



# ***FD/FG40N-55N***

## **S E R I E S**

Internal Combustion Pneumatic Tyre  
**4.0–5.5 ton**

# THE ULTIMATE PERFORMER

## Mitsubishi *FD/FG40N-55N* Series Forklift Trucks



FG40N

Gasoline engine  
Capacity rating 4000kg @ 500mm load center

Mitsubishi Forklift Trucks' new FD/FG40N-55N series is a whole new breed of forklift truck that's been built from the ground up to meet the demands of users who require heavy duty, robust and reliable machines.

The latest in a series of forklift trucks, the new N-Generation has won accolades from its users for its capacity to work even in the most demanding situations while being friendly to the environment. What's more, these forklift trucks represents the latest in Mitsubishi's transport technology, enhanced safety and commitment to keeping the world green.

The FD/FG40N-55N forklift trucks —  
**Performance without compromise.**

# FOR HEAVY DUTY APPLICATIONS



FD55N

Diesel engine  
Capacity rating 5500kg @ 600mm load center

# MADE FOR THE MOST DEMANDING APPLICATIONS.

## ECO-POWER



**POWER DOESN'T MEAN DIRTY.**

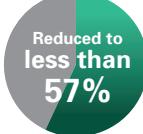
Under the hood of the N-Generation forklift truck is a simple, yet remarkable engine. Mitsubishi Forklift Trucks has developed and refined this robust and reliable power plant while achieving some of the lowest engine emissions in the world. And they've done all this without compromising engine life span, power or ease of maintenance.

### HIGHLY RELIABLE DIESEL ENGINE THAT PASSED 2008 EMISSION GAS STANDARD\*

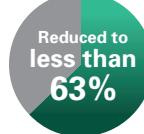
The Mitsubishi S6S high performance engine, NOx, PM, HC emission can be controlled to comply with new environmental standards without adding common rail technology and other options. While low on emissions, S6S engines are designed to be trouble free with only simple maintenance. The result: a powerful, clean operating engine with a long life span.

\* 2008 Japan Emissions Standard for Specific Special Vehicles (including off-road vehicles).

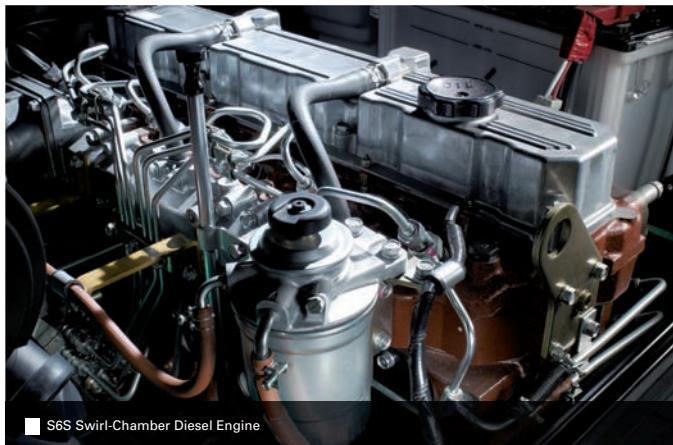
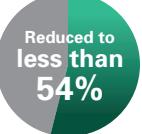
NOx (Nitrogen Oxide) emission



PM (Particle Material) emission



HC (Hydro Carbon) emission



S6S Swirl-Chamber Diesel Engine

\* Compared with 2003 Japan Emissions Standard.

### 2007 EMISSION GAS STANDARD COMPLIANT\* GASOLINE ENGINE WITH THREE-WAY CATALYTIC MUFFLER

The N-Generation series also has an Advanced Electronic Control system that allows optimum management of its engine, which means lower fuel consumption.

To remove environmentally toxic combustion gases a three-way catalytic muffler (standard) has been installed to create higher power yet with lower emissions.

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Three-way catalytic muffler



TB45 Electronic Controlled Gasoline Engine

### ONE-TOUCH SWITCH TO ECOLOGY MODE\*

"Power / Soft Mode Switch" enables the N-Generation forklift trucks to change between power or ecology priority depending on conditions. Selecting the ecology mode means that CO<sub>2</sub> emissions are decreased by about 13 percent, a significant reduction of this environmentally toxic greenhouse gas.

\* This is an option on diesel engine truck.

#### POWER / SOFT Mode switch



Ecology Mode:  
CO<sub>2</sub> emission  
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# RELIABLE PERFORMANCE

## STURDY MAST WITH BETTER VISIBILITY ALL AROUND

Mitsubishi Forklift Trucks' newly designed hardened steel mast rail is extremely strong and resists twisting and bending under loads that would cripple some forklifts. The mast also incorporates trouble free ball-type bushings. These bearings give the mast a longer life span and a longer service interval. Besides the optimum positioning of the mast itself, the main mast's cylinder and chain have been placed out of the way for even better driver vision. Better vision means better safety.



## SOLID FRAME & LOW CENTER OF GRAVITY DESIGN

The latest stress analysis techniques, together with proven Mitsubishi Forklift Trucks manufacturing technologies, have created a long-lasting frame and body with a low centre of gravity. This translates into better performance and enhanced stability when doing heavy work or carrying heavy loads.



## STEEL NOT PLASTIC

All N-Generation forklift trucks incorporate a wide, open step made from steel, not fibreglass, into its cab design. A steel step increases durability, prevents slipping and won't crack under pressure like plastics can.



## TOUGH BASE AREA TO SUPPORT HEAVY LOADS

Double pin sealing and a one-piece cast housing creates a stronger, tougher forklift truck base. A tougher base provides added protection and support when carrying heavy and demanding loads.



## A SMOOTH & COMFORTABLE RIDE

The newly developed Flexcontrol system (optional) can automatically slow down truck speed to enable smooth and jerk-free directional changing. And when combined with the wet-disc brakes (optional), the N-Generation forklift trucks have unrivalled handling and stopping control.



## EXCELLENT BODY BALANCE AND REAR VIEW

Designed not only to look good, N-Generation series forklift truck's new sharp form V-shaped counterweight provides exceptional stability and balance while allowing for an easier rear view, as well. The more a driver can see means better workplace safety and fewer accidents.



## EFFECTIVE COOLING SYSTEM

All N-Generation forklift trucks are fitted with a large, heavy-duty radiator core. The radiator's low noise cooling fan along with optimum placement of the muffler make for a highly effective cooling system. Effective cooling translates into longer engine life and less downtime due to overheating.



## MITSUBISHI FORKLIFT TRUCKS OFFER THE BEST OF BOTH WORLDS : COMFORT AND SAFETY.

# EASY OPERATION. DRIVER COMFORT.

**FD/FG40N-55N SERIES COCKPITS ARE DESIGNED WITH OPERATOR SAFETY IN MIND AND INCORPORATE THE MANEUVERABILITY, COMFORT AND SAFETY THAT PROFESSIONALS HAVE COME TO EXPECT FROM MITSUBISHI FORKLIFT TRUCKS.**

To improve operator comfort while reducing strain and fatigue, the forklift truck is fully equipped with advanced features that make operating a N-Generations series forklift truck less tiring and more productive than ever before.



### PRODUCTIVITY AND COMFORT FEATURES

#### 01 100% Full Hydraulic Power Steering

Equipped with cornering and steering knob to help prevent accidental steering slippage.

#### 02 Combination Switch

Turn signal and headlight switches are combined as in passenger car.

#### 03 Electric Shift Lever

Forward / neutral / reverse shift operation is easy with the touch of a finger.

#### 04 Suspension Seat with Hip Support Function

Sliding and reclining mechanism to reduce back strain.

#### 05 Foot Operated Inching Pedal

Wide foot space and better foot pedal position for precise control.

#### 06 New Transmission

Forward 2-speed / Reverse 1-speed automatic transmission.

### OPTIONAL PRO-LIFT SPECIFICATION VEHICLE TO REDUCE RIDING FATIGUE

The new N-Generation series of forklift trucks can also be equipped with lifting and tilting adjustment by a finger-tip controller, allowing a driver's arm to remain on the armrest — a great way to reduce fatigue and repetitive strain injuries.



### POWER LINE FULL-FLOATING DESIGN

The entire power train, from engine to transmission is secured to the frame by rubber mounts. These specially designed mounts absorb vibration, and make for quieter, smoother forklift truck operation.

# ACTIVE SAFETY

AUTOMATICALLY "SAFE" ONCE YOU LEAVE THE SEAT.

To avoid the risk of accidents, Mitsubishi Forklift Trucks' unique vehicle Integrated Presence System "IPS2" has been incorporated into all FD/FG40N-55N series models. The system automatically disengages and locks forklift operation when operator leaves the seat. Such a system helps to ensure safety and prevent accidents to operators, colleagues and customers alike at the workplace.



## INTEGRATED MONITOR

Digital display allows excellent vision, from travel speed, gross load and other operating conditions. The monitor easily shows engine and forklift truck operations at a glance.



## SAFETY SYSTEMS TO AVOID OPERATION ERROR

The fork on the forklift truck is automatically locked when the ignition is switched off, so it remains in position even if the lift lever is accidentally bumped or moved. A Neutral Safety lock is also installed to prevent the machine from sudden travel if the engine is accidentally started while in gear.



## PARKING BRAKE AT THE SEAT-CONNECTED INTERLOCK

Another safety improvement to the N-Generation series of forklift trucks is the integral interlock system. Once an operator leaves the seat, not only the mast and travel functions are locked, but the parking brake is engaged as well.



## HIGH-MOUNTED REAR COMBINATION LAMP

This rear combination lamp that provides clear brake, reverse and turn signals to vehicles or persons behind the forklift truck.



## SOFT LANDING

This unique feature automatically slows down the forks when approaching the ground, protecting valuable goods from hard drops or shocks.

\* only for two-stage simplex masts.



## EASY TO MAINTAIN.

# MAINTENANCE

**MITSUBISHI FORKLIFT TRUCKS ASSURES OWNERS OF EASY MAINTENANCE AND A LOW RUNNING COST.**

Longer service intervals mean that a vehicle can be used more often, saving valuable time and money. Operators and owners will find the N-Generation series of forklift trucks easy to maintain and manage.



### WELL-PLACED MAINTENANCE POINTS

The N-Generation series forklift trucks have an engine cover that opens fully along with easy-to-remove side panels. The maintenance points are easy to access and they are strategically placed to allow quick inspection or maintenance.

#### ■ IMPROVED BRAKE DESIGN

A newly designed, easy-maintenance braking system that does not require hub and drum removal is installed as standard equipment. The work, time and cost required for service are substantially reduced when compared to previous models.

#### ■ EASY MAINTENANCE AROUND RADIATOR

An easy to open half-split cover makes radiator inspection and maintenance a snap.



### SIGNIFICANT EXTENSION IN SERVICE INTERVAL

Service intervals for the changing of engine oil has been more than doubled from 200 hours to 500 hours. Further, wet-disc brakes\* allow maintenance-free intervals for 10,000 hours. Extended service intervals mean lower running cost.

■ Oil change cycle (with Mitsubishi Forklift Trucks recommended engine oil).

Conventional vehicle	200 hours
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FD/FG40N-55N series	500 hours
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\* Depending on usage condition, brake oil change is required for the optional wet-disc brakes.

# ATTACHMENTS & OPTIONS

**MITSUBISHI FORKLIFT TRUCKS ARE HIGHLY CUSTOMIZABLE TO SUIT JUST ABOUT ANY APPLICATION AND WORKPLACE ENVIRONMENT.**

The FD/FG40N-55N series forklift trucks' unsurpassed performance is ideal for many industries where quality, dependability and heavy duty tasking is involved. Mitsubishi Forklift Trucks offers a line-up of attachments and options to suit just about any need.

## ■ FORKLIFT TRUCK FOR THE PAPER INDUSTRY

Capable of handling paper rolls effectively. Capable of handling small-diameter paper roll with a movable short arm. Improved contact pads provides better grips on rolls. Capable of handling two rolls of paper with different diameters (Special Request Option).

- Attachment installed: Roll Clamp
- Mast installed : Heavy Duty Mast
- Recommended option : Wet-disc Brake / Hydraulic Oil Cooler



## ■ FORKLIFT TRUCK FOR THE RECYCLED PAPER INDUSTRY

Excellent insert clamp-arm to grip paper bales safely and securely.  
Wide view between clamp cylinders.

- Attachment installed : Bale Clamp
- Recommended option : Hydraulic Oil Cooler / Semi-under Net Kit



## ■ FORKLIFT TRUCK FOR THE TIMBER INDUSTRY

This forklift truck has a hinged fork and back rest to scoop and carry logs and sawn timber.

- Standard : Panoramic Hinged Fork (fixed type back rest)
- Recommended option : Air Intake Pre-Cleaner / Front Windshield / Dust Proof Net for Radiator



## ■ FORKLIFT TRUCK FOR THE QUARRY INDUSTRY

This forklift truck has a hinged fork and fixed back rest that can move and carry stone without damage. It provides excellent handling and grip, even in bad road conditions.

- Standard : Panoramic Hinged Fork (fixed back rest)
- Recommended option : Air Intake Pre-Cleaner / Front Windshield / Dust Proof Net for Radiator



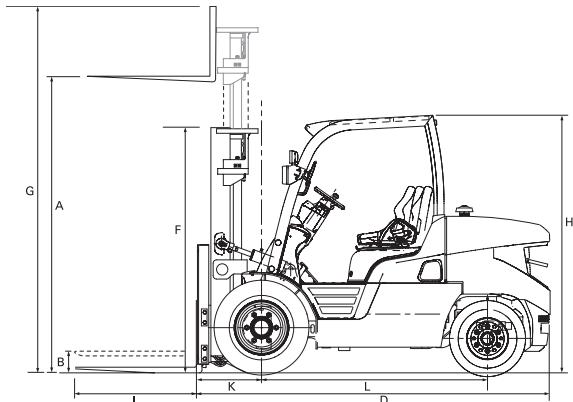
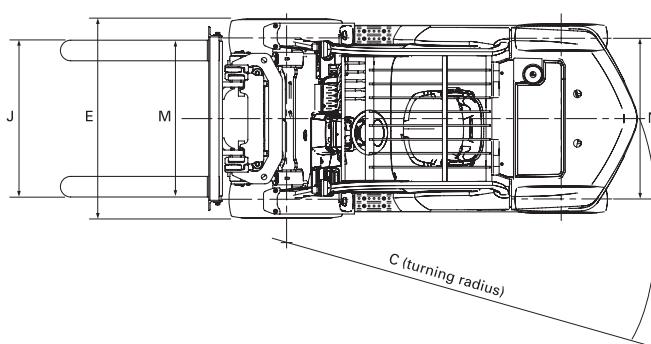
## ■ FORKLIFT TRUCK FOR THE MARINE/PORT INDUSTRY

This forklift truck is designed to work in confined spaces such as inside vessels or containers. The three-stage full free mast has a wide front view, and it can be used for high shelves loading — making full use of cargo space.

- Standard : Wide view Three-stage Full Free Mast
- Recommended options : Diesel Particulate Filter / Front Windshield

# Specifications

CHARACTERISTICS						DIESEL ENGINE TRUCK					
1 Type of Truck							FD40N				
2 Model							FD45N				
3 Loading Capacity							kg	3500	4000		
4 Load Center							mm	600	500		
PERFORMANCE						DIESEL ENGINE TRUCK					
5 Maximum Fork Height							mm	A	3350		
6 Free Fork Height							mm	B	150		
7 Speeds	Lifting	Loaded	mm/s								
		Unloaded	mm/s								
	Lowering	Loaded	mm/s								
		Unloaded	mm/s								
8 Tilt	Mast	Forward	deg								
		Backward	deg								
9 Speeds	Travelling	Loaded	km/h								
		Unloaded	km/h								
10 Maximum Drawbar Pull	stationary on slope	Loaded	N	37500			36500				
Drawbar Pull	at 1.6km/h	Loaded	N								
11 Maximum Gradeability	stationary on slope	Loaded	%	44.9	42.5	39.4	37.4	22.0			
Gradeability	at 1.6km/h	Loaded	%	31.1	29.1	28.0	26.4	35.5			
12 Turning Radius		mm	C	2580			2730				
13 Practical Intersecting Aisle Width	Single	with 1220mm forks	mm	2320			2395				
14 Practical Aisle for Right Angle Stacking		with 1220mm forks	mm	4370			4530				
DIMENSIONS											
15 Overall Length to fork Face			mm	D	3000			3130			
16 Width	with Standard Tires		mm	E	1415						
	with Optional Duals		mm								
	with Special Duals		mm								
17 Height	with Lowered Mast		mm	F	2320						
	with Extended Mast (with backrest)		mm	G				4570			
	to top of Overhead Guard		mm	H							
18 Forks (Thickness x Width x Length)			mm	I	50x150x1220						
19 Forks Spread (Out-to-Out Minimum / Maximum)			mm	J							
20 Front Overhang (Center of Front Axle to Fork Face)			mm	K	577						
21 Wheelbase			mm	L	1850			2000			
22 Tread Width	Front, standard tires		mm	M							
	Front, optional duals		mm								
	Front, special duals		mm								
	Rear tires		mm	N							
23 Ground Clearance	at Lowest point mast		mm								
	at Center of Wheelbase		mm								
24 Tire Size	Size Front, standard			8.25-15-14PR							
	Size Front, Optional dual										
	Size Front, special dual										
	Rear tires						7.00-12-12PR				
WEIGHT											
25 Machine Weight	Powershift (standard)		kg	5920			6330				
	Powershift (optional dual)		kg	6050			6420				
	Powershift (special dual)		kg	6120			6490				
BRAKE											
26 Service Brake Type											
27 Parking Brake Type											
POWERTRAIN											
28 Engine	Model							S6S			
	Max. Rated Power / rpm to DIN 70020		kW / rpm					57.5 / 2300			
	Max. Rated Torque / rpm to DIN 70020		Nm / rpm					260 / 1700			
	Displacement		cc					4996			
	Fuel Tank Capacity		L		87						
29 Transmission	Type										
	Number of Speed										
	Forward										
30 Relief of Pressure	For Attachments		Mpa								



GASOLINE ENGINE TRUCK								
FD50CN	FD50N	FD55N	FG40N		FG45N		FG50CN	
5000	5000	5500	3500	4000	4000	4500	4500	5000
500	600	600	600	500	600	500	600	600
3360			3350			3360		
160			150			160		
470			570			490		
530			600			520		
500								
500								
6								
10								
21.0					22.0			21.5
37000			38500			37500		
26500	26000		28000			27500		27000
33.9	32.3	30.1	45.8	43.3	40.2	38.1	36.2	34.6
23.8	22.6	20.8	32.0	30.1	28.9	27.2	25.9	24.5
2760	2890	2940	2580		2730		2760	2890
2415	2470	2495	2320		2395		2415	2470
4560	4710	4760	4370		4530		4560	4710
3170	3310	3360	3000		3130		3170	3310
1460			1415				1460	3360
1780								
1965								
2400			2320			2400		
4590				4570				4590
2250								
60x150x1220				50x150x1220				60x150x1220
300-1190								
582	602		577		582		602	
	2150		1850		2000		2150	
1175								
1310								
1445								
1180								
150								
227								
300-15-18PR		8.25-15-14PR			300-15-18PR			
7.50-16-12PR								
8.25-15-12PR								
	7.00-12-14PR			7.00-12-12PR			7.00-12-14PR	
6850	7300	7640	5860		6270		6780	7240
6930	7390	7720	5980		6350		6870	7320
7000	7460	7790	6060		6430		6940	7400
								7570
								7660
								7730
Hydraulic								
Hydraulic								
					TB45			
					72 / 2300			
					280 / 1200			
					4500			
105		87			105			
ATM (TORQUE CONVERTER)								
	2							
	1							
	19.1							



## ***Ready to Perform To Your Applications***



[www.mitforklift.com.sg](http://www.mitforklift.com.sg)

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PRESENTED BY:



Note: Performance specifications may vary depending on standard manufacturing tolerances, vehicle condition, types of tyres, floor or surface conditions, applications or operating environment. Trucks may be shown with non-standard options. Specific performance requirements and locally available configurations should be discussed with your Mitsubishi forklift truck dealers. Mitsubishi Forklift Trucks follows a policy of continual product improvement. For this reason, some materials, options and specifications could change without notice.



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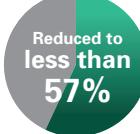
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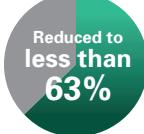
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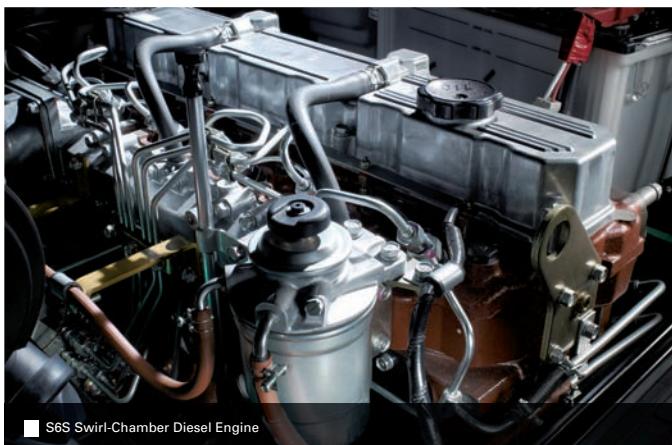
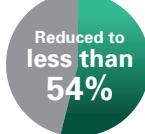
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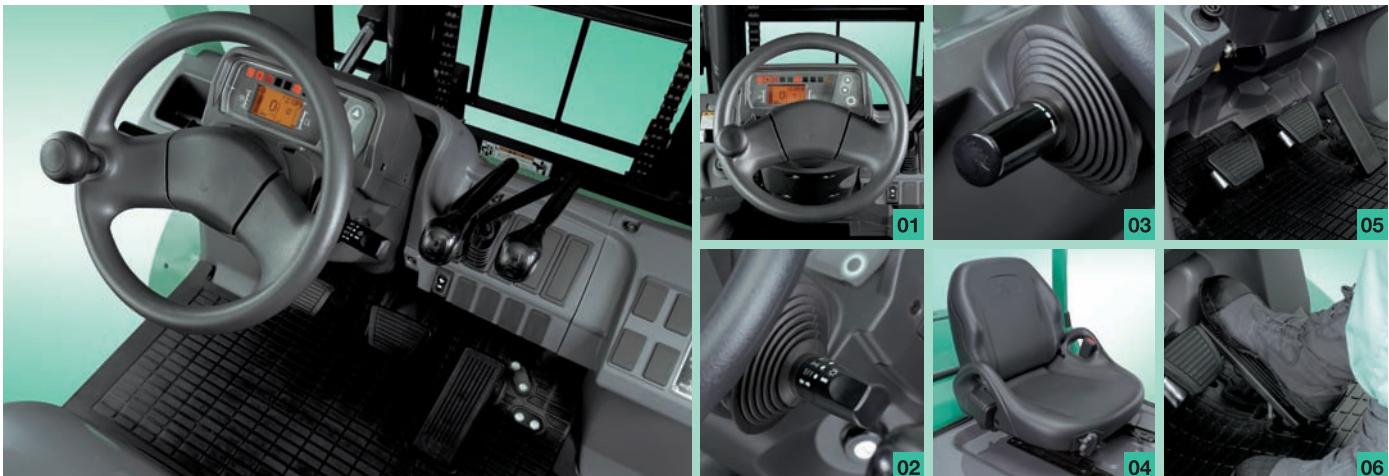


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Digital display allows excellent vision, from travel speed, gross load and other operating conditions. The monitor easily shows engine and forklift truck operations at a glance.



## SAFETY SYSTEMS TO AVOID OPERATION ERROR

The fork on the forklift truck is automatically locked when the ignition is switched off, so it remains in position even if the lift lever is accidentally bumped or moved. A Neutral Safety lock is also installed to prevent the machine from sudden travel if the engine is accidentally started while in gear.



## PARKING BRAKE AT THE SEAT-CONNECTED INTERLOCK

Another safety improvement to the N-Generation series of forklift trucks is the integral interlock system. Once an operator leaves the seat, not only the mast and travel functions are locked, but the parking brake is engaged as well.



## HIGH-MOUNTED REAR COMBINATION LAMP

This rear combination lamp that provides clear brake, reverse and turn signals to vehicles or persons behind the forklift truck.



## SOFT LANDING

This unique feature automatically slows down the forks when approaching the ground, protecting valuable goods from hard drops or shocks.

\* only for two-stage simplex masts.



## EASY TO MAINTAIN.

# MAINTENANCE

**MITSUBISHI FORKLIFT TRUCKS ASSURES OWNERS OF EASY MAINTENANCE AND A LOW RUNNING COST.**

Longer service intervals mean that a vehicle can be used more often, saving valuable time and money. Operators and owners will find the N-Generation series of forklift trucks easy to maintain and manage.



### WELL-PLACED MAINTENANCE POINTS

The N-Generation series forklift trucks have an engine cover that opens fully along with easy-to-remove side panels. The maintenance points are easy to access and they are strategically placed to allow quick inspection or maintenance.

#### ■ IMPROVED BRAKE DESIGN

A newly designed, easy-maintenance braking system that does not require hub and drum removal is installed as standard equipment. The work, time and cost required for service are substantially reduced when compared to previous models.

#### ■ EASY MAINTENANCE AROUND RADIATOR

An easy to open half-split cover makes radiator inspection and maintenance a snap.



### SIGNIFICANT EXTENSION IN SERVICE INTERVAL

Service intervals for the changing of engine oil has been more than doubled from 200 hours to 500 hours. Further, wet-disc brakes\* allow maintenance-free intervals for 10,000 hours. Extended service intervals mean lower running cost.

■ Oil change cycle (with Mitsubishi Forklift Trucks recommended engine oil).

Conventional vehicle	200 hours
----------------------	-----------

FD/FG40N-55N series	500 hours
---------------------	-----------

\* Depending on usage condition, brake oil change is required for the optional wet-disc brakes.

# ATTACHMENTS & OPTIONS

**MITSUBISHI FORKLIFT TRUCKS ARE HIGHLY CUSTOMIZABLE TO SUIT JUST ABOUT ANY APPLICATION AND WORKPLACE ENVIRONMENT.**

The FD/FG40N-55N series forklift trucks' unsurpassed performance is ideal for many industries where quality, dependability and heavy duty tasking is involved. Mitsubishi Forklift Trucks offers a line-up of attachments and options to suit just about any need.

## ■ FORKLIFT TRUCK FOR THE PAPER INDUSTRY

Capable of handling paper rolls effectively. Capable of handling small-diameter paper roll with a movable short arm. Improved contact pads provides better grips on rolls. Capable of handling two rolls of paper with different diameters (Special Request Option).

- Attachment installed: Roll Clamp
- Mast installed : Heavy Duty Mast
- Recommended option : Wet-disc Brake / Hydraulic Oil Cooler



## ■ FORKLIFT TRUCK FOR THE RECYCLED PAPER INDUSTRY

Excellent insert clamp-arm to grip paper bales safely and securely.  
Wide view between clamp cylinders.

- Attachment installed : Bale Clamp
- Recommended option : Hydraulic Oil Cooler / Semi-under Net Kit



## ■ FORKLIFT TRUCK FOR THE TIMBER INDUSTRY

This forklift truck has a hinged fork and back rest to scoop and carry logs and sawn timber.

- Standard : Panoramic Hinged Fork (fixed type back rest)
- Recommended option : Air Intake Pre-Cleaner / Front Windshield / Dust Proof Net for Radiator



## ■ FORKLIFT TRUCK FOR THE QUARRY INDUSTRY

This forklift truck has a hinged fork and fixed back rest that can move and carry stone without damage. It provides excellent handling and grip, even in bad road conditions.

- Standard : Panoramic Hinged Fork (fixed back rest)
- Recommended option : Air Intake Pre-Cleaner / Front Windshield / Dust Proof Net for Radiator



## ■ FORKLIFT TRUCK FOR THE MARINE/PORT INDUSTRY

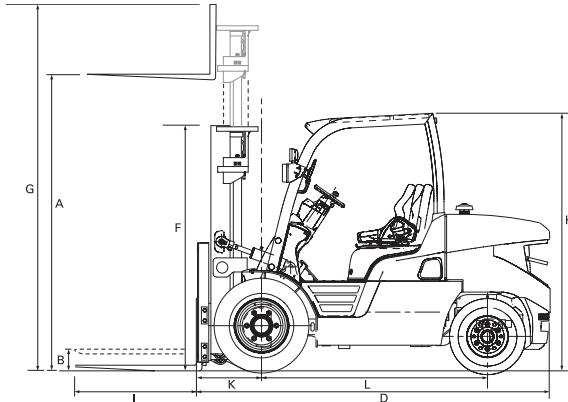
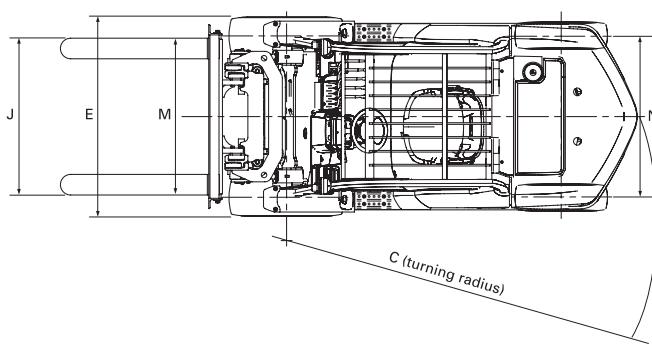
This forklift truck is designed to work in confined spaces such as inside vessels or containers. The three-stage full free mast has a wide front view, and it can be used for high shelves loading — making full use of cargo space.

- Standard : Wide view Three-stage Full Free Mast
- Recommended options : Diesel Particulate Filter / Front Windshield



# Specifications

CHARACTERISTICS					DIESEL ENGINE TRUCK							
1	Type of Truck						FD40N					
2	Model						FD45N					
3	Loading Capacity						kg	3500	4000			
4	Load Center						mm	600	500			
PERFORMANCE												
5	Maximum Fork Height						mm	A	3350			
6	Free Fork Height						mm	B	150			
7	Speeds	Lifting	Loaded	mm/s								
		Unloaded	mm/s						550			
		Lowering	Loaded	mm/s					610			
		Unloaded	mm/s									
8	Tilt	Mast	Forward	deg								
			Backward	deg								
9	Speeds	Travelling	Loaded	km/h								
		Unloaded	km/h						21.5			
10	Maximum Drawbar Pull	stationary on slope	Loaded	N	37500			36500				
	Drawbar Pull	at 1.6km/h	Loaded	N								
11	Maximum Gradeability	stationary on slope	Loaded	%	44.9	42.5	39.4	37.4	35.5			
	Gradeability	at 1.6km/h	Loaded	%	31.1	29.1	28.0	26.4	25.0			
12	Turning Radius		mm	C	2580	2730						
13	Practical Intersecting Aisle Width	Single	with 1220mm forks	mm	2320	2395						
14	Practical Aisle for Right Angle Stacking		with 1220mm forks	mm	4370	4530						
DIMENSIONS												
15	Overall Length to fork Face		mm	D	3000	3130						
16	Width	with Standard Tires	mm	E	1415							
		with Optional Duals	mm									
		with Special Duals	mm									
17	Height	with Lowered Mast	mm	F	2320							
		with Extended Mast (with backrest)	mm	G	4570							
		to top of Overhead Guard	mm	H								
18	Forks (Thickness x Width x Length)		mm	I	50x150x1220							
19	Forks Spread (Out-to-Out Minimum / Maximum)		mm	J								
20	Front Overhang (Center of Front Axle to Fork Face)		mm	K	577							
21	Wheelbase		mm	L	1850	2000						
22	Tread Width	Front, standard tires	mm	M								
		Front, optional duals	mm									
		Front, special duals	mm									
		Rear tires	mm	N								
23	Ground Clearance	at Lowest point mast	mm									
		at Center of Wheelbase	mm									
24	Tire Size	Size Front, standard			8.25-15-14PR							
		Size Front, Optional dual										
		Size Front, special dual										
		Rear tires				7.00-12-12PR						
WEIGHT												
25	Machine Weight	Powershift (standard)	kg		5920	6330						
		Powershift (optional dual)	kg		6050	6420						
		Powershift (special dual)	kg		6120	6490						
BRAKE												
26	Service Brake Type											
27	Parking Brake Type											
POWERTRAIN												
28	Engine	Model				S6S						
		Max. Rated Power / rpm to DIN 70020	kW / rpm			57.5 / 2300						
		Max. Rated Torque / rpm to DIN 70020	Nm / rpm			260 / 1700						
		Displacement	cc			4996						
		Fuel Tank Capacity	L		87							
29	Transmission	Type										
		Number of Speed										
		Forward										
30	Relief of Pressure	For Attachments	Mpa									



GASOLINE ENGINE TRUCK								
FD50CN	FD50N	FD55N	FG40N		FG45N		FG50CN	
5000	5000	5500	3500	4000	4000	4500	4500	5000
500	600	600	600	500	600	500	600	600
3360			3350			3360		
160			150			160		
470			570			490		
530			600			520		
500								
500								
6								
10								
21.0					22.0			21.5
37000			38500			37500		
26500	26000		28000			27500		27000
33.9	32.3	30.1	45.8	43.3	40.2	38.1	36.2	34.6
23.8	22.6	20.8	32.0	30.1	28.9	27.2	25.9	24.5
2760	2890	2940	2580		2730		2760	2890
2415	2470	2495	2320		2395		2415	2470
4560	4710	4760	4370		4530		4560	4710
3170	3310	3360	3000		3130		3170	3310
1460			1415				1460	3360
1780								
1965								
2400			2320			2400		
4590				4570				4590
2250								
60x150x1220				50x150x1220				60x150x1220
300-1190								
582	602		577		582		602	
	2150		1850		2000		2150	
1175								
1310								
1445								
1180								
150								
227								
300-15-18PR		8.25-15-14PR			300-15-18PR			
7.50-16-12PR								
8.25-15-12PR								
	7.00-12-14PR			7.00-12-12PR			7.00-12-14PR	
6850	7300	7640	5860		6270		6780	7240
6930	7390	7720	5980		6350		6870	7320
7000	7460	7790	6060		6430		6940	7400
								7570
								7660
								7730
Hydraulic								
Hydraulic								
					TB45			
					72 / 2300			
					280 / 1200			
					4500			
105		87			105			
ATM (TORQUE CONVERTER)								
	2							
	1							
	19.1							



## ***Ready to Perform To Your Applications***



[www.mitforklift.com.sg](http://www.mitforklift.com.sg)

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PRESENTED BY:



Note: Performance specifications may vary depending on standard manufacturing tolerances, vehicle condition, types of tyres, floor or surface conditions, applications or operating environment. Trucks may be shown with non-standard options. Specific performance requirements and locally available configurations should be discussed with your Mitsubishi forklift truck dealers. Mitsubishi Forklift Trucks follows a policy of continual product improvement. For this reason, some materials, options and specifications could change without notice.



## PNEUMATIC TIRE FORKLIFT

7000 KG CAPACITY LP DIESEL MODELS

THE HEAVY-DUTY FORKLIFT BUILT TO HANDLE TOUGH LOADS

# EXPECT PRODUCTIVITY.

EXPERIENCE ENHANCED PERFORMANCE WITH A POWERFUL TURBO-CHARGED ENGINE



#### Serious Power:

The FD70NM delivers excellent fuel efficiency with superior dependability. Its S6S-T engine offers high torque for heavy-duty performance – allowing it to tackle heavy loads up to 7000 kg. This turbocharged diesel engine is built to thrive in rigorous applications and features cold weather starting capabilities, for added reliability in extreme climates.

#### High Performance:

When you need power, you need it now. The FD70NM's transmission features a precise torque converter – allowing for controlled, powerful acceleration when driving up ramps with full loads or moving heavier pallets across rough terrains.

#### Durable Frame:

Rough applications require tough equipment. The FD70NM consists of a steel frame for strength and durability:

- More steel in the frame for added resilience
- Rigorous testing helped develop this rugged design by minimizing stress points in the frame

- Outstanding power and performance
- Powerful engine
- Durable steel frame for rugged applications
- Greater uptime, less maintenance

**The FD70NM delivers the power and performance that tough applications demand.**

#### Exceptional Performance, Exceptional Value:

Mitsubishi Forklift Trucks developed the FD70NM 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, the FD70NM is ready to work when you are.



#### Key applications:

- Lumber
- Stone and glass
- Fabricated metals
- Industrial machinery
- Building materials
- Garden supplies



#### Maintenance Made Simple:

Simplified maintenance means less downtime and more time on the job. Whether it's scheduled maintenance or a daily inspection, the FD70NM 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
- 500-hour service intervals

#### Hydrostatic Power Steering System:

The hydrostatic steering system of the FD70NM is directly connected to the steer axle at the rear of the truck. The flow of hydraulic oil that powers it allows for easy and smooth steering by the operator. It also prevents kickback to the steering wheel from the steer tires, as well as eliminating the need for mechanical linkage in the steering process, lowering the amount of maintenance required.



# THE COMFORT YOUR OPERATORS DESERVE.

COMBINED WITH THE CONTROL YOUR BUSINESS DEMANDS



## Front-End Attachments:

The FD70NM can be further customized to meet the demands of your business with optional front-end attachments, such as sideshifters or fork positioners. Ask your local Mitsubishi forklift truck dealer for more information.

## Invaluable standard features:

- Full-suspension vinyl seat for enhanced comfort
- LED / LCD display panel for operator awareness
- Integrated Presence System (IPS) for added security

## Intuitive Display Panel:

The standard LCD/LED display panel, featuring fluid level warnings, brake fluid level, fuel gauge and hour meter, quickly informs the operator of the current performance status of the forklift — for increased awareness during operation.



## Less Noise, Greater Comfort:

The FD70NM is built for added operator comfort. 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 FD70NM is equipped with a full-suspension vinyl seat, providing day-long comfort to operators of all sizes:

- Forward and backward adjustment up to 6.5"
- Suspension adjustment conforms to the operator
- Lower back lumbar adjustment
- Fold down pin allows for easy access to the engine compartment during daily checks and maintenance
- An optional cloth seat is also available for operators working long shifts or on rough surfaces

## Integrated Presence System (IPS):

The Integrated Presence System (IPS) 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, while increasing operator awareness.

## Flexible Cab Options To Meet Your Needs:

For harsh or demanding outdoor applications, an optional cab package can be added to the FD70NM for further protection.



Features	Option 1:	Option 2:	Option 3:
Front windshield	●	●	●
Roof	●	●	●
Back windshield		●	●
Steel doors			●

CHARACTERISTICS				FD70NM
1 Capacity at rated load center	lb	kg	15,500	7,000
2 Capacity at load center – distance	in	mm	24	600
3 Power – electric, diesel, gasoline, LP gas			diesel	
4 Tire type – cushion, pneumatic			pneumatic	
5 Wheels (x=driven) number front / rear			4x 2	
DIMENSIONS				
6 Maximum fork height (top of fork) <sup>[1]</sup>	in	mm	120.5	3,060
7 Free fork height <sup>[1]</sup>	in	mm	7.9	200
8 Forks – thickness x length x width <sup>[1]</sup>	in	mm	2.4 x 48 x 5.9	60 x 1,220 x 150
9 Fork spacing – out-to-out minimum / maximum	in	mm	11.8 / 63.0	300 / 1,600
10 Tilt – forward / backward	deg		6° / 12°	
11 Length to fork face	in	mm	141	3,580
12 Width with dual drive tires	in	mm	85.4	2,170
13 Height with lowered mast <sup>[1]</sup>	in	mm	101.5	2,570
14 Seat height	in	mm	62.7	1,592
15 Height to top of overhead guard	in	mm	103	2,610
16 Height with extended mast <sup>[1]</sup>	in	mm	168.5	4,277
17 Minimum outside turning radius	in	mm	130	3,310
18 Load moment constant	in	mm	23.0	585
19 Minimum aisle – 90° stack – zero clearance without load	in	mm	153	3,895
PERFORMANCE				
20 Travel speed loaded / empty	mph km/h		14.3 / 17.4	23.0 / 28.0
21 Lift speed loaded / empty	fpm m/s		84.5 / 92.5	0.43 / 0.47
22 Lowering speed loaded / empty	fpm m/s		98.4 / 98.4	0.50 / 0.50
23 Drawbar pull – loaded at 1 mph (1.6 km)	lb N		9,000	40,020
24 Drawbar pull – loaded at maximum	lb N		12,150	54,050
25 Gradeability – loaded at 1 mph (1.6 km)	%		26	
26 Gradeability – loaded at maximum	%		36	
WEIGHT				
27 Empty	lb kg		20,790	9,430
28 Axle load – with rated load front / rear	lb kg		32,750 / 3,540	14,830 / 1,600
29 Axle load – without load front / rear	lb kg		9,300 / 11,490	4,220 / 5,210
CHASSIS				
30 Tire size – front, standard duals	in		8.25-15-12PR	
31 Tire size – rear	in		8.25-15-12PR	
32 Wheelbase	in mm		90.6	2,300
33 Tread width – front, standard duals	in mm		65.0	1,650
34 Tread width – rear	in mm		65.0	1,650
35 Ground clearance – at lowest point at mast	in mm		6.7	170
36 Ground clearance – at center of wheelbase	in mm		10.4	263
37 Service brake			hydraulic with vacuum boost	
38 Parking brake			hand, mechanical	
POWERTRAIN				
39 Engine model			Mitsubishi S6S-T	
40 Continuous output S.A.E. gross	HP kW		93.9	70
	at r.p.m.		2,300	
42 Maximum torque S.A.E. gross	lb-ft N-m		214	290
	at r.p.m.		1,700	
44 Cylinder / displacement	cu in L		6 / 305	6 / 5.0
45 Transmission type			powershift	
46 Number of speeds forward / reverse			2 / 2	
47 Battery	volt		12	
48 Relief pressure for attachments	psi bar		2,770	191
49 Noise level – at operator's ear Leq	dB(A)		86.5	

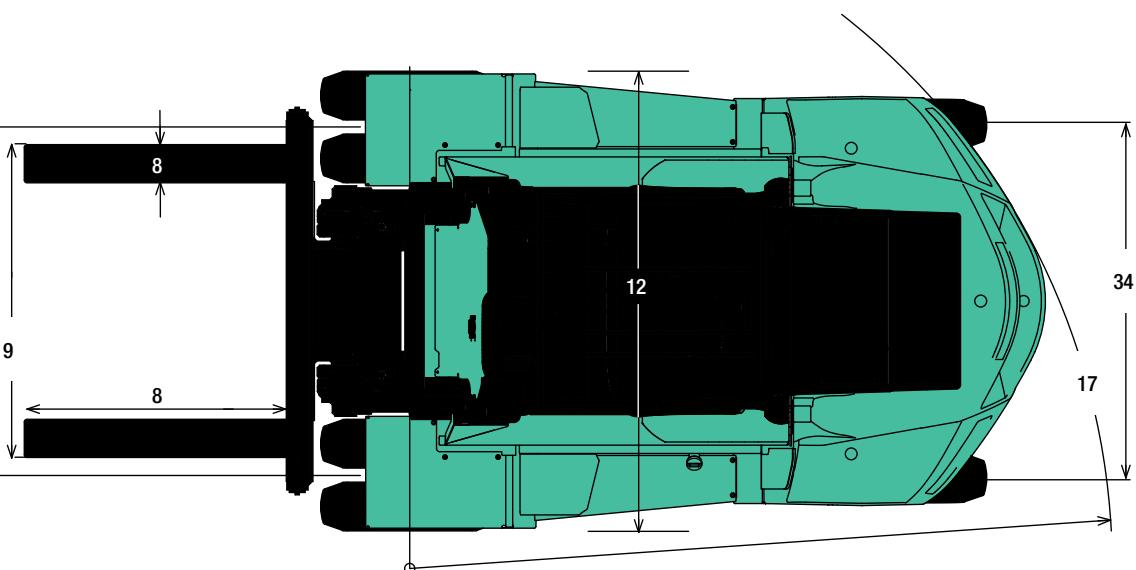
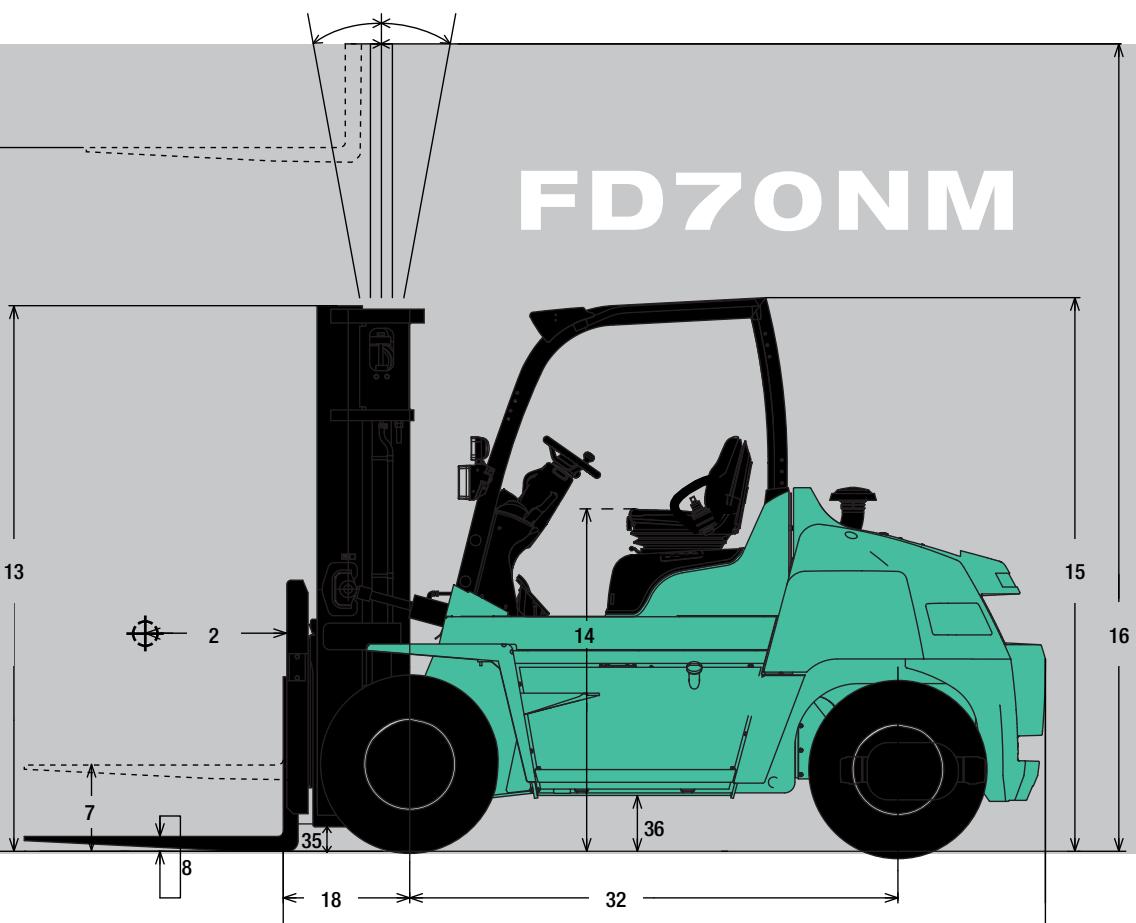
#### SAFETY STANDARDS

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.

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



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

# FD70NM

7000 KG CAPACITY PNEUMATIC TIRE FORKLIFT

## 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. Contact your local dealer to put our services to work for you.

### **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.



# GRENDIA

## MITSUBISHI FORKLIFT TRUCKS

1 ~ 3.5A ton



# New Logistics Standard



**GRENDAIA**  
**FGE20CNT**

Capacity: 2000kg at 500mm Load Center  
Overall length with 920mm forks = 3280mm



**GRENDAIA**  
**FD25NT**

Capacity: 2500kg at 500mm Load Center  
Overall length with 1070mm forks = 3625mm

What is the ideal forklift truck for drivers to operate?

How should forklifts respond to the ever increasing demands of development of information and distribution systems?

Mitsubishi's new generation "GRENDAIA" model is the answer to these questions.

The moment you drive it you will experience the excellent operator comfort and unmatched productivity.

Mitsubishi forklift trucks have a worldwide reputation to be friendly to the environment.

Equipped with a variety of advanced safety features, a new standard in materials handling is set.

# High Performance

Drive, turn, accelerate, lift and move. Excellent maneuverability.  
Power is at hand for performing in even the most severe conditions.



## Lift

Load handling performance  
The low center of gravity of the new frame ensures safe load handling and excellent residual capacities. Moreover, with or without load, the electronic controlled gasoline engine provides stable lifting speeds.

**Lift speed:**  
680mm/sec (with load)  
690mm/sec (without load)  
(FGE25ZN electronic controlled gasoline engine type)



\*Top-class lifting performance.  
All 2-stage masts lifting height up to 4m without loss of capacity.

## Drive

Driving performance  
The newly developed engine and transmission present top-class driving performance. The maneuverability, one of the most important features of a forklift, is now more precised than ever before.

**10m Acceleration:**  
3.1 seconds  
(FD25NT without load)



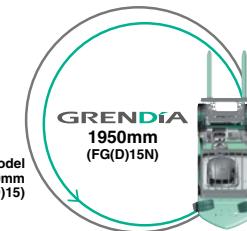
**12°Gradeability:**  
5.0km/h  
(FD25NT without load)



## Turn

Turning performance  
Full hydraulic power steering allows turning "on-the-spot". With full power available at all times this system realizes top-class turning ability, even in the most confined areas.

Previous Model  
1990mm  
(FG(D)15)



**Minimum turning radius:**  
FG(D)15N 1950mm  
FG(D)20CN 2020mm  
FG(D)25N 2230mm

## Friendly To The Environment

Friendly for the operator, friendly for the environment.

### EXHAUST EMISSION CONTROL

Electronic Controlled Gasoline Engine  
with 3-stage Catalytic Muffler.

**K15E, K21E, K25E**

CO•HC•NOx

Reduced by more than 90% compared with previous model. The electronic controlled engine is equipped with a 3-stage catalytic muffler. The result is not just lower exhaust emissions but also higher torque, more power and lower fuel consumption levels as never realized before.



Displacement: 2065cc  
Rated Output: 42kW(57ps)/2700rpm  
Maximum Torque: 160Nm(16.3kgm)/2000rpm

Swirl-Chamber Diesel Engine.

**S4Q2, S4S**

Black Smoke Density

Reduced by 50% compared with previous model. Major targets during the development of this new model were to limit the pollution caused by exhaust emissions and to reduce the noise levels of the engines. Mitsubishi has succeeded in reaching these targets for the entire range.



Displacement: 3331cc  
Rated Output: 44kW(60ps)/2300rpm  
Maximum Torque: 183Nm(18.7kgm)/1800rpm

### Passed Euro Class II Regulation of Exhaust Emission Value (Worldwide)

The S4Q2 and S4S diesel engines do not only comply with the European Class II regulation of exhaust emission values of the Comite Europeen de Normalisation (CEN), which is by far the strictest, but also the U.S.A. Tier-2 regulation of exhaust emission value of Environmental Protection Agency (EPA).

# Comfortable Operation

A comfortable ride similar to today's passenger cars.  
Automotive type features integrated in the dashboard.  
Comfortable compartment for the operator to work in.



## Entire Power Line Full Floating Realizing Low Vibration Levels

The principle of a full floating power train is proven technology in the automotive industry. Mitsubishi was among the first to introduce this technology on forklift trucks and has fine-tuned the system on this new model. The results are even lower vibration levels, like in your car, providing a comfortable working position for the driver.

## Low Noise Levels

The noise that is coming directly from the exclusively developed engine and transmission is reduced tremendously. Improving the airflow to the engine and the careful choice of sound absorbing materials inside the engine compartment has further reduced noise levels. The reduction of noise both inside the compartment as well as the noise emitted to the surrounding ensures a quieter working environment.

Noise Level At Operator's Ear

**77.5dB**

(FD25NT with Sound Suppression Kit option)



Quality foam inside the engine cover as noise absorber.

## Excellent Forward Visibility

A wide and unobstructed forward view is the trademark of Mitsubishi. The rigid structure of the mast and smart layout of the cylinders improve fast and safe working. Because of the low dash the visibility at the fork tip is excellent.



## Rear Visibility

The new design of the counterweight with the strong wedge shape provides a clear full view of the rear while driving backwards.



## Full Suspension Seat With Hip Restraint

The new machine is equipped with a new type of seat providing improved seating stability, more comfort while driving and easier on and off access. With the backrest reclining function, the weight-adjust system and its capability to slide forth and back, every operator can find a comfortable position.

- 20° backrest recline adjustment in 11 steps.
- Weight adjustment by turn knob
- 150mm horizontal slide travel adjustment.
- Full suspension
- Document pouch
- Seatbelt with warning indicator



## Wide And Open Floor Area

As the height, angle and operating force of the pedals are improved Mitsubishi has accomplished easy operation for all drivers. As the steering valve is integrated in the steering column, the steering rod in the floor area is eliminated. The tilt cylinders have also been appropriately arranged, allowing wider floor space while maintaining rigidity.

## Open Step

The wide and open step with non-slip plate provides easy on and off access. This is the design Mitsubishi focused on.



## Soft Landing

When the forks are lowered and approach ground level, the lowering speed is slowed down automatically. The load is protected from the shock of hitting the ground.

(2-stage masts only)

## ALS\* option (Mast Vertical System)

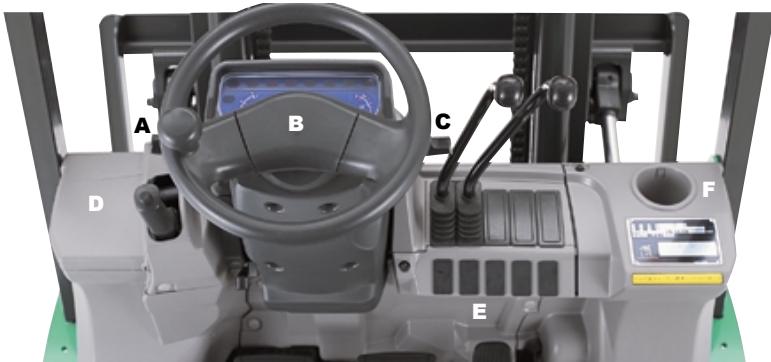
When the operator tilts the mast forward without load and simultaneously pushes the ALS button, the mast stops in the vertical position, consequently placing the forks horizontally.

\*Automatic Leveling System



# Easy Operation

New and excellent driver's compartment provides an unobstructed view in all directions. The ease in operation substantially improves efficiency.



**Electric FNR Lever**  
(Automatic Transmission Models)

The FNR lever is easily controlled with a fingertip. It is conveniently placed and needs no extra effort in reaching.



**Power Steering With 100% Standstill Steering**

Full hydraulic power steering with 100% standstill steering reduces the steering force substantially. With steering synchronizer, the steering angle of the rear tires always corresponds with the position of the steer knob on the steering wheel, leading to safer and more comfortable steering. **Steering operating force: Reduced by 20%** (compared with the previous model)



**Tiltable Steering Column**

The steering column can be fixed in every possible position within the tilt range. Tilt position memory system, which remembers operator's preferred tilt, is equipped.



**Multi-synchro Transmission**  
(Manual Transmission Models)

Thanks to the incorporation of a multi-synchro transmission, the operating force has been reduced, making shifting a lot easier.



**Switch Panel**  
On the right side of the dash, space is reserved for switches of optional functions.



**Cup Holder**  
An automotive type cup holder is integrated in the dash area.



**Transparent Roof**  
Removable roof with rain gutter is available as an option.

# Active Safety

Mitsubishi's new forklift features a safety system that actively reduces the risk of accidents.

## Instrument Panel

A large display is centrally located, behind the steering wheel within line of sight of the operator. The combination of the new LCD monitor, gauges and alarm lights provides all information necessary for the operator and service engineer. If a breakdown occurs, the self-diagnostic system shows an error code on the LCD display identifying the cause. The new LAN:CAN-bus system has created a leading-edge IT feature.



Park Brake Indicator

When the park brake lever is applied, a park brake indicator on the display lights up. If the park brake is released and the engine is not running, an alarm buzzer goes off.



Seatbelt Warning Indicator

A warning lamp on the display lights up when the seat-belt is not used while seated, just like in passenger cars.



Multi-purpose Indicator

When there is a minor accident, the multi-purpose indicator lights up. Mitsubishi's new model is equipped with a monitoring system utilizing the in-vehicle LAN functionality.

## Mast and Traveling Interlock System

Mitsubishi seats are equipped with a unique interlock switch. When the operator leaves the seat, this seat-switch is activated and the operation of the mast and shifting transmission of the vehicle (automatic transmission type) will be locked. This is the safety system of the next generation of forklifts and gained from Mitsubishi's experience in the forklift industry over the past 10 years.



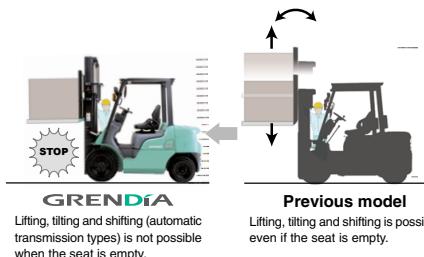
Neutral Indicator

The neutral indicator lights up if the shift lever is set to neutral when the operator is seated. If the seat is empty, the neutral indicator blinks to warn that the forward/reverse function is interlocked.  
(Auto transmission models only)



Mast Interlock Indicator

The mast interlock indicator lights up when the seat is empty to indicate that the mast cannot be activated.



## Neutral Safety Start System

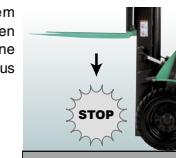
The FNR lever has to be in Neutral position before the engine can be started. This prevents the unexpected "jack-rabbit" start.

## Drum Brakes Bring Reliable Braking Power

Along with the improvement of the engine performance, the brake performance is improved. The braking response is drastically improved by increasing the rigidity and capacity of the brake drum and brake shoe. A stable brake performance is realized at any situation.

## Lift Lock System

Mitsubishi's new Lift Lock System prevents the mast from lowering when the lift lever is operated and the engine is off. This prevents potentially dangerous situations.



## High Mounted Rear Combination Lamp

The rear combination lamp is mounted on the upper rear cross bar of the head guard for improved visibility by surrounding workers or other operators.



## Automatic Response To Engine Breakdown (Electronic Controlled Gasoline engine)

The engine revolutions are automatically controlled when the engine coolant temperature is getting too hot or the battery voltage becomes low. This is possible due to the combination of in-vehicle LAN:CAN-bus and the electronic controlled gasoline engine.



## Rigid Frame With Low Center Of Gravity

The completely new designed frame withstands the most severe and harsh conditions.

# Easy Maintenance

Durable components to increase reliability and service intervals.  
All items that require daily inspection are located within easy reach.



Removable Side Cover

The removable side cover and wide opening range of the engine cover provides unobstructed access to the engine compartment.



Easy Replacement Of Air Filters

Convenient arrangement of the air cleaner allows easy replacement of its filter.



Efficient Layout

The fuse box, relays and battery are clustered in one location. This layout provides easier inspection and maintenance.

# Options

## MAST VARIATIONS

Various masts with wide variations are available.  
Select the type appropriate for your working place and operation.

- 2-stage mast • 2-stage full-free mast • 3-stage full-free mast

## ■The "Green" Truck, Caring For The Environment

### LPG Engine

Forklifts with LPG engines are friendly to the environment and LPG models benefit from the low fuel costs.

### Black Smoke Reducing DPF System

The built-in ceramic filter in the muffler of the diesel models collects all black smoke. The collected soot is burnt by a built-in heater in the muffler and the filter is recovered.



The recovering unit is located within the right step.



The monitor of the DPF muffler indicates the clogging situation of the filter and recovering time.



### ● LPG Tank Swing Bracket

This tank bracket facilitates replacement of LPG tanks.

- This means no lifting of the bottle over the counterweight.
- Replacing the gas bottle can be done within the vehicle width. The operator in narrow aisles is thus possible.



### Sound Suppression Kit

To have even lower noise levels, a belly plate with sound absorption material, an additional intake silencer and an insulated radiator cover can be ordered as a kit.

### Panel Cabin

A panel cabin can be mounted on the standard overhead guard.

## ATTACHMENT

For faster and more efficient operations, various attachments are available.



● Side shifter



● Hinged fork



● Fork positioner



● Rotating fork



● Rotating roll clamp



● Load stabilizer



● Bale clamp

● Others: Attachments meeting your specific requirements are available.  
Please feel free to contact your local dealer.

## Equipments At-A-Glance

	Electronic Controlled Gasoline Engine		Gasoline Engine		Diesel Engine	
	Torque Converter	Direct Drive	Torque Converter	Direct Drive	Torque Converter	Direct Drive
Steering with tilt position memory system	○	○	○	○	○	○
Full hydraulic steering with Steering Synchronizer	○	○	○	○	○	○
Combination switch with auto return indicator	○	○	○	○	○	○
Electric automatic FNR shift lever	○	—	○	—	○	—
Neutral safety start system	○	○	○	○	○	○
Suspension seat with hip restraint feature	○	○	○	○	○	○
Mast and traveling interlock system	○	○ *1	○	○ *1	○	○ *1
Cup holder	○	○	○	○	○	○
Double action parking brake	○	○	○	○	○	○
Anti-restart lock	○	○	○	○	○	○
Open step	○	○	○	○	○	○
Inching pedal	○	—	○	—	○	—
Floor mat	○	○	○	○	○	○
Speed meter	OP	OP	OP	OP	OP	OP
Foot heater	OP	OP	OP	OP	OP	OP
Water temperature	○	○	○	○	○	○
Fuel meter	○	○	○	○	○	○
LCD hour meter	○	○	○	○	○	○
Brake liquid warning lamp	OP	OP	OP	OP	OP	OP
Engine oil pressure warning lamp	○	○	○	○	○	○
Charge lamp	○	○	○	○	○	○
Diesel vehicle glow pilot lamp	—	—	—	—	○	○
Diesel vehicle fuel filter drain warning lamp	—	—	—	—	○	○
Seatbelt indicator	○	○	○	○	○	○
Neutral indicator	○	—	○	—	○	—
Parking indicator	○	○	○	○	○	○
Mast interlock indicator	○	○	○	○	○	○
Error code indicate at the breakdown	○	○	○	○	○	○
Air cleaner dust indicator lamp + Radiator coolant level warning lamp	OP	OP	OP	OP	OP	OP
Torque converter oil temperature warning lamp	OP	OP	OP	OP	OP	OP
Rear-view mirror	○	○	○	○	○	○
Back-up buzzer	○	○	○	○	○	○
Halogen front headlight	○	○	○	○	○	○
Front indicator light	○	○	○	○	○	○
High mounted rear combination lamp	○	○	○	○	○	○
Assist grip	○	○	○	○	○	○
Engine cover with sound insulator	○	○	○	○	○	○
Engine side cover with sound insulator	○	○	○	○	○	○
Transparent roof	OP	OP	OP	OP	OP	OP
Revolving Lamp	OP	OP	OP	OP	OP	OP
Front Working Lamp	OP	OP	OP	OP	OP	OP
Rear Working Lamp	OP	OP	OP	OP	OP	OP
Sound Suppression Kit	OP	OP	OP	OP	OP	OP
Front glass	OP	OP	OP	OP	OP	OP
Panel cabin	OP	OP	OP	OP	OP	OP
Soft landing lift cylinder (2SP)	○	○	○	○	○	○
Lift lock	○	○	○	○	○	○
ALS (Automatic Leveling System)	OP	OP	OP	OP	OP	OP
Auto choke (gasoline models)	—	—	○	○	—	—
Multi-synchro transmission (Direct Drive models)	—	○	—	○	—	○
Cyclone air cleaner	○	○	○	○	○	○
Elevated air intake	○	○	○	○	○	○
Three-stages catalytic muffler	○	○	—	—	—	—
Black smoke eliminating equipment DPF	—	—	—	—	OP *2	OP *2
Engine full floating	○	○	○	○	○	○
Aluminum radiator	○	○	○	○	○	○
Anti-clogging radiator (R/CSO)	OP	OP	OP	OP	OP	OP
Radiator dust-proof net	OP	OP	OP	OP	OP	OP
Cyclone muffler	OP	OP	OP	OP	OP	OP
Speed limiter	OP	OP	—	—	OP *3	OP *3

○: Standard equipment OP : Optional equipment

: Pending

\*1:The traveling interlock system is not equipped on the direct drive (manual transmission) vehicle.

\*2:This is not available for 1.0 ton models.

\*3:This is only for electronic controlled vehicles.



## PNEUMATIC TIRE FORKLIFT

7000 KG CAPACITY LP DIESEL MODELS

THE HEAVY-DUTY FORKLIFT BUILT TO HANDLE TOUGH LOADS

# EXPECT PRODUCTIVITY.

EXPERIENCE ENHANCED PERFORMANCE WITH A POWERFUL TURBO-CHARGED ENGINE



#### Serious Power:

The FD70NM delivers excellent fuel efficiency with superior dependability. Its S6S-T engine offers high torque for heavy-duty performance – allowing it to tackle heavy loads up to 7000 kg. This turbocharged diesel engine is built to thrive in rigorous applications and features cold weather starting capabilities, for added reliability in extreme climates.

#### High Performance:

When you need power, you need it now. The FD70NM's transmission features a precise torque converter – allowing for controlled, powerful acceleration when driving up ramps with full loads or moving heavier pallets across rough terrains.

#### Durable Frame:

Rough applications require tough equipment. The FD70NM consists of a steel frame for strength and durability:

- More steel in the frame for added resilience
- Rigorous testing helped develop this rugged design by minimizing stress points in the frame

- Outstanding power and performance
- Powerful engine
- Durable steel frame for rugged applications
- Greater uptime, less maintenance

**The FD70NM delivers the power and performance that tough applications demand.**

#### Exceptional Performance, Exceptional Value:

Mitsubishi Forklift Trucks developed the FD70NM 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, the FD70NM is ready to work when you are.



#### Key applications:

- Lumber
- Stone and glass
- Fabricated metals
- Industrial machinery
- Building materials
- Garden supplies



#### Maintenance Made Simple:

Simplified maintenance means less downtime and more time on the job. Whether it's scheduled maintenance or a daily inspection, the FD70NM 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
- 500-hour service intervals

#### Hydrostatic Power Steering System:

The hydrostatic steering system of the FD70NM is directly connected to the steer axle at the rear of the truck. The flow of hydraulic oil that powers it allows for easy and smooth steering by the operator. It also prevents kickback to the steering wheel from the steer tires, as well as eliminating the need for mechanical linkage in the steering process, lowering the amount of maintenance required.



# THE COMFORT YOUR OPERATORS DESERVE.

COMBINED WITH THE CONTROL YOUR BUSINESS DEMANDS



## Front-End Attachments:

The FD70NM can be further customized to meet the demands of your business with optional front-end attachments, such as sideshifters or fork positioners. Ask your local Mitsubishi forklift truck dealer for more information.

## Invaluable standard features:

- Full-suspension vinyl seat for enhanced comfort
- LED / LCD display panel for operator awareness
- Integrated Presence System (IPS) for added security

## Intuitive Display Panel:

The standard LCD/LED display panel, featuring fluid level warnings, brake fluid level, fuel gauge and hour meter, quickly informs the operator of the current performance status of the forklift — for increased awareness during operation.



## Less Noise, Greater Comfort:

The FD70NM is built for added operator comfort. 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 FD70NM is equipped with a full-suspension vinyl seat, providing day-long comfort to operators of all sizes:

- Forward and backward adjustment up to 6.5"
- Suspension adjustment conforms to the operator
- Lower back lumbar adjustment
- Fold down pin allows for easy access to the engine compartment during daily checks and maintenance
- An optional cloth seat is also available for operators working long shifts or on rough surfaces

## Integrated Presence System (IPS):

The Integrated Presence System (IPS) 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, while increasing operator awareness.

## Flexible Cab Options To Meet Your Needs:

For harsh or demanding outdoor applications, an optional cab package can be added to the FD70NM for further protection.



Features	Option 1:	Option 2:	Option 3:
Front windshield	●	●	●
Roof	●	●	●
Back windshield		●	●
Steel doors			●

CHARACTERISTICS				FD70NM
1 Capacity at rated load center	lb	kg	15,500	7,000
2 Capacity at load center – distance	in	mm	24	600
3 Power – electric, diesel, gasoline, LP gas			diesel	
4 Tire type – cushion, pneumatic			pneumatic	
5 Wheels (x=driven) number front / rear			4x 2	
DIMENSIONS				
6 Maximum fork height (top of fork) <sup>[1]</sup>	in	mm	120.5	3,060
7 Free fork height <sup>[1]</sup>	in	mm	7.9	200
8 Forks – thickness x length x width <sup>[1]</sup>	in	mm	2.4 x 48 x 5.9	60 x 1,220 x 150
9 Fork spacing – out-to-out minimum / maximum	in	mm	11.8 / 63.0	300 / 1,600
10 Tilt – forward / backward	deg		6° / 12°	
11 Length to fork face	in	mm	141	3,580
12 Width with dual drive tires	in	mm	85.4	2,170
13 Height with lowered mast <sup>[1]</sup>	in	mm	101.5	2,570
14 Seat height	in	mm	62.7	1,592
15 Height to top of overhead guard	in	mm	103	2,610
16 Height with extended mast <sup>[1]</sup>	in	mm	168.5	4,277
17 Minimum outside turning radius	in	mm	130	3,310
18 Load moment constant	in	mm	23.0	585
19 Minimum aisle – 90° stack – zero clearance without load	in	mm	153	3,895
PERFORMANCE				
20 Travel speed loaded / empty	mph km/h		14.3 / 17.4	23.0 / 28.0
21 Lift speed loaded / empty	fpm m/s		84.5 / 92.5	0.43 / 0.47
22 Lowering speed loaded / empty	fpm m/s		98.4 / 98.4	0.50 / 0.50
23 Drawbar pull – loaded at 1 mph (1.6 km)	lb N		9,000	40,020
24 Drawbar pull – loaded at maximum	lb N		12,150	54,050
25 Gradeability – loaded at 1 mph (1.6 km)	%		26	
26 Gradeability – loaded at maximum	%		36	
WEIGHT				
27 Empty	lb kg		20,790	9,430
28 Axle load – with rated load front / rear	lb kg		32,750 / 3,540	14,830 / 1,600
29 Axle load – without load front / rear	lb kg		9,300 / 11,490	4,220 / 5,210
CHASSIS				
30 Tire size – front, standard duals	in		8.25-15-12PR	
31 Tire size – rear	in		8.25-15-12PR	
32 Wheelbase	in mm		90.6	2,300
33 Tread width – front, standard duals	in mm		65.0	1,650
34 Tread width – rear	in mm		65.0	1,650
35 Ground clearance – at lowest point at mast	in mm		6.7	170
36 Ground clearance – at center of wheelbase	in mm		10.4	263
37 Service brake			hydraulic with vacuum boost	
38 Parking brake			hand, mechanical	
POWERTRAIN				
39 Engine model			Mitsubishi S6S-T	
40 Continuous output S.A.E. gross	HP kW		93.9	70
	at r.p.m.		2,300	
42 Maximum torque S.A.E. gross	lb-ft N-m		214	290
	at r.p.m.		1,700	
44 Cylinder / displacement	cu in L		6 / 305	6 / 5.0
45 Transmission type			powershift	
46 Number of speeds forward / reverse			2 / 2	
47 Battery	volt		12	
48 Relief pressure for attachments	psi bar		2,770	191
49 Noise level – at operator's ear Leq	dB(A)		86.5	

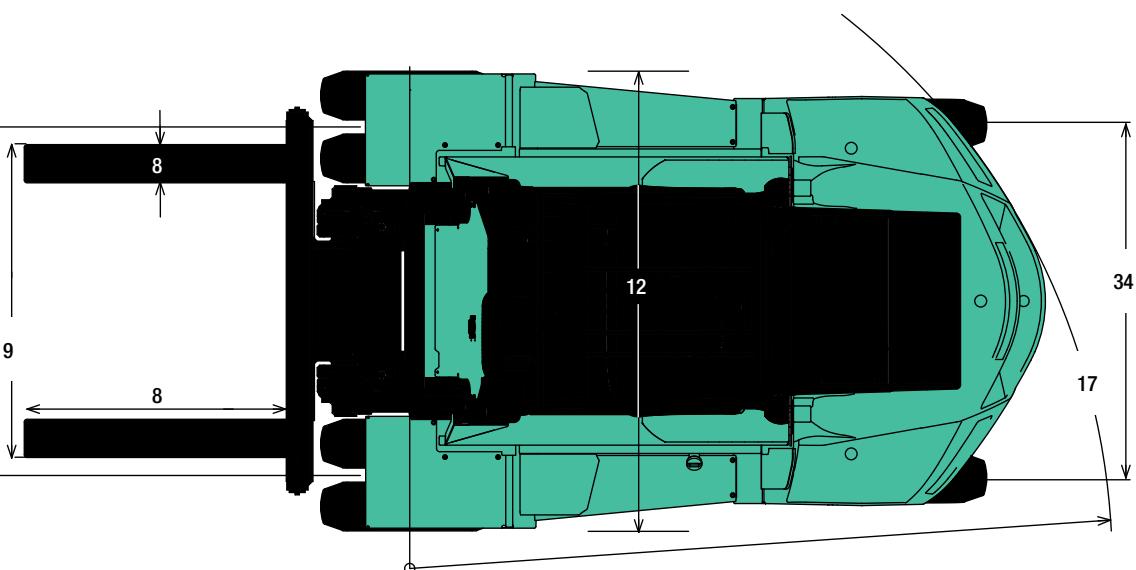
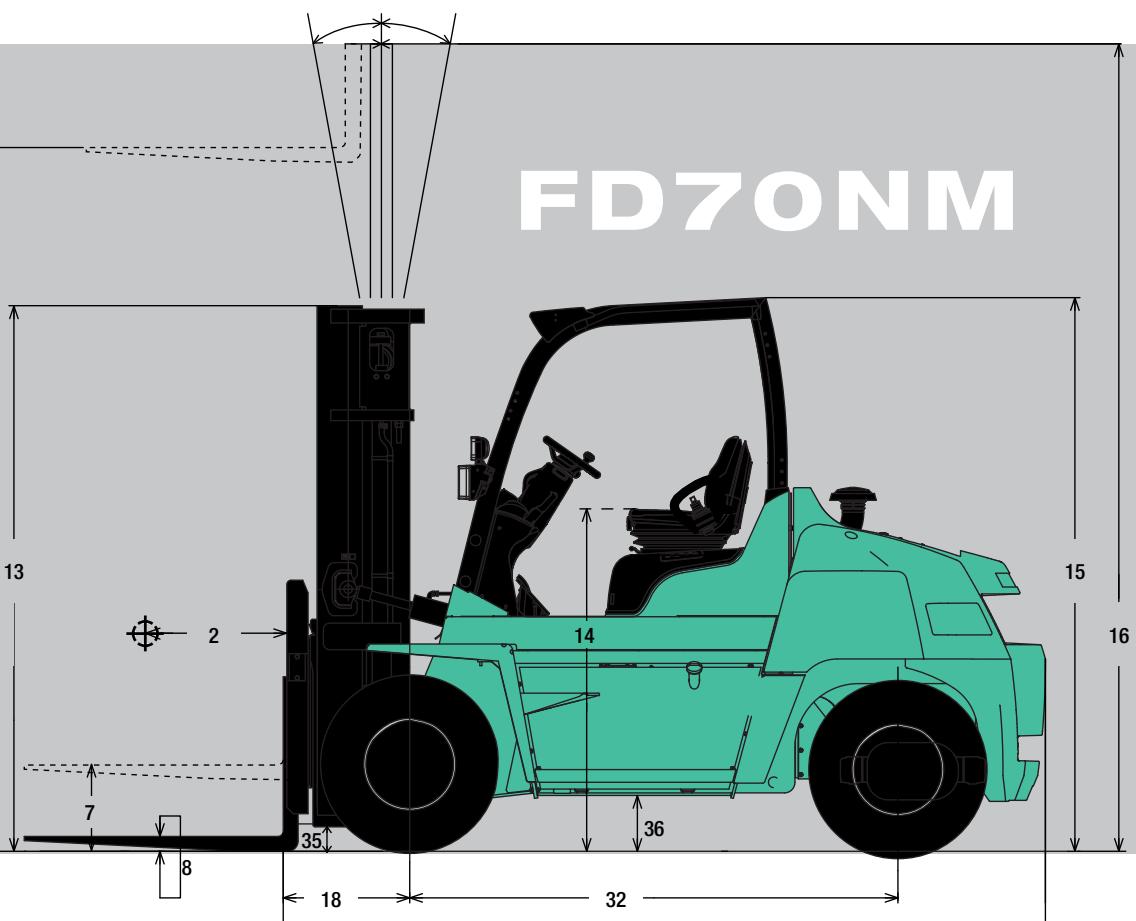
#### SAFETY STANDARDS

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.

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



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

# FD70NM

7000 KG CAPACITY PNEUMATIC TIRE FORKLIFT

## Exceptional Value

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

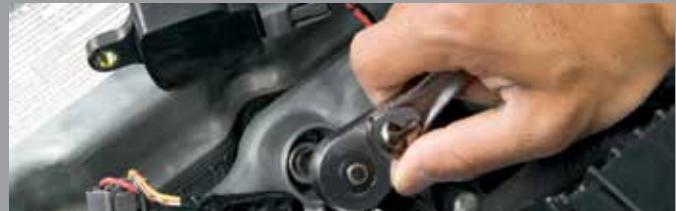
Mitsubishi Forklift Trucks offers several parts programs, all designed to bring you top performance and convenience for your material handling needs. Contact your local dealer to put our services to work for you.

### **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.



# GRENDIA

## MITSUBISHI FORKLIFT TRUCKS

1 ~ 3.5A ton



# New Logistics Standard



**GRENDAIA**  
**FGE20CNT**

Capacity: 2000kg at 500mm Load Center  
Overall length with 920mm forks = 3280mm



**GRENDAIA**  
**FD25NT**

Capacity: 2500kg at 500mm Load Center  
Overall length with 1070mm forks = 3625mm

What is the ideal forklift truck for drivers to operate?

How should forklifts respond to the ever increasing demands of development of information and distribution systems?

Mitsubishi's new generation "GRENDAIA" model is the answer to these questions.

The moment you drive it you will experience the excellent operator comfort and unmatched productivity.

Mitsubishi forklift trucks have a worldwide reputation to be friendly to the environment.

Equipped with a variety of advanced safety features, a new standard in materials handling is set.

# High Performance

Drive, turn, accelerate, lift and move. Excellent maneuverability.  
Power is at hand for performing in even the most severe conditions.



## Lift

Load handling performance  
The low center of gravity of the new frame ensures safe load handling and excellent residual capacities. Moreover, with or without load, the electronic controlled gasoline engine provides stable lifting speeds.

**Lift speed:**  
680mm/sec (with load)  
690mm/sec (without load)  
(FGE25ZN electronic controlled gasoline engine type)



\*Top-class lifting performance.  
All 2-stage masts lifting height up to 4m without loss of capacity.

## Drive

Driving performance  
The newly developed engine and transmission present top-class driving performance. The maneuverability, one of the most important features of a forklift, is now more precised than ever before.

**10m Acceleration:**  
3.1 seconds  
(FD25NT without load)



**12°Gradeability:**  
5.0km/h  
(FD25NT without load)



## Turn

Turning performance  
Full hydraulic power steering allows turning "on-the-spot". With full power available at all times this system realizes top-class turning ability, even in the most confined areas.

Previous Model  
1990mm  
(FG(D)15)



**Minimum turning radius:**  
FG(D)15N 1950mm  
FG(D)20CN 2020mm  
FG(D)25N 2230mm

## Friendly To The Environment

Friendly for the operator, friendly for the environment.

### EXHAUST EMISSION CONTROL

Electronic Controlled Gasoline Engine  
with 3-stage Catalytic Muffler.

**K15E, K21E, K25E**



Reduced by more than 90% compared with previous model. The electronic controlled engine is equipped with a 3-stage catalytic muffler. The result is not just lower exhaust emissions but also higher torque, more power and lower fuel consumption levels as never realized before.

Displacement: 2065cc  
Rated Output: 42kW(57ps)/2700rpm  
Maximum Torque: 160Nm(16.3kgm)/2000rpm

Swirl-Chamber Diesel Engine.

**S4Q2, S4S**



Reduced by 50% compared with previous model. Major targets during the development of this new model were to limit the pollution caused by exhaust emissions and to reduce the noise levels of the engines. Mitsubishi has succeeded in reaching these targets for the entire range.

Displacement: 3331cc  
Rated Output: 44kW(60ps)/2300rpm  
Maximum Torque: 183Nm(18.7kgm)/1800rpm

### Passed Euro Class II Regulation of Exhaust Emission Value (Worldwide)

The S4Q2 and S4S diesel engines do not only comply with the European Class II regulation of exhaust emission values of the Comite Europeen de Normalisation (CEN), which is by far the strictest, but also the U.S.A. Tier-2 regulation of exhaust emission value of Environmental Protection Agency (EPA).

# Comfortable Operation

A comfortable ride similar to today's passenger cars.  
Automotive type features integrated in the dashboard.  
Comfortable compartment for the operator to work in.



## Entire Power Line Full Floating Realizing Low Vibration Levels

The principle of a full floating power train is proven technology in the automotive industry. Mitsubishi was among the first to introduce this technology on forklift trucks and has fine-tuned the system on this new model. The results are even lower vibration levels, like in your car, providing a comfortable working position for the driver.

## Low Noise Levels

The noise that is coming directly from the exclusively developed engine and transmission is reduced tremendously. Improving the airflow to the engine and the careful choice of sound absorbing materials inside the engine compartment has further reduced noise levels. The reduction of noise both inside the compartment as well as the noise emitted to the surrounding ensures a quieter working environment.

Noise Level At Operator's Ear

**77.5dB**

(FD25NT with Sound Suppression Kit option)



Quality foam inside the engine cover as noise absorber.

## Excellent Forward Visibility

A wide and unobstructed forward view is the trademark of Mitsubishi. The rigid structure of the mast and smart layout of the cylinders improve fast and safe working. Because of the low dash the visibility at the fork tip is excellent.



## Rear Visibility

The new design of the counterweight with the strong wedge shape provides a clear full view of the rear while driving backwards.



## Full Suspension Seat With Hip Restraint

The new machine is equipped with a new type of seat providing improved seating stability, more comfort while driving and easier on and off access. With the backrest reclining function, the weight-adjust system and its capability to slide forth and back, every operator can find a comfortable position.

- 20° backrest recline adjustment in 11 steps.
- Weight adjustment by turn knob
- 150mm horizontal slide travel adjustment.
- Full suspension
- Document pouch
- Seatbelt with warning indicator



## Wide And Open Floor Area

As the height, angle and operating force of the pedals are improved Mitsubishi has accomplished easy operation for all drivers. As the steering valve is integrated in the steering column, the steering rod in the floor area is eliminated. The tilt cylinders have also been appropriately arranged, allowing wider floor space while maintaining rigidity.



## Soft Landing

When the forks are lowered and approach ground level, the lowering speed is slowed down automatically. The load is protected from the shock of hitting the ground.



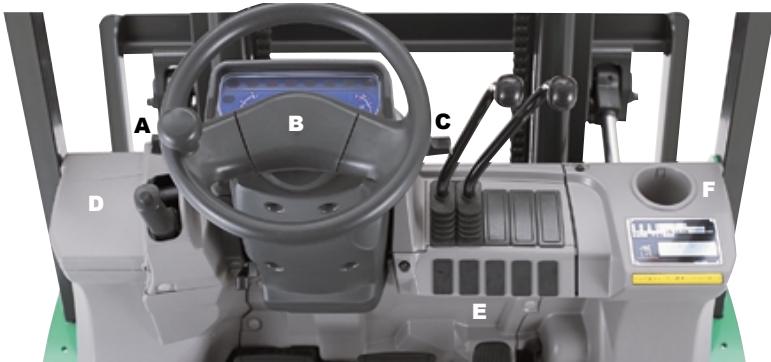
## ALS\* option (Mast Vertical System)

When the operator tilts the mast forward without load and simultaneously pushes the ALS button, the mast stops in the vertical position, consequently placing the forks horizontally.



# Easy Operation

New and excellent driver's compartment provides an unobstructed view in all directions. The ease in operation substantially improves efficiency.



**Electric FNR Lever**  
(Automatic Transmission Models)

The FNR lever is easily controlled with a fingertip. It is conveniently placed and needs no extra effort in reaching.



**Power Steering With 100% Standstill Steering**

Full hydraulic power steering with 100% standstill steering reduces the steering force substantially. With steering synchronizer, the steering angle of the rear tires always corresponds with the position of the steer knob on the steering wheel, leading to safer and more comfortable steering. **Steering operating force: Reduced by 20%** (compared with the previous model)



**Tiltable Steering Column**

The steering column can be fixed in every possible position within the tilt range. Tilt position memory system, which remembers operator's preferred tilt, is equipped.



**Multi-synchro Transmission**  
(Manual Transmission Models)

Thanks to the incorporation of a multi-synchro transmission, the operating force has been reduced, making shifting a lot easier.



**Switch Panel**  
On the right side of the dash, space is reserved for switches of optional functions.



**Cup Holder**  
An automotive type cup holder is integrated in the dash area.



**Transparent Roof**  
Removable roof with rain gutter is available as an option.

# Active Safety

Mitsubishi's new forklift features a safety system that actively reduces the risk of accidents.

## Instrument Panel

A large display is centrally located, behind the steering wheel within line of sight of the operator. The combination of the new LCD monitor, gauges and alarm lights provides all information necessary for the operator and service engineer. If a breakdown occurs, the self-diagnostic system shows an error code on the LCD display identifying the cause. The new LAN:CAN-bus system has created a leading-edge IT feature.



### Park Brake Indicator

When the park brake lever is applied, a park brake indicator on the display lights up. If the park brake is released and the engine is not running, an alarm buzzer goes off.



### Seatbelt Warning Indicator

A warning lamp on the display lights up when the seat-belt is not used while seated, just like in passenger cars.



### Multi- purpose Indicator

When there is a minor accident, the multi purpose indicator lights up. Mitsubishi's new model is equipped with a monitoring system utilizing the in-vehicle LAN functionality.

## Mast and Traveling Interlock System

Mitsubishi seats are equipped with a unique interlock switch. When the operator leaves the seat, this seat-switch is activated and the operation of the mast and shifting transmission of the vehicle (automatic transmission type) will be locked. This is the safety system of the next generation of forklifts and gained from Mitsubishi's experience in the forklift industry over the past 10 years.



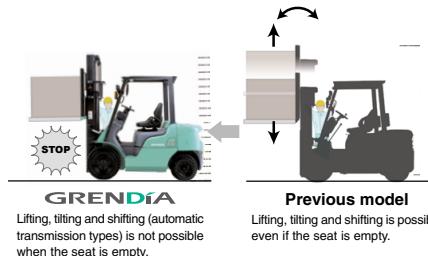
### Neutral Indicator

The neutral indicator lights up if the shift lever is set to neutral when the operator is seated. If the seat is empty, the neutral indicator blinks to warn that the forward/reverse function is interlocked.  
(Auto transmission models only)



### Mast Interlock Indicator

The mast interlock indicator lights up when the seat is empty to indicate that the mast cannot be activated.



## Neutral Safety Start System

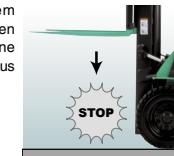
The FNR lever has to be in Neutral position before the engine can be started. This prevents the unexpected "jack-rabbit" start.

## Drum Brakes Bring Reliable Braking Power

Along with the improvement of the engine performance, the brake performance is improved. The braking response is drastically improved by increasing the rigidity and capacity of the brake drum and brake shoe. A stable brake performance is realized at any situation.

## Lift Lock System

Mitsubishi's new Lift Lock System prevents the mast from lowering when the lift lever is operated and the engine is off. This prevents potentially dangerous situations.



## High Mounted Rear Combination Lamp

The rear combination lamp is mounted on the upper rear cross bar of the head guard for improved visibility by surrounding workers or other operators.



## Automatic Response To Engine Breakdown (Electronic Controlled Gasoline engine)

The engine revolutions are automatically controlled when the engine coolant temperature is getting too hot or the battery voltage becomes low. This is possible due to the combination of in-vehicle LAN:CAN-bus and the electronic controlled gasoline engine.



## Rigid Frame With Low Center Of Gravity

The completely new designed frame withstands the most severe and harsh conditions.

# Easy Maintenance

Durable components to increase reliability and service intervals.  
All items that require daily inspection are located within easy reach.



### Removable Side Cover

The removable side cover and wide opening range of the engine cover provides unobstructed access to the engine compartment.



### Easy Replacement Of Air Filters

Convenient arrangement of the air cleaner allows easy replacement of its filter.



### Efficient Layout

The fuse box, relays and battery are clustered in one location. This layout provides easier inspection and maintenance.

# Options

## MAST VARIATIONS

Various masts with wide variations are available.  
Select the type appropriate for your working place and operation.

- 2-stage mast • 2-stage full-free mast • 3-stage full-free mast

## ■The "Green" Truck, Caring For The Environment

### LPG Engine

Forklifts with LPG engines are friendly to the environment and LPG models benefit from the low fuel costs.

### Black Smoke Reducing DPF System

The built-in ceramic filter in the muffler of the diesel models collects all black smoke. The collected soot is burnt by a built-in heater in the muffler and the filter is recovered.



The recovering unit is located within the right step.



The monitor of the DPF muffler indicates the clogging situation of the filter and recovering time.



### ● LPG Tank Swing Bracket

This tank bracket facilitates replacement of LPG tanks.

- This means no lifting of the bottle over the counterweight.
- Replacing the gas bottle can be done within the vehicle width. The operator in narrow aisles is thus possible.



### Sound Suppression Kit

To have even lower noise levels, a belly plate with sound absorption material, an additional intake silencer and an insulated radiator cover can be ordered as a kit.

### Panel Cabin

A panel cabin can be mounted on the standard overhead guard.

## ATTACHMENT

For faster and more efficient operations, various attachments are available.



● Side shifter



● Hinged fork



● Fork positioner



● Rotating fork



● Rotating roll clamp



● Load stabilizer



● Bale clamp

● Others: Attachments meeting your specific requirements are available.  
Please feel free to contact your local dealer.

## Equipments At-A-Glance

	Electronic Controlled Gasoline Engine		Gasoline Engine		Diesel Engine	
	Torque Converter	Direct Drive	Torque Converter	Direct Drive	Torque Converter	Direct Drive
Steering with tilt position memory system	○	○	○	○	○	○
Full hydraulic steering with Steering Synchronizer	○	○	○	○	○	○
Combination switch with auto return indicator	○	○	○	○	○	○
Electric automatic FNR shift lever	○	—	○	—	○	—
Neutral safety start system	○	○	○	○	○	○
Suspension seat with hip restraint feature	○	○	○	○	○	○
Mast and traveling interlock system	○	○ *1	○	○ *1	○	○ *1
Cup holder	○	○	○	○	○	○
Double action parking brake	○	○	○	○	○	○
Anti-restart lock	○	○	○	○	○	○
Open step	○	○	○	○	○	○
Inching pedal	○	—	○	—	○	—
Floor mat	○	○	○	○	○	○
Speed meter	OP	OP	OP	OP	OP	OP
Foot heater	OP	OP	OP	OP	OP	OP
Water temperature	○	○	○	○	○	○
Fuel meter	○	○	○	○	○	○
LCD hour meter	○	○	○	○	○	○
Brake liquid warning lamp	OP	OP	OP	OP	OP	OP
Engine oil pressure warning lamp	○	○	○	○	○	○
Charge lamp	○	○	○	○	○	○
Diesel vehicle glow pilot lamp	—	—	—	—	○	○
Diesel vehicle fuel filter drain warning lamp	—	—	—	—	○	○
Seatbelt indicator	○	○	○	○	○	○
Neutral indicator	○	—	○	—	○	—
Parking indicator	○	○	○	○	○	○
Mast interlock indicator	○	○	○	○	○	○
Error code indicate at the breakdown	○	○	○	○	○	○
Air cleaner dust indicator lamp + Radiator coolant level warning lamp	OP	OP	OP	OP	OP	OP
Torque converter oil temperature warning lamp	OP	OP	OP	OP	OP	OP
Rear-view mirror	○	○	○	○	○	○
Back-up buzzer	○	○	○	○	○	○
Halogen front headlight	○	○	○	○	○	○
Front indicator light	○	○	○	○	○	○
High mounted rear combination lamp	○	○	○	○	○	○
Assist grip	○	○	○	○	○	○
Engine cover with sound insulator	○	○	○	○	○	○
Engine side cover with sound insulator	○	○	○	○	○	○
Transparent roof	OP	OP	OP	OP	OP	OP
Revolving Lamp	OP	OP	OP	OP	OP	OP
Front Working Lamp	OP	OP	OP	OP	OP	OP
Rear Working Lamp	OP	OP	OP	OP	OP	OP
Sound Suppression Kit	OP	OP	OP	OP	OP	OP
Front glass	OP	OP	OP	OP	OP	OP
Panel cabin	OP	OP	OP	OP	OP	OP
Soft landing lift cylinder (2SP)	○	○	○	○	○	○
Lift lock	○	○	○	○	○	○
ALS (Automatic Leveling System)	OP	OP	OP	OP	OP	OP
Auto choke (gasoline models)	—	—	○	○	—	—
Multi-synchro transmission (Direct Drive models)	—	○	—	○	—	○
Cyclone air cleaner	○	○	○	○	○	○
Elevated air intake	○	○	○	○	○	○
Three-stages catalytic muffler	○	○	—	—	—	—
Black smoke eliminating equipment DPF	—	—	—	—	OP *2	OP *2
Engine full floating	○	○	○	○	○	○
Aluminum radiator	○	○	○	○	○	○
Anti-clogging radiator (R/CSO)	OP	OP	OP	OP	OP	OP
Radiator dust-proof net	OP	OP	OP	OP	OP	OP
Cyclone muffler	OP	OP	OP	OP	OP	OP
Speed limiter	OP	OP	—	—	OP *3	OP *3

○: Standard equipment OP : Optional equipment

: Pending

\*1:The traveling interlock system is not equipped on the direct drive (manual transmission) vehicle.

\*2:This is not available for 1.0 ton models.

\*3:This is only for electronic controlled vehicles.

# FORKLIFT TCM 15 TON



# FORKLIFT TCM 15 TON





## PNEUMATIC TIRE FORKLIFT

7000 KG CAPACITY LP DIESEL MODELS

THE HEAVY-DUTY FORKLIFT BUILT TO HANDLE TOUGH LOADS

# EXPECT PRODUCTIVITY.

EXPERIENCE ENHANCED PERFORMANCE WITH A POWERFUL TURBO-CHARGED ENGINE



#### Serious Power:

The FD70NM delivers excellent fuel efficiency with superior dependability. Its S6S-T engine offers high torque for heavy-duty performance – allowing it to tackle heavy loads up to 7000 kg. This turbocharged diesel engine is built to thrive in rigorous applications and features cold weather starting capabilities, for added reliability in extreme climates.

#### High Performance:

When you need power, you need it now. The FD70NM's transmission features a precise torque converter – allowing for controlled, powerful acceleration when driving up ramps with full loads or moving heavier pallets across rough terrains.

#### Durable Frame:

Rough applications require tough equipment. The FD70NM consists of a steel frame for strength and durability:

- More steel in the frame for added resilience
- Rigorous testing helped develop this rugged design by minimizing stress points in the frame

- Outstanding power and performance
- Powerful engine
- Durable steel frame for rugged applications
- Greater uptime, less maintenance

**The FD70NM delivers the power and performance that tough applications demand.**

#### Exceptional Performance, Exceptional Value:

Mitsubishi Forklift Trucks developed the FD70NM 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, the FD70NM is ready to work when you are.



#### Key applications:

- Lumber
- Stone and glass
- Fabricated metals
- Industrial machinery
- Building materials
- Garden supplies



#### Maintenance Made Simple:

Simplified maintenance means less downtime and more time on the job. Whether it's scheduled maintenance or a daily inspection, the FD70NM 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
- 500-hour service intervals

#### Hydrostatic Power Steering System:

The hydrostatic steering system of the FD70NM is directly connected to the steer axle at the rear of the truck. The flow of hydraulic oil that powers it allows for easy and smooth steering by the operator. It also prevents kickback to the steering wheel from the steer tires, as well as eliminating the need for mechanical linkage in the steering process, lowering the amount of maintenance required.



# THE COMFORT YOUR OPERATORS DESERVE.

COMBINED WITH THE CONTROL YOUR BUSINESS DEMANDS



## Front-End Attachments:

The FD70NM can be further customized to meet the demands of your business with optional front-end attachments, such as sideshifters or fork positioners. Ask your local Mitsubishi forklift truck dealer for more information.

## Invaluable standard features:

- Full-suspension vinyl seat for enhanced comfort
- LED / LCD display panel for operator awareness
- Integrated Presence System (IPS) for added security

## Intuitive Display Panel:

The standard LCD/LED display panel, featuring fluid level warnings, brake fluid level, fuel gauge and hour meter, quickly informs the operator of the current performance status of the forklift — for increased awareness during operation.



## Less Noise, Greater Comfort:

The FD70NM is built for added operator comfort. 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 FD70NM is equipped with a full-suspension vinyl seat, providing day-long comfort to operators of all sizes:

- Forward and backward adjustment up to 6.5"
- Suspension adjustment conforms to the operator
- Lower back lumbar adjustment
- Fold down pin allows for easy access to the engine compartment during daily checks and maintenance
- An optional cloth seat is also available for operators working long shifts or on rough surfaces

## Integrated Presence System (IPS):

The Integrated Presence System (IPS) 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, while increasing operator awareness.

## Flexible Cab Options To Meet Your Needs:

For harsh or demanding outdoor applications, an optional cab package can be added to the FD70NM for further protection.



Features	Option 1:	Option 2:	Option 3:
Front windshield	●	●	●
Roof	●	●	●
Back windshield		●	●
Steel doors			●

CHARACTERISTICS				FD70NM
1 Capacity at rated load center	lb	kg	15,500	7,000
2 Capacity at load center – distance	in	mm	24	600
3 Power – electric, diesel, gasoline, LP gas			diesel	
4 Tire type – cushion, pneumatic			pneumatic	
5 Wheels (x=driven) number front / rear			4x 2	
DIMENSIONS				
6 Maximum fork height (top of fork) <sup>[1]</sup>	in	mm	120.5	3,060
7 Free fork height <sup>[1]</sup>	in	mm	7.9	200
8 Forks – thickness x length x width <sup>[1]</sup>	in	mm	2.4 x 48 x 5.9	60 x 1,220 x 150
9 Fork spacing – out-to-out minimum / maximum	in	mm	11.8 / 63.0	300 / 1,600
10 Tilt – forward / backward	deg		6° / 12°	
11 Length to fork face	in	mm	141	3,580
12 Width with dual drive tires	in	mm	85.4	2,170
13 Height with lowered mast <sup>[1]</sup>	in	mm	101.5	2,570
14 Seat height	in	mm	62.7	1,592
15 Height to top of overhead guard	in	mm	103	2,610
16 Height with extended mast <sup>[1]</sup>	in	mm	168.5	4,277
17 Minimum outside turning radius	in	mm	130	3,310
18 Load moment constant	in	mm	23.0	585
19 Minimum aisle – 90° stack – zero clearance without load	in	mm	153	3,895
PERFORMANCE				
20 Travel speed loaded / empty	mph km/h		14.3 / 17.4	23.0 / 28.0
21 Lift speed loaded / empty	fpm m/s		84.5 / 92.5	0.43 / 0.47
22 Lowering speed loaded / empty	fpm m/s		98.4 / 98.4	0.50 / 0.50
23 Drawbar pull – loaded at 1 mph (1.6 km)	lb N		9,000	40,020
24 Drawbar pull – loaded at maximum	lb N		12,150	54,050
25 Gradeability – loaded at 1 mph (1.6 km)	%		26	
26 Gradeability – loaded at maximum	%		36	
WEIGHT				
27 Empty	lb kg		20,790	9,430
28 Axle load – with rated load front / rear	lb kg		32,750 / 3,540	14,830 / 1,600
29 Axle load – without load front / rear	lb kg		9,300 / 11,490	4,220 / 5,210
CHASSIS				
30 Tire size – front, standard duals	in		8.25-15-12PR	
31 Tire size – rear	in		8.25-15-12PR	
32 Wheelbase	in mm		90.6	2,300
33 Tread width – front, standard duals	in mm		65.0	1,650
34 Tread width – rear	in mm		65.0	1,650
35 Ground clearance – at lowest point at mast	in mm		6.7	170
36 Ground clearance – at center of wheelbase	in mm		10.4	263
37 Service brake			hydraulic with vacuum boost	
38 Parking brake			hand, mechanical	
POWERTRAIN				
39 Engine model			Mitsubishi S6S-T	
40 Continuous output S.A.E. gross	HP kW		93.9	70
	at r.p.m.		2,300	
42 Maximum torque S.A.E. gross	lb-ft N-m		214	290
	at r.p.m.		1,700	
44 Cylinder / displacement	cu in L		6 / 305	6 / 5.0
45 Transmission type			powershift	
46 Number of speeds forward / reverse			2 / 2	
47 Battery	volt		12	
48 Relief pressure for attachments	psi bar		2,770	191
49 Noise level – at operator's ear Leq	dB(A)		86.5	

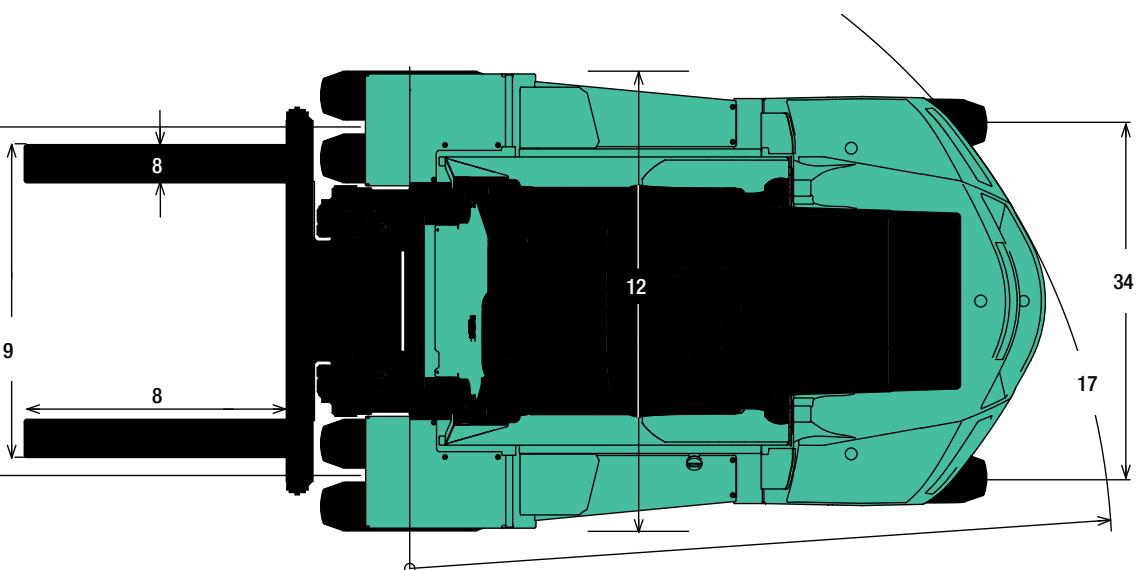
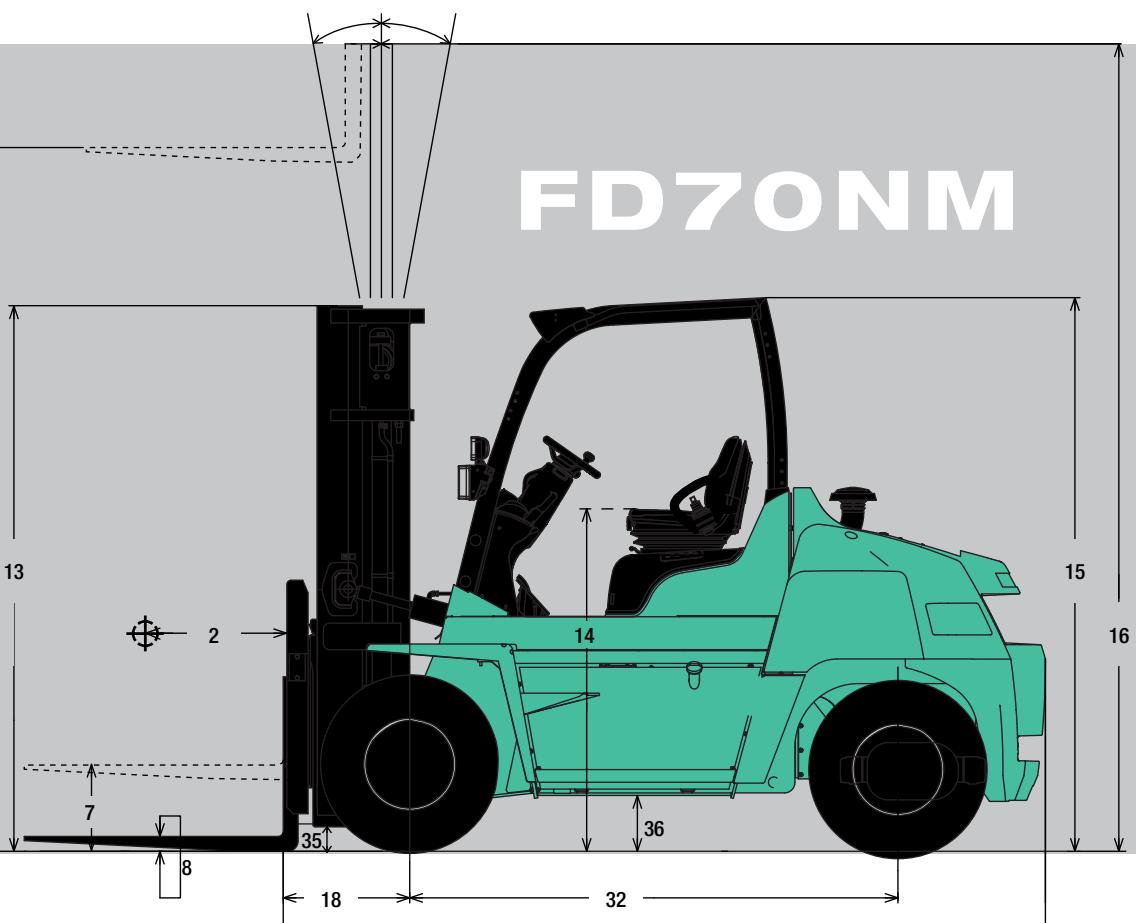
#### SAFETY STANDARDS

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.

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



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

# FD70NM

7000 KG CAPACITY PNEUMATIC TIRE FORKLIFT

## 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. Contact your local dealer to put our services to work for you.

### **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.



# GRENDIA

## MITSUBISHI FORKLIFT TRUCKS

1 ~ 3.5A ton



# New Logistics Standard



**GRENDAIA**  
**FGE20CNT**

Capacity: 2000kg at 500mm Load Center  
Overall length with 920mm forks = 3280mm



**GRENDAIA**  
**FD25NT**

Capacity: 2500kg at 500mm Load Center  
Overall length with 1070mm forks = 3625mm

What is the ideal forklift truck for drivers to operate?

How should forklifts respond to the ever increasing demands of development of information and distribution systems?

Mitsubishi's new generation "GRENDAIA" model is the answer to these questions.

The moment you drive it you will experience the excellent operator comfort and unmatched productivity.

Mitsubishi forklift trucks have a worldwide reputation to be friendly to the environment.

Equipped with a variety of advanced safety features, a new standard in materials handling is set.

# High Performance

Drive, turn, accelerate, lift and move. Excellent maneuverability.  
Power is at hand for performing in even the most severe conditions.



## Lift

Load handling performance  
The low center of gravity of the new frame ensures safe load handling and excellent residual capacities. Moreover, with or without load, the electronic controlled gasoline engine provides stable lifting speeds.

**Lift speed:**  
680mm/sec (with load)  
690mm/sec (without load)  
(FGE25ZN electronic controlled gasoline engine type)



\*Top-class lifting performance.  
All 2-stage masts lifting height up to 4m without loss of capacity.

## Drive

Driving performance  
The newly developed engine and transmission present top-class driving performance. The maneuverability, one of the most important features of a forklift, is now more precised than ever before.

**10m Acceleration:**  
3.1 seconds  
(FD25NT without load)



**12°Gradeability:**  
5.0km/h  
(FD25NT without load)



## Turn

Turning performance  
Full hydraulic power steering allows turning "on-the-spot". With full power available at all times this system realizes top-class turning ability, even in the most confined areas.

Previous Model  
1990mm  
(FG(D)15)



**Minimum turning radius:**  
FG(D)15N 1950mm  
FG(D)20CN 2020mm  
FG(D)25N 2230mm

## Friendly To The Environment

Friendly for the operator, friendly for the environment.

### EXHAUST EMISSION CONTROL

Electronic Controlled Gasoline Engine  
with 3-stage Catalytic Muffler.

**K15E, K21E, K25E**



Reduced by more than 90% compared with previous model. The electronic controlled engine is equipped with a 3-stage catalytic muffler. The result is not just lower exhaust emissions but also higher torque, more power and lower fuel consumption levels as never realized before.

Displacement: 2065cc  
Rated Output: 42kW(57ps)/2700rpm  
Maximum Torque: 160Nm(16.3kgm)/2000rpm

**S4Q2, S4S**



Reduced by 50% compared with previous model. Major targets during the development of this new model were to limit the pollution caused by exhaust emissions and to reduce the noise levels of the engines. Mitsubishi has succeeded in reaching these targets for the entire range.

Displacement: 3331cc  
Rated Output: 44kW(60ps)/2300rpm  
Maximum Torque: 183Nm(18.7kgm)/1800rpm

### Passed Euro Class II Regulation of Exhaust Emission Value (Worldwide)

The S4Q2 and S4S diesel engines do not only comply with the European Class II regulation of exhaust emission values of the Comite Europeen de Normalisation (CEN), which is by far the strictest, but also the U.S.A. Tier-2 regulation of exhaust emission value of Environmental Protection Agency (EPA).

# Comfortable Operation

A comfortable ride similar to today's passenger cars.  
Automotive type features integrated in the dashboard.  
Comfortable compartment for the operator to work in.



## Entire Power Line Full Floating Realizing Low Vibration Levels

The principle of a full floating power train is proven technology in the automotive industry. Mitsubishi was among the first to introduce this technology on forklift trucks and has fine-tuned the system on this new model. The results are even lower vibration levels, like in your car, providing a comfortable working position for the driver.

## Low Noise Levels

The noise that is coming directly from the exclusively developed engine and transmission is reduced tremendously. Improving the airflow to the engine and the careful choice of sound absorbing materials inside the engine compartment has further reduced noise levels. The reduction of noise both inside the compartment as well as the noise emitted to the surrounding ensures a quieter working environment.

Noise Level At Operator's Ear

**77.5dB**

(FD25NT with Sound Suppression Kit option)



Quality foam inside the engine cover as noise absorber.

## Excellent Forward Visibility

A wide and unobstructed forward view is the trademark of Mitsubishi. The rigid structure of the mast and smart layout of the cylinders improve fast and safe working. Because of the low dash the visibility at the fork tip is excellent.



## Rear Visibility

The new design of the counterweight with the strong wedge shape provides a clear full view of the rear while driving backwards.



## Full Suspension Seat With Hip Restraint

The new machine is equipped with a new type of seat providing improved seating stability, more comfort while driving and easier on and off access. With the backrest reclining function, the weight-adjust system and its capability to slide forth and back, every operator can find a comfortable position.

- 20° backrest recline adjustment in 11 steps.
- Weight adjustment by turn knob
- 150mm horizontal slide travel adjustment.
- Full suspension
- Document pouch
- Seatbelt with warning indicator



## Wide And Open Floor Area

As the height, angle and operating force of the pedals are improved Mitsubishi has accomplished easy operation for all drivers. As the steering valve is integrated in the steering column, the steering rod in the floor area is eliminated. The tilt cylinders have also been appropriately arranged, allowing wider floor space while maintaining rigidity.



## Soft Landing

When the forks are lowered and approach ground level, the lowering speed is slowed down automatically. The load is protected from the shock of hitting the ground.



## ALS\* option (Mast Vertical System)

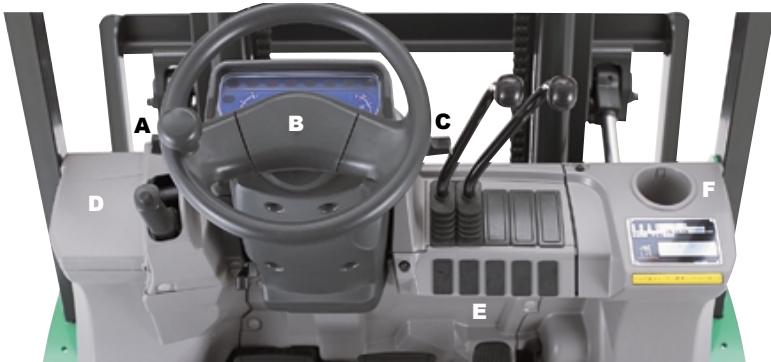
When the operator tilts the mast forward without load and simultaneously pushes the ALS button, the mast stops in the vertical position, consequently placing the forks horizontally.

\*Automatic Leveling System



# Easy Operation

New and excellent driver's compartment provides an unobstructed view in all directions. The ease in operation substantially improves efficiency.



**Electric FNR Lever**  
(Automatic Transmission Models)

The FNR lever is easily controlled with a fingertip. It is conveniently placed and needs no extra effort in reaching.



**Power Steering With 100% Standstill Steering**

Full hydraulic power steering with 100% standstill steering reduces the steering force substantially. With steering synchronizer, the steering angle of the rear tires always corresponds with the position of the steer knob on the steering wheel, leading to safer and more comfortable steering. **Steering operating force: Reduced by 20%** (compared with the previous model)



**Tiltable Steering Column**

The steering column can be fixed in every possible position within the tilt range. Tilt position memory system, which remembers operator's preferred tilt, is equipped.



**Switch Panel**  
On the right side of the dash, space is reserved for switches of optional functions.



**Multi-synchro Transmission**  
(Manual Transmission Models)



**Transparent Roof**  
Removable roof with rain gutter is available as an option.



**Cup Holder**  
An automotive type cup holder is integrated in the dash area.

# Active Safety

Mitsubishi's new forklift features a safety system that actively reduces the risk of accidents.

## Instrument Panel

A large display is centrally located, behind the steering wheel within line of sight of the operator. The combination of the new LCD monitor, gauges and alarm lights provides all information necessary for the operator and service engineer. If a breakdown occurs, the self-diagnostic system shows an error code on the LCD display identifying the cause. The new LAN:CAN-bus system has created a leading-edge IT feature.



### Park Brake Indicator

When the park brake lever is applied, a park brake indicator on the display lights up. If the park brake is released and the engine is not running, an alarm buzzer goes off.



### Seatbelt Warning Indicator

A warning lamp on the display lights up when the seat-belt is not used while seated, just like in passenger cars.



### Multi-purpose Indicator

When there is a minor accident, the multi-purpose indicator lights up. Mitsubishi's new model is equipped with a monitoring system utilizing the in-vehicle LAN functionality.

## Mast and Traveling Interlock System

Mitsubishi seats are equipped with a unique interlock switch. When the operator leaves the seat, this seat-switch is activated and the operation of the mast and shifting transmission of the vehicle (automatic transmission type) will be locked. This is the safety system of the next generation of forklifts and gained from Mitsubishi's experience in the forklift industry over the past 10 years.



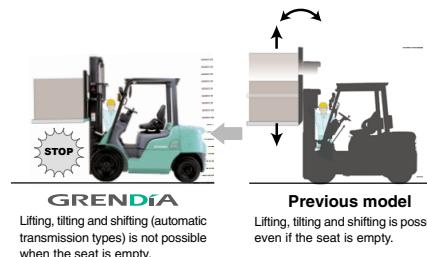
### Neutral Indicator

The neutral indicator lights up if the shift lever is set to neutral when the operator is seated. If the seat is empty, the neutral indicator blinks to warn that the forward/reverse function is interlocked. (Auto transmission models only)



### Mast Interlock Indicator

The mast interlock indicator lights up when the seat is empty to indicate that the mast cannot be activated.



## Neutral Safety Start System

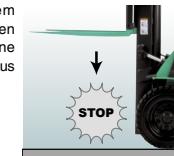
The FNR lever has to be in Neutral position before the engine can be started. This prevents the unexpected "jack-rabbit" start.

## Drum Brakes Bring Reliable Braking Power

Along with the improvement of the engine performance, the brake performance is improved. The braking response is drastically improved by increasing the rigidity and capacity of the brake drum and brake shoe. A stable brake performance is realized at any situation.

## Lift Lock System

Mitsubishi's new Lift Lock System prevents the mast from lowering when the lift lever is operated and the engine is off. This prevents potentially dangerous situations.



## High Mounted Rear Combination Lamp

The rear combination lamp is mounted on the upper rear cross bar of the head guard for improved visibility by surrounding workers or other operators.



## Automatic Response To Engine Breakdown (Electronic Controlled Gasoline engine)

The engine revolutions are automatically controlled when the engine coolant temperature is getting too hot or the battery voltage becomes low. This is possible due to the combination of in-vehicle LAN:CAN-bus and the electronic controlled gasoline engine.



## Rigid Frame With Low Center Of Gravity

The completely new designed frame withstands the most severe and harsh conditions.

# Easy Maintenance

Durable components to increase reliability and service intervals.  
All items that require daily inspection are located within easy reach.



### Removable Side Cover

The removable side cover and wide opening range of the engine cover provides unobstructed access to the engine compartment.



### Easy Replacement Of Air Filters

Convenient arrangement of the air cleaner allows easy replacement of its filter.



### Efficient Layout

The fuse box, relays and battery are clustered in one location. This layout provides easier inspection and maintenance.

# Options

## MAST VARIATIONS

Various masts with wide variations are available.  
Select the type appropriate for your working place and operation.

- 2-stage mast • 2-stage full-free mast • 3-stage full-free mast

## ■The "Green" Truck, Caring For The Environment

### LPG Engine

Forklifts with LPG engines are friendly to the environment and LPG models benefit from the low fuel costs.

### Black Smoke Reducing DPF System

The built-in ceramic filter in the muffler of the diesel models collects all black smoke. The collected soot is burnt by a built-in heater in the muffler and the filter is recovered.



The recovering unit is located within the right step.



The monitor of the DPF muffler indicates the clogging situation of the filter and recovering time.



### ● LPG Tank Swing Bracket

This tank bracket facilitates replacement of LPG tanks.

- This means no lifting of the bottle over the counterweight.
- Replacing the gas bottle can be done within the vehicle width. The operator in narrow aisles is thus possible.



### Sound Suppression Kit

To have even lower noise levels, a belly plate with sound absorption material, an additional intake silencer and an insulated radiator cover can be ordered as a kit.

### Panel Cabin

A panel cabin can be mounted on the standard overhead guard.

## ATTACHMENT

For faster and more efficient operations, various attachments are available.



● Side shifter



● Hinged fork



● Fork positioner



● Rotating fork



● Rotating roll clamp



● Load stabilizer



● Bale clamp

● Others: Attachments meeting your specific requirements are available.  
Please feel free to contact your local dealer.

## Equipments At-A-Glance

	Electronic Controlled Gasoline Engine		Gasoline Engine		Diesel Engine	
	Torque Converter	Direct Drive	Torque Converter	Direct Drive	Torque Converter	Direct Drive
Steering with tilt position memory system	○	○	○	○	○	○
Full hydraulic steering with Steering Synchronizer	○	○	○	○	○	○
Combination switch with auto return indicator	○	○	○	○	○	○
Electric automatic FNR shift lever	○	—	○	—	○	—
Neutral safety start system	○	○	○	○	○	○
Suspension seat with hip restraint feature	○	○	○	○	○	○
Mast and traveling interlock system	○	○ *1	○	○ *1	○	○ *1
Cup holder	○	○	○	○	○	○
Double action parking brake	○	○	○	○	○	○
Anti-restart lock	○	○	○	○	○	○
Open step	○	○	○	○	○	○
Inching pedal	○	—	○	—	○	—
Floor mat	○	○	○	○	○	○
Speed meter	OP	OP	OP	OP	OP	OP
Foot heater	OP	OP	OP	OP	OP	OP
Water temperature	○	○	○	○	○	○
Fuel meter	○	○	○	○	○	○
LCD hour meter	○	○	○	○	○	○
Brake liquid warning lamp	OP	OP	OP	OP	OP	OP
Engine oil pressure warning lamp	○	○	○	○	○	○
Charge lamp	○	○	○	○	○	○
Diesel vehicle glow pilot lamp	—	—	—	—	○	○
Diesel vehicle fuel filter drain warning lamp	—	—	—	—	○	○
Seatbelt indicator	○	○	○	○	○	○
Neutral indicator	○	—	○	—	○	—
Parking indicator	○	○	○	○	○	○
Mast interlock indicator	○	○	○	○	○	○
Error code indicate at the breakdown	○	○	○	○	○	○
Air cleaner dust indicator lamp + Radiator coolant level warning lamp	OP	OP	OP	OP	OP	OP
Torque converter oil temperature warning lamp	OP	OP	OP	OP	OP	OP
Rear-view mirror	○	○	○	○	○	○
Back-up buzzer	○	○	○	○	○	○
Halogen front headlight	○	○	○	○	○	○
Front indicator light	○	○	○	○	○	○
High mounted rear combination lamp	○	○	○	○	○	○
Assist grip	○	○	○	○	○	○
Engine cover with sound insulator	○	○	○	○	○	○
Engine side cover with sound insulator	○	○	○	○	○	○
Transparent roof	OP	OP	OP	OP	OP	OP
Revolving Lamp	OP	OP	OP	OP	OP	OP
Front Working Lamp	OP	OP	OP	OP	OP	OP
Rear Working Lamp	OP	OP	OP	OP	OP	OP
Sound Suppression Kit	OP	OP	OP	OP	OP	OP
Front glass	OP	OP	OP	OP	OP	OP
Panel cabin	OP	OP	OP	OP	OP	OP
Soft landing lift cylinder (2SP)	○	○	○	○	○	○
Lift lock	○	○	○	○	○	○
ALS (Automatic Leveling System)	OP	OP	OP	OP	OP	OP
Auto choke (gasoline models)	—	—	○	○	—	—
Multi-synchro transmission (Direct Drive models)	—	○	—	○	—	○
Cyclone air cleaner	○	○	○	○	○	○
Elevated air intake	○	○	○	○	○	○
Three-stages catalytic muffler	○	○	—	—	—	—
Black smoke eliminating equipment DPF	—	—	—	—	OP *2	OP *2
Engine full floating	○	○	○	○	○	○
Aluminum radiator	○	○	○	○	○	○
Anti-clogging radiator (R/CSO)	OP	OP	OP	OP	OP	OP
Radiator dust-proof net	OP	OP	OP	OP	OP	OP
Cyclone muffler	OP	OP	OP	OP	OP	OP
Speed limiter	OP	OP	—	—	OP *3	OP *3

○: Standard equipment OP : Optional equipment

: Pending

\*1:The traveling interlock system is not equipped on the direct drive (manual transmission) vehicle.

\*2:This is not available for 1.0 ton models.

\*3:This is only for electronic controlled vehicles.



# ***FD/FG40N-55N***

## **S E R I E S**

Internal Combustion Pneumatic Tyre  
**4.0–5.5 ton**

# THE ULTIMATE PERFORMER

## Mitsubishi *FD/FG40N-55N* *Series Forklift Trucks*



FG40N

Gasoline engine  
Capacity rating 4000kg @ 500mm load center

Mitsubishi Forklift Trucks' new FD/FG40N-55N series is a whole new breed of forklift truck that's been built from the ground up to meet the demands of users who require heavy duty, robust and reliable machines.

The latest in a series of forklift trucks, the new N-Generation has won accolades from its users for its capacity to work even in the most demanding situations while being friendly to the environment. What's more, these forklift trucks represents the latest in Mitsubishi's transport technology, enhanced safety and commitment to keeping the world green.

The FD/FG40N-55N forklift trucks —  
**Performance without compromise.**

# FOR HEAVY DUTY APPLICATIONS



FD55N

Diesel engine  
Capacity rating 5500kg @ 600mm load center

# MADE FOR THE MOST DEMANDING APPLICATIONS.

## ECO-POWER



**POWER DOESN'T MEAN DIRTY.**

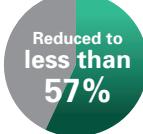
Under the hood of the N-Generation forklift truck is a simple, yet remarkable engine. Mitsubishi Forklift Trucks has developed and refined this robust and reliable power plant while achieving some of the lowest engine emissions in the world. And they've done all this without compromising engine life span, power or ease of maintenance.

### HIGHLY RELIABLE DIESEL ENGINE THAT PASSED 2008 EMISSION GAS STANDARD\*

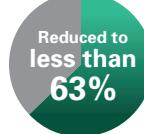
The Mitsubishi S6S high performance engine, NOx, PM, HC emission can be controlled to comply with new environmental standards without adding common rail technology and other options. While low on emissions, S6S engines are designed to be trouble free with only simple maintenance. The result: a powerful, clean operating engine with a long life span.

\* 2008 Japan Emissions Standard for Specific Special Vehicles (including off-road vehicles).

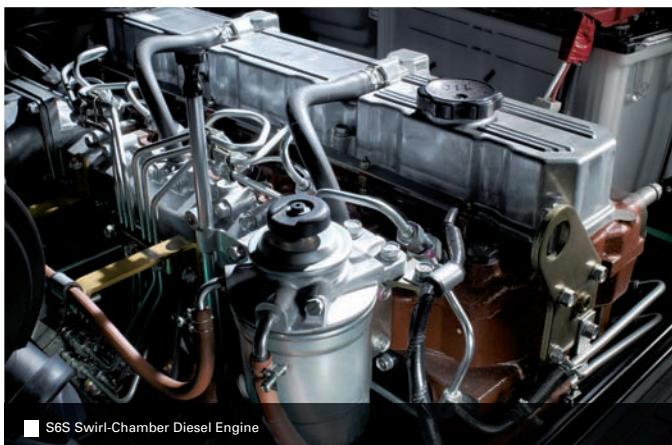
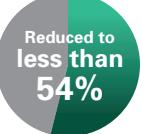
NOx (Nitrogen Oxide) emission



PM (Particle Material) emission



HC (Hydro Carbon) emission



S6S Swirl-Chamber Diesel Engine

\* Compared with 2003 Japan Emissions Standard.

### 2007 EMISSION GAS STANDARD COMPLIANT\* GASOLINE ENGINE WITH THREE-WAY CATALYTIC MUFFLER

The N-Generation series also has an Advanced Electronic Control system that allows optimum management of its engine, which means lower fuel consumption.

To remove environmentally toxic combustion gases a three-way catalytic muffler (standard) has been installed to create higher power yet with lower emissions.

\* 2007 Japan Emissions Standard for Specific Special Vehicles (including off-road vehicles).



Three-way catalytic muffler



TB45 Electronic Controlled Gasoline Engine

### ONE-TOUCH SWITCH TO ECOLOGY MODE\*

"Power / Soft Mode Switch" enables the N-Generation forklift trucks to change between power or ecology priority depending on conditions. Selecting the ecology mode means that CO<sub>2</sub> emissions are decreased by about 13 percent, a significant reduction of this environmentally toxic greenhouse gas.

\* This is an option on diesel engine truck.

#### POWER / SOFT Mode switch



Ecology Mode:  
CO<sub>2</sub> emission  
reduced by  
about 13%

# RELIABLE PERFORMANCE

## STURDY MAST WITH BETTER VISIBILITY ALL AROUND

Mitsubishi Forklift Trucks' newly designed hardened steel mast rail is extremely strong and resists twisting and bending under loads that would cripple some forklifts. The mast also incorporates trouble free ball-type bushings. These bearings give the mast a longer life span and a longer service interval. Besides the optimum positioning of the mast itself, the main mast's cylinder and chain have been placed out of the way for even better driver vision. Better vision means better safety.



## SOLID FRAME & LOW CENTER OF GRAVITY DESIGN

The latest stress analysis techniques, together with proven Mitsubishi Forklift Trucks manufacturing technologies, have created a long-lasting frame and body with a low centre of gravity. This translates into better performance and enhanced stability when doing heavy work or carrying heavy loads.



## STEEL NOT PLASTIC

All N-Generation forklift trucks incorporate a wide, open step made from steel, not fibreglass, into its cab design. A steel step increases durability, prevents slipping and won't crack under pressure like plastics can.



## TOUGH BASE AREA TO SUPPORT HEAVY LOADS

Double pin sealing and a one-piece cast housing creates a stronger, tougher forklift truck base. A tougher base provides added protection and support when carrying heavy and demanding loads.



## A SMOOTH & COMFORTABLE RIDE

The newly developed Flexcontrol system (optional) can automatically slow down truck speed to enable smooth and jerk-free directional changing. And when combined with the wet-disc brakes (optional), the N-Generation forklift trucks have unrivalled handling and stopping control.



## EXCELLENT BODY BALANCE AND REAR VIEW

Designed not only to look good, N-Generation series forklift truck's new sharp form V-shaped counterweight provides exceptional stability and balance while allowing for an easier rear view, as well. The more a driver can see means better workplace safety and fewer accidents.



## EFFECTIVE COOLING SYSTEM

All N-Generation forklift trucks are fitted with a large, heavy-duty radiator core. The radiator's low noise cooling fan along with optimum placement of the muffler make for a highly effective cooling system. Effective cooling translates into longer engine life and less downtime due to overheating.

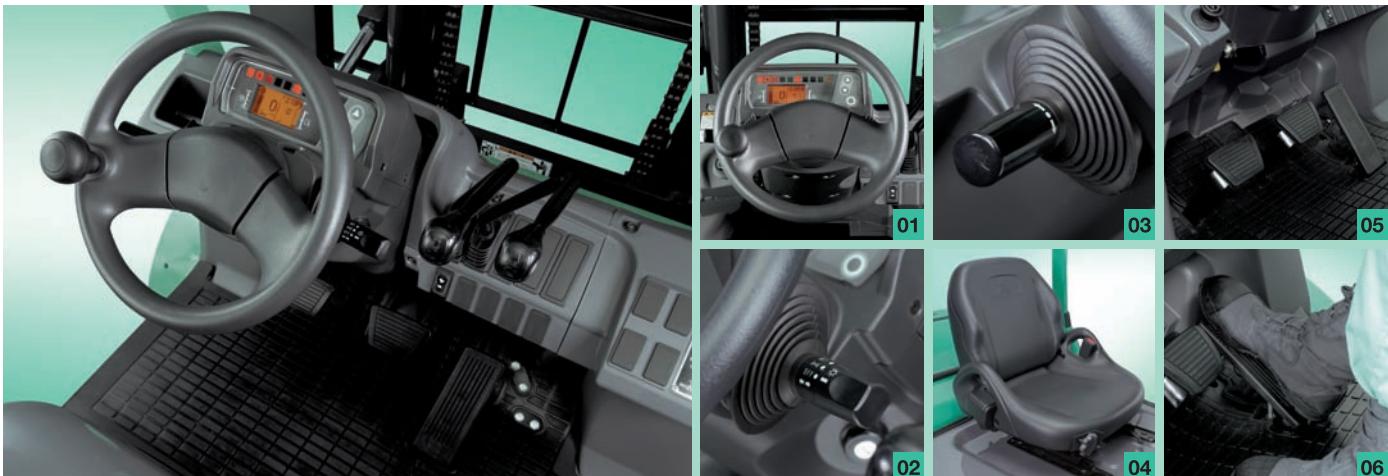


## MITSUBISHI FORKLIFT TRUCKS OFFER THE BEST OF BOTH WORLDS : COMFORT AND SAFETY.

# EASY OPERATION. DRIVER COMFORT.

**FD/FG40N-55N SERIES COCKPITS ARE DESIGNED WITH OPERATOR SAFETY IN MIND AND INCORPORATE THE MANEUVERABILITY, COMFORT AND SAFETY THAT PROFESSIONALS HAVE COME TO EXPECT FROM MITSUBISHI FORKLIFT TRUCKS.**

To improve operator comfort while reducing strain and fatigue, the forklift truck is fully equipped with advanced features that make operating a N-Generations series forklift truck less tiring and more productive than ever before.



### PRODUCTIVITY AND COMFORT FEATURES

#### 01 100% Full Hydraulic Power Steering

Equipped with cornering and steering knob to help prevent accidental steering slippage.

#### 02 Combination Switch

Turn signal and headlight switches are combined as in passenger car.

#### 03 Electric Shift Lever

Forward / neutral / reverse shift operation is easy with the touch of a finger.

#### 04 Suspension Seat with Hip Support Function

Sliding and reclining mechanism to reduce back strain.

#### 05 Foot Operated Inching Pedal

Wide foot space and better foot pedal position for precise control.

#### 06 New Transmission

Forward 2-speed / Reverse 1-speed automatic transmission.

### OPTIONAL PRO-LIFT SPECIFICATION VEHICLE TO REDUCE RIDING FATIGUE

The new N-Generation series of forklift trucks can also be equipped with lifting and tilting adjustment by a finger-tip controller, allowing a driver's arm to remain on the armrest — a great way to reduce fatigue and repetitive strain injuries.



### POWER LINE FULL-FLOATING DESIGN

The entire power train, from engine to transmission is secured to the frame by rubber mounts. These specially designed mounts absorb vibration, and make for quieter, smoother forklift truck operation.

# ACTIVE SAFETY

AUTOMATICALLY "SAFE" ONCE YOU LEAVE THE SEAT.

To avoid the risk of accidents, Mitsubishi Forklift Trucks' unique vehicle Integrated Presence System "IPS2" has been incorporated into all FD/FG40N-55N series models. The system automatically disengages and locks forklift operation when operator leaves the seat. Such a system helps to ensure safety and prevent accidents to operators, colleagues and customers alike at the workplace.



## INTEGRATED MONITOR

Digital display allows excellent vision, from travel speed, gross load and other operating conditions. The monitor easily shows engine and forklift truck operations at a glance.



## SAFETY SYSTEMS TO AVOID OPERATION ERROR

The fork on the forklift truck is automatically locked when the ignition is switched off, so it remains in position even if the lift lever is accidentally bumped or moved. A Neutral Safety lock is also installed to prevent the machine from sudden travel if the engine is accidentally started while in gear.



## PARKING BRAKE AT THE SEAT-CONNECTED INTERLOCK

Another safety improvement to the N-Generation series of forklift trucks is the integral interlock system. Once an operator leaves the seat, not only the mast and travel functions are locked, but the parking brake is engaged as well.



## HIGH-MOUNTED REAR COMBINATION LAMP

This rear combination lamp that provides clear brake, reverse and turn signals to vehicles or persons behind the forklift truck.



## SOFT LANDING

This unique feature automatically slows down the forks when approaching the ground, protecting valuable goods from hard drops or shocks.

\* only for two-stage simplex masts.



## EASY TO MAINTAIN.

# MAINTENANCE

**MITSUBISHI FORKLIFT TRUCKS ASSURES OWNERS OF EASY MAINTENANCE AND A LOW RUNNING COST.**

Longer service intervals mean that a vehicle can be used more often, saving valuable time and money. Operators and owners will find the N-Generation series of forklift trucks easy to maintain and manage.



### WELL-PLACED MAINTENANCE POINTS

The N-Generation series forklift trucks have an engine cover that opens fully along with easy-to-remove side panels. The maintenance points are easy to access and they are strategically placed to allow quick inspection or maintenance.

#### ■ IMPROVED BRAKE DESIGN

A newly designed, easy-maintenance braking system that does not require hub and drum removal is installed as standard equipment. The work, time and cost required for service are substantially reduced when compared to previous models.

#### ■ EASY MAINTENANCE AROUND RADIATOR

An easy to open half-split cover makes radiator inspection and maintenance a snap.



### SIGNIFICANT EXTENSION IN SERVICE INTERVAL

Service intervals for the changing of engine oil has been more than doubled from 200 hours to 500 hours. Further, wet-disc brakes\* allow maintenance-free intervals for 10,000 hours. Extended service intervals mean lower running cost.

■ Oil change cycle (with Mitsubishi Forklift Trucks recommended engine oil).

Conventional vehicle	200 hours
----------------------	-----------

FD/FG40N-55N series	500 hours
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\* Depending on usage condition, brake oil change is required for the optional wet-disc brakes.

# ATTACHMENTS & OPTIONS

**MITSUBISHI FORKLIFT TRUCKS ARE HIGHLY CUSTOMIZABLE TO SUIT JUST ABOUT ANY APPLICATION AND WORKPLACE ENVIRONMENT.**

The FD/FG40N-55N series forklift trucks' unsurpassed performance is ideal for many industries where quality, dependability and heavy duty tasking is involved. Mitsubishi Forklift Trucks offers a line-up of attachments and options to suit just about any need.

## ■ FORKLIFT TRUCK FOR THE PAPER INDUSTRY

Capable of handling paper rolls effectively. Capable of handling small-diameter paper roll with a movable short arm. Improved contact pads provides better grips on rolls. Capable of handling two rolls of paper with different diameters (Special Request Option).

- Attachment installed: Roll Clamp
- Mast installed : Heavy Duty Mast
- Recommended option : Wet-disc Brake / Hydraulic Oil Cooler



## ■ FORKLIFT TRUCK FOR THE RECYCLED PAPER INDUSTRY

Excellent insert clamp-arm to grip paper bales safely and securely.  
Wide view between clamp cylinders.

- Attachment installed : Bale Clamp
- Recommended option : Hydraulic Oil Cooler / Semi-under Net Kit



## ■ FORKLIFT TRUCK FOR THE TIMBER INDUSTRY

This forklift truck has a hinged fork and back rest to scoop and carry logs and sawn timber.

- Standard : Panoramic Hinged Fork (fixed type back rest)
- Recommended option : Air Intake Pre-Cleaner / Front Windshield / Dust Proof Net for Radiator



## ■ FORKLIFT TRUCK FOR THE QUARRY INDUSTRY

This forklift truck has a hinged fork and fixed back rest that can move and carry stone without damage. It provides excellent handling and grip, even in bad road conditions.

- Standard : Panoramic Hinged Fork (fixed back rest)
- Recommended option : Air Intake Pre-Cleaner / Front Windshield / Dust Proof Net for Radiator



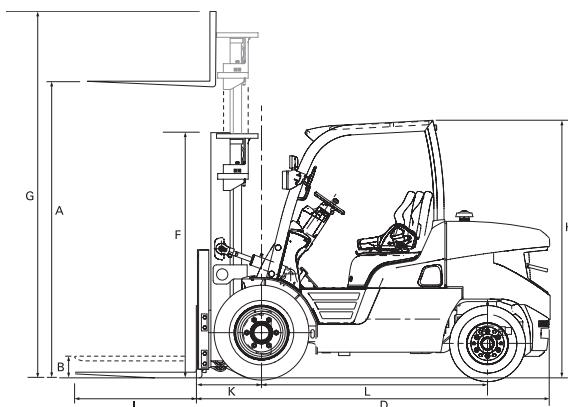
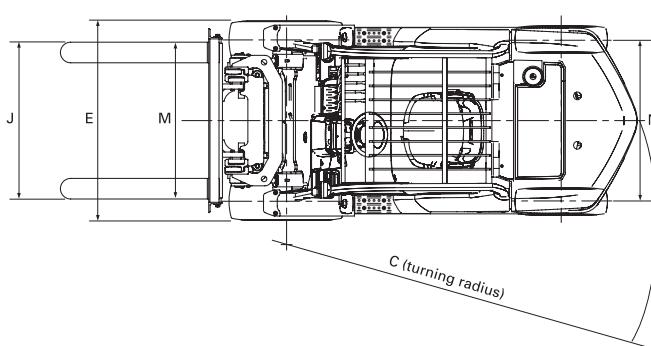
## ■ FORKLIFT TRUCK FOR THE MARINE/PORT INDUSTRY

This forklift truck is designed to work in confined spaces such as inside vessels or containers. The three-stage full free mast has a wide front view, and it can be used for high shelves loading — making full use of cargo space.

- Standard : Wide view Three-stage Full Free Mast
- Recommended options : Diesel Particulate Filter / Front Windshield

# Specifications

CHARACTERISTICS						DIESEL ENGINE TRUCK					
1 Type of Truck					FD40N				FD45N		
2 Model					kg	3500	4000	4000	4500		
3 Loading Capacity					mm	600	500	600	500		
4 Load Center					mm	600	500	600	600		
PERFORMANCE											
5 Maximum Fork Height					mm	A	3350				
6 Free Fork Height					mm	B	150				
7 Speeds	Lifting	Loaded	mm/s	550							
		Unloaded	mm/s	610							
	Lowering	Loaded	mm/s								
		Unloaded	mm/s								
8 Tilt	Mast	Forward	deg								
		Backward	deg								
9 Speeds	Travelling	Loaded	km/h	21.5				22.0			
10 Maximum Drawbar Pull	stationary on slope	Loaded	N	37500				36500			
Drawbar Pull	at 1.6km/h	Loaded	N	27000							
11 Maximum Gradeability	stationary on slope	Loaded	%	44.9	42.5	39.4	37.4	35.5			
	at 1.6km/h	Loaded	%	31.1	29.1	28.0	26.4	25.0			
12 Turning Radius		mm	C	2580				2730			
13 Practical Intersecting Aisle Width	Single	with 1220mm forks	mm	2320				2395			
14 Practical Aisle for Right Angle Stacking		with 1220mm forks	mm	4370				4530			
DIMENSIONS											
15 Overall Length to fork Face			mm	D	3000				3130		
16 Width	with Standard Tires		mm	E	1415						
	with Optional Duals		mm								
	with Special Duals		mm								
17 Height	with Lowered Mast		mm	F	2320						
	with Extended Mast (with backrest)		mm	G	4570						
	to top of Overhead Guard		mm	H							
18 Forks (Thickness x Width x Length)			mm	I	50x150x1220						
19 Forks Spread (Out-to-Out Minimum / Maximum)			mm	J							
20 Front Overhang (Center of Front Axle to Fork Face)			mm	K	577						
21 Wheelbase			mm	L	1850				2000		
22 Tread Width	Front, standard tires		mm	M							
	Front, optional duals		mm								
	Front, special duals		mm								
	Rear tires		mm	N							
23 Ground Clearance	at Lowest point mast		mm								
	at Center of Wheelbase		mm								
24 Tire Size	Size Front, standard				8.25-15-14PR						
	Size Front, Optional dual										
	Size Front, special dual										
	Rear tires				7.00-12-12PR						
WEIGHT											
25 Machine Weight	Powershift (standard)		kg	5920				6330			
	Powershift (optional dual)		kg	6050				6420			
	Powershift (special dual)		kg	6120				6490			
BRAKE											
26 Service Brake Type											
27 Parking Brake Type											
POWERTRAIN											
28 Engine	Model					S6S					
	Max. Rated Power / rpm to DIN 70020		kW / rpm	57.5 / 2300							
	Max. Rated Torque / rpm to DIN 70020		Nm / rpm	260 / 1700							
	Displacement		cc	4996							
	Fuel Tank Capacity		L	87							
29 Transmission	Type										
	Number of Speed										
	Forward										
30 Relief of Pressure	For Attachments		Mpa								



GASOLINE ENGINE TRUCK								
FD50CN	FD50N	FD55N	FG40N		FG45N		FG50CN	
5000	5000	5500	3500	4000	4000	4500	4500	5000
500	600	600	600	500	600	500	600	600
3360			3350			3360		
160			150			160		
470			570			490		
530			600			520		
500								
500								
6								
10								
21.0					22.0			21.5
37000			38500			37500		
26500	26000		28000			27500		27000
33.9	32.3	30.1	45.8	43.3	40.2	38.1	36.2	34.6
23.8	22.6	20.8	32.0	30.1	28.9	27.2	25.9	24.5
2760	2890	2940	2580		2730		2760	2890
2415	2470	2495	2320		2395		2415	2470
4560	4710	4760	4370		4530		4560	4710
3170	3310	3360	3000		3130		3170	3310
1460			1415				1460	3360
1780								
1965								
2400			2320			2400		
4590				4570				4590
2250								
60x150x1220				50x150x1220				60x150x1220
300-1190								
582	602		577		582		602	
	2150		1850		2000		2150	
1175								
1310								
1445								
1180								
150								
227								
300-15-18PR		8.25-15-14PR			300-15-18PR			
7.50-16-12PR								
8.25-15-12PR								
	7.00-12-14PR			7.00-12-12PR			7.00-12-14PR	
6850	7300	7640	5860		6270		6780	7240
6930	7390	7720	5980		6350		6870	7320
7000	7460	7790	6060		6430		6940	7400
								7570
								7660
								7730
Hydraulic								
Hydraulic								
					TB45			
					72 / 2300			
					280 / 1200			
					4500			
105		87			105			
ATM (TORQUE CONVERTER)								
	2							
	1							
	19.1							



## ***Ready to Perform To Your Applications***



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Note: Performance specifications may vary depending on standard manufacturing tolerances, vehicle condition, types of tyres, floor or surface conditions, applications or operating environment. Trucks may be shown with non-standard options. Specific performance requirements and locally available configurations should be discussed with your Mitsubishi forklift truck dealers. Mitsubishi Forklift Trucks follows a policy of continual product improvement. For this reason, some materials, options and specifications could change without notice.