



Cat[®] Tiltrotators

TRS10, TRS14, TRS18, TRS23

Technical Specifications

Not all attachments available in all regions. Consult your Cat[®] dealer for specific configurations available in your region.

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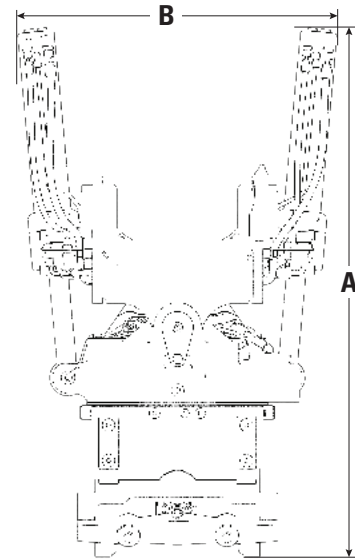
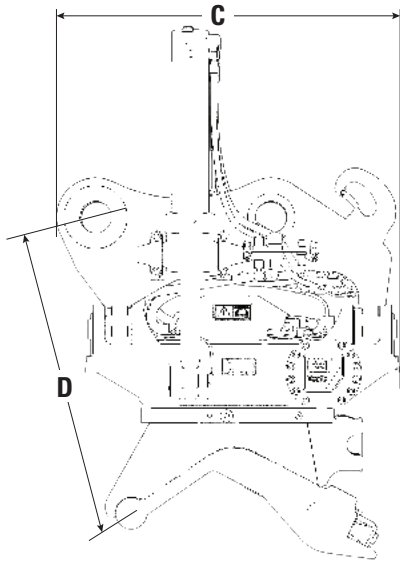
Tiltrotators Technical Specifications

Specifications

Model	Part Number	Top Interface	Bottom Interface	Machine Class, Minimum		Machine Class, Maximum		Weight		Maximum Standard Bucket Capacity		Maximum Bucket Width	
				t	lb	t	lb	kg	lb	m ³	yd ³	mm	in
TRS10	516-6765	S60	S60	11	24,250	16	35,274	425	937	0.80	1.05	1600	63
	516-6766	Pin-on	S60	11	24,250	16	35,274	470	1,036	0.80	1.05	1600	63
	555-1563	Pin-on	S60	11	24,250	16	35,274	448	988	0.80	1.05	1600	63
	605-4732	HCS60	HCS60	11	24,250	16	35,274	500	1,102	0.80	1.05	1600	63
	605-4735	HCS60	S60	11	24,250	16	35,274	491	1,082	0.80	1.05	1600	63
	605-4738	Pin-on	HCS60	11	24,250	16	35,274	520	1,146	0.80	1.05	1600	63
	605-4740	Pin-on	HCS60	11	24,250	16	35,274	497	1,096	0.80	1.05	1600	63
	605-4744	Pin-on HF	HCS60	11	24,250	16	35,274	526	1,160	0.80	1.05	1600	63
	605-4746	Pin-on HF	HCS60	11	24,250	16	35,274	503	1,109	0.80	1.05	1600	63
TRS14	516-6769	S60	S60	14	30,864	19	41,887	540	1,190	1.00	1.31	1700	68
	516-6772	Pin-on	S60	14	30,864	19	41,887	575	1,268	1.00	1.31	1700	68
	555-1567	Pin-on	S60	14	30,864	19	41,887	575	1,268	1.00	1.31	1700	68
	605-4748	HCS60	HCS60	14	30,864	19	41,887	620	1,367	1.00	1.31	1700	68
	605-4751	HCS60	S60	14	30,864	19	41,887	611	1,347	1.00	1.31	1700	68
	605-4753	Pin-on	HCS60	14	30,864	19	41,887	624	1,376	1.00	1.31	1700	68
	605-4754	Pin-on	HCS60	14	30,864	19	41,887	623	1,373	1.00	1.31	1700	68
	605-4755	Pin-on HF	HCS60	14	30,864	19	41,887	629	1,387	1.00	1.31	1700	68
	605-4756	Pin-on HF	HCS60	14	30,864	19	41,887	629	1,387	1.00	1.31	1700	68
	605-4757	HCS65	HCS65	14	30,864	19	41,887	715	1,576	1.00	1.31	1700	68
	605-4763	HCS65	S65	14	30,864	19	41,887	705	1,554	1.00	1.31	1700	68
	605-4766	Pin-on	HCS65	14	30,864	19	41,887	664	1,464	1.00	1.31	1700	68
	605-4768	Pin-on	HCS65	14	30,864	19	41,887	664	1,464	1.00	1.31	1700	68
	605-4769	Pin-on HF	HCS65	14	30,864	19	41,887	670	1,477	1.00	1.31	1700	68
	605-4770	Pin-on HF	HCS65	14	30,864	19	41,887	669	1,475	1.00	1.31	1700	68
TRS18	516-6779	S70	S70	18	39,683	24	52,910	666	1,468	1.10	1.44	1800	71
	516-6780	Pin-on	S70	18	39,683	24	52,910	682	1,503	1.10	1.44	1800	71
	605-4771	HCS70	HCS70	18	39,683	24	52,910	785	1,731	1.10	1.44	1800	71
	605-4772	HCS70	S70	18	39,683	24	52,910	774	1,706	1.10	1.44	1800	71
	605-4773	Pin-on	HCS70	18	39,683	24	52,910	742	1,636	1.10	1.44	1800	71
	605-4774	Pin-on HF	HCS70	18	39,683	24	52,910	751	1,656	1.10	1.44	1800	71
	605-4775	HCS70/55	HCS70/55	18	39,683	24	52,910	855	1,885	1.10	1.44	1800	71
	605-4776	HCS70/55	S70/55	18	39,683	24	52,910	843	1,858	1.10	1.44	1800	71
	605-4777	Pin-on	HCS70/55	18	39,683	24	52,910	788	1,737	1.10	1.44	1800	71
605-4778	Pin-on HF	HCS70/55	18	39,683	24	52,910	797	1,757	1.10	1.44	1800	71	
TRS23	558-8925	S70	S70	23	50,706	30	66,138	800	1,764	1.60	2.09	2000	79
	558-8926	S80	S80	23	50,706	30	66,138	937	2,066	1.60	2.09	2000	79
	567-6085	Pin-on	S70	23	50,706	30	66,138	862	1,900	1.60	2.09	2000	79
	567-6086	Pin-on	S80	23	50,706	30	66,138	945	2,083	1.60	2.09	2000	79
	600-0914	HCS70	HCS70	23	50,706	32	70,548	911	2,008	1.60	2.09	2000	79
	600-0915	HCS70	S70	23	50,706	32	70,548	900	1,984	1.60	2.09	2000	79
	605-4779	HCS70/55	HCS70/55	23	50,706	32	70,548	978	2,156	1.60	2.09	2000	79
	605-4780	HCS70/55	S70/55	23	50,706	32	70,548	966	2,130	1.60	2.09	2000	79
	605-4781	HCS80	HCS80	23	50,706	32	70,548	1114	2,456	1.60	2.09	2000	79
605-4782	HCS80	S80	23	50,706	32	70,548	1102	2,429	1.60	2.09	2000	79	

Tiltrotators Technical Specifications

Dimensions

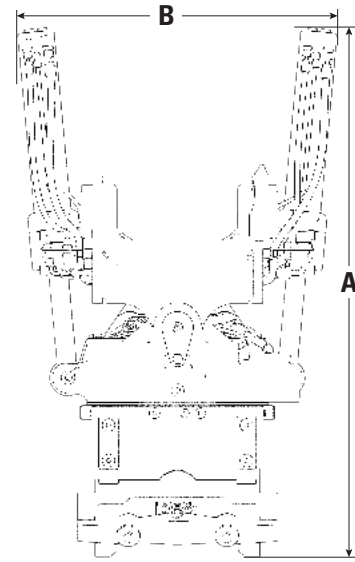
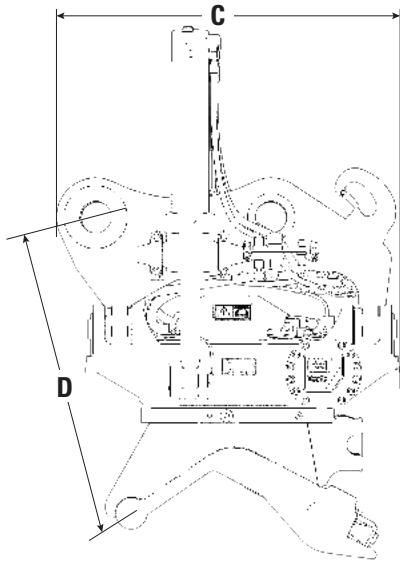


Model	Part Number	Top Interface	Bottom Interface	(A) Total Height		(B) Total Width		(C) Total Length		(D) Building Height	
				mm	in	mm	in	mm	in	mm	in
TRS10	516-6765	S60	S60	1045	41.14	725	28.54	705	27.76	505	19.88
	516-6766	Pin-on	S60	1030	40.55	895	35.24	805	31.69	540	21.26
	555-1563	Pin-on	S60	1050	41.34	690	27.17	790	31.10	530	20.87
	605-4732	HCS60	HCS60	1117	44	753	30	707	28	583	23
	605-4735	HCS60	S60	1117	44	756	30	705	28	583	23
	605-4738	Pin-on	HCS60	1101	43	892	35	778	31	612	24
	605-4740	Pin-on	HCS60	1120	44	688	27	765	30	602	24
	605-4744	Pin-on HF	HCS60	1098	43	892	35	917	36	612	24
605-4746	Pin-on HF	HCS60	1120	44	688	27	885	35	602	24	
TRS14	516-6769	S60	S60	1160	45.67	810	31.89	800	31.50	535	21.06
	516-6772	Pin-on	S60	1160	45.67	810	31.89	850	33.46	570	22.44
	555-1567	Pin-on	S60	1160	45.67	810	31.89	850	33.46	570	22.44
	605-4748	HCS60	HCS60	1235	49	815	32	800	31	614	24
	605-4751	HCS60	S60	1234	49	808	32	801	32	614	24
	605-4753	Pin-on	HCS60	1235	49	808	32	815	32	643	25
	605-4754	Pin-on	HCS60	1235	49	808	32	815	32	643	25
	605-4755	Pin-on HF	HCS60	1235	49	808	32	964	38	643	25
	605-4756	Pin-on HF	HCS60	1235	49	808	32	964	38	643	25
	605-4757	HCS65	HCS65	1231	48	973	38	801	32	626	25
	605-4763	HCS65	S65	1231	48	973	38	801	32	626	25
	605-4766	Pin-on	HCS65	1242	49	808	32	815	32	637	25
	605-4768	Pin-on	HCS65	1243	49	808	32	815	32	637	25
605-4769	Pin-on HF	HCS65	1243	49	808	32	964	38	637	25	
605-4770	Pin-on HF	HCS65	1243	49	815	32	964	38	637	25	

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Tiltrotators Technical Specifications

Dimensions (continued)



Model	Part Number	Top Interface	Bottom Interface	(A) Total Height		(B) Total Width		(C) Total Length		(D) Building Height	
				mm	in	mm	in	mm	in	mm	in
TRS18	516-6779	S70	S70	1190	46.85	960	37.80	800	31.50	575	22.64
	516-6780	Pin-on	S70	1200	47.24	870	34.25	875	34.45	570	22.44
	605-4771	HCS70	HCS70	1252	49	986	39	820	32	640	25
	605-4772	HCS70	S70	1252	49	986	39	820	32	640	25
	605-4773	Pin-on	HCS70	1260	50	859	34	873	34	632	25
	605-4774	Pin-on HF	HCS70	1260	50	859	34	1004	40	632	25
	605-4775	HCS70/55	HCS70/55	1231	48	1190	47	834	33	645	25
	605-4776	HCS70/55	S70/55	1231	48	1190	47	833	33	645	25
	605-4777	Pin-on	HCS70/55	1260	50	859	34	873	34	632	25
605-4778	Pin-on HF	HCS70/55	1260	50	859	34	1004	40	632	25	
TRS23	558-8925	S70	S70	1290	50.79	948	37.32	920	36.22	625	24.61
	558-8926	S80	S80	1310	51.57	1223	48.15	920	36.22	665	26.18
	567-6085	Pin-on	S70	1288	50.71	970	38.19	989	38.94	670	26.38
	567-6086	Pin-on	S80	1335	52.56	970	38.19	989	38.94	680	26.77
	600-0914	HCS70	HCS70	1358	53	947	37	920	36	697	27
	600-0915	HCS70	S70	1358	53	947	37	920	36	697	27
	605-4779	HCS70/55	HCS70/55	1339	53	1138	45	920	36	702	28
	605-4780	HCS70/55	S70/55	1335	53	1138	45	920	36	702	28
	605-4781	HCS80	HCS80	1342	53	1221	48	956	38	702	28
605-4782	HCS80	S80	1345	53	1221	48	956	38	702	28	

Tiltrotators Technical Specifications

Hydraulic Specifications

Model	Turning Torque at 25 Mpa	Turning Torque at 3626 psi	Tilt Torque at 25 Mpa	Tilting Torque at 3626 psi	Flow for Rotation Speed	
	N·m	ft·lb	N·m	ft·lb	L/min	gpm
TRS10	7640	5635	38,600	28,470	58	15.32
TRS14	9550	7044	45,100	33,264	72	19.02
TRS18	9550	7044	56,600	41,746	72	19.02
TRS23	11,940	8806	64,700	47,720	79	20.87

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Tiltrotators Technical Specifications

Hydraulic Specifications *(continued)*

Model	Part Number	Top Interface	Bottom Interface	Tilt Angle, Left and Right	Rotation Speed, 1 Full Rotation	Flow for Rotation Speed	Working Pressure	
				degrees	seconds	L/min	Mpa	psi
TRS10	516-6765	S60	S60	40	7	60	25	3626
	516-6766	Pin-on	S60	40	7	60	25	3626
	555-1563	Pin-on	S60	40	7	60	25	3626
	605-4732	HCS60	HCS60	40	7	58	25	3626
	605-4735	HCS60	S60	40	7	58	25	3626
	605-4738	Pin-on	HCS60	40	7	58	25	3626
	605-4740	Pin-on	HCS60	40	7	58	25	3626
	605-4744	Pin-on HF	HCS60	40	7	58	25	3626
	605-4746	Pin-on HF	HCS60	40	7	58	25	3626
TRS14	516-6769	S60	S60	40	7	65	25	3626
	516-6772	Pin-on	S60	40	7	65	25	3626
	555-1567	Pin-on	S60	40	7	65	25	3626
	605-4748	HCS60	HCS60	40	7	72	25	3626
	605-4751	HCS60	S60	40	7	72	25	3626
	605-4753	Pin-on	HCS60	40	7	72	25	3626
	605-4754	Pin-on	HCS60	40	7	72	25	3626
	605-4755	Pin-on HF	HCS60	40	7	72	25	3626
	605-4756	Pin-on HF	HCS60	40	7	72	25	3626
	605-4757	HCS65	HCS65	40	7	72	25	3626
	605-4763	HCS65	S65	40	7	72	25	3626
	605-4766	Pin-on	HCS65	40	7	72	25	3626
	605-4768	Pin-on	HCS65	40	7	72	25	3626
	605-4769	Pin-on HF	HCS65	40	7	72	25	3626
	605-4770	Pin-on HF	HCS65	40	7	72	25	3626
TRS18	516-6779	S70	S70	40	7	65	25	3626
	516-6780	Pin-on	S70	40	7	65	25	3626
	605-4771	HCS70	HCS70	40	7	72	25	3626
	605-4772	HCS70	S70	40	7	72	25	3626
	605-4773	Pin-on	HCS70	40	7	72	25	3626
	605-4774	Pin-on HF	HCS70	40	7	72	25	3626
	605-4775	HCS70/55	HCS70/55	40	7	72	25	3626
	605-4776	HCS70/55	S70/55	40	7	72	25	3626
	605-4777	Pin-on	HCS70/55	40	7	72	25	3626
605-4778	Pin-on HF	HCS70/55	40	7	72	25	3626	
TRS23	558-8925	S70	S70	40	7	70	25	3626
	558-8926	S80	S80	40	7	70	25	3626
	567-6085	Pin-on	S70	40	7	70	25	3626
	567-6086	Pin-on	S80	40	7	70	25	3626
	600-0914	HCS70	HCS70	40	8	79	25	3626
	600-0915	HCS70	S70	40	8	79	25	3626
	605-4779	HCS70/55	HCS70/55	40	8	79	25	3626
	605-4780	HCS70/55	S70/55	40	8	79	25	3626
	605-4781	HCS80	HCS80	40	8	79	25	3626
605-4782	HCS80	S80	40	8	79	25	3626	

Tiltrotators Technical Specifications

Machine Matching

Configurations and features may vary by region. Please consult your Cat dealer for availability in your area.

Match

No Match

	TRS10	TRS14	TRS18	TRS23
Tracked Excavators				
313F	✓			
313	✓			
315F	✓			
315	✓			
316F		✓		
317		✓		
318F		✓		
320F			✓	
320			✓	
323F			✓	
323			✓	
325F			✓	
325			✓	
326F				✓
326				✓
330F				✓
330				✓
335F				✓
335				✓
Wheeled Excavators				
M314F	✓			
M314	✓			
M315	✓			
M315F	✓			
M316F		✓		
M316		✓		
M317F		✓		
M317		✓		
M318F		✓		
M318		✓		
M319		✓		
M320F			✓	
M320			✓	
M322F			✓	
M322			✓	

Tiltrotators Technical Specifications

Hydromechanical Matching

Check your machine's configuration to determine optimal Tiltrotators, coupler, and attachment combinations.

Match

No Match

Family	Model	TRS10	TRS14	TRS18	TRS23
Hydraulic Hammers	H110 GC S	✓	✓		
	H110 S	✓	✓		
	H115 GC S		✓	✓	
	H115 S		✓	✓	
	H120 GC S			✓	✓
	H120 S			✓	✓
	H130 GC S				✓
	H130 S				✓
Compactors (Vibratory Plate)	CVP75	✓	✓	✓	
	CVP110			✓	✓

NOTE: Hammer on tiltrotator usage less than 10% of working hours. Refer to your OMM for recommended hydraulic flow requirements.

Tiltrotators Technical Specifications

Bucket Matching and Specifications

Buckets listed below are designed primarily for use with tiltrotators.

TRS10

Maximum bucket width: 1,600 mm (63 in)

Part Number	Bucket Interface	Width		Capacity		Weight	
		mm	in	m ³	yd ³	kg	lb
Grading							
512-8393	S60	1,500	60	0.50	0.65	494	1089
512-8394	S60	1,500	60	0.65	0.79	517	1140
512-8395	S60	1,600	63	0.75	0.98	556	1226
Trenching							
512-8397	S60	540	21	0.35	0.46	309	681
Digging							
596-1834	S60	980	39	0.60	0.78	500	1103
596-1835	S60	1,100	43	0.70	0.92	553	1219
596-1836	S60	1,100	43	0.70	0.92	558	1230

TRS14

Recommended maximum bucket width: 1,700 mm (68 in)

Part Number	Bucket Interface	Width		Capacity		Weight	
		mm	in	m ³	yd ³	kg	lb
Grading							
512-8395	S60	1,600	63	0.75	0.98	560	1235
512-8413	S60	1,700	66	0.80	1.05	611	1346
512-8400	S60	1,800	70	0.90	1.2	643	1418
Trenching							
512-8397	S60	540	21	0.35	0.46	298	657
Digging							
596-1837	S60	1,130	44	0.80	1.05	628	1385
596-1839	S60	1,150	45	0.90	1.18	699	1541

TRS18

Maximum bucket width: 1,800 mm (71 in)

Part Number	Bucket Interface	Width		Capacity		Weight	
		mm	in	m ³	yd ³	kg	lb
Grading							
512-8404	S70	1,800	71	1.10	1.44	798	1760
512-8405	S70	2,000	79	1.15	1.5	891	1965
Trenching							
512-8406	S70	600	24	0.55	0.72	516	1138
Digging							
596-1840	S70	1,360	54	1.15	1.5	1194	2663
596-1841	S70	1,430	56	1.25	1.63	1260	2778
596-1842	S70	1,480	58	1.35	1.77	1331	2935

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Tiltrotators Technical Specifications

Bucket Matching and Specifications *(continued)*

Buckets listed below are designed primarily for use with tiltrotators.

TRS23

Maximum bucket width: 2,000 mm (79 in)

Part Number	Bucket Interface	Width		Capacity		Weight	
		mm	in	m ³	yd ³	kg	lb
Grading							
512-8407	S70	2000	79	1.45	1.9	1085	2392
512-8408	S70	2000	79	1.6	2.09	1175	2591
514-7847	S80	2000	79	1.6	2.09	1190	2624
Digging							
596-1844	S70	1650	65	1.7	2.22	1773	3909
596-1845	S80	1650	65	1.7	2.22	1873	4130
596-1846	S80	1690	67	1.8	2.35	1900	4190
596-1847	S80	1690	67	1.8	2.35	1910	4212
596-1849	S80	1830	72	2	2.62	2406	5305
596-1851	S80	1920	76	2.2	2.88	2501	5515

Tiltrotators Technical Specifications

Grapple Modules

Grapple modules are optional and do not impact the tiltrotators machine matches.

Model	Part Number	Top Interface	Bottom Interface	Optional Grapple Module	Retrofit Positioning System Kit (RPS)
TRS10	516-6765	S60	S60	512-3108	540-2979
	516-6766	Pin-on	S60	512-3108	
	555-1563	Pin-on	S60	512-3108	
	605-4732	HCS60	HCS60	607-1190	
	605-4735	HCS60	S60	512-3108	
	605-4738	Pin-on	HCS60	607-1190	
	605-4740	Pin-on	HCS60	607-1190	
	605-4744	Pin-on HF	HCS60	607-1190	
	605-4746	Pin-on HF	HCS60	607-1190	
TRS14	516-6769	S60	S60	512-3108	540-2979
	516-6772	Pin-on	S60	512-3108	
	555-1567	Pin-on	S60	512-3108	
	605-4748	HCS60	HCS60	607-1190	
	605-4751	HCS60	S60	512-3108	
	605-4753	Pin-on	HCS60	607-1190	
	605-4754	Pin-on	HCS60	607-1190	
	605-4755	Pin-on HF	HCS60	607-1190	
	605-4756	Pin-on HF	HCS60	607-1190	
	605-4757	HCS65	HCS65	512-3107	
	605-4763	HCS65	S65	512-3107	
	605-4766	Pin-on	HCS65	512-3107	
	605-4768	Pin-on	HCS65	512-3107	
	605-4769	Pin-on HF	HCS65	512-3107	
	605-4770	Pin-on HF	HCS65	512-3107	
TRS18	516-6779	S70	S70	512-3107	540-2979
	516-6780	Pin-on	S70	512-3107	
	605-4771	HCS70	HCS70	512-3107	
	605-4772	HCS70	S70	512-3107	
	605-4773	Pin-on	HCS70	512-3107	
	605-4774	Pin-on HF	HCS70	512-3107	
	605-4775	HCS70/55	HCS70/55	567-7344	
	605-4776	HCS70/55	S70/55	567-7344	
	605-4777	Pin-on	HCS70/55	567-7344	
605-4778	Pin-on HF	HCS70/55	567-7344		
TRS23	558-8925	S70	S70	567-7343	540-2979
	558-8926	S80	S80	567-7344	
	567-6085	Pin-on	S70	567-7343	
	567-6086	Pin-on	S80	567-7344	
	600-0914	HCS70	HCS70	567-7343	
	600-0915	HCS70	S70	567-7343	
	605-4779	HCS70/55	HCS70/55	567-7344	
	605-4780	HCS70/55	S70/55	567-7344	
	605-4781	HCS80	HCS80	567-7344	
	605-4782	HCS80	S80	567-7344	

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(N Am, S Am)

