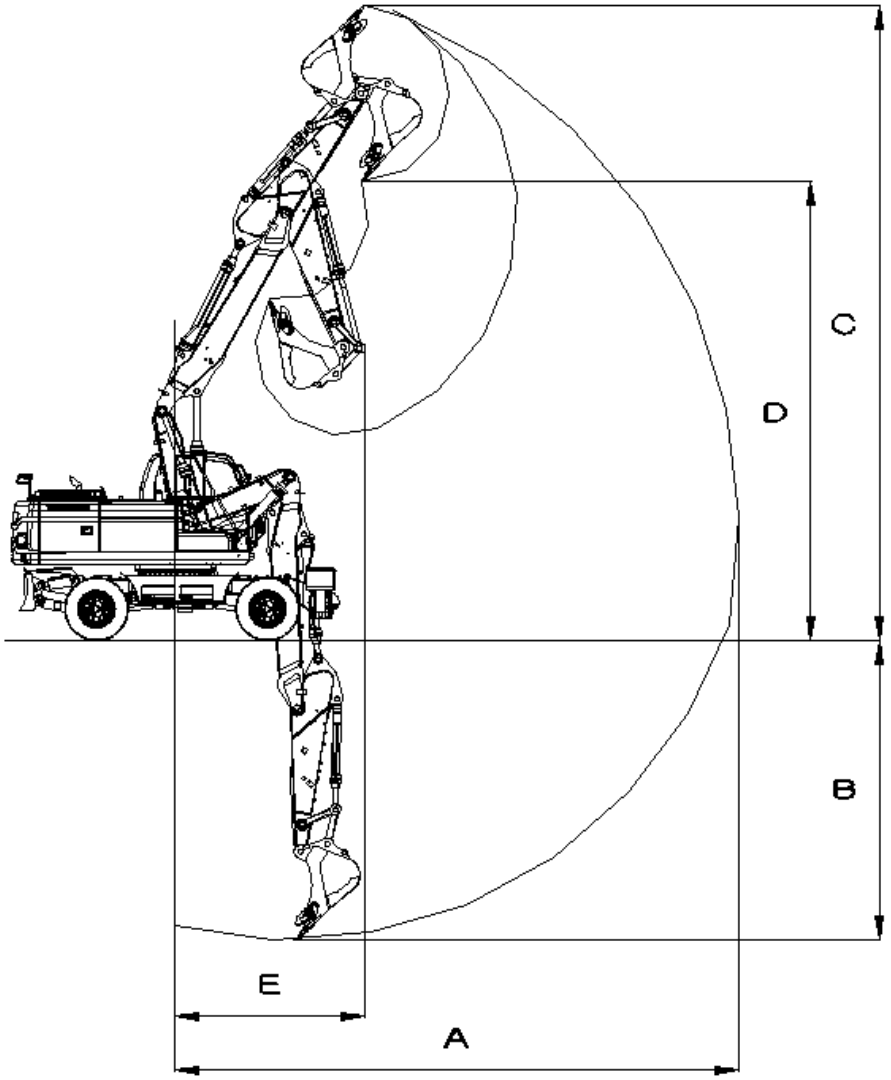
2) WORKING RANGE

2-1) ONE-PIECE BOOM



REFERENCE	DESCRIPTION	DIMENSION		
		5.6m ONE-PIECE BOOM		
		3.0m ARM	2.75m ARM	2.4m ARM
A	Max. Digging Radius	10000mm	9730mm	9430mm
B	Max. Digging Depth	6255mm	6010mm	5655mm
C	Max. Digging Height	10050mm	9800mm	9690mm
D	Max. Dump Height	7250mm	7020mm	6890mm
E	Min. Swing Radius	3440mm	3375mm	3390mm

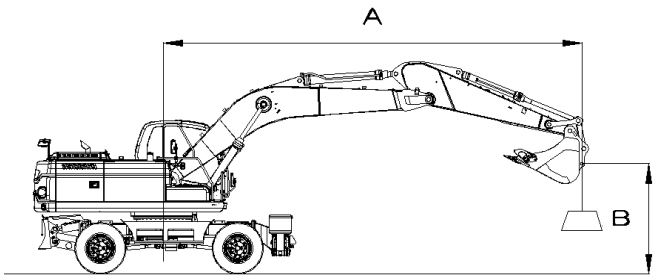
2-2) ONE-PIECE BOOM



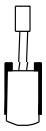
REFERENCE	DESCRIPTION	DIMENSION	
		5.4m TWO-PIECE BOOM	
		2.4m ARM	2.0m ARM
A	Max. Digging Radius	9405mm	9005mm
B	Max. Digging Depth	5625mm	5225mm
C	Max. Digging Height	10560mm	10210mm
D	Max. Dump Height	7620mm	7275mm
E	Min. Swing Radius	3185mm	3380mm

10. LIFTING CAPACITIES

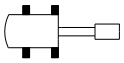
1) ONE-PIECE BOOM (3.0m Arm, 3.8t C/W)



BOOM	: 5.6m (18'04") One-Piece Boom
ARM	: 3.0m (9'10")
BUCKET	: Without Bucket
COUNTERWEIGHT	: 3,800kg
UNIT	: 1000 kg (1000 lb)



: Rated lift capacity over front (Dozer and Outrigger on ground)



: Rated lift capacity over side (Dozer and Outrigger on ground)

METRIC

A(m) / B(m)	Chassis Frame Attachment	2		3		4		5	
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE
8	F-Dozer + R-Outrigger								
	F-Outrigger + R-Outrigger								
7	F-Dozer + R-Outrigger								
	F-Outrigger + R-Outrigger								
6	F-Dozer + R-Outrigger								
	F-Outrigger + R-Outrigger								
5	F-Dozer + R-Outrigger							*5.94	*5.94
	F-Outrigger + R-Outrigger							*5.94	*5.94
4	F-Dozer + R-Outrigger			*10.16	*10.16	*7.90	*7.90	*6.72	*6.72
	F-Outrigger + R-Outrigger			*10.16	*10.16	*7.90	*7.90	*6.72	*6.72
3	F-Dozer + R-Outrigger			*7.11	*7.11	*9.49	*9.49	*7.60	*7.60
	F-Outrigger + R-Outrigger			*7.11	*7.11	*9.49	*9.49	*7.60	*7.60
2	F-Dozer + R-Outrigger					*10.86	*10.86	*8.43	*8.43
	F-Outrigger + R-Outrigger					*10.86	*10.86	*8.43	*8.43
1	F-Dozer + R-Outrigger			*2.72	*2.72	*11.67	*11.67	*9.04	8.61
	F-Outrigger + R-Outrigger			*2.72	*2.72	*11.67	*11.67	*9.04	8.68
0	F-Dozer + R-Outrigger			*4.69	*4.69	*11.90	*11.90	*9.33	8.50
	F-Outrigger + R-Outrigger			*4.69	*4.69	*11.90	*11.90	*9.33	8.58
-1	F-Dozer + R-Outrigger	*4.40	*4.40	*7.28	*7.28	*11.67	*11.67	*9.30	8.45
	F-Outrigger + R-Outrigger	*4.40	*4.40	*7.28	*7.28	*11.67	*11.67	*9.30	8.52
-2	F-Dozer + R-Outrigger	*7.36	*7.36	*10.52	*10.52	*11.05	*11.05	*8.94	8.44
	F-Outrigger + R-Outrigger	*7.36	*7.36	*10.52	*10.52	*11.05	*11.05	*8.94	8.52
-3	F-Dozer + R-Outrigger	*10.73	*10.73	*12.44	*12.44	*10.01	*10.01	*8.18	*8.18
	F-Outrigger + R-Outrigger	*10.73	*10.73	*12.44	*12.44	*10.01	*10.01	*8.18	*8.18
-4	F-Dozer + R-Outrigger			*10.26	*10.26	*8.40	*8.40	*6.83	*6.83
	F-Outrigger + R-Outrigger			*10.26	*10.26	*8.40	*8.40	*6.83	*6.83

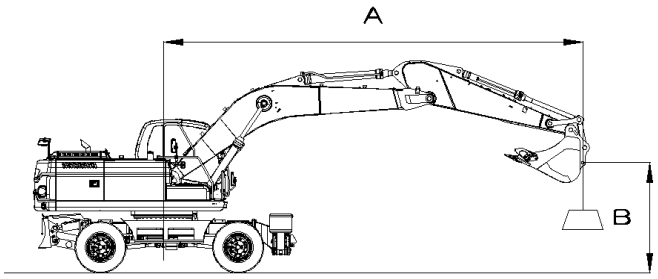
A(m) / B(m)	Chassis Frame Attachment	6		7		8		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
8	F-Dozer + R-Outrigger							*5.41	*5.41	5.66
	F-Outrigger + R-Outrigger							*5.41	*5.41	5.66
7	F-Dozer + R-Outrigger	*5.18	*5.18					*5.19	*5.19	6.60
	F-Outrigger + R-Outrigger	*5.18	*5.18					*5.19	*5.19	6.60
6	F-Dozer + R-Outrigger	*5.24	*5.24	*5.18	*5.18			*5.12	*5.12	7.28
	F-Outrigger + R-Outrigger	*5.24	*5.24	*5.18	*5.18			*5.12	*5.12	7.28
5	F-Dozer + R-Outrigger	*5.54	*5.54	*5.28	*5.28			*5.15	4.68	7.76
	F-Outrigger + R-Outrigger	*5.54	*5.54	*5.28	*5.28			*5.15	4.72	7.76
4	F-Dozer + R-Outrigger	*6.00	*6.00	*5.53	5.44	*5.24	4.44	*5.22	4.36	8.09
	F-Outrigger + R-Outrigger	*6.00	*6.00	*5.53	5.49	*5.24	4.48	*5.22	4.40	8.09
3	F-Dozer + R-Outrigger	*6.53	*6.53	*5.84	5.37	*5.37	4.40	*5.27	4.17	8.29
	F-Outrigger + R-Outrigger	*6.53	*6.53	*5.84	5.41	*5.37	4.44	*5.27	4.21	8.29
2	F-Dozer + R-Outrigger	*7.04	6.64	*6.15	5.29	*5.53	4.36	*5.34	4.09	8.36
	F-Outrigger + R-Outrigger	*7.04	6.70	*6.15	5.34	*5.53	4.40	*5.34	4.13	8.36
1	F-Dozer + R-Outrigger	*7.44	6.53	*6.39	5.22	*5.64	4.32	*5.43	4.09	8.31
	F-Outrigger + R-Outrigger	*7.44	6.59	*6.39	5.27	*5.64	4.36	*5.43	4.13	8.31
0	F-Dozer + R-Outrigger	*7.67	6.46	*6.52	5.17	*5.63	4.29	*5.52	4.20	8.13
	F-Outrigger + R-Outrigger	*7.67	6.52	*6.52	5.22	*5.63	4.33	*5.52	4.24	8.13
-1	F-Dozer + R-Outrigger	*7.66	6.42	*6.46	5.15			*5.60	4.42	7.82
	F-Outrigger + R-Outrigger	*7.66	6.48	*6.46	5.20			*5.60	4.46	7.82
-2	F-Dozer + R-Outrigger	*7.38	6.41	*6.12	5.15			*5.67	4.82	7.36
	F-Outrigger + R-Outrigger	*7.38	6.47	*6.12	5.20			*5.67	4.86	7.36
-3	F-Dozer + R-Outrigger	*6.70	6.44					*5.68	5.51	6.71
	F-Outrigger + R-Outrigger	*6.70	6.50					*5.68	5.56	6.71
-4	F-Dozer + R-Outrigger							*5.54	*5.54	5.82
	F-Outrigger + R-Outrigger							*5.54	*5.54	5.82

FEET

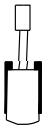
A(ft) / B(ft)	Chassis Frame Attachment	10		15		20		25		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
25	F-Dozer+R-Outrigger									*11.68	*11.68	19.87
	F-Outrigger+R-Outrigger									*11.68	*11.68	19.87
20	F-Dozer+R-Outrigger					*11.50	*11.50			*11.29	*11.29	23.69
	F-Outrigger+R-Outrigger					*11.50	*11.50			*11.29	*11.29	23.69
15	F-Dozer+R-Outrigger			*14.45	*14.45	*12.53	*12.53	*11.55	10.59	*11.45	9.96	25.99
	F-Outrigger+R-Outrigger			*14.45	*14.45	*12.53	*12.53	*11.55	10.68	*11.45	10.06	25.99
10	F-Dozer+R-Outrigger Down	*19.62	*19.62	*18.12	*18.12	*14.16	*14.16	*12.17	10.43	*11.62	9.21	27.18
	F-Outrigger+R-Outrigger	*19.62	*19.62	*18.12	*18.12	*14.16	*14.16	*12.17	10.53	*11.62	9.29	27.18
5	F-Dozer+R-Outrigger	*5.52	*5.52	*21.33	*21.33	*15.73	14.18	*12.85	10.26	*11.87	8.99	27.40
	F-Outrigger+R-Outrigger	*5.52	*5.52	*21.33	*21.33	*15.73	14.31	*12.85	10.35	*11.87	9.08	27.40
0 (GND)	F-Dozer+R-Outrigger	*10.83	*10.83	*22.69	21.60	*16.62	13.91	*13.12	10.13	*12.16	9.26	26.67
	F-Outrigger+R-Outrigger	*10.83	*10.83	*22.69	21.80	*16.62	14.04	*13.12	10.22	*12.16	9.35	26.67
-5	F-Dozer+R-Outrigger	*20.06	*20.06	*22.09	21.48	*16.37	13.80			*12.43	10.15	24.92
	F-Outrigger+R-Outrigger	*20.06	*20.06	*22.09	21.68	*16.37	13.93			*12.43	10.24	24.92
-10	F-Dozer+R-Outrigger	*26.93	*26.93	*19.52	*19.52	*14.36	13.89			*12.51	12.24	21.90
	F-Outrigger+R-Outrigger	*26.93	*26.93	*19.52	*19.52	*14.36	14.02			*12.51	12.35	21.90
-15	F-Dozer+R-Outrigger			*13.74	*13.74					*11.69	*11.69	16.90
	F-Outrigger+R-Outrigger			*13.74	*13.74					*11.69	*11.69	16.90

1. RATINGS ARE BASED ON SAE J1097
2. LOAD POINT IS THE END OF ARM.
3. * RATED LOADS ARE BASED ON HYDRAULIC CAPACITY.
4. RATED LOADS DO NOT EXCEED 87% OF HYD. CAPACITY OR 75% OF TIPPING CAPACITY.

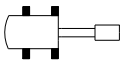
2) ONE-PIECE BOOM (2.75m Arm, 3.8t C/W)



BOOM	: 5.6m (18'04") One-Piece Boom
ARM	: 2.75m (9'00")
BUCKET	: Without Bucket
COUNTERWEIGHT	: 3,800kg
UNIT	: 1000 kg (1000 lb)



: Rated lift capacity over front (Dozer and Outrigger on ground)



: Rated lift capacity over side (Dozer and Outrigger on ground)

METRIC

A(m) / B(m)	Chassis Frame Attachment	2		3		4		5	
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE
8	F-Dozer + R-Outrigger								
	F-Outrigger + R-Outrigger								
7	F-Dozer + R-Outrigger								
	F-Outrigger + R-Outrigger								
6	F-Dozer + R-Outrigger								
	F-Outrigger + R-Outrigger								
5	F-Dozer + R-Outrigger							*6.22	*6.22
	F-Outrigger + R-Outrigger							*6.22	*6.22
4	F-Dozer + R-Outrigger			*11.02	*11.02	*8.34	*8.34	*7.00	*7.00
	F-Outrigger + R-Outrigger			*11.02	*11.02	*8.34	*8.34	*7.00	*7.00
3	F-Dozer + R-Outrigger			*3.94	*3.94	*9.91	*9.91	*7.86	*7.86
	F-Outrigger + R-Outrigger			*3.94	*3.94	*9.91	*9.91	*7.86	*7.86
2	F-Dozer + R-Outrigger					*11.20	*11.20	*8.65	8.38
	F-Outrigger + R-Outrigger					*11.20	*11.20	*8.65	8.46
1	F-Dozer + R-Outrigger			*1.92	*1.92	*11.39	*11.39	*9.19	8.24
	F-Outrigger + R-Outrigger			*1.92	*1.92	*11.39	*11.39	*9.19	8.31
0	F-Dozer + R-Outrigger			*4.71	*4.71	*11.93	11.79	*9.40	8.15
	F-Outrigger + R-Outrigger			*4.71	*4.71	*11.93	11.90	*9.40	8.23
-1	F-Dozer + R-Outrigger	*4.77	*4.77	*7.77	*7.77	*11.58	*11.58	*9.29	8.11
	F-Outrigger + R-Outrigger	*4.77	*4.77	*7.77	*7.77	*11.58	*11.58	*9.29	8.19
-2	F-Dozer + R-Outrigger	*8.13	*8.13	*11.42	*11.42	*10.85	*10.85	*8.83	8.12
	F-Outrigger + R-Outrigger	*8.13	*8.13	*11.42	*11.42	*10.85	*10.85	*8.83	8.19
-3	F-Dozer + R-Outrigger	*11.85	*11.85	*11.86	*11.86	*9.69	*9.69	*7.95	*7.95
	F-Outrigger + R-Outrigger	*11.85	*11.85	*11.86	*11.86	*9.69	*9.69	*7.95	*7.95
-4	F-Dozer + R-Outrigger			*9.52	*9.52	*7.90	*7.90	*6.38	*6.38
	F-Outrigger + R-Outrigger			*9.52	*9.52	*7.90	*7.90	*6.38	*6.38

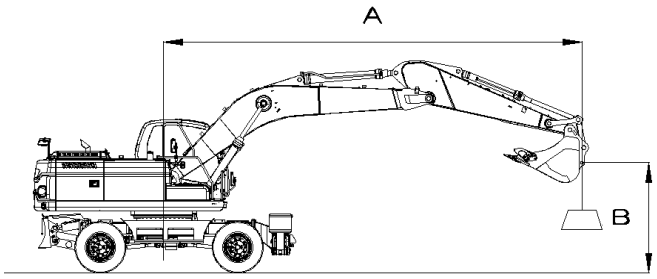
A(m) / B(m)	Chassis Frame Attachment	6		7		8		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
8	F-Dozer + R-Outrigger							*5.68	*5.68	5.24
	F-Outrigger + R-Outrigger							*5.68	*5.68	5.24
7	F-Dozer + R-Outrigger	*5.45	*5.45					*5.44	*5.44	6.24
	F-Outrigger + R-Outrigger	*5.45	*5.45					*5.44	*5.44	6.24
6	F-Dozer + R-Outrigger	*5.48	*5.48					*5.39	5.32	6.95
	F-Outrigger + R-Outrigger	*5.48	*5.48					*5.39	5.37	6.95
5	F-Dozer + R-Outrigger	*5.76	*5.76	*5.47	5.25			*5.40	4.74	7.46
	F-Outrigger + R-Outrigger	*5.76	*5.76	*5.47	5.29			*5.40	4.79	7.46
4	F-Dozer + R-Outrigger	*6.20	*6.20	*5.69	5.19			*5.43	4.39	7.81
	F-Outrigger + R-Outrigger	*6.20	*6.20	*5.69	5.24			*5.43	4.44	7.81
3	F-Dozer + R-Outrigger	*6.71	6.46	*5.98	5.13	*5.49	4.20	*5.49	4.19	8.01
	F-Outrigger + R-Outrigger	*6.71	6.52	*5.98	5.17	*5.49	4.24	*5.49	4.23	8.01
2	F-Dozer + R-Outrigger	*7.19	6.35	*6.26	5.06	*5.61	4.16	*5.57	4.10	8.08
	F-Outrigger + R-Outrigger	*7.19	6.41	*6.26	5.11	*5.61	4.20	*5.57	4.14	8.08
1	F-Dozer + R-Outrigger	*7.55	6.25	*6.47	5.00	*5.68	4.13	*5.66	4.11	8.03
	F-Outrigger + R-Outrigger	*7.55	6.31	*6.47	5.05	*5.68	4.17	*5.66	4.15	8.03
0	F-Dozer + R-Outrigger	*7.73	6.19	*6.55	4.96			*5.75	4.23	7.84
	F-Outrigger + R-Outrigger	*7.73	6.25	*6.55	5.01			*5.75	4.27	7.84
-1	F-Dozer + R-Outrigger	*7.66	6.16	*6.43	4.94			*5.85	4.47	7.52
	F-Outrigger + R-Outrigger	*7.66	6.21	*6.43	4.99			*5.85	4.52	7.52
-2	F-Dozer + R-Outrigger	*7.29	6.16	*5.97	4.95			*5.91	4.92	7.04
	F-Outrigger + R-Outrigger	*7.29	6.22	*5.97	5.00			*5.91	4.96	7.04
-3	F-Dozer + R-Outrigger	*6.46	6.20					*5.91	5.71	6.36
	F-Outrigger + R-Outrigger	*6.46	6.26					*5.91	5.77	6.36
-4	F-Dozer + R-Outrigger							*5.71	*5.71	5.41
	F-Outrigger + R-Outrigger							*5.71	*5.71	5.41

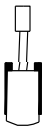
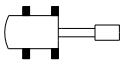
FEET

A(ft) / B(ft)	Chassis Frame Attachment	10		15		20		25		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
25	F-Dozer + R-Outrigger									*12.26	*12.26	18.58
	F-Outrigger + R-Outrigger									*12.26	*12.26	18.58
20	F-Dozer + R-Outrigger					*12.01	*12.01			*11.88	*11.88	22.62
	F-Outrigger + R-Outrigger					*12.01	*12.01			*11.88	*11.88	22.62
15	F-Dozer + R-Outrigger			*15.18	*15.18	*12.98	*12.98	*11.93	10.09	*11.93	10.08	25.02
	F-Outrigger + R-Outrigger			*15.18	*15.18	*12.98	*12.98	*11.93	10.19	*11.93	10.17	25.02
10	F-Dozer + R-Outrigger	*11.52	*11.52	*18.81	*18.81	*14.55	13.92	*12.45	9.96	*12.10	9.26	26.26
	F-Outrigger + R-Outrigger	*11.52	*11.52	*18.81	*18.81	*14.55	14.05	*12.45	10.06	*12.10	9.35	26.26
5	F-Dozer + R-Outrigger	*2.61	*2.61	*21.81	21.11	*16.02	13.56	*13.03	9.81	*12.37	9.03	26.48
	F-Outrigger + R-Outrigger	*2.61	*2.61	*21.81	21.31	*16.02	13.69	*13.03	9.90	*12.37	9.12	26.48
0 (GND)	F-Dozer + R-Outrigger	*10.91	*10.91	*22.83	20.72	*16.75	13.33	*13.15	9.70	*12.69	9.32	25.74
	F-Outrigger + R-Outrigger	*10.91	*10.91	*22.83	20.91	*16.75	13.46	*13.15	9.80	*12.69	9.41	25.74
-5	F-Dozer + R-Outrigger	*21.63	*21.63	*21.90	20.64	*16.26	13.25			*12.98	10.31	23.92
	F-Outrigger + R-Outrigger	*21.63	*21.63	*21.90	20.84	*16.26	13.38			*12.98	10.41	23.92
-10	F-Dozer + R-Outrigger	*25.69	*25.69	*18.94	*18.94	*13.79	13.38			*13.02	12.71	20.74
	F-Outrigger + R-Outrigger	*25.69	*25.69	*18.94	*18.94	*13.79	13.5			*13.02	12.83	20.74

1. RATINGS ARE BASED ON SAE J1097
2. LOAD POINT IS THE END OF ARM.
3. * RATED LOADS ARE BASED ON HYDRAULIC CAPACITY.
4. RATED LOADS DO NOT EXCEED 87% OF HYD. CAPACITY OR 75% OF TIPPING CAPACITY.

3) ONE-PIECE BOOM (2.4m Arm, 3.8t C/W)



BOOM	: 5.6m (18'04") One-Piece Boom
ARM	: 2.4m (7'10")
BUCKET	: Without Bucket
COUNTERWEIGHT	: 3,800kg
UNIT	: 1000 kg (1000 lb)
	: Rated lift capacity over front (Dozer and Outrigger on ground)
	: Rated lift capacity over side (Dozer and Outrigger on ground)

METRIC

A(m) / B(m)	Chassis Frame Attachment	2		3		4		5	
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE
8	F-Dozer + R-Outrigger								
	F-Outrigger + R-Outrigger								
7	F-Dozer + R-Outrigger							*5.88	*5.88
	F-Outrigger + R-Outrigger							*5.88	*5.88
6	F-Dozer + R-Outrigger							*6.07	*6.07
	F-Outrigger + R-Outrigger							*6.07	*6.07
5	F-Dozer + R-Outrigger					*7.51	*7.51	*6.60	*6.60
	F-Outrigger + R-Outrigger					*7.51	*7.51	*6.60	*6.60
4	F-Dozer + R-Outrigger			*12.32	*12.32	*8.92	*8.92	*7.35	*7.35
	F-Outrigger + R-Outrigger			*12.32	*12.32	*8.92	*8.92	*7.35	*7.35
3	F-Dozer + R-Outrigger					*10.45	*10.45	*8.18	*8.18
	F-Outrigger + R-Outrigger					*10.45	*10.45	*8.18	*8.18
2	F-Dozer + R-Outrigger					*10.27	*10.27	*8.89	8.72
	F-Outrigger + R-Outrigger					*10.27	*10.27	*8.89	8.79
1	F-Dozer + R-Outrigger					*9.00	*9.00	*9.32	8.59
	F-Outrigger + R-Outrigger					*9.00	*9.00	*9.32	8.66
0	F-Dozer + R-Outrigger			*2.96	*2.96	*11.08	*11.08	*9.41	8.52
	F-Outrigger + R-Outrigger			*2.96	*2.96	*11.08	*11.08	*9.41	8.59
-1	F-Dozer + R-Outrigger			*7.40	*7.40	*11.30	*11.30	*9.18	8.49
	F-Outrigger + R-Outrigger			*7.40	*7.40	*11.30	*11.30	*9.18	8.57
-2	F-Dozer + R-Outrigger	*8.47	*8.47	*12.13	*12.13	*10.43	*10.43	*8.59	8.52
	F-Outrigger + R-Outrigger	*8.47	*8.47	*12.13	*12.13	*10.43	*10.43	*8.59	*8.59
-3	F-Dozer + R-Outrigger			*10.87	*10.87	*9.11	*9.11	*7.52	*7.52
	F-Outrigger + R-Outrigger			*10.87	*10.87	*9.11	*9.11	*7.52	*7.52
-4	F-Dozer + R-Outrigger					*7.03	*7.03		
	F-Outrigger + R-Outrigger					*7.03	*7.03		

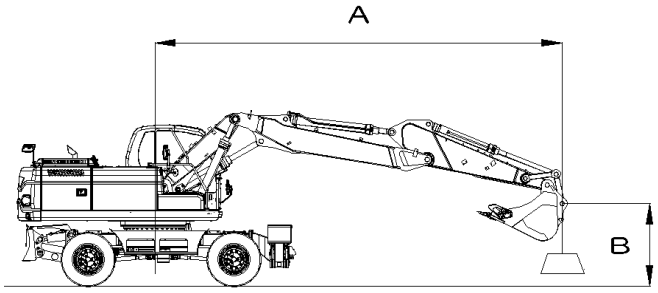
A(m) / B(m)	Chassis Frame Attachment	6		7		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
8	F-Dozer + R-Outrigger					*6.20	*6.20	4.81
	F-Outrigger + R-Outrigger					*6.20	*6.20	4.81
7	F-Dozer + R-Outrigger					*5.87	*5.87	5.89
	F-Outrigger + R-Outrigger					*5.87	*5.87	5.89
6	F-Dozer + R-Outrigger	*5.80	*5.80			*5.74	*5.74	6.64
	F-Outrigger + R-Outrigger	*5.80	*5.80			*5.74	*5.74	6.64
5	F-Dozer + R-Outrigger	*6.04	*6.04	*5.73	5.45	*5.70	5.24	7.17
	F-Outrigger + R-Outrigger	*6.04	*6.04	*5.73	5.50	*5.70	5.29	7.17
4	F-Dozer + R-Outrigger	*6.45	*6.45	*5.90	5.40	*5.71	4.83	7.53
	F-Outrigger + R-Outrigger	*6.45	*6.45	*5.90	5.45	*5.71	4.88	7.53
3	F-Dozer + R-Outrigger	*6.93	6.72	*6.15	5.34	*5.75	4.60	7.74
	F-Outrigger + R-Outrigger	*6.93	6.78	*6.15	5.39	*5.75	4.65	7.74
2	F-Dozer + R-Outrigger	*7.36	6.61	*6.39	5.28	*5.81	4.50	7.82
	F-Outrigger + R-Outrigger	*7.36	6.67	*6.39	5.33	*5.81	4.55	7.82
1	F-Dozer + R-Outrigger	*7.66	6.53	*6.55	5.23	*5.89	4.52	7.76
	F-Outrigger + R-Outrigger	*7.66	6.59	*6.55	5.28	*5.89	4.56	7.76
0	F-Dozer + R-Outrigger	*7.75	6.47	*6.55	5.20	*5.96	4.66	7.57
	F-Outrigger + R-Outrigger	*7.75	6.53	*6.55	5.24	*5.96	4.71	7.57
-1	F-Dozer + R-Outrigger	*7.58	6.45	*6.31	5.19	*6.02	4.96	7.23
	F-Outrigger + R-Outrigger	*7.58	6.51	*6.31	5.24	*6.02	5.01	7.23
-2	F-Dozer + R-Outrigger	*7.07	6.47			*6.03	5.51	6.73
	F-Outrigger + R-Outrigger	*7.07	6.53			*6.03	5.56	6.73
-3	F-Dozer + R-Outrigger	*5.95	*5.95			*5.93	*5.93	6.01
	F-Outrigger + R-Outrigger	*5.95	*5.95			*5.93	*5.93	6.01
-4	F-Dozer + R-Outrigger					*5.50	*5.50	5.00
	F-Outrigger + R-Outrigger					*5.50	*5.50	5.00

FEET

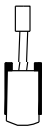
A(ft) / B(ft)	Chassis Frame Attachment	10		15		20		25		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
25	F-Dozer + R-Outrigger									*13.31	*13.31	17.30
	F-Outrigger + R-Outrigger									*13.31	*13.31	17.30
20	F-Dozer + R-Outrigger					*12.74	*12.74			*12.68	*12.68	21.59
	F-Outrigger + R-Outrigger					*12.74	*12.74			*12.68	*12.68	21.59
15	F-Dozer + R-Outrigger	*22.43	*22.43	*16.15	*16.15	*13.57	*13.57			*12.57	11.12	24.09
	F-Outrigger + R-Outrigger	*22.43	*22.43	*16.15	*16.15	*13.57	*13.57			*12.57	11.22	24.09
10	F-Dozer + R-Outrigger			*19.67	*19.67	*15.03	14.48	*12.79	10.39	*12.68	10.17	25.37
	F-Outrigger + R-Outrigger			*19.67	*19.67	*15.03	14.61	*12.79	10.49	*12.68	10.26	25.37
5	F-Dozer + R-Outrigger			*22.29	21.96	*16.32	14.15	*13.19	10.26	*12.89	9.92	25.61
	F-Outrigger + R-Outrigger			*22.29	22.15	*16.32	14.28	*13.19	10.36	*12.89	10.01	25.61
0 (GND)	F-Dozer + R-Outrigger	*7.27	*7.27	*22.80	21.65	*16.80	13.95			*13.14	10.28	24.83
	F-Outrigger + R-Outrigger	*7.27	*7.27	*22.80	21.85	*16.80	14.08			*13.14	10.38	24.83
-5	F-Dozer + R-Outrigger	*22.07	*22.07	*21.40	*21.40	*15.95	13.92			*13.30	11.49	22.94
	F-Outrigger + R-Outrigger	*22.07	*22.07	*21.40	*21.40	*15.95	14.04			*13.30	11.59	22.94
-10	F-Dozer + R-Outrigger	*23.55	*23.55	*17.87	*17.87					*13.04	*13.04	19.60
	F-Outrigger + R-Outrigger	*23.55	*23.55	*17.87	*17.87					*13.04	*13.04	19.60

1. RATINGS ARE BASED ON SAE J1097
2. LOAD POINT IS THE END OF ARM.
3. * RATED LOADS ARE BASED ON HYDRAULIC CAPACITY.
4. RATED LOADS DO NOT EXCEED 87% OF HYD. CAPACITY OR 75% OF TIPPING CAPACITY.

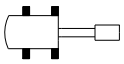
4) TWO-PIECE BOOM (2.4m Arm, 3.8t C/W)



BOOM	: 5.4m (17'08") Two-Piece Boom
ARM	: 2.4m (7'10")
BUCKET	: Without Bucket
COUNTERWEIGHT	: 3,800kg
UNIT	: 1000 kg (1000 lb)



: Rated lift capacity over front (Dozer and Outrigger on ground)



: Rated lift capacity over side (Dozer and Outrigger on ground)

METRIC

A(m) / B(m)	Chassis Frame Attachment	2		3		4		5	
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE
8	F-Dozer + R-Outrigger								
	F-Outrigger + R-Outrigger								
7	F-Dozer + R-Outrigger							*5.88	*5.88
	F-Outrigger + R-Outrigger							*5.88	*5.88
6	F-Dozer + R-Outrigger							*6.07	*6.07
	F-Outrigger + R-Outrigger							*6.07	*6.07
5	F-Dozer + R-Outrigger					*7.51	*7.51	*6.60	6.12
	F-Outrigger + R-Outrigger					*7.51	*7.51	*6.60	*6.60
4	F-Dozer + R-Outrigger			*12.32	*12.32	*8.92	8.32	*7.35	5.96
	F-Outrigger + R-Outrigger			*12.32	*12.32	*8.92	*8.92	*7.35	*7.35
3	F-Dozer + R-Outrigger					*10.45	7.97	*8.18	5.78
	F-Outrigger + R-Outrigger					*10.45	*10.45	*8.18	*8.18
2	F-Dozer + R-Outrigger					*10.27	7.70	*8.89	5.62
	F-Outrigger + R-Outrigger					*10.27	*10.27	*8.89	8.42
11	F-Dozer + R-Outrigger					*9.00	7.56	*9.32	5.51
	F-Outrigger + R-Outrigger					*9.00	*9.00	*9.32	8.29
0	F-Dozer + R-Outrigger			*2.96	*2.96	*11.08	7.51	*9.41	5.45
	F-Outrigger + R-Outrigger			*2.96	*2.96	*11.08	*11.08	*9.41	8.22
-1	F-Dozer + R-Outrigger			*7.40	*7.40	*11.30	7.51	*9.18	5.43
	F-Outrigger + R-Outrigger			*7.40	*7.40	*11.30	*11.30	*9.18	8.20
-2	F-Dozer + R-Outrigger	*8.47	*8.47	*12.13	*12.13	*10.43	7.56	*8.59	5.45
	F-Outrigger + R-Outrigger	*8.47	*8.47	*12.13	*12.13	*10.43	*10.43	*8.59	8.22

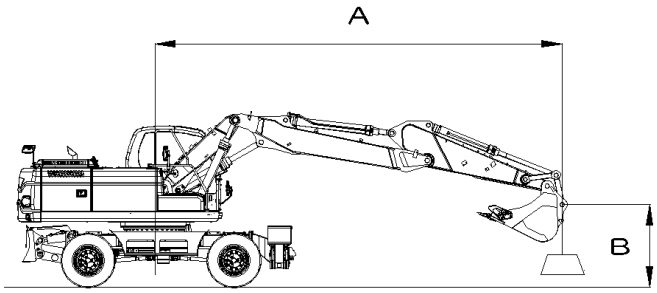
A(m) / B(m)	Chassis Frame Attachment	6		7		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
8	F-Dozer + R-Outrigger					*6.20	*6.20	4.81
	F-Outrigger + R-Outrigger					*6.20	*6.20	4.81
7	F-Dozer + R-Outrigger					*5.87	4.85	5.89
	F-Outrigger + R-Outrigger					*5.87	*5.87	5.89
6	F-Dozer + R-Outrigger	*5.80	4.72			*5.74	4.02	6.64
	F-Outrigger + R-Outrigger	*5.80	*5.80			*5.74	5.74	6.64
5	F-Dozer + R-Outrigger	*6.04	4.66	*5.73	3.69	*5.70	3.55	7.17
	F-Outrigger + R-Outrigger	*6.04	*6.04	*5.73	5.26	*5.70	5.06	7.17
4	F-Dozer + R-Outrigger	*6.45	4.57	*5.90	3.65	*5.71	3.27	7.53
	F-Outrigger + R-Outrigger	*6.45	*6.45	*5.90	5.22	*5.71	4.67	7.53
3	F-Dozer + R-Outrigger	*6.93	4.47	*6.15	3.59	*5.75	3.10	7.74
	F-Outrigger + R-Outrigger	*6.93	6.49	*6.15	5.16	*5.75	4.44	7.74
2	F-Dozer + R-Outrigger	*7.36	4.37	*6.39	3.54	*5.81	3.03	7.82
	F-Outrigger + R-Outrigger	*7.36	6.39	*6.39	5.10	*5.81	4.34	7.82
1	F-Dozer + R-Outrigger	*7.66	4.30	*6.55	3.49	*5.89	3.03	7.76
	F-Outrigger + R-Outrigger	*7.66	6.30	*6.55	5.04	*5.89	4.36	7.76
0	F-Dozer + R-Outrigger	*7.75	4.25	*6.55	3.46	*5.96	3.12	7.57
	F-Outrigger + R-Outrigger	*7.75	6.25	*6.55	5.01	*5.96	4.50	7.57
-1	F-Dozer + R-Outrigger	*7.58	4.23	*6.31	3.45	*6.02	3.31	7.23
	F-Outrigger + R-Outrigger	*7.58	6.23	*6.31	5.01	*6.02	4.79	7.23
-2	F-Dozer + R-Outrigger	*7.07	4.24			*6.03	3.66	6.73
	F-Outrigger + R-Outrigger	*7.07	6.24			*6.03	5.31	6.73

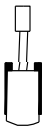
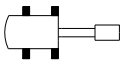
FEET

A(ft) / B(ft)	Chassis Frame Attachment	10		15		20		25		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
25	F-Dozer + R-Outrigger									*13.31	12.69	17.30
	F-Outrigger + R-Outrigger									*13.31	*13.31	17.30
20	F-Dozer + R-Outrigger					*12.74	10.15			*12.68	9.00	21.59
	F-Outrigger + R-Outrigger					*12.74	*12.74			*12.68	*12.68	21.59
15	F-Dozer + R-Outrigger	*22.43	*22.43	*16.15	15.28	*13.57	9.96			*12.57	7.52	24.09
	F-Outrigger + R-Outrigger	*22.43	*22.43	*16.15	*16.15	*13.57	*13.57			*12.57	10.73	24.09
10	F-Dozer + R-Outrigger			*19.67	14.50	*15.03	9.65	*12.79	7.01	*12.68	6.86	25.37
	F-Outrigger + R-Outrigger			*19.67	*19.67	*15.03	13.99	*12.79	10.03	*12.68	9.81	25.37
5	F-Dozer + R-Outrigger			*22.29	13.88	*16.32	9.35	*13.19	6.89	*12.89	6.66	25.61
	F-Outrigger + R-Outrigger			*22.29	21.20	*16.32	13.66	*13.19	9.90	*12.89	9.56	25.61
0 (GND)	F-Dozer + R-Outrigger	*7.27	*7.27	*22.80	13.62	*16.80	9.17			*13.14	6.88	24.83
	F-Outrigger + R-Outrigger	*7.27	*7.27	*22.80	20.90	*16.80	13.46			*13.14	9.91	24.83
-5	F-Dozer + R-Outrigger	*22.07	*22.07	*21.40	13.61	*15.95	9.14			*13.30	7.65	22.94
	F-Outrigger + R-Outrigger	*22.07	*22.07	*21.40	20.89	*15.95	13.42			*13.30	11.08	22.94
-10	F-Dozer + R-Outrigger	*23.55	*23.55	*17.87	13.81					*13.04	9.56	19.60
	F-Outrigger + R-Outrigger	*23.55	*23.55	*17.87	*17.87					*13.04	*13.04	19.60

1. RATINGS ARE BASED ON SAE J1097
2. LOAD POINT IS THE END OF ARM.
3. * RATED LOADS ARE BASED ON HYDRAULIC CAPACITY.
4. RATED LOADS DO NOT EXCEED 87% OF HYD. CAPACITY OR 75% OF TIPPING CAPACITY.

5) TWO-PIECE BOOM (2.0m Arm, 3.8t C/W)



BOOM	: 5.4m (17'08") Two-Piece Boom
ARM	: 2.0m (6'07")
BUCKET	: Without Bucket
COUNTERWEIGHT	: 3,800kg
UNIT	: 1000 kg (1000 lb)
	: Rated lift capacity over front (Dozer and Outrigger on ground)
	: Rated lift capacity over side (Dozer and Outrigger on ground)

METRIC

A(m) / B(m)	Chassis Frame Attachment	3		4		5	
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE
7	F-Dozer + R-Outrigger					*6.37	6.14
	F-Outrigger + R-Outrigger					*6.37	*6.37
6	F-Dozer + R-Outrigger					*6.49	6.11
	F-Outrigger + R-Outrigger					*6.49	*6.49
5	F-Dozer + R-Outrigger	*10.28	*10.28	*8.11	*8.11	*6.99	6.00
	F-Outrigger + R-Outrigger	*10.28	*10.28	*8.11	*8.11	*6.99	*6.99
4	F-Dozer + R-Outrigger			*9.57	8.12	*7.73	5.84
	F-Outrigger + R-Outrigger			*9.57	*9.57	*7.73	*7.73
3	F-Dozer + R-Outrigger			*11.07	7.79	*8.51	5.68
	F-Outrigger + R-Outrigger			*11.07	*11.07	*8.51	8.46
2	F-Dozer + R-Outrigger			*5.60	*5.60	*9.12	5.54
	F-Outrigger + R-Outrigger			*5.60	*5.60	*9.12	8.30
1	F-Dozer + R-Outrigger			*6.49	*6.49	*9.42	5.45
	F-Outrigger + R-Outrigger			*6.49	*6.49	*9.42	8.20
0	F-Dozer + R-Outrigger			*10.27	7.48	*9.38	5.41
	F-Outrigger + R-Outrigger			*10.27	*10.27	*9.38	8.15
-1	F-Dozer + R-Outrigger	*7.06	*7.06	*10.90	7.51	*9.00	5.41
	F-Outrigger + R-Outrigger	*7.06	*7.06	*10.90	*10.90	*9.00	8.15
-2	F-Dozer + R-Outrigger	*11.43	*11.43	*9.89	7.56	*8.24	5.44
	F-Outrigger + R-Outrigger	*11.43	*11.43	*9.89	*9.89	*8.24	8.18

A(m) / B(m)	Chassis Frame Attachment	6		7		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
7	F-Dozer + R-Outrigger					*6.35	5.44	5.40
	F-Outrigger + R-Outrigger					*6.35	*6.35	5.40
6	F-Dozer + R-Outrigger	*6.17	4.61			*6.15	4.36	6.21
	F-Outrigger + R-Outrigger	*6.17	*6.17			*6.15	*6.15	6.21
5	F-Dozer + R-Outrigger	*6.34	4.56			*6.07	3.79	6.77
	F-Outrigger + R-Outrigger	*6.34	*6.34			*6.07	5.43	6.77
4	F-Dozer + R-Outrigger	*6.71	4.49	*6.12	3.58	*6.06	3.46	7.15
	F-Outrigger + R-Outrigger	*6.71	6.49	*6.12	5.13	*6.06	4.96	7.15
3	F-Dozer + R-Outrigger	*7.15	4.39	*6.31	3.53	*6.09	3.27	7.37
	F-Outrigger + R-Outrigger	*7.15	6.39	*6.31	5.08	*6.09	4.70	7.37
2	F-Dozer + R-Outrigger	*7.52	4.31	*6.50	3.48	*6.14	3.19	7.45
	F-Outrigger + R-Outrigger	*7.52	6.30	*6.50	5.03	*6.14	4.59	7.45
1	F-Dozer + R-Outrigger	*7.74	4.25	*6.58	3.45	*6.20	3.20	7.39
	F-Outrigger + R-Outrigger	*7.74	6.23	*6.58	4.99	*6.20	4.61	7.39
0	F-Dozer + R-Outrigger	*7.73	4.21	*6.49	3.43	*6.26	3.31	7.19
	F-Outrigger + R-Outrigger	*7.73	6.19	*6.49	4.97	*6.26	4.78	7.19
-1	F-Dozer + R-Outrigger	*7.44	4.21			*6.29	3.54	6.84
	F-Outrigger + R-Outrigger	*7.44	6.18			*6.29	5.14	6.84
-2	F-Dozer + R-Outrigger	*6.73	4.24			*6.24	3.97	6.30
	F-Outrigger + R-Outrigger	*6.73	6.22			*6.24	5.80	6.30

FEET

A(ft) / B(ft)	Chassis Frame Attachment	10		15		20		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
25	F-Dozer + R-Outrigger			*14.58	*14.58			*14.59	*14.59	15.46
	F-Outrigger + R-Outrigger			*14.58	*14.58			*14.59	*14.59	15.46
20	F-Dozer + R-Outrigger			*14.68	*14.68	*13.59	9.91	*13.59	9.79	20.15
	F-Outrigger + R-Outrigger			*14.68	*14.68	*13.59	*13.59	*13.59	*13.59	20.15
15	F-Dozer + R-Outrigger	*25.33	*25.33	*17.16	14.95	*14.18	9.76	*13.37	8.00	22.82
	F-Outrigger + R-Outrigger	*25.33	*25.33	*17.16	*17.16	*14.18	14.08	*13.37	11.46	22.82
10	F-Dozer + R-Outrigger			*20.58	14.23	*15.50	9.48	*13.42	7.23	24.17
	F-Outrigger + R-Outrigger			*20.58	*20.58	*15.50	13.77	*13.42	10.38	24.17
5	F-Dozer + R-Outrigger			*22.73	13.71	*16.59	9.23	*13.60	7.02	24.42
	F-Outrigger + R-Outrigger			*22.73	20.94	*16.59	13.49	*13.60	10.11	24.42
0 (GND)	F-Dozer + R-Outrigger			*22.62	13.54	*16.76	9.09	*13.79	7.29	23.60
	F-Outrigger + R-Outrigger			*22.62	20.74	*16.76	13.33	*13.79	10.54	23.60
-5	F-Dozer + R-Outrigger	*23.55	*23.55	*20.69	13.58	*15.43	9.10	*13.84	8.23	21.60
	F-Outrigger + R-Outrigger	*23.55	*23.55	*20.69	*20.69	*15.43	13.35	*13.84	11.97	21.60
-10	F-Dozer + R-Outrigger	*20.92	*20.92	*16.42	13.82			*13.20	10.72	18.00
	F-Outrigger + R-Outrigger	*20.92	*20.92	*16.42	*16.42			*13.20	*13.20	18.00

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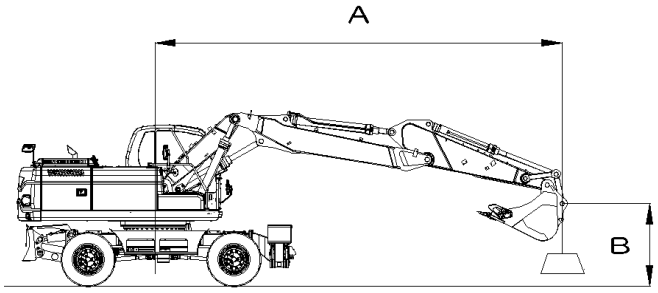
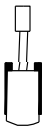
4. RATED LOADS DO NOT EXCEED 87% OF HYD. CAPACITY OR 75% OF TIPPING CAPACITY.

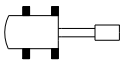
6) TWO-PIECE BOOM (2.4m Arm, 3.4t C/W)



BOOM	: 5.4m (17'08") Two-Piece Boom
ARM	: 2.4m (7'10")
BUCKET	: Without Bucket
COUNTERWEIGHT	: 3,400kg, Axle Load < 12t
UNIT	: 1000 kg (1000 lb)



: Rated lift capacity over front (Dozer and Outrigger on ground)



: Rated lift capacity over side (Dozer and Outrigger on ground)

METRIC

A(m) / B(m)	Chassis Frame Attachment	2		3		4		5	
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE
8	F-Dozer + R-Outrigger								
	F-Outrigger + R-Outrigger								
7	F-Dozer + R-Outrigger							*5.88	*5.88
	F-Outrigger + R-Outrigger							*5.88	*5.88
6	F-Dozer + R-Outrigger							*6.07	*6.07
	F-Outrigger + R-Outrigger							*6.07	*6.07
5	F-Dozer + R-Outrigger					*7.51	*7.51	*6.60	5.87
	F-Outrigger + R-Outrigger					*7.51	*7.51	*6.60	*6.60
4	F-Dozer + R-Outrigger			*12.32	*12.32	*8.92	7.98	*7.35	5.71
	F-Outrigger + R-Outrigger			*12.32	*12.32	*8.92	*8.92	*7.35	*7.35
3	F-Dozer + R-Outrigger					*10.45	7.63	*8.18	5.53
	F-Outrigger + R-Outrigger					*10.45	*10.45	*8.18	*8.18
2	F-Dozer + R-Outrigger					*10.27	7.37	*8.89	5.37
	F-Outrigger + R-Outrigger					*10.27	*10.27	*8.89	8.17
11	F-Dozer + R-Outrigger					*9.00	7.23	*9.32	5.26
	F-Outrigger + R-Outrigger					*9.00	*9.00	*9.32	8.04
0	F-Dozer + R-Outrigger			*2.96	*2.96	*11.08	7.18	*9.41	5.20
	F-Outrigger + R-Outrigger			*2.96	*2.96	*11.08	*11.08	*9.41	7.97
-1	F-Dozer + R-Outrigger			*7.40	*7.40	*11.30	7.18	*9.18	5.18
	F-Outrigger + R-Outrigger			*7.40	*7.40	*11.30	*11.30	*9.18	7.95
-2	F-Dozer + R-Outrigger	*8.47	*8.47	*12.13	*12.13	*10.43	7.23	*8.59	5.20
	F-Outrigger + R-Outrigger	*8.47	*8.47	*12.13	*12.13	*10.43	*10.43	*8.59	7.97

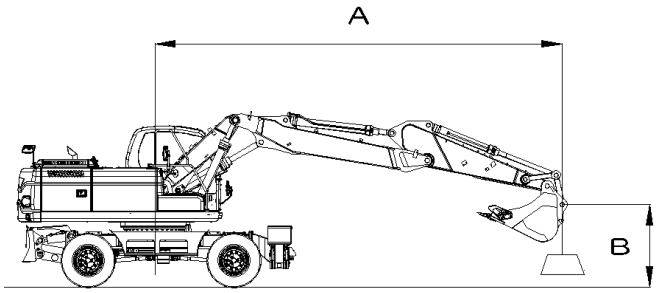
A(m) / B(m)	Chassis Frame Attachment	6		7		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
8	F-Dozer + R-Outrigger					*6.20	*6.20	4.81
	F-Outrigger + R-Outrigger					*6.20	*6.20	4.81
7	F-Dozer + R-Outrigger					*5.87	4.65	5.89
	F-Outrigger + R-Outrigger					*5.87	*5.87	5.89
6	F-Dozer + R-Outrigger	*5.80	4.52			*5.74	3.85	6.64
	F-Outrigger + R-Outrigger	*5.80	*5.80			*5.74	5.57	6.64
5	F-Dozer + R-Outrigger	*6.04	4.46	*5.73	3.53	*5.70	3.39	7.17
	F-Outrigger + R-Outrigger	*6.04	*6.04	*5.73	5.10	*5.70	4.90	7.17
4	F-Dozer + R-Outrigger	*6.45	4.37	*5.90	3.48	*5.71	3.12	7.53
	F-Outrigger + R-Outrigger	*6.45	*6.45	*5.90	5.05	*5.71	4.52	7.53
3	F-Dozer + R-Outrigger	*6.93	4.26	*6.15	3.42	*5.75	2.95	7.74
	F-Outrigger + R-Outrigger	*6.93	6.28	*6.15	4.99	*5.75	4.29	7.74
2	F-Dozer + R-Outrigger	*7.36	4.17	*6.39	3.38	*5.81	2.88	7.82
	F-Outrigger + R-Outrigger	*7.36	6.19	*6.39	4.94	*5.81	4.19	7.82
1	F-Dozer + R-Outrigger	*7.66	4.10	*6.55	3.32	*5.89	2.88	7.76
	F-Outrigger + R-Outrigger	*7.66	6.10	*6.55	4.87	*5.89	4.21	7.76
0	F-Dozer + R-Outrigger	*7.75	4.05	*6.55	3.30	*5.96	2.97	7.57
	F-Outrigger + R-Outrigger	*7.75	6.05	*6.55	4.85	*5.96	4.35	7.57
-1	F-Dozer + R-Outrigger	*7.58	4.03	*6.31	3.28	*6.02	3.15	7.23
	F-Outrigger + R-Outrigger	*7.58	6.03	*6.31	4.84	*6.02	4.63	7.23
-2	F-Dozer + R-Outrigger	*7.07	4.04			*6.03	3.49	6.73
	F-Outrigger + R-Outrigger	*7.07	6.04			*6.03	5.14	6.73

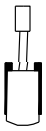
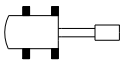
FEET

A(ft) / B(ft)	Chassis Frame Attachment	10		15		20		25		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
25	F-Dozer + R-Outrigger									*13.31	12.20	17.30
	F-Outrigger + R-Outrigger									*13.31	*13.31	17.30
20	F-Dozer + R-Outrigger					*12.74	9.72			*12.68	8.61	21.59
	F-Outrigger + R-Outrigger					*12.74	*12.74			*12.68	*12.68	21.59
15	F-Dozer + R-Outrigger	*22.43	*22.43	*16.15	14.67	*13.57	9.52			*12.57	7.18	24.09
	F-Outrigger + R-Outrigger	*22.43	*22.43	*16.15	*16.15	*13.57	*13.57			*12.57	10.39	24.09
10	F-Dozer + R-Outrigger			*19.67	13.88	*15.03	9.22	*12.79	6.67	*12.68	6.54	25.37
	F-Outrigger + R-Outrigger			*19.67	*19.67	*15.03	13.56	*12.79	9.69	*12.68	9.49	25.37
5	F-Dozer + R-Outrigger			*22.29	13.26	*16.32	8.91	*13.19	6.56	*12.89	6.34	25.61
	F-Outrigger + R-Outrigger			*22.29	20.58	*16.32	13.22	*13.19	9.57	*12.89	9.24	25.61
0 (GND)	F-Dozer + R-Outrigger	*7.27	*7.27	*22.80	13.00	*16.80	8.74			*13.14	6.55	24.83
	F-Outrigger + R-Outrigger	*7.27	*7.27	*22.80	20.28	*16.80	13.03			*13.14	9.58	24.83
-5	F-Dozer + R-Outrigger	*22.07	*22.07	*21.40	12.99	*15.95	8.71			*13.30	7.29	22.94
	F-Outrigger + R-Outrigger	*22.07	*22.07	*21.40	20.27	*15.95	12.99			*13.30	10.72	22.94
-10	F-Dozer + R-Outrigger	*23.55	*23.55	*17.87	13.19					*13.04	9.17	19.60
	F-Outrigger + R-Outrigger	*23.55	*23.55	*17.87	*17.87					*13.04	*13.04	19.60

1. RATINGS ARE BASED ON SAE J1097
2. LOAD POINT IS THE END OF ARM.
3. * RATED LOADS ARE BASED ON HYDRAULIC CAPACITY.
4. RATED LOADS DO NOT EXCEED 87% OF HYD. CAPACITY OR 75% OF TIPPING CAPACITY.

7) TWO-PIECE BOOM (2.0m Arm, 3.4t C/W)



BOOM	: 5.4m (17'08") Two-Piece Boom
ARM	: 2.0m (6'07")
BUCKET	: Without Bucket
COUNTERWEIGHT	: 3,400kg, Axle Load < 12t
UNIT	: 1000 kg (1000 lb)
	: Rated lift capacity over front (Dozer and Outrigger on ground)
	: Rated lift capacity over side (Dozer and Outrigger on ground)

METRIC

A(m) / B(m)	Chassis Frame Attachment	3		4		5	
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE
7	F-Dozer + R-Outrigger					*6.37	5.89
	F-Outrigger + R-Outrigger					*6.37	*6.37
6	F-Dozer + R-Outrigger					*6.49	5.86
	F-Outrigger + R-Outrigger					*6.49	*6.49
5	F-Dozer + R-Outrigger	*10.28	*10.28	*8.11	*8.11	*6.99	5.75
	F-Outrigger + R-Outrigger	*10.28	*10.28	*8.11	*8.11	*6.99	*6.99
4	F-Dozer + R-Outrigger			*9.57	7.82	*7.73	5.59
	F-Outrigger + R-Outrigger			*9.57	*9.57	*7.73	*7.73
3	F-Dozer + R-Outrigger			*11.07	7.48	*8.51	5.43
	F-Outrigger + R-Outrigger			*11.07	*11.07	*8.51	8.21
2	F-Dozer + R-Outrigger			*5.60	*5.60	*9.12	5.29
	F-Outrigger + R-Outrigger			*5.60	*5.60	*9.12	8.05
1	F-Dozer + R-Outrigger			*6.49	*6.49	*9.42	5.20
	F-Outrigger + R-Outrigger			*6.49	*6.49	*9.42	7.95
0	F-Dozer + R-Outrigger			*10.27	7.16	*9.38	5.16
	F-Outrigger + R-Outrigger			*10.27	*10.27	*9.38	7.90
-1	F-Dozer + R-Outrigger	*7.06	*7.06	*10.90	7.18	*9.00	5.16
	F-Outrigger + R-Outrigger	*7.06	*7.06	*10.90	*10.90	*9.00	7.90
-2	F-Dozer + R-Outrigger	*11.43	*11.43	*9.89	7.23	*8.24	5.19
	F-Outrigger + R-Outrigger	*11.43	*11.43	*9.89	*9.89	*8.24	7.93

A(m) / B(m)	Chassis Frame Attachment	6		7		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
7	F-Dozer + R-Outrigger					*6.35	5.22	5.40
	F-Outrigger + R-Outrigger					*6.35	*6.35	5.40
6	F-Dozer + R-Outrigger	*6.17	4.41			*6.15	4.18	6.21
	F-Outrigger + R-Outrigger	*6.17	*6.17			*6.15	*6.15	6.21
5	F-Dozer + R-Outrigger	*6.34	4.36			*6.07	3.62	6.77
	F-Outrigger + R-Outrigger	*6.34	*6.34			*6.07	5.26	6.77
4	F-Dozer + R-Outrigger	*6.71	4.29	*6.12	3.41	*6.06	3.30	7.15
	F-Outrigger + R-Outrigger	*6.71	6.29	*6.12	4.96	*6.06	4.80	7.15
3	F-Dozer + R-Outrigger	*7.15	4.19	*6.31	3.37	*6.09	3.12	7.37
	F-Outrigger + R-Outrigger	*7.15	6.19	*6.31	4.92	*6.09	4.55	7.37
2	F-Dozer + R-Outrigger	*7.52	4.11	*6.50	3.31	*6.14	3.04	7.45
	F-Outrigger + R-Outrigger	*7.52	6.10	*6.50	4.86	*6.14	4.44	7.45
1	F-Dozer + R-Outrigger	*7.74	4.05	*6.58	3.29	*6.20	3.04	7.39
	F-Outrigger + R-Outrigger	*7.74	6.03	*6.58	4.83	*6.20	4.45	7.39
0	F-Dozer + R-Outrigger	*7.73	4.01	*6.49	3.26	*6.26	3.15	7.19
	F-Outrigger + R-Outrigger	*7.73	5.99	*6.49	4.80	*6.26	4.62	7.19
-1	F-Dozer + R-Outrigger	*7.44	4.01			*6.29	3.37	6.84
	F-Outrigger + R-Outrigger	*7.44	5.98			*6.29	4.97	6.84
-2	F-Dozer + R-Outrigger	*6.73	4.04			*6.24	3.77	6.30
	F-Outrigger + R-Outrigger	*6.73	6.02			*6.24	5.60	6.30

FEET

A(ft) / B(ft)	Chassis Frame Attachment	10		15		20		Max. Reach		
		FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	A
25	F-Dozer + R-Outrigger			*14.58	*14.58			*14.59	*14.59	15.46
	F-Outrigger + R-Outrigger			*14.58	*14.58			*14.59	*14.59	15.46
20	F-Dozer + R-Outrigger			*14.68	*14.68	*13.59	9.48	*13.59	9.37	20.15
	F-Outrigger + R-Outrigger			*14.68	*14.68	*13.59	*13.59	*13.59	*13.59	20.15
15	F-Dozer + R-Outrigger	*25.33	*25.33	*17.16	14.33	*14.18	9.32	*13.37	7.63	22.82
	F-Outrigger + R-Outrigger	*25.33	*25.33	*17.16	*17.16	*14.18	13.64	*13.37	11.09	22.82
10	F-Dozer + R-Outrigger			*20.58	13.61	*15.50	9.05	*13.42	6.89	24.17
	F-Outrigger + R-Outrigger			*20.58	*20.58	*15.50	13.34	*13.42	10.04	24.17
5	F-Dozer + R-Outrigger			*22.73	13.09	*16.59	8.79	*13.60	6.68	24.42
	F-Outrigger + R-Outrigger			*22.73	20.32	*16.59	13.05	*13.60	9.77	24.42
0 (GND)	F-Dozer + R-Outrigger			*22.62	12.92	*16.76	8.65	*13.79	6.94	23.60
	F-Outrigger + R-Outrigger			*22.62	20.12	*16.76	12.89	*13.79	10.19	23.60
-5	F-Dozer + R-Outrigger	*23.55	*23.55	*20.69	12.96	*15.43	8.66	*13.84	7.84	21.60
	F-Outrigger + R-Outrigger	*23.55	*23.55	*20.69	*20.69	*15.43	12.91	*13.84	11.58	21.60
-10	F-Dozer + R-Outrigger	*20.92	*20.92	*16.42	13.20			*13.20	10.27	18.00
	F-Outrigger + R-Outrigger	*20.92	*20.92	*16.42	*16.42			*13.20	*13.20	18.00

1. RATINGS ARE BASED ON SAE J1097
2. LOAD POINT IS THE END OF ARM.
3. * RATED LOADS ARE BASED ON HYDRAULIC CAPACITY.
4. RATED LOADS DO NOT EXCEED 87% OF HYD. CAPACITY OR 75% OF TIPPING CAPACITY.

11. PERFORMANCE DATA

1) SET PRESSURE

MAIN RELIEF (WORKING)	:	*32.4 (34.2)MPa*
MAIN RELIEF (TRAVELLING)	:	*34.2MPa*
PORT RELIEF (BOOM, ARM, BUCKET)	:	*35.3MPa*
PORT RELIEF (DOZER, OUTRIGGER)	:	*35.3MPa*
SWING MOTOR RELIEF	:	*26.5MPa*
TRAVEL MOTOR RELIEF	:	*37MPa*
TRANSMISSION PRESSURE RANGE	:	2.5~*3.1MPa*

2) ACTUATOR SPEED

OPERATION		UNIT	ONE-PIECE BOOM	REMARKS
ONE-PIECE BOOM	UP	SEC	*3.3 ± 0.4*	
	DOWN	SEC	*2.2 ± 0.3*	
ARM	DUMP	SEC	*2.6 ± 0.3*	
	CROWD	SEC	*3.1 ± 0.4*	
BUCKET	DUMP	SEC	*2.1 ± 0.3*	
	CROWD	SEC	*3.5 ± 0.4*	
SWING (3 REVOLUTIONS)		SEC	*16.5 ± 1.5*	
DOZER	UP	SEC	*2.2 ± 0.3*	-
	DOWN	SEC	*1.9 ± 0.3*	-
OUTRIGGER	UP	SEC	*4.6 ± 0.5*	
	DOWN	SEC	*3.8 ± 0.4*	
PROPELLER SHAFT	HIGH	SEC	*3,090 ± 70*	
	30km/h	SEC	*2,470 ± 60*	
	LOW	SEC	*771 ± 30*	
	CREEP	SEC	*314 ± 30*	
TRAVEL SPEED		Km/h	*MIN. 36+($^{+0}/_{-0.5}$)*	
BRAKING DISTANCE		m	*6.56/24 Km/h*	

12. NOISE LEVEL

L_{WA}	GUARANTEED SOUND POWER LEVEL	:	*104 dB(A) (2000/14/EC)*
L_{pA}	MESSUREDSOUND POWER LEVEL	:	*104 dB(A) (2000/14/EC)*
L_{Pa}	OPERATOR NOISE	:	75 *dB(A) (ISO 6396)*

13. SUB GROUP WEIGHT

ITEM		UNIT	FIGURE	REMARKS
SUPER STRUCTURE W/O FRONT		*kg*	11,150	WITH COUNTERWEIGHT
COUNTER WEIGHT		*kg*	3,800	
LOWER STRUCTURE ASS'Y		*kg*	6,150	
CABIN		*kg*	630	
ENGINE		*kg*	535	
OIL TANK		*kg*	140	
FUEL TANK		*kg*	160	
MAIN PUMP		*kg*	120	
MCV		*kg*	170	
SWING DEVICE		*kg*	250	
GEAR PUMP (for Steering)		*kg*	16	
CENTER JOINT		*kg*	90	
TRAVEL MOTOR		*kg*	86	
PROPELLER SHAFTS	Front Drive Shaft	*kg*	17	
	Center Drive Shaft	*kg*	16	
	Rear Drive Shaft	*kg*	17	
AXLE_FRONT		*kg*	763	
AXLE_REAR (with Transmission)		*kg*	727	
TIRE Ass'y	NA	*kg*	230	
	EU	*kg*	230	
RIM		*kg*	-	Include in Tire Ass'y
FRONT ASS'Y		*kg*	3,950	
Boom(5.6m)		*kg*	1,335	With BUSH
Arm(3.0m)		*kg*	675	With BUSH
Bucket(1.05)		*kg*	775	
BOOM CYL.		*kg*	177	1EA
ARM CYL.		*kg*	251	1EA
BUCKET CYL.		*kg*	153	1EA
DOZER		*kg*	850	
DOZER CYL.		*kg*	42	1EA
Outrigger		*kg*	1,300	
Out CYL.		*kg*	75	1EA

OPTION	COUNTER WEIGHT (3.4ton)		*kg*	3400	
	TWO PIECE BOOM	LOWER	*kg*	554	
		UPPER	*kg*	950	
	TWO PIECE BOOM CYLINDER		*kg*	165	
	ARM	2.40 m	*kg*	570	
		2.75 m	*kg*	632	
		3.00 m	*kg*	675	
		2.0 m, Arti	*kg*	522	
		2.4 m, Arti	*kg*	570	
	BUCKET SAE(CECE)	0.51 m3	*kg*	549	
		0.81 m3	*kg*	683	
		0.86 m3	*kg*	695	
		1.05 m3	*kg*	776	
		1.17 m3	*kg*	835	
		1.28 m3	*kg*	872	
		0.73 m3	*kg*	736	36" DART Bucket
		0.9 m3	*kg*	808	42" DART Bucket
		1.07 m3	*kg*	868	48" DART Bucket
		1.24 m3	*kg*	926	54" DART Bucket
		1.32 m3	*kg*	971	57" DART Bucket
		1.49 m3	*kg*	1,043	63" DART Bucket

[NOTE] * : for ROPS, ** : Axle Load < 12t

14. USER SERVICE DATA

COMPARTMENT / GREASE JOINT	TYPE OF FLUID OR LUBRICANT	No. OF C/G	SERVICE INTERVAL					
			10	50	250	500	1000	2000
FRONT JOINT PIN I	GREASE	*11(15)*	F100		W10			
FRONT JOINT PIN II	GREASE	*6*	F100	W10				
SWING BEARING	GREASE	*2*						
SWING GEAR & PINION	GREASE	*1*						
SWING REDUCTION DEVICE	GREASE	*1*						
DOZER	GREASE	*10*	F100	W10				
OUTRIGGER	GREASE	*8*	F100	W10				
FRONT AXLE PIN	GREASE	*2*						
PROPELLER SHAFT	GREASE	*8*						
FRONT AXLE KNUCKLE	GREASE	*4*						
ENGINE OIL	ENGINE OIL (10W40)	*26 ℓ*	V	F				
ENGINE OIL FILTER	CORTRIDGE	*1*		F				
SWING DEVICE	GEAR OIL (80W90)	*5 ℓ*	V			F		
TRANSMISSION	GEAR OIL (10W40)	*2.5 ℓ*				F		
FRONT AXLE CASE	GEAR OIL (80W90)	*11 ℓ*				F		
REAR AXLE CASE	GEAR OIL (80W90)	*14.5 ℓ*				F		
HUB REDUCTION GEAR CASE(FRONT)	GEAR OIL (80W90)	*2x2.5 ℓ*				F		
HUB REDUCTION GEAR CASE(REAR)	GEAR OIL (80W90)	*2x2.5 ℓ*				F		
HYDRAULIC OIL	HYDRAULIC OIL (ISO VG#46)	*205ℓ*	V					
HYD. OIL SUCTION FILTER	STRAINER	*1*						C
HYD. OIL RETURN FILTER	ELEMENT	*1*			F			
PILOT FILTER	ELEMENT	*1*			F			

BRAKE FILTER	ELEMENT	*1*			F			
FUEL TANK	DIESEL	*350 ℓ*	V					
FUEL PRE-FILTER	CORTRIDGE	*1*						
FUEL FILTER	CORTRIDGE	*1*						
AIR CLEANER (OUTER)	ELEMENT	*1*				C		
AIR CLEANER (INNER)	ELEMENT	*1*						
RADIATOR	COOLANT	*24 ℓ*	V					
RADIATOR CORE	CORE	*1*				C		
OIL COOLER CORE	CORE	*1*				C		
INNER COOLER CORE	CORE	*1*				C		
AIRCON CONDENSER CORE	CORE	*1*				C		
AIR CONDITIONER FILTER (OUTER)	CORTRIDGE	*1*				C		
AIR CONDITIONER FILTER (INNER)	CORTRIDGE	*1*				C		
AIR BREATHER FILTER	ELEMENT	*1*						

V: Maintenance & Refill C: Cleaning

F: First Time Exchange Only F100: Every 10 Hours For First 100 Hours

W10: Every 10 Hours If Operating In Water Gray Box: Replacement On Every Interval

15. CIRCUITS

- HYDRAULIC CIRCUIT : 950102-00262

- ELECTRIC CIRCUIT : 950102-00263