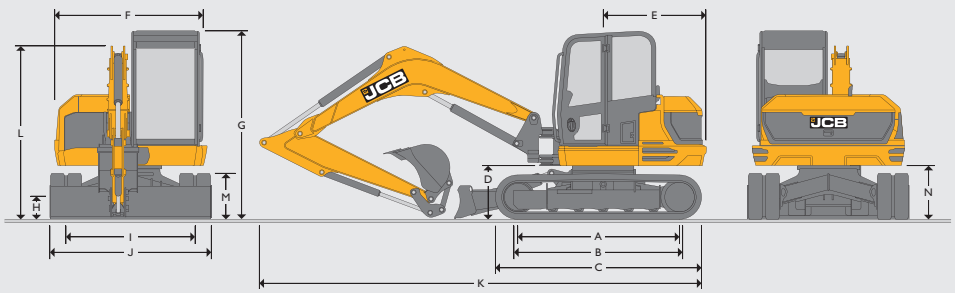
STATIC DIMENSIONS



Machine Model			85Z-1	86C-1	86C-1 TAB
A	Sprocket idler centers	ft/in		7' 8"	
B	Track length on ground	ft/in		7' 8"	
C	Undercarriage overall length - rubber	ft/in		9' 8"	
	Undercarriage overall length - steel	ft/in		9' 6"	
D	Swing bracket clearance	ft/in		2' 7"	
E	Tailswing radius	ft/in	3' 9"	4' 11"	5' 3"
F	Overall width of superstructure	ft/in	7' 1"	7' 2"	
G	Height over cab	ft/in		8' 11"	
H	Ground clearance	ft/in		1' 2"	
I	Track gauge	ft/in		6' 1"	
J	Width over tracks (450 shoes)	ft/in		7' 7"	
K	Transport length with standard arm	ft/in	19' 2"	21' 1"	21' 10"
L	Transport height with standard arm	ft/in		8' 11"	
M	Track height	ft/in		2' 2"	
N	Counterweight clearance	ft/in		2' 6"	

ENGINE

Machine Model		85Z-1	86C-1	86C-1 TAB
Model			Stage IIIB Tier 4 Final KDI 2504 TCR	
Fuel			Diesel	
Cooling			Water cooled	
Gross power ISO 14396	HP @ 2200 rpm		64.4	
Net power	HP @ 2200 rpm		60.8	
Gross torque ISO 14396	Nm @ 1500 rpm		305	
Displacement	cc/liters		2500	
Gradeability	degrees		30	
Starter motor	HP (kW)		2.7 (2)	
Battery	volt/Ah		12V, 750	
Alternator	volt/amps		12V, 100	

UNDERCARRIAGE

Machine Model		85Z-1	86C-1	86C-1 TAB
No of top rollers			1	
No of bottom rollers			5	
Track width	in		18	
Track width optional	in		24	
Ground clearance	in		14	
Track tensioning			Grease	
Travel speed - low	mph		1.6	
Travel speed - high	mph		3.1	
Tractive effort	lbf	13,713	14,613	

HYDRAULIC SYSTEM

Machine Model		85Z-1	86C-1	86C-1 TAB
Nominal output @2,200	gpm		41.8	
Excavator/track main relief pressure	psi		4351	
Slew main relief pressure	gpm		60	
Auxiliary low flow	gpm		6.6	
Auxiliary high flow	gpm		26.4	
Auxiliary low flow	psi		2756	
Auxiliary high flow	psi		2756	

WEIGHTS

Machine Model		85Z-1	86C-1	86C-1 TAB
Operating weight (18in (450mm) rubber tracks)	lbs	18,298	18,960	
Transport weight (18in (450mm) rubber tracks)	lbs	18,133	18,794	
With FOGS guard - Stage 1	lbs		31	
With FOGS guard - Stage 2	lbs		132	
With steel tracks (18in (450mm))	lbs		359	
With steel tracks (24in (600mm))	lbs		809	
With Bridgestone geogrips	lbs		399	
With wide dozer (2470mm)	lbs		40	
With narrow dozer (2200mm)	lbs		-11	
Ground pressure (18in (450mm) rubber tracks)	lbs/in2	5.7	5.8	
Ground pressure (18in (450mm)steel tracks)	lbs/in2	5.7	6	
Ground pressure (24in (600mm) steel tracks)	lbs/in2	4.4	4.6	

OPERATOR STATION

Machine Model		85Z-1	86C-1	86C-1 TAB
Cab/canopy height	in		61	
Cab/canopy height with FOGS guard LEVEL 1	in		65	
Cab/canopy height with FOGS guard LEVEL 2	in		68	
Cab/canopy length	in		76	
Cab/canopy width	in		41	
Distance from seat base to roof	in		44	
Door aperture width	in		24	

SERVICE CAPACITIES

Machine Model		85Z-1	86C-1	86C-1 TAB
Fuel tank	gal		30	
Engine coolant	gal		3.2	
Engine oil	gal		3	
Hydraulic system	gal		31	
Hydraulic tank	gal		17	

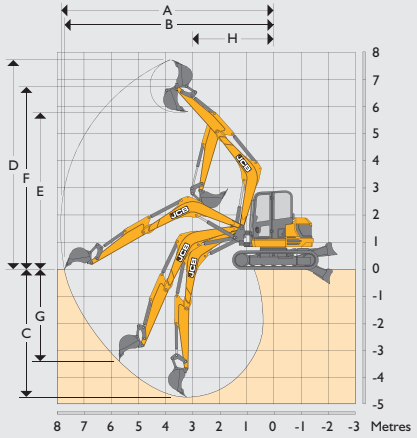
EEC NOISE LEVELS (95/27/EC DYNAMIC)

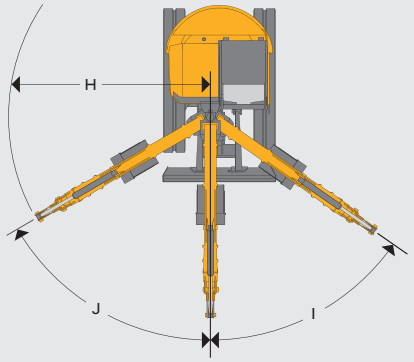
Machine Model		85Z-1	86C-1	86C-1 TAB
Cab/canopy external	dB		96	
Cab internal	dB		74*	

*Internal noise during default eco mode

STANDARD EQUIPMENT	Tilting cab, fully glazed ROPS & TOPS certified cab with JCB impact protection front screen, 2 speed intermittent wiper with wash/wipe, roof mounted front worklights, 3 speed heater/demister with 9 adjustable air vents, color LCD display, digital clock, adjustable sun visor, internal lockable toolbox, cup holder, coat hook, 12V accessory socket, interior light, full audio/visual warning systems, radio ready kit, auto idle throttle, below idle system, 2 digging modes (ECO & Heavy), ISO servo controls with electro-hydraulic dozer lever, electro-proportional thumb controlled high flow double acting auxiliary, 10 selectable auxiliary flow rates, joystick mounted hammer switch, electronic single/double acting auxiliary changeover valve, neutral start, full control isolation, 2GO hydraulic isolation, operator presence seat switch, seat belt activation switch, midback suspension seat, 2 piece removable floormat, beacon ready kit, two speed tracking, auto-kickdown track motors, 18in short pitch rubber tracks, double element air cleaner, heavy-duty alternator, heavy-duty battery, battery isolater, hydraulic slew braking with disc type park brake, ORFS hydraulics, color coded hydraulic hoses, bushed swing bracket, 500 hour dig end greasing intervals, heavy duty boom cylinder guard, protected boom worklight, 6' 7" dipper (85z), 6' 11" dipper (86c), 2 position bucket tipping link - speed & power, quick release auxiliary couplers, 100% steel bodywork.
OPTIONAL EQUIPMENT	AC, ROPS & TOPS canopy with polycarbonate impact protection screen, FOPS guard stage 1 or 2, 18in or 24in steel tracks, 18in GeoGrip road liner tracks, fan & chaff gurds, high back seat or deluxe heated high back air-suspension seat, radio installation, electro-proportional thumb controlled low flow auxiliary, hose burst check valve (HBCV) lifting kit (dozer, boom & arm), bucket-to-grab change over valve, mechanical quickhitch, hydraulic quickhitch, hydraulic quickhitch ready pipework, GP digging buckets, ditch/grading buckets, hydraulic hammers, rotating/strobe beacon, travel alarm, white noise alarm, face fan, toolkit, greasegun & cartridge, fire extinguisher, exterior cab mounted mirrors, interior mirror, electric refuelling pump, JCB immobilizer (unique key or keypad system), dozer float, angled dozer blade, TAB boom, dualpattern controls (ISO/SAE change-over), front screen guard (fine or course), rear roof mounted worklight, twin pair of front roof moutned worklights, short & long dipper options, LiveLink, special paint options, block heater 110/240V.

WORKING RANGE





			85Z-1	86C-1	86C-1 TAB
	Boom length	ft/in	9' 6"	11'	TAB
	Arm length	ft/in	5' 5" / 6' 7" / 6' 11"	5' 5" / 6' 11" / 7' 5"	5' 5" / 6' 11" / 7' 5"
A	Max digging reach	ft/in	21' 8" / 22' 9" / 23' 1"	22' 4" / 23' 9" / 24' 3"	23' 9" / 25' 9" / 26' 3"
B	Max digging reach on ground	ft/in	21' / 22' 2" / 22' 6"	21' 9" / 23' 3" / 23' 8"	24' 4" / 25' 3" / 25' 9"
C	Max digging depth - dozer up	ft/in	10' 7" / 11' 9" / 12' 1"	12' 11" / 14' 4" / 14' 10"	13' 2" / 14' 8" / 15' 2"
	Max digging depth - dozer down	ft/in	11' 10" / 11' 11" / 12' 2"	12' 10" / 14' 4" / 14' 10"	13' 2" / 14' 8" / 15' 2"
D	Max digging height	ft/in	21' 3" / 22' 2" / 22' 5"	22' 6" / 23' 7" / 23' 11"	25' 6" / 26' 10" / 27' 3"
E	Max dump/load-over height	ft/in	15' 4" / 16' 3" / 16' 6"	16' 7" / 17' 8" / 18' 1"	19' 4" / 20' 8" / 21' 2"
F	Max height to bucket pin	ft/in	18' 2" / 19' 1" / 19' 4"	19' 5" / 20' 6" / 20' 10"	22' 5" / 23' 9" / 24' 2"
G	Max vertical wall digging depth	ft/in	8' 3" / 9' 4" / 9' 8"	9' / 10' 4" / 10' 9"	11' 1" / 12' 5" / 12' 10"
H	Min. front swing radius (no offset)	ft/in	9' 4" / 9' 10" / 10'	8' 5" / 8' 9" / 8' 11"	7' 4" / 7' 5" / 7' 6"
	Min. front swing radius (fully offset)	ft/in	8' 2" / 8' 7" / 8' 9"	7' 7" / 8' / 8' 1"	6' 4" / 6' 5" / 6' 6"
I	Boom swing left	degrees		55	
J	Boom swing right	degrees		60	
	Bucket rotation	degrees		200	
	Arm rotation	degrees	114	122	126
	Bucket digging force	lbf		12,837	
	Arm digging force	lbf	9,847	9,509	9,509 / 9,060 / 11,218
	Slew speed	rpm		10	

DOZER

Machine Model		85Z-1	86C-1	86C-1 TAB
Dozer length	ft/in		4' 11"	
Max height above ground	ft/in		1' 7"	
Dig depth below ground	in		18	
Approach angle	degrees		27.8	
Width	ft/in		7' 7"	
Height	in		19	
Reach in front of tracks	in		24	

LIFT CAPACITIES - 18" RUBBER TRACKS, 11' BOOM, 5' 4" ARM, NO BUCKET **86C**

Load Point	6' 7"			9' 10"			13' 2"			16' 5"			Capacity at Maximum Reach			
Height	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Distance
Ft/in	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	Ft/in
16' 5"							3,402*	3,635*	3,719*				3,276	3,774*	3,499	14' 2"
13' 2"							3,377*	3,607*	3,693*	3,377*	3,609*	2,798	2,443	3,649*	2,668	16' 10"
9' 10"				5,121	5,216*	5,236	4,162	4,239*	4,162	3,682	3,779*	2,862	3,027	3,702*	2,546	18' 1"
6' 7"				7,460	7,577*	5,853	5,007	5,101*	3,968	4,008	4,162*	2,844	2,829	3,779*	2,282	18' 10"
3' 3"				6,812	869*	5,357	4,663	5,811*	3,688	3,472	4,489*	2,745	2,679	3,874*	2,266	18' 10"
0				6,962	8,746*	5,225	4,581	6,158*	3,622	3,358	4,623*	2,712	2,862	3,990*	2,282	18' 1"
-3' 3"	7,507*	8,020*	8,208*	7,518	7,710*	5,176	4,597	5,734*	3,589	3,340	4,182*	2,579	3,241	397*	2,579	16' 9"
-6' 7"	9,623*	10,280*	10,335	6,387*	6,823*	5,190	4,431	4,797*	3,450				2,795	3,931*	3,020	14' 7"

LIFT CAPACITIES - 18" RUBBER TRACKS, 11' BOOM, 6' 9" ARM, NO BUCKET **86C**

Load Point	6' 7"			9' 10"			13' 2"			16' 5"			Capacity at Maximum Reach			
Height	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Distance
Ft/in	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	Ft/in
16' 5"							2,725*	2,910*	2,978*				2,659	3,272*	2,881	16' 2"
13' 2"							2,809*	3,000*	3,069*	2,899*	3,097*	2,837	2,103	3,223*	2,315	18' 6"
9' 10"				4,057*	2,282*	4,436*	3,549*	3,624*	3,587*	3,318*	3,358*	3,318*	2,729	3,318*	2,083	19' 8"
6' 7"				6,272*	6,407*	6,272*	4,449*	4,526*	4,334*	3,664*	3,741*	2,778	2,480	3,358*	1,951	20' 4"
3' 3"				7,577*	8,076*	5,309	5,370*	5,505*	3,622	3,406	4,257*	2,679	2,480	3,472*	1,936	20' 3"
0				6,746	8,708*	5,011	4,564	6,100*	3,505	3,391	4,641*	2,597	2,531	3,567*	2,034	19' 8"
-3' 3"	6,352*	6,786*	6,942*	6,466	8,076*	5,027	4,398	5,966*	3,373	3,258	4,508*	2,513	2,745	3,664*	2,167	18' 8"
-6' 7"	10,942*	11,021*	10,027	6,852	7,648*	5,035	4,325	5,333*	3,338	3,168	3,686*	2,507	2,273*	3,629*	2,491*	16' 6"
-9' 10"	7,582*	8,100*	8,287*	4,907*	5,243*	5,198							3,234*	3,455*	3,536*	12' 9"

LIFT CAPACITIES - 18" RUBBER TRACKS, 11' BOOM, 7' 4" ARM, NO BUCKET **86C**

Load Point	6' 7"			9' 10"			13' 2"			16' 5"			Capacity at Maximum Reach			
Height	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Distance
Ft/in	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	Ft/in
16' 5"										2,868*	3,064*	2,829	2,500	3,126*	2,718	16' 9"
13' 2"							2,610*	2,789*	2,853*	2,749*	2,937*	2,848	2,006	3,093*	2,216	19'
9' 10"							3,188*	3,406*	3,486*	2,989*	3,194*	2,787	1,766	3,120*	1,964	20' 5"
6' 7"				5,769*	6,164*	5,672	4,101*	4,383*	3,715	3,347	3,642*	2,685	1,645	3,179*	1,839	21'
3' 3"				7,031	8,353*	5,201	4,491	5,348*	3,501	3,239	4,114*	2,575	1,609	3,261*	1,803	21' 1"
0				6,806	8,492*	4,989	4,343	5,933*	3,353	3,153	4,429*	2,489	1,658	3,371*	1,854	20' 5"
-3' 3"	6,038*	6,451*	6,601*	6,757	8,885*	4,943	4,279	5,994*	3,291	3,113	4,440*	2,449	1,799	3,459*	2,002	19' 3"
-6' 7"	10,168*	10,862*	9,934*	6,806	7,866*	4,989	4,292	5,452*	3,303	3,132	3,882*	2,469	2,138	3,534*	2,352	17' 1"
-9' 10"	8,516*	9,098*	9,310*	5,351*	5,717*	5,132	3,508*	3,746*	3,419				3,053	3,419*	3,265	13' 7"

Lift capacity front and rear.

Lift capacity full circle.

Notes:

1.) lifting capacities are based on ISO 10567 that is 75% of minimum tipping load or 87% of hydraulic lift capacity whichever is the less. Lifting capacities marked* are based on hydraulic capacity.
2.) Lift capacities assume that the machine is on firm level ground and equipped with an approved lifting point
3.) A bucket must be fitted when lifting, the weight of this bucket must be deducted from the above lift capacities
4.) Lift capacities may be limited by local regulations - please refer to your dealer

LIFT CAPACITIES - 18" RUBBER TRACKS, 11' BOOM, 5' 4" ARM, NO BUCKET — 85Z

Load Point	6' 7"			9' 10"			13' 2"			16' 5"			Capacity at Maximum Reach			
																
Height	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Distance
Ft/in	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	Ft/in
16' 5"							3,497*	3,735*	3,214						1,984	15' 10"
13' 2"				4,539*	4,848*	4,943	4,297	4,411*	3,159	2,778	4,162*	2,167	2,579	4,162*	1,803	17' 1"
9' 10"				6,226	7,688*	4,535	3,920	5,542*	3,042	2,729	4,603*	2,116	2,332	4,334*	1,836	18' 1"
6' 7"				5,589	9,667*	4,200	3,622	6,426*	2,844	2,564	4,872*	2,050	2,266	4,449*	1,819	18' 1"
3' 3"				5,192	9,819*	3,935	3,472	6,770*	2,679	2,480	5,007*	1,951	2,332	4,623*	1,969	17' 3"
0	9,498*	10,148*	8,199	4,894	8,574*	3,836	3,373	6,252*	2,597				2,646	4,641*	2,802	15' 9"
-3' 3"				5,875	6,396*	4,204	3,662*	3,911*	2,811				3,146	3,880*	2,579	13' 2"

LIFT CAPACITIES - 18" RUBBER TRACKS, 11' BOOM, 6' 6" ARM, NO BUCKET — 85Z

Load Point	6' 7"			9' 10"			13' 2"			16' 5"			Capacity at Maximum Reach			
																
Height	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Distance
Ft/in	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	Ft/in
13' 2"							2,917*	3,115*	3,188*	2,835	3,371*	2,205	2,205	3,477*	2,017	17' 2"
9' 10"							3,759*	3,836*	3,664*	2,829	3,799*	2,200	2,299	3,816*	1,803	18' 1"
6' 7"				6,693*	6,925*	4,747	3,968	5,064*	3,075	2,862	4,297*	2,134	2,116	3,990*	1,587	19' 2"
3' 3"				5,672	9,284*	4,251	3,655	6,138*	2,895	2,597	4,758*	2,002	2,035	4,065*	1,605	19' 1"
0				5,456	9,916*	3,935	3,538	6,751*	2,712	2,546	5,064*	2,017	2,183	4,277*	1,737	18' 5"
-3' 3"	7,934	8,477*	7,866	5,159	9,092*	3,788	3,457	6,656*	2,630	2,546	4,949*	1,918	2,366	4,334*	1,903	16' 11"
-6' 7"	11,021	11,021*	8,053	5,681	7,383*	4,008	3,576	4,855*	2,646				2,520	3,675*	2,262*	14' 10"

LIFT CAPACITIES - 18" RUBBER TRACKS, 11' BOOM, 6' 9" ARM, NO BUCKET — 85Z

Load Point	6' 7"			9' 10"			13' 2"			16' 5"			Capacity at Maximum Reach			
																
Height	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Dozer Up	Dozer Down	Over Side	Distance
Ft/in	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	LBS	Ft/in
16' 5"							3,018*	3,223*	3,247				2,870	3,558*	2,612	14' 10"
13' 2"							2,811*	3,003*	3,073*	2,886	3,287*	2,258	2,169	3,428*	1,995	17' 7"
9' 10"							3,278*	3,501*	3,188	2,859	3,408*	2,231	1,867	3,426*	1,722	19' 2"
6' 7"				5,769*	6,164*	4,680	3,951	4,511*	3,018	2,782	3,825*	2,154	1,726	3,477*	1,590	19' 10"
3' 3"				5,913	8,957*	4,231	3,757	5,600*	2,826	2,692	4,297*	2,061	1,691	3,558*	1,554	19' 11"
0				5,692	9,936*	4,023	3,624	6,239*	2,696	2,623	4,583*	1,991	1,753	3,655*	1,605	19' 3"
-3' 3"	7,665*	8,190*	7,919	5,653	9,473*	3,986	3,574	6,175*	2,646	2,599	4,407*	1,967	1,953	3,739*	1,779	17' 9"
-6' 7"	11,021*	11,021*	8,095	5,721	7,743*	4,050	3,609	5,117*	2,681				2,456	3,713*	2,213	15' 3"

 Lift capacity front and rear.

 Lift capacity full circle.

Notes:

1.) lifting capacities are based on ISO 10567 that is 75% of minimum tipping load or 87% of hydraulic lift capacity whichever is the less. Lifting capacities marked* are based on hydraulic capacity.
2.) Lift capacities assume that the machine is on firm level ground and equipped with an approved lifting point
3.) A bucket must be fitted when lifting, the weight of this bucket must be deducted from the above lift capacities
4.) Lift capacities may be limited by local regulations - please refer to your dealer