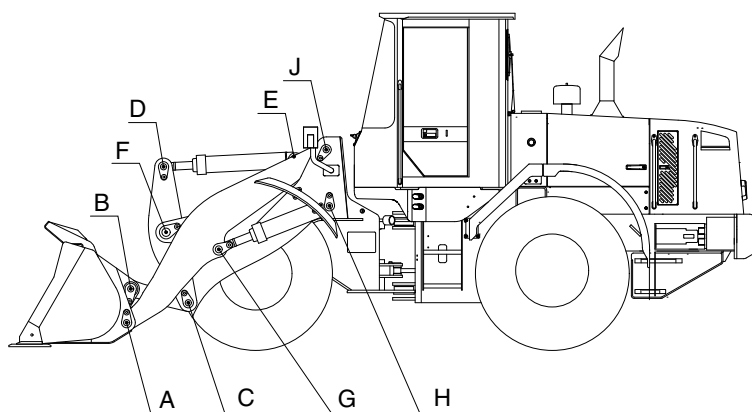


3. Pin and Bushing (1/5)

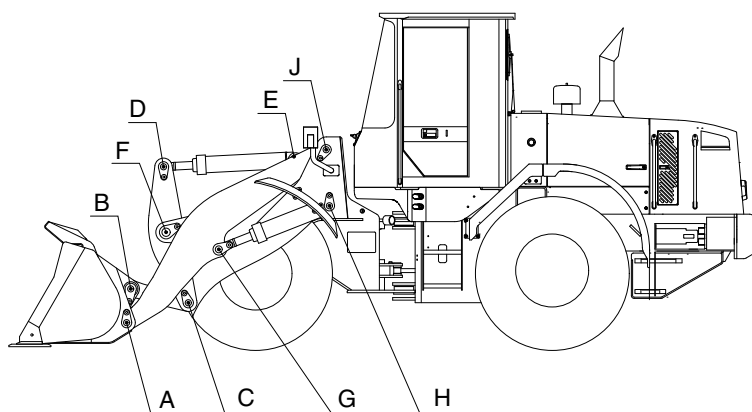


- A Bucket and boom
- B Bucket and tilt link
- C Bell crank and tilt link
- D Bell crank and tilt link
- E Bucket cylinder and front frame
- F Boom and bell crank
- G Boom and boom cylinder
- H Boom cylinder and front frame
- J Boom and front frame

Unit : mm

Model	Measuring point (Pin and bushing)	Criteria					Remarks
		Standard size	Tolerance		Standard clearance	Clearance limit	
			Pin	Bushing			
HL730-9 HL730-9A	A, B, C, G	65	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	D, E, H, J	70	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	F	90	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	G	65	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	A,B,C,H,J	70	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	D, E	75	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
HL740-9 HL740-9A	F	100	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	G, H	75	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	A, B, C, J	80	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	D	90	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	E	95	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	F	110	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	

3. Pin and Bushing (1/5)

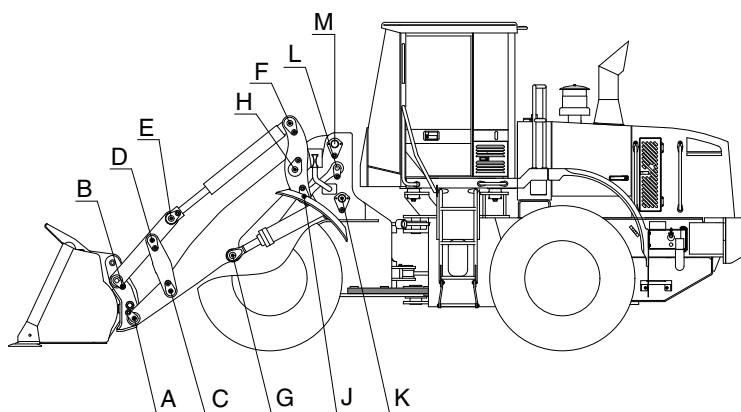


- A Bucket and boom
- B Bucket and tilt link
- C Bell crank and tilt link
- D Bell crank and tilt link
- E Bucket cylinder and front frame
- F Boom and bell crank
- G Boom and boom cylinder
- H Boom cylinder and front frame
- J Boom and front frame

Unit : mm

Model	Measuring point (Pin and bushing)	Criteria					Remarks
		Standard size	Tolerance		Standard clearance	Clearance limit	
			Pin	Bushing			
HL760-9 HL760-9A	A, B, C	90	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	G, H	95	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	J	100	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	D, E	110	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	F	120	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
HL770-9 HL770-9A	A, B, C, G, H	100	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	D, E	120	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	F	130	-0.043 -0.106	+0.245 +0.145	0.188 ~0.351	1.0	
HL780-9 HL780-9A	B, C	80	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	D	90	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	E	95	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	A, F	110	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	G, H, J	120	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	

3. Pin and Bushing (2/5)

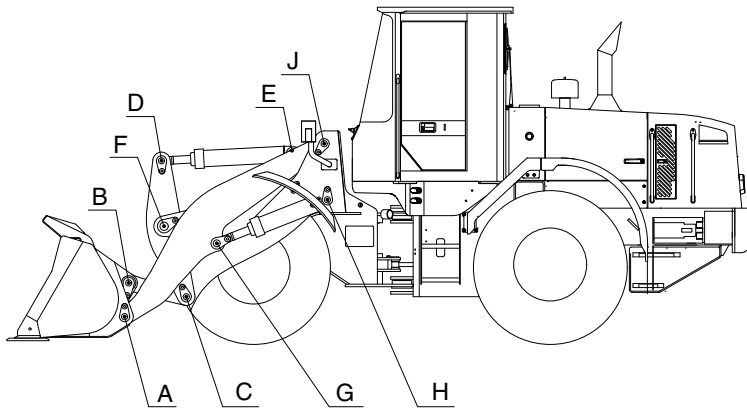


- A Coupler and boom
- B Coupler and tilt link
- C Boom and tilt lever
- D Tilt link and tilt lever
- E Tilt link and bucket cylinder
- F Lever and bucket cylinder
- G Boom and boom cylinder
- H Boom and lever
- J Lever and link
- K Boom cylinder and front frame
- L Link and front frame
- M Boom and front frame

Unit : mm

Model	Measuring point (Pin and bushing)	Criteria					Remarks
		Standard size	Tolerance		Standard clearance	Clearance limit	
			Pin	Bushing			
HL730TM-9 HL730TM-9A	A, B, C, D, E, F, J	50	-0.025 -0.064	+0.142 +0.080	0.105 ~0.206	1.0	
	G, H	65	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	K, L, M	70	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
HL740TM-9 HL740TM-9A	C, D, E, F, J, L	50	-0.025 +0.064	+0.142 +0.080	0.105 ~0.206	1.0	
	A, B	60	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	G	65	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	H, K, M	70	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
HL757TM-9 HL757TM-9A	A, B, C, D, J, L	60	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	E	65	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	F	70	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	G, K	75	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	H, M	80	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	

3. Pin and Bushing (3/5)

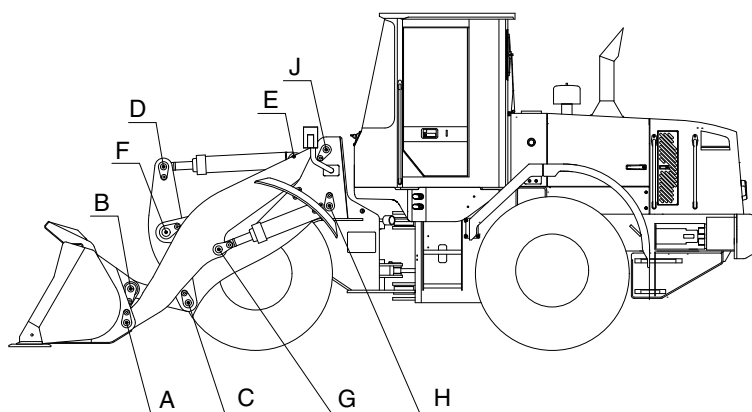


- A Bucket and boom
- B Bucket and tilt link
- C Bell crank and tilt link
- D Bell crank and tilt link
- E Bucket cylinder and front frame
- F Boom and bell crank
- G Boom and boom cylinder
- H Boom cylinder and front frame
- J Boom and front frame

Unit : mm

Model	Measuring point (Pin and bushing)	Criteria					Remarks
		Standard size	Tolerance		Standard clearance	Clearance limit	
			Pin	Bushing			
HL730-9S	A, B, C, G	65	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	D, E, H, J	70	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	F	90	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
HL740-9S	G	65	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	A, B, C, H, J	70	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	D, E	75	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	F	100	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
HL757-9S	G, H	75	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	A, B, C, J	80	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	D	90	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	E	95	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	F	110	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	

3. Pin and Bushing (3/5)

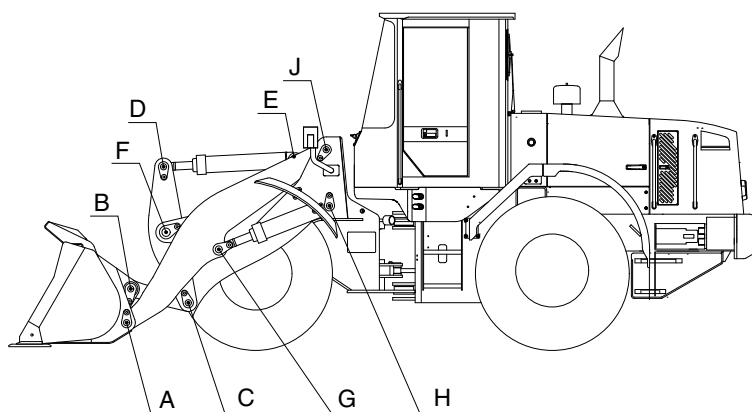


- A Bucket and boom
- B Bucket and tilt link
- C Bell crank and tilt link
- D Bell crank and tilt link
- E Bucket cylinder and front frame
- F Boom and bell crank
- G Boom and boom cylinder
- H Boom cylinder and front frame
- J Boom and front frame

Unit : mm

Model	Measuring point (Pin and bushing)	Criteria					Remarks
		Standard size	Tolerance		Standard clearance	Clearance limit	
			Pin	Bushing			
HL760-9S	A, B, C	90	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	G, H	95	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	J	100	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	D, E	110	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	F	120	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
HL770-9S HL775-9S	A, B, C, G, H	100	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	J	110	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	D, E	120	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	F	130	-0.043 -0.106	+0.245 +0.145	0.188 ~0.351	1.0	
HL780-9S	B, C	80	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	D	90	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	E	95	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	A, F	110	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
	G, H, J	120	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	

3. Pin and Bushing (4/5)

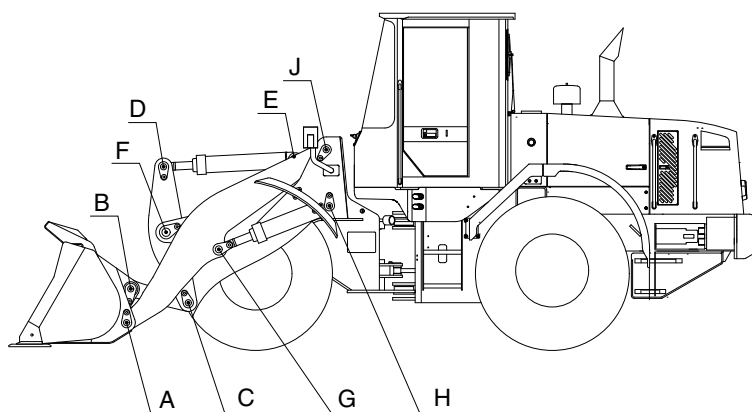


- A Bucket and boom
- B Bucket and tilt link
- C Bell crank and tilt link
- D Bell crank and tilt link
- E Bucket cylinder and front frame
- F Boom and bell crank
- G Boom and boom cylinder
- H Boom cylinder and front frame
- J Boom and front frame

Unit : mm

Model	Measuring point (Pin and bushing)	Criteria					Remarks
		Standard size	Tolerance		Standard clearance	Clearance limit	
			Pin	Bushing			
HL930A	A, B, C, G	65	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	D, E, H, J	70	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	F	90	-0.036 -0.090	+0.207 +0.120	0.156 ~0.297	1.0	
HL935	G	65	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	A, B, C, H, J	70	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	D, E	75	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	F	100	-0.036 -0.071	+0.207 +0.120	0.156 ~0.278	1.0	
HL940 HL940A	G	65	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	A, B, C, H, J	70	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	D, E	75	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	F	100	-0.036 -0.071	+0.207 +0.120	0.156 ~0.278	1.0	

3. Pin and Bushing (4/5)

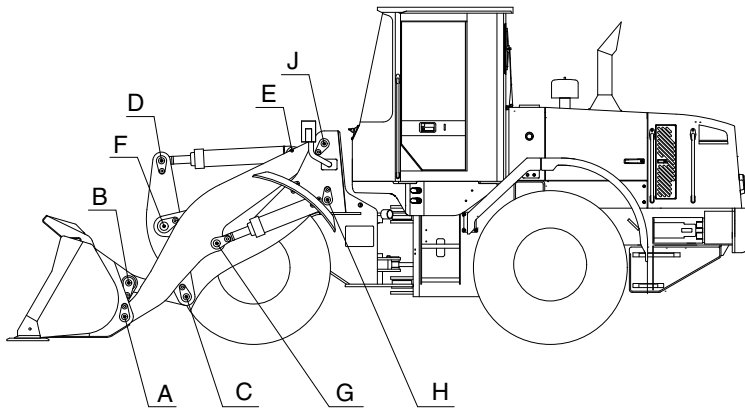


- A Bucket and boom
- B Bucket and tilt link
- C Bell crank and tilt link
- D Bell crank and tilt link
- E Bucket cylinder and front frame
- F Boom and bell crank
- G Boom and boom cylinder
- H Boom cylinder and front frame
- J Boom and front frame

Unit : mm

Model	Measuring point (Pin and bushing)	Criteria					Remarks
		Standard size	Tolerance		Standard clearance	Clearance limit	
			Pin	Bushing			
HL955 HL955A HL955 T3	G, H	75	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	A, B, C, J	80	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	D, E	90	-0.036 -0.071	+0.207 +0.12	0.156 ~0.278	1.0	
	E	95	-0.036 -0.071	+0.207 +0.12	0.156 ~0.278	1.0	
	F	110	-0.036 -0.071	+0.207 +0.12	0.156 ~0.278	1.0	
HL960 HL960A HL960 T3 HL965	A, B, C	90	-0.036 -0.071	+0.207 +0.120	0.156 ~0.278	1.0	
	G, H	95	-0.036 -0.071	+0.207 +0.120	0.156 ~0.278	1.0	
	J	100	-0.036 -0.071	+0.207 +0.120	0.156 ~0.278	1.0	
	D, E	110	-0.036 -0.071	+0.207 +0.120	0.156 ~0.278	1.0	
	F	120	-0.036 -0.071	+0.207 +0.120	0.156 ~0.278	1.0	
HL970 HL970A HL970 T3 HL975	A, B, C, G, H	100	-0.036 -0.071	+0.207 +0.120	0.156 ~0.278	1.0	
	J	110	-0.036 -0.071	+0.207 +0.120	0.156 ~0.278	1.0	
	D, E	120	-0.036 -0.071	+0.207 +0.120	0.156 ~0.278	1.0	
	F	130	-0.043 -0.083	+0.245 +0.145	0.188 ~0.328	1.0	

3. Pin and Bushing (4/5)

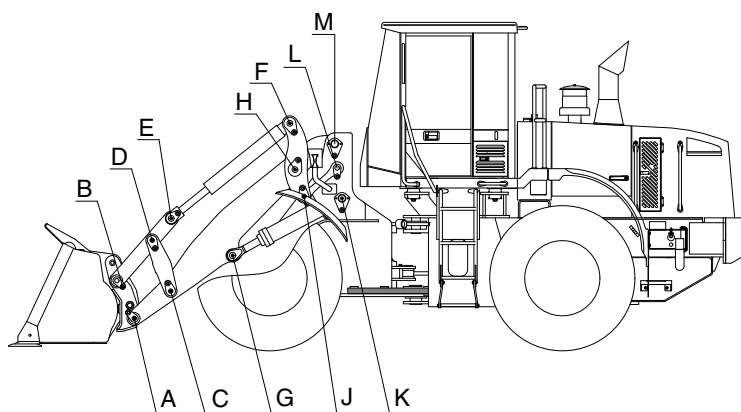


- A Bucket and boom
- B Bucket and tilt link
- C Bell crank and tilt link
- D Bell crank and tilt link
- E Bucket cylinder and front frame
- F Boom and bell crank
- G Boom and boom cylinder
- H Boom cylinder and front frame
- J Boom and front frame

Unit : mm

Model	Measuring point (Pin and bushing)	Criteria					Remarks
		Standard size	Tolerance		Standard clearance	Clearance limit	
			Pin	Bushing			
HL980 HL980A HL980 T3 HL985A	A, B, C	110	-0.036	+0.207	0.156	1.0	
			-0.071	+0.120	~0.278		
	G, H, J	120	-0.036	+0.207	0.156	1.0	
			-0.071	+0.120	~0.278		
	D, E	130	-0.043	+0.245	0.188	1.0	
			-0.083	+0.145	~0.328		
	F	140	-0.043	+0.245	0.188	1.0	
			-0.083	+0.145	~0.328		

3. Pin and Bushing (5/5)



- A Coupler and boom
- B Coupler and tilt link
- C Boom and tilt lever
- D Tilt link and tilt lever
- E Tilt link and bucket cylinder
- F Lever and bucket cylinder
- G Boom and boom cylinder
- H Boom and lever
- J Lever and link
- K Boom cylinder and front frame
- L Link and front frame
- M Boom and front frame

Unit : mm

Model	Measuring point (Pin and bushing)	Criteria					Remarks
		Standard size	Tolerance		Standard clearance	Clearance limit	
			Pin	Bushing			
HL930A TM	A, B, C, D, E, F, J	50	-0.025 -0.064	+0.142 +0.080	0.105 ~0.206	1.0	
	G, H	65	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
	K, L, M	70	-0.030 -0.076	+0.174 +0.100	0.130 ~0.250	1.0	
HL935TM HL940TM HL940AM	C, D, E, F, J, L	50	-0.025 -0.050	+0.142 +0.080	0.105 ~0.192	1.0	
	A, B	60	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	G	65	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	H, K, M	70	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
HL955TM HL955A TM	A, B, C, D, J, L	60	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	E	65	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	F	70	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	G, K	75	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	
	H, M	80	-0.030 -0.060	+0.174 +0.100	0.130 ~0.234	1.0	