

SM180
BEC07C1-01

FORKLIFT TRUCK

FG40Z/40/45-7
FD40Z/40/45-7

KOMATSU FORKLIFT USA

SHOP MANUAL

FG40Z/40/45-7 **FD40Z/40/45-7**

MACHINE MODEL	SERIAL NO.	ENGINE
FG40Z-7	and up	TB42
FG40/45-7	and up	TB42
FD40Z-7	and up	6D102E
FD40/45-7	and up	6D102E
FG35S/45S-7	and up	TB42
FG35BCS-7	and up	TB42

PRECAUTIONS WHEN PERFORMING THE SERVICE WORK

Always pay attention to "Safety" before starting any work – this is important.

Never attempt any work where danger to yourself or to other persons.

Whenever work requiring safety precautions are described in this manual, a flag mark  inserted, always make double sure that safety measures are taken.

Other unmarked work, should always be performed after studying and using your common sense to prevent accidents.

DESCRIPTION OF THE SYMBOLS

The symbols described below are used in this manual for convenience and better understanding

Symbol	Item	Description
	Safety	Special safety precautions are needed to perform the work.
	Note	Special technical precautions are needed to perform the work.
	Tightening torque	Fastening parts that require specified tightening force when assembling.
	Weight	Weight of parts or systems.
	Coat	Places to be coated with adhesives, etc. When assembling.

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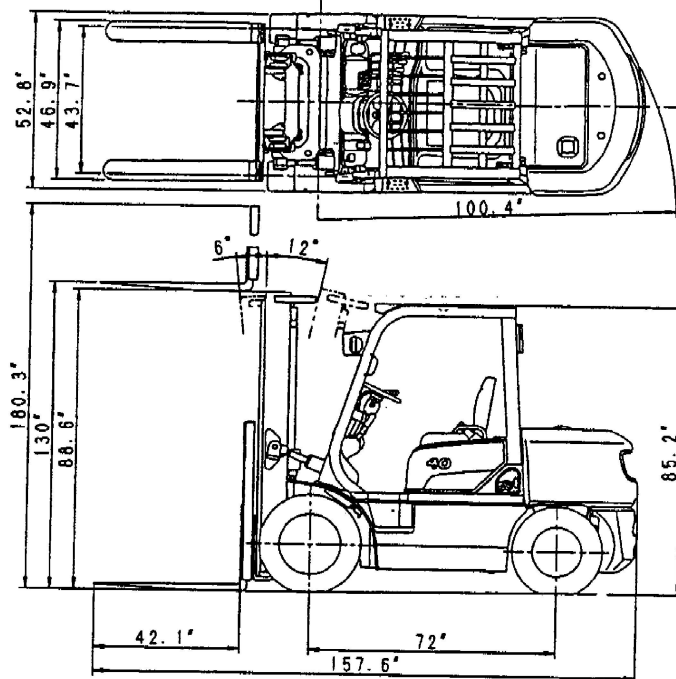
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01. GENERAL AND SPECIFICATIONS

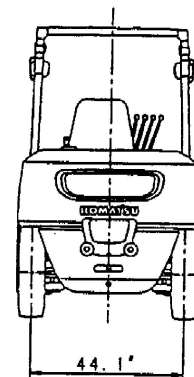
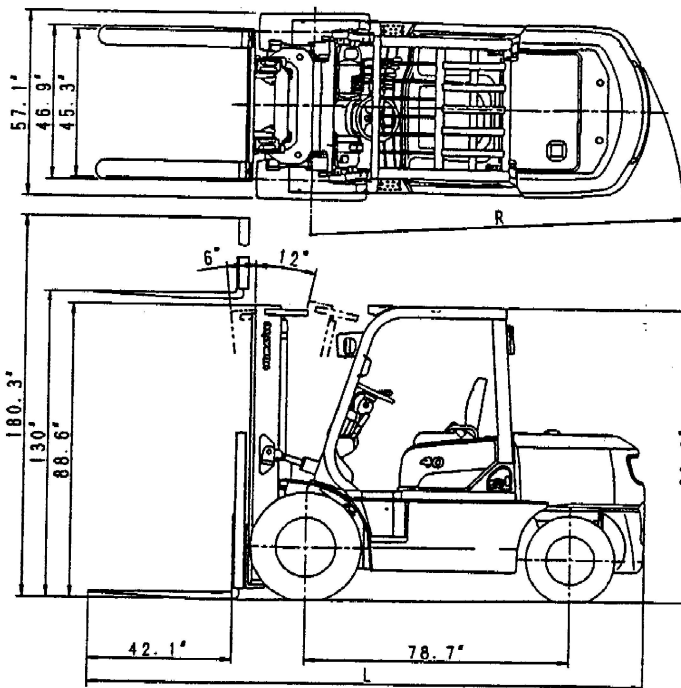
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SPECIFICATIONS

PNEUMATIC TYPE

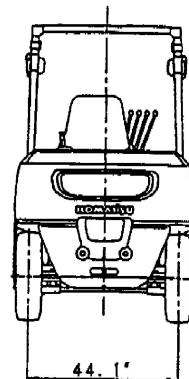


Unit: inch

Pneumatic compact car
HWZ01650

Unit: inch

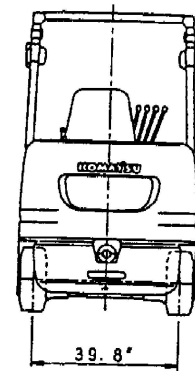
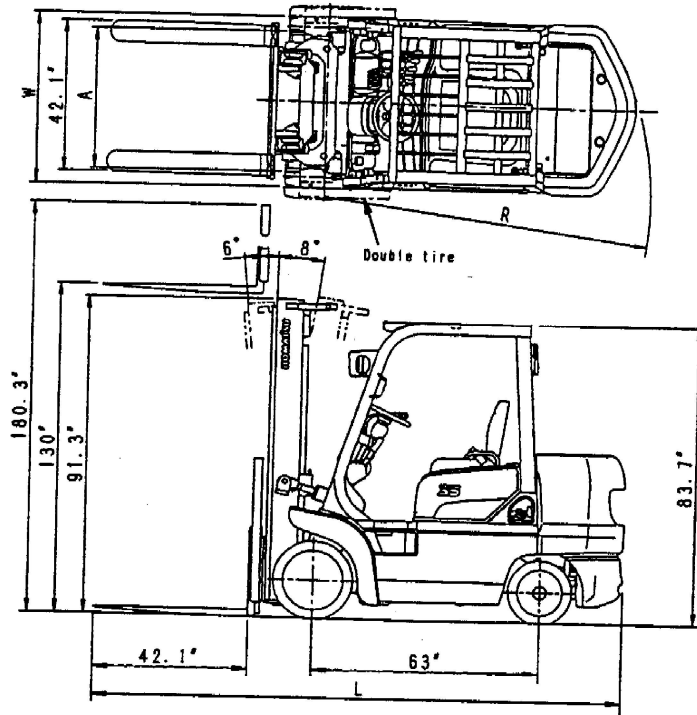
	FG(D)40	FG(D)45
L	164.5°	166.3°
R	108.3°	109.4°

Pneumatic std.
HWZ01651

CUSHION TYPE

Unit: inch

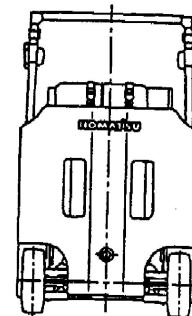
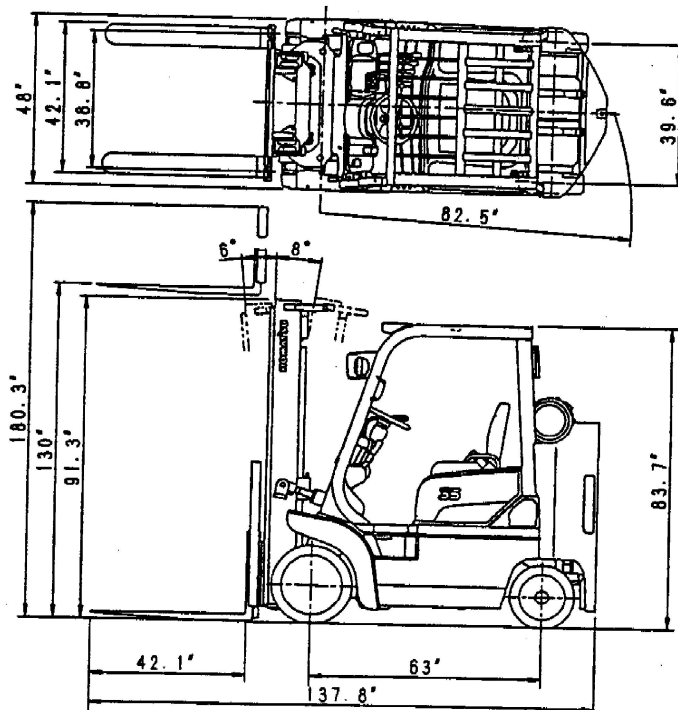
	FG35S	FG45S
L	146°	150.2°
R	90°	93.7°
A	38.8°	41.9°
W	48°	53.9°



Cushion Std.

HWZ01652

Unit: inch



Cushion Box Car Special

HWZ01653

SPECIFICATIONS

Characteristics	1.2 Model		Manufacturer's Designation		FG40ZT-7	FG40ZT2-7	FD40ZT-7	FD40ZT2-7
	Power type		Electric, Diesel, Gasoline, LPG, Cable		Gasoline		Diesel	
Weight	1.4 Operation Type		Pedestrian, Driver Standing, Siting, Order Picking		Sitting			
	1.5 Rated Capacity		Q	Rated Capacity	lbs(kg)			
Tyres	1.6 Load Center		c	Rated Load Center	in.(mm)			
	1.6.1 Alternative Capacity		Q2	Capacity @600mm load center	lbs(kg)			
Basic Measurement	1.8 Load distance		x	Front Axle Center to Fork Face	in.(mm)			
	1.9 Wheelbase		y		in.(mm)			
Performance	2.1 Service Weight				lbs(kg)			
	2.2 Axie Loading		Loaded (at Q2)	Front	lbs(kg)			
Others	2.3.1 Unloaded			Front	lbs(kg)			
				Rear	lbs(kg)			
Tyres	3.1 Tyre Type		Cushion, Elastic, Cushion, Pneumatic, Polyurethane		Pneumatic			
	3.2 Tyer Siza		Front		250-15-16PR(I)			
Basic Measurement	3.3		Rear		7.00-12-12PR(I)			
	3.5 Number of Wheel		Front/Rear(x=driven)		2/2			
Performance	3.6 Tread, Front		b10		in.(mm)			
	3.7 Tread, Rear		b11		in.(mm)			
Basic Measurement	4.1 Tilting Angle		a/β	Forward/Backward	degree			
	4.2 Mast Height, Lowered		h1	2-stage Std. Mast	in.(mm)			
Performance	4.3 Std. Free Lift		h2	2-stage Std. Mast from Ground	in.(mm)			
	4.4 Maximum Fork Height		h3	2-stage Std. Mast from Ground	in.(mm)			
Basic Measurement	4.5 Mast Height, extended		h4	2-seage std. Mast	in.(mm)			
	4.7 Height, Overhead Guard		h6		in.(mm)			
Performance	4.19 Length, with Std.Forks		L1		in.(mm)			
	4.20 Length, to Fork Face		L2		in.(mm)			
Basic Measurement	4.21 Width, at Tyre		b1	Single	in.(mm)			
	4.22 Forks		s/e/l	Thickness/Width/Length	in.(mm)			
Performance	4.23 Forks Carriage Class		ISO 2328, Type A/B/no		class 3, TYPE A			
	4.24 Width, Fork Carriage		b3		in.(mm)			
Basic Measurement	4.31 Ground Clearance		m1	under Mast	in.(mm)			
	4.32 Ground Clearance		m2	at center of Wheelbase	in.(mm)			
Performance	4.33 Right Angle Stacking Aisle		Ast	with 1000x1200 pallet, lateral	in.(mm)			
	4.34 Right Angle Stacking Aisle		Ast	with 800x1200 pallet, straight	in.(mm)			
Basic Measurement	4.35 Turning Radius		Wa		in.(mm)			
	5.1 Travel speed(FWD)		loaded	mpm(km/h)	11.8(19.0)	13.4(21.5)	11.2(18.0)	12.4(20)
Performance	5.1.1		unloaded	mpm(km/h)	12.7(20.5)	14.3(23)	12.1(19.5)	13.7(22)
	5.2 lifting Speed		loaded/unloaded	fpm(mm/s)	100/112 (510/570)	110/116 (560/590)		
Basic Measurement	5.3 Lowering Speed		loaded/unloaded	fpm(mm/s)	94/108 (480/550)			
	5.6 Max. Drawbar Pull		loaded	lbs(KN)	6,410(28.5)	8,810(39.2)	7,230(32.2)	9,760(43.7)
Performance	5.8 Max. Gredeability		loaded/unloaded	%	32/21	47/21	35/21	52/21
	5.10 Service Brake		Operation/Control		Hydraulic			
Basic Measurement	5.11 Parking Brake		Operation/Control		Mechanical			
	5.12 Steering		Type		F.H.P.S.			
I. C. Engine	6.4 Battery		Voltage/Capacity at 5-hour rating		V/Ah		12/60	
	7.1 Make/Model				T842		6D102E	
Performance	7.2 Rated Output SAE gross		HP(KW)		88 (65)		95 (71)	
	7.3 Rated RPM		min		2300		2150	
Basic Measurement	7.3.1 Max. Torque SAE gross		lb-ft(NM)@min		203 (275) @1900		253 (343) @1500	
	7.4 No. of Cylinder/Displacement		cu.in.(cm³)		6/254 (4169)		6/359 (5880)	
Performance	7.6 Fuel Tank Capacity		U.S.gais(liters)		23 (85)			
	8.2 Relief Pressure for Attachment		psi(bar)		2,650 (181)			
Others	8.2.1 Hydraulic Tank Capacity		U.S.gais(liters)		15 (55)			
	8.6 Clutch Type				Torque Converter			
Basic Measurement	8.7 Transmission type				TORQFLOW			