



**MITSUBISHI
FORKLIFT TRUCKS**



GRENDIA

Internal Combustion Pneumatic Tyre
1.5–3.5 ton

SETTING NEW STANDARDS

Mitsubishi

GRENDIA

Series Forklift Trucks



FGE15N

Electronically controlled gasoline engine
Capacity rating 1500kg @ 500mm load center

A next generation, higher performance machine.

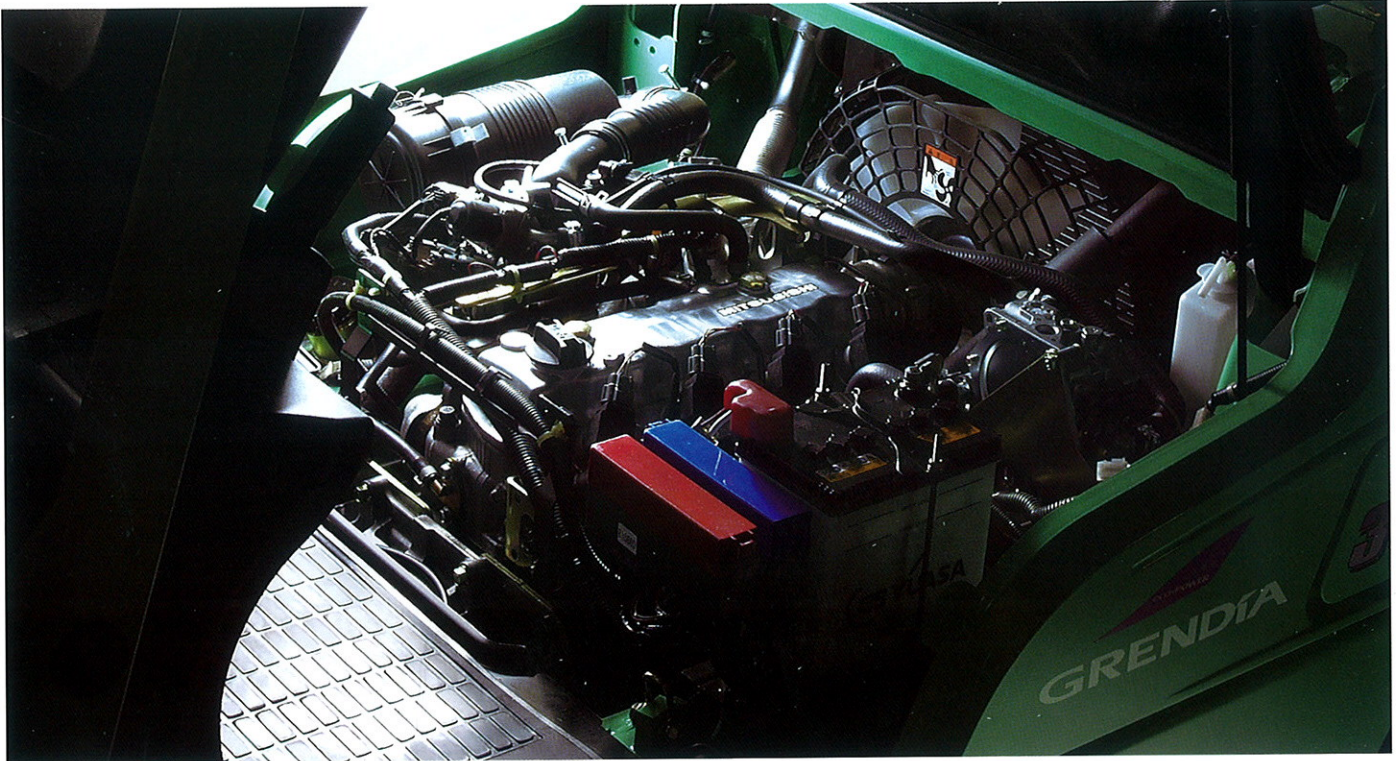
Thanks to the application of new technologies, the Mitsubishi Grendia is not only easier to operate but friendly to the environment as well.

The new Mitsubishi Grendia's engine is very fuel-efficient and has ultra low emissions, which either complies with or exceeds the latest international environmental standards. In addition to its newly designed engine, Mitsubishi Forklift Trucks has increased rider comfort and enhanced safety. For instance, all Grendia forklift trucks incorporate an Integrated Presence System (IPS), which enhances safety and helps reduce accidents. LCD graphic displays and digital monitoring systems also make the Grendia safer and more efficient.

It's the forklift of tomorrow that's available today.

GRENDIA'S ECO-POWER

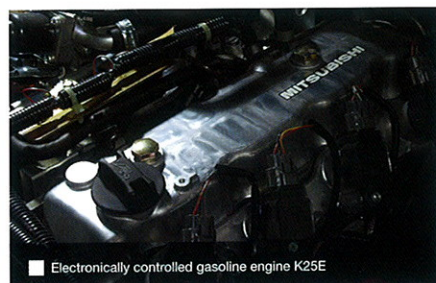
MEETS THE ENVIRONMENTAL REQUIREMENTS OF TODAY AND TOMORROW.



NEW 2007 EMISSION STANDARDS COMPLIANT*: **NEW ELECTRONICALLY CONTROLLED GASOLINE ENGINE**

Mitsubishi Grendia's advanced gasoline engine, which helped pioneer the standard use of electronically controlled fuel injection and three-way catalytic converters in forklift trucks, has evolved even further. The new Grendia has achieved remarkable environmental controls and complies with all 2007 Emission Standards while still maintaining high performance and reliability levels.

* 2007 Emissions Standard for Specific Special Vehicles (including off-road vehicles)
 Compliant with Emissions Standard for Specific Special Vehicles
 Ministry of the Environment
 Ministry of Economy, Trade and Industry
 Ministry of Land, Infrastructure and Transport



■ Electronically controlled gasoline engine K25E



■ Three-way catalytic converter

TWO-LEVEL HIGH/LOW SPEED LIMITER

The Grendia's automatic speed limiter can be set to two levels – outdoors (HIGH) and indoors (LOW).

Drivers can alternate between the two speed limits at the flick of a switch, helping them to choose the most appropriate fuel efficiency for the location.

- Standard for Electronically Controlled Gasoline Engine Trucks



POWER/SOFT MODE SWITCH

Depending on the task, two power levels can be selected: POWER mode, which maximizes power output and SOFT mode for fuel efficiency and low noise levels. Selecting SOFT mode cuts CO₂ emissions by approximately 13% compared to the POWER mode.

- Standard for Electronically Controlled Gasoline Engine Trucks



**2007 EMISSION STANDARDS
COMPLIANT*: HIGH RELIABILITY
DIESEL ENGINE**

The well-known performance levels of the highly acclaimed Mitsubishi Diesel Engine have been maintained but now come with eco-friendly refinements. The upgraded engines have now achieved low emission levels in compliance with the 2007 Emission Standards without compromising horsepower or reliability.

- 2007 Emissions Standard for Specific Special Vehicles (including off-road vehicles)
Compliant with Emissions Standard for Specific Special Vehicles
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■ Swirl-chamber diesel engine S4S



**LOW-NOISE DESIGN FOR
MAXIMUM COMFORT WITH
MINIMAL OPERATOR FATIGUE**

With features such as low-noise engine, enhanced soundproofing of the engine compartment and floor level noise dampening, Mitsubishi Forklift Trucks has achieved a quiet working environment both for the operator and the surrounding working environment.

- ISO-equivalent noise level (When diesel engine is in SOFT mode at high idle speed)



**OPTIONAL ECO-FRIENDLY VEHICLES
WITH CLEAN EXHAUST EMISSIONS**

Besides the gasoline-powered and diesel-powered models, the Grendia is also available in other clean exhaust, energy-efficient models. These include LPG-powered or diesel trucks fitted with DPF (Diesel Particulate Filter) that helps eliminate possible black smoke.

■ LPG powered version



Vehicle fitted with DPF helps eliminate black smoke.



The ceramic DPF filter recovery unit is fitted inside the right-side step of the machine.



DPF exhaust monitor. Displays filter levels and necessary recovery time.

Specifications

CHARACTERISTICS											
Type of Truck			DIESEL ENGINE TRUCK								
Model			FD15N	FD18N	FD20CN	FD20N	FD25N	FD30N	FD35N		
Loading Capacity			kg	1500	1750	2000		2500	3000	3500	
Load Center			mm	500		500			500		
PERFORMANCE											
Maximum Fork Height			mm	A	3000			3000		3000	
Free Fork Height			mm	B	115	120	140		145		
Speeds	Lifting	Loaded	mm/s	630	630			500	420		
		Unloaded	mm/s	690	650	660		530	450		
	Lowering	Loaded	mm/s	520	520	500		530	420		
		Unloaded	mm/s	500	500			500	400		
Tilt	Mast	Forward	deg	6	6			6			
		Backward	deg	12	12			12			
Speeds	Traveling (Powershift)	Loaded	km/h	19	19			19			
		Unloaded	km/h	19.5	19.5			19.5			
	Traveling (Manual)	Loaded	km/h	19	19			19			
		Unloaded	km/h	19.5	19.5			19.5			
Maximum Drawbar Pull	Powershift	Loaded	kgf	1260	1250	1210	1830	1810	1770	1680	
	Manual	Loaded	kgf	1180	1160	1130	1500	1480	1460	1380	
Maximum Gradeability	Powershift	Loaded	%	33	29	25	36	31	25	21	
	Manual	Loaded	%	30	27	23	29	24	20	17	
Turning Radius			mm	C	1950	1980	2020	2200	2230	2380	2440
Practical Intersecting Aisle Width			mm		2065	2080	2105	2195	2215	2325	2365
Practical Aisle for Right Angle Stacking			mm		3650	3680	3735	3955	3985	4170	4230
DIMENSIONS											
Overall Length			mm	D	3180	3220	3275	3405	3480	3805	3865
Width	with Standard Tires		mm	E	1065	1065	1150		1275	1290	
	with Optional Duals		mm		1330	-	1480		1490		
Height	with Lowered Mast		mm	F	1990	1990			2015	2130	
	with Extended Mast (with Backrest)		mm	G	4055	4055			4055		
	to Top of Overhead Guard		mm	H	2065	2065	2074		2093	2103	
Forks (Thickness x Width x Length)			mm	I	35x100x920	40x122x920			50x125x1070		
Fork Spread (Out-to-Out Minimum / Maximum)			mm	J	200-920	244-920	244-1000		244-1000		
Front Overhang (Center of Front Axle to Fork Face)			mm	K	400	415	455		490		
Wheelbase			mm	L	1400	1400	1600		1700		
Tread Width	Front, standard tires		mm	M	890	890	960		1060		
	Front, optional duals		mm		1025	-	1140		1140		
	Rear tyres		mm	N	900	900	980		980		
Ground Clearance	at Lowest point mast		mm		110	110	115		135	150	
	at Center of Wheelbase		mm		150	150	160		190	200	
Tyre Size	Size Front, standard				6.50-10-10-PR	6.50-10/5.00	7.00-12-12PR		28x9-15-12PR	250-15-16PR	
	Size Front, optional dual				4.50-12-8-PR	-	5.50-15-8PR		6.00-15-10PR		
	Size Rear				5.00-8-8-PR	5.00-8/3.00	6.00-9-10PR		6.50-10-10PR	6.50-10-12PR	
WEIGHT											
Empty	Powershift (standard)		kg		2550	2740	3060	3410	3710	4350	4740
	Manual (standard)		kg		2590	2780	3100	3450	3750	4390	4780
	Powershift (optional dual)		kg		2590	2780	-	3500	3800	4390	4770
	Manual (optional dual)		kg		2630	2820	-	3540	3840	4430	4810
BRAKE											
Service Brake					Hyd.			Hyd.		Hyd.	
Parking Brake					Hand			Hand		Hand	
POWERTRAIN											
Engine	Model				S4Q2	S4Q2	S4S		S4S		
	Max. Rated Power / rpm to DIN 70020	Kw/rpm			30 / 2500	30 / 2500	38.1 / 2250		38.1 / 2250		
		ps/rpm			40.8 / 2500	40.8 / 2500	51.8 / 2250		51.8 / 2250		
	Max. Rated Torque / rpm to DIN 70020	Nm/rpm			131 / 1800	131 / 1800	185 / 1700		185 / 1700		
		kgm/rpm			13.4 / 1800	13.4 / 1800	18.9 / 1700		18.9 / 1700		
	Displacement		cc			2505	2505	3331		3331	
Fuel Tank Capacity		ℓ			46	46	66		66		
Transmission	Type				Powershift / Manual		Powershift / Manual		Powershift / Manual		
	Number of Speeds				AT:1 / MT:2		AT:1 / MT:2		AT:1 / MT:2		
Relief Pressure		For Attachments	Mpa		18.1	18.1		18.1			