8FGU25
8FDU25

MAIN VEHICLE SPECIFICATIONS

1	Manufacturer				TOYOTA	TOYOTA
2	Model				8FGU25	8FDU25
3	Load Capacity			lb (kg)	5000 (2250)	5000 (2250)
4	Load Center			in (mm)	24 (600)	24 (600)
5	Power Type				LP	Diesel
6	Operator Position				Seated Rider	Seated Rider
7	Tire Type				Pneumatic	Pneumatic
8	Wheels (x = driven)		Front / Rear		2x / 2	2x / 2
9	Maximum Fork Height (MFH) (Top of Forks)			in (mm)	131.5 (3340)	131.5 (3340)
10	Free Lift (Top of Forks)			in (mm)	6.1 (155)	6.1 (155)
13	Fork Size		T x W x L	in (mm)	1.6 x 5 x 42 (40 x 125 x 1070)	1.6 x 5 x 42 (40 x 125 x 1070)
	Fork Spread (Outer Edge to Edge)		Max / Min	in (mm)	40 (1020) / 10 (250)	40 (1020) / 10 (250)
14	Tilt Range		Fwd / Bwd	deg	6° / 11°	6° / 11°
15	Length to Fork Face			in (mm)	103.9 (2640)	103.9 (2640)
16	Overall Width			in (mm)	45.3 (1150)	45.3 (1150)
17	Mast Lowered Height			in (mm)	84.5 (2145)	84.5 (2145)
18	Mast Extended Height (Top of Load Backrest)			in (mm)	179.5 (4560)	179.5 (4560)
19	Overhead Guard Height[3]			in (mm)	83.1 (2110)	83.1 (2110)
21	Turning Radius Inside/Outside			in (mm)	5.91 (150) / 87.5 (2220)	5.91 (150) / 87.5 (2220)
22	Load Distance (Centerline of Front Axle to Front Face of Forks)			in (mm)	18.5 (470)	18.5 (470)
	Rear Overhang			in (mm)	20.5 (520)	20.5 (520)
23	Basic Right Angle Stacking Aisle Width (Add Load Length and Clearance)			in (mm)	105.9 (2690)	105.9 (2690)
24	Speeds	Travel, Max. (Forward / Reverse)	Full Load	mph (km/h)	10.9 (17.5) / 10.9 (17.5)	10.3 (16.5) / 10.3 (16.5)
			No Load	mph (km/h)	11.2 (18.0) / 11.2 (18.0)	10.7 (17.0) / 10.7 (17.0)
25		Lifting	Full Load	fpm (mm/sec)	118 (600)	121 (615)
			No Load	fpm (mm/sec)	126 (640)	129 (655)
26		Lowering	Full Load	fpm (mm/sec)	98 (500)	98 (500)
			No Load	fpm (mm/sec)	98 (500)	98 (500)
28	Drawbar Pull, Max.		Full Load	lb (kg) <N>	4130 (1870) <18400>	4475 (2030) <20000>
			No Load	lb (kg) <N>	1910 (870) <8500>	1930 (880) <8600>
29	Gradeability at 1 mph (1.5 km/h)[1]		Full Load	%	30	30
30	Gradeability, Max.[1]		Full Load	%	33	35
			No Load	%	20	20
32	Total Weight			lb (kg)	7840 (3560)	7990 (3630)
33	Weight Distribution	Full Load	Front / Rear	lb (kg)	11260 (5330) / 1580 (730)	11320 (5350) / 1670 (780)
34		No Load	Front / Rear	lb (kg)	2980 (1350) / 4860 (2210)	3040 (1380) / 4950 (2250)
35	Tires	Number	Front / Rear		2 / 2	2 / 2
36		Size	Front		7.00-12-12PR (I)	7.00-12-12PR (I)
37			Rear		6.00-9-10PR (I)	6.00-9-10PR (I)
38	Wheelbase			in (mm)	65 (1650)	65 (1650)
39	Tread Width	Front		in (mm)	37.8 (960)	37.8 (960)
		Rear		in (mm)	38.0 (965)	38.0 (965)
40	Underclearance (Full Load)	Min. with Load		in (mm)	3.7 (95)	3.7 (95)
41		Center of Wheelbase		in (mm)	5.5 (140)	5.5 (140)
42	Brake	Service (Foot)			Hydraulic	Hydraulic
43		Parking (Foot)			Mechanical	Mechanical
45	Battery	Voltage / Capacity (5HR)		V / AH	12 / 35	12 / 52
49	Internal Combustion Engine	Make / Model			Toyota / 4Y - ECS	Toyota / 1ZS
50		Rated Horsepower @ r.p.m.		SAE HP	48 @ 2250 Net	55 @ 2200 Net
				(kW)	(36 @ 2250)	(41 @ 2200)
51		Rated Torque @ r.p.m.		SAE ft-lb	118 @ 2000 Net	148 @ 1600 Net
				(N-m)	(160 @ 2000)	(200 @ 1600)
52		Number of Cylinders			4	3
		Piston Displacement		cu in. (cc)	136 (2237)	110 (1795)
		Fuel Tank Capacity		US gal (liter)	15.9	15.9
55	Transmission	Type			Powershift	Powershift
		Speeds	Forward / Reverse		1 / 1	1 / 1
57	Aux. Hydraulic Function (For Attachments)[2]	Max. Operating Pressure		psi (kg / cm2)	2275 (160)	2275 (160)
				<Mpa>	<15.7>	<15.7>
58		Max. Flow Rate		gpm (lpm)	20	19

[1] Computed Values. Performance of LPG fuel system may be less than that of standard model shown.

[2] Values taken at Hydraulic Control Valve. Does not take into consideration losses through mast plumbing (hosing, fittings, QDs, etc.)

[3] Overhead guard height tolerance is +/- 1.57" (measured from the ground to the top of the overhead guard)

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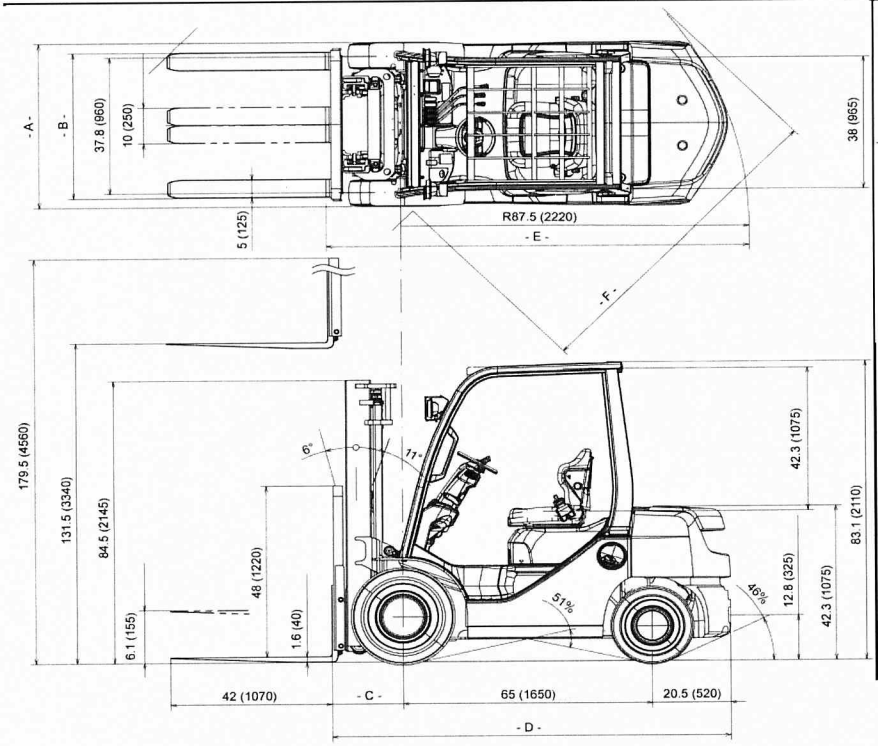
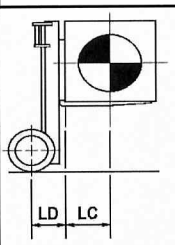
DIMENSIONAL DRAWING



RATED CAPACITY



PC = Published Maximum Fork Height (MFH) Capacity @ 24" Load Center (lbs.)
LC = Desired Load Center (in.)
LD = Load Distance (in.) *(Reference Chart Below)*
W = Capacity at LC (lbs.)

	Load Distance (LD)	
V	18.5	in.
FV	18.5	in.
FSV	19.3	in.

$$W^{*} = PC \times \left(\frac{LD + 24}{LD + LC}\right)$$

**Should W calculate to a value greater than 5,000 lbs., then maximum capacity at the desired load center is no greater than 5,000 lbs. This calculation has been provided for estimation purposes ONLY. For official rated capacity values, please submit capacity requests through the Capacity Quote/Nameplate Request System. (All capacities based on standard forks)*

* Contact Factory for Tilt Limit Specifications

VARIABLE DIMENSIONS

	V & FV	FSV	QFV
A: Overall Width	45.3 (1150)	- - -	- - -
B: Maximum Fork Spread	40 (1020)	40 (1020)	40 (1020)
Tread Width	37.8 (960)	43.1 (1095)	43.1 (1095)
C: Load Distance	18.5 (470)	19.3 (490)	20.2 (512.1)
D: Length to Fork Face	103.9 (2640)	104.7 (2615)	105.6 (2682)
E: Basic Right Angle Stacking	105.9 (2690)	106.7 (2660)	107.6 (2732)
F: Intersecting Aisle Width	77.2 (1960)	- - -	- - -

I.T.A. CARRIAGE CLASS II

UNDERCLEARANCE

Mast	Full Load	3.7 (95)
Drive Axle	Full Load	5.1 (130)
Steer Axle	No Load	6.3 (160)
Center of Wheelbase	Full Load	5.5 (140)
Counterweight	No Load	5.9 (150)

WHEEL & TIRE CONFIGURATIONS

	Drive Wheel & Tire						Steer Wheel & Tire		
	V, FV Mast All Heights FSV up to 170.5 inch		FSV Mast 189 inch and higher		V, FV, FSV Mast All Heights		V, FV, FSV Mast All Heights		
	Single Narrow	Single Wide Tread (G00A)	Single Narrow (G00F)	Single Wide Tread	Dual Drive Tires (F00C)	Front Solid Tires (F02B)1	Standard Rear Tires	Rear Solid Tires (F42B)	Side Ring Rear Wheel (F60A)
Standard / Option	**STANDARD**	Option	Option	**STANDARD**	Option	Option	**STANDARD**	Option	Option
Tire Size	7.00-12-12PR (I)	7.00-12-12PR (I)	7.00-12-12PR (I)	7.00-12-12PR (I)	7.00-12-12PR (I)	7.00-12	9.60/6.00-9-10	6.00-9	- - -
Wheel Size	12x5.00S	12x5.00S	12x5.00S	12x5.00S	12x5.00S	12x5.00S	9x4.00E	9x4.00E	9x4.00E
Wheel Type	Side Ring	Side Ring	Side Ring	Side Ring	Side Ring	Side Ring	Divided	Side Ring	Side Ring
Overall Width	45.3	50.6	45.3	50.6	63.4	- - -	- - -	- - -	- - -
Tread Width	37.8	43.1	37.8	43.1	46.9	- - -	- - -	- - -	- - -

NOTE: 1. For DUAL DRIVE SOLID TIRES, order F02B & F00C.

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OPTIONAL MASTS SPECIFICATIONS AND VARIABLE DIMENSIONS

Wide Visible Mast (V), Wide Visible Full-Free Lift Two-Stage Mast (FV), Wide Visible Full-Free Lift Three Stage Mast (FSV), Wide Visible Full-Free Lift Four Stage Mast (QFV)

Model				8FGU25				8FDU25			
Type of Mast				V	FV	FSV	QFV	V	FV	FSV	QFV
PERFORMANCE											
Speeds	Lifting	Full Load	fpm (mm/sec)	118 (600)	113 (575)	111 (565)	116 (590)	121 (615)	118 (600)	116 (590)	116 (590)
		No Load	fpm (mm/sec)	126 (640)	118 (600)	118 (600)	118 (600)	129 (655)	126 (640)	124 (630)	118 (600)
	Lowering	Full Load	fpm (mm/sec)	98 (500)	94 (480	94 (480)	100 (508	98 (500)	94 (480	94 (480)	100 (508
		No Load	fpm (mm/sec)	98 (500)	83 (420)	89 (450)	89 (450)	98 (500)	83 (420)	89 (450)	89 (450)

MAST SPECIFICATIONS & RATED CAPACITIES

Mast Type	Maximum Fork Height (top of forks)	Overall Height			Free Lift		Single Tire				Dual Tire		
		Lowered	Extended		Without Load Backrest	With Standard Load Backrest	Tilt Range		Load Capacity at 24 in. (600mm) Load Center		Tilt Range		Load Capacity at 24 in. (600mm) Load Center
			Without Load Backrest	With Standard Load Backrest			FWD	BWD	Narrow Tread	Wide Tread	FWD	BWD	
	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	deg	deg	lb (kg)	lb (kg)	deg	deg	lb (kg)
V	80 (2040)	58.9 (1495)	104.7 (2660)	128.3 (3260)	6.1 (155)	6.1 (155)	6	11	5000 (2250)	5000 (2250)	6	11	5000 (2250)
	119.5 (3040)	78.5 (1995)	144.1 (3660)	167.7 (4260)	6.1 (155)	6.1 (155)	6	11	5000 (2250)	5000 (2250)	6	11	5000 (2250)
	131.5 (3340)	84.5 (2145)	155.9 (3960)	179.5 (4560)	6.1 (155)	6.1 (155)	6	11	5000 (2250)	5000 (2250)	6	11	5000 (2250)
	139 (3540)	88.4 (2245)	163.8 (4160)	187.4 (4760)	6.1 (155)	6.1 (155)	6	11	5000 (2250)	5000 (2250)	6	11	5000 (2250)
	147 (3740)	94.7 (2405)	171.7 (4360)	195.3 (4960)	6.1 (155)	6.1 (155)	6	11	5000 (2250)	5000 (2250)	6	11	5000 (2250)
	159 (4040)	102.2 (2595)	183.5 (4660)	207.1 (5260)	6.1 (155)	6.1 (155)	6	6	5000 (2250)	5000 (2250)	6	11	5000 (2250)
FV	119.5 (3040)	78.5 (1995)	143.5 (3645)	167.7 (4260)	55.1 (1400)	30.5 (775)	6	11	5000 (2250)	5000 (2250)	6	11	5000 (2250)
	131.5 (3340)	84.5 (2145)	151.4 (3845)	179.5 (4560)	61 (1550)	36.4 (925)	6	11	5000 (2250)	5000 (2250)	6	11	5000 (2250)
	139 (3540)	88.4 (2245)	163.2 (4145)	187.4 (4760)	65 (1650)	40.4 (1025)	6	11	5000 (2250)	5000 (2250)	6	11	5000 (2250)
FSV	159 (4040)	74.6 (1895)	181.5 (4610)	206.7 (5250)	52.4 (1330)	26.6 (675)	6	6	5000 (2250)	5000 (2250)	6	6	5000 (2250)
	170.5 (4340)	78.5 (1995)	193.3 (4910)	218.5 (5550)	56.3 (1430)	30.5 (775)	6	6	5000 (2250)	5000 (2250)	6	6	5000 (2250)
	189 (4800)	84.5 (2145)	211.4 (5370)	236.6 (6010)	62.2 (1580)	36.4 (915)	6	6	3950 (1800)	4850 (2200)	6	6	4950 (2250)
	198 (5040)	88.4 (2245)	220.9 (5610)	246.1 (6250)	66.1 (1680)	40.4 (1015)	6	6	3550 (1600)	4500 (2050)	6	6	4850 (2200)
	218 (5540)	94.7 (2405)	240.6 (6110)	265.7 (6750)	72.4 (1840)	46.7 (1185)	6	6	2850 (1300)	3850 (1750)	6	6	4500 (2050)
	237.5 (6040)	102.2 (2595)	260.2 (6610)	285.4 (7250)	79.9 (2030)	54.2 (1375)	6	6	2000 (900)	2550 (1150)	6	6	3500 (1600)
	257.5 (6540)	112 (2845)	279.9 (7110)	305.1 (7750)	89.8 (2280)	64 (1625)	---	---	---	---	6	6	3200 (1450)
	277 (7040)	121.9 (3095)	299.6 (7610)	324.8 (8250)	99.6 (2530)	73.9 (1875)	---	---	---	---	6	6	2500 (1150)
QFV	240 (6100)	84.8 (2155)	263.4 (6690)	289.4 (7350)	61 (1550)	35 (895)	6	3	TBA*	3800 (1720)	6	3	TBA*
	258 (6600)	90.7 (2305)	281.5 (7150)	307.5 (7810)	67 (1700)	41 (1045)	6	3	TBA*	TBA*	6	3	TBA*

* Please submit a TSDR for capacity

Note: Height of standard load backrest is 48 in. (1220 mm)
High lift SAS Active Mast Functions not available on 80V mast
Wide Tread standard for all models with a 189 inch and higher FSV mast. Wide tread deduct option (G00F) will configure back to narrow tread
Must have Dual Drive Tires (F00C) at extra cost for 258 FSV, 277 FSV

SOLID TIRE OPTION'

Mast Type	Maximum Fork Height (top of forks)	Single Tire		
		Tilt Range		Load Capacity at 24 in. (600mm) Load Center
		FWD	BWD	Narrow Tread
	in (mm)	deg	deg	lb (kg)
FSV	189 (4800)	6	6	4000 (1800)
	198 (5040)	6	6	3550 (1600)
	218 (5540)	6	6	3000 (1350)
	237.5 (6040)	6	6	2100 (950)

Note 1: The solid tire option capacities are the same as the pneumatic tires except for the masts listed in this chart and the charts shown on pages V-B-35 through V-B-38.