

TCM



ENGINE POWERED FORKLIFT TRUCKS
TCM PRO-CG
3,000-6,000 lbs.
(Class 4 - Cushion Tire Type)



[3,000 lbs.]

FCG15-4



[4,000 lbs. and 5,000 lbs.]

FCG20-4 FCG20-4H
FCG25-4 FCG25-4H

ENGINE POWERED FORKLIFT TRUCKS

TCM PRO

All-new TCM PRO Cushion Tire Lift Trucks The New Benchmark in Class 4 Forklift Trucks

From TCM -- the company that manufactured the first forklift truck in Japan -- comes a totally revamped **TCM PRO** series of cushion tire forklift trucks. Rugged and reliable lift trucks, **TCM PRO** series offers superior controllability, excellent front visibility and high-speed operation to help increase productivity and profit. No detail has been overlooked in improving operator safety and maintenance has been made easier than ever. For the ultimate in performance, count on **TCM PRO**!



[6,000 lbs.]

FCG30-4H

Excellent Eco-Friendliness eco mode

Serious consideration is paid to the operator and to the environment

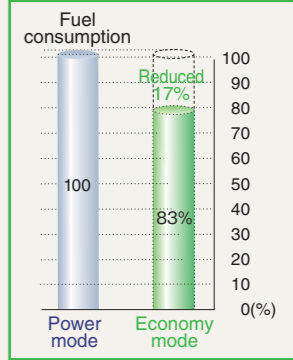
Selection of the eco-mode provides even lower fuel consumption and lower operating noise (gasoline and LPG trucks)

You can select the eco-mode using the mode switch provided on the left side of the operator's seat. The eco-mode reduces fuel consumption and operating noise while maintaining a reasonable level of driving power. With the eco-mode selected, fuel consumption and CO₂ emissions are reduced about 17% compared with the power mode. A top speed setting (the left switch in the photo) is optionally available.



Overheating prevention (gasoline and LPG trucks)

If the coolant temperature rises excessively, the engine output is reduced automatically, to keep the engine from being seriously damaged.



E NHANCED OPERATOR COMFORT AND SAFETY



The parking brake lever has been relocated, for easier entry and exit and improved safety

The parking brake lever is located on the right side of the steering wheel for easier entry and exit. The double-action lever provides better control and reliability when setting the brake.



The steps are also wider – 20% wider – for easier entry and exit

A wide open step (20% wider than before) is built in, for easier and safer mounting and dismounting. The anti-skid surface prevents slipping, even when wet.



Largest floor space ever designed into a TCM cushion tire lift truck!

The wide-open floor space has been increased by 10%, for easier entry and exit, and more operator comfort. The uncluttered floor without any tripping hazards and the dashboard free of sharp edges provide improved operator safety.



Interlock system is standard on all models

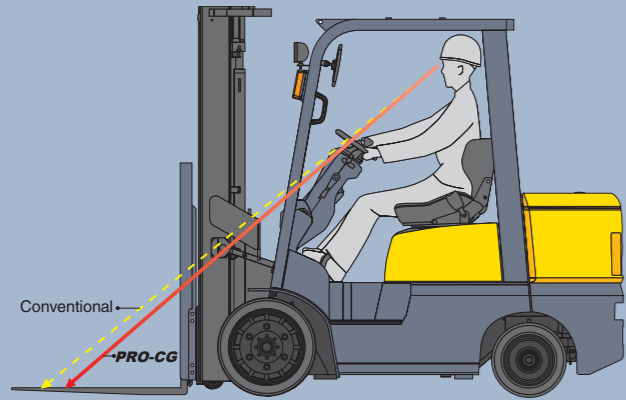
The interlock system is a safety device that cuts off the power to the drive and load handling circuits if the operator leaves his seat during operation.



Easy-reach cup holder

A large cup holder is located within easy reach, and it can also be used to hold pens, small tools and other items during operation.

SUPERIOR CONTROLLABILITY, SAFETY AND PRODUCTIVITY



Better forward visibility

Forward visibility has been improved about 30%, by lowering the tilt cylinder mounting position and the dashboard height. The steering wheel diameter has also been reduced to improve the visibility of the fork tips and load, helping enhance safety and reduce operator fatigue.



A new, small-diameter steering wheel is optionally available (photo)

The diameter of the steering wheel has been reduced to less than 12 in., so the operator can control the steering wheel more easily. This provides more convenient entry and exit and improves forward visibility.

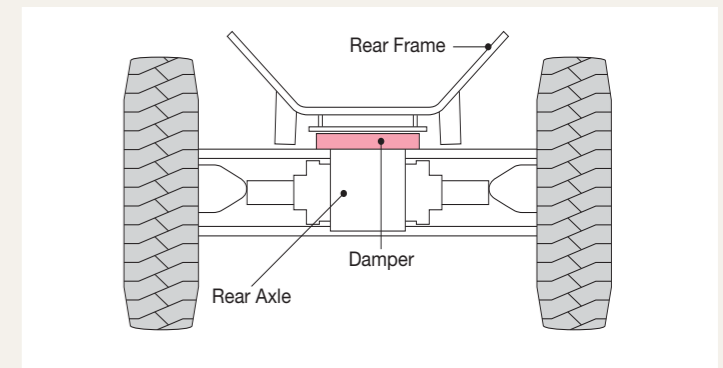
Operating controls are grouped for easier operation

The operating controls are located in an optimized configuration for improved functionality. Intuitive and productive operation is easier. The instrument cluster that monitors all truck functions is located near the operating controls so that the operator can scan the meters easily while operating the hand controls.



Directional control lever with a neutral safety function

The neutral safety function prevents the engine from being started unless the directional control lever is in the neutral position.



Special damper delivers stability and safety (only on the 4,000 to 6,000 lb. models)

A special damper cushions and stabilizes the axle for stable operation over uneven surfaces, giving outstanding reliability while traveling and in load handling operations.



High mounted rear combination lamps

The rear combination lamps are mounted on the upper rear cross bar of the overhead guard for improved visibility by workers nearby and by other forklift operators.

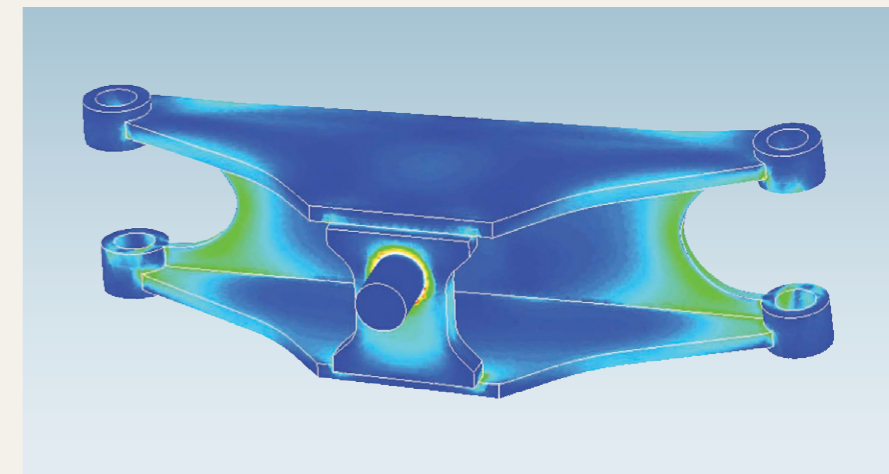
The high-mount brake lamps are integrated into the overhead guard for protection of the lamps and they are vibration resistant for long life.



New easy-to-see instruments

The instrument cluster monitors all the truck functions and incorporates LED technology that is easy to read, even in bright daylight.

TCM TECHNOLOGY MEANS INCREASED DURABILITY

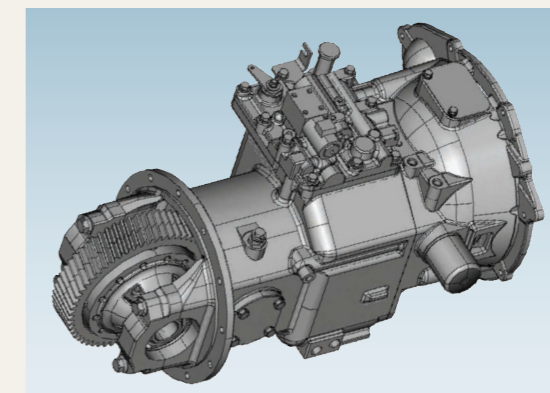
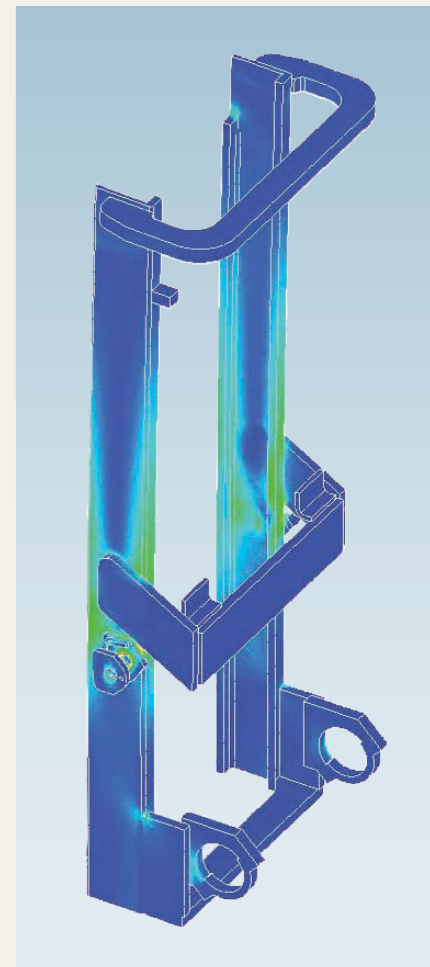


TCM steering axles

The steering axle construction has been strengthened. It delivers excellent performance in the harshest working environments.

TCM masts

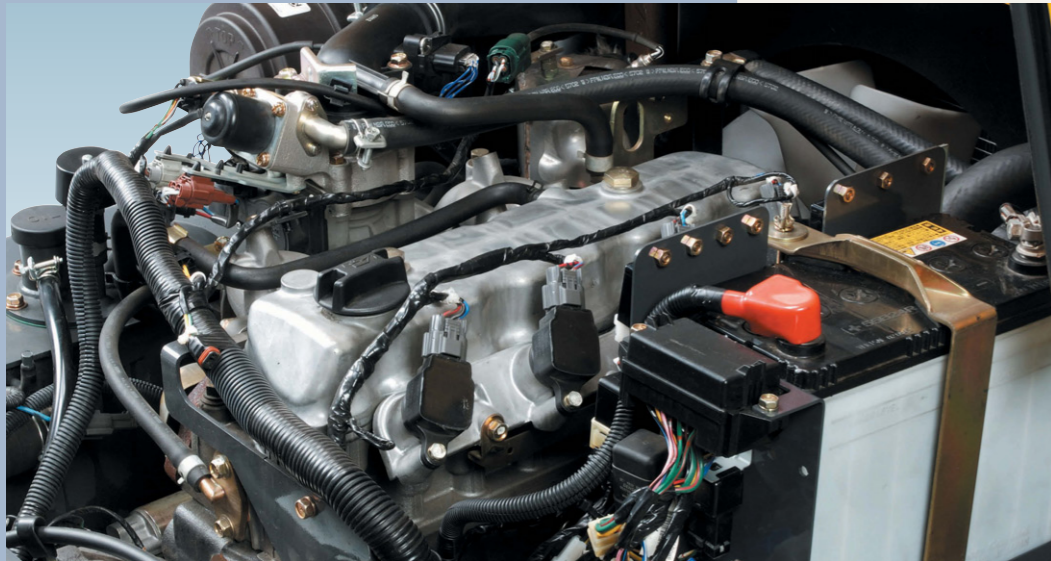
The tilt cylinder mounting position has been optimized to ensure wide front visibility. The rigidity of the mast has been improved for longer service and to provide smooth and reliable load handling operation.



TCM transmissions

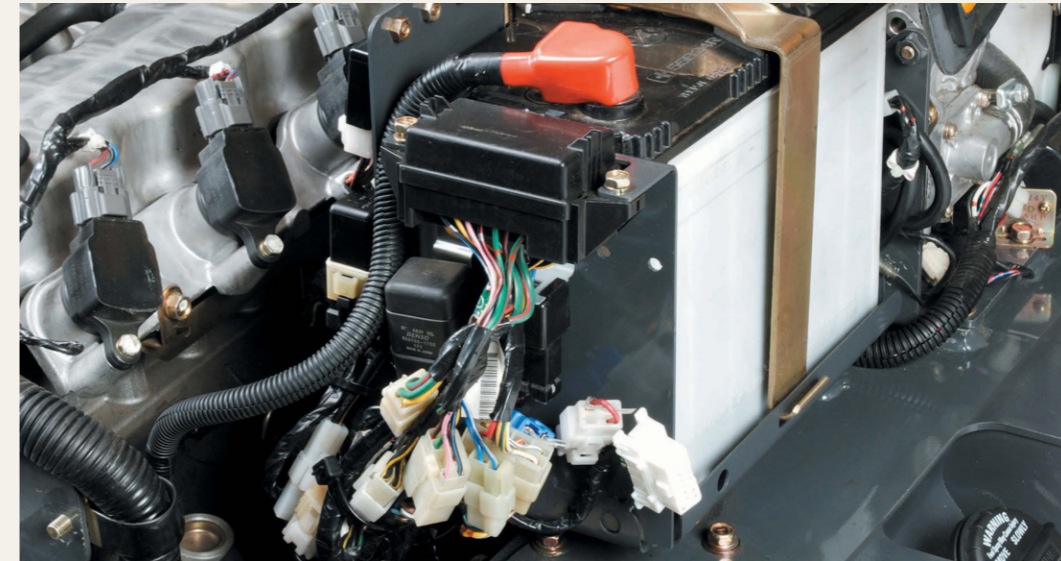
The TCM PRO series use high-quality TCM transmissions, which feature quiet operation and long life.

EASY MAINTENANCE AND ENVIRONMENTAL FRIENDLINESS



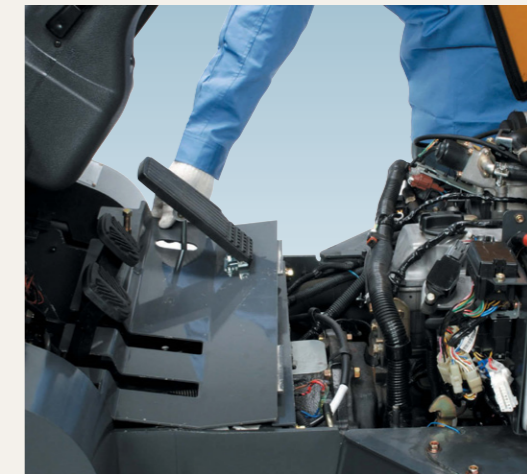
Cleaner, more efficient engines

A new type of emission control and engine management system delivers excellent power, economy and reliability. TCM PRO series use gasoline engines which meet the 2010 EPA emission control standards.



Easy access to major electrical components

The major electrical components are located together in the front of the engine compartment, for easy access.



Easy-to-open floorboards

All components and assemblies are reliable and long lasting. However, if any of them should need replacement or repair, you can easily gain access to them by simply opening the floorboards.

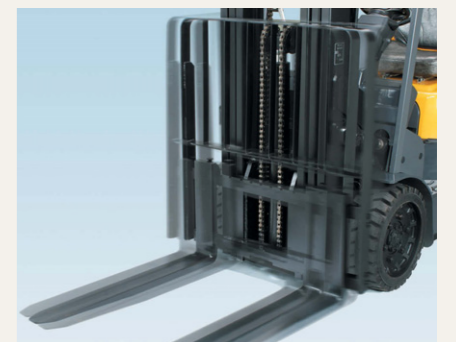
NEW EQUIPMENT

New geometry for the foot controls

All foot pedals have been located on the floor to improve maximum leverage and controllability. The connecting arms have been redesigned to increase the foot area for better operator comfort.

Integral side shifter (option)

The integral side shifter has been substantially improved to deliver maximum load capacity, better front visibility and efficient operation.



ENGINE POWERED FORKLIFT TRUCK

TCM PRO-CG

8000lbs. Class 4 - Cushion Tire Type

FCG36-8 | 8000lbs/24in
3600kg/600mm

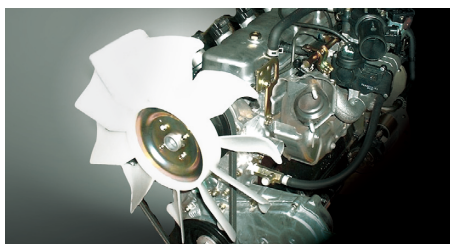


*Above photo includes optional equipment & accessories

POWERFUL AND HIGH-PERFORMANCE

K25 Gasoline Engine

Rated output **60.9HP**(45.4kW)/(2800r.p.m)



- Electric managed system along with 3-way catalytic muffler reduce exhaust emission.
- The engine meets U.S.EPA 2010 year emission control requirements.

Large capacity alternator **50A**

Greater lifting speed

Lifting speed **80.3fpm** (410mm/s) (with load)
82.7fpm (420mm/s) (without load)

COMFORT WITH SAFETY

- Flat, open floor design
- Superior design brake pedal and accelerator
- Electric shift control lever
- Multi-function switch lever (lighting and turn-signal)
- Turn-signal with self-canceling mechanism
- Full open steps
- Tilt cylinder covers
- Wider cylinder covers
- Wider visibility
- Parking brake with safety lock
- Glove compartment / Pen holder

STANDARD SPECIFICATIONS

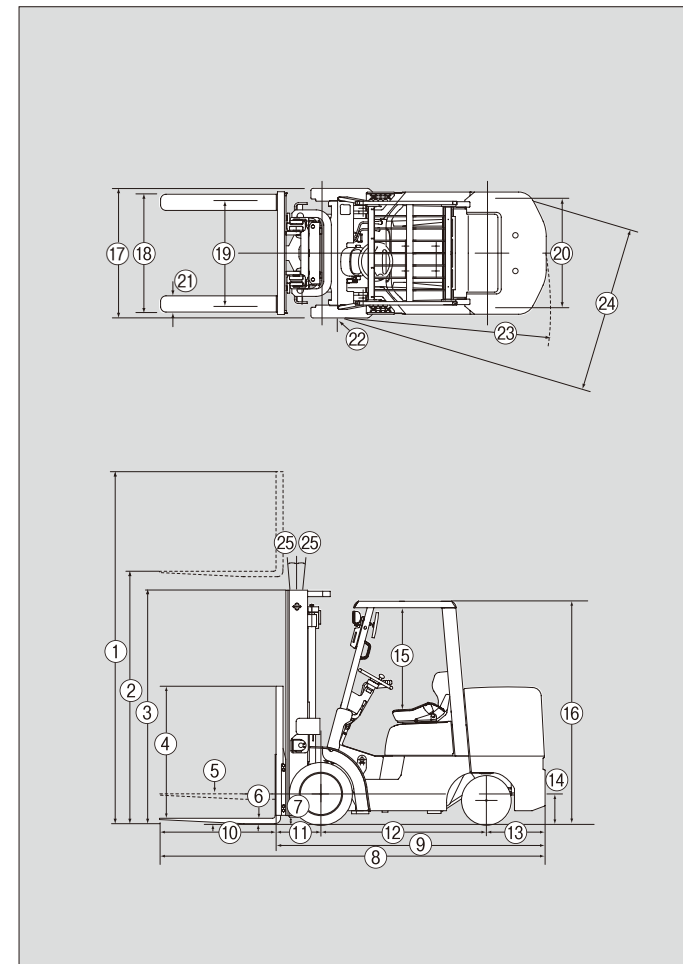
CHARACTERISTICS	1 Manufacturer		TCM		
	2 Model		FCG36-8		
	3 Load Capacity	lbs (kg)	8000 (3600)		
	4 Load Center	in (mm)	24 (600)		
	5 Power Type LPG				
	6 Operator Position Sit down rider type				
	7 Tire Type	Front / Rear	Cushion tires		
	8 Wheels (× = driven)	Front / Rear	2 × / 2		
DIMENSIONS	9 Max. Fork Height		in (mm)	130.0 (3300)	
	10 Free Lift		in (mm)	11.8 (300)	
	13 Fork Size	L×W×T	in (mm)	42.1×5.9×2.0 (1070×150×50)	
	14 Tilt Angle	Fwd / Bwd	deg.	6 / 7	
	15 Length to Fork Face		in (mm)	98.3 (2495)	
	16 Overall Width		in (mm)	47.3 (1200)	
	17 Mast Height Fork Lowered		in (mm)	85.0 (2160)	
	18 Overall Height Fork Raised		in (mm)	179.5 (4560)	
	19 Overhead Guard Height		in (mm)	80.9 (2055)	
	21 Turning Radius (Outside)		in (mm)	87.6 (2225)	
	22 Load Distance (Centerline of front axle to front face of forks)		in (mm)	16.7 (425)	
23 Basic Right Angle Stacking Aisle Width (Add load length and clearance)		in (mm)	104.3 (2650)		
PERFORMANCE	24	Travel Max. (Fwd / Rvs.)	With Load	mph (km / h)	9.4 (15.0)
			Without Load	mph (km / h)	9.7 (15.5)
	25	Lifting	With Load	fph (mm / s)	80.3 (410)
			Without Load	fph (mm / s)	82.7 (420)
	26	Lowering	With Load	fph (mm / s)	78.8 (400)
			Without Load	fph (mm / s)	82.7 (420)
28 Max. Drawbar Pull		Without Load	lbf (kN)	2650 (11.8)	
29 Gradeability at 1 mph (1.6 km / h)		With / Without Load	%	25 / 18	
WEIGHT	32 Total Weight		lbs (kg)	11310 (5130)	
	33	With Load	Front	lbs (kg)	17280 (7840)
			Rear	lbs (kg)	2010 (910)
	34	Without Load	Front	lbs (kg)	3870 (1755)
Rear			lbs (kg)	7420 (3365)	
BRAKES AND TIRES	35	Number	Front / Rear	2 / 2	
		Size	Front	22×9×16	
	36	Rear	18×6×12 ^{1/8}		
38 Wheelbase		in (mm)	60.2 (1530)		
39	Tread	Front	in (mm)	38.2 (970)	
		Rear	in (mm)	36.2 (920)	
40	Ground clearance	at lowest point (Mast)	in (mm)	3.0 (75)	
		at rear axle	in (mm)	3.9 (100)	
42	41	Service	Hydraulic internal expansion duo-servo front wheel braking		
43	42	Parking	Mechanical internal expansion front wheel braking		
ENGINE AND TRANSMISSION	45 Battery		V / AH	12 / 45	
			A / V	50 / 12	
	49		Model	NISSAN K25	
	50		Rated Horsepower / r.p.m.	JIS D1001 60.9 HP / 2800 r.p.m. (45.4 kW / 2800 r.p.m. : 61.8 PS / 2800 r.p.m.)	
	51		Rated Torque / r.p.m.	185.0 N·m / 1600 r.p.m. 136.4 lbf·Ft / 1600 r.p.m. 18.9 kgf·m / 1600 r.p.m.	
	52		Number of Cylinders	4	
			Displacement	cu·in (lit)	151.8 (2.488)
		Fuel Tank Capacity	gal (lit)	12.0 (47)	
55	55 Transmission		Number of Speed Fwd / Rvs-type	Power shift T / M	1-1 Power shift Transmission
57	57 Operating Pressure		For Attachment	psi (kg / cm ²)	2560 (180)
			Hydraulic oil capacity	gal (lit)	10.5 (40)

STANDARD DIMENSIONS

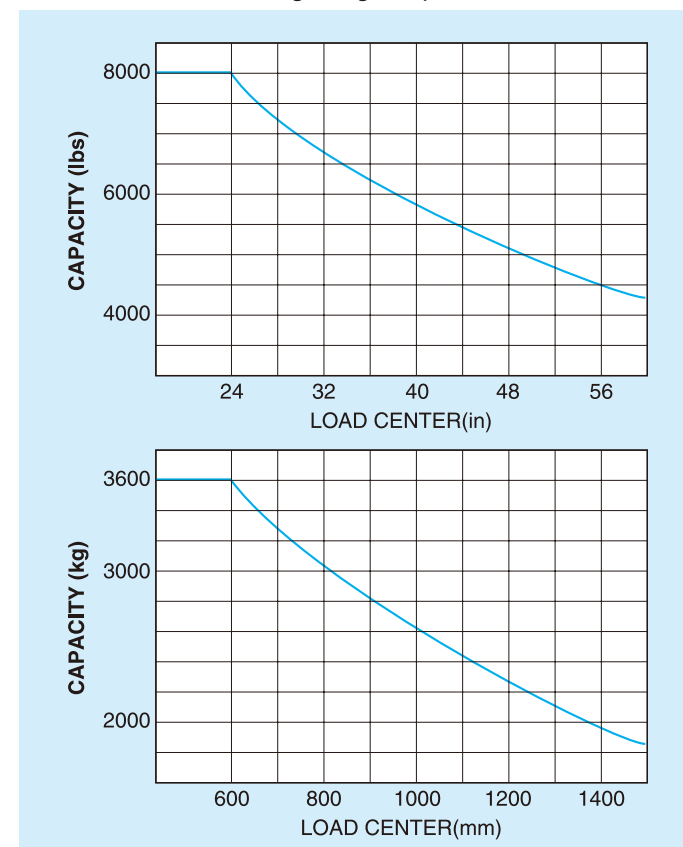
MODEL	FCG36	
	in.	mm
① Overall height, fork raised (with backrest)	179.5	4560
② Max. fork height	130.0	3300
③ Overall height, fork lowered (upright)	85.0	2160
④ Backrest height (from upper face of fork)	48.0	1220
⑤ Free lift	11.8	300
⑥ Fork thickness	2.0	50
⑦ Minimum ground clearance	3.0	75
⑧ Overall length (with forks)	140.4	3565
⑨ Length to fork face	98.3	2495
⑩ Fork length	42.1	1070
⑪ Load distance	16.7	425
⑫ Wheelbase	60.2	1530
⑬ Rear overhang	21.4	540
⑭ Drawbar pin center height	11.0	280
⑮ Overhead guard clearance (from face of seat)	39.4	1000
⑯ Overall height (overhead guard)	80.9	2055
⑰ Overall width	47.3	1200
⑱ Lateral fork adjustment (outside forks)	11.8-42.9	300-1090
⑲ Tread (front)	38.2	970
⑳ Tread (rear)	36.2	920
㉑ Fork width	5.9	150
㉒ Inside turning radius	0.4	10
㉓ Outside turning radius	87.6	2225
㉔ Min. intersecting aisle	81.9	2080
㉕ Tilt angle (forward-backward)	6°/7°	6°/7°

GROUND CLEARANCE

	FCG36	
	in.	mm
Mast	3.0	75
Frame	4.7	120
Front axle	3.9	100
Counterweight	4.7	120



LOAD CHART Lifting Height Up to 157 in (4000 mm)



Note:

Capacities shown are computed with upright in vertical position. Load centers are determined from front face of forks. Capacities are based on a 1000 mm or 48-in. cube load configuration with the center of gravity (C.G.) at the true center of the cube, and standard forks. Truck capacities with upright in forward tilt position will be less. Long forks, and unusually wide or tall loads may also reduce capacity. Contact TCM representative for capacity information on irregular loads. Specific capacities are shown on truck load chart.

Meets following major standards and code.

ISO 1074 Counter Balanced Lift Trucks, Stability & Safety Test (Int'l)
JIS D6001 Industrial Lift Trucks (Japan)
ANSI B56.1 Low & High Lift Trucks (USA)

Overhead guard meets ISO 6055, JIS 6021

Insurance classifications

Underwriter's Laboratories requirements as to fire hazard only for LP

WIDE VIEW MAST VM

Mast Model	Capacity		Max. Fork Height		Overall Mast Height				Free Lift with Backrest		Tilting Angle F / B	Service Weight	
	24 in. (600 mm)				Lowered		Raised with Backrest						
	lbs.	kg	in.	mm	in.	mm	in.	mm	in.	mm	degree	lbs.	kg
VM270	8000	3600	106.3	2700	73.2	1860	155.9	3960	11.8	300	6-7	11130	5045
VM300	8000	3600	118.0	3000	79.1	2010	167.7	4260	11.8	300	6-7	11200	5080
VM330	8000	3600	130.0	3300	85.0	2160	179.5	4560	11.8	300	6-7	11310	5130
VM350	8000	3600	137.8	3500	89.0	2260	187.4	4760	11.8	300	6-7	11340	5140
VM375	8000	3600	147.6	3750	93.9	2385	197.2	5010	11.8	300	3-6	11380	5160
VM400	8000	3600	157.5	4000	100.8	2560	207.1	5260	11.8	300	3-6	11540	5235
VM425	7800	3500	167.3	4250	105.7	2685	216.9	5510	11.8	300	3-6	11610	5265
VM450	7600	3450	177.2	4500	110.6	2810	226.8	5760	11.8	300	3-6	11650	5285
VM475	7400	3350	187.0	4750	115.6	2935	236.6	6010	11.8	300	3-6	11730	5320
VM500	7250	3300	196.9	5000	120.5	3060	246.5	6260	11.8	300	3-6	11800	5350

WIDE VIEW FULL FREE 2-STAGE MAST VFM

Mast Model	Capacity		Max. Fork Height		Overall Mast Height				Free Lift with Backrest		Tilting Angle F / B	Service Weight	
	24 in. (600 mm)				Lowered		Raised with Backrest						
	lbs.	kg	in.	mm	in.	mm	in.	mm	in.	mm	degree	lbs.	kg
VFM270	8000	3600	106.3	2700	73.2	1860	155.9	3960	25.2	640	6-7	11220	5085
VFM300	8000	3600	118.1	3000	79.1	2010	167.7	4260	31.1	790	6-7	11290	5115
VFM330	8000	3600	130.0	3300	85.0	2160	179.5	4560	37.0	940	6-7	11350	5145
VFM350	8000	3600	137.8	3500	89.0	2260	187.4	4760	40.9	1040	6-7	11400	5165
VFM375	8000	3600	147.6	3750	93.9	2385	197.3	5010	45.9	1165	3-6	11450	5190
VFM400	8000	3600	157.5	4000	100.8	2560	207.1	5260	52.8	1340	3-6	11630	5270
VFM425	7800	3500	167.3	4250	105.7	2685	216.9	5510	57.7	1465	3-6	11690	5300
VFM450	7600	3450	177.2	4500	110.6	2810	226.8	5760	62.6	1590	3-6	11750	5325
VFM475	7400	3350	187.0	4750	115.6	2935	236.6	6010	67.5	1715	3-6	11800	5350
VFM500	7250	3300	196.9	5000	120.5	3060	246.5	6260	72.4	1840	3-6	11860	5375

WIDE VIEW FULL FREE 3-STAGE MAST VFHM

Mast Model	Capacity		Max. Fork Height		Overall Mast Height				Free Lift with Backrest		Tilting Angle F / B	Service Weight	
	24 in. (600 mm)				Lowered		Raised with Backrest						
	lbs.	kg	in.	mm	in.	mm	in.	mm	in.	mm	degree	lbs.	kg
VFHM360	8000	3500	141.7	3600	69.3	1760	191.3	4860	21.3	540	3-6	11790	5345
VFHM400	7900	3500	157.5	4000	74.2	1885	207.1	5260	26.2	665	3-6	11880	5385
VFHM435	7750	3450	171.3	4350	79.1	2010	220.9	5610	31.1	790	3-6	11970	5425
VFHM480	7400	3300	189.0	4800	85.0	2160	238.6	6060	37.0	940	3-6	12080	5475
VFHM500	7250	3200	196.9	5000	89.0	2260	246.5	6260	40.9	1040	3-6	12140	5505
VFHM540	6800	2900	212.6	5400	93.9	2385	262.2	6660	45.9	1165	1.5-6	12230	5545
VFHM600	5100	2300	236.2	6000	102.8	2610	285.8	7260	54.7	1390	1.5-6	12540	5685

Note: Overall length with VFHM Mast: +1.6 in (40 mm) longer than that of STD model with VM Mast ... FCG36

Manufactured by

TCM

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Distributed by

STANDARD EQUIPMENT AND ACCESSORIES**[Equipment]**

- LPG exclusive fuel package
- Asbestos-free brake shoe material
- Centrifugal air cleaner
- Coolant reservoir
- Cushion tires
- Cylinder type bonnet latch
- Drawbar device
- Durable overhead guard
- Full hydrostatic power steering
- High-visibility, wide-view mast
- Hydraulic oil dipstick
- ITA Class II, III carriage
- Lift circuit cut-off valve
- Load backrest
- Load check valve
- Operator restraint seat with seat belt
- Overhead air intake system
- Return hydraulic filter
- Suction hydraulic strainer
- Tilt lock valve
- Transmission oil dipstick
- Travel & load handling interlock system
- 42 in (1070mm) forks
- 3-spool control valve with pressure relief
- 3-way catalytic muffler

[Controls]

- Electric shift control lever
- Lift and tilt levers
- Parking brake lever with safety lock
- Tilt adjustable steering post
- Turn signal lights with self-cancelling mechanism

[Accessories]

- Back-up alarm buzzer
- Back-up lights
- Deluxe non-slip floor mat
- Electric horn
- Entry/Exit assist grip
- Glove compartment/Pen holder
- Halogen head lights
- Rear combination lights
- Side view mirrors

[Instruments and Switch]

- Charge indicator
- Engine check indicator
- Engine oil pressure warning indicator
- Fuel gauge
- Hourmeter
- Neutral safety switch
- Torque convertor oil temperature gauge
- Transmission mode select switch: Power/Economy
- Water temperature gauge

OPTIONAL EQUIPMENT AND ACCESSORIES**[Equipment]**

- Auxiliary hydraulic valve modules
- Radiator dust screen

[Accessories]

- Overhead guard canvas
- Rear working light
- Steel net (for overhead guard)
- Tilt cylinder boots

[Instruments and Switch]

- Ammeter
- O.K. monitor (battery electrolyte level, coolant level, parking brake, air-cleaner)

OPTIONAL LOADING ATTACHMENT

- Alternative fork lengths
- Side shift (hook-on type)
- Wide view full free 2-stage (VFM) mast
- Wide view full free 3-stage (VFHM) mast

Others on request.