



# **PNEUMATIC TIRE FORKLIFT**

22,000–36,000 LB CAPACITY LP DIESEL PNEUMATIC TIRE MODELS

POWER AND PERFORMANCE FOR THE LONG HAUL.



# EXPECT PERFORMANCE.

A POWERFUL LOW-EMISSIONS ENGINE FOR MAXIMUM PRODUCTIVITY



- Outstanding durability and performance
- Fuel-efficient engine
- Lower maintenance for increased uptime

The FD100N2-FD160AN2 series delivers the power and performance that tough applications demand.

#### Enhanced Performance — For More Value:

Mitsubishi Forklift Trucks developed this forklift series to deliver everything you need to tackle tough jobs every day – and at an exceptional value. From a durable design to a fuel-efficient and high-performance engine, these forklifts are ready to work when you are.

#### Excellent Fuel Efficiency:

The high-performance Perkins™ twin turbo 1204F 4.4L, in-line, four-cylinder engine was engineered for low fuel consumption. This engine is able to provide the productivity you'd expect using a fraction of the fuel, and ultimately, a fraction of the operating cost.

#### High Performance:

When you need power, you need it now. This truck's engine features powerfully synchronized dual turbochargers that provide low-speed torque – allowing for controlled, powerful acceleration for maximum productivity.

#### Durable Frame:


Tough applications require durable equipment. These forklifts consist of steel frames for added strength and durability:

- More steel in the frame for added resilience
- Rugged design helps minimize stress points in the frame
- Excellent ground clearance



#### Key applications:

- Lumber
- Concrete and stone
- Fabricated metals
- Industrial machinery
- Building materials
- Steel and pipe



**Engine Protection:** Controlled by the Engine Control Module, the Engine Protection System keeps the truck running at desirable levels while helping to reduce the risk of damage to the forklift, saving you money. If vital fluids become critically low, or fluid temperatures are too high, RPM levels are automatically lowered and the operator is notified by a light on the dash display.

**Maintenance Made Simple:**

Simplified maintenance means less downtime and more time on the job. Whether it's scheduled maintenance or a daily inspection, this forklift series makes it easier to get back to work.

- Easy-to-remove floor panel and steel side covers; no tools required
- Greater uptime and lower planned maintenance costs
- Easy access to all major components
- Less time consuming daily inspections
- Extended 500-hour service intervals



# COMFORT FEATURES FOR YOUR OPERATORS.

COMBINED WITH THE POWER YOUR BUSINESS DEMANDS



## Invaluable standard features:

- Full-suspension vinyl seat for a comfortable ride
- Premium LED / LCD display for operator awareness
- Integrated Presence System (IPS) for added security
- Hydrostatic steering for optimal forklift control
- Fingertip armrest control option for precise load control

## MORE CONTROL

Designed with operator comfort in mind, the optional armrest fingertip control's ergonomic design enables precise load control with easy movement and excellent hand positioning.

## Flexible Cab Options To Meet Your Needs:

For maximum operator comfort and protection from the elements, this lift truck can be equipped with two different cabin options. The fully enclosed panel cabin option can be installed at the factory or on site and comes standard with a heater and optional A/C package. The new wide cabin option is a factory install welded frame offering several upgrades including:

- Spacious operator compartment with a redesigned engine cover.
- Deluxe air suspension vinyl GRAMMER™ adjustable air ride seat with swivel.
- New floor plates design with easy access for service.

## Front-End Attachments:

Customize your forklift to meet your business demands with optional front-end attachments, such as sidershifters or fork positioners. Ask your local Mitsubishi forklift truck dealer for more information.



### **Integrated Presence System (IPS):**

This system activates whenever the operator does not fasten the seat belt during operation or leaves the normal operating position without activating the parking brake. This integral computer-based feedback system uses both audible and visual indicators to alert the operator to potentially hazardous situations, increasing operator awareness.

### **More Comfort For More Efficiency:**

Standard design features such as rubber-mounted major components, a fully-insulated steel engine hood, helical transmission gears and fully-enclosed wheel wells all work together to create a smooth driving experience.

### **Comfortable Ride:**

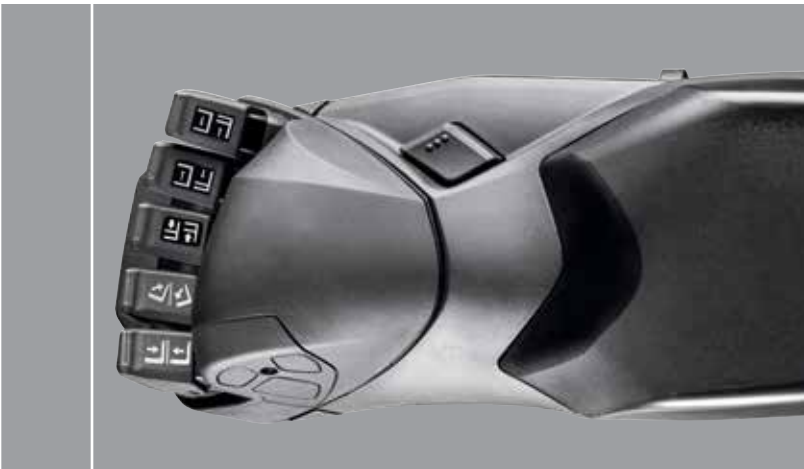
The standard vinyl multifunction full-suspension GRAMMER™ seat provides day-long comfort to operators of various heights.

- Forward and backward adjustment up to 8.25 inches
- Suspension adjustment offers seat support for the operator
- Lower back lumbar adjustment

### **Premium Display Panel:**

The LED and LCD display panel provides important indicator lights and information to the operator. These indicators help keep the operator informed about the current status of the forklift, whether it's as simple as the amount of fuel in the truck or something more complex such as an issue with oil pressure or fluid temperatures.

- High capacity heater system with defrost to circulate air evenly in the whole cabin.
- Optional A/C package.
- Elevated air intake pre-cleaner to prevent contaminants from prematurely clogging the air filter.
- High output alternator and auxiliary power plugs to allow for additional accessories.
- Operator fan.
- Premium double folding doors with the ability to lock in the open position.



CHARACTERISTICS			FD100N2		FD120N2		FD135N2	
1	Capacity at rated load center	lb kg	22,000	10,000	26,500	12,000	30,000	13,500
2	Capacity at load center – distance	in mm	24	600	24	600	24	600
3	Power – electric, diesel, gasoline, LP gas		diesel		diesel		diesel	
4	Tire type – cushion or pneumatic		pneumatic		pneumatic		pneumatic	
5	Wheels (x=driven) number front / rear		4x / 2		4x / 2		4x / 2	
<b>DIMENSIONS</b>								
6	Maximum fork height (top of fork) <sup>[1]</sup>	in mm	121	3,072	121	3,079	121.5	3,088
7	Free fork height <sup>[1]</sup>	in mm	2.8	72	3.1	79	3.5	88
8	Forks – thickness x length x width <sup>[1]</sup>	in mm	2.8 x 48.0 x 7.1	72 x 1,220 x 180	3.1 x 48.0 x 7.1	79 x 1,220 x 180	3.5 x 48.0 x 7.1	88 x 1,220 x 180
9	Fork spacing – out-to-out minimum / maximum	in mm	18.7 / 79.1	475 / 2,010	18.7 / 79.1	475 / 2,010	18.7 / 79.1	475 / 2,010
10	Tilt – forward / backward	deg	15° / 12°		15° / 12°		15° / 12°	
11	Length to fork face	in mm	177	4,505	178	4,515	179	4,535
12	Width with dual drive tires	in mm	99	2,515	99	2,515	103	2,605
13	Height with lowered mast <sup>[1]</sup>	in mm	121.5	3,087	121.5	3,087	131.5	3,332
14	Seat height to SIP	in mm	75.4	1,915	75.4	1,915	77.2	1,960
15	Height to top of overhead guard	in mm	119	3,015	119	3,020	121	3,060
16	Height with extended mast <sup>[1]</sup>	in mm	177	4,486	177	4,486	194	4,927
17	Minimum outside turning radius	in mm	164	4,160	164	4,160	164	4,160
18	Load moment constant	in mm	30.3	770	30.7	780	31.5	800
19	Minimum aisle – 90° stack – zero clearance without load	in mm	194	4,930	194	4,940	195	4,960
<b>PERFORMANCE</b>								
20	Travel speed loaded / empty	mph km/h	17.7 / 20.2	28.5 / 32.5	16.8 / 19.9	27.0 / 32.0	16.8 / 20.5	27.0 / 33.0
21	Lift speed loaded / empty	fpm m/s	80.7 / 86.6	0.41 / 0.44	80.7 / 86.6	0.41 / 0.44	66.9 / 72.8	0.34 / 0.37
22	Lowering speed loaded / empty	fpm m/s	90.6 / 94.5	0.46 / 0.48	90.6 / 94.5	0.46 / 0.48	94.5 / 78.7	0.48 / 0.40
23	Drawbar pull – loaded at 1 mph (1.6 km)	lb N	21,130	94,000	20,910	93,000	19,560	87,000
24	Drawbar pull – loaded at maximum	lb N	23,830	106,000	25,400	113,000	23,380	104,000
25	Gradeability – loaded at 1 mph (1.6 km)	%	41.5		36.4		29.7	
26	Gradeability – loaded at maximum	%	41.5		42.1		36.3	
<b>WEIGHT</b>								
27	Empty	lb kg	32,280	14,640	34,580	15,680	38,930	17,660
28	Axle load – with rated load front / rear	lb kg	48,305 / 5,975	21,930 / 2,710	55,035 / 6,045	24,940 / 2,740	62,140 / 6,790	28,080 / 3,080
29	Axle load – without load front / rear	lb kg	15,540 / 16,740	7,050 / 7,590	15,520 / 19,060	7,040 / 8,640	17,270 / 21,660	7,835 / 9,825
<b>CHASSIS</b>								
30	Tire size – front, standard duals	in	10-20-14PR		10-20-16PR		12-20-18PR	
31	Tire size – rear tires	in	10-20-14PR		10-20-16PR		12-20-18PR	
32	Wheelbase	in mm	110	2,800	110	2,800	110	2,800
33	Tread width – front, standard duals	in mm	74.8	1,900	74.8	1,900	75.0	1,905
34	Tread width – rear tires	in mm	77.4	1,965	77.4	1,965	75.8	1,925
35	Ground clearance – at lowest point at mast	in mm	10.2	260	10.2	260	12.0	305
36	Ground clearance – at center of wheelbase	in mm	12.2	310	12.2	310	14.0	355
37	Service brake		air over hydraulic power brakes		air over hydraulic power brakes		air over hydraulic power brakes	
38	Parking brake		hand, mechanical		hand, mechanical		hand, mechanical	
<b>POWERTRAIN</b>								
39	Engine model		Perkins 1204F		Perkins 1204F		Perkins 1204F	
40	Continuous output S.A.E. gross	HP kW	174	129	174	129	174	129
41		at r.p.m.	2,200		2,200		2,200	
42	Maximum torque S.A.E. gross	lb-ft N-m	553	750	553	750	553	750
43		at r.p.m.	1,400		1,400		1,400	
44	Cylinder / displacement	cu in L	4 / 268.5	4 / 4.4	4 / 268.5	4 / 4.4	4 / 268.5	4 / 4.4
45	Transmission type		powershift		powershift		powershift	
46	Number of speeds forward / reverse		3 / 3		3 / 3		3 / 3	
47	Battery	volts	24		24		24	
48	Relief pressure for attachments	psi bar	2,990	206	2,990	206	2,990	206
49	Noise level – at operator's ear Leq	dB(A)	82.9		82.9		82.9	

1) Heights with listed forks on standard two-stage mast. Optional forks will change dimensions slightly.

## SAFETY STANDARDS

These trucks meet American National Standards Institute/Industrial Truck Standards Development Foundation, ANSI/ITSDF B56.1. UL-Classified by Underwriters Laboratories, Inc., as to fire and electric shock hazard only; Type E, EE (optional), Industrial Trucks. Users should be aware of, and adhere to, applicable codes and regulations regarding operator training, use, operation and maintenance of powered industrial trucks, including:

- ANSI/ITSDF B56.1.
- NFPA 505, fire safety standard for powered industrial trucks -type designations, areas of use, maintenance and operation.
- Occupational Safety and Health Administration (OSHA) regulations that may apply.

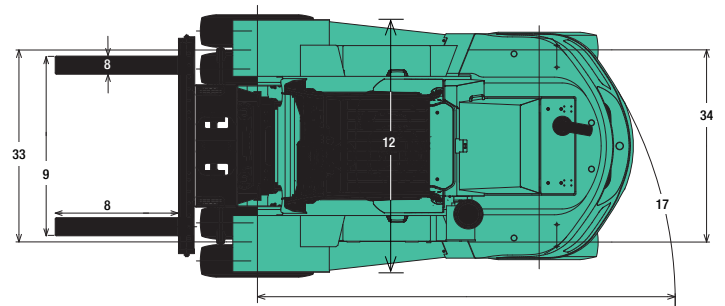
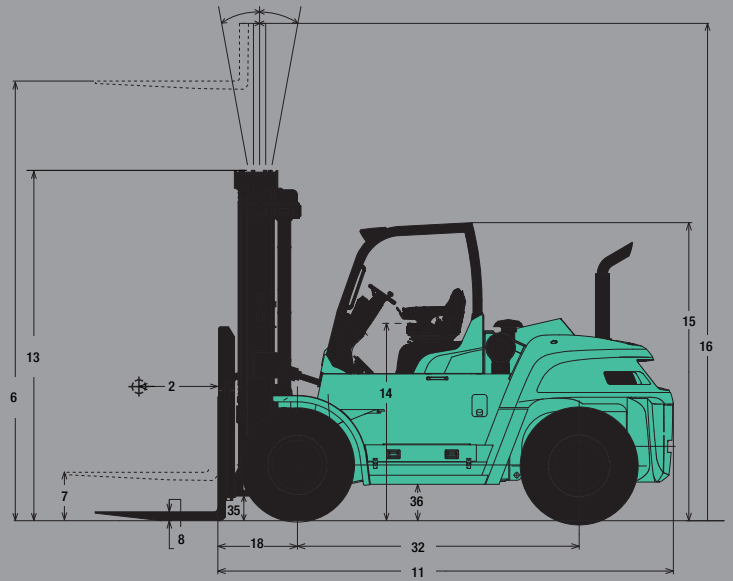
Specifications, equipment, technical data, photos and illustrations based on information at time of printing and subject to change without notice. Some products may be shown with optional equipment.

[1] Heights with shaft type forks on a standard two-stage mast. Optional hook type forks will change dimensions slightly.

			FD150AN2		FD160AN2	
1	lb	kg	33,000	15,000	36,000	16,000
2	in	mm	24	600	24	600
3			diesel		diesel	
4			pneumatic		pneumatic	
5			4x / 2		4x / 2	
6	in	mm	121.5	3,088	121.5	3,092
7	in	mm	3.5	88	3.6	92
8	in	mm	3.5 x 48.0 x 7.1	88 x 1,220 x 180	3.6 x 48.0 x 7.1	92 x 1,220 x 180
9	in	mm	18.7 / 89.0	475 / 2,260	18.7 / 89.0	475 / 2,260
10	deg		15° / 12°		15° / 12°	
11	in	mm	191	4,840	199	5,050
12	in	mm	103	2,605	104	2,635
13	in	mm	131.5	3,330	139	3,530
14	in	mm	77.2	1,960	77.2	1,960
15	in	mm	121	3,060	121	3,060
16	in	mm	194	4,927	194	4,927
17	in	mm	179	4,550	190	4,820
18	in	mm	31.7	805	32.1	815
19	in	mm	211	5,355	222	5,635
20	mph	km/h	16.5 / 20.2	26.5 / 32.5	16.2 / 20.2	26.0 / 32.5
21	fpm	m/s	66.9 / 72.8	0.34 / 0.37	63.0 / 67.0	0.32 / 0.34
22	fpm	m/s	94.5 / 78.7	0.48 / 0.40	86.6 / 72.8	0.44 / 0.37
23	lb	N	19,560	87,000	19,330	86,000
24	lb	N	23,380	104,000	23,160	103,000
25	%		27.6		25.7	
26	%		33.8		31.3	
27	lb	kg	40,230	18,240	42,170	19,120
28	lb	kg	66,500 / 6,730	30,190 / 3,050	71,225 / 6,945	31,970 / 3,150
29	lb	kg	18,490 / 21,740	8,385 / 9,855	20,100 / 22,070	9,110 / 10,010
30	in		12-20-18PR		12-20-20PR	
31	in		12-20-18PR		12-20-20PR	
32	in	mm	122	3,100	130	3,300
33	in	mm	75.0	1,905	75.0	1,905
34	in	mm	75.8	1,925	74.4	1,890
35	in	mm	11.8	300	11.8	300
36	in	mm	14.0	355	14.0	355
37			air over hydraulic power brakes		wet disc brakes	
38			hand, mechanical		hand, mechanical	
39			Perkins 1204F		Perkins 1204F	
40	HP	kW	174	129	174	129
41	at r.p.m.		2,200		2,200	
42	lb-ft	N-m	553	750	553	750
43	at r.p.m.		1,400		1,400	
44	cu in	L	4 / 268.5	4 / 4.4	4 / 268.5	4 / 4.4
45			powershift		powershift	
46			3 / 3		3 / 3	
47	volts		24		24	
48	psi	bar	2,990	206	2,990	206
49	dB(A)		82.9		82.9	

Call-out numbers shown in the diagram below correspond to the first column of the specifications chart.

# FD100N2- FD160AN2



# FD100N2-FD160AN2

22,000-36,000 LB CAPACITY PNEUMATIC TIRE FORKLIFT

## Delivering Exceptional Value

### More Than 296,000 Parts To Keep You Running

Mitsubishi Forklift Trucks offers several parts programs, all designed to bring you top performance and convenience for your material handling needs.

### Support To Fit Your Operation

Find out why more companies are relying on Mitsubishi forklift truck dealers to keep their fleet operating at top performance. Our efficiency provides customers with a better return on investment, and qualified service technicians, diverse parts inventory and unparalleled selection of service options can help reduce your total cost of ownership.

### Extensive Dealer Network

The Mitsubishi forklift truck dealer network is dedicated to finding the right forklift solution for your business. With more than 300 dealer locations, you can rely on your local dealer to provide the service you need when you need it most.



Manufactured with superior quality and exceptional value, Mitsubishi forklift trucks are supported by an extensive dealer and field support network located throughout North and South America. Don't forget to ask your local Mitsubishi forklift truck dealer about details on factory retail programs, financing plans and additional options and dealer services like planned maintenance and operator training.