

# LARGE IC PNEUMATIC



13500 - 17500 LBS.

SPECIFICATIONS



8FGU60-80 | 8FDU60-80

CLASS  
5

INTERNAL COMBUSTION ENGINE PNEUMATIC TIRE

[ToyotaForklift.com](http://ToyotaForklift.com)

## LARGE IC PNEUMATIC

### CAPACITY

**13500 - 17500 LBS.**

### MAXIMUM FORK HEIGHT

**239 IN.**

### LOAD CENTER

**24 IN.**

#### INDUSTRIES



Distribution



Factory



General  
Manufacturing



General  
Warehousing



Lumber



Paper



Retail

## STANDARD FEATURES

### DURABILITY

- Control Area Network (CAN-bus) communication
- Fully stamped steel side panels
- Full-floating front axle
- Moisture-resistant electric connectors
- High cooling capacity radiator
- Tilt cylinder boots
- Low-maintenance battery
- Large-capacity engine-cooling fan
- 8" cyclone air cleaner
- Plate-iron front fenders
- Anti-restart ignition key switch
- Stamped steel engine hood
- Radiator screen
- External hydraulic oil cooler

### SAFETY

- System of Active Stability™ (SAS)
- Operator Presence Sensing System (OPSS)
- Bolt-on overhead guard
- Key lowering interlock
- Electric horn
- Neutral start safety switch
- Asbestos-free components
- Orange forks

### PERFORMANCE

- EPA/CARB-certified engine
- Toyota 4-cylinder, 3.7 liter, OHV gasoline engine (1FS)
- Toyota 4-cylinder, 3.0 liter, DOHC Tier 4 Final (Diesel Oxidation Catalyst) diesel engine (1KD)
- Electronic fuel injection (gasoline only)
- Distributorless ignition system (1FS)
- UL "G" gasoline engine
- UL "D" diesel engine
- Automatic fork leveling feature
- Integrated monitoring system – includes:
  - Digital hour meter display
  - Engine coolant temperature gauge
  - Fuel gauge (except LPG-only models)
  - Check engine light
  - Sedimentor warning light (diesel only)
  - Glow indicator light (diesel only)
  - Engine oil pressure warning light
  - Battery charge warning light
  - OPSS activation light
- Limited free-lift 2-stage mast (V)
- Adjustable headlights with guards
- Double-action parking brake (hand)
- Alternator with built-in regulator
  - Gas model = 60A
  - Diesel model = 80A
- Automatic transmission with oil cooler
- Full-floating powertrain
- Hydraulic valve lifters
- Integrated headlight & turn signal lever
- Electric shift control
- Speed control (technician programmable)
- Engine protection system

### ERGONOMICS

- Dash-mounted instrument display
- 11.8"-dia., two-spoke steering wheel
- Load-sensing power steering
- Cowl-mounted hydraulic control levers with rubber boot covers
- 12"-long dual operator assist grips
- Low, wide entry steps
- Dash-integrated amenity tray & oversized cup holder
- Vinyl 4-way adjustable full-suspension seat
- Non-cinching seatbelt

### SERVICEABILITY

- Easy-access no tools required floorboard
- Engine hood assist damper with lock device
- Air cleaner discharge valve
- Easy-lift engine hood with wide 75° opening
- Easy access to common service items, such as filters & dipsticks

# TRUCK SPECIFICATIONS

## MODEL NUMBERS

GENERAL DATA			8FG60U	8FD60U	8FG70U	8FD70U	
Load Capacity	lb (kg)		13500 (6000)	13500 (6000)	15500 (7000)	15500 (7000)	
Power Type			Gasoline	Diesel	Gasoline	Diesel	
Operator Position			Seated Rider	Seated Rider	Seated Rider	Seated Rider	
Tire Type	Front / Rear		Pneumatic / Pneumatic	Pneumatic / Pneumatic	Pneumatic / Pneumatic	Pneumatic / Pneumatic	
Wheels (x = driven)	Front / Rear		4x / 2	4x / 2	4x / 2	4x / 2	
EXTERIOR DIMENSIONS			8FG60U	8FD60U	8FG70U	8FD70U	
<b>A</b> Maximum Fork Height (top of forks)	in (mm)		120.5 (3060)	120.5 (3060)	120.6 (3065)	120.6 (3065)	
<b>B</b> Free-Lift (top of forks)	in (mm)		4.9 (125)	4.9 (125)	4.9 (125)	4.9 (125)	
<b>C</b> Fork Size (T x W x L)	in (mm)		2.4 x 6 x 48 (60 x 150 x 1220)	2.4 x 6 x 48 (60 x 150 x 1220)	2.6 x 6 x 48 (65 x 150 x 1220)	2.6 x 6 x 48 (65 x 150 x 1220)	
<b>D</b> Fork Spread Max. / Min. (outer edge to edge)	in (mm)		66.9 / 11.8 (1700 / 300)	66.9 / 11.8 (1700 / 300)	66.9 / 11.8 (1700 / 300)	66.9 / 11.8 (1700 / 300)	
<b>E</b> Tilt Range (forward / backward)	deg		6 / 12	6 / 12	6 / 12	6 / 12	
<b>F</b> Length to Fork Face	in (mm)		137.4 (3490)	137.4 (3490)	139.6 (3545)	139.6 (3545)	
<b>G</b> Overall Width	in (mm)		77.4 (1965)	77.4 (1965)	77.4 (1965)	77.4 (1965)	
<b>H</b> Mast Lowered Height	in (mm)		96.8 (2460)	96.8 (2460)	96.8 (2460)	96.8 (2460)	
<b>I</b> Mast Extended Height (top of load backrest)	in (mm)		174.6 (4435)	174.6 (4435)	174.6 (4435)	174.6 (4435)	
<b>J</b> Overhead Guard Height	in (mm)		90.9 (2310)	90.9 (2310)	90.9 (2310)	90.9 (2310)	
<b>K</b> Turning Radius (inside / outside)	in (mm)		127 (3230)	127 (3230)	129 (3280)	129 (3280)	
<b>L</b> Load Distance <sup>1</sup>	in (mm)		22.8 (580)	22.8 (580)	23 (585)	23 (585)	
<b>M</b> Basic Right-Angle Stacking Aisle Width	in (mm)		150 (3810)	150 (3810)	152 (3870)	152 (3870)	
PERFORMANCE DATA			8FG60U	8FD60U	8FG70U	8FD70U	
Speeds	Maximum Travel (forward / reverse)	Full Load	mph (km/h)	11.8 (19.0) / 11.8 (19.0)	11.8 (19.0) / 11.8 (19.0)	11.8 (19.0) / 11.8 (19.0)	11.8 (19.0) / 11.8 (19.0)
		No Load	mph (km/h)	13.0 (21.0) / 13.0 (21.0)	13.0 (21.0) / 13.0 (21.0)	13.0 (21.0) / 13.0 (21.0)	13.0 (21.0) / 13.0 (21.0)
	Lifting	Full Load	fpm (mm/sec)	81 (410)	81 (410)	81 (410)	81 (410)
		No Load	fpm (mm/sec)	87 (440)	87 (440)	87 (440)	87 (440)
	Lowering	Full Load	fpm (mm/sec)	104 (530)	104 (530)	104 (530)	104 (530)
		No Load	fpm (mm/sec)	94 (480)	94 (480)	94 (480)	94 (480)
Drawbar Pull	Maximum	Full Load	lb (kg)	10350 (4700)	10350 (4700)	10350 (4700)	10350 (4700)
		No Load	lb (kg)	4700 (2130)	4730 (2150)	4480 (2030)	4520 (2050)
Gradeability	1 mph (1.5 km/h) <sup>1</sup>	Full Load	%	24	24	21	21
		Full Load	%	34	34	30	30
	Maximum <sup>1</sup>	No Load	%	24	24	21	21
TRUCK WEIGHTS			8FG60U	8FD60U	8FG70U	8FD70U	
Total Weight	lb (kg)		18460 (8370)	18590 (8430)	19910 (9030)	20040 (9090)	
Weight Distribution	Full Load (front / rear)	lb (kg)	28910 (12900) / 3050 (1470)	28980 (12930) / 3110 (1500)	31680 (14300) / 3730 (1730)	31740 (14330) / 3800 (1760)	
	No Load (front / rear)	lb (kg)	8270 (3750) / 10190 (4620)	8340 (3780) / 10250 (4650)	7960 (3610) / 11950 (5420)	8020 (3640) / 12020 (5450)	
TIRES			8FG60U	8FD60U	8FG70U	8FD70U	
Tires	Number (front / rear)		4 / 2	4 / 2	4 / 2	4 / 2	
	Size	Front	8.25-15-12PR	8.25-15-12PR	8.25-15-14PR	8.25-15-14PR	
		Rear	8.25-15-12PR	8.25-15-12PR	8.25-15-14PR	8.25-15-14PR	
Wheelbase	in (mm)		88.6 (2250)	88.6 (2250)	88.6 (2250)	88.6 (2250)	
Tread Width (front / rear)	in (mm)		56.7 (1440) / 57.5 (1460)	56.7 (1440) / 57.5 (1460)	56.7 (1440) / 57.5 (1460)	56.7 (1440) / 57.5 (1460)	
Underclearance (full load)	Minimum with Load	in (mm)	4.9 (125)	4.9 (125)	4.9 (125)	4.9 (125)	
	Center of Wheelbase	in (mm)	9.8 (250)	9.8 (250)	9.8 (250)	9.8 (250)	
Brake	Service (foot) / Parking		Hydraulic / Hand	Hydraulic / Hand	Hydraulic / Hand	Hydraulic / Hand	
POWER SYSTEM			8FG60U	8FD60U	8FG70U	8FD70U	
Battery (5-hour rating)	V / Ah		12 / 48	12 / 70	12 / 48	12 / 70	
Internal Combustion Engine	Make / Model		TOYOTA 1FS	TOYOTA 1KD	TOYOTA 1FS	TOYOTA 1KD	
	Rated Horsepower @ rpm	SAE HP	93 @ 2550	74 @ 2200	93 @ 2550	74 @ 2200	
		(kW)	(69 @ 2550)	(55 @ 2200)	(69 @ 2550)	(55 @ 2200)	
	Rated Torque @ rpm	SAE ft-lb	200 @ 1600	220 @ 1200 - 1500	200 @ 1600	220 @ 1500	
		(N-m)	(276 @ 1600)	(300 @ 1200 - 1500)	(276 @ 1600)	(300 @ 1200 - 1500)	
	Number of Cylinders		4	4	4	4	
Piston Displacement		cu in (cc)	224 (3685)	182 (2982)	224 (3685)	182 (2982)	
Fuel Tank Capacity		US gal (liter)	34 (130)	34 (130)	34 (130)	34 (130)	
Transmission	Type		Powershift	Powershift	Powershift	Powershift	
	Speeds (forward / reverse)		1 / 1	1 / 1	1 / 1	1 / 1	
Auxiliary Hydraulic Function Specifications (for attachments) <sup>2</sup>	Max. Operating Pressure		psi (kg/cm <sup>2</sup> )	2990 (210)	2990 (210)	2990 (210)	
	Max. Flow Rate		gpm (lpm)	33.8 (128)	33.8 (128)	33.8 (128)	

<sup>1</sup> Computed values.

<sup>2</sup> Values taken at Hydraulic Control Valve. Does not take in to consideration losses through mast plumbing (hosing, fittings, QDs, etc.).

# TRUCK SPECIFICATIONS

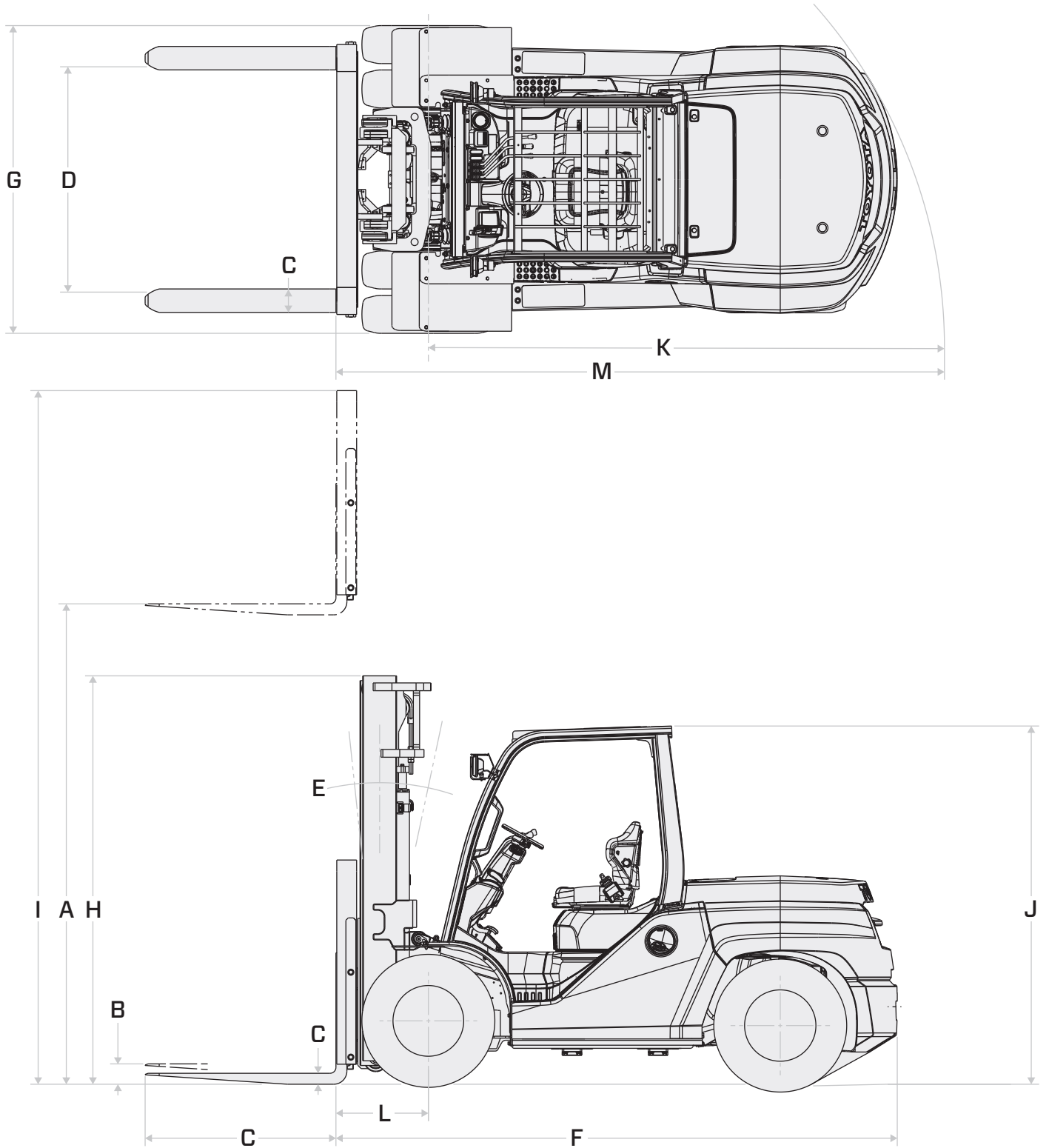
## MODEL NUMBERS

GENERAL DATA				8FG80U	8FD80U	
Load Capacity		lb (kg)		17500 (8000)	17500 (8000)	
Power Type				Gasoline	Diesel	
Operator Position				Seated Rider	Seated Rider	
Tire Type	Front / Rear		Pneumatic / Pneumatic		Pneumatic / Pneumatic	
Wheels (x = driven)	Front / Rear		4x / 2		4x / 2	
EXTERIOR DIMENSIONS				8FG80U	8FD80U	
<b>A</b>	Maximum Fork Height (top of forks)		in (mm)		120.8 (3070)	120.8 (3070)
<b>B</b>	Free-Lift (top of forks)		in (mm)		5.1 (130)	5.1 (130)
<b>C</b>	Fork Size (T x W x L)		in (mm)		2.8 x 6 x 48 (70 x 150 x 1220)	2.8 x 6 x 48 (70 x 150 x 1220)
<b>D</b>	Fork Spread Max. / Min. (outer edge to edge)		in (mm)		66.9 / 11.8 (1700 / 300)	66.9 / 11.8 (1700 / 300)
<b>E</b>	Tilt Range (forward / backward)		deg		6 / 12	6 / 12
<b>F</b>	Length to Fork Face		in (mm)		141.3 (3590)	141.3 (3590)
<b>G</b>	Overall Width		in (mm)		77.4 (1965)	77.4 (1965)
<b>H</b>	Mast Lowered Height		in (mm)		102.8 (2610)	102.8 (2610)
<b>I</b>	Mast Extended Height (top of load backrest)		in (mm)		174.8 (4440)	174.8 (4440)
<b>J</b>	Overhead Guard Height		in (mm)		90.9 (2310)	90.9 (2310)
<b>K</b>	Turning Radius (inside / outside)		in (mm)		130.5 (3320)	130.5 (3320)
<b>L</b>	Load Distance <sup>1</sup>		in (mm)		23.2 (590)	23.2 (590)
<b>M</b>	Basic Right-Angle Stacking Aisle Width		in (mm)		154 (3910)	154 (3910)
PERFORMANCE DATA				8FG80U	8FD80U	
Speeds	Maximum Travel (forward / reverse)	Full Load	mph (km/h)	11.8 (19.0) / 11.8 (19.0)	11.8 (19.0) / 11.8 (19.0)	
		No Load	mph (km/h)	13.0 (21.0) / 13.0 (21.0)	13.0 (21.0) / 13.0 (21.0)	
	Lifting	Full Load	fpm (mm/sec)	81 (410)	73 (370)	
		No Load	fpm (mm/sec)	87 (440)	87 (440)	
	Lowering	Full Load	fpm (mm/sec)	104 (530)	104 (530)	
		No Load	fpm (mm/sec)	94 (480)	94 (480)	
Drawbar Pull	Maximum	Full Load	lb (kg)	10150 (4600)	10150 (4600)	
		No Load	lb (kg)	4440 (2010)	4480 (2030)	
Gradeability	1 mph (1.5 km/h) <sup>1</sup>	Full Load	%	17	18	
		Maximum <sup>1</sup>	%	26	26	
		No Load	%	19	19	
TRUCK WEIGHTS				8FG80U	8FD80U	
Total Weight		lb (kg)		21790 (9880)	21920 (9940)	
Weight Distribution	Full Load (front / rear)		lb (kg)		34760 (15830) / 4530 (2050)	34830 (15860) / 4590 (2080)
	No Load (front / rear)		lb (kg)		7940 (3600) / 13850 (6280)	8010 (3630) / 13910 (6310)
TIRES				8FG80U	8FD80U	
Tires	Number (front / rear)		4 / 2		4 / 2	
	Size	Front	8.25-15-14PR		8.25-15-14PR	
		Rear	8.25-15-14PR		8.25-15-14PR	
Wheelbase	in (mm)		88.6 (2250)		88.6 (2250)	
Tread Width (front / rear)	in (mm)		56.7 (1440) / 57.5 (1460)		56.7 (1440) / 57.5 (1460)	
Underclearance (full load)	Minimum with Load		in (mm)		4.9 (125)	4.9 (125)
	Center of Wheelbase		in (mm)		9.8 (250)	9.8 (250)
Brake	Service (foot) / Parking		Hydraulic / Hand		Hydraulic / Hand	
POWER SYSTEM				8FG80U	8FD80U	
Battery (5-hour rating)		V / Ah		12 / 48	12 / 70	
Internal Combustion Engine	Make / Model		TOYOTA 1FS		TOYOTA 1KD	
	Rated Horsepower @ rpm	SAE HP	93 @ 2550		74 @ 2200	
		(kW)	(69 @ 2550)		(55 @ 2200)	
	Rated Torque @ rpm	SAE ft-lb	200 @ 1600		220 @ 1200 - 1500	
		(N-m)	(276 @ 1600)		(300 @ 1200 - 1500)	
	Number of Cylinders		4		4	
Piston Displacement		cu in (cc)		224 (3685)	182 (2982)	
Fuel Tank Capacity		US gal (liter)		34 (130)	34 (130)	
Transmission	Type		Powershift		Powershift	
	Speeds (forward / reverse)		1 / 1		1 / 1	
Auxiliary Hydraulic Function Specifications (for attachments) <sup>2</sup>	Max. Operating Pressure		psi (kg/cm <sup>2</sup> )		2990 (210)	2990 (210)
	Max. Flow Rate		gpm (lpm)		33.8 (128)	33.8 (128)

<sup>1</sup> Computed values.

<sup>2</sup> Values taken at Hydraulic Control Valve. Does not take in to consideration losses through mast plumbing (hosing, fittings, QDs, etc.).

# EXTERIOR DIMENSIONS



## MAST SPECIFICATIONS

MAST TYPE	MAXIMUM FORK HEIGHT (TOP OF FORKS)	OVERALL HEIGHT			FREE-LIFT		TILT RANGE		LOAD CAPACITY AT 24 IN. (610 MM) LOAD CENTER
		LOWERED	EXTENDED		WITHOUT LOAD BACKREST	WITH STANDARD LOAD BACKREST <sup>1</sup>	FWD	BWD	
			WITHOUT LOAD BACKREST	WITH STANDARD LOAD BACKREST <sup>1</sup>					
	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	deg	deg	lb (kg)
<b>8FG60U / 8FD60U</b>									
Wide Visible (V)	120.5 (3065)	96.9 (2460)	156.7 (3980)	174.6 (4435)	4.9 (125)	4.9 (125)	6	12	13500 (6000)
	132.5 (3365)	102.8 (2610)	168.5 (4280)	186.4 (4735)	4.9 (125)	4.9 (125)	6	12	13500 (6000)
	140.5 (3565)	106.7 (2710)	176.4 (4480)	194.3 (4935)	4.9 (125)	4.9 (125)	6	12	13500 (6000)
	148 (3765)	110.6 (2810)	184.3 (4680)	202.2 (5135)	4.9 (125)	4.9 (125)	6	12	13500 (6000)
	179.5 (4565)	130.3 (3310)	215.8 (5480)	233.7 (5935)	4.9 (125)	4.9 (125)	6	12	13500 (6000)
	219 (5565)	150 (3810)	255.1 (6480)	273 (6935)	4.9 (125)	4.9 (125)	6	12	13500 (6000)
Full Free-Lift 3-Stage (FSV)	160 (4065)	92.9 (2360)	196.9 (5000)	214 (5435)	56.1 (1425)	39 (990)	6	6	13300 (6000)
	172 (4365)	96.9 (2460)	208.7 (5300)	225.8 (5735)	60 (1525)	42.9 (1090)	6	6	12900 (5850)
	187.5 (4765)	100.4 (2550)	224.4 (5700)	241.5 (6135)	63.6 (1615)	46.5 (1180)	6	6	12400 (5620)
	199.5 (5065)	110.6 (2810)	236.2 (6000)	253.4 (6435)	73.8 (1875)	56.7 (1440)	6	6	12110 (5500)
	219 (5565)	120.5 (3060)	255.9 (6500)	273 (6935)	83.7 (2125)	66.5 (1690)	6	6	11450 (5200)
	239 (6065)	122.4 (3110)	275.6 (7000)	292.7 (7435)	85.6 (2175)	68.5 (1740)	6	6	11450 (5200)

MAST TYPE	MAXIMUM FORK HEIGHT (TOP OF FORKS)	OVERALL HEIGHT			FREE-LIFT		TILT RANGE		LOAD CAPACITY AT 24 IN. (610 MM) LOAD CENTER
		LOWERED	EXTENDED		WITHOUT LOAD BACKREST	WITH STANDARD LOAD BACKREST <sup>1</sup>	FWD	BWD	
			WITHOUT LOAD BACKREST	WITH STANDARD LOAD BACKREST <sup>1</sup>					
	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	deg	deg	lb (kg)
<b>8FG70U / 8FD70U</b>									
Wide Visible (V)	120.5 (3065)	96.9 (2460)	156.7 (3980)	174.6 (4435)	4.9 (125)	4.9 (125)	6	12	15500 (7000)
	132.5 (3365)	102.8 (2610)	168.5 (4280)	186.4 (4735)	4.9 (125)	4.9 (125)	6	12	15500 (7000)
	140.5 (3565)	106.7 (2710)	176.4 (4480)	194.3 (4935)	4.9 (125)	4.9 (125)	6	12	15500 (7000)
	148 (3765)	110.6 (2810)	184.3 (4680)	202.2 (5135)	4.9 (125)	4.9 (125)	6	12	15500 (7000)
	179.5 (4565)	130.3 (3310)	215.8 (5480)	233.7 (5935)	4.9 (125)	4.9 (125)	6	12	15500 (7000)
	219 (5565)	150 (3810)	255.1 (6480)	273 (6935)	4.9 (125)	4.9 (125)	6	12	14750 (6700)
Full Free-Lift 3-Stage (FSV)	160 (4065)	92.9 (2360)	196.9 (5000)	214 (5435)	56.1 (1425)	39 (990)	6	6	15500 (7000)
	172 (4365)	96.9 (2460)	208.7 (5300)	225.8 (5735)	60 (1525)	42.9 (1090)	6	6	14800 (6730)
	187.5 (4765)	100.4 (2550)	224.4 (5700)	241.5 (6135)	63.6 (1615)	46.5 (1180)	6	6	14750 (6700)
	199.5 (5065)	110.6 (2810)	236.2 (6000)	253.4 (6435)	73.8 (1875)	56.7 (1440)	6	6	14750 (6700)
	219 (5565)	120.5 (3060)	255.9 (6500)	273 (6935)	83.7 (2125)	66.5 (1690)	6	6	12700 (5750)
	239 (6065)	122.4 (3110)	275.6 (7000)	292.7 (7435)	85.6 (2175)	68.5 (1740)	6	6	12550 (5700)

MAST TYPE	MAXIMUM FORK HEIGHT (TOP OF FORKS)	OVERALL HEIGHT			FREE-LIFT		TILT RANGE		LOAD CAPACITY AT 24 IN. (610 MM) LOAD CENTER
		LOWERED	EXTENDED		WITHOUT LOAD BACKREST	WITH STANDARD LOAD BACKREST <sup>1</sup>	FWD	BWD	
			WITHOUT LOAD BACKREST	WITH STANDARD LOAD BACKREST <sup>1</sup>					
	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	deg	deg	lb (kg)
<b>8FG80U / 8FD80U</b>									
Wide Visible (V)	121 (3070)	102.8 (2610)	160.8 (4085)	174.8 (4440)	5.1 (130)	5.1 (130)	6	12	17500 (8000)
	132.5 (3370)	106.7 (2710)	172.6 (4385)	186.6 (4740)	5.1 (130)	5.1 (130)	6	12	17500 (8000)
	140.5 (3570)	110.6 (2810)	180.5 (4585)	194.5 (4940)	5.1 (130)	5.1 (130)	6	12	17500 (8000)
	148.5 (3770)	120.5 (3060)	188.4 (4785)	202.4 (5140)	5.1 (130)	5.1 (130)	6	12	17500 (8000)
	180 (4570)	140.2 (3560)	219.9 (5585)	233.9 (5940)	5.1 (130)	5.1 (130)	6	12	17500 (8000)

<sup>1</sup> Height of standard load backrest is 54" (1370 mm).  
NOTE: Mast will be removed for delivery if overall lowered height is greater than 106" (2692 mm).



Some product features described herein are optional. Please consult your dealer for specifications.  
Details of specifications and equipment are based on information available at time of printing and may change without notice.



007228FGD6080SS

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