CAT® Lift Trucks

Service Manual

Chassis & Mast — MC/FC

GP15N	T25C-50001-up
GP15ZN	T34-50011-up
GP18N	T25C-70001-up
GP18ZN	T34-70001-up
GP20CN	T34-20001-up
GP20N	T17D-00011-up
GP20ZN	T35-00011-up
GP25N	T17D-50001-up
GP25ZN	T35-50001-up
GP30N	T13F-30011-up
GP35AN	T13F-50001-up
GPE15N	T25C-58001/68001-up
GPE15ZN	T34-58011/68001-up
GPE18N	T25C-78001/88001-up
GPE18ZN	T34-78001/88001-up
GPE20CN	T34-28001/38001-up
GPE20N	T17D-08011/18001-up
GPE20ZN	T35-08011/18001-up
GPE25N	T17D-58001/68001-up
GPE25ZN	T35-58001/68001-up
GPE30N	T13F-38011/48001-up
GPE35AN	T13F-58001/68001-up

DP15N	T16D-50001/60001-up
DP18N	T16D-70001/80001-up
DP20CN	T16D-85001/87001-up
DP20N	T18C-00011/10001-up
DP25N	T18C-50001/60001-up
DP30N	T14E-30011/40001-up
DP35AN	T14E-50001/60001-up

For use with S4Q2, S4S and K15/K21/K25 Engine Service Manuals.

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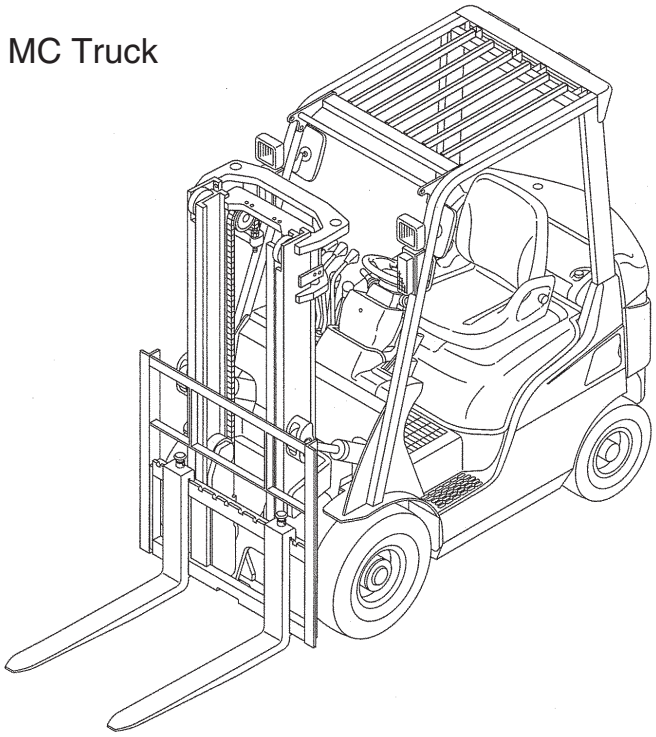
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GENERAL INFORMATION

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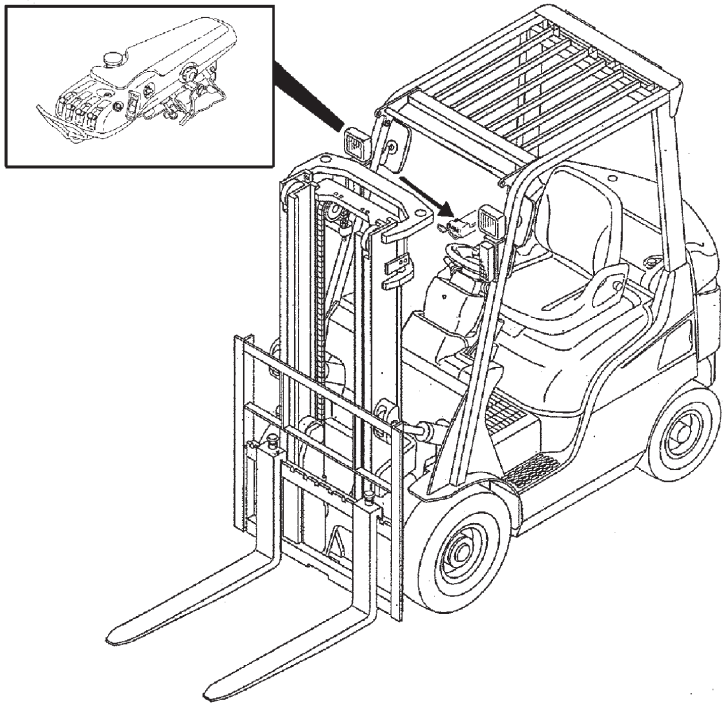
Model View

MC Truck



209605

FC Truck



210780

Truck Models Covered

This Service Manual provides servicing and maintenance information for the following trucks:

Engine control	Gasoline engine	Diesel engine	LPG engine
Standard (Non-electronic control)	MC/—	MC/FC	—
Electronic control	MC/FC	—	MC/FC

(FC type is used in torque converter model only.)

Truck class	Standard gasoline engine models			Diesel engine models		
	Truck model	Model code - serial number	Engine mounted	Truck model	Model code - serial number	Engine mounted
1 ton class	GP15N	T25C-50001~	K15	DP15N	T16D-50001~	S4Q2
	—	—	—	DP15N(F)	T16D-60001~	S4Q2
	GP18N	T25C-70001~	K15	DP18N	T16D-70001~	S4Q2
	GP15ZN	T34-50011~	K21	DP18N(F)	T16D-80001~	S4Q2
	GP18ZN	T34-70001~	K21	DP20CN	T16D-85001~	S4Q2
	GP20CN	T34-20001~	K21	DP20CN(F)	T16D-87001~	S4Q2
2 ton class	GP20N	T17D-00011~	K21	DP20N	T18C-00011~	S4S
	GP25N	T17D-50001~	K21	DP20N(F)	T18C-10001~	S4S
	GP20ZN	T35-00011~	K25	DP25N	T18C-50001~	S4S
	GP25ZN	T35-50001~	K25	DP25N(F)	T18C-60001~	S4S
3 ton class	GP30N	T13F-30011~	K25	DP30N	T14E-30011~	S4S
	—	—	—	DP30N(F)	T14E-40001~	S4S
	GP35AN	T13F-50001~	K25	DP35AN	T14E-50001~	S4S
	—	—	—	DP35AN(F)	T14E-60001~	S4S

Notice: Characters at the end of truck model should be read as follows:

(F) : Finger-tip-controlled model

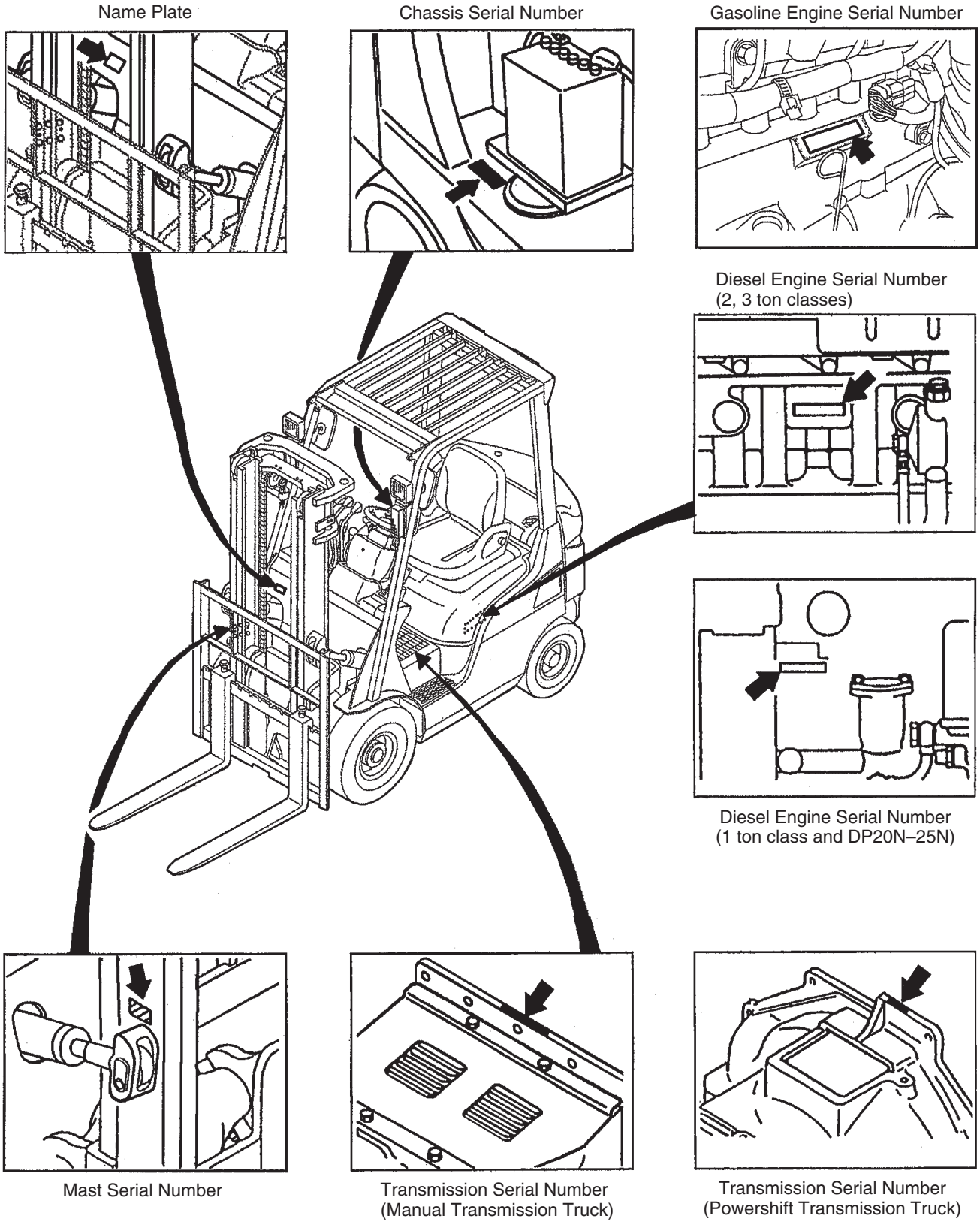
None: Mechanically-controlled model

Z : High-power engine model

C : Short body model

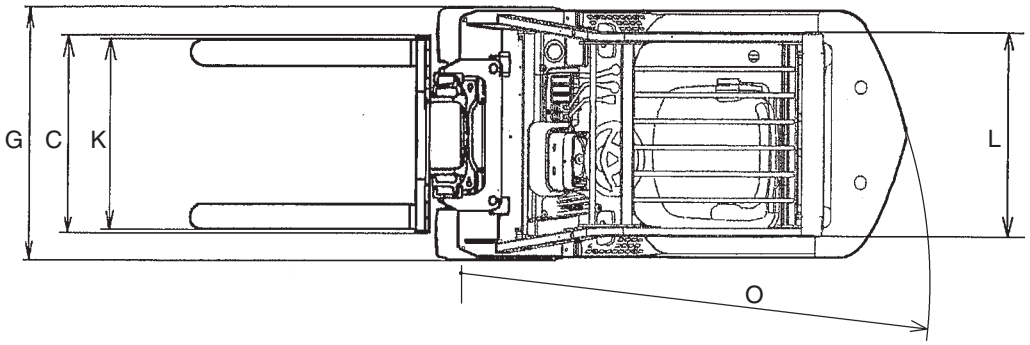
Truck class	Electronically-controlled gasoline engine models			Electronically-controlled LPG engine models		
	Truck model	Model code - serial number	Engine mounted	Truck model	Model code - serial number	Engine mounted
1 ton class	GPE15N	T25C-58001~	K15	—	—	—
	GPE15N(F)	T25C-68001~	K15			
	GPE18N	T25C-78001~	K15			
	GPE18N(F)	T25C-88001~	K15			
	GPE15ZN	T34-58011~	K21			
	GPE15ZN(F)	T34-68001~	K21			
	GPE18ZN	T34-78001~	K21			
	GPE18ZN(F)	T34-88001~	K21			
	GPE20CN	T34-28001~	K21			
	GPE20CN(F)	T34-38001~	K21			
2 ton class	GPE20N	T17D-08011~	K21	—	—	—
	GPE20N(F)	T17D-18001~	K21			
	GPE25N	T17D-58001~	K21			
	GPE25N(F)	T17D-68001~	K21			
	GPE20ZN	T35-08011~	K25			
	GPE20ZN(F)	T35-18001~	K25			
	GPE25ZN	T35-58001~	K25			
	GPE25ZN(F)	T35-68001~	K25			
3 ton class	GPE30N	T13F-38011~	K25	—	—	—
	GPE30N(F)	T13F-48001~	K25	GPE30N(F)	T13F-49001~	K25
	GPE35AN	T13F-58001~	K25	—	—	—
	GPE35AN(F)	T13F-68001~	K25	—	—	—

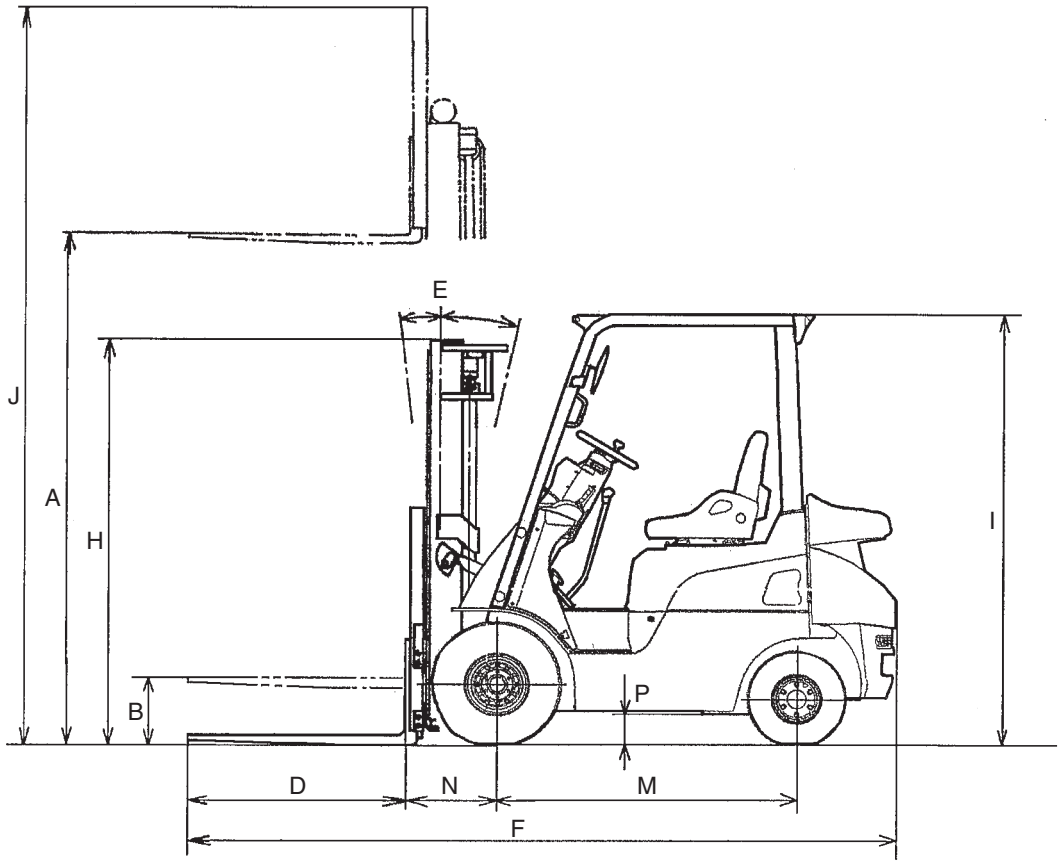
Serial Number Locations



209607

Dimensions





210781

Technical Data

Unit: mm (in.)

Ref. No.	Item \ Model		Gasoline-engine Truck	GP15N GP15ZN GPE15N GPE15ZN	GP18N GP18ZN GPE18N GPE18ZN
			Diesel-engine Truck	(DP15N)	(DP18N)
A	Maximum lift			3000 (118)	
B	Free lift			115 (4.5)	
C	Fork spread (outside)			200 to 920 (7.9 to 36.2)	
D	Fork length			920 (36.2)	
E	Tilt angle (forward – backward)			6° – 12°	
F	Overall length			3180 (125.2)	3220 (126.8)
G	Overall width (outside of tires)		Single tire	1065 (41.9)	
			Dual tire	1330 (52.4)	
H	Overall height (to top of mast lowered)			1995 (78.5)	
I	Overall height (to top of overhead guard)			2065 (81.3)	
J	Overall height (mast extended)			4055 (159.6)	
K	Tread (front)		Single tire	888.5 (35)	
			Dual tire	1025 (40.4)	
L	Tread (rear)			900 (35.4)	
M	Wheelbase			1400 (55.1)	
N	Front overhang			400 (15.7)	
O	Minimum turning radius			1950 (76.8)	1980 (78)
P	Underclearance (at frame)			150 (5.9)	

Unit: mm (in.)

GP20CN GPE20CN	GP20N GP20ZN GPE20N GPE20ZN	GP25N GP25ZN GPE25N GPE25ZN	GP30N GPE30N	GP35AN GPE35AN
(DP20CN)	(DP20N)	(DP25N)	(DP30N)	(DP35AN)
3000 (118)			3030 (119)	3000 (118)
115 (4.5)	140 (5.5)	145 (5.7)	150 (5.9)	
220 to 920 (8.7 to 36.2)	220 to 1000 (8.7 to 39.4)		250 to 1000 (9.8 to 39.4)	
920 (36.2)		1070 (42.1)		
6° – 12°				
3280 (129.1)	3410 (134.3)	3625 (142.7)	3795 (149.4)	3860 (152)
1065 (41.9)	1150 (45.3)		1275 (50.2)	1290 (50.8)
—	1480 (58.3)		1490 (58.7)	
1995 (78.5)			2045 (80.5)	2180 (85.8)
2065 (81.3)	2070 (81.5)		2095 (82.5)	2105 (82.9)
4055 (159.6)			4085 (160.8)	4055 (159.6)
890 (35)	960 (37.8)		1060 (41.7)	
—	1140 (44.9)			
900 (35.4)	980 (38.6)			
1400 (55.1)	1600 (63)		1700 (66.9)	
415 (16.3)	455 (17.9)		490 (19.3)	
2020 (79.5)	2200 (86.6)	2230 (87.8)	2380 (93.7)	2440 (96.1)
150 (5.9)	160 (6.3)		190 (7.5)	200 (7.9)

Unit: mm (in.)

Item \ Model			Gasoline-engine Truck	GP15N GP15ZN GPE15N GPE15ZN	GP18N GP18ZN GPE18N GPE18ZN
			Diesel-engine Truck	(DP15N)	(DP18N)
Performance	Capacity/load center		kgf/mm (lbf/in.)	1500/500 (3310/20)	1750/500 (3860/20)
	Lift speed		rate load mm/sec (fpm)	GP15N: 500 (98) GP15ZN: 570 (112) GPE15N: 560 (110) GPE15ZN: 640 (126) DP15N: 600 (118)	GP18N: 500 (98) GP18ZN: 570 (112) GPE18N: 560 (110) GPE18ZN: 640 (126) DP18N: 600 (118)
			unload mm/sec (fpm)	GP15N: 560 (110) GP15ZN: 640 (126) GPE15N: 570 (112) GPE15ZN: 650 (128) DP15N: 650 (128)	GP18N: 560 (110) GP18ZN: 640 (126) GPE18N: 570 (112) GPE18ZN: 650 (128) DP18N: 650 (128)
	Travel speed		rate load km/h (mph)	19/(11.8)	
			unload km/h (mph)	19.5/(12.1)	

Unit: mm (in.)

GP20CN GPE20CN	GP20N GP20ZN GPE20N GPE20ZN	GP25N GP25ZN GPE25N GPE25ZN	GP30N GPE30N	GP35AN GPE35AN
(DP20CN)	(DP20N)	(DP25N)	(DP30N)	(DP35AN)
2000/500 (4410/20)	2000/500 (4410/20)	2500/500 (5510/20)	3000/500 (6610/20)	3500/500 (7720/20)
GP20CN: 570 (112) GPE20CN: 640 (126) DP20CN: 600 (118)	GP20N: 510 (100) GP20ZN: 590 (116) GPE20N: 590 (116) GPE20ZN: 680 (134) DP20N: 640 (126)	GP25N: 510 (100) GP25ZN: 590 (116) GPE25N: 590 (116) GPE25ZN: 680 (134) DP25N: 640 (126)	GP30N: 470 (93) GPE30N: 520 (102) DP30N: 510 (100)	GP35AN: 400 (79) GPE35AN: 430 (85) DP35AN: 430 (85)
GP20CN: 640 (126) GPE20CN: 650 (128) DP20CN: 650 (128)	GP20N: 600 (118) GP20ZN: 680 (134) GPE20N: 610 (120) GPE20ZN: 690 (136) DP20N: 670 (132)	GP25N: 600 (118) GP25ZN: 680 (134) GPE25N: 610 (120) GPE25ZN: 690 (136) DP25N: 670 (132)	GP30N: 515 (101) GPE30N: 530 (104) DP30N: 545 (107)	GP35AN: 430 (85) GPE35AN: 440 (87) DP35AN: 460 (91)
19/(11.8)				
19.5/(12.1)				


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